UPPER SNAKE SUBBASIN
TECHNICAL ASSESSMENT TEAM MEETING

SEPTEMBER 18, 8:30 A.M. TO 12:00 P.M.
POCATELLO, ID

MEETING MINUTES

Primary Facilitation:	Jon Beals, IDFG, jbeals@idfg.state.id.us
	Lance Hebdon, IDFG, lhebdon@idfg.state.id.us
Meeting Documentation:	Natalie Chavez, Chavez Writing & Editing, natalie@chavezwriting.com
	Kathy Hopper, IDFG, khopper@idfg.state.id.us

MEETING PURPOSE AND DESIRED OUTCOMES

The purpose of the meeting was to share and process information relative to the upper Snake subbasin assessment. Desired outcomes were to identify aquatic focal species, as well as terrestrial focal habitats and species.

MEETING DECISIONS AND OUTCOMES

The next meeting of the upper Snake subbasin technical assessment teams is set for October 23 in Pocatello.

Fisheries Technical Assessment Team (FTAT)

The following are the agreed-upon aquatic focal species:

- Yellowstone cutthroat trout (*Oncorhynchus clarkii bouvieri*)
- molluscs: Utah valvata (*Valvata utahensis*), Bliss Rapids snail (*Taylorconcha serpenticola*), and Snake River physa (*Physa natricina*)
- bull trout (*Salvelinus confluentus*) in limited distribution
- mountain whitefish (*Prosopium williamsoni*) in limited distribution

The following are species that are considered important but were not selected as focal species:

- speckled dace (*Rhinichthys osculus*)
- longnose dace (*Rhinichthys cataractae*)
- leopard dace (*Rhinichthys falcatus*)
- peamouth chub (*Mylocheilus caurinus*)
- chiselmouth chub (*Acrocheilus alutaceus*)
- Utah chub (*Catostomus ardens*)
- tui chub (*Gila bicolor*)
- shorthead sculpin (*Cottus confusus*)
- mottled sculpin (*Cottus bairdi*)
- torrent sculpin (*Cottus rhotheus*)
- California floater (*Anodonta californiensis*)
- *Margaritifera* spp. (molluscs)

Boundaries for the subbasin should remain as they were for the subbasin summaries. The Big Wood River drainage would not be transferred from the middle Snake subbasin to the upper Snake subbasin.

Terrestrial Assessment Team (TAT)

The following are the agreed-upon focal habitats:

- shrub-steppe
- riparian/herbaceous wetlands
- aspen
- western juniper/mountain mahogany
- mixed conifer
- open water, lakes, rivers, and streams
- mountain brush
- whitebark pine

The following includes focal species (by habitat type) identified during the meeting (in regular typeface). It also includes focal species identified by other TATs for the same habitats (common name in italic typeface).

Shrub-Steppe

- northern sagebrush lizard (*Sceloporus graciosus graciosus*)
- sage grouse (*Centrocercus urophasianus*)
- sage sparrow (*Amphispiza belli*)
- sagebrush spp. (*Artemisia* spp.)

Riparian/Herbaceous Wetlands

- western toad (*Bufo boreas*)
- yellow-billed cuckoo (*Coccyzus americanus*)

Aspen

- aspen (*Populus tremuloides*)

Western Juniper/Mountain Mahogany

- mountain mahogany (*Cercocarpus* Kunth)

Mixed Conifer

- great gray owl (*Strix nebulosa*)
- black-backed woodpecker (*Picoides arcticus*)
- boreal owl (*Aegolius funereus*)
- *northern goshawk* (*Accipiter gentilis*)

Open Water, Lakes, Rivers, and Streams

- trumpeter swan (*Cygnus buccinator*)
- western grebe (*Aechmophorus occidentalis*)
- American avocet (*Recurvirostra americana*)
- American white pelican (*Pelecanus erythrorhynchos*)
- common loon (*Gavia immer*)

Mountain Brush

- antelope bitterbrush (*Purshia tridentata*)
- *mule deer* (*Odocoileus hemionus*)
- green-tailed towhee (*Pipilo chlorurus*)
- *elk* (*Cervus elaphus*)

Whitebark Pine

- whitebark pine (*Pinus albicaulis*)
- Clark's nutcracker (*Nucifraga columbiana*)

ACTION ITEMS

Jon Beals	• E-mail the work plan to FTAT and TAT participants.
Lance Hebdon	• Review status of the Yellowstone cutthroat trout to determine whether this information can be applied to the assessment process. • E-mail the Yellowstone cutthroat trout status review to FTAT participants.
Kathy Hopper	• E-mail a schedule of upper Snake subbasin FTAT meetings.
All	• Provide Jon Beals and Lance Hebdon with the names of people who should be involved in the upper Snake subbasin assessment process.

WELCOME[1]

Jon Beals, IDFG, introduced himself and the subbasin team (Lance Hebdon, Kathy Hopper, and Natalie Chavez), had others do the same (see Addendum A for names of participants), and explained that fisheries and terrestrial resources had both been included in this technical assessment meeting. Before providing an overview of the assessment and planning processes, he commented that the Big Wood River is included in the upper Snake subbasin but may be more appropriate for the middle Snake subbasin. He also asked that people give him the names of any people who should be included in this forum. During the preliminary overview, the FTAT and TAT were combined. Beals commented that, later in the meeting, the two teams would individually identify focal species.

OVERVIEW OF SUBBASIN TECHNICAL ASSESSMENT AND PLANNING

After previewing acronyms that people would be hearing during the meeting, Beals shared the following description of the subbasin management plan:

The Subbasin Management Plan is the end product of an integrative process that links the factors limiting production in a subbasin (identified in an assessment) to a future vision, through defined quantitative objectives and the strategies that will be used to achieve them. Strategies will be implemented via projects. Monitoring and evaluation will adaptively assess and guide projects.

The subbasin management plans will guide prioritization of Bonneville Power Administration (BPA) funding for the next 10 to 15 years, based on needs and issues identified by local expertise within each subbasin. He then distributed flowcharts showing the process (see Addendum B for a list of handouts). The assessment part of the process is the focus of this technical team's efforts. Deliverables developed by Beals and Hebdon, with input from and review by the FTAT and TAT, will be forwarded to the Shoshone-Bannock Tribes for development of the actual subbasin management plan. The team's technical expertise will be crucial throughout the whole process of developing the assessment and the plan. The subbasin summaries developed two years ago will be updated and used for this assessment. Beals walked participants through the handout entitled "Subbasin Assessment Outline," which showed the products of the assessment process.

[1] Though the minutes generally adhere to the chronological development of the meeting, information for any subject covered at different times is organized by subject matter.

Relationship to BPA Funding

The BPA, a government agency, has charged the newly renamed Northwest Power and Conservation Council (NWPCC, formerly the Northwest Power Planning Council), an appointed group that oversees BPA actions, with developing subbasin management plans. In the past, funding from the BPA has been fairly "fish-centric." But everyone would like a better balance of funding for fish and wildlife projects. So the entire Columbia Basin has been divided into 12 provinces, and the NWPCC is implementing the "rolling provincial review." The upper Snake subbasin is also one of the provinces. Each year, one-third of the provinces will be asked for project proposals. A panel of provincial managers (made up of local managers from the provinces) will review the proposals for scientific soundness and the degree to which they meet prioritized needs identified for the subbasins. These subbasin management plans provide the panel with a biological context for evaluating project proposals. Top priority proposals will be sent to the Independent Science Review Panel (ISRP) and the Columbia Basin Fish and Wildlife Authority (CBFWA) for review. If a proposal meets identified needs, it is forwarded to the NWPCC, which will also evaluate it according to priorities and available funding. Recommendations from the NWPCC will be forwarded to the BPA, which has final say. This process is designed to provide the biological foundation so that projects are funded based on biological needs. A caveat is that the BPA is a federal agency and bound by the ESA and other federal acts.

Minidoka and Palisades dams are the two major hydroelectric projects affecting the upper Snake subbasin. The current BPA budget for this year is $139 million, pared down somewhat from the original allocation. Because the NWPCC is made up of political appointees, there are times when, despite recommendations by the ISRP or CBFWA, projects are funded in a region based on political reasons. Beals distributed a list of Internet websites that provide more information about subbasin planning (see Addendum C).

Use in Fish and Wildlife Restoration and Other Planning Efforts

As mentioned earlier, the subbasin management plans will help focus review of project proposals. Although the process for developing the technical assessment and subbasin management plan is separate and distinct from other efforts, the documents may help the subbasin secure funding through grants and other resources.

Overview of Idaho Fish and Wildlife Information System

An additional objective of this process for the IDFG is the Idaho Fish and Wildlife Information System (IFWIS), now being developed as a statewide database system for fish and wildlife species (similar to STREAMNET). Staff have been hired to collect and digitize GIS and other data. This database will be important for subbasin management planning. Beals listed other IFWIS products that will benefit managers: habitat maps, tables of species lists, trends, wildlife–habitat lists, habitat summaries, salmon–wildlife relationships, rolling review findings, relevant state and tribal plans, key reports, bibliographic references, applicable links, and many others. He asked that those with raw data contact him, Hebdon, or Hopper. The IDFG will process the data and provide the GIS layers to people, who may find them useful for their proposals.

Expectations for Team Members

Primary expectations are that people attend the meetings to provide their knowledge and expertise and review the documentation that Beals and Hebdon develop based on meeting input. There will probably be a meeting a month until May. They requested that the technical assessment teams meet in the morning and the planning team meet in the afternoon on meeting days for logistical reasons. One of the criticisms

of the subbasin management plan for the Clearwater River, the first plan to be completed, was that not as many people were included as should have been. Beals reiterated that they would appreciate the names of additional people to invite to these meetings.

In addition to involving the right people, expectations for the facilitators include effective facilitation, timely provision of agendas and other documents, and compilation of the deliverables. Beals distributed the "Snake Subbasin Assessment Timeline," which showed the tasks of this group up through May 2004. The timeline included the following tasks:

October 2003	• Complete the subbasin overview, which will describe geography, land ownership, and biological and environmental situations in the subbasin.
	• Develop a list of native and nonnative species, identifying status and cultural significance (species characterization and status).
	• Identify subset to be used as focal species/habitats based on the ESA and state sensitive species lists, cultural importance, life history, habitat associations, and key ecological functions.
November 2003	• Develop assessment of ecological relationships and limiting factors, addressing key functional relationships, processes, and functions of the focal species.
December 2003	• Develop description of existing conditions.
May 2004	• Interpret and synthesize results, stating key assumptions and key factors impeding optimal ecological function and biological performance for the identified focal species.
	• Inventory existing and past projects per Technical Guide (from the NWPCC) directions.

