
BIGHORN SHEEP: SUPPLEMENTAL ANALYSIS TO THE FOREST PLAN ENVIRONMENTAL IMPACT STATEMENT—INTERDISCIPLINARY TEAM MEETING

*USGS Idaho Water Science Center Building
230 Collins, Boise, Idaho*

January 31, 2008

ATTENDEES

Brooklyn Baptiste, Nez Perce Tribal Executive Committee, Nez Perce Tribe

Christine Bradbury, Clearwater/Nez Perce National Forests Tribal Liaison

Vic Coggins, Oregon Dept. of Fish and Wildlife

Craig Ely, Oregon Dept. of Fish and Wildlife

Pete Grinde, Payette Forest Range Specialist

Keith Lawrence, Nez Perce Tribe

Mike Lopez, Nez Perce Tribe

Curt Mack, Nez Perce Tribe

Tyler Mallard, State of Idaho

Rebecca Miles, Vice-Chairman, Nez Perce Tribal Executive Committee, Nez Perce Tribe

Susan Miller, Payette Forest Ecologist (via phone)

Chans O'Brien, Payette Forest GIS Analyst

Suzanne Rainville, Payette Forest Supervisor

Carl Scheeler, Confederated Tribes of the Umatilla Indian Reservation (via phone)

Tim Schommer, Wallowa Whitman National Forest

Pattie Soucek, Payette Forest Planner/
Interdisciplinary Team Leader

Dale Toweill, Idaho Dept. of Fish and Game

Leander Watson, Shoshone-Bannock Tribes

Paul Wik, Washington Dept. of Fish and Wildlife

Susan Hayman, Facilitator, North Country Resources, Inc.

Nikole Pearson, Documentation, Peak Science Communications

MEETING OBJECTIVES

- 1) Review the findings of the analysis to date.
- 2) Discuss and make recommendations on pack goats and trailing routes.
- 3) Define criteria that the IDT will use to evaluate the alternatives in February in order to provide recommendations on the alternatives to the Forest Service.

ACTION ITEMS

What	Who	When
1) Provide an index of contents in response to Hells Canyon FOIA #2	Pattie Soucek	February 28
2) Questions/concerns on confidentiality agreement to Soucek	IDT	February 15
3) Check with regional office on appropriateness of addressing pack goats in this analysis	Pattie Soucek	February 15
4) Develop an approach to model trailing routes	Technical Report Subcommittee	February 10
5) Synthesize decision/evaluation criteria and finalize through email	Susan Hayman	February 15
6) Check on the ability of the affects analysis to address the evaluation criteria	Susan Miller	February 15

The next meeting is scheduled for February 28–29, 2008, from 8:30 A.M. to 3:00 P.M. in McCall, Idaho.

OPENING

Welcome

Suzanne Rainville welcomed participants and acknowledged the members of the Nez Perce Tribal Leadership that were in attendance. Rainville appreciates the collaborative effort and believes the process will only improve as they move forward in the analysis.

Pattie Soucek added that the Payette National Forest (NF) has been focusing on the analysis and will be sharing information today. Once the draft SEIS is complete, it will undergo a 90-day comment period.

Meeting Overview

Susan Hayman introduced herself, asked participants to introduce themselves, and reviewed the agenda and ground rules.

Dale Toweill distributed copies of a recently published paper that describes research surrounding a bighorn sheep die-off within Hells Canyon (Rudolph et al. 2007). He also reported on the Governor's Interim Strategy Workgroup on bighorn sheep and domestic sheep, which is co-chaired by Mr. Brian Oakey, Idaho State Department of Agriculture, and Mr. Jim Unsworth, Idaho Department of Fish and Game. The state of Idaho will publish an interim strategy for managing separation between domestic sheep and bighorn sheep by February 15, 2008. Governor Butch Otter would like a policy in place before the earliest turn out date for domestic sheep. Toweill is updating Idaho data while working on the interim strategy. Anyone interested in receiving these updated data when available should contact Hayman. Toweill's last report was on a disease workshop that will be held in Boise, Idaho on March 7 and 8, 2008.

