

Comment # Label	Original BLM Comment	Original UDWR Response	UDWR March 31, 2017 Response	Additional BLM Comment	BLM Reviewer	UDWR Updated Response
BLM 708	1st line on page: Please edit as follows: "... including Buckskin Gulch is, in part, managed as a wilderness ..." 3rd line on page: Please edit as follows: "... not in a wilderness study area and would be adjacent to ..." 11th line on page: Should be "floodplain" rather than "floodway." 1st complete paragraph on page: • 3rd line: End of line should read "... the Paria Canyon- Vermilion Cliffs Wilderness area". • 4th line: This statement is inaccurate (on the condition of the Paria River riparian area). Also, this is not correct terminology – the BLM (as well as USFS and NRCS) use "functioning condition" terminology" (i.e., "properly functioning," "functional-at risk," "nonfunctional," and "unknown"), not "impaired" – see Technical Reference TR 1737-15 – Riparian Area Management.	The suggested edits from the first, second, and third paragraphs of the above comment have been incorporated. The terminology used for riparian function analysis was identified in the approved study plan, which was developed in consultation with BLM and addressed BLM review comments.	Although in the paragraph preceding the referenced text there is a brief description of the riparian environment at the Paria River crossing, the subject of this section is the aquatic resources in the stream and the referenced text is referring to the stream functionality, and not the riparian area functionality, and the associated aquatic resources. In order to make the "functionality" reference clear, the second sentence of the 3rd paragraph of section 5.3.6.1.6.2, Chapter 5, Exhibit E of the License Application is revised as follows: <b>The functionality of reaches of the river above the Paria Canyon wilderness (Primitive) areas is known to be impaired as a result of grazing and other human uses.</b>	The revised text is still incorrect - the revised text needs to read "The functionality of reaches of the river above the Paria Canyon- Vermilion Cliffs Wilderness is known to be impaired ..."	Lorraine Christian	The second sentence of the 3rd paragraph of section 5.3.6.1.6.2, Chapter 5, Exhibit E of the License Application is revised to read: <b>The functionality of reaches of the river above the Paria Canyon- Vermilion Cliffs Wilderness is known by BLM to be impaired as a result of grazing and other human uses.</b>
BLM 717	Why is there no discussion of Kanab Creek, the Virgin River, and Sand Hollow Reservoir in this analysis [5.3.6.2.2], since they were introduced in Section 5.3.6.1.6? Please add this discussion (even if no impact, they should be mentioned).	UDWR's view is that the text with regards to the first part of the comment is appropriate. The text has been revised to address the second part of the comment.	Please see the attached Extended Narrative document response to BLM Comment 716, for the response to BLM Comment No. 717.	The comment listed here as BLM 717 is not the actual BLM 717 comment (BLM 716 was listed instead). I therefore cannot comment on whether the response is okay.	Lorraine Christian	A third paragraph in Section 5.3.6.2.2, Chapter 5, Exhibit E is added to read: <b>The Proposed Action construction and operation would have no measurable effects on aquatic resources in Kanab Creek as the creek at the crossing is an intermittent stream and only flows briefly through this portion of Kanab Creek Canyon during precipitation runoff events. The Proposed Action would have no measurable effects on aquatic resources in the Virgin River or Sand Hollow Reservoir. The Proposed Action terminates at Sand Hollow Reservoir, more than 3 miles from the Virgin River, and LPP water would be conveyed from Sand Hollow Reservoir to the Quail Creek Water Treatment Plant for treatment. The Sand Hollow Hydro Station tailrace channel would be constructed in the dry during a drawdown of Sand Hollow Reservoir by WICWD. Constructing the tailrace would involve excavating a channel through the sandstone bedrock approximately 170 feet long at an average 30 feet wide. LPP water delivered from Sand Hollow Hydro Station would have approximately the same dissolved oxygen concentration and water temperature as Sand Hollow Reservoir and would have no measurable effect on aquatic resource habitat in the reservoir.</b>
BLM 718	General Comment: Why is there no discussion of Kanab Creek, the Virgin River, and Sand Hollow Reservoir in this analysis, since they were introduced in Section 5.3.6.1.6? Please add this discussion (even if no impact, they should be mentioned).	UDWR's view is that the text is appropriate.	Please see the response to BLM Comment No. 472 for an explanation of the differences between Exhibit E in the License Application and NEPA documents.  Please see the Extended Narrative document for the response to BLM Comment No. 718.	Thank you for adding this. Note that the sentence "The Proposed Action operation would have no measurable effects on aquatic resources in Kanab Creek ... typically has no flow" is essentially repeated in the second paragraph. It is more appropriate in the second paragraph since the first only discusses construction effects. Thus, I suggest <del>deleting it from the first paragraph.</del>	Lorraine Christian	Please see the updated response for BLM 718 in the Updated Extended Narrative Responses to BLM Comments.