Although the timelines for both the technical assessment and subbasin management plan have been compressed, the due date for both of these documents is May 28. This parallel track for the documents may be a difficult approach, given that information from the assessment must be provided to the Shoshone-Bannock Tribes throughout the process, but it's the only approach available. Fortunately, the subbasin summary is already done and available as an invaluable resource. To help clarify the different roles, Beals agreed to e-mail people copies of the work plan for the upper Snake subbasin.

Issues Raised during the Overview

Reasons for Participating—Chad Colter, Shoshone-Bannock Tribes, talked about the funding process and shared his hope that the subbasin management plan leads to additional funding since the upper Snake subbasin is one of the least-funded provinces. Under this process, funding will be determined in three-year blocks so that managers don't have to "fight for funding" every year. David Teuscher, IDFG, expressed his frustration that the funding process has been "fine-tuned" in the past, with no apparent results. Colter agreed but added that without a subbasin management plan, funding will drop from its current, inadequate levels to nothing at all.

Status of Proposals in the Subbasin Summary—Jim Mende, IDFG, asked whether anything had been done with the proposals at the end of the subbasin summary. Hebdon responded that they had been approved but not funded. He suggested articulating the limiting factors on which those proposals were based and making sure that those limiting factors are included in the assessment.

Scope of the Subbasin Management Plan—Participants were asked whether they want to focus on the two federal hydropower projects in the subbasin or make the whole province the broad focus. On one hand, the timeline has been compressed and it might be easier to focus on the two projects. Funding might also be easier to obtain, given a narrower focus. On the other hand, the subbasin is defined as "ridge top to ridge top." In addition, the plan will have a 10- to 15-year horizon, meaning that it will span up to five funding cycles. Great headway might be made in filling data gaps during that time. In addition, the plan might be instrumental in getting off-site mitigation and enhancement funding from the Federal Energy Regulatory Commission and other sources. The consensus was to focus as broadly as possible and commit to providing input and revisions.

BREAK-OUT SESSIONS

After the overview, the group broke into fisheries and terrestrial assessment teams for concurrent sessions. The FTAT identified focal species and discussed use of the QHA model, while the TAT identified focal habitats and species.

Fisheries

Identification of Focal Species

Hebdon read the following definition of "focal species," provided by the NWPCC:

> Focal species—A focal species has special ecological, cultural, or legal status and will be used to evaluate the health of the ecosystem and the effectiveness of management actions. Federally listed species will likely be considered as focal species. Others may be included that a) have special cultural significance, b) fulfill a critical ecological function, c) serve as an indicator of environmental health, and/or d) are locally significant or rare, as determined by applicable state or federal resource management agencies. (NWPCC)

He added that the ISRP and NWPCC have cautioned planners against using over five focal species since the plan can become too unwieldy.

FTAT participants brainstormed a number of species. Several of these were selected as focal species (see page 1), while a number of others were identified as "important species," that is, species that need to be included in some way even if they don't meet the criteria of ESA listing or state sensitive designation, cultural importance, management importance, or key ecological function. During the discussion, a couple of issues were raised:

- *Inclusion of Wetland Species*—Hebdon commented that any type of wetland species will likely be addressed by the TAT. Ultimately, terrestrial and aquatic issues will be compiled into the same assessment document. Dan Gustafson, researcher at Montana State University, was suggested as a resource regarding wetlands and molluscs.
- *Transfer of the Wood River Drainage to the Middle Snake Subbasin*—Hebdon said that middle Snake subbasin FTAT members felt strongly that the Big Wood River drainage should be in their subbasin. After some discussion, this group decided that the boundaries should remain the same as those used for the subbasin summaries.

Assessment Methods and Modeling

The first step of the assessment is to determine the distribution of focal species. Then the FTAT needs to identify what kinds of habitat changes have also changed species distribution. Hebdon said that, as part of the assessment, people are to use a tool to prioritize habitat for protection or restoration activities. The NWPCC contracted with MoBrand Biometrics to develop a couple of models: the ecosystem diagnosis and treatment (EDT) model and the qualitative habitat assessment (QHA) model. The EDT model is extremely complex and time consuming to run. The QHA model is being used in other subbasins on a 6th order hydrologic unit code level (6th code HUCs). Hebdon wasn't sure whether the model could be used for the upper Snake subbasin, given its size, although it might work at the 5th code HUC level.

Hebdon demonstrated the model's use for the North Fork Boise River drainage in the Boise, Payette, and Weiser subbasin. He noted that the QHA model is species specific; watersheds can be broken into units that users prefer; it addresses sediment, riparian condition, and other factors; and it uses a fairly simple rating system. In addition, the model provides a systematic approach for assessing an area and sets up a framework for getting consistent output. On the other hand, the model does take time to use and does not capture any population abundance issues.

Members of the group had concerns about using the QHA model. For example, a number of people with the required expertise were not in attendance. Several alternative resources were identified by the group, including the Yellowstone cutthroat trout status review, BLM assessments, total maximum daily loads (TMDLs, which indicate the amount of pollution that a stream is allowed to carry), and the subbasin summary. Hebdon agreed to review the Yellowstone document to determine whether the information could be applied to the assessment process. He will also e-mail the document out for everyone to review. Sheryl Hill also suggested that the FTAT look at the issue of selenium in the Blackfoot drainage in a future meeting.

Terrestrial

Beals distributed several handouts to help participants select focal habitats and species. Some of the information was from the *Idaho Bird Conservation Plan*, while other information came from the Interactive Biodiversity Information System (IBIS). Current and historical acreages for habitat types in the subbasins came from IBIS and were based on Gap analysis. Beals commented that, although people in other subbasins have concerns about the acreages, the information can still guide discussion of focal habitats. He also shared the definition of focal species that was provided by the NWPCC (see above), adding that focal species work better from a fishery perspective than a terrestrial perspective. Beals said that, although the TATs have wanted to focus on habitat management, focal species are important for evaluating what is happening in those habitats. In some cases, subbasins have decided that a plant species is better than a wildlife species for monitoring and evaluation efforts.

Focal Habitats

To keep from "reinventing the wheel," participants asked Beals to download a copy of the subbasin summary so that they could see the habitats and species identified as priorities in that document. While he did so, they identified and discussed potential focal habitats (see page 2 for the final list and Addendum D for details). During that discussion, the following issues were addressed:

- *Basis for IBIS Acreages*—The question was raised about why no historical acreage was provided for montane coniferous wetlands. Bryan Aber, USFS, responded that sometimes habitats weren't broken out, they were considered wasteland, or in the case of aspen, one Douglas-fir might have marked an area as a Douglas-fir site. People would have to go back to narrative descriptions from 1917 to figure out discrepancies.

- *Criteria for Selecting Focal Habitats*—Participants wondered about which criteria to use to select focal habitats. Several criteria were raised, including differences in IBIS historical and current acreages, habitats that are most affected by the BPA projects, habitats that have been impacted most recently or are likely to be impacted in the near future, and habitats that are currently the focus of many agency activities. This last item led to some initial brainstorming of habitats, including shrub-steppe, aspen, and riparian.
- *Information about Habitats from the Subbasin Summary*—When Beals returned with the subbasin summary, he reviewed information about habitats and changes brought about by closure of American Falls and Palisades dams. The subbasin summary included information and tables about habitats but included no identification of priority or focal habitats. He believed that the TAT's brainstormed list of habitats was appropriate.

Focal Species Associated with the Focal Habitats

TAT members then brainstormed important species and/or species that will show whether management actions are successful (see page 2 for the final list and Addendum E for details). Beals said that the five-species limit worked well for fishery resources but not for terrestrial resources. He encouraged the group to identify more species and pare the list down later. He added that managed and listed species are already addressed in the overview. Beals also commented that a few of the habitats chosen by this TAT are the same as those chosen by other TATs. He will add focal species, selected by the other TATs, that are associated with these shared habitat types and e-mail the full list of potential focal species out for review.

During the discussion of focal species, several issues were raised:

- *Information about Species from the Subbasin Summary*—Beals listed species that were discussed in the subbasin summary, although these species weren't prioritized in that document. Based on the extensive nature of the species lists, the group decided that their efforts wouldn't duplicate any efforts from the subbasin summary. In fact, they saw this as an opportunity to "clean up the lists."
- *References to Other Plans*—Participants talked about other plans that included species lists, limiting factors, and other relevant information. One idea was to include information or lists from these plans as appendices so that no information was "lost." However, these inclusions might make the technical assessment unwieldy. Beals said that the ISRP has requested references, so many of these plans can be included in a bibliography for the ISRP to review. Group members decided to collect any plans or documents that they think are appropriate and bring them to the next meeting. Some information could be excerpted into the technical assessment.

MEETING EVALUATION AND NEXT STEPS

The next meeting is scheduled for 8:30 a.m. to 12:00 p.m. on October 23. Typically these meetings will be held the third Thursday of each month and coordinated with the planning team meetings. But the October meeting has to be held on a different day because of other conflicts. Beals will schedule that meeting for the same location, although the BLM volunteered to host the November 20 meeting. Beals added that the TAT will be talking about limiting factors at the next meeting. He will also have habitat descriptions ready for people to review. He asked that people bring any plans, reports, or other helpful resources with them.

ADDENDUM A—ATTENDEES

Name and Affiliation	E-mail Address	Phone Number
Bryan Aber, Caribou-Targhee National Forest[T]	baber@fs.fed.us	558-7301
Dan Christopherson, Shoshone-Bannock Tribes[T]	dchristopherson@shoshonebannocktribes.com	478-3808
Chad Colter, Shoshone-Bannock Tribes[F]	ccolter@shoshonebannocktribes.com	251-8189
John Fred, Shoshone-Bannock Tribes[F]	jfred@shoshonebannocktribes.com	251-2647
Jim Fredericks, IDFG[F]	Jim_Fredericks@idfg.state.id.us	525-7290
Lauri Hanauska-Brown, IDFG[T]	lhanausk@idfg.state.id.us	525-7290
Sheryl Hill, independent[F]	sherylhill@cableone.net	529-9148
Geoff Hogander, BLM[T]	geoff_hogander@blm.gov	478-6345
Kathy Hopper, IDFG[F]	khopper@idfg.state.id.us	287-2796
Jim Mende, IDFG[T]	jmende@idfg.state.id.us	232-4703
Kevin Meyer, IDFG[F]	kmeyer@idfg.state.id.us	465-8404
Deb Mignogno, USFWS[F]	debbie_mignogno@fws.gov	237-6975 x 31
David Teuscher, IDFG[F]	dteuscher@idfg.state.id.us	232-4703
Gary Vecellio, IDFG[T,F]	gvecellioi@idfg.state.id.us	525-7290
Chuck Warren, IDFG[F]	cwarren@idfg.state.id.us	324-4359
Leander Watson, Shoshone-Bannock Tribes	lwatson@shoshonebannocktribes.com	478-3808

[T] Participated in the terrestrial assessment team to identify focal habitats and species.