The Nez Perce Tribe said that the State policy generated outside of the Payette Supplemental Environmental Impact Statement process is counterproductive to the goal of changing the Payette Forest Plan to add more protection for bighorn sheep. Further, they said the attempt to compromise federal management guidelines, policies, and laws by imposition of state authorities could not compromise treaty reserved rights or responsibilities.

The State of Oregon also said that the new Idaho Policy cannot compromise their sovereign authorities and responsibilities.

PROTOCOL REVISIONS

Confidentiality Agreements

Soucek discussed the proposed confidentiality agreement distributed in today's folder. Information discussed by the IDT is very sensitive, so the U.S. Forest Service (USFS) counsel has recommended modifying the Memorandums of Understanding (MOU) to include a confidentiality agreement. Those who do not operate under an MOU will be asked to sign the proposed confidentiality agreement, which contains language identical to that proposed for inclusion in the MOU. Participants are requested to review the proposed language and submit any concerns or questions to Soucek by February 15, 2008. The USFS would like the agreements in place by February 28, 2008.

Meeting Summary

Rainville affirmed that she will no longer be making decisions during the IDT meetings in response to IDT agreements. The record will continue to show the IDT agreements at each meeting. Any decisions made by Rainville during the process to enable IDT work to continue will be reported at subsequent IDT meetings. Rainville reminded the IDT that her interim decisions that move the process along are subject to change as new information arises; decisions regarding bighorn sheep management will not be final until the end of the process.

No corrections or additions were made to the October 31, 2007, meeting summary.

ACTION ITEMS FROM LAST MEETING

Action Item 1—Identify known travel corridors, including east side and Rapid River (Jim Rohlman, Jay, Keith Lawrence, Chans O'Brien)

This action item has been completed to the extent possible with the available data, and all corridors have been incorporated into the latest GPR.

Action Item 2—Develop specific questions that Fish and Game representatives need to address for qualitative/quantitative economic analysis (Pattie Soucek)

The University of Wyoming would like to complete the recreational economic analysis. If the university is not able to complete the analysis, Soucek will work directly with fish and game representatives from each state.

Action Item 3—Technical Report Subcommittee will meet again to resolve issues related to the analysis approach, including documentation of any proposed modifications to existing agreements/decisions (Technical Report Subcommittee)

The technical report subcommittee met and refined the risk model, which was distributed to the IDT for further review and comment. No additional comments were submitted, and the USFS has moved forward with the proposed risk model.

Action Item 4—Create maps of all alternatives that will be carried forward for detailed analysis (Chans O'Brien)

This action item has been completed.

ANALYSIS UPDATE

(Note: Appendix 2 contains the transcribed flip chart notes, which document key points as well as agreements captured during the January 31, 2008, meeting.)

Susan Miller presented the preliminary effects analysis completed thus far. The purpose of today's presentation is for the USFS to present its findings and ask clarifying questions, not for the IDT to debate the findings. Copies of the maps and preliminary findings will not be distributed at this time.

Update on suitability in wilderness

The Wilderness Act of 1964 does not prohibit suitable domestic livestock grazing range within wilderness; however, USFS policy states that once domestic livestock grazing allotments in wilderness areas are closed, they are no longer deemed suitable for livestock grazing. Due to past allotment closures, the Payette NF portion of the Frank Church Wilderness Area is no longer considered suitable for livestock grazing, which creates subtle differences in Alternatives, particularly 7G and 7J. For the draft SEIS, the USFS will continue to analyze the alternatives as they were developed by the IDT but will include a narrative describing the unsuitability of the wilderness areas. The final SEIS will not include the wilderness areas as suitable grazing land.

Trailing routes

The IDT developed alternatives without discussing trailing routes. Therefore, the IDT reopened discussions of the alternatives and decided whether trailing routes should be left open or closed for each of the 13 proposed alternatives. If an alternative is chosen that contains an open trailing route, the USFS must address what actions will be taken to protect the bighorn sheep.

