

## Snake River Salmon Draft Recovery Plan Agency Comment Summary -- "Content comments"

#	Source	Comment	Plan	Reference
1	USFWS	Section 1.1, pg. 2: We suggest adding the following wording that describes the Service's role in setting recovery goals for bull trout: "The US Fish and Wildlife Service has the ultimate responsibility to determine if bull trout have been successfully restored to the point where they can be de-listed." *	Full document	Introduction
2	USFWS	Section 3.2, pg. 76: We suggest adding a more detailed description of bull trout life history. Please note that the statement "none migrate into salt water" from the Snake River Salmon Recovery Plan [SRSRP] is incorrect. For example, from pg. 9 of the Chapter 1 of the draft Bull Trout Recovery Plan (BTRP): "Bull trout exhibit both resident and migratory life-history strategies (Rieman and McIntyre 1993). Resident bull trout complete their entire life cycle in the tributary (or nearby) streams in which they spawn and rear. Migratory bull trout spawn in tributary streams where juvenile fish rear one to four years before migrating to either a lake (adfluvial form), river (fluvial form) (Fraley and Shepard 1989; Goetz 1989), or in certain coastal areas, to saltwater (anadromous) (Cavender 1978; McPhail and Baxter 1996; Washington Department of Fish and Wildlife. Et al. 1997). Resident and migratory forms may be found together, and either form may give rise to offspring exhibiting either resident or migratory behavior (Rieman and McIntyre 1 993)." * ++	Full document	Salmonid Assessment
3	USFWS	Section 3.7.3: We suggest adding the following to the Tucannon River section, second paragraph, pg. 124 (from the <b>draft</b> BTRP, Snake River Washington chapter): "Kleist (in litt. 1993) reported several observations of adult bull trout passing Lower Monumental and Little Goose Dams on the mainstem Snake River. The U.S. Army Corps of Engineers summarized occurrences of adult bull trout seen in fish ladders and captured in juvenile bypass sampling systems at Lower Monumental Dam and Ice Harbor Dam facilities (Baxter, in litt., 2002). Since 1993, fish facility personnel have documented a total of 37 bull trout at both projects. Length estimates for these fish ranged between 20 and 46 centimeters (8 to 18 inches). It is very possible that these fish are migratory fish returning to, or migrating from, the nearby Tucannon River, rather than fish migrating to streams significantly farther upstream. Fish passage personnel have not documented adult bull trout passing Lower Granite Dam (R. Baxter, U.S. Army Corps of Engineers, pers. comm., 2002). Juvenile bull trout have been captured in juvenile salmon bypass systems at Lower Granite Dam (Groat, pers. comm., 2002d). In the past, fish counters at Lower Granite Dam may not have documented passing bull trout because counting protocol instructed individuals to tally only "core" anadromous species (Baxter, pers. comm., 2002)." * ++	Full document	Salmonid Assessment
4	USFWS	Section 3.7.3, Tucannon River section, pg. 127: We suggest adding (from pg. 1 1 of the <b>draft</b> BTRP, Snake River Washington chapter): "The Washington Department of Wildlife (1 997) reported that historically, migratory bull trout probably used Asotin Creek." *	Full document	Salmonid Assessment
5	USFWS	In generwl this section is difficult to follow. The order in which the areas/species appear does not follow the same order as other sections and it is often difficult to tell which sub-heading(s) the text falls under. Also, explanations of both VSP and EDT are mixed in with descriptions of habitat factors. We suggest separate sections for VSP and EDT early on in the document (perhaps an entire section before Section 3.0) and using each ESU/Core Area as a larger	Full document	Factors limiting viability

		category under the "Factors Related to.. ." sections. *		
6	USFWS	Since there is overlap between the limiting factors (habitat) for salmon/steelhead and bull trout, it would be easier on the reader to simply include and mention bull trout within the overall discussion of each area (and heading) rather than having such short discussions for bull trout alone. For example, the sub-heading, "Snake River ESU Asotin Creek Steelhead and Asotin Creek Spring/Summer Chinook Populations" would read, "Snake River ESU/Recovery Unit Asotin Creek Steelhead, Spring/Summer Chinook, and Bull Trout Populations". As it currently reads, some of the bull trout sections give the impression that the limiting habitat factors for bull trout are very few when compared to those for steelhead and Chinook. *	Full document	Factors limiting viability
7	USFWS	There are discussions of factors relating to spatial structure and diversity within the Factors Affecting Habitat section. This is difficult to follow. Perhaps giving spatial structure and diversity their own sections would add clarity. *	Full document	Factors limiting viability
8	USFWS	Pg. 165, Bull Trout section: It is unclear if this section is intended to be a full description of the habitat factors affecting abundance for bull trout in the Asotin Creek Core Area (this also applies to other bull trout sections). If it is, the <b>draft</b> BTRP has extensive discussions of habitat impacts in the "Reasons for Decline" section. Important factors such as Headgate Dam are discussed and likely warrant mention in this section of the SRSRP, similar to the "Causes of Impacts to Walla Walla Headwaters" section's (pg. 172 of the SRSRP) discussion of habitat conditions. *	Full document	Factors limiting viability
9	USFWS	Pg. 166, Bull Trout section: The last sentence reads, "It is therefore assumed that actions designed to improve habitat conditions for steelhead and spring/summer Chinook will provide benefits to bull trout as well." We suggest pointing out that because bull trout are more limited in their tolerance for habitat alterations, actions for salmon and steelhead alone may not be sufficient to achieve recovery of bull trout. We also suggest adding this statement in all applicable places in the SRSRP. *	Full document	Factors limiting viability
10	USFWS	Pg. 177, Bull Trout section: We suggest stating that the <b>draft</b> BTRP, Umatilla-Walla Walla Chapter, also describes limiting factors for bull trout in the Walla Walla subbasin. *	Full document	Factors limiting viability
11	USFWS	Section 4.3.2: We suggest adding wording in the "Juvenile Salmon Survival" section that reflects the following information: "According to the <b>draft</b> report, "Summary of Bull Trout Studies in the Lower Snake River and McNary Reservoir", March 2004, prepared for the Corps of Engineers by Biomark and Battelle, juvenile/sub-adult bull trout have been observed during sampling at the juvenile fish bypass system at the three Lower Snake River dams. These fish likely represent a small percentage of the number of bull trout incidentally included with salmon and steelhead that are diverted to a holding area where they are loaded onto barges or trucks for transport downriver. A search of the lower Columbia PIT tag data is underway to determine if any bull trout that were PIT tagged within the Snake River system have been found at Caspian tern colonies and other avian predator breeding colonies along the lower Columbia River. The potential impact to the recovery of bull trout in the Snake River Washington Recovery Unit and other Recovery Units with connectivity to the Snake River in the area is undetermined at this point, but could be significant. The Service is awaiting additional data from the COE regarding the dates in which bull trout were sampled, number of bull trout sampled, and daily sample rate at the juvenile facility. Staff from the USFWS Dworshak Fishery Resource Office is reviewing the data to estimate the number of bull trout that may have been barged in past years. The barged fish are being released into the Columbia River near Astoria, Oregon. There are no known numbers of bull trout that have been observed ascending the ladder at Bonneville Dam, suggesting near total mortality of barged bull trout, or at least the loss of these fish to the Snake River system."*	Full document	Factors limiting viability

12	USFWS	Section 4.3.4, pg. 199, fifth paragraph: We suggest adding language from pg. 43 of the <b>draft</b> BTRP, Snake River Chapter: "Within the Snake River Washington Recovery Unit, overfishing has reduced bull trout populations in some southeast Washington streams, including the Tucannon River, as some anglers targeted bull trout when the fish were concentrated below stream barriers and vulnerable just prior to, or during, spawning (Mendel, pers. comm., 2002g). In addition, bull trout may have been historically considered an unfavorable species by anglers, <b>as</b> occurred in other areas (Thomas 1992), and been specifically targeted for removal. Current angler related threats to bull trout in the Snake River Washington Recovery Unit could occur through misidentification and accidental harvest, intentional poaching, or hooking mortality." ++	Full document	Factors limiting viability
13	USFWS	Section 5.2.1 : We suggest adding a discussion of how at the time the SRSRP was written, EDT rules were not available for bull trout, and thus they are not specifically addressed in this section. Also, we recommend adding a statement that bull trout EDT rules are now available and there are opportunities in the near future, planners will run the model for bull trout. *	Full document	
14	USFWS	Section 6.2: The first paragraph reads, "The habitat strategy relies upon use of EDT simulations which integrate environmental attributes critical to fish. Those attributes allow estimates of the VSP parameters: abundance, productivity, life history diversity, and spatial distribution (Chapter 4.0)." We suggest pointing out that because bull trout rules for EDT were not available when the SRSRP was developed, some habitat strategies needed for bull trout recovery are not identified by EDT modeling. Also, we suggest stating that NMFS VSP criteria are not applied to bull trout and that different parameters (such as those in the BTRP) are used. *	Full document	Recovery goals and planning targets
15	USFWS	Section 6.2.2, pg. 253, last paragraph: The last sentence reads, "It is therefore assumed that actions designed to improve habitat conditions for steelhead and spring/summer Chinook will provide benefits to bull trout as well." We recommend pointing out that because bull trout are more limited in their tolerance for habitat alterations, actions for salmon and steelhead alone may not be sufficient to achieve recovery of bull trout. *	Full document	Recovery goals and planning targets
16	USFWS	Section 6.2.2, pg. 261, Critical Uncertainties and Data Gaps: We suggest addressing research needs into Walla Walla bull trout life history patterns and movements in this section. *	Full document	Recovery goals and planning targets
17	USFWS	Section 6.4: We suggest adding a description of how the hydro strategy for bull trout is based upon the Service's 2000 FCRPS BiOp. *	Full document	Recovery goals and planning targets
18	USFWS	Section 6.6: We suggest describing the Service's 2000 FCRPS BiOp and its role in Snake River hydroelectric operations. The Service would work with planners on specific wording as the plan is finalized. *	Full document	Recovery goals and planning targets
19	USFWS	Section 7.1 : We suggest adding a discussion of specific threats identified for bull trout and the plan for addressing them. The Service would work with planners on this section. *	Full document	Actions
20	USFWS	Section 7.2: We suggest adding a description of how the hydroelectric strategy for bulltrout relies upon the Service's 2000 FCRPS BiOp. *	Full document	Actions
21	WDFW	The over-riding sense of the Plan is of an emphasis on Habitat factors with little integration of the other H's. Since the Snake is so high in the Columbia other H related activities and out of subbasin effects (OOSE) such as mainstem Federal Columbia River Power System (FCRPS) actions, Hatchery Genetic Management Plan(s) (HGMP's) and harvest management plans can greatly impact the ability of Habitat actions to achieve recovery goals. We understand the Board was primarily focused on writing the Habitat section of the plan, while incorporating other documents to	Public summary	General