[F] Participated in the fisheries technical assessment team to identify focal species and discuss the QHA model.

ADDENDUM B—HANDOUTS

- Meeting agenda
- Pertinent subbasin planning websites
- "Subbasin Plan Components and Logic"
- Flowchart of subbasin planning concepts
- "Subbasin Assessment Outline"
- "Upper Snake Subbasin Assessment Timeline (Revised August 4, 2003)"
- Definitions for "priority habitat," "focal species," and "priority species" and upper Snake subbasin species, according to IBIS
- Upper Snake subbasin habitat types (IBIS) with historical and current acreages for the entire subbasin, the closed basin, and the headwaters
- Page 15 (Table 1) of the *Idaho Bird Conservation Plan*, Version 1.0, dated January 2000
- Page 17 (Table 3) of the *Idaho Bird Conservation Plan*, Version 1.0, dated January 2000
- Sample outline of sections 1 and 2 of the middle Snake subbasin technical assessment

ADDENDUM C—REFERENCE RESOURCES

Idaho Partners in Flight (PIF). January 2000. *Idaho Bird Conservation Plan*. Version 1.0. Available at www.blm.gov/wildlife/plan/pl_id_10.pdf.

http://www.cbfwa.org/province.htm

http://www.nwcouncil.org/library/2000/2000-19/Default.htm

http://www.nwhi.org/ibis/subbasin/home.asp

http://www.nwppc.org/fw/subbasinplanning/Default.htm

http://www.epa.gov/surf

ADDENDUM D—BRAINSTORMING FOR FOCAL HABITATS

(Constructed from flipchart notes and discussion)

shrub-steppe	• includes dwarf shrub-steppe • is the focus of BLM efforts to recover what has been burned and lost (for the benefit of sage grouse) • The area around Harriman State Park would probably be dwarf shrub-steppe rather than grassland if it were in a natural condition.
riparian/herbaceous wetlands	• The Flat Ranch would probably be herbaceous wetland in its natural condition.
~~interior grasslands~~	• What is IBIS calling "interior grasslands"? • This habitat doesn't apply in the subbasin unless Curlew National Grasslands lies in the subbasin. • may have been some grassland in the Kilgore Valley that was lost to agriculture • has been replaced through Conservation Reserve Program (CRP) • is important for some of the birds
aspen	
mixed conifer	• is basically whitebark pine • mostly at higher elevations • is a huge category
western juniper/mountain mahogany	• is shown as decreasing, per IBIS acreages, but data seem to indicate that the amount of this habitat is increasing • Lack of fire is a limiting factor; fire gets rid of the juniper and rejuvenates the mahogany. • is being heavily degraded • There is good mountain mahogany regeneration at Fish Creek summit. • Based on the number of species that use this habitat, we don't want to lose sight of it.

open water, lakes, rivers, and streams	• should check 303(d) listed streams and TMDLs, which indicate the amount of pollution that a stream is allowed to carry • Reservoir levels result in loss of shoreline habitat. • The altered hydrologic regime comes in as a limiting factor. • may want to leave this habitat type to the aquatics group • Practices in American Falls and Palisades reservoirs are not conducive to fish or wildlife. • A number of rivers and streams are “dried up” each year. • affects a number of species (through botulism outbreaks and other problems)
mountain brush	• Where is this habitat included in IBIS? • is one of the habitats most imperiled by people building and maintaining summer cabins • This habitat is important for big game (winter range), bears, upland game birds, and neotropical migrants.
whitebark pine	• might be lost if not broken out from mixed conifer into its own habitat

ADDENDUM E—BRAINSTORMING FOR FOCAL SPECIES

(Constructed from flipchart notes and discussion)

Shrub-Steppe

greater sage grouse

sagebrush lizard

sage sparrow

sagebrush spp.
- The upper Salmon subbasin TAT listed mountain big, Wyoming, and black/low sage as focal species for shrub-steppe.

Riparian/Herbaceous Wetlands

western toad
- necessary for breeding
- also occurs in mixed conifer

yellow-billed cuckoo
- are opportunistic and at the edge of their distribution

Aspen

aspen

Mixed Conifer

great gray owl

boreal owl

black-backed woodpecker

Western Juniper/Mountain Mahogany

mountain mahogany

Open Water, Lakes, Rivers, and Streams

trumpeter swan

American white pelican

western grebe

common loon
- is listed as sensitive
- They nest in Wyoming where water levels are natural but not in Idaho where water levels are regulated.
- is not a good indicator species

American avocet

Mountain Brush

bitterbrush

green-tailed towhee

Whitebark Pine

whitebark pine	• is being impacted by white pine blister rust, which was introduced from Europe at the turn of the twentieth century; its spread has been exacerbated by fire suppression
Clark's nutcracker	

UPPER SNAKE SUBBASIN
FISHERIES TECHNICAL ASSESSMENT TEAM MEETING

OCTOBER 23, 8:30 A.M. TO 12:00 P.M.
REGIONAL HEADQUARTERS, POCATELLO, ID

DRAFT MEETING MINUTES

Primary Facilitation: Lance Hebdon, IDFG, lhebdon@idfg.state.id.us
Meeting Documentation: Kathy Hopper, IDFG, khopper@idfg.state.id.us

MEETING PURPOSE AND DESIRED OUTCOMES

The purpose of the meeting is to share and process information relative to the Boise, Payette, and Weiser subbasin assessment. Desired outcomes are to discuss information availability for focal species descriptions and identify limiting factors for focal species.

MEETING DECISIONS AND OUTCOMES

The next meeting of the upper Salmon FTAT is tentatively set for November 20, 2003, in Pocatello, starting at 8:30 A.M. The November meeting may be canceled if the group feels that these tasks might be accomplished through email and conference calls.

ACTION ITEMS

Lance Hebdon	• Send out a matrix for description of whitefish status.
	• Contact Chuck Warren for Lake Walcott lake species data.
	• Habitat loss assessment for Walcott and Palisades.
David Teuscher	• Will give a copy of a draft paper on cutthroat trout genetics.
Hunter Osborane	• Supply tribal history information on habitat quality.

WELCOME[2]

Lance Hebdon, Idaho Department of Fish and Game (IDFG), introduced himself, had others do the same (see Addendum A-Attendees for names of participants). Hebdon gave the group the minutes from the September meeting and noted that he would email copies to folks who were not on the mailing list. He then reviewed the focal species from the last meeting and then began by updating the team members on the status of the Salmon subbasin assessment.

[2] Though the minutes generally adhere to the chronological development of the meeting, information for any subject covered at different times is organized by subject matter.

I. Review outline for Biological Resources Section of the Assessment

Hebdon handed out a draft outline of the "Biological Resources" section for the Upper Snake Subbasin assessment. The assessment process is broken down into different parts. The first part of the assessment was an overview of the subbasin. Hebdon said that a draft of the overview should be forwarded to the planning team within a month.

The second portion of the assessment is the "Biological Resources" section that covers both the aquatic and terrestrial resources and what the outline is describing. Hebdon then reviewed the aquatic resources portion of the outline. For example, the conservation status, description, generalized life history and population trends and distribution within the subbasins would be prepared for each focal species. Section 2.1.3 is the "Non-native Descriptions" that what has been introduced into the subbasins intentionally or unintentionally. Section 2.1.4 is a section called, "Ecological Relationships" that discusses major processes acting on these animals. The "Environmental Section" (section 2.2) will be a quick overview, a general, what is going on and what are the issues.

Hebdon asked for the team members to review the outline and offer comments.

II. Limiting Factor Discussion

David Teuscher asked Hebdon why did he want to do limiting factors by watershed or drainage? Teuscher thought that it would be too repetitive. Hebdon explained that you would have a matrix of watersheds and limiting factors ranked according to priority. Since the goal of the effort is to direct funding, this matrix approach was thought to lay everything out to assist in developing project proposals.

Hebdon noted that what he hoped the technical team members could provide was input in the form of data and comments on what is put together. What kinds of information are missing from the assessment? The Biological Resources section should be ready for review by sometime in December.

Looking for relative abundance information for whitefish. Teuscher said that there are limited whitefish population studies in the Snake. No population estimates are available for whitefish from the tribes; all that can be said is that the species is abundant. Teuscher noted that it seemed all that was available was relative species abundance for whitefish.

Cutthroat trout will most likely be the driver for the assessment. For the other focal species, the USFWS has already supplied the Aquatic Resources Plan, which covers the mollusc species. There is a draft recovery plan for bull trout, which information can be pulled out. Whitefish information is sketchy. Hebdon thought that the assessment should use the same population abundance information as the Yellowstone cutthroat trout.

Hebdon noted that a fish loss assessment was put together for flathead in Montana and he thought this approach might be applicable to the assessment. For instance, one would take a reservoir and note that a certain amount of habitat was inundated, and historically, this system would have supported a certain amount of fish.

Estimate habitat lost, estimate how many fish are lost and then – Hebdon said that he had a rough draft of this and would like to work on it for a bit more before it is handed out.

Teuscher noted that this would be mitigating for a fluvial population, but he felt there were now more cutthroat than there was previously. There are losses for native species, but gains for non-native species. Teuscher had a problem stated that there were no benefits from the reservoir. Hebdon explained that the group needed to ask, "What have these federal programs done to impact native fish?"

Teuscher thought that if the group wanted to do a fish loss assessment, measuring how much of the main stem was lost could do it and also noting where all the barriers are located. Group agreed that river miles lost and passage blockage could be assessed for the system.