Agreement:

- **Basic assumptions—trailing routes are closed within stippled areas, unless specifically noted by alternative; trailing routes in non-stippled areas are open, unless specifically noted.**

- 7e—close trailing in stippled areas within the boundaries of the Payette NF (trailing permits across Payette NF would not be permitted)
- 3, 4, 6, and 7—continue current trailing
- 7g—close entire Salmon River driveway in addition to the basic assumptions
- 7h—basic assumptions apply with no exceptions
- 7j—close entire Salmon River driveway in addition to the basic assumptions
- 7k—open entire Salmon River driveway (including stippled area) until the junction of Hornet Creek Road in addition to the basic assumptions

Applicability to pack goats

According to the scientific literature, goats and domestic sheep are treated similarly in their potential to affect bighorn sheep viability. However, adequate data for pack goat use on the Payette National Forest do not exist. Soucek will discuss the appropriateness of including pack goats in this SEIS analysis with the Regional Office (RO).

Risk model review and update (RO briefing)

Payette NF IDT members created a map of relative risk of contact based on the locations of the GPRs, grazing allotments, and source habitat. Risk ratings were treated as varying exponentially between the risk of contact and the GPR contour lines. This model uses all of the contour line intervals—from 50% (9.7) kernel to 100% (0.7) kernel. This relative risk map will be used to compare the alternatives.

Participants provided the following feedback:

- The risk associated with trailing routes is not considered in the landscape risk model, but is represented as a separate risk model (see paragraph below)
- Concern with risk interface between areas of 100% and 0% risk
- This is a standard risk map used to compute relative risk—at this stage, is it probably OK
- Remember to note that GPRs in Hells Canyon reflect significantly depressed bighorn sheep populations in some areas
- “Islands of risk” upstream of Allison-Berg Allotment—The “islands of risk” on the map are created by applying the risk model to mapped incidental sightings of bighorn sheep. The USFS has not determined how to incorporate the 1,500 additional bighorn sightings in that same area over the last 50 years as provided through IDF&G winter trend surveys. There is a question about what to do with data that can’t be incorporated, but will affect risk rating (it will be addressed in cumulative effects).

Trailing routes were not included in the landscape risk model because the IDT had no scientific documentation on an appropriate distance of risk from the trailing route to create a corridor/polygon with area, rather than simply including trailing routes as linear features. The Technical Report Subcommittee agreed to add them as linear features with their own risk ratings, which were routed to the entire IDT group after the October 29, 2007, IDT meeting; no additional IDT comments were received. This approach was also presented to USFS Regional Office, and the Payette was instructed to proceed with effects analysis. The Technical Report Subcommittee will reconvene to attempt to develop an acceptable methodology for including trailing routes as polygons in the landscape risk model.

Affected environment

Miller briefly reviewed the draft Affected Environment chapter that will be included in the SEIS. She explained that the Affected Environment chapter is written iteratively with the Environmental Effects chapter, so the IDT may see changes from the text they have in hand today to that which will end up in the SEIS. Participants asked for minor clarifications concerning the definition of source habitat capacity and the differences between

summer and winter source habitat. The USFS was not asking for review and comment at this time and copies were disseminated for informational purposes only.

Update on preliminary findings

Miller and O'Brien displayed pie charts that provided a very preliminary visual depiction of relative risk remaining in each alternative. Miller is still working on a satisfactory visual depiction. The alternatives were presented in order of decreasing relative risk:

- 7 (all risk)
- 3, 4, 5;
- 7k
- 7g, 7j
- 7h
- 7e (zero risk)

Miller and O'Brien displayed a second set of charts that, again, provided a very preliminary visual depiction of the risk remaining outside closure area by relative risk category group (no relationship to the livestock grazing allotments). The alternatives were presented in order of decreasing relative risk:

- 7 (not displayed)—mostly moderate risk with some very low-low risk and very little high-very high risk
- 3,4,6—mostly moderate risk with some low-very low risk
- 7k—very low-low risk increases, most is moderate risk
- 7j and 7g—7G has equal ratios of very low-low and moderate risk; 7J has mostly very low-low
- 7h—all very low-low levels of risk
- 7e—no risk

Based on the preliminary effects analysis shared today, Rainville feels that the ID has developed a reasonable range of alternatives. Her final decision about the range of alternatives will be made once the environmental effects analysis is complete.