		<p>address the other 3 H's. This plan, however, needs to do a better job of describing and integrating these with the Habitat section. It would help if the document defined SRSRB limits of responsibility for recovery and limitations when dealing with the other H's, as well as giving more in depth information on the impacts of the other H's. For Hydro this would include the impacts outlined in the 2004 NOAA Fish Columbia River Biological Opinion (Bi-Op.), as well as, the actions proposed in the same. Relevant information on hatchery operations within the Snake River Basin is available in the latest versions of HGMP's prepared for NOAA Fish, and publications such as the NMFS Technical Memorandum which discusses the impacts of artificially produced salmonids on wild salmon populations in the Columbia/Snake River system (Flagg et al. 2000). Information on Harvest related impacts, and actions to lessen them, are available in a variety of documents including the Columbia River Fish Management Plan (CRFMP) WDFW final draft Fish Management and Evaluation Plans (FMELPs) and US v OR materials. Data presentations of harvest should include run sizes, harvests, exploitation (or harvest) rates, and resulting escapements. Discussion of the above processes as they relate to the ability of tributary habitat changes to increase adult run sizes should be a part of this discussion. In addition, the recently developed All H Analysis (AHA) model should be included as at least a discussion item. This process will likely contribute greatly to the evaluation and integration of various strategies to address the H's in the final Recovery Plan, and may be a valuable addition to any general integration discussion the writers care to include. The out of basin effects and their significance must be clearly described for the reader to understand that out of basin effects represent a dominating impact over and above inbasin effects. An additional resource is the March 14 draft Comparison of Major Categories of Limiting Factors by NOAA which presents and compares mainstem corridor effects, inbasin effects and estuary effects.</p>		
22	WDFW	<p>The use of Ecosystem Diagnosis and Treatment (EDT) to predict whether a population is meeting recovery; needs further discussion, particularly when empirical data seems to disagree with model predictions. For Asotin steelhead the EDT results on pg 309 show that they will not achieve recovery based on EDT, but the starting point or current abundance appears to differ from the empirical data and could be underestimating actual abundance. It also shows no production in George Creek where WDFW has documented fairly high production. In addition, it ignores some of the tributaries such as Alpowa Creek where EDT was not run. Asotin spring Chinook and Touchet steelhead have wide differences in EDT predicted current abundance and estimates from empirical data. This casts doubts on further predictions (PFC and Habitat) that are dependent on this baseline prediction. These should be further examined and discussed as it relates to the EDT modeling of the point on the Viability Curve. What if the empirical data is right and EDT is wrong? That could change the predicted outcome, i.e. recovered vs. not recovered. This discussion should help to make the case that monitoring and measuring, with adaptive management, is the only reliable way to determine recovery.</p>	Public summary	Recovery goals and planning targets
23	WDFW	<p>There are several instances in the presentation of EDT run results where it appears that outdated or incorrect model inputs may have been used. As an example George Cr is shown to have zero predicted abundance for steelhead. This result was also found during subbasin planning and adjustments were made to erroneous model input to correct it. We suggest that the EDT results included in this plan be re-examined to ensure current model inputs were used. In addition we suggest that the EDT model inputs and runs as they now exist be reviewed in several streams for accuracy and consistency with known conditions. This would include, but is not limited to, the Asotin (steelhead and spring chinook) and Pataha. Given the importance EDT has played in this plan and its certain future use in the basin this would be time well spent.</p>	Public summary	Recovery goals and planning targets
24	WDFW	<p>Though it is recognized that the primary purpose of this document is to plan for recovery of ESA listed stocks it should also be noted that there are other obligations within the Snake Region that may or may not currently integrate well with the Plan. Written discussion is needed that recognizes the demands and expectations of other priorities and the</p>	Public summary	General

		need to balance ESA recovery plans and goals with these processes. These expectations include Federal Treaty trust and treaty rights, Lower Snake River Compensation Plan mitigation, Co-Manager's goals and court mandated treaty and non-treaty rights (e.g. USvOR).		
25	WDFW	Stock status descriptions at present are inadequate. There are many documents readily available that help to describe the current status of various stocks and give good demographic information. These include (but are not limited to) the Subbasin Plans, NOAA documents (i.e. BRT), and Gallinat's (WDFW Snake River Lab) current publications on Tucannon spring Chinook. This addition information does not have to include the full status descriptions from these documents but should be a summary that provides greater detail than is now present. Stock status or viability presentations as provided in Safety Net Artificial Propagation Program (SNAPP) and the work by Chilcoate (as provided earlier) also need to be included. These were provided earlier and it is unclear why they are hardly mentioned in the document.	Public summary	Salmonid Assessment
26	WDFW	The productivity (smolts)/spawner paper that was recently written by Technical Recovery Team (TRT) member Casey Baldwin should be included, either in the status or viability sections. This paper represents cutting edge science on measuring the impacts of work within a subbasin. It is particularly applicative since Tucannon spring Chinook are used in the examples. There needs to be some method to help measure the impact that habitat actions are having on the intrinsic productivity of the populations in question. It would be particularly appropriate to include this paper as a basis for a discussion on how in basin habitat actions may be monitored as to their relative impacts on the stocks.	Public summary	Salmonid Assessment / factors affecting viability
27	WDFW	We need better explanation of how populations that cross state lines were measured in relation to the viability curves. How were habitat changes quantified to obtain the point that predicts recovery or lack of? What assumptions were made outside of Washington jurisdiction?	Public summary	Factors affecting viability
28	WDFW	The Regional Technical Team (RTT) struggled with several stream reaches that were designated as Major or Minor Spawning Areas (MmSA) by the TRT's Intrinsic Potential Analysis but are not regarded, either through expert opinion or empirical data, as having the potential to meet the adult spawner requirements. The RTT eventually agreed to accept an area as an MmSA if both EDT and the Intrinsic Potential Analyses indicated that the area could support the minimum population for the designation. The document and executive summary should emphasize this concern and include a discussion on the specific areas that are in question. This includes spring Chinook in Asotin, George Creek, Upper South Fork Asotin and others; also Deadman Cr and <b>Patit</b> as an MSA for steelhead. In particular Pataha spring Chinook needs to be discussed regarding the potential effect of that decision regarding the risk and viability of the Tucannon spring Chinook population.	Public summary	Salmonid Assessment
29	WDFW	The term "rebuilding" is used to describe those levels above recovery such as Tribal or WDFW adult return goals. This term has not been discussed by the RTT nor at a policy level. The term that had been agreed upon is "restoration". All references to rebuilding numbers should be changed to this more widely accepted term.	Public summary	Recovery goals and planning targets
30	WDFW	The Recovery Goals chapter seems incomplete and not very informative. The concept of VSP is introduced here (ch 5) but not fully applied until chapter 7. In chapter 5 after introducing the concept of VSP graphs it would be better to show all of the graphs with everything but PFC and Habitat points (which would really be all of the recovery/restoration goals). Then repeat the graphs in chapter 7 with the addition of PFC and the Habitat points. That way the presentation of recovery goals are more complete and the reader is eased more gently into the concept of VSP. Also, it is important that all points currently labeled as historical be re-labeled as EDT Historical, there shouldn't be any questions as to the origin of these numbers.	Public summary	Recovery goals and planning targets

