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Comment Report: All Comments

Project: (CRSO EIS) IEPR Reviews Review: EIS Review

Displaying 23 comments for the criteria specified in this report.

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Id ▲	Discipline	Section/Figure	Page Number	Line Number
8587361	Environmental	n/a	Final Panel Comment 1	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium/High)</p> <p>The implementation of adaptive management in the CRSO would benefit from a more robust, science-based adaptive management model that can be used to guide program development and support future decision making.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_1.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0	<p>Evaluation Concurred</p> <p>The co-lead agencies agree that "implementation of a practically optimal CRSO will require a timely, robust, scientific adaptive management model to confirm, test, or modify management operations and effectively deal with changing conditions and new information over time." We have added additional content to Appendix R to more clearly make this point.</p> <p>Additional information and discussion is included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_1.docx)</p>			
1-1	<p>Backcheck Recommendation Close Comment</p> <p>Concur</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>			
Current Comment Status: Comment Closed				
8587362	Cultural Resources	n/a	Final Panel Comment 2	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium/High)</p> <p>The CRSO DEIS does not identify which built resources are eligible for listing in the NRHP, and what effects project actions would have on such resources.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_2.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0	<p>Evaluation Non-concurred</p> <p>The co-lead agencies acknowledge the importance of the National Historic Preservation Act (NHPA) and implement a robust section 106 compliance program in keeping with the FCRPS Systemwide Programmatic Agreement (SWPA), as described in section 3.16.1.</p> <p>Additional information and discussion is included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_2.docx)</p>			
1-1	<p>Backcheck Recommendation Close Comment</p> <p>Concur - The Panel understands and appreciates the PDT's response, but feels that the Co-lead agency's Section 106 compliance program would be strengthened by using the National</p>			

Register of Historic Places (NRHP) eligibility process in conjunction with their Sitewide Programmatic Agreement under the 36 CFR 800.14 Federal Agency Program Alternatives (b) Programmatic Agreement for compliance with the National Historic Preservation Act. Using the NRHP eligibility process to identify historic properties would streamline the Co-lead agency's ability to determine the effects of the operational and structural measures on historic properties and resolve any adverse effects. The Co-leads would only need to concentrate on those built resources that are eligible for the NRHP, or historic properties. Thus, the Co-leads could focus on those historic properties with the highest likelihood to be impacted by the operational and structural measures under the various alternatives.

Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020

Current Comment Status: **Comment Closed**

8587363	Environmental	n/a	Final Panel Comment 3	n/a
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Comment Classification: **Unclassified\For Official Use Only (U\FOUO)**
 (Document Reference: [Significance Level - Medium](#))

The assessment of climate change does not consider the impacts of increases in extreme climate events.

(Attachment: CRSO_EIS_Final_Panel_Comment_3.docx)

Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020

Revised May 19 2020.

1-0 Evaluation Non-concurred
 Extreme events were included in the climate analysis. Through on-going regional climate change studies and work, the co-lead agencies evaluated potential shifts in precipitation and temperature patterns and resulting changes in unregulated Columbia Basin streamflow timing and volumes. The evaluation consisted of the full range of the latest climate change projections developed using multiple global climate models, emissions scenarios, downscaling techniques, and hydrologic models. Details of this evaluation are in chapter 4 of the EIS. This information was used to describe the potential effects (both beneficial and adverse) on the river systems and resources due to potential changes in climate for all alternatives.

Additional information and discussion is included in the attached response.

Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_3.docx)

1-1 Backcheck Recommendation Close Comment
 Concur - The response from the PDT that emerging climate change information will be considered is satisfactory.

Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020

Current Comment Status: **Comment Closed**

8587366	Cultural Resources	n/a	Final Panel Comment 4	n/a
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Comment Classification: **Unclassified\For Official Use Only (U\FOUO)**
 (Document Reference: [Significance Level - Medium](#))

The approach used to determine what constitutes a built resource versus an archaeological property is too narrow and subjective.