DEFINING CRITERIA FOR IDT RECOMMENDATION

(Note: Note card comments are included verbatim in Appendix 3).

At the next meeting, the IDT will be comparing the alternatives to see if they are able to make a recommendation to Rainville on the IDT preferred alternative. In order to do this, the IDT must develop a list of criteria that should be used to compare the alternatives. Each IDT member was asked to write on a note card a maximum of three criteria that were most important to him or her. Each criterion was then organized into the following categories: process, risk, population, science, legal, cultural, habitat, and livestock.

Hayman will synthesize the criteria, which will be finalized by the IDT via email.

NEXT STEPS

BIN Items

- 1) Risk assessment/viability-fit together—In progress
- 2) Update cycle for data (e.g., 2007 telemetry points)—Completed, the latest data available will be included in the FEIS
- 3) Compare first year movements to “after they are settled” movements—Completed, researchers could not differentiate the points and they were not useful in the analysis

- 4) Definition of contact—what are we using?
- 5) Parameters for “bright line” of non-suitability—Removed, question no longer exists
- 6) Incorporating benefits of outfitter/guides, hunting, and wildlife viewing into economic analysis—In progress
- 7) Incorporating cost of administering grazing permits into economic analysis
- 8) Future IDT review and comment on “need for changes” in FEIS document through supplement (wildlife & range section at least, other areas as interested/needed)—In progress
- 9) Define “wandering” sheep for adaptive management/tools discussion
- 10) “Occupied habitat” = GPR?
- 11) Summarize/synthesize historic trend survey data for east side—Removed, will be completed between the draft and final SEIS
- 12) Check on Rapid River travel corridor—confirm east side travel corridors w/Jim and Jay (IDFG)—Completed, incorporated into the GPR
- 13) Concerns with the proposed Idaho interim bighorn sheep strategy:
 - What is the relationship between the SEIS and the proposed Idaho interim strategy?
 - Will the proposed strategy affect the SEIS and/or be affected by it—what decisions will it drive?
 - How will Idaho’s interim strategy affect Oregon and Washington’s bighorn sheep interests in the Payette National Forest?—Need discussion on this at the next meeting.
- 14) Need to clarify confidentiality proposal: “General consensus that information is complete.”—Removed, is an action item
- 15) Are allotment buyouts a consideration as a management tool—Removed, while buyouts are not an option for the USFS to initiate, they can be initiated by a third party.
- 16) Incorporate tribal benefits of bighorn sheep into the economic analysis.

Action Items

- 1) Provide an index of contents in response to Hells Canyon FOIA #2—Soucek by February 28, 2008
- 2) Questions/concerns on confidentiality agreement to Soucek by February 15, 2008 (Hayman will email copy of proposal to absent team members by February 1, 2008—IDT Members)
- 3) Check with Regional Office on appropriateness of addressing pack goats in this analysis—Soucek by February 15, 2008
- 4) Technical Subcommittee will reconvene to try and develop an approach to model trailing routes—Technical Subcommittee by February 10, 2008
- 5) Synthesize decision/evaluation criteria and finalize through email—Hayman will distribute a draft list by February 4, 2008—Hayman will finalize by February 15, 2008
- 6) Check on the ability of the effects analysis to address the evaluation criteria—Susan Miller will look at draft versions by February 5, 2008

Meeting Schedule

The next meeting is scheduled for February 28–29, 2008, at 8:30 a.m. in McCall, Idaho (the addition of February 29 to make a two-day meeting was suggested at the end of the meeting after some members had already left). If weather does not permit travel, team members can videoconference from USFS offices. A decision on this will be made as the date approaches.