31	WDFW	The implementation chapter is short and seems relatively incomplete. It will be difficult to find acceptance for a plan that recommends many good actions but has no clear pathway to implement them. It is very important that this be addressed now or during the fix-it loop.	Public summary	Implementation
32	WDFW	Instream flows, particularly in the Walla Walla, are not well discussed in the plan. Given how important limited water supplies are to the recovery of listed stocks, it would seem that, at a minimum, there should be discussions on this matter. This should include any water goals that come out of the WRIA 32 watershed planning process.	Public summary	Factors affecting viability
33	WDFW	It was suggested early on that the Stillaguamish plan be referred to for important language and content regarding recovery. This would still be a valuable exercise, particularly when it comes to describing the purpose of the Plan. The Stillaguamish Chinook Recovery Plan has several visionary statements that WDFW believes could also apply to the Snake Plan. For example; "The Stillaguamish Recovery Plan is intended to provide guidance to local stakeholders in a collaborative effort to restore and protect chinook spawning populations in the Stilly watershed and "This document describes the biological content of a recovery plan directed to ultimately fulfill the obligations of the ESA and address broader recovery goals.	Public summary	General
34	WDFW	The Economic portion that was previously provided by Mendel has some errors and needs to be revised. Glen Mendel should be contacted concerning this.	Public summary	General
35	WDFW	WDFW/tribal population objectives need to be included.	Public summary	General
36	WDFW	Water is listed in many cases as a limiting factor. The final plan should eventually include 2514 water budgets and flows for fish.	Public summary	General
37	WDFW	The coverage of hatcheries and harvest was given little discussion and no details.	Public summary	General
38	WDFW	Information should be reported in the same chapters as in the technical document.	Public summary	General
39	WDFW	Not enough of other viability analyses and reports were included to refute or bolster the results from EDT and NOAAs viability information. All these efforts should be briefly included here to strengthen the analyses.	Public summary	Factors affecting viability
40	WDFW	The term "Productivity" is defined as "The maximum number of recruits (adults) produced by a single spawner." Productivity is almost always expressed as an average of a number of brood cycles, and the single maximum brood year productivity is not particularly informative. The word "total" might be a better choice than "maximum." Another problem is that the productivity of a single spawner will be zero. This should probably be changed to; "The total number of recruits (adults) produced by a spawning population, usually expressed as recruits per spawner (R/S)."	Public summary	Glossary
41	WDFW	Chapter 1, page 3, paragraph 3: Actions targeting hatcheries. ....Additional discussion is needed here and within the greater document, which identifies the connection and interaction within and between the 4Hs relative to contributions to population viability. Placeholder language should be considered in this draft (for future clarification in the fix it loop) which deals with contributions and threshold limits which may be contributed by any one or combination of actions within the habitat, harvest, or other Hs relative to recovery and viability criteria. The upper Columbia Recovery team is including language on utilization of the AHA model as a tool to help address this testing and evaluation of various contributions for Habitat, etc. This type of language should be considered for inclusion in the Snake recovery plan.	Public summary	Introduction
42	WDFW	Chapter 1, page 1, paragraph 3: The statement is made that: "Populations of salmonids have been reduced to very low levels within the State of Washington, resulting in some populations being listed as threatened or endangered under the federal and state endangered species acts." This is not correct on several levels. First, no salmonid is listed as threatened or endangered under the state endangered species act. Bull trout and several salmon	Public summary	Introduction

		populations are listed as “State Candidate” species in the WDFW system. And, second salmon populations are not “reduced to very low levels” across Washington State. As an example, pink and chum salmon are the most abundant wild salmon in the state, and both species are experiencing record returns to Puget Sound streams. The statement should be corrected to: “Populations of salmonids have been reduced to very low levels within the State of Washington Columbia River system, resulting in some a number of populations being listed as threatened or endangered under the federal and state endangered species acts.”		
43	WDFW	Chapter 4: Out of basin effects need to be emphasized much more than in shown in this document. Try using an upper basin population and a Walla Walla Basin population as examples and compare out of basin effects. The out of basin effects and their significance must be clearly described for the reader to understand that out of basin effects are dominate over inbasin effects. The March 14 draft Comparison of Major Categories of Limiting Factors by NOAA shows mainstem corridor effects and estuary effects of High and Medium for the Grande Ronde spring Chinook, but within basin effects as moderate. For fall Chinook in the Snake inbasin effects are considered low and corridor effects are high, estuary effects are medium, and harvest effects are high. For lower Snake steelhead within basin effects are rated as low and corridor effects are high.	Public summary	Factors affecting viability
44	WDFW	Chapter 4, page 32, Table 8: should show in the title that it is only EDT results and does not cover all limiting factors for populations within the recovery region.	Public summary	Factors affecting viability
45	WDFW	Chapter 4, page 36, paragraph 3: Not all dams have facilities to aid fish passage within the ESU. Clarify this to read “...to aid fish passage at four <b>Lower Snake River dams</b> ,”.....	Public summary	Factors affecting viability
46	WDFW	Chapter 4, page 36, paragraph 4: “There is no specific information available regarding the effects of in-region hatcheries on recovery region ESA-listed populations.” Provide clarification relating to this data gap back to M&E plan components.	Public summary	Factors affecting viability
47	WDFW	Chapter 4, page 36, paragraph 4: “The adipose fin is clipped on hatchery-origin fish.” Clarify if on all Snake River hatchery fish	Public summary	Factors affecting viability
48	WDFW	Chapter 4, page 36, paragraph 1: Hatcheries are covered here and 6.3, Page 53. Both need to be expanded and also in the plan. Need more discussion on how it will be integrated into plan.	Public summary	Factors affecting viability
49	WDFW	Chapter 4, page 36, all: Needs to be expanded. Not necessarily in the summary, but in the plan.	Public summary	Factors affecting viability
50	WDFW	Chapter 4, page 36 & 37, paragraph 1 & 3:It is important to explain in more detail how dams affect the fish migration environment.This is discussed in section 4.5.	Public summary	Factors affecting viability
51	WDFW	Chapter 4, page 37, paragraph 5:First sentence – Anadromous salmonids are also taken in sport fisheries in the ocean.	Public summary	Factors affecting viability
52	WDFW	Chapter 4, page 37, paragraph 6: Last sentence – It is stated: “The effects of hatcheries is also similar to those discussed above for Snake River dams.” I don’t see the connection between dams and hatcheries. If the intent of this statement is to suggest that the impact of lower Columbia River hatchery salmonids are similar to the effects of salmonids from Snake River hatcheries (the connection made for dams), then there’s a problem. The issue of predation impacts from hatchery fish in the snake system was not discussed (see general comments), so hatchery impacts on wild fish are being ignored for the entire system. This is not appropriate.	Public summary	Factors affecting viability
53	WDFW	Chapter 4, page 38, paragraph 3: “Most impacts to Snake River Steelhead occur in fall season fisheries”, <b>both within and out of basin</b> ....This section should be fleshed out a little more. Example, WA regulations have been enacted to increase the harvest on abundant hatchery (marked) steelhead to help in reducing straying and other related hatchery / wild interaction impacts. SE WA bag limit during open SH season is 3 hatchery steelhead per day. Other out of basin impacts which could be included for notation in this section hatchery straying impacts (example Umatilla spring	Public summary	Factors affecting viability

		Chinook and concerns for impacts on Tucannon spring Chinook. This section is a little weak.		
54	WDFW	Chapter 5, all: The abundance/productivity viability curves provide the means of determining when populations will be recovered, but they are complex and not clearly explained. The rebuilding concept is completely glossed over in the document without careful study. These are important graphs, but have inconsistencies that will be questioned and confusing to readers. They are probably better left to the full document or to appendices, with critical numbers captured and presented in table form for easy assimilation. Summarize the four elements of the ICTRT viability in one paragraph each and how the plan intends to address each.	Public summary	Recovery goals and planning targets
55	WDFW	Chapter 5, all: In the viability graphs the label for historical should say that it is EDT historical so everyone can quickly understand where it came from.	Public summary	Recovery goals and planning targets
56	WDFW	Chapter 5, all: Asotin steelhead viability graph is missing in this document.	Public summary	Recovery goals and planning targets
57	WDFW	Chapter 5, page 40, paragraph 1: Productivity and abundance indices , which could also be noted, include some of the material Casey Baldwin provided for egg to smolt productivity indices, etc.	Public summary	Recovery goals and planning targets
58	WDFW	Chapter 6, page 53, paragraph 1: “no actions suggested...proposed through this recovery plan”. Incorrect - EDT models assume BIOP 15 year plan will implement upgrades.	Public summary	Planning strategies
59	WDFW	Chapter 6, page 53, paragraph 1: Mention steelhead along with Chinook?	Public summary	Planning strategies
60	WDFW	Chapter 7, pages 52-54, tables 8, 12, 13: The flow discussion is limited, mostly just listings in various tables and referencing the ESHB 2514 processes. There is no discussion of how water quantity will be changed. It would be worthwhile to have a discussion of the perpetual nature of water rights and the variable nature of hydrology as a context for how one addresses changes in water quantity.	Public summary	Actions
61	WDFW	Chapter 7, pages 55-58, habitat factors paragraph: The reader has no frame of reference for the level of improvement being requested for each habitat type by the objective listed. A current status / Plan Goal might be a better approach so the reader understands the expected change. But that will require a sophisticated reader who understands that small improvements may require huge effort. This is simply too complex for the summary. Distill to the critical minimum and delete the actions for each factor/objective.	Public summary	Actions
62	WDFW	Chapter 7, page 58: There may be a better way to present costs than the current. It seems as the costs are dropped on the reader. The cost breakdown on subsequent pages helps the reader understand how these costs came to be, but they are overwhelming in their own. There has to be a better way. M&E costs must be included in planned actions or accountability will not occur as required by most funding agencies.	Public summary	Actions
63	WDFW	Chapter 7, page 63, paragraph 1: Hydro actions... Additional discussion is needed here and within the greater document, which identifies the connection and interaction within and between the 4Hs relative to contributions to population viability. Placeholder language should be considered in this draft (for future clarification in the fix it loop) which deals with contributions and threshold limits which may be contributed by any one or combination of actions within the habitat, harvest, or other Hs relative to recovery and viability criteria. The upper Columbia Recovery team is including language on utilization of the AHA model as a tool to help address this testing and evaluation of various contributions for Habitat, etc. This type of language should be considered for inclusion in the Snake recovery plan.	Public summary	Actions
64	WDFW	Chapter 7, page 63, paragraph 5: Hatchery Actions .... Additional discussion is needed here and within the greater document, which identifies the connection and interaction within and between the 4Hs relative to contributions to population viability. Placeholder language should be considered in this draft (for future clarification in the fix it loop) which deals with contributions and threshold limits which may be contributed by any one or combination of actions within the habitat, harvest, or other Hs relative to recovery and viability criteria. The upper Columbia Recovery team is	Public summary	Actions