(Attachment: CRSO_EIS_Final_Panel_Comment_4.docx)

Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020

1-0

	<p>Evaluation Non-concurred The co-lead agencies respectfully disagree the approach used to determine what constitutes a built resource versus an archaeological property is too narrow or subjective. The co-lead agency cultural resources team leads have over approximately 70 years of combined professional cultural resources management experience and are very cognizant of the resource characteristic differences between pre-contact archaeological sites, post-contact and historic archaeological sites, historic built environment sites, to include buildings and structures, and multi-component sites, or sites that exhibit one or more characteristics or evidence of one or more of the aforementioned site types. The agencies provide an adequate description of what constitutes an element of the built environment in section 3.16.2.5 of the draft EIS.</p> <p>Additional information and discussion is included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_4.docx)</p>			
1-1	<p>Backcheck Recommendation Close Comment Concur - The Panel still feels that the DEIS would benefit from a broader, more flexible approach on what constitutes a built resource versus an archaeological property that would provide clarity for understanding the differences and treatment of both types of resources under the various alternatives. Clearly the standard that defines a built resource that is over 50 years of age, no longer in use, and deteriorating as an archaeological property does not provide such flexibility. While the Panel appreciates that the State Historic Preservation Offices in the states of Washington, Oregon, Idaho and Montana use varying definitions of what constitutes an archaeological resource versus a built resource, the Co-lead agencies could develop an approach based on the consensus of the definitions used by those states.</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>			
	<p>Current Comment Status: Comment Closed</p>			
8587367	Economics	n/a	Final Panel Comment 5	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium)</p> <p>The definition of local versus non-local visitors is not appropriate for the aggregation of economic impacts from changes in recreation.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_5.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0	<p>Evaluation Non-concurred The PDT does not concur that the definition of local versus non-local visitors is not appropriate for the aggregation of economic impacts from changes in recreation. The focus of the regional economic impact analysis is at the site- or project- level, which is designed to estimate the economic impacts in terms of jobs and income of changes in non-local visitor spending in gateway communities.</p> <p>Additional information and discussion is included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_5.docx)</p>			
1-1	<p>Backcheck Recommendation Close Comment Concur - The Panel is able to concur given the modified language provided by the PDT.</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>			
	<p>Current Comment Status: Comment Closed</p>			
8587370	Economics	n/a	Final Panel Comment 6	n/a

Comment Classification: **Unclassified\For Official Use Only (U\FOUO)**
 (Document Reference: [Significance Level - Medium](#))

The inconsistent use of datasets for the commodities modeled by SCENT and TOM distorts the comparisons of results for shipment costs.

(Attachment: [CRSO_EIS_Final_Panel_Comment_6.docx](#))

Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020

1-0 Evaluation Non-concurred

The PDT concurs that it would be ideal to have both the SCENT and TOM models utilize identical data, but it does not concur that the effect of shipping costs under the alternatives would be significantly affected by this change. The basis for the TOM model is the regional wheat production as well as the 10-year average of downriver wheat shipments on the lower Snake River which, as the reviewer notes, is the majority of the commodities that travel on the lower Snake River.

Additional information and discussion is included in the attached response.

Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: [CRSO_EIS_IEPR_FPC_6.docx](#))

1-1 Backcheck Recommendation Close Comment

Concur - Given the new information and clarifications provided, the Panel is now able to concur.

Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020

Current Comment Status: **Comment Closed**

8587372	Economics	n/a	Final Panel Comment 7	n/a
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Comment Classification: **Unclassified\For Official Use Only (U\FOUO)**
 (Document Reference: [Significance Level - Medium](#))

The CRSO DEIS does not explain how the risk associated with disruption/delay due to high-water conditions is incorporated into the SCENT model, and this risk does not appear to be included in the TOM at all.

(Attachment: [CRSO_EIS_Final_Panel_Comment_7.docx](#))

Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020

1-0 Evaluation Non-concurred

While the commenter is correct that risk of disruption is included in the SCENT model, the commenter is not correct that risk is not incorporated in the TOM model. The typical risk of disruption is incorporated into shipper costs. Shipping would be entirely precluded from the lower Snake River under MO3. There would not be an increased risk of disruption on the Columbia River under MO3. As such, a change in risk is not relevant to the assessment that is conducted using the TOM model.