The IDT scheduled an additional meeting for April 1–2, 2008, in McCall, Idaho. The purpose of this meeting is to draft the proposed Forest Plan language, including adaptive management language.

CLOSING

Rainville acknowledged the group's progress and thanked everyone for attending, remaining focused, and making the draft a priority. Rainville added that she had presented the team's progress to the RO, which did not suggest any changes to the process.

Soucek added that she appreciated everyone for attending and being collaborative, especially considering the variety of perspectives represented.

Participants thanked the USFS for their patience with the IDT, especially concerning the NEPA process.

The meeting adjourned at 3:40 p.m.

HANDOUTS

1. Agenda
2. Rudolph, K. M., B.A., Ph.D.; D. L. Hunter, B.S., D.V.M; R. B. Rimler, M.S., Ph.D.; E. F. Cassirer, M.S., Ph.D.; W. J. Foreyt, M.S., Ph.D.; W. J. DeLong, B.S., M.S.; G. C. Weiser, M.S., Ph.D.; and A. C. S. Ward, M.S., Ph.D. 2007. Microorganisms associated with a pneumonic epizootic in Rocky Mountain bighorn sheep (*Ovis canadensis canadensis*). *Journal of Zoo and Wildlife Medicine* 38(4): 548–558.
3. "Proposed Interdisciplinary Team Confidentiality Statement." Handout from Pattie Soucek. 1 p.
4. "Affected Environment." Handout from Susan Miller dated January 30, 2008. 27 p.
5. Action items and BIN items as of 10/29/2007. Handout from Susan Hayman. 1 p.

APPENDIX 1—AGENDA**Bighorn Sheep: Supplemental Analysis to the Forest Plan Environmental Impact Statement****Interdisciplinary Team Meeting**

January 31, 2008

USGS Idaho Water Science Center Building, 230 Collins, Boise, ID

Meeting Objectives:

- 1) Review the findings of the analysis to date.
- 2) Discuss and make recommendations on pack goats and trailing routes
- 3) Define criteria that the IDT will use to evaluate the alternatives in February in order to provide recommendations on the alternatives to the Forest Service.

Agenda (8:30 a.m. to 3:30 p.m.)

Time	Topic	Process / Product
8:15 a.m.	Refreshments available in meeting room	
8:30 a.m.	Opening <ul style="list-style-type: none"> • Welcome and opening remarks; Update on the schedule <ul style="list-style-type: none"> – Suzanne Rainville, Payette Forest Supervisor – Pattie Soucek, Payette Forest Planner • Meeting overview, group agreements <ul style="list-style-type: none"> – Susan Hayman, Facilitator 	Information
8:45 a.m.	Protocol Revisions – Pattie Soucek <ul style="list-style-type: none"> • Confidentiality agreements • Meeting summaries 	Information; Discussion <i>Product: Written documentation of IDT agreements regarding confidentiality and meeting summaries</i>
9:15 a.m.	October 29, 2007 Meeting Summary – Susan Hayman <ul style="list-style-type: none"> • Framing the discussion • October 29 action item review 	Discussion; IDT action <i>Product: Update on action items not on today's agenda</i>
9:45 a.m.	BREAK	
10:00 a.m.	Analysis Update – Susan Miller, Chans O'Brien <ul style="list-style-type: none"> • Risk model review and update (RO briefing) • Update on suitability in wilderness • Update on the affected environment • Update on the preliminary findings 	Information; Discussion/Q&A <i>Product: IDT recommendations to address remaining questions.</i>