Lack of connectivity and population isolations are huge issues in the Upper Snake subbasin. Teuscher suggested just state that there were a bunch of cutthroat trout populations that are now diverging from one another because of the lack of connectivity.

Genetic studies on hybridization are being conducted recently in various locations throughout the basin. Hebdon said that he would attempt to put together the amount of habitat lost. Hunter Osborne noted that he could investigate the tribal history to determine the relative habitat quality for the area.

Group agreed to develop a ranked limiting factor matrix. Hebdon proposing breaking areas out by 4-code HUCs.

ADDENDUM A—ATTENDEES

Name	E-mail Address	Phone Number
Dan Christopherson, Shoshone-Bannock Tribes	dchristopherson@shoshonebannocktribes.com	(208) 478-3808
Larry Dickerson, USFWS	larry_dickerson@fws.gov	(208) 237-6975
Hunter Osborne	hosborne@shoshonebannocktribes.com	(208) 478-3808
David Teuscher	dteuscher@idfg.state.id.us	(208) 238-8364
Dick Sjostrom, USFWS	dick_sjostrom@fws.gov	(208) 237-6617 x 23
Geoff Hogander, BLM	Geoff_Hogander@blm.gov	(208) 478-6345

ADDENDUM B—HANDOUTS

- Meeting agenda

UPPER SNAKE SUBBASIN
TERRESTRIAL ASSESSMENT TEAM MEETING

OCTOBER 23, 8:30 A.M. TO 12:00 P.M.
IDFG REGIONAL OFFICE, POCATELLO, ID

DRAFT MEETING MINUTES

Primary Facilitation: Jon Beals, IDFG, jbeals@idfg.state.id.us
Meeting Documentation: Natalie Chavez, Chavez Writing & Editing, natalie@chavezwriting.com

MEETING PURPOSE AND DESIRED OUTCOMES

The purpose of the terrestrial assessment meeting (TAT) was to share and process information relative to the upper Snake subbasin assessment. Desired outcomes were to clarify priority habitat definitions and identify limiting factors for priority habitats and focal species.

ACTION ITEMS

Beals	• E-mail September 18 meeting minutes to Dick Sjostrom and Larry Dickerson. • Check information and limiting factors for mountain mahogany habitat in the upper Salmon subbasin. • Provide Larry Dickerson with a list of focal species associated with the focal habitats.
Hogander	• Make arrangements to have the November 20 meeting at the BLM office. If no room is available, coordinate with Larry Dickerson for a meeting location.
Dickerson	• Review the list of focal species that Beals e-mails and provide any input.

DECISIONS AND OUTCOMES

The next meeting of the upper Snake subbasin TAT was set for November 20.

Limiting factors for the chosen focal habitats are summarized in the following table:

Habitat	Grazing and/or Browsing	Land-Use Conversion	Road/Trails	Altered Hydrologic Regime	Timber Harvest	Altered Fire Regime	Invasive Exotics	Clarification
Riparian/herbaceous wetlands	x	x[c1]	x	x[c2]			x	1. On private land 2. Lack of beavers
Shrub-steppe	x	x[c1]	x	x[c2]		x[c3]	x	1. Water development 2. Based on agriculture and livestock needs 3. More prevalent in lower elevations
Open water		x		x			x	
Pine/fir/mixed conifer forests (dry, mature)	x	x	x		x[c1]	x[c2]	x	1. Harvest of old-growth trees 2. Fire suppression
Whitebark pine			x			x	x[c1]	1. Blister rust
Juniper/mountain mahogany	x					x[c1]	x	1. Juniper expansion due to altered fire regime
Aspen	x		x			x		
Mountain brush	x	x				x		

WELCOME[3]

Jon Beals, IDFG, welcomed participants to the meeting. A list of these participants is included as Addendum A. Handouts provided during the meeting are listed in Addendum B. Then he summarized the process for developing the technical assessment and subbasin management plans for those who had not attended the September 18, 2003, meeting of the upper Snake subbasin TAT. Beals also said that he would e-mail those meeting minutes to Dick Sjostrom, USFWS (who then joined the fisheries technical assessment team [FTAT] meeting), and Larry Dickerson, USFWS.

LIMITING FACTORS FOR FOCAL HABITATS

Beals distributed a table of the focal habitats that the upper Snake subbasin TAT had selected, as well as columns for limiting factors that other TATs had identified in prior meetings. Based on similar habitats and limiting factors for other subbasins, he had placed x's in some of the columns, but he wanted this

[3] Though the minutes generally adhere to the chronological development of the meeting, information for any subject covered at different times is organized by subject matter.

meeting's participants to make sure that the x's he placed were correct and identify limiting factors for focal habitats that were unique to the upper Snake subbasin.

TAT participants went through the table one habitat at a time, discussing the limiting factors for each habitat. Below are each of the habitats and issues raised during the discussion.

Riparian/Herbaceous Wetlands

- Impacts of grazing are exacerbated by the drought since a greater number of species are using the riparian habitat during these dry years. Beals commented that a section on environmental conditions would address the drought.
- The category for roads was broadened to include horse trails. Participants believed that the Roads/Trails category should get at all vehicle use, such as cars, trucks, all-terrain vehicles (ATVs), and snowmobiles. Vehicles cause erosion, while snowmobiles (which can go anywhere) negatively affect lynx, grizzlies, and other creatures at higher elevations. There has been more evidence of "mudding" in meadows and riparian habitat in the last few years.
- The categories for water use and altered hydrologic regime were combined after participants discussed where wells would go. When people dig wells and use well water for irrigation (water use), the water table drops and the downstream hydrologic regime is affected (altered hydrologic regime). The lack of beavers applied to numerous drainages in this subbasin. Management agencies have been moving beavers to where they're needed, but the animals don't always stay where they're placed. They like to have both aspens and willows. Most of what is considered quality beaver habitat is in farmland.
- Because the BLM and USFS have buffers on streams, timber harvest isn't a limiting factor.
- Invasive exotics include Canada thistle (*Cirsium arvense*), purple loosestrife (*Lythrum salicaria*), dyer's woad (*Isatis tinctoria*), and leafy spurge (*Euphorbia esula*).

Shrub-Steppe

- Private landowners are still burning sagebrush for grazing, although the Conservation Reserve Program (CRP) has made huge differences, especially for sharp-tailed grouse (*Tympanuchus phasianellus*). The greatest opportunity really lies in this habitat because it is so heavily impacted.
- Approximately 80% of historical shrub-steppe is gone because of agriculture. Now the farmland is being converted to housing developments.
- Interestingly, the loss of riparian habitat resulting from the altered hydrologic regime and downcutting has increased the amount of sagebrush-steppe in some places. If the water table were brought back up, riparian habitat would be restored and eliminate the sagebrush-steppe. Participants weren't sure how to address this issue of sagebrush becoming a "weed" in riparian habitat because of the altered water table.

  The conversion of shrub-steppe to agriculture is directly linked to water use. The U.S. Army Corps of Engineers continues to construct diversions that affect shrub-steppe habitat. In addition, water development at seeps and springs leads to additional grazing. Water development can be good and done effectively, but it can also be destructive.

  Participants decided to insert a comment to show that the land-use conversion is directly related to water development in the subbasin.

- Although crested wheatgrass (*Agropyron cristatum*) isn't an invasive, it is abundant because of poor land management in the 1960s. Crested wheatgrass was the only cost-effective grass, so it was planted everywhere.

Open Water

- The amount of development along the lakes and reservoirs is astounding. Participants talked about the various areas being developed and projected growth. Birds can no longer nest along the open water. In addition, in places, land right up to the edge of the reservoirs is farmed.
- Again, water use ties to land-use conversion. With people building along the lakes and reservoirs, they want to install riprap, which further affects the hydrologic regime. Runoff from their lawns is flowing directly into the lakes and reservoirs.
- Invasive exotics are a problem along the open water.

Pine/Fir/Mixed Conifer Forests

- State land immediately adjacent to National Forest boundaries is heavily grazed. There are no limbs on trees below 4 or 5 feet.
- Again, the number of summer homes is staggering (30,000 in the Island Park area). Because of such development, fire is becoming an increasingly important issue, since the USFS has made it a priority to protect human health and property.
- ATVs allow people cutting firewood to access large trees some distance from a road. People are able to make multiple trips between these downed trees and their vehicles.

Whitebark Pine

- With ATVs, people are able to access the remote whitebark pine habitat at higher elevations. Powerful dirt bikes also facilitate access.
- Timber harvest is less of an issue than it was before whitebark pine was identified as a key species.

Juniper/Mountain Mahogany

- Juniper, mountain mahogany, and mountain brush were originally grouped in the table. However, participants decided to include mountain brush as its own habitat since it typically occurs on the wetter north slopes, while juniper and mountain mahogany occur on the drier south slopes. The Interactive Biodiversity Information System (IBIS) database combines juniper and mountain mahogany.
- The problem with juniper (which includes cedar) is land-use conversion, but in reverse. Junipers are invasive in the southern part of the subbasin, displacing the shrub-steppe and therefore shrub-steppe obligates. Juniper doesn't have much of an understory so it doesn't support the same number of species as sagebrush. Juniper does provide thermal cover, although it doesn't provide much forage. The problem is tied to the altered fire regime, since the juniper isn't burned back enough.
- Overbrowsing by wintering deer is a problem for mountain mahogany. Beals said that he would check information and limiting factors that had been developed for mountain mahogany by the upper Salmon subbasin TAT.
- Cheatgrass (*Bromus tectorum*) has become a problem in the upper Snake subbasin.

Aspen

- Dickerson had spent several hours in some pure aspen stands and mixed stands with aspen recently and said that the number of species using the pure aspen stands was "eye opening."
- The USFS is encouraging harvest of some of the big aspens to rejuvenate the stands. There has also been some harvest of encroaching timber to open up the stands.

Mountain Brush

- Key species for this habitat are antelope bitterbrush (*Purshia tridentata*) and green-tailed towhee (*Pipilo chlorurus*).
- Foothills development does affect mountain brush species; however, roads and trails are typically located on the south slopes where serviceberry (*Amelanchier* sp.) and other dense brush allow easier access.
- Typically, these plant communities are in good shape and get enough water that they can resist invasive exotics.

NEXT STEPS

Beals informed participants that the next step would be to review an outline of the assessment. The next meeting was scheduled for November 20, possibly at the new BLM office, from 8:30 to noon. Geoff Hogander, BLM, would line up a room or coordinate with Dickerson if a room at the BLM office wasn't available. Dickerson would like a list of the species associated with the focal habitats. Then if he has any suggestions, he will let Beals know.