		including language on utilization of the AHA model as a tool to help address this testing and evaluation of various contributions for Habitat, etc. This type of language should be considered for inclusion in the Snake recovery plan.		
65	WDFW	Chapter 7, page 63, paragraph 6: Harvest Actions ... Additional discussion is needed here and within the greater document, which identifies the connection and interaction within and between the 4Hs relative to contributions to population viability. Placeholder language should be considered in this draft (for future clarification in the fix it loop) which deals with contributions and threshold limits which may be contributed by any one or combination of actions within the habitat, harvest, or other Hs relative to recovery and viability criteria. The upper Columbia Recovery team is including language on utilization of the AHA model as a tool to help address this testing and evaluation of various contributions for Habitat, etc. This type of language should be considered for inclusion in the Snake recovery plan.	Public summary	Actions
66	WDFW	Chapter 7, page 64: Table 17 summarizes results from EDT runs but the RTT should review these conclusions and provide some verification and truthing. Several of the results are counter intuitive and upon review of the current EDT levels and areas that are included as spawning and rearing under EDT for some species it is easy to tell how EDT came out with odd results. This should be put in perspective and revised.	Public summary	Actions
67	WDFW	Chapter 8: Most of these defer action or responsibility to another forum. EDT refinement, M&E approaches and priorities, general statements about genetic samples (but no explanation of expected benefits from such samples), baseline sampling for areas where no data exist, and monitoring of most fish bearing streams. These are laudable, but to what level will these be pursued? The public will demand more details.	Public summary	Implementation
68	WDFW	Chapter 8, page 67-68: Monitoring and priorities for monitoring needs to be expanded and refined much more, this should be an emphasis in the fix-it loop.	Public summary	Implementation
69	WDFW	Chapter 3: Many errors regarding fish distribution. Also missing the information in the Grande Ronde in the ESU maps. Use subbasin maps or revised version that matches Salmonscape distribution or use the Map Tech limits that were used for EDT.	Full document	Salmonid Assessment
70	WDFW	Chapter 3: Stock status is far too brief for most populations or geographical areas. e.g. 1 sentence for fall Chinook in the Grande Rhonde. Much more information from subbasin plans should be included to give a full picture of adult abundance, smolt production, distribution, etc. This chapter should include more information on viability analyses by Chilcote and SNAPP and data from Gallinat for Tucannon spring Chinook productivity and Casey Baldwin's graphs for Tucannon spring Chinook smolts per redd and the use of that to evaluate tributary habitat restoration contributions to recovery and restoration. Tucannon spring Chinook is one of the few populations that have this long time series of productivity information and it has been seriously glossed over in this plan. There also needs to be further discussion of an alternative to adult abundance for achieving recovery when adult returns are greatly influenced out of basin and restoring habitat may have little effect. By evaluating smolts per redd for the effect of habitat restoration on subbasin production there is a measure of the effects of local actions on production. None of this was covered in the plan, even after several meetings and discussions at the TRT and RTT levels.	Full document	Salmonid assessment
71	WDFW	Chapter 3, figure 3-4 to 3-9: Many of the (M)SA classifications for restoration seem overly optimistic. Charley Creek is simply not large enough for spring chinook. Lower George Creek is currently dry during most years during spring chinook spawning. Spring Chinook in the Palouse have not ever been documented. These categories should be reviewed.	Full document	Salmonid assessment
72	WDFW	Chapter 3, table 3-3: Inclusion of Palouse in the Tucannon Steelhead population. There is no documented use of the 6 accessible miles of the Palouse by steelhead	Full document	Salmonid assessment
73	WDFW	Chapter 3, table 3-3: The Umatilla and Walla Walla should be considered separate populations. This would be more consistent with the approach taken by the TRT in other Snake Basin populations.	Full document	Salmonid assessment

74	WDFW	Chapter 3, page 75, table 3-4: Pataha Creek is a concern as an MSA for steelhead. This seems excessively optimistic for a basin with severe habitat problems. The historical numbers were not likely above 500 spawners.	Full document	Salmonid assessment
75	WDFW	What is difference between “unavailable” and “no data”?	Full document	Salmonid assessment
76	WDFW	What is the source of “true, historical rates for the mainstem Snake and Columbia Rivers.”?	Full document	Salmonid assessment
77	WDFW	Confusing sentence structure for juveniles in the estuary, and adults return to spawn from 2-6, not 2-5.	Full document	Salmonid assessment
78	WDFW	Chapter 3, page 94, paragraph 4: Move to para. 2. This is an important statement and should be earlier. This whole section fails to help the reader understand the degree and causes of decline in fall chinook. They are very important concepts and need to be treated with more clarity of presentation so the reader understands the level of loss and the causes of same.	Full document	Salmonid assessment
79	WDFW	Chapter 3, page 94, paragraph 4: This is a confusing paragraph that needs rewriting. The first result of this paragraph is that StreamNet data becomes suspect because it isn’t complete. Why bother with the conflicting statements, just state : “Fall chinook are known to spawn in the Snake River from its mouth upstream to Hells Canyon Dam, and in the lower reaches of the Grande Ronde R. to Troy, Oregon.” Inform, don’t confuse with detail.	Full document	Salmonid assessment
80	WDFW	Chapter 3, page 98, paragraph 2: What does the Grande Ronde section tell the reader that hasn’t already been stated? Eliminate this or provide more information to the reader.	Full document	Salmonid assessment
81	WDFW	Chapter 3, page 99, all: All the sub-sections for sockeye salmon (3.5.1 – 3.5.4) are just unnecessary detail – delete. The sole role of the lower Snake is for migration for sockeye.	Full document	Salmonid assessment
82	WDFW	Chapter 3, page 101, all: This is confusing because it isn’t clear whether the authors are discussing <u>all</u> Snake River steelhead, or just <u>Wash.</u> Snake River steelhead. Please clarify. Global statements such as the first sentence of paragraph 5 that the majority of steelhead spawn after one year need to be carefully reviewed. More A-run’s spawn after one year in the ocean, but that isn’t true for B-runs, which return heavily as 2-ocean fish. B-runs are genetically distinct from A-run’s, and ocean residency isn’t the over-riding cause of the size difference between the two, simply one factor contributing to size differences.	Full document	Salmonid assessment
83	WDFW	Chapter 3, page 101, footnote 5: Tucannon steelhead migrant age structure is not likely representative of all other steelhead streams in the region. Delete this statement and replace with: “Age structure of migrants in other streams probably differs from those in the Tucannon because of different habitat and hatchery influences.”	Full document	Salmonid assessment
84	WDFW	Chapter 3, page 101, all: There may be good reason to refer to resident O. mykiss as rainbow, but generalized hatchery plants isn’t one of them.	Full document	Salmonid assessment
85	WDFW	Chapter 3, page 107, figure 3-17l: There is no steelhead distribution for Deadman Creek – add to the map.	Full document	Salmonid assessment
86	WDFW	Chapter 3, page 122, paragraph 1: If the above is adopted, the last sentence can be eliminated since it will duplicate the above statement.	Full document	Salmonid assessment
87	WDFW	Chapter 3, page 124, table 3-25: Why isn’t preferred habitat for 1+ rearing during summer listed in the table? And why are the habitats for spawning different for winter and spring.	Full document	Salmonid assessment

88	WDFW	Chapter 3, page 132, table 3-29: Why is Joseph Creek prominent in this table since most of it occurs in Oregon?	Full document	Salmonid assessment
89	WDFW	Chapter 3, page 133, table 3-25: The adoption of minimum and maximum rebuilding goals based on Joseph Creek production is completely out of place. More habitat than Joseph creek exists in the WA portion of the Lower Grande Ronde. This simplistic approach to setting goals will almost certainly be incorrect. Consider basing the goal on available habitat, not Joseph Creek numbers.	Full document	Salmonid assessment
90	WDFW	Chapter 3, page 134, table 3-29: This number is far in excess of the LSRCP hatchery goal for the Walla Walla steelhead, and should be referenced accordingly. Explain how this was established. Same comment for Touchet Steelhead on next page (135).	Full document	Salmonid assessment
91	WDFW	Chapter 3, page 136, table 3-25: The PPP estimation process is based on <u>maximum</u> observed juvenile abundance for all years sampled. This is “potential”, and should not be used in a minimum rebuilding capacity. This is especially misleading since the Empirical and Current EDT figures in the table are for <u>Asotin Creek only</u> , not the entire meta-population of other included streams. These numbers need to be presented for comparable areas.	Full document	Salmonid assessment
92	WDFW	Chapter 3, page 140, paragraphs 1-3: The BRT discussion of lambda should be moved to the beginning of the section.	Full document	Salmonid assessment
93	WDFW	The organization of Chapt 4 seems confusing, especially the location of the introduction to VSP. The VSP section seems to be an abrupt change in subject and confuses the chapter. It is also not listed in the Table of contents so the reader could not easily find this section if needed. Maybe put it at the very start of the chapter and give it a heading that will show in the table of contents.	Full document	Factors affecting viability
94	WDFW	Chapter 4 & 5: There should be a more direct correspondence between the tables for limiting factors for each stream (or stream reach) in chapter 4 with the tables for desired future conditions in chapter 5. It would make more sense an average reader to see a direct connection between a limiting factor and a desired future condition (that presumably addresses each limiting factor in each stream or stream reach).	Full document	Factors affecting viability
95	WDFW	Chapter 4, page 152, section 4.3: This section should be included in the exec. Summary to help emphasize the out of basin effects. The executive summary tends to ignore all the other Hs other than the recovery area habitat. Out of basin effects are very significant on the anadromous populations and it should be highlighted how significant that effect is. Maybe using a couple of examples that can be emphasized. If out of basin effects are not highlighted in the executive summary because they are significant, the executive summary presents an inaccurate picture of causes of decline and limiting factors. Acknowledge the significant effects in the summary and then indicate that this plan will concentrate on dealing with recovery area habitat conditions.	Full document	Factors affecting viability
96	WDFW	Chapter 4, page 155, figure 4-1: The figure needs a key to explain the basic, intermediate and large sections of the graph by color. It is the next page before the three colors are explained – the graph needs to stand alone. Also, text on p156 explaining the three colors is incorrect. Red = basic, and Blue = intermed.	Full document	Factors affecting viability
97	WDFW	Chapter 4, page 157, table 4-4: Asotin Steelhead Category D is too high. The ICTRT’s decision to include multiple small stream populations (many of which are extremely small) in the Asotin population requires a Category D designation. This is misleading, since there are no data to support the relationship among the Snake tribs and Asotin.	Full document	Factors affecting viability
98	WDFW	Chapter 4, page 157, table 4-4: The structural categories and current abundance are debatable and need further discussion and review by the RTT and more discussion of in text. These 2 columns are important for determining a populations viability and there is likely not agreement on these designations. The RTT should agree to the Structural category and most of the empirical estimates are likely to minimum estimates because some reaches or tributaries have little information. Also, the current abundance does not always match abundance shown in table 3-29.	Full document	Factors affecting viability