Time	Topic	Process / Product
	<ul style="list-style-type: none"> • Additional questions to address <ul style="list-style-type: none"> ▪ Applicability to pack goats? ▪ Trailing routes? ▪ Other questions? 	
12:00 p.m.	LUNCH (available for purchase on-site)	
12:45 p.m.	Defining Criteria for IDT Recommendation – Susan Hayman	Facilitated task
2:15 p.m.	BREAK	
2:30 p.m.	Next Steps – Susan Hayman <ul style="list-style-type: none"> • Review and confirmation of today's IDT agreements • Bin Items • Identify Objectives for February meeting • Review action items for February meeting 	Discussion; ID team decision <i>Products:</i> <ul style="list-style-type: none"> • <i>Written documentation of IDT agreements</i> • <i>List of bin items and disposition;</i> • <i>Preliminary objectives for the next meeting</i> • <i>Assignments for the next meeting;</i>
3:15 p.m.	Closing remarks – Pattie Soucek	Information
3:30 p.m.	Adjourn	

APPENDIX 2—TRANSCRIBED FLIP CHART NOTES

<p style="text-align: center;">Trailing Routes</p> <ul style="list-style-type: none"> • Trailing routes closed in stippled areas unless specifically noted by alt. • Trailing routes in non-stippled are open unless noted <p>Alt E: All Closed Alt 3,4,6,7: All Open Alt G: Close SR driveway in/out of stippling</p> <ul style="list-style-type: none"> • Shipping driveway stippled is closed...rest is open <p style="text-align: right;">1</p>	<p style="text-align: center;">Trailing Routes (cont.)</p> <p>Alt E: Not trailing in stippled area/within boundaries of PNF. Trailing permits across PNF would not be permitted.</p> <p>ALT 3,4,6,7: Continue current trailing routes open.</p> <p style="text-align: right;">2</p>
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<p style="text-align: center;">Trailing Routes (cont.)</p> <p><u>Alt H:</u> Basic assumptions apply-no exceptions</p> <p><u>Alt J:</u> Salmon River driveway closed entirely</p> <p><u>Alt K:</u> Entire Salmon River driveway opened <u>until</u> junction of CK/Hornet road</p> <p style="text-align: right;">3</p>	<p style="text-align: center;">Comments on Findings</p> <p style="text-align: center;"><u>Relative</u> Risk Ratings</p> <ol style="list-style-type: none"> 1) Concern with preliminary risk rating on Cuddy Mt. 2) Concern with risk interface between mustard (high risk) and blue (low risk) 3) Acknowledge that this is a standard risk map used to compare relative risk—at this stage-probably OK for now. <p style="text-align: right;">4</p>
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<p style="text-align: center;">Comments on Findings (cont.)</p> <ol style="list-style-type: none"> 4) Remember to note that GPRs in Hells Canyon reflect significantly depressed BHS populations in some areas 5) “Islands of risk” upstream of Allison Berg allotment. Ability to include Allison Berg info in analysis. Also, ability to include non-GPS F&G data, etc. What to do with data that can't be incorporated but would affect risk rating. (addressed in cumulative effects) <p style="text-align: right;">5</p>	<p style="text-align: center;">Comments on Findings (cont.)</p> <ol style="list-style-type: none"> 6) Can you have 2 different models in an analysis and have it withstand a court test? <ul style="list-style-type: none"> • Must demonstrate use of best information. • Decision-maker uses all information available. <p style="text-align: right;">6</p>
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<p style="text-align: center;">Trailing Route Options</p> <ol style="list-style-type: none"> 1) Width of actual route (e.g. 150 yards→¼ mile or something). 2) Gradation of risk from route (highest) to lowest (top of ridge). <p style="text-align: right;">7</p>	<p style="text-align: center;">Action Items</p> <ol style="list-style-type: none"> 1) Provide an index of contents in response to Hells Canyon FOIA#2—Pattie by Feb. 28. 2) Questions/Concerns on confidentiality agreement—get to Pattie by Feb. 15. (Susan send out to absent team members 2/1) Try to finalize by end of February. 3) Check with RO on appropriateness of addressing pack goats in this analysis—Pattie Feb. 15 <p style="text-align: right;">8</p>
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<p style="text-align: center;">Action Items (cont.)</p> <ol style="list-style-type: none"> 4) Tech Team (Pattie/Susan M.) try to develop approach to model trailing routes (Feb. 10) 5) Synthesize decision/eval. criteria. Finalize thru email—Susan Feb. 15 6) Check on ability of effects analysis to address eval. criteria—Susan M. Out by Feb. 4. <p style="text-align: right;">9</p>	<p style="text-align: center;">Additional BIN Items</p> <p style="text-align: center;">(IDT recommended disposition in italics)</p> <ol style="list-style-type: none"> 13) Concerns with the proposed Idaho interim bighorn sheep strategy: <ul style="list-style-type: none"> • What is the relationship between the SEIS and the proposed Idaho interim strategy? • Will the proposed strategy affect the SEIS and/or be affected by it—what decisions will it drive? • How will Idaho’s interim strategy affect Oregon and Washington’s bighorn sheep interests in the Payette National Forest? <i>Need discussion on this at next meeting.</i> <p style="text-align: right;">10</p>
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<p style="text-align: center;">Additional BIN Items (cont.)</p> <ol style="list-style-type: none"> 14) Need to clarify confidentiality proposal: “General consensus that information is complete...” <i>This will be handled as an action item. Individual team members will review the confidentiality language and email their concerns to Pattie Soucek by February 15.</i> <p style="text-align: right;">11</p>	<p style="text-align: center;">Additional BIN Items (cont.)</p> <ol style="list-style-type: none"> 15) Are allotment buyouts a consideration as a management tool? <i>While buyouts are not an option for the Forest Service to initiate, they can be initiated by a third party. This “third party option” has been available as a management tool for some time.</i> 16) Incorporate tribal benefits from BHS into the economic analysis. <p style="text-align: right;">12</p>
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APPENDIX 3