Additional information and discussion is included in the attached response.

Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: [CRSO_EIS_IEPR_FPC_7.docx](#))

1-1 Backcheck Recommendation Close Comment

concur - Given the new information and clarifications provided, the Panel is now able to concur.

Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020

Current Comment Status: **Comment Closed**

8587375	Economics	n/a		n/a
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			Final Panel Comment 8	
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium)</p> <p>The assumption that all new power generation and transmission infrastructure would be immediately available for all MO alternatives misrepresents the estimated costs and benefits.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_8.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
	1-0	<p>Evaluation Non-concurred The commenter questions the use of 2022 as the study year for the EIS and suggests including a timeline for the implementation and cost analysis. While there is merit in evaluating costs and benefits according to the comment, Bonneville feels confident in the reasons for the approach taken in the EIS.</p> <p>Additional information and discussion is included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_8.docx)</p>		
	1-1	<p>Backcheck Recommendation Close Comment Concur - The Panel is able to concur given the additional information and clarification provided.</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>		
<p>Current Comment Status: Comment Closed</p>				
8587376	Environmental	n/a	Final Panel Comment 9	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium)</p> <p>The conclusion that TDG levels exceeding 110% produce an increased risk of fish mortality is misleading.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_9.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
	1-0	<p>Evaluation Non-concurred TDG levels of 110% saturation does, with sufficient duration, increase the risk of mortality. However the DEIS does not emphasizes 110% as a standard. TDG levels among alternatives are reported as the proportion of time exceeding TDG of 120% or 125%, for modeled salmon and for steelhead only an estimated average exposure is presented. Higher TDG levels are identified as higher risk of GBT. Despite many field studies there are still many remaining uncertainties in effects in free swimming fish in general, the variety of species and life stages, so a conservative approach is prudent. The co-lead agencies did not use the TDG related mortality estimates generated by the UW TDG model in their decision making process. The co-lead agencies updated the Final EIS and clarified the description of how elevated risk of mortality associated with TDG was considered for non-salmonids.</p> <p>Additional information and discussion is included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_9.docx)</p>		
	1-1	<p>Backcheck Recommendation Close Comment Non-Concur - The basic issue is use of the term "risk" in the absence of a true risk analysis. An increase of 1 % of saturation may technically produce a small increase in "risk" of the incidence or even severity of GBD. However, this increase in risk is sufficiently small as to be generally undetectable. Most Columbia River System field studies do not provide evidence of an increase in risk at slightly greater than 110 % of saturation.</p>		

	<p>Tailrace conditions are not of great concern in this issue. The extremely high water velocities of tailrace areas prohibit most fish from remaining in these areas for sufficient periods of time to develop high internal levels of TDG that may result in GBD. The recorded durations of juvenile salmonids in tailrace areas indicate resident times of minutes to several hours. Fish that remain in tailrace areas for prolonged periods need to remain near the bottom to avoid downstream displacement, thus are exposed to hydrostatic compensation that decreases the risk of GBD at TDG levels of 110-120 % of saturation. The general absence of GBD in many field studies with TDG levels of 110-120 % and higher provide evidence that depth compensation is commonly adequate to avoid increased risk of GBD during the relatively brief residence in tailrace areas.</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>			
	Current Comment Status: Comment Closed			
8587377	Environmental	n/a	Final Panel Comment 10	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium)</p> <p>A percent change in the 5-year average maximum TDG as compared to the No Action Alternative does not reflect the degree of GBD impact to the fish.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_10.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0	<p>Evaluation Non-concurred</p> <p>5-year average maximum does not reflect to degree of risk for GBD and this information was not used for this purpose. It is an index to identify the long-term differences in TDG among alternatives to compare the water quality effects. TDG effects on fish were subjectively described due to the complexity and uncertainty in fish behavior, and differing sensitivities of different life stages.</p> <p>Additional information and discussion is included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_10.docx)</p>			
1-1	<p>Backcheck Recommendation Close Comment</p> <p>Non-Concur - The 5-year average maximum does not provide a useful index to distinguish differences among the alternatives evaluated by the Draft EIS. If the "5-year maximums were not purported to represent TDG impacts on fish.", it would be of little or no value in distinguishing differences among the alternatives. The basic purpose of regulating and evaluating total dissolved gas supersaturation is to protect aquatic life.</p> <p>Although there is substantial complexity in fish behavior, it is only the fish's depth distribution that is of substantial value in determining adverse effects of total dissolved gas supersaturation. The two documents cited above (Weitkamp and Katz 1980, Weitkamp 2020) provide reference to numerous investigations that document or infer the depth of juvenile and adult salmonids that avoid gas bubble disease under reservoir and free-flowing river conditions.</p> <p>This is an artificial criterion that does not usefully distinguish differences in the evaluated alternatives. This risks introducing a confusing and unnecessary analysis to TDG regulation that is not of any value.</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>			
	Current Comment Status: Comment Closed			
8587380	Environmental Engineering	n/a	Final Panel Comment 11	n/a