BLM 720	General Comment: Why is there no discussion of Kanab Creek, the Virgin River, and Sand Hollow Reservoir in this analysis, since they were introduced in Section 5.3.6.1.6? Please add this discussion (even if no impact, they should be mentioned).	UDWR's view is that the text is appropriate.	There is a discussion of the effects on the Virgin River in Section 5.3.6.2.5. A sentence is added to the end of Section 5.3.6.2.5 - No Lake Powell Water Alternative, Chapter 5, Exhibit E of the License Application as follows: <b>The No Lake Powell Water Alternative would have no effect on Kanab Creek or Sand Hollow Reservoir.</b>	Need to add a justification/explanation on WHY no effect. Can't just say no effect without a rationale.	Lorraine Christian	A second paragraph is added to Section 5.3.6.2.5 - No Lake Powell Water Alternative, Chapter 5, Exhibit E of the License Application, incorporating the last sentence previously added to the section, as follows: <b>Aquatic resources in Kanab Creek and Sand Hollow Reservoir would not be directly or indirectly affected by operation of the No Lake Powell Water Alternative. Kanab Creek is more than 57 miles away from the St. George metropolitan area communities where residential outdoor watering with potable water would be eliminated under this alternative. The decreased groundwater discharge to the Virgin River would occur in a different hydrologic drainage basin than the Kanab Creek hydrologic drainage basin. Sand Hollow Reservoir is an off-stream reservoir supplied by diversions from the Virgin River upstream from the St. George metropolitan area, and there is no residential development tributary to Sand Hollow Reservoir. There would be no changes to the hydrology or water quality in Kanab Creek or Sand Hollow Reservoir under the No Lake Powell Water Alternative. The No Lake Powell Water Alternative would have no effects on aquatic resources in Kanab Creek or Sand Hollow Reservoir.</b>
BLM 721	NEW SUB-SECTION: There needs to be a sub-section on analysis of impacts from the No Action Alternative (which is currently missing) – please add.	The text has been revised to address the comment.	The differences between the No Action Alternative and the No Lake Powell Water Alternative were discussed in the meeting between BLM and the proponent on March 17, 2017. Please see the response to BLM No. 667 in the attached Narrative response document for a partial response to BLM No. 721. An explanation of why there would be no effects is added. Section 5.3.6.2.6 - No Action Alternative, Chapter 5, Exhibit E of the License Application is revised to read: <b>The No Action Alternative would have no effect on aquatic resources in the LPP study area as there would be no federal action requiring a water pipeline crossing of the Paria River and there would be no pipeline water releases to the Paria River which could risk aquatic biota transfer to the river. Existing aquatic resource conditions would continue to evolve subject to natural or other anthropogenic influences and factors.</b>  Regarding the comparison of effects between the No Action Alternative and the No Lake Powell Water Alternative, the latter alternative would involve implementation of additional and different water supply development and conservation measures than the No Action Alternative. As a result, the effects would be different between the two alternatives.	Okay with new text. I would suggest, to make the analysis in the EIS more clear, that Sec. 5.3.6.2.6 describe (here) the differences between the No Lake Powell Water alternative, and the No Action alternative - this would then more clearly demonstrate WHY the effects of the two alternatives, which seem so similar, are in fact different.	Lorraine Christian	Please see the response to BLM 721 in the Updated Extended Narrative Responses to BLM Comments.
