

COMMENT LETTER

RESPONSES

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- 198 | Page 3.8-16, 3.8.2.2.2.1.2
paragraph 6: Is there a connection between lake elevation and breeding season for the flycatcher? The connection is for habitat formation, unless there is also a component at elevation 1192 and below to allow for saturated soils. Please clarify.
- 199 | Page 3.8-17, 3.8.2.2.2.1.2
paragraph 2: The citation for Fitzpatrick 2000 is not in the literature cited. We are also unclear about sightings of Yuma clapper rails at the Lake Mead Delta. The reference we have is from McKernan for the Virgin River. Please clarify this point.
- 200 | Page 3.8-18, 3.8.2.2.3
paragraph 1: Bonytail chub also eat small fish. The citation for NPS 1998 is not correctly attributed to National Park Service. Also, there are more adequate summaries of species accounts than are contained in this citation and we suggest they be used instead.
- 201 | Page 3.8-19, 3.8.2.2.3
paragraph 1: The efforts on Lake Havasu are better referred to as an augmentation or repatriation.
- 202 | paragraph 2: This section on critical habitat is incorrect. Critical habitat for the bonytail in the project area is from Hoover Dam to Davis Dam including Lake Mohave to its full pool elevation and Lake Havasu from Parker Dam to the northern border of the Havasu National Wildlife Refuge including Lake Havasu to its full pool elevation.
- 203 | paragraph 3: Colorado pikeminnow were taken from Lake Mohave in the 1970's.
- 204 | paragraph 5: Please include only those critical habitat areas that are within the project area.
- 205 | Page 3.8-21, 3.8.2.2.3
paragraph 5: The critical habitat for the humpback chub in the project area is incorrect. The designation includes the Colorado River from Nautiloid Canyon to Granite Park in the Grand Canyon and the lower 8 miles of the Little Colorado River including the confluence with the Colorado.
- 206 | paragraph 7: Please refer to razorback sucker populations in the lower Colorado River as well as those in the San Juan in this paragraph. Also mention the populations in Lake Havasu and in the Parker to Imperial reach.
- 207 | Page 3.8-23, 3.8.2.3.1.1
Much of the information here is included in the preceding section and perhaps could be combined there.
- 198: Additional information on lake elevation and breeding season for the Southwestern willow flycatcher has been added to the FEIS. This information was summarized from information included in the BA discussed in previous responses.
- 199: According to information included in McKernan, 1999, individual Yuma clapper rails have been documented at the Virgin and Muddy Rivers including the Virgin River floodplain between Littlefield, AZ and the Virgin River Delta, NV, and at sites within the lower Grand Canyon. No additional information on possible sightings of Yuma clapper rail in the Lake Mead Delta is available.
- 200: Revisions have been made to the discussion of bonytail in the FEIS.
- 201: Section 3.8.2.2.3 has been revised to use the term "repatriate" instead of "reintroduce."
- 202: The locations of designation of critical habitat for all four fish species references the Federal Register notice (March 21, 1994), and occurrence of critical habitat in the analysis area is noted for each species.
- 203: This information has been noted in the FEIS.
- 204: See response to Comment 57-202 above.
- 205: See response to Comment 57-202 above. This information has been added to the FEIS.
- 206: This section has been modified to discuss that razorback sucker can be found in the lower Colorado River and Lake Havasu. Populations of razorback sucker within the San Juan River are outside of the area under consideration in the EIS.
- 207: Comment noted. However, Reclamation believes that the information is presented appropriately.

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- 208 | Page 3.8-24, 3.8.2.3.1.2 through 3.8.2.3.1.5
These sections should be more detailed as to how these species would be affected by the alternatives, especially the differences between them.
- 209 | Page 3.8-24, 3.8.2.3.2
The second part of this paragraph (beginning with "Additional special..." repeats information given previously that does not need to be repeated.
- 210 | Page 3.8-25, 3.8.2.3.2.1
paragraph 2: Riparian and marsh habitats may also be eliminated by rising levels, or those levels that go too low and dry out the site. This section on baseline needs to focus more on the opportunity for habitats to exist at the expected fluctuations, than to deal in broad generalities. The differences between it and the alternatives cannot be evaluated without being more specific. This section also does not discuss the effects to the lower river. On a species level, California black rails are not tolerant of water level fluctuations and any increase in fluctuations would reduce the suitability of habitat for this species.
- 211 | Page 3.8-25 and 26, 3.8.2.3.2.2 to 3.8.2.3.2.5
These sections should be more detailed as to how these species would be affected by the alternatives, especially the differences between them. The analysis is incomplete without this step. The issue of longer periods of lower water elevations is very important to the habitat that support these species. The discussion for the southwestern willow flycatcher would especially benefit by including more details.
- 212 | Page 3.8-27, 3.8.2.3.3
Please include a baseline section here as for the other special status species groups. It should also be noted here that the increase in fluctuations, and lower water levels, may in fact present an opportunity to examine the potential for native fish recruitment. Filling reservoirs may provide lower predator loads initially. Further, there is spawning and some natural recruitment at Lake Mead, and the effects to razorback sucker of changing the present operation should be part of this analysis.
- 213 | Page 3.8-27, 3.8.2.3.3.1
Reintroduction of the bonytail to the Parker to Imperial Dam reach may be affected by the changes to that reach caused by the proposed action. Additionally, the bonytail in Lake Havasu may move upriver into the river reach below Davis Dam, that will also be affected by the changes in flow.
- 214 | Page 3.8-28, 3.8.2.3.3.3
For flannelmouth suckers the presence of the population below Davis Dam should be mentioned in the analysis. They will be affected by the change in flows. Since there will not be much by way of higher lake elevations under the alternatives, the last sentence is unclear as to intent.
- 208: It should be noted that the analysis considers how species would be affected by changing system conditions that could occur under baseline conditions and each of the alternatives. With regard to potential effects on special-status species, the differences between the alternatives is primarily associated with changes in probabilities for certain conditions to occur. A more complete and detailed analysis would involve extensive study of each of these species and their population dynamics.
- 209: Comment noted. However, Reclamation believes that the information is presented appropriately.
- 210: Modeling of future conditions under baseline conditions and the alternatives indicates increased potential for declining water levels at Lake Mead. Although the rate of changed potential for surface elevation reductions varies among the alternatives compared to baseline conditions, significant differences in seasonal fluctuations are not expected (or indicated through system modeling). No research directly addressing various lake levels and resulting development of riparian and marsh habitat is available. Only general historical information is available and is associated with post-drought years followed by high water years. As a result, a general approach that includes potential effects on vegetation based on the predicted declines in water levels is presented.
- 211: Comment noted. Reclamation believes that the analysis presented adequately identifies the potential effects of the alternatives compared to baseline conditions.
- 212: The discussions for effects to fish species has been reformatted similar to that for the plant and wildlife species. Effects of the alternatives to razorback sucker in Lake Mead are analyzed.
- 213: Flows below Hoover Dam would be within historical ranges under baseline conditions and each of the alternatives, and no impacts to special-status species fish within this segment would occur as a result of interim surplus criteria.
- 214: Comment noted. See response to Comment 57-213. The last sentence has been clarified.