Comment Classification: **Unclassified\For Official Use Only (U\FOUO)**
 (Document Reference: [Significance Level - Medium](#))

It is unclear why MO1, MO3, and MO4 were burdened with new irrigation diversions that are 25 times greater than those used for the Preferred Alternative.

(Attachment: [CRSO_EIS_Final_Panel_Comment_11.docx](#))

Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020

1-0 Evaluation Non-concurred

This language is in Chapter 7 and explains why the CBP diversion was decreased in the PA: This operational measure was included in MO1, MO3, and MO4 where an additional 1.15 million acre-feet could be pumped from Lake Roosevelt at Grand Coulee above what was provided in the No Action. This measure was updated for the Preferred Alternative to pump up to 45,000 acre-feet of water above the No Action due to the uncertainty over the timing and extent of the development of new water supply projects for the full volume. Additionally, this measure would change the timing of delivery of recently developed water supplies for the Odessa Subarea of the Columbia Basin Project (164,000 acre-feet for irrigation and 15,000 acre-feet for M&I of the current supplies) from September and October to when the water is needed, on demand. The 45,000 acre-feet water supports near-term additional development of authorized project acres. Water pumped from Lake Roosevelt would be delivered as the demand arises during the irrigation season (March to October). Because multiple factors contribute to the amount of water in the river and reservoirs that then translates into changes in power generation, etc, this was not explicitly called out in the EIS, though the H&H section explains the measures that lead to changes in flow and storage in each MO.

Additional information and discussion is included in the attached response.

Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: [CRSO_EIS_IEPR_FPC_11.docx](#))

1-1 Backcheck Recommendation Close Comment

Concur - The Panel concurs with the addition of text in Section 3.12.1.4 which clarifies that beneficial effects of the additional water supply diversion were not analyzed.

The Panel understands that further development of cropland in the Columbia Basin Project is uncertain, both in terms of its timing and the total acreage that may ultimately be developed. However, the relative magnitude of the two water volumes begs at least some mention that benefits of the increased pumping at Grand Coulee could be significantly larger than the cropland loss in Region C. Some mention of this should be presented in 3.12.2.2 for Region B.

Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020

Current Comment Status: **Comment Closed**

8587383	Hydraulics	n/a	Final Panel Comment 12	n/a
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Comment Classification: **Unclassified\For Official Use Only (U\FOUO)**
 (Document Reference: [Significance Level - Medium/Low](#))

The use of monthly and weekly flows in the H&H models does not replicate local hydraulic conditions that would impact aspects of the quality and use of the CRSO environment by adult and juvenile fish during passage.