ADDENDUM A—ATTENDEES

Name	E-mail Address	Phone Number
Dan Christopherson, Shoshone-Bannock Tribes	dchristopherson@shoshonebannocktribes.com	(208) 478-3808
Larry Dickerson, USFWS	larry_dickerson@fws.gov	(208) 237-6975
Dick Sjostrom, USFWS	dick_sjostrom@fws.gov	(208) 237-6617 x 23
Geoff Hogander, BLM	Geoff_Hogander@blm.gov	(208) 478-6345

ADDENDUM B—HANDOUTS

- Meeting agenda, e-mailed on October 14, 2003
- "Upper Snake focal habitats and associated limiting factors," draft limiting factors table

UPPER SNAKE SUBBASIN
TERRESTRIAL ASSESSMENT TEAM MEETING

NOVEMBER 2, 8:30 A.M. TO 10:00 A.M.
IDFG REGIONAL OFFICE, POCATELLO, ID

DRAFT MEETING MINUTES

Primary Facilitation: Lance Hebdon , IDFG,
Meeting Documentation: Lance Hebdon, IDFG,

MEETING PURPOSE AND DESIRED OUTCOMES

The purpose of the terrestrial assessment meeting (TAT) was to share and process information relative to the upper Snake subbasin assessment. Desired outcomes were to clarify discuss focal species assessment information obtained to date.

ACTION ITEMS

Hebdon
- Draft limiting factors by watershed for review at next meeting
- Contact DEQ for TMDL information

Munoz
- Contact BOR and USFWS personnel regarding *Utah Valvata* information
- Obtain information regarding Fisheries Restoration and Irrigation Mititagation Program (FRIMA)

DECISIONS AND OUTCOMES

Mountain whitefish were removed from the focal species list.

The next meeting of the upper Snake subbasin TAT was set for December 18.

Dave Teuscher, IDFG

Chuck Warren, IDFG

Dick Munoz USFW @fws.gov

The meeting began with a brief overview of the Subbasin Planning process and the role the pieces of the Assessment; Overview, Biological Resources, Inventory. The majority of the Assessment deals with the chosen “Focal Species” and their population status and the status of the habitats that support them.

Hebdon began with a review of the mountain whitefish data that he was able to find. All Some data were available from the and Henry’s Fork and tributaries and a few accounts from South Fork Snake Tributaries. In many instances of sampling on the main Snake River whitefish were not counted or collected and therefore the only data available would be presence/absence. Warren noted that data were available for a whitefish from fish kills in the main river. A suggestion was made to remove mountain

whitefish from the "Focal Species" list due to lack of data and redundancy with other focal species. The group agreed to remove mountain whitefish from the focal species list.

A brief discussion ensued regarding the Yellowstone cutthroat trout (YSC) populations downstream of American Falls Reservoir (AFR). Teuscher noted that YSC- make up to 15% of the opening weekend creel below AFR on opening weekend. It's believed that these fish are migrants from upstream systems, Portneuf, Blackfoot, Rock Creek etc. Gifford springs located in Lake Walcott is also known to have some YSC presence.

Many of the tributary populations in the area are isolated due to dewatering or habitat degredation.

The group identified the need to get information from the department of environmental quality for the area including 303D listing status and any completed TMDL documents. Two names were mentioned as possible contacts, Lynn VanAvery and Mike Rowe.

Hebdon mentioned a newspaper article that was forwarded to him from a tech team member that documented the Threatened *Utah Valvata* in the Snake River upstream of American Falls Reservoir. Munoz suggested that the Bureau of Reclamation may have more distribution information on the species.

The next information that item that needs to be addressed by the team is the Limiting Factors information, and the biological objectives by watershed. Hebdon indicated that he would work to put together a draft for each watershed that the tech team could review at the next meeting.

The next meeting is scheduled for December 18, at the IDFG Regional office in Pocatello.

ADDENDUM A—ATTENDEES

Name	E-mail Address	Phone Number
Chuck Warren	Cwarren@idfg.state.id.us	
Dave Teuscher	Dteuscher@idfg.state.id.us	
Dick Munoz	dick_munoz@fws.gov	

UPPER SNAKE SUBBASIN
FISHERIES TECHNICAL ASSESSMENT TEAM MEETING

DECEMBER 18, 8:30 A.M. TO 12:00 P.M.
IDFG REGIONAL OFFICE, POCATELLO, ID

DRAFT MEETING MINUTES

Primary Facilitation: Lance Hebdon, IDFG, lhebdon@idfg.state.id.us
Meeting Documentation: Natalie Chavez, Chavez Writing & Editing, natalie@chavezwriting.com

MEETING PURPOSE AND DESIRED OUTCOMES

The purpose of the meeting was to share and process information relative to the upper Snake subbasin assessment process. The desired outcome was to determine a ranked list of limiting factors by watershed (4th code HUC) for each of the focal species.

MEETING OUTCOMES

Dick Scully, IDFG-Pocatello, and Dan Garren, IDFG-Idaho Falls, discussed conditions and limiting factors for focal species in their watersheds. They also recommended people with whom Lance Hebdon, IDFG, should speak regarding other watersheds.

ACTION ITEMS

Hebdon

- Talk with Tom Herron (IDEQ, 528-2650, therron@deq.state.id.us) about TMDLs for the Big Lost and Little Lost rivers (and other drainages in the subbasin).
- Talk with Chuck Warren, (IDFG-Jerome, 324-4359, cwarren@idfg.state.id.us) about the Rock Creek watershed.
- Talk with Shoshone-Bannock tribal representatives about the American Falls bottoms and tributaries.
- Get limiting factors information for the Blackfoot River drainage from Dick Scully (232-4703, rscully@idfg.state.id.us).
- Check Native Salmonid Assessment Database re: Falls River drainage
- Consult Draft State Yellowstone Cutthroat Management Plan re: biological objectives
- Talk with Bart Gamett (Salmon-Challis National Forest, 588-2224) about the Little Lost and Big Lost rivers.

Garren

- Provide Hebdon with information about IDFG sampling of whitefish in the Big Lost River drainage this year.

Scully

- E-mail limiting factors for the Blackfoot River drainage to Hebdon.

WELCOME AND OUTLINE REVIEW[4]

Lance Hebdon welcomed participants to the meeting. A list of these participants is included as Addendum A. Handouts provided during the meeting are listed in Addendum B.

LIMITING FACTORS

Hebdon informed participants of the upper Snake subbasin fisheries technical assessment team (FTAT) that the assessment was to include a generalized list of limiting factors for the focal species. This information would, in turn, be used by the planning team when it came time to develop strategies for addressing limiting factors in the subbasin. Although the planning team didn't currently exist, once established, it would likely try to catch up quickly.

The FTAT was responsible for developing information about the background of the subbasin and its potential, as well as what factors were limiting fish in the basin. In addition, Hebdon wanted the FTAT to narrow the information further. If someone were to look at what could be done in a certain watershed, where should the money be spent? In addition to prioritized limiting factors for each watershed, the FTAT would identify biological objectives. Finally, the FTAT would develop some strategies for addressing the limiting factors.

Hebdon commented that they had used 4th code hydrological units (HUCs) for identifying watersheds. In addition, to help in identifying limiting factors for each watershed, he had provided a table that included documentation about what kinds of alterations had occurred in the Pacific Northwest. For each of the types of alterations, the table included a summary of the effects on salmonids and their ecosystem, as well as selected references that provided more information. He believed that this information bolster the credibility of limiting factors and other information compiled in the technical assessment.

He suggested that the participants talk generally about what was taking place in each watershed and identify the major issues. Details of this discussion are provided in Addendum C.

NEXT STEPS

Hebdon asked Garren to talk with others in his office and see if they could come up with a sound approach for setting biological objectives for the watersheds. Garren asked whether these objectives were to be broad or specific. Hebdon responded that he would consult the Draft Yellowstone Cutthroat Management Plan for a starting point on scale of objectives. Garren also asked about native species besides Yellowstone cutthroat trout, such as whitefish in the Big Lost River watershed. Hebdon affirmed that other native species would be used in place of the focal species, if necessary, to assess habitat conditions. Garren said that the IDFG had sampled the entire Big Lost River drainage this year, following up on Chip Corsi's (IDFG-Coeur d'Alene, 769-1414, ccorsi@idfg.state.id.us) work from about 1991. So some trend data were available. He would provide Hebdon with the information.

Garren suggested that Hebdon ask Tom Herron (IDEQ, 528-2650, therron@deq.state.id.us) for BURP data for the Big Lost and possibly the Little Lost rivers. He responded that he would talk with Herron about TMDLs that have been done in the subbasin.

[4] Though the minutes generally adhere to the chronological development of the meeting, information for any subject covered at different times is organized by subject matter.

Addendum A—Attendees

Name	E-mail Address	Phone Number
Dan Garren, IDFG-Idaho Falls	dgarren@idfg.state.id.us	(208) 525-7290
Dick Scully, IDFG-Pocatello	rscully@idfg.state.id.us	(208) 232-4703

ADDENDUM B—HANDOUTS

- Meeting agenda. 1 p.
- "Table 1: Types of habitat alteration and effects on salmonid fishes in the Pacific Northwest. In Gregory and Bisson (1997). Based in part on Hicks et al. (1991b), and National Research Council (1996)." 4 p.

ADDENDUM C—LIMITING FACTORS

Ratings: 1 = most important factor to address, while 3 = important but less of an issue in the drainage

Goose Creek

- Hebdon had already discussed limiting factors for this drainage with Chuck Warren.

Raft River

- Hebdon had already discussed limiting factors for this drainage with Chuck Warren.

Rock Creek

- Hebdon needed to talk with Chuck Warren (IDFG-Jerome, 324-4359, cwarren@idfg.state.id.us) about this watershed.
- Specific to the East Fork of Rock Creek

Limiting Factor	Comments	Rating
Low Flows from withdrawls	• not sure whether the stream dewaters entirely or just experiences low flows (in Region 4)	1

American Falls Bottoms/Tributaries

- Hebdon needed to talk to Shoshone-Bannock tribal representatives about this watershed.

Portneuf River

- The largest fishery is in Chesterfield Reservoir, which is filled via canal with water from Toponce Creek. The canals include diversions that fish would have to jump. If water could be kept in the canal year-round and passage could be provided at the diversion structures, Toponce Creek might have an adfluvial cutthroat population. But it's currently dry during different parts of the year because water is diverted for various reasons.