Process

- Will the alt affect mgt “at the boundary”
- Speed of completing the project.
- Does the analysis consider all domestics that can prevent BHS viability

Risk

- Level of risk of contact w/ BHS from domestics
- Alternative adequately separates bighorns + domestics
- Minimize risk
- Effectively creates separation between occupied BHS populations and DS.
- Reduces potential contact between BHS and DS to less than 1% a year.

Cultural

- Cultural sustainability

Legal

- Alternative meets current laws – including federal trust responsibility to tribes.
- Is the alternative compliant with the Hell’s Canyon NRA Act?
- State must retain wildlife management authority.
- How well does alternative address NPT treaty + cultural concerns?
- Meet all federal laws: NFMA – Bighorn long term viability; HCNRA; Tribal Trust Responsibility; NEPA
- Decision must clearly conform with Congressional direction/federal law (i.e., must be as legally bullet-proof as possible, to reduce or eliminate appeals).
- Is the alternative meeting the President’s Executive order to provide for huntable populations of BHS? Or how well does it?
- Is the alternative compliant w/ NFMA?

Livestock

- What effect does each alternative have on permitted livestock numbers.
- Trailing routes need to be defined 150 yds–2 miles?

Science

- Ability to implement the decision
- Use all disease research + findings in a fair process
- Use best available science—not “Bush” science
- Use good science for decisions.

Population

- Bighorn sheep populations must be viable.
- Sustainable populations
- Huntable/harvestable populations

- Viability of BHS populations
- Decisions based on our understanding that the B.H.S. data is a minimal estimate + extremely depressed
- Hells Canyon pop'n healthy + robust—more than viability—occupying most available habitat
- Restoring BHS in Snake and Salmon River Canyons to healthy, harvestable population levels.
- In determining “viability” of BHS, capturing values that include the animal’s cultural/spiritual importance to the Nez Perce Tribe; economic importance; and the ecologic importance of BHS.
- How well does alternative promote BHS restoration opportunities above min. viable levels providing for range expansion + dist. of BHS across historic source habitat
- A healthy, reproducing population of bighorn sheep in Hells Canyon Initiative area.
- How well does alternative reduce contact between BHS + d sheep + promote connectivity of BHS habitat + pop connectivity

Habitat

- How does each alternative provide for viable BHS habitat.
- Degree to which connectivity w/ historic habitat is established/maint