(Attachment: [CRSO_EIS_Final_Panel_Comment_12.docx](#))

Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020

1-0 Evaluation Non-concurred

Estimated monthly and two week flows in of themselves does not describe the hydraulic characters. However, many of the key factors for differentiating among the alternatives were qualitatively described, to include adult passage delays, and tailrace eddies, that delay juveniles and increase their predation risk. They types of modeling necessary to address

	<p>these factors in the tailraces is very expensive and often very difficult to validate. The Preferred Alternative includes and Adaptive Management Framework to address unintended consequences such as those that could arise from some the uncertainty in local hydraulics.</p> <p>Additional information and discussion is included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_12.docx)</p>			
1-1	<p>Backcheck Recommendation Close Comment Concur - The PDT's choice of using an Adaptive Management Framework to address unintended consequences is a satisfactory approach.</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>			
	<p>Current Comment Status: Comment Closed</p>			
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8587388	Environmental	n/a	Final Panel Comment 13	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium/Low)</p> <p>The assessment of climate changes does not consider the adaptability of fish to changing climatic conditions.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_13.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0	<p>Evaluation Concurred The DEIS does not address the potential for salmon and steelhead to adapt to changing conditions. The salmon are well known to be quite plastic in many life history traits and have adapted to each local habitat. Water temperature, runoff timing, etcetera are very powerful selection forces so some degree of adaption could be expected. However, much of the recognized adaption of these cold water obligates has been in migration timing to allow success in the hot arid inland Columbia River basin. Meeting the challenges of higher temperatures and longer durations of warm water will be a challenge.</p> <p>Additional information and discussion is included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_13.docx)</p>			
1-1	<p>Backcheck Recommendation Close Comment Concur</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>			
	<p>Current Comment Status: Comment Closed</p>			
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8587390	Environmental Engineering	n/a	Final Panel Comment 14	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium/Low)</p> <p>In evaluating the loss of LSR hydro generation (part of MO3), regional development of new renewable generation resources is not considered as the most likely replacement energy source.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_14.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0	<p>Evaluation Concurred The underlying premise of the comment, that natural-gas may not be the likely replacement for the four lower Snake River dams' generation in some scenarios and that Bonneville may not be the entity acquiring the new resources, are already described in the EIS.</p>			

	Additional information and discussion are included in the attached response.			
	Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_14.docx)			
1-1	Backcheck Recommendation Close Comment Concur			
	Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020			
	Current Comment Status: Comment Closed			
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8587397	Economics	n/a	Final Panel Comment 15	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium/Low)</p> <p>The use of averages from a USACE nation-wide database for expenditure data may not accurately represent the average expenditures on a regional scale.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_15.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0	Evaluation Non-concurred The PDT agrees with the commenter that expenditure data would ideally reflect the expenditure profiles that are specific to the study sites or the Pacific Northwest.			
	Additional information and discussion are included in the attached response.			
	Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_15.docx)			
1-1	Backcheck Recommendation Close Comment Concur - Given the information provided, the Panel concurs that the expenditure data cannot be stratified as recommended. We do, however, suggest the PDT further explain why it is not possible to stratify the national expenditure data by region. For example, is it because of the sampling methodology or because the survey instrument or something else.			
	Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 12 2020			
	Current Comment Status: Comment Closed			
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8587404	Cost Engineering	n/a	Final Panel Comment 16	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium/Low)</p> <p>The system cost models do not communicate risk under the MO alternatives.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_16.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0	Evaluation Concurred The PDT agrees that the risk and uncertainty surrounding the CRSO implementation and system costs could be better communicated in the EIS. The PDT will revise the EIS (Section 3.19 and Appendix Q) to better describe risk and uncertainty regarding the cost estimates. Appendix Q, Chapter 1, second to last paragraph includes some description on uncertainty related to the development of the cost analysis and cost estimates. Some of the cost estimates include uncertainty, such as construction costs of the structural measures and the additional mitigation measures and the Fish and Wildlife Program costs.			
	Additional information and discussion are included in the attached response.			

	Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_16.docx)		
1-1	Backcheck Recommendation Close Comment Concur		
	Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020		
	Current Comment Status: Comment Closed		
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8587408	Economics	n/a	Final Panel Comment 17
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium/Low)</p> <p>The IMPLAN analysis for the power generation and transmission model was not modeled properly.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_17.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>			
1-0	<p>Evaluation Non-concurred</p> <p>Thank you for reviewing the IMPLAN modeling approach and providing thoughtful comments. It is correct that the current IMPLAN modeling analysis is conducted at the state level. This means that the power rate effects rely on state-level spending and state-specific multiplier data to quantify indirect and induced impacts, and results are then summed across states to estimate a total effect. We agree that this approach results in some unaccounted for direct and induced effects that occur due to interconnected businesses that are affected outside of the state. This is referred to as "leakage" in the context of regional economic modeling.</p> <p>Additional information and discussion are included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_17.docx)</p>		
1-1	<p>Backcheck Recommendation Close Comment</p> <p>Concur - The Panel is able to concur given the clarification provided.</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>		
	Current Comment Status: Comment Closed		
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8587414	Environmental Engineering	n/a	Final Panel Comment 18
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium/Low)</p> <p>The CRSO DEIS does not include any information on the potential for earthquakes and any resulting impacts to the Columbia River area under the No Action Alternative or the action alternatives assessed.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_18.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>			
1-0	<p>Evaluation Non-concurred</p> <p>Earthquake effects were not considered in evaluating any of the alternatives. The measures considered do not result in an increase in water levels that would saturate potentially liquefiable soils or increase soil pressure on the shoreline slopes, which would result in an increase in expected slope instability during an earthquake event. While this could be discussed, there is no expected change in consequences from seismic events for any of the alternatives.</p> <p>Additional information and discussion are included in the attached response.</p>		

Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_18.docx)				
1-1 Backcheck Recommendation Close Comment				
Concur - The Panel accepts the PDT's explanations and suggests that those explanation be included in the final EIS to demonstrate that potential earthquake effects and concerns were recognized and generally considered (as stated above) and judged to not significantly affect the alternatives.				
Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020				
Current Comment Status: Comment Closed				
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8587420	Risk Assessment	n/a	Final Panel Comment 19	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium/Low)</p> <p>It is unclear how risk and uncertainty have been integrated into the complex adaptive system managed under the CRSO.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_19.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0 Evaluation Non-concurred				
<p>Most of our understanding of potential changes to resources of implementing different operational measures is well understood. MO1, MO2, and MO4 operate within ranges we have historically operated within, and was used to interpret modeling results to describe the cumulative impacts. The exception is in the fish response, and in particular, response of anadromous migrating fish to spill levels, TDG, and the hypotheses of latent mortality. Structural uncertainty relates to breaching the earthen embankments of the federal dams and the short and long term impacts to natural resources as well as to regional economies and social welfare. The team used a previous reservoir drawdown pilot study on the lower Snake River and previous dam breaching activities for empirical data to identify potential short term effects along with supplemental modeling. We used the best available, current models to understand changes to hydrology, water quality, navigation and transportation, recreation, air quality, power production and fish responses. Even so, each model can introduce an element of uncertainty. There are also conditions outside of the federal actions, such as climate change, changes to power production from carbon, gas, wind, and future demands and how the region will meet those demands, changes in development, etc, which the team tried to anticipate and modeled in the analysis.</p> <p>Additional information and discussion are included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_19.docx)</p>				
1-1 Backcheck Recommendation Close Comment				
Concur - The Panel accepts and appreciates the PDT's clarifying and summarizing explanations, and suggests that the content of the (clarifying and summarizing) discussion be added to the final EIS.				
Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020				
Current Comment Status: Comment Closed				
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8587425	Environmental	n/a	Final Panel Comment 20	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Medium/Low)</p> <p>It is unlikely that the relatively small-scale habitat restorations proposed will restore historic levels of the fish stocks on the Columbia River tributaries due to large watershed impacts from various human activities prior to and since dam construction.</p>				

(Attachment: CRSO_EIS_Final_Panel_Comment_20.docx)

Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020

1-0 Evaluation Concurred
 The purpose of the CRS EIS is to update operation and configuration of the 14 dams operated as a system, while meeting the fish and wildlife authorized purposes of the dams as well as relevant law, most notably, the Endangered Species Act (ESA). Recovery of salmon and steelhead population is not the purpose, nor a requirement of the EIS. Under the section 7 of the ESA, the operation and maintenance of the CRS may not jeopardize the existence of any species listed under the ESA, or destroy or adversely modify designated critical habitat of any listed species. Recovery is a shared responsibility, led by NOAA Fisheries to address the myriad factors affecting the listed species.