BLM 724	2nd sentence: Need to discuss/expand on this more ... what is the basis for this conclusion? (Right now it is an unsubstantiated claim.)	The cumulative effects of the No Lake Powell Water Alternative, which would eliminate residential outdoor watering, would reduce non-sewered return flows to the Virgin River throughout the St. George metropolitan area, which is analyzed in the final Alternatives Development study report. The reduced flow, combined with water diversions from the Virgin River, would have significant adverse cumulative effects on aquatic resources.	The effects of the No Lake Powell Water Alternative were discussed during the meeting between BLM and UDWR on March 17, 2017. Based on these discussions we understand that BLM's primary concern is that USGS documents cited in the analysis of changes to urban groundwater recharge appear to contradict the conclusions of the groundwater impact analysis in the environmental report. The impact analysis for the alternative is based on localized recharge of the shallow subsurface soils in the vicinity of the urban irrigation and describes the potential effects of changes to this groundwater resource from the alternative. UDWR agrees with BLM that these site-specific changes in groundwater conditions are not in total agreement with conditions described in the two USGS reports. We recognize these differences do exist and suggest the cited USGS documents describe groundwater conditions at a different scale than is described in the impact analysis for the alternative as the reason for the differences. In addition to the response below, please refer to attached Narrative Response document for the response to this comment and BLM comment No. 694.  The following sentence is added as the first sentence of section 5.3.6.4.4, No Lake Powell Water Alternative, Chapter 5, Exhibit E of the License Application: <b>The effects of the No Lake Powell Water Alternative presented below are localized, anthropomorphic changes imposed in addition to other natural and man-made conditions described in other reports.</b>	There is no response to either Comment No. 694 or this comment in the Extended Narrative Response document.	Lorraine Christian	Section 5.3.6.4.4, No Lake Powell Water Alternative, Chapter 5, Exhibit E of the License Application is revised to read: <b>The No Lake Powell Water Alternative would have no measurable short-term cumulative effects on aquatic resources when combined with past, present and reasonably foreseeable future interrelated actions. The reduced return flows from eliminating residential outdoor irrigation (see Section 5.3.6.2.5) could have significant long-term indirect cumulative effects on aquatic resources in the Virgin River when combined with the past, present and reasonably foreseeable effects of water diversion throughout the St. George metropolitan area.</b>  Please see the updated response to BLM Comment No. 668 and BLM Comment No. 694 in the Updated Extended Narrative Responses to BLM Comments for additional clarification regarding BLM Comment No. 724.

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BLM 725	NEW SUB-SECTION: There needs to be a sub-section on analysis of impacts from the No Action Alternative (which is currently missing) – please add.	The text has been revised to address the comment.	An explanation of the effects is added. Section 5.3.6.4.5 - No Action Alternative, Chapter 5, Exhibit E of the License Application is revised to read: <b>The No Action Alternative would have no measurable cumulative effects on aquatic resources in the LPP study area. No federal action authorizing diversion of water from the Colorado River would occur and thus existing conditions would continue to evolve subject to natural or other anthropogenic influences and factors.</b>  For an explanation of the differences between the No Action and No Lake Powell Water Alternatives please see the response to BLM Comment No. 667.	Okay (except delete "to evolve").	Lorraine Christian	Section 5.3.6.4.5, Chapter 5, Exhibit E of the License Application is revised to read: <b>The No Action Alternative would have no measurable cumulative effects on aquatic resources in the LPP study area. Federal action authorizing diversion of water from the Colorado River would not occur and existing conditions would continue subject to natural or other anthropogenic influences and factors.</b>
BLM 767	Recommend a simple summary table with the following columns: Species/Status/Effects Determination (break out the species determination and critical habitat determinations)/Detailed Rationale	Your comment has been noted.	The requested summary table is incorporated into the appropriate section. Section 5.3.7.2.1.2, Chapter 5, Exhibit E of the License Application is a subsection describing the significance criteria identified for federal sensitive species and state/local agencies species of concern. The significance criteria are identified to determine if the effects of the Proposed Action and alternatives on sensitive aquatic species and their habitat would be significant or not significant.  BLM Comment No. 770 requests the text of Section 5.3.7.2, Chapter 5, Exhibit E of the License Application be reorganized to more clearly present the results of the environmental effects analysis for special status aquatic species. Section 5.3.7.2, Chapter 5, Exhibit E of the License Application is reorganized as requested by BLM in BLM Comment No. 770 and is provided in the attached Extended Narrative document.	1st paragraph - okay 2nd paragraph - not pertinent to BLM 767, so delete this text.	Lorraine Christian	The second paragraph of the March 31, 2017 Response is deleted. Response to BLM 767 is as follows: The requested summary table is incorporated into the appropriate section. Section 5.3.7.2.1.2 Chapter 5, Exhibit E of the License Application is a subsection describing the significance criteria identified for federal sensitive species and state/local agencies species of concern. The significance criteria are identified to determine if the effects of the Proposed Action and alternatives on sensitive aquatic species and their habitat would be significant or not significant.