99	WDFW	Chapter 4, page 157, table 4-4: Tucannon Steelhead Category A. If Asotin is a Category D because of all the small Snake Tribs., than Tucannon should be the same.	Full document	Factors affecting viability
100	WDFW	Chapter 4, page 158, all: Factors affecting viability: spatial structure and diversity are currently shown at the end of each population discussion (e.g pg 165). I suggest moving all these sections to right after Table 4-4 so information in the chapter that deals with viability is grouped together and is not so hard to find. Also add this material to the executive summary.	Full document	Factors affecting viability
101	WDFW	Chapter 4, page 159, figure 4-2 and 4-3: There is not text explanation of these two figures, or even a reference to them in text. These are complex figures with no explanation other than the Key in the figures, but the reader doesn't know why circles and blackened circles are used?	Full document	Factors affecting viability
102	WDFW	Chapter 4, page 160, paragraph 3: The last sentence is incorrect. Spring chinook are more subject to temperature effects than steelhead.	Full document	Factors affecting viability
103	WDFW	Chapter 4, page 161, paragraph 2: The authors build a case for the effects of urbanization, but this is never followed with recommendations later in the plan to address urban creep.	Full document	Factors affecting viability
104	WDFW	Chapter 4, page 160, last paragraph: Spring chinook do not use Charley Creek, and there is little data to support the statement that it has a temperature problem.	Full document	Factors affecting viability
105	WDFW	Chapter 4, page 162, paragraph 2: It is unclear what the purpose of the Reach description is. These don't occur for other streams, and just add unnecessary bulk to the document.	Full document	Factors affecting viability
106	WDFW	Chapter 4, page 163, paragraph 4: There is no current passage problem in Charley Creek at the former dam sites. Delete this reference.	Full document	Factors affecting viability
107	WDFW	Chapter 4, page 164, paragraph 2: Cattle grazing was a significant historic impact to SF Asotin. It has only recently been removed.	Full document	Factors affecting viability
108	WDFW	Chapter 4, page 173, figure 4-5: There are no obstructions listed for Touchet mainstem in the figure, although there is at least one major obs.	Full document	Factors affecting viability
109	WDFW	Chapter 4, page 175, paragraph 3: Delete the paragraph as it references Mill Creek and the Walla Walla, not Touchet.	Full document	Factors affecting viability
110	WDFW	Chapter 4, page 177, paragraph 3: References to Kuttle Jr. 2002 seem to focus on bull trout. There should be more extensive use of the limiting factors analysis report in the body of the plan.	Full document	Factors affecting viability
111	WDFW	Chapter 4, page 179, paragraph 2: 3 <sup>rd</sup> from last sentence. Predation near the Columbia comes in association with a discussion of the Tucannon. This seems out of place. Rewrite or delete.	Full document	Factors affecting viability
112	WDFW	Chapter 4, page 179, top: Expand on this statement about Pataha Cr being an MSA for spring Chinook and the RTT concern. The RTT struggled with this and agreed to accept EDT and Intrinsic potential analyses even though we generally disagreed that spring Chinook ever used Pataha Creek to any great extent. The document and executive summary should emphasize this concern and that there is no intent to try and restore it for spring Chinook because it is not feasible. The potential effect of that decision should be discussed regarding the risk and viability of the Tucannon spring Chinook population. The same discussion should occur for George Creek system, upper South Fork, etc. in the Asotin drainage for spring Chinook and for the designation of Deadman Cr as a MSA for steelhead. All these areas are not feasible for restoration to a level to meet these designations, but they effect EDT results and	Full document	Factors affecting viability

		conclusions for achieving recovery levels.		
113	WDFW	Chapter 4, page 182, paragraph 5: Use “levee” in text and delete references to ‘dikes’. They are somewhat redundant.	Full document	Factors affecting viability
114	WDFW	Chapter 4, page 184, paragraph 2: Human impacts other than logging should be included in Tucannon Headwaters section. Extensive recreational use has impacted both habitat and fish populations directly. Firewood cutting, camping next to streams, legal and illegal fishing, roads, etc.	Full document	Factors affecting viability
115	WDFW	Chapter 4, page 182, paragraph 5: Spatial Structure is listed as a Cat. A for spring chinook and thus at ‘high risk’ spatially. This assertion contradicts a similar statement for Tucannon steelhead as a Cat. A structure population that is ‘low risk’. If they are both the same spatial structure category – how are they at different risk. If there is a good reason, it will need to be explained.	Full document	Factors affecting viability
116	WDFW	Chapter 4, page 185, paragraph 3: The 38% wild proportion should not raise serious concerns as the hatchery fish are endemic origin. To prevent population collapse, the entire wild run was taken into the hatchery in one year. The distinction between wild and hatchery origin fish in text should be carefully explained as nearly indistinguishable.	Full document	Factors affecting viability
117	WDFW	Chapter 4, page 186, all: No discussion of effects from hatchery releases at Cottonwood AP is in the section. Significant releases of hatchery fish have occurred at Cottonwood since 1986. There has been straying documented into three tribs of lower Grande Ronde, and these potential impacts need to at least be mentioned.	Full document	Factors affecting viability
118	WDFW	Chapter 4, page 192, paragraph 2: The statement that a portion of the river is spilled at the dams to aid passage, isn’t always true. Change to read “ in most years some spill is provided to improve juvenile passage and survival.”	Full document	Factors affecting viability
119	WDFW	Chapter 4, page 192, FCRPS survival: There is a reasonably complete discussion of the passage problems – but no actions will be recommended? If the plan will make no recommendations regarding the FCRPS, why is so much time spent in discussing it? There should be an explanation for the lack of recommendations.	Full document	Factors affecting viability
120	WDFW	Chapter 4, page 198: This needs to be examined in a realistic fashion to include the available information. See the Columbia River and Puget Sound Plans, as well as Snake River HGMPs.	Full document	Factors affecting viability
121	WDFW	Chapter 4, page 198, all: Many parts of this chapter are far too brief regarding harvest and hatcheries. E.g. add a table of hatchery releases in the recovery area for all stocks for all years or the past 5-10 years (see subbasin plans). Add information on steelhead residualism available from the Snake R Lab, etc.	Full document	Factors affecting viability
122	WDFW	Chapter 4, page 199,: The attempt to cover Out of Basin effects points to the inadequacy of the previous section. And 4.4.4 tries to refer to a section with no information. Address 4.3.3 before referring to it in 4.4.4.	Full document	Factors affecting viability
123	WDFW	Chapter 4, page 208, section 4.4.4: Point out the straying problems and some documentation for Umatilla spring Chinook into the Tucannon R and about Umatilla fall Chinook into the Snake River and hatchery broodstock. Umatilla hatchery programs have the highest documented straying issues for local populations of fish and for local hatchery broodstock programs. This should not be ignored, and it can be used as an example of outside hatchery effects.	Full document	Factors affecting viability
124	WDFW	Chapter 4, page 209, paragraph 3: Spring/summer Chinook: add language about limited harvest for spring Chinook in the Snake R because of shared ESA impact level with lower Columbia fisheries. When the run comes in small than expected or the wild component is high the ESA impact of lower river fisheries that begin in March may reach the 2.0% cap and preclude spring Chinook fisheries in the Snake River or require them to close early. Also, lower river fisheries affect marking of hatchery spring Chinook from the Tucannon to try and limit the out of basin harvest and allow more fish to return to the Tucannon River. This lack of an adipose clip on Tucannon hatchery spring Chinook may preclude non-tribal harvest in the Tucannon when the return is high enough for terminal fisheries, or the fisheries will have to be nonselective. Non selective fisheries for ESA listed spring Chinook may be difficult to get approval for from NOAA.	Full document	Factors affecting viability