- Dewatering affects the upper Portneuf.
- One part that the Shoshone-Bannock Tribes wanted to use for spawning is seasonally covered by Chesterfield Reservoir.
- The river is channelized for about 10 miles downstream of the reservoir. This segment doesn't provide habitat year-round because it is can run dry during the winter. This area has been extensively fenced to reduce sediment problems.
- Where Kelly-Toponce Road takes off, the habitat is pretty good. The IDFG is trying to get funds to obtain a corridor fencing and protect riparian habitat. Last year, they were almost ready to purchase an easement, but the money was reallocated. The company is still interested. Dick Scully, IDFG, commented that the permanent long-term easement would ensure the continued benefits of the riparian fencing project, but there would be no political battles over water rights or other issues.
- The operator of the hydropower plant in Lava Hot Springs sometimes "turns the water off" for maintenance, rather than spilling it. So fluctuations may dewater fish redds and other aquatic organisms.
- Most of the summer flows come through Marsh Creek rather than the Portneuf River as a result of flow diversions. Limiting factors in this segment are flood irrigation, grazing, sedimentation, riparian issues, and other water quality concerns.
- After Marsh Creek and the Portneuf River converge, main impacts are from the city (Pocatello). For 6 miles, the river flows through a concrete flume built in 1961, which provides no fish habitat or connectivity with other streams.
- After leaving Pocatello, the Portneuf River passes Interstate 86, Simplot, and the city sewage treatment plant. Groundwater seepage leaches phosphorus into the river. Mike Rowe (IDEQ-Pocatello, 236-6160, mrowe@deq.state.id.us) has said that much of the phosphorus entering American Falls Reservoir from the Portneuf and Snake rivers comes from the Portneuf. Temperature problems in this segment are mitigated by a number of springs.
- Many of the water rights on the Portneuf River are based on the peak of the hydrograph, so more water is allocated than is generally in the river.
- There are no screens on any diversions in the Portneuf drainage. Entrainment may be an issue but has not been investigated.
- Flow issues are probably the primary limiting factor, with riparian impacts next.
- Scully had attended a meeting where Richard Inouye (ISU, 282-2933, inourich@isu.edu) discussed precipitation and flows. The last 10 years were the lowest decade on record, although the last few years were especially bad. No one knows whether this is a permanent downward trend or a cycle, but the situation is really bad for water.

Limiting Factor	Comments	Rating
diversion of water	• Toponce Creek and other places	1
sedimentation	• on reservoir area	
channelization	• through a concrete flume for 6 miles since 1961	
fluctuations and dewatering	• from hydropower at Lava Hot Springs	1
	• water rights exceed water in the streams	
	• dewatering is a problem in some sections	
temperature	•	

Limiting Factor	Comments	Rating
riparian impacts	• land use	1

Blackfoot River

- Dick Scully would identify limiting factors for the Blackfoot River drainage and e-mail them to Hebdon.

Willow Creek

- Bill Schrader (IDFG-Idaho Falls, 525-7290, bschrader@idfg.state.id.us) had provided Garren with information about this drainage.
- The Willow Creek drainage is the second worst in Region 6. Riparian areas are devastated, primarily by grazing. Related issues include sedimentation and widening of the channel.
- The headwaters are on public land, but more of the drainage is privately owned than publicly owned.
- The drainage does have a genetically pure Yellowstone cutthroat throat population, despite stocking of brown trout and rainbow trout.

Limiting Factor	Comments	Rating
riparian issues	• Would greatly benefit from riparian fencing	1
channel modification	•	1
sedimentation	• land use	1

South Fork Snake River

- Bill Schrader (IDFG-Idaho Falls, 525-7290, bschrader@idfg.state.id.us) had provided Garren with information about this drainage. This watershed has received a lot of attention recently because of flow-manipulation possibilities.
- Hebdon and Garren decided that the South Fork Snake River ran from the headwater of Palisades Reservoir upstream to a diversion right below Heise Road.
- The tributaries, which are in fairly good shape, provide spawning habitat. There are rainbow exclusion devices to block upstream movement on the four main tributaries.
- Rainey Creek doesn't really connect to the South Fork and may never have. It could provide spawning habitat if it were connected.

Limiting Factor	Comments	Rating
flow issues	•	2
hybridization with exotics	• issue affecting the tributaries as well	1

Teton River

- Bill Schrader (IDFG-Idaho Falls, 525-7290, bschrader@idfg.state.id.us) had provided Garren with information about this drainage. He called it the worst drainage in Region 6.

- The upper section of the drainage has development, agricultural use, riparian issues, loss of connectivity, and sediment issues. People take water without rights, even though the area has been adjudicated.
- The canyon section runs from the Teton Dam location upstream to the top of the canyon. Closing the dam had supersaturated all the soil, which sloughed off into the river and created small pool and rapid segments down through the reach. When the dam failed, the water ripped out all the riparian vegetation. The riparian zone is slowly coming back, although the vegetation is mostly cheatgrass and other undesirables.
- Because the lower section has irrigation and diversions, it is really regularly dewatered. There are two channels between which water is alternately run, often without much notice.

Limiting Factor	Comments	Rating
development	•	2
riparian issues	• in the upper and canyon sections	1
sediment issues	• in the upper section	1
Loss of connectivity	• in the upper section	
channel alteration	• from dam failure in the canyon section; from riparian impacts elsewhere	
dewatering	• in the upper end tributaries disconnected from water diversion	1
	• in the lower section; from water diversion	
nonnative species	• entire drainage (brook and rainbow)	?
	• A survey this year showed a 95% decline in Yellowstone cutthroat trout since 1996 or 1999.	

Falls River

- A canyon protects the river from grazing. There are some irrigation diversions and one hydropower plant, with associated flow issues.
- This drainage is scheduled to be sampled this year. Garren said that there was a decent rainbow trout population. Hebdon said that he would talk with Meyer about the sample he had done.
- The upper end of the drainage is in Yellowstone Park, there are probably some serious impacts from rainbow trout on YSC.

Limiting Factor	Comments	Rating
rainbow trout	• in the upper end	?
Flow issues	• from diversions and one hydropower plant	2

Henrys Fork

- The upper end of the drainage extended from the outlet of Henrys Lake downstream to the confluence with Big Springs. This area has habitat, sediment, and channel alteration problems from land use and heavy grazing. The Nature Conservancy has some projects that are improving habitat. Big Springs has nutrient issues. Natural reproduction is apparently minimal.

- The middle section runs from Box Canyon to the Falls River, where it is primarily affected by flows from Island Park Reservoir. There aren't many irrigation diversions. Where the river runs through Targhee National Forest, the habitat is decent . Sedimentation through the ranch area has been a problem because of the flush in 1992. The area is a rainbow fishery now, and cutthroat are rarely seen.
- The tributaries to Island Park Reservoir have fairly decent habitat since grazing is limited.

Limiting Factor	Comments	Rating
riparian	• especially in outlet section; if addressed might improve things downstream	1
sediment	• especially in outlet section; if addressed might improve things downstream	1
	• in the upper and middle sections	
Flow	• in the middle section; Box Canyon to Mesa Falls	1

Camas/Beaver Creek

- This drainage is forested in the headwaters. It is in decent shape, despite some grazing issues. Nonnatives, mainly brook trout, are an issue. Garren wasn't sure whether the drainage had Yellowstone cutthroat.
- Once in the flat areas, storage, irrigation diversions, sediment issues, and riparian issues are problems. Flows are reduced, by the streams may not be dewatered completely.

Limiting Factor	Comments	Rating
nonnatives	• mainly brook trout	?
Flow issues	• storage and diversions in the flat areas	1
sediment	•	1
riparian issues	•	1

Medicine Lodge Creek

- This drainage was in good shape until a hot fire this year. Now they expect substantial erosion. Flows are usually decent, at least until the lower canyon section. Garren wouldn't expect that the drainage had a Yellowstone cutthroat population.
- There are few landowners. The one at the uppermost end of the reach raises buffalo, which are supposed to be easier on the land than cattle.

Limiting Factor	Comments	Rating
sediment	• concern for potential sediment problems	
nonnatives	• biggest issue for native species	1

Birch Creek

- Most of the drainage is on BLM land and isn't in terrible shape. Garren wasn't sure whether Yellowstone cutthroat historically occurred in Birch Creek.

- The IDFG stocks a section with a diversion immediately downstream. Habitat where the stream isn't diverted is not bad. There is some grazing, with the associated bank instability, riparian issues, and sediment issues.

Limiting Factor	Comments	Rating
Flow	• Most of creek is diverted	1
riparian issues	• associated with land use	1
sediment	• associated with land use	1

Little Lost River

- There is a recovery plan for the Little Lost River. Hebdon would contact Bart Gamett (Salmon-Challis National Forest, 588-2224) about this drainage.

Big Lost River

- Hebdon would contact Bart Gamett about this drainage as well.

UPPER SNAKE SUBBASIN FISHERIES AND TERRESTRIAL TECHNICAL ASSESSMENT TEAM MEETINGS

JANUARY 22, 2004, 11:00 A.M. TO 3:00 P.M.
IDAHO DEPARTMENT OF FISH AND GAME REGIONAL OFFICE, IDAHO FALLS

DRAFT MEETING MINUTES

Primary Facilitation: **Fisheries**—Lance Hebdon, IDFG, lhebdon@idfg.state.id.us
Terrestrial—Jon Beals IDFG, jbeals@idfg.state.id.us
Meeting Documentation: Natalie Chavez, Chavez Writing & Editing, natalie@chavezwriting.com

MEETING PURPOSE AND DESIRED OUTCOMES

The purpose of the technical assessment team meetings was to share and process information relative to upper Snake subbasin planning. Desired outcomes for the fisheries technical assessment team (FTAT) were to review limiting factors information and comments, discuss resident fish, and review the timeline and products for the assessment and plan. Desired outcomes for the terrestrial assessment team (TAT) were to receive input and guidance for watershed-scale limiting factors in the upper Snake subbasin.