 Additional information and discussion are included in the attached response.

 Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_20.docx)

1-1 Backcheck Recommendation Close Comment
 Concur

 Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020

Current Comment Status: **Comment Closed**

8587427	Environmental	n/a	Final Panel Comment 21	n/a
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Comment Classification: **Unclassified\For Official Use Only (U\FOUO)**
 (Document Reference: [Significance Level - Medium/Low](#))

Several definitions, terms, and comparisons used in the CRSO DEIS in regard to TDG supersaturation are incorrect and misleading.

(Attachment: CRSO_EIS_Final_Panel_Comment_21.docx)

Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020

1-0 Evaluation Non-concurred
 The co-lead agencies agree that the TDG definition the commenter provides is correct and more precise. However, NEPA documents are to written in plain language to be understood by the general public. We believe, the description is sufficiently accurate for the purposes of the EIS.

 The term gas bubble trauma will be retained as both gas bubble disease and gas bubble trauma are commonly used in the literature, the condition fits within the definitions of both disease and trauma, a change will not improve clarity of the document, nor would change effect decisions.

 Additional information and discussion are included in the attached response.

 Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_21.docx)

1-1 Backcheck Recommendation Close Comment
 Concur - Explanation not valid. The term "trauma" is no more likely to be understood by members of the general public than the word "disease". Over a period of approximately 50 years we have found that non-technical people have difficulty understanding the role of hydrostatic pressure and depth in total dissolved gas supersaturation and gas bubble disease. However, we have not encountered any difficulty in their understanding the technical terminology that would avoid its use in the EIS.

 Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020

Current Comment Status: **Comment Closed**

8587429	Environmental	n/a	Final Panel Comment 22	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Low)</p> <p>Chapter 2 of the CRSO DEIS does not discuss increased access by white sturgeon to upstream habitat due to removal of the LSR dams.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_22.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0	<p>Evaluation Non-concurred</p> <p>None of the resources analyzed are described in Chapter 2 - Alternatives. The alternatives only described the measures that are included in each alternative. There is no discussion of effects to any of the resources. This information is included in Chapter 3 – Affected Environment and Environmental Consequences.</p> <p>Additional information and discussion are included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_22.docx)</p>			
1-1	<p>Backcheck Recommendation Close Comment</p> <p>Concur - With the additional information provided by the PDT during the Comment Response Teleconference, the Panel understands the USACE response and Concurs.</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>			
<p>Current Comment Status: Comment Closed</p>				
8587433	Other	n/a	Final Panel Comment 23	n/a
<p>Comment Classification: Unclassified\For Official Use Only (U\FOUO) (Document Reference: Significance Level - Low)</p> <p>Discussions of some topics seem fragmented and distributed throughout the CRSO DEIS in a way that makes it difficult to capture and appreciate details and reach full understanding of the impacts.</p> <p>(Attachment: CRSO_EIS_Final_Panel_Comment_23.docx)</p> <p>Submitted By: Lynn McLeod (781/681-5510). Submitted On: May 19 2020</p>				
1-0	<p>Evaluation Non-concurred</p> <p>We agree that the overall length of the document is long and difficult to review due to the complex nature of the subject matter and broad geographic scope of the EIS. However, the document contains the necessary information to fully evaluate each alternative while meeting all policy and legal requirements.</p> <p>Additional information and discussion are included in the attached response.</p> <p>Submitted By: Rachel Mesko (651-323-7178) Submitted On: Aug 11 2020 (Attachment: CRSO_EIS_IEPR_FPC_23.docx)</p>			
1-1	<p>Backcheck Recommendation Close Comment</p> <p>Concur - The Panel is pleased to learn that the TOC will be expanded as recommended. The Panel is satisfied that the PDT understands its general concern with the readability and understandability of the DEIS and assumes that the updated, final EIS will have adequately resolved those shortcomings.</p> <p>Submitted By: Lynn McLeod (781/681-5510) Submitted On: Aug 11 2020</p>			
<p>Current Comment Status: Comment Closed</p>				

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