125	WDFW	Chapter 4, page 209, paragraph 4: Fall Chinook: add language about Snake River fisheries for fall Chinook being precluded because there is no ESA impact allocated to the Snake River. The entire ESA impact for the Columbia Basin non-tribal fisheries is allocated below McNary Dam.	Full document	Factors affecting viability
126	WDFW	Chapter 4, page 209, paragraph 4: Needs to be at least some discussion on Hells Canyon Dams effects, particularly on Fall Chinook production and mitigation.	Full document	Factors affecting viability
127	WDFW	Chapter 4, page 213, paragraph 1: Add one item to the list of negative hatchery impacts: Increased incidental wild fish mortality may occur with expanded fisheries that target hatchery fish.	Full document	Factors affecting viability
128	WDFW	Chapter 4, page 215, table 4-13: Explain why Historical Life history Diversity does not equal 100%. If each population is considered separately, historical diversity should have expressed 100% of the diversity patterns available to that population. But only a few populations in the table have values of 100%. Explain why or why not.	Full document	Factors affecting viability
129	WDFW	Chapter 4, page 215, table 4-13: Current EDT abundance values need to be discussed and evaluated compared with empirical estimates. The information in this table is used to evaluate viability and the effects of habitat restoration based in EDT modeling. The results then get reduced to either achieving recovery for the population or not. Asotin steelhead current EDT shows 196, but empirical data is much higher (814) adults. Actual numbers may even be higher if we could sample all areas adequately. The EDT results on pg 309 show Asotin steelhead will not achieve recovery based on EDT, but the starting point or current abundance is incorrect and underestimates actual abundance. It also shows no production in George Creek where we have documented fairly high production. In addition, it ignores some of the tributaries such as Alpowa Creek where EDT was not run. The same problems exist for Touchet steelhead and the EDT current estimate vs the empirical or likely steelhead abundance. Asotin spring chinook current EDT is way to high compared to empirical and the EDT modeling shows Asotin spring Chinook as meeting recovery goals. Highly doubtful when it is functionally extinct. Also, EDT includes George Creek and other areas that likely will never have spring Chinook production.	Full document	Factors affecting viability
130	WDFW	Chapter 4, page 216, table 4-13: If historical abundance for Touchet Steelhead below Patit is 469, why is it a MSA and not an <u>m</u> SA? Is this just another disconnect by the ICTRT, or is this abundance number different?	Full document	Factors affecting viability
131	WDFW	Chapter 5, all: I recommend that the term "rebuilding" be changed to "restoration". "Rebuilding" seems to be an inappropriate word for a targeted abundance level. It sounds like an interim step to restoration or abundance goals. Restoration implies we have reached the restoration goals.	Full document	Recovery goals and planning targets
132	WDFW	Chapter 5, page 218, paragraph 3: Add to line 3 in parenthesis, after the word recovery, "and restoration" To again note that the goal is to go beyond ESA recovery to achieve restoration.	Full document	Recovery goals and planning targets
133	WDFW	Chapter 5, page 218, section 5.2: End of Last line of paragr. add " or mitigation goals". To again note that hatcheries are being used for more than just meeting ESA recovery or natural production	Full document	Recovery goals and planning targets
134	WDFW	Chapter 5, page 218, section 5.1 and 5.2: The vision or desired future condition statements are incomplete.  The Technical plan needs to recognize several federal, state and tribal mandates or priorities in conjunction with ESA.  The co-managers have not agreed to relinquish any of their priorities for achieving ESA at the expense of the other priorities. The plan should include the following priorities, not just emphasize ESA and tributary recovery efforts. <b>Federal</b> 1. Treaty trust and treaty rights	Full document	Recovery goals and planning targets

		<p>2. ESA requirements/recovery  3. LSRCP mitigation for losses caused by Snake R dams</p> <p><b>State</b></p> <p>1. goals of Extinction is not an option State Plan  2. WDFW goals for harvestable, healthy, sustainable  3. mitigation of losses and maintaining tribal and non-tribal fishing</p> <p><b>Tribes</b></p> <p>1. Treaty rights and fisheries  2. Goals of Tribal Recovery Plan</p>		
135	WDFW	Chapter 5, page 219, table 5-1: Asotin Creek and Walla Walla River should be separated into separate rows. It must be assumed that as different as the two basins are, that their DFC would require different emphasis for restoration.	Full document	Recovery goals and planning targets
136	WDFW	Chapter 5, page 219, paragraph 2: Delete the list of basins from text below the table, it is redundant and adds nothing to the document except length.	Full document	Recovery goals and planning targets
137	WDFW	Chapter 5, page 218, last: Include a numerical example for the calculation of percent restoration. This is a fundamental part of the plan – what % improvement is the goal. Understanding how that is calculated is important since it is not intuitively obvious. This is especially true for 100% values in the table, which may lead people to believe that the goal is to reach historic, pristine conditions.	Full document	Recovery goals and planning targets
138	WDFW	Chapter 5, page 221, table 5-3: Why so many blank values? (See also Almota and Deadman Creek tables). Nearly all the other tables of this kind have fully complete values, even if they are 0%. Why not for the Tucannon?	Full document	Recovery goals and planning targets
139	WDFW	Chapter 5, page 222, table 5-5: Lower Touchet (Mouth to Coppei) is missing from the table.	Full document	Recovery goals and planning targets
140	WDFW	Chapter 5, page 224, table 5-7: Remove the reaches outside WA for the GR and Joseph Cr. If they don't pertain to the plan, don't include.	Full document	Recovery goals and planning targets
141	WDFW	Chapter 5, page 226, all: Hydro and Hatchery future conditions should be included. If there is a description of desired future conditions for two of the H's, shouldn't the other two be included?	Full document	Recovery goals and planning targets
142	WDFW	Chapter 5, page 226, section 5.2.2: This section is titled Hydroelectric but discusses only Harvest. Only discusses harvest. Also, add on line 3 after the word "tribal" add "and non-tribal". The Courts have clearly ruled that 50% of harvestable surplus is for non-tribal harvest so non-tribal citizens have fishing rights too. I have several other comments and revisions for this section that we will have to discuss later.	Full document	Recovery goals and planning targets
143	WDFW	Chapter 5, page 228, first paragraph: End of first paragr. add language that deals with the differences between ESA recovery efforts and mitigation or tribal trust, to reflect the importance of different mandates and balancing priorities.	Full document	Recovery goals and planning targets
144	WDFW	Chapter 5, page 228, section 5.3.1: Should discuss what to do if out of basin effects preclude meeting recovery or abundance targets for meeting recovery or restoration if the tributary habitat is improved and meeting goals. This is a good place to reemphasize the use of smolt production per female as a measure of habitat effects on fish production and meeting ESA needs at the local level, even if recovery is not being met.	Full document	Recovery goals and planning targets
145	WDFW	Chapter 5, page 232, paragraph 5: Abundance and productivity are the best measures for risk currently available as noted. However these measures may not be capable of measuring progress within basins toward recovery if OOSE overwhelm in-basin improvements. Since most of the plan focuses on improving habitat, there must be means to	Full document	Recovery goals and planning targets

		measure the effects of improvements on populations. That is not provided here by the ICTRT methodology. An in-basin metric such as smolt production per redd might be appropriate, and could be monitored long term. There must be a way for the plan to receive credit for actions taken, but not be held hostage by circumstances outside their control (Exculpation).		
146	WDFW	Chapter 5, page 233, paragraph 3: Add a hatchery impact goal to the diversity/spatial structure listing. Although hatchery impacts may not be established by this plan, it should capture this goal from other sources and integrate it.	Full document	Recovery goals and planning targets
147	WDFW	Chapter 5, page 234, parts of section 5.3.3: Every reference to the bull trout recovery plans should have draft in their titles. These plans and their goals have not been accepted or approved yet.	Full document	Recovery goals and planning targets
148	WDFW	Chapter 5, page 236, table 5-12: Natural return numbers should be suggested for the area above LGR Dam.	Full document	Recovery goals and planning targets
149	WDFW	Chapter 5, page 237, table 5-12: Spring Chinook goals for Asotin are incorrect. Those listed are for the Tucannon and do not reflect appropriate numbers for Asotin.	Full document	Recovery goals and planning targets
150	WDFW	Chapter 6, page 239, paragraph 6: Note that limited strategies for hatcheries and harvest will be included here with substantial habitat actions. This plan should not defer all strategies or actions to other planning processes. This is an opportunity for local entities to provide input to other planning efforts and tee up issues that affect the achievement of recovery or restoration goals related to hatcheries or harvest (within or external to the recovery region).	Full document	Planning strategies
151	WDFW	Chapter 6, page 241, paragraph 4: Delete the second and third sentences. They suggest veto power by the ag community. Other entities are also significant in the community such as urban dwellers and this statement focuses too much on the ag. Community.	Full document	Planning strategies
152	WDFW	Chapter 6, page 243, footnote: Refers to Fig 6-2 – should be Fig. 6-1.	Full document	Planning strategies
153	WDFW	Chapter 6, page 246, paragraph 2: Add Alpowa and Penewawa to this list of priority passive restoration areas. Alpowa is similar to Almota, even though EDT was not run on Alpowa and is has more water than and perennial flows compared to other small Snake R tributaries considered. It also has documented steelhead use and good juvenile rearing densities. Penewawa has had up to 44 adult steelhead documented in it on one day.	Full document	Planning strategies
154	WDFW	Chapter 6, page 247, last paragraph: Note the uncertainty of spring Chinook use historically, or in the future, of Pintler Cr, George Cr, and up. SF Asotin	Full document	Planning strategies
155	WDFW	Chapter 6, page 250, last paragraph: The last sentence states "... additional data must be collected to confirm the initial EDT analysis of limiting factors." It is true the EDT should be verified, but it should not be viewed as being required before riparian restoration or imminent threats, etc. can be dealt with. The same level of proof is not required elsewhere before habitat restoration projects are approved. Additionally, imminent threats and riparian restoration are relatively obvious.	Full document	Planning strategies
156	WDFW	Chapter 6, page 251, paragraph 3: Last sent. About potential benefits were 2-4 times greater for spring Chinook than steelhead may be a reflection of the EDT bias that steelhead are mainly tributary spawners. Please note this. The Tucannon R is a small river and would qualify as a tributary in many other stream systems. Steelhead are known to spawn in large number throughout most of its length.	Full document	Planning strategies
157	WDFW	Chapter 6, page 251, second to last paragraph: Also note that fall Chinook are primarily below Pataha Cr with its high sediment load. Another reason why fall Chinook areas were given lower priority.	Full document	Planning strategies
158	WDFW	Chapter 6, page 252 second to last paragraph: Deadman Cr is hampered from much if any steelhead production by lack of water and poor habitat conditions. The limited water during summer and fall is a serious problem. This stream system has very limited practical value to steelhead because of its lack of water – nearly dry in summer and fall.	Full document	Planning strategies