ACTION ITEMS

Hebdon

- Add Larry Dickerson, USFWS, and Dan Garren, IDFG, to the distribution list.
- Contact Dr. Robert VanKirk, ISU, about operational impacts to cutthroat from the Palisades Dam and Bart Gamett, USFS, about the closed basins.
- Contact Jenna Hickey regarding spring inundation information.
- E-mail updated assessment outline and instructions for updating the project inventory to those on the FTAT distribution list.
- Send e-mail list and planning team memberships to John Beller, Portage Environmental.
- E-mail the overview, biological resources section, and limiting factors section to people on the FTAT distribution list as these documents are ready for review.

Beals

- E-mail the overview, biological resources section, and limiting factors section to people on the TAT distribution list as these documents are ready for review.

All

- Once provided, review the overview, biological resources section, and limiting factors discussion and return comments to Hebdon and Beals.
- Before February 22, update the project inventory, either by inputting information to the database at www2.state.id.us/fishgame/subbasin/ or by e-mailing an Excel spreadsheet to Hebdon or Beals. Contact either person with any questions.

OVERVIEW AND OUTCOMES[5]

The FTAT and TAT meetings were held concurrently. Results of both meetings are reported in this document. A list of participants is included as Addendum A. Handouts provided before or during the meeting are listed in Addendum B.

Lance Hebdon facilitated the FTAT meeting. Participants discussed a resident fish loss assessment for Palisades Reservoir and provided Hebdon with numerous contacts regarding aquatic projects, applicable research results, and other issues. Hebdon updated people on the status of different components of the assessment.

Jon Beals facilitated the TAT meeting. TAT participants rated impacts of limiting factors for the 22 watersheds in the upper Snake subbasin.

FTAT and TAT participants were informed that the overview would be sent to them as soon as possible for their review; the biological resources section would be e-mailed before the next meeting so that it could provide the basis for discussion in the FTAT. The next FTAT and TAT meetings were scheduled for February 19 in Idaho Falls.

FISHERIES TECHNICAL ASSESSMENT TEAM MEETING

Limiting Factors Information and Comments

Hebdon reviewed that, at the previous meeting, Dan Garren and Dick Scully, both with the IDFG, had provided limiting factors information for focal fish species in several of the watersheds. Corrections and revisions had been made to some of that information as these people checked with their colleagues. Hebdon commented that this section of the assessment was nearly finished, except for the closed basins. He planned to talk with Bart Gamett, USFS, for that information. Once completed, the limiting factors section of the assessment would be passed to the planning team. The technical teams and planning team would coordinate to develop biological objectives and strategies.

Dick Munoz, USFWS, provided Hebdon with Steve Lysne's master's thesis about the Utah valvata (*Valvata utahensis).* Sheryl Hill, independent aquatic biologist, said that there had been articles about a bridge removal project in the subbasin and its potential effects to the Utah valvata. She would send Hebdon copies of those articles.

Resident Fish Loss Assessment for the Palisades Project

Hebdon reported that, although the amount of habitat lost by construction of the Palisades and Minidoka dams could be quantified fairly accurately, it was difficult or impossible to quantify the number of fish lost. Both of these dams were considered part of the Federal Columbia River Power System (FCRPS) so Bonneville Power Administration (BPA) mitigation funding would apply. American Falls Dam was also located in the subbasin but was not part of the FCRPS. The U.S. Bureau of Reclamation (USBR) owned and operated it, primarily for irrigation. Idaho Power Company operated the hydroelectric aspect of the dam. Minidoka Dam was built so long ago (in the early 1900s) that an effort to quantify the number of fish lost would be impossible. Information for Palisades Dam existed but was limited so a number might be possible. Hebdon talked about an approach used in Montana. This approach used the amount of habitat

[5] Though the minutes generally adhere to the chronological development of the meeting, information for any subject covered at different times is organized by subject matter.

lost, data from known systems about the number of fish, and historic data, if available, to extrapolate numbers. Several possible resources for appropriate data were suggested:

- The USBR might have done some preimpoundment sampling, but Hebdon hadn't obtained results yet.
- Dr. Robert VanKirk, ISU (vankrobe@isu.edu or 282-2503) had preimpoundment data. These data, combined with data for free-flowing segments upstream in Wyoming, might allow some pre- and postimpoundment comparisons. VanKirk looked at flows (regulated vs. free-flowing) and concluded that cutthroat weren't necessarily dependent on winter flows. The way that the Palisades Dam was managed benefited rainbow trout over Yellowstone cutthroat trout. A loss assessment should look not only at what habitat was lost in spring creeks above and below the dam but also at operational impacts (construction and operations). VanKirk was scheduled to be at the Idaho chapter meeting of the American Fisheries Society (February 12–14 in Moscow) and the western division meeting (February 29–March 4 in Salt Lake City).
- Steve Lysne (steve_lysne@fws.gov or 685-6956) was the USFWS resource for the Minidoka Project. His expertise was in the Utah valvata, although he also worked on bird issues.
- Chris Ketchum (670-3068 or 678-0461 ext. 15) at the Burley office of the USBR might also have information about the Utah valvata in the Minidoka area. In addition, the USBR had talked about analyzing the potential for raising the dam and increasing the reservoir capacity.
- The USFWS filed for water rights on springs in the vicinity of Minidoka Dam to ensure that upstream activities didn't affect listed snail species. Although the filing was rejected, the data may be helpful. Jenna Hickey worked on this effort (although she's in Wyoming now) and may have spring inundation information.
- Bruce May, Gallatin National Forest in Montana (406-587-6707), conducted a rangewide status review of westslope cutthroat trout, which may provide good information.
- Bill Schrader (525-7290, bschrader@idfg.state.id.us) had been collecting cutthroat data. Hebdon was aware of his work but didn't think the results had been published yet. He would use Schrader's data if Schrader allowed it.

Planning Team Update

Karen Haskett, Bannock Technologies and project lead for the planning team, wanted to know the status of the assessment process. Hebdon said that the overview was about ready to be delivered to the planning team. He anticipated that he and his colleagues would have a fair amount of information to hand over at the first meeting of the planning team, although he cautioned that anything provided would be in draft form and subject to change. Hebdon asked who the participants to the planning team were. Haskett replied that she, John Beller (Portage Environmental), Jim Gregory (Henry's Fork Foundation), and others would hold informational meetings over the next month and ask people to participate.

Hebdon briefly summarized the relationships between the planning team and technical teams. On specific pieces of the process, the technical teams were supposed to be overseen by the planning team, while on other pieces, the planning team was supposed to be overseen by the technical teams. So far, the other subbasins on which he was working had run into no conflicts. If issues arose that could not be resolved, there was a mechanism for dissenting opinions. Also, once the assessment and plan were provided to the Independent Science Review Panel, they would go out for public review. Anyone could raise issues in that forum. Although the technical teams and planning teams for the other subbasins hadn't held joint meetings, all of the meetings were open.

Haskett commented that she had unsuccessfully attempted to extend the deadline. She planned to provide the Northwest Power and Conservation Council with a finished draft by May 28 and then perhaps have an extra comment period to gather anything else that the planning team could submit later or use during a revision loop.

Timeline and Products for the Assessment

Hebdon told participants that the overview (section 1) of the assessment was nearly finished. He anticipated that it would be e-mailed to people within the next couple of weeks for review and comment. Once compiled, the limiting factors discussion would also be e-mailed out for review. He added that comments that were submitted in time were incorporated. But given the strict May 28 deadline, comments that came back too late were being added to an appendix so that they were not lost to the process. If possible, these comments could be addressed in a post-deadline revision loop. Below are the components of the assessment, as well as information that Hebdon provided about each:

Overview (Section 1)	• This section describes how the upper Snake subbasin fit into the Columbia Basin. It would be out for technical review as soon as possible.
Biological Resources (Section 2)	• Although the Northwest Power and Conservation Council instructed subbasins to take a focal species approach, the TAT had taken a focal habitat approach. • The FTAT chose the Yellowstone cutthroat trout as a focal species. • This section was so large that the challenge was getting enough detail that it was meaningful without bogging people down.
Limiting Factors (Section 3)	• The FTAT had identified habitat limiting factors (such as land use, sedimentation, decreased or degraded riparian vegetation, altered hydrograph, and hydroelectric impacts) as well as biological limiting factors (such as hybridization).
Synthesis and Inventory (Section 4)	• The inventory listed projects that had been implemented (generally within the last five years) to address limiting factors for the focal species. If people knew of projects, they needed to update the inventory via a form at www2.state.id.us/fishgame/subbasin/. This inventory could also be used for other purposes besides subbasin planning.

Other Issues Raised and Discussed

During the FTAT meeting, the following issues pertaining to the subbasin planning process were raised and discussed:

- *Wood River Watershed*—Hebdon said that responsibility for the Wood River watershed had been moved to the middle Snake subbasin. Confusion about where this watershed was to be included came from old Northwest Power and Conservation Council maps.
- *BPA Funding to the Upper Snake Subbasin*—Hill showed a list of upper Snake projects funded by the BPA. This list showed that $25 million were dedicated to projects in the region, although only $13 million had been allocated. Some of this funding applied to Camas Creek, which was actually in the middle Snake subbasin.

- *Role of Subbasin Summaries*—Hill asked how the subbasin summaries had been incorporated into the process. Hebdon said that the summaries provided the baseline for developing the assessment and the plan. He and his colleagues pulled information from the summaries although these summaries varied in their degree of detail.
- *Role of TMDLs and TMDL Implementation Plans*—Hebdon had talked with Tom Herron, IDEQ, about TMDLs and the 303(d) list, which was being revised. Hill expressed concern about the draft 303(d) list. Hebdon responded that, since the assessment had to address compliance with the Clean Water Act, the draft list would have to be included. However, caveats could be added about these concerns. TMDLs were developed by IDEQ, but implementation plans were developed by the responsible agencies, such as the Idaho Association of Soil Conservation Districts for agricultural land or the USFS for National Forest lands. The IDEQ website listed TMDLs approved by the USEPA. Hill said that she could provide Hebdon with names of people to contact about TMDLs and implementation plans in the upper Snake subbasin.
- *Lawsuits against Responsible Agencies*—Although the issue of lawsuits against responsible agencies hadn't arisen during the subbasin planning process, Hebdon believed that it would be an issue for the planning team. The assessment included what was technically known. However, he added that, if the lawsuit documentation included information about impacts to Yellowstone cutthroat, it would be useful.

TERRESTRIAL ASSESSMENT TEAM

Beals reminded people to go to www2.state.id.us/fishgame/subbasin/ to update projects in the project inventory. The form had dropdown menus and was easy to use. People should also provide the address to colleagues so that they could add projects that they knew about.