BLM 770	Do not have a section on "Potential Effects and Alternatives Eliminated from Further Analysis." Instead, organize this entire analysis the way the other resource sections are: 5.3.7.2.2 Proposed Action 5.3.7.2.2.1 Construction Effects 5.3.7.2.2.2 Operations and Maintenance Effects 5.3.7.2.2.3 Effects Determination 5.3.7.2.3 Existing Highway Alternative 5.3.7.2.3.1 Construction Effects 5.3.7.2.3.2 Operations and Maintenance Effects 5.3.7.2.3.3 Effects Determination 5.3.7.2.4 Southeast Corner Alternative 5.3.7.2.4.1 Construction Effects 5.3.7.2.4.2 Operations and Maintenance Effects 5.3.7.2.4.3 Effects Determination 5.3.7.2.5 No Lake Powell Water Alternative 5.3.7.2.5.1 Construction Effects 5.3.7.2.5.2 Operations and Maintenance Effects 5.3.7.2.5.3 Effects Determination 5.3.7.2.6 No Action 5.3.7.2.6.1 Construction Effects 5.3.7.2.6.2 Operations and Maintenance Effects 5.3.7.2.6.3 Effects Determination The "effects determination" sub-section for each alternative would then discuss the overall effects of each alternative (which is what will go into the Biological Assessment). Thus, all of the text in Sections 5.3.7.2.2.1 through 5.3.7.2.2.8 would be merged into the overall analysis of impacts by alternative, and each statement on "potential effects from LPP Project" features being "eliminated from further analysis" would be deleted. Note: There are no "transmission line alternatives" – construction and operation of transmission lines is built into each of the separate alternatives.	The document was organized and written in accordance with FERC guidance.	Please see the Extended Narrative Response document for the response to BLM Comment No. 770.	This is MUCH better. However, there are still some "issues" with the organization. For example, note that this is Section 5.3.7.2.2.1 Proposed Action, yet the Extended Narrative Response document includes discussions/text on all the other alternatives as well. Since the section is for the Proposed Action, those other paragraphs should be removed from here and placed in their own separate sub-sections.	Lorraine Christian	The reorganized and simplified sections in the response to BLM Comment No. 770 are included in the Updated Extended Narrative Responses to BLM Comments.
BLM 795	NEW SUB-SECTION: There needs to be a sub-section on analysis of impacts from the No Action Alternative (which is currently missing) – please add.	The text has been revised to address the comment.	An explanation of why there will be no unavoidable adverse effects is added. The following sentence is added to the end of Section 5.3.7.5.5 - No Action Alternative, Chapter 5, Exhibit E of the License Application: <b>There would be no Federal action undertaken as part of the No Action Alternative and therefore there would be no cumulative effect on special status aquatic species.</b>	New text needs to be revised to address "unavoidable adverse effects" rather than "cumulative effects." Thus, please rewrite the new (added) text to read "There would be no Federal action undertaken as part of the No Action Alternative and therefore there would be no unavoidable adverse effects on special status aquatic species."	Lorraine Christian	The last sentence of Section 5.3.7.5.5, Chapter 5, Exhibit E of the License Application is revised to read: <b>There would be no Federal action undertaken as part of the No Action Alternative and there would be no unavoidable adverse effects on special status aquatic species.</b>