		Penewawa Creek has as much or more potential for production.		
159	WDFW	Chapter 6, page 258, last line: Patit Creek does not appear to qualify for an MSA designation, given what is currently known. Patit is a small tributary that is often intermittent. It seems counterintuitive that it would support 500 spawners.	Full document	Planning strategies
160	WDFW	Chapter 6, page 265: Critical uncertainties should include the lack of data on fish distribution and relative abundance in the tributaries of the Wenaha within WA. This information is necessary to track population status and diversity. Little is documented for these streams or reaches.	Full document	Planning strategies
161	WDFW	Chapter 6, page 265, last paragraph: A formal proposal for a Snake R fall Chinook fishery has been submitted for only the Snake River, but the Grande Ronde could be included in the future.  The last bullet should be altered as such “re-allocate some of the ESA “take” impact from the lower Columbia...	Full document	Planning strategies
162	WDFW	Chapter 6, page 265, all: There is no Steelhead reference in regard to harvest. At the very least there should be a policy recommendation within the plan to keep incidental take of listed fish to limits established as part of NOAA/ US v Oregon discussions.	Full document	Planning strategies
163	WDFW	Chapter 6, page 266: There should be policy direction from the board regarding accountability for recovery outside the subbasins and habitat approaches. There isn't a clear statement of expectation by the plan that accountability for mainstem and downriver Hydro must be responsible if it is found responsible for preventing recovery as a result of habitat actions. Without that assurance – why would anyone within the Snake agree to sacrifice if others won't as well? Lack of recovery should not be blamed on failure of habitat actions to overwhelm mortality due to the power system.	Full document	Planning strategies
164	WDFW	Chapter 6, page 267, bottom: After last sentence under Steelhead add “WDFW recommends no hatchery program and continued mgmt as a wild fish refuge area.” After last sentence of spring/summer Chinook add “and an approved management plan.” Add WDFW's management intent – not just NOAA's. No reintroduction should occur with out a management plan agreed to by all co-managers.	Full document	Planning strategies
165	WDFW	Chapter 6, page 269, table 6-8: Proposed for Walla Walla steelhead is segregated program in the lower basin. To meet mitigation goals and minimize effects on listed fish.	Full document	Planning strategies
166	WDFW	Chapter 6, page 269, last paragraph:Possibly releases of adult broodstock in the Touchet. This has not been agreed to by all WDFW at this time	Full document	Planning strategies
167	WDFW	Chapter 6, page 270, second paragraph:Significant releases (majority) of hatchery fall chinook occur above LGR Dam. Releases of fall chinook occur primarily above LGR.	Full document	Planning strategies
168	WDFW	Chapter 6, page 270, fourth paragraph:Last sentence is incorrect. Change to “Fish are primarily released in the Snake River above Lower Granite Dam in cooperation with the Nez Perce Tribe and other co-managers although some releases are also made in the lower Snake River at Lyons Ferry Hatchery.	Full document	Planning strategies
169	WDFW	Chapter 6, page 271, first paragraph:Last sentence - delete the word ‘initially’. Because of substantially limited habitat for fall chinook and commitments to produce hatchery chinook for many purposes – it is very unlikely that natural fish will ever equal or exceed hatchery numbers.	Full document	Planning strategies
170	WDFW	Chapter 6, page 271, second paragraph: Line 4 change to “as proposed by ODFW, WDFW and NOAA fisheries, Joseph Creek would be reserved for natural production.” ODFW and WDFW initiated the reserve are in Joseph Cr and agree with NOAA to maintain it.	Full document	Planning strategies
171	WDFW			
172	WDFW	Chapter 6, page 272, #10: Insert: All harvest <u>and hatchery production</u> actions. More than harvest is driven by the CRFMP.	Full document	Planning strategies
173	WDFW	Chapter 6, page 272, lend: Should Add SNAPP and Chilcote plans or assessments and the Model watershed plans	Full document	Planning strategies

		for Asotin, Tucannon and Pataha. Also add the HGMPs and FMEPs and Sec 10 documents as well as the Hatchery Master Plan draft for the Walla Walla spring Chinook.		
174	WDFW	Chapter 7, page 273, first paragraph: The role of integrated hatchery programs has recently been reviewed and altered, and to a certain extent some may count toward abundance goals. Statements about the role of hatchery fish should be checked on a case-by-case basis, as some play a role in recovery and may be counted.	Full document	Actions
175	WDFW	Chapter 7, page 274, table 7-2: The table provides good detail, but maybe too much, and requires the reader to reference earlier chapters to assess how much progress is being asked for. Consider including current status in the table for the reader. The previous table provided a prioritized list of approaches, and it is then provided here again. Consider removing it and replacing it with more fully explained goals. For instance: 'Confinement' should be 'Anthropogenic Confinement', then provide: Current (50 – 75%) Plan Goal (25 – 50%). This will decrease the size of the table and provide more usable information.	Full document	Actions
176	WDFW	Chapter 7, page 281, first paragraph: M&E costs (over and above expected ongoing) should be included in the plan costs. Failure to include M&E costs will almost surely lead to lack of funds for such work. It should be a recognized cost of doing business – otherwise where is the accountability?	Full document	Actions
177	WDFW	Chapter 7, page 282, second paragraph: This statement should be prominent in the plan, not buried here. This should be discussed further as a limitation of the plan and the integration of the 4 H's. See General Comments.	Full document	Actions
178	WDFW	Chapter 7, page 282, last paragraph: The HSRG recommendation for integrated hatchery fish to make up 50% or less if the spawning population is just a recommendation. This is far too strong a statement. Production and hatchery management agreements for populations in the Snake have been carefully crafted and adopted under US v Oregon by the co-managers. Those agreements should be here, which recognize that for populations like the Tucannon spring chinook and Snake River fall chinook, integrated hatchery fish will be a majority in the habitat for the foreseeable future. The 50% recommendation will be more appropriate as recovery is reached or surpassed.	Full document	Actions
179	WDFW	Chapter 7, page 282, last paragraph: The statement that integrated hatchery programs will be managed so that hatchery fish make up less than 50% of the natural spawning population in all years. And the last sentence that "All integrated programs will be managed to achieve this balance" (same proportion of wild fish in broodstock as hatchery fish on spawning grounds). These statements will need to be changed at least in the short term. This process will be decided in consultation with NOAA and co-managers during HGMP consultation or US v Or. These statements are inconsistent with our current integrated programs for spring Chinook in the Tucannon and on some years could be inconsistent with other programs. It may mean removing hatchery fish from the spawning grounds and tribal co-managers will likely object.	Full document	Actions
180	WDFW	Chapter 7, tables 7-3 through 7-6: The tables should be modified to show that the desired in-river spawners from Segregated hatchery programs should be zero (0). <i>Tucannon steelhead, Walla Walla steelhead, Touchet steelhead, lower Snake steelhead, and Grande Ronde steelhead</i> . The numbers listed in the tables for segregated are the LSRCP adult return numbers for specific rivers. While historically these were deemed acceptable for escapement (spawning) that is no longer the case for segregated type stocks, and maximum removal by fisheries is the goal.	Full document	Actions
181	WDFW	Chapter 7, page 283, table 7-3: Tucannon Sp Chinook Captive Brood – This needs to be footnoted or noted within the table that the last releases will occur in 2008, after which the Supplementation program will be increased to 225,000 from 132,000. This is just to be sure everyone understands that the Captive brood program goes away in 2008 as planned, and increased supplementation production is planned to reach the 1,152 adult hatchery goal.	Full document	Actions
182	WDFW	Chapter 7, page 284, table 7-4: Touchet Summer Steelhead – Lyons Ferry stock should be <i>Segregated</i> not integrated. As mentioned above there should be no in-river spawning goal for these fish (0), but a wild escapement goal could be added here for reference.	Full document	Actions

183	WDFW	Chapter 7, page 284, paragraph 3: Statement to manage for no more than 10% segregated in the wild is too strong. The plan could 'suggest that managers move toward no more than 10% segregated hatchery stocks spawning in the wild. <u>Or:</u> Managers should strive to achieve NOAA standards for integrated and segregated hatchery stocks spawning in the wild.	Full document	Actions
184	WDFW	Chapter 7, page 284, paragraph 4: Spawning surveys will be undertaken in <u>all selected index streams.</u> Committing to surveys in all streams is simply impossible. Especially considering that no costs for M&E have been included in the plan.	Full document	Actions
185	WDFW	Chapter 7, page 286: If there are hatchery recommendations that come from the plan that are not covered in other venues, than the plan should be prepared to provide expected costs, and a prioritized list of the actions in relation to other actions.	Full document	Actions
186	WDFW	Chapter 7, page 287, bullet list: Add US v OR agreement.	Full document	Actions
187	WDFW	Chapter 7, page 287: New harvest actions have been proposed for additional Chinook salmon fisheries e.g. fall Chinook. Additional monitoring funding will be required.	Full document	Actions
188	WDFW	Chapter 7, page 289, second paragraph: At the end of paragr. 2 add that the EDT estimate is well below empirical data for current condition. Therefore, after restoration work is completed the abundance may well be above the curve. The conclusion that EDT accurately reflects the abundance of the population and that recovery will not be achieved must be challenged based on empirical data and abundance levels that may currently be at or near 1,000 adults.	Full document	Actions
189	WDFW	Chapter 7, page 292, figure 7: These figures need to be re-checked. It was our understanding that the EDT model was changed to more accurately reflect current knowledge of these streams. George Cr should not have a current value of 0 and Tenmile production should not be near equal to Asotin. The EDT results presented need to be re-examined for accuracy throughout the document. It appears in some cases the latest iterations were not used.	Full document	Actions
190	WDFW	Chapter 7, page 293, all: I question the conclusions for Asotin spring Chinook as far as the amount of change and meeting the recovery goals in abundance. The current population or individuals may be strays and may have poor fitness for this basin. Also, the current EDT value is far too high compared to empirical data so the increase expected from habitat restoration is not likely to produce abundance above the recovery line. Lastly, the inclusion of George Cr, Pintler and upper SF Asotin, etc. as spring Chinook habitat is presumptuous and not likely.	Full document	Actions
191	WDFW	Chapter 7, page 295, all: I also question the conclusions for Tucannon steelhead and recovery or VSP. Empirical data suggests that wild steelhead are uncommon and below the current EDT value. SNAPP analysis indicated a high risk of extinction for this population. Recovery of this population from tributary habitat actions is questionable.	Full document	Actions
192	WDFW	Chapter 7, page 297, figure 7-7: Text below the figure states that intrinsic productivity is less than 1.0, but the figure shows current empirical and EDT values approaching 1.2, and a value of more than 1.3 with habitat recovery. Which is correct?	Full document	Actions
193	WDFW	Chapter 7, page 299, all: If Note that the empirical is probably an underestimate and more monitoring is needed.	Full document	Actions
194	WDFW	Chapter 7, page 301, all: If proposed actions do not correct productivity and abundance, even though the Touchet is only above 4 dams, is there a problem with the goal set for the Touchet?	Full document	Actions
195	WDFW	Chapter 7, page 301, all: I question the conclusion for Touchet steelhead. Empirical data is incomplete and likely too low as spawner index areas only were used and production is poorly understood in many tributary areas.	Full document	Actions
196	WDFW	Chapter 7, figure 7-17: The inability to achieve recovery for Wenaha spring chinook in an essentially pristine habitat sheds doubt on the accuracy of EDT outputs. This is especially important when seeing current productivity plotted as greater than EDT estimated PFC. These discrepancies point to the importance of OOSE to the overall recovery of populations in the Snake.	Full document	Actions