Next, Beals had the participants rate limiting factors for 22 watersheds in the upper Snake subbasin. For this activity, he handed out a sheet with two tables. The first table included the focal habitats and the limiting factors that affected each of these habitats (see Table 1 in Addendum C). The second table provided the framework for rating the degree of impact by each of these limiting factors by 4th field hydrologic unit code (HUC) or watershed (see Table 2 in Addendum C). He explained that, although it was a subjective approach based on professional opinion, this exercise gave him a context for understanding the priorities within the subbasin. TAT members were to compare watersheds within the subbasin against each other, not against watersheds outside the subbasin, in arriving at their ratings.

NEXT STEPS

The next meetings for both the FTAT and TAT were scheduled for February 19 in Idaho Falls. Hebdon hoped to have the FTAT talk about the biological resources section (section 2) of the technical assessment, loss assessment, and project inventory for the first couple of hours. After those discussions, the team could start drafting biological objectives for the subbasin management plan. The TAT would also draft biological objectives.

ADDENDUM A—ATTENDEES

Name	E-mail Address	Phone No.
FTAT		
Jim Fredericks, IDFG	jim_fredericks@idfg.state.id.us	525-7290
Dan Garren, IDFG	dgarren@idfg.state.id.us	589-9762
Karen Haskett, Bannock Technologies	bannockinc@aol.com	522-5007 221-1285
Sheryl Hill, independent aquatic biologist	sherylhill@cableone.net	529-9148
Dick Munoz, USFWS	Dick_Munoz@fws.gov	237-6615
Hunter Osborne, Shoshone-Bannock Tribes	hosborne@shoshonebannocktribes.com	221-4872
TAT		
Bryan Aber, Caribou-Targhee National Forest	baber@fs.fed.us	558-7301
Lauri Hanauska-Brown, IDFG	lhanausk@idfg.state.id.us	525-7290
Dan Christopherson, Shoshone-Bannock Tribes	dchristopherson@shoshonebannocktribes.com	478-3808
Geoff Hogander, BLM	geoff_hogander@blm.gov	478-6345

ADDENDUM B—HANDOUTS

Fisheries Technical Assessment Team

- Meeting agenda. 1 p.

Terrestrial Assessment Team

- Meeting agenda. 1 p.
- Addendum C—Limiting Factors." Two tables, the first of which had limiting factors for focal habitat types in the upper Snake subbasin and the second of which was used during the meeting to rank impacts to each watershed as insignificant, low, moderate, or high. 1 p.

ADDENDUM C—LIMITING FACTORS RANKING

Table 1 Focal habitat types and their associated limiting factors in the Upper Snake Province.

Focal Habitat Type	Altered Fire Regime	Grazing/ Browsing	Altered Hydrologic Regime	Timber Harvest	Land-Use Conversion	Invasive/ Exotics
Riparian/herbaceous wetlands		×	×		×	×
Shrub-steppe	×	×			×	×
Open water			×			
Pine/fir/mixed conifer forests (dry, mature)	×	×		×	×	×
Whitebark pine	×					×
Juniper/mountain mahogany/mountain brush						
Aspen	×	×			×	

Table 2 Rankings of the impacts of limiting factors for each watershed in the Upper Snake Province (rankings: 0 = insignificant, 1 = low, 2 = moderate, and 3 = high).

Watershed	Altered Fire Regime	Grazing/ Browsing	Altered Hydrologic Regime	Timber Harvest	Land-Use Conversion	Invasive/ Exotics
Snake Headwaters Subbasin						
Greys–Hobock (GHB)	3	×[a]	1	1	2	×[a]
Gros Ventre (GVT)	3	1	1	1	2	×[a]
Palisades (PAL)	3	2	3	2	3	3
Salt (SAL)	3	2	1	2[a]	3	3
Snake Headwaters (SHW)	3	2	3	2	3	3
Upper Snake Subbasin						
American Falls (AMF)	1	3	3	0	2	3
Blackfoot (BFT)	2	3	3	2	3	3
Goose (GSE)	3	3	3	0	3	3
Idaho Falls (IFA)	3	3	3	0	3	3
Lower Henrys (LHF)	3	3	3	0	3	3
Portneuf (PTF)	3	3	3	1	3	3
Raft (RFT)	2	3	3	0	3	3

Watershed	Altered Fire Regime	Grazing/ Browsing	Altered Hydrologic Regime	Timber Harvest	Land-Use Conversion	Invasive/ Exotics
Teton (TET)	3	2	2	2	3	3
Upper Henrys (UHF)	3	2	3	3	3	2
Upper Snake–Rock (USR)	3	3	2	2	2	3
Lake Walcott (LWT)	1	3	3	0	3	3
Willow (WIL)	3	3	3	2	2	3
Closed Basin Subbasin						
Beaver–Camas (BCM)	3	2	2	2	2	3
Birch (BCK)	3	2	2	0	2	2
Big Lost (BLR)	3	2	3	2	2	3
Little Lost (LLR)	3	2	2	1	2	3
Medicine Lodge (MDL)	3	2	2	0	2	3

[a] Other resources need to be contacted for this rating.

Upper Snake Province Plan

Joint Meeting of the Technical Team's Terrestrial and Aquatic Groups

Idaho Department of Fish and Game, Idaho Falls

March 18, 2004

11:00 am - 5:00 pm

Minutes

In attendance: Kyle Babbitt, Sheryl Hill, and Karen Haskett, Bannock Technologies; Lauri Hanauska-Brown and Dan Garren, Idaho Department of Fish and Game (IDFG), Idaho Falls; Lance Hebdon and Jon Beals, IDFG, Boise; Larry Dickerson and Dick Munoz, US Fish and Wildlife Service, Pocatello; Hunter Osborne and Dan Christopherson, Shoshone-Bannock Tribes Fish and Wildlife Department, Ft Hall.

The following notes of the combined meeting of the technical team's aquatic and terrestrial groups were prepared by Kyle Babbitt, who also facilitated the meeting and took group notes.

Kyle gave an overview of the public meetings held to date in Burley and Pocatello. The vision statements and goals for each group were reviewed. Sheryl Hill and Karen Haskett gave other comments about the meetings. Although there were low numbers of participants (four in Burley; nine in Pocatello), they were knowledgeable and provided useful information for the plan. Some participants also volunteered to serve on the planning team. Overall, the meetings were productive.

Lance Hebdon gave an update on the assessment and inventory sections of the plan. A draft of the *Overview* portion of the assessment was distributed via e-mail by Lance and Jon on March 18 (and again by Jon on March 19). A request was made to place sections of the plan that are available for review on an ftp site instead of distributing them as e-mail attachments because 1) not everyone has access to e-mail right now (i.e., all employees of the Department of Interior) and 2) the attachments are too large for some e-mail accounts to receive. Projects are still needed for the inventory section of the plan. Jon and Lance confirmed that the address for submitting projects for the inventory can and should be made available to the public at future meetings[6].

Karen compiled the draft terrestrial and aquatic biological objectives provided by Lance and Jon into a table for review by the technical team. Kyle noted the group's comments on the draft and confirmed them with the group as they were discussed. A revised version incorporating the group's comments will be circulated for review. There was much discussion regarding the importance of quantifiable objectives and therefore how to make the objectives quantifiable. Not enough data is available in most cases to develop quantifiable objectives that are also scientifically defensible. Those deficiencies can, however, be included in the plan as data gaps. The plan can also acknowledge that because it is intended to be a

[6]The URL for submitting projects is http://www2.state.id.us/fishgame/subbasin/. According to an earlier e-mail from Jon, assessment team members can contact either Kathy Hopper (208/287-2796, khopper@idfg.state.id.us) or Jeff Semmens (208/287-2796, jsemmens@idfg.state.id.us) if they have any questions about the inventory, need help submitting projects, or if they want to provide further information or contacts.

"living" document that is continually updated and modified, the objectives can be reviewed and adjusted as data become available.

It was noted that the terrestrial group has addressed issues related to terrestrial and wetland species by identifying focal habitats whereas the aquatic group has addressed issues related to aquatic habitats by identifying focal species. The manner in which this difference in approach for terrestrial and aquatic species enables development of quantifiable biological objectives will be explained in the management section of the plan.

Kyle reviewed the proposed meetings for the planning teams. There will be three planning teams; one in each subbasin. Each planning team will have three meetings, the first of which is the public meeting where the vision and goals are being developed. The agenda for the second meeting will be to review the vision statements and goals developed at the public meetings, attempt to create a combined vision for that subbasin, and review the biological objectives prepared by the technical team. The agenda for the third meeting will be to review the research, monitoring, and evaluation sections of the plan. The timing of these meetings depends on progress made by the technical team. The planning teams will also be asked to review the portions of assessment, inventory, and management portions of the plan that pertain to the subbasin they represent.

Next meeting date: Monday, April 19th from 11:30 am – 3:30pm at IDFG in Idaho Falls

Agenda items to include:

- Review visions and goals developed at public meetings
- Review planning team comments (if available)
- Review biological objectives for final inclusions
- Review and provide comments on the research, monitoring, and evaluation sections of the plan

Action Items:

- Inventory: Last date for submission of inventory items (i.e., projects) is April 15th.
- Lance and Jon will distribute the site for including items directly into the inventory (or see footnote 1).
- Sheryl will submit Henry's Fork Watershed Council projects for the inventory.
- All participants will submit projects that have been completed or are currently being implemented by their organizations.
- All participants will look for references and sources of data or information and submit them to Lance and Jon for inclusion in the assessment.
- Lance will add limiting factors to the aquatic section of the biological objectives.
- Lance will add information regarding mountain whitefish and *Utah valvata* to the table of biological objectives. Dan will provide Lance with additional information regarding whitefish, and Dick will follow up with Steve (?) from USFWS regarding *U. vavlvata*.
- All participants will review and respond with comments regarding the revised biological objectives.

Next Steps:

- Sheryl revised the biological objectives, incorporating comments from the technical team. The revised table has been transmitted along with these minutes. Please note the comments shown in red and provide responses whenever possible.

- Please review the revised table of biological objectives and return your comments to Sheryl by April 6th (e-mail directly to sherylhill@cableone.net).

- Lance will send the Research, Monitoring, and Evaluation section out for review during the week of March 22. He needs corrections and comments back by April 12th so he can bring a revised version to the meeting on April 19th.