197	WDFW	Chapter 7, page 303, all: This agrees with Chilcote and Chilcote's analysis should be included here.	Full document	Actions
198	WDFW	Chapter 7, page 309, all: The RTT did not agree that the Asotin steelhead, Touchet steelhead and Wenaha spring Chinook would not meet recovery. The RTT did not have a chance to discuss this yet.	Full document	Actions
199	WDFW	Chapter 7, page 309, table 7-8: This table and its conclusions needs to be discussed by the RTT and others first. Those populations identified above as having questionable conclusion in particular need further review and discussion before the recovery plan is completed.	Full document	Actions
200	WDFW	Chapter 8, all: This chapter lacks any details regarding monitoring and evaluation. An outline of what monitoring should be done and where: such as where should smolt production be estimated, and what should be included in the few intensively monitored subbasins or watershed, and which watersheds. What should be done in the other subbasins or watersheds and how often? How will these action monitor habitat changes and fish population abundance and productivity, etc for VSP? This chapter is not implementable and provides little guidance for implementation.	Full document	Implimentation
201	WDFW	Chapter 8, all: Coordination of regional M&E efforts, model evaluation and decisions regarding the types and nature of various monitoring efforts will be a monumental task.. Dialing into existing state and federal efforts are probably the best way to ensure efficient and effective use of time and money.	Full document	Implimentation
202	American Rivers	"a successful salmon recovery strategy needs to highlight all factors that may limit their potential to achieve their goals, for this plan the lower Snake River dams are a primary limiting factor."  American Rivers position is for the removal of the 4 dams on the lower Snake River.	Full document	Non-plan specific
203	American Rivers	"Helpful background section; information on water quality and riparian assessments is particularly valuable."	Full document	Description
204	American Rivers	"In section on Lower Granite Dam on page 61, the statement that removable spillway weirs benefit fish survival is not substantiated. The U.S. Geological Survey recently concluded that "we found no difference in survival probabilities between treatments [i.e. RSW spill and spill over regular spillways]."6 RSWs may prove to provide some minor survival benefits, but they have so far only been proven to allow roughly equal survival benefits with less spill volume (and hence more power generation)."	Full document	Description
205	American Rivers	Separating out wild and hatchery passage at Snake River dams for fall Chinook and spring/summer chinook would be helpful to the extent the information is available. This information is provided for steelhead, but not the other stocks.	Full document	Salmonid Assessment
206	American Rivers	Discussion of NOAA Fisheries Biological Review Team assessment of both Chinook ESUs would be helpful – the inclusion of their assessment of the steelhead ESUs is helpful in understanding their status.	Full document	Salmonid Assessment
207	American Rivers	Table 3-29, "black areas" in the table "highlight the need for more empirical data for all stocks in this recovery region."	Full document	Salmonid Assessment
208	American Rivers	As noted above, the recent Idaho fishing study may make it feasible to come up with at least a ballpark estimate the value of a restored salmon and steelhead fishery for Washington's lower Snake River and its tributaries. If possible, we encourage you to include such an estimate in the final draft.	Full document	Salmonid Assessment
209	American Rivers	It should be noted that restoring Snake River fall chinook would help the fall chinook fishery throughout the Columbia Basin, as weak Snake River stocks currently restrict harvest of healthier Hanford Reach fall chinook.	Full document	Salmonid Assessment
210	American Rivers	As the draft plan acknowledges, much more information needs to be included on Snake River fall chinook before the plan is finalized.	Full document	Salmonid Assessment

211	American Rivers	<p>Page 149, 150 – “The "Hydroelectric Generation" section on pages 149 and 150 states that juvenile survival from Lower Granite to Bonneville Dam is estimated at 50 to 60 percent.”</p> <p>Table 10.3  “According to the 2004 FCRPS Biological Opinion (BiOp) at Table 10.3, juvenile survival currently averages 51% for Snake River spring/summer chinook and 49% for Snake River steelhead, but only 14% for Snake River fall chinook. That latter statistic should be noted in the recovery plan, particularly in light of increasing evidence that in-river fall chinook migrants may return at equal or greater numbers than transported fish, even in light of their low in-river survival.”</p>	Full document	Factors Affecting Viability
212	American Rivers	<p>“We strongly support the draft recovery plan's use of Viable Salmon Population parameters at developed by the Interior Columbia Technical Review Team.”</p>	Full document	Factors Affecting Viability
213	American Rivers	<p>Tables 5-1, 6-1, 7-1  “The EDT analysis of limiting factors in various tributaries is helpful. It would be useful to see a comparison of these limiting factors to those identified by NOAA Fisheries in its findings on Ecological Improvement Potential in the FCWS BiOp at tables 5-1,6-1, and 7-1. These tables suggest that there is "low" practical potential for ecological improvement for some of the populations relevant to this recovery plan, while the draft recovery plan seems to suggest that somewhat higher ecological restoration potential exists in these tributaries. It would be helpful to reconcile this possible contradiction or to have an explanation of why the two documents do not conflict.”</p>	Full document	Factors Affecting Viability
214	American Rivers	<p>“On page 190, the acknowledgement of the lack of success of transportation for fall chmook is warranted.”</p>	Full document	Factors Affecting Viability
215	American Rivers	<p>Pages 210-213  “The discussion of in- and out-of-region limiting factors at pages 210-213 is helpful. This section could be improved by ranking, to the extent possible, the severity of these factors and how much they limit the entire ESU or certain subpopulations.  This information would help with the task of prioritizing various actions both within and between the 4 "Hs.””</p>	Full document	Factors Affecting Viability
216	American Rivers	<p>Page 218  “Vision statement: This statement is worthy of support. With respect to the explanation listed below the statement on page 21 8, it is worth noting that achieving healthy, harvestable populations will require exceeding NOAA's recovery goals, which at least in their current, interim form are based on meeting a lower ESA threshold that doesn't include harvest. For both economic and cultural reasons, recovery goals should be sufficient to sustain a productive but sustainable recreational, tribal, and commercial harvest.”</p>	Full document	Recovery Goals and Planning Targets
217	American Rivers	<p>“Regarding section 6.6 on "Integration of Strategies with other Plans," we encourage this plan and all Columbia Basin recovery plans to ensure that federal policies regarding dam, hatchery, and harvest management do not preclude the effectiveness of local recovery plans by taking too many fish through harmful policies or by using scarce salmon recovery funding resources ineffectively. These are the biggest potential barriers to the success of the recovery planning process (particularly in the Snake fiver Basin where dams exact a high toll during juvenile and adult migrations but spawning habitat is generally in better condition than elsewhere in the Columbia Basin) and we encourage recovery planning boards to call for other entities to ensure that their actions will not prevent the success of regional recovery plans.”</p>	Full document	Management Strategies

218	American Rivers	Page 281 "The system of prioritization for habitat actions appears generally sound within the recovery region. We agree with the draft plan's observation on page 28 1 that "The lack of significant survival improvement in the hydrosystem [through the FCRPS BiOp] limits what can be achieved to recover listed fish populations in the Snake River." In fact, the losses through the hydrosystem can be up to 92% for juvenile Snake River fall chinook (see BiOp, table 10.3), which is higher than the draft plan states on page 281."	Full document	Action Plan
219	American Rivers	Page 281 "In response to the "costs" section on page 281, costs for hydro actions are also covered by federal taxpayers through funding for the U.S. Army Corps of Engineers (not all of which is reimbursed by the Bonneville Power Administration) and hydropower mitigation is performed by numerous federal agencies."	Full document	Actions
220	American Rivers	"American Rivers agrees that securing adequate funding will be a major challenge to the success of this and other salmon recovery plans. Currently, Congress (through the 11 federal agencies and the Pacific Coastal Salmon Recovery Fund) and BPA do not appear prepared to devote the resources that will be required to fully implement the BiOp, let alone recovery plans. We stand ready to assist Washington's Snake River Recovery Board and other recovery boards throughout the Northwest to secure additional funding for effective salmon recovery work."	Full document	Implementation

++ = USFWS References

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