

1. Page 8: 1. Storage reservoir draft limits in late summer are a higher priority than the summer flow objectives in order to meet other project uses and reserve water in storage for the following year. This paragraph has been changed to specify only late summer draft limits. The language should be re-written to include that all Flood Control draft limits are also a priority over power drafts (early spring, etc.) and in some extreme years (if agreed to) additional summer drafts beyond normal limits may be requested (e.g., need extra cold water from DWR).

The Service supports the recommendation.

2. Page 24 and 32: The summer reservoir draft limits at Hungry Horse and Libby are 20 feet—dictated by the lowest 20th percentile of water years at The Dalles (May Final Forecast, April through August). The lowest 20th Percentile at The Dalles has been 72.2 Maf in prior WMPs; this year it has been changed to 72.5 Maf.

An explanation of the change should be provided.

3. Page 27, Section 6.3.1, Albeni Falls Dam Fall and Winter Operations: This section discusses a Flexible Winter Power Operation (FWPO) at Albeni Falls that BPA can request which allows fluctuations up to elevation 2,056 ft. Although this operation will be limited this year due to a cultural bank stabilization project, more details of this operation should be discussed prior to incorporation in this document. Under some conditions, this operation could negatively impact the ability to meet chum flows. However, at other times, the extra storage could be used to meet chum flows.

The Service would like additional justification on this change.

4. Page 39, Project Maintenance (at Dworshak): This discusses the two-phase overhaul of Unit #3. The first phase is to be implemented in September 2016 through May 2017, with the second phase in either 2018 or 2019.

No comments

5. Page 52: the Draft 2016 WMP includes some language about how 75%/85% probable inflows are derived at Hungry Horse and Grand Coulee. Comment: one uses the 80-year modified streamflow record; the other uses in-season ESP hydro-regulation studies. It is not clear why there are two different methods used. Consistent methodology may be more acceptable.

The Service would like additional discussion or justification as to why one method would be used over the other.

General comments on Draft 2016 Water Management Plan with some suggested additions:

1. Page 10, Section 4.2.3, Chum Flow versus Project Refill and Spring Flow Management states: Although water supply forecasts are available in November and December the forecast errors are very

large. Water supply forecasts become incrementally more reliable as time between the forecast and the forecast period decreases. Consider adding: With consideration to early season forecast errors, the Action Agencies should operate storage reservoirs in a conservative manner, with minimal power drafting, to ensure both chum flows and April 10th FC elevations can be met if forecasts change. The AA should also pay close attention to Water Supply Forecast trends at projects and consider altering operations if significant changes in FC elevations are expected that could compromise meeting chum flows and/or April 10th FC.

The Service supports this recommendation.

2. Page 14, Table 2: Add the following italicized words to: On April 10, John Day begins operation at Minimum Irrigation Pool (MIP), elevation 262.5–264 ft.

The Service supports this recommendation.

3. Page 14, Table 2: Add dates for spring and summer flow periods at LGR, PRD, and MCN. LGR dates are 4/3–6/20 (spring) and 6/21–8/31 (summer). PRD dates are 4/10–6/30 (spring only). MCN dates are 4/10–6/30 (spring) and 7/1 to 8/31 (summer).

The Service supports this recommendation.

4. Page 17, Table 4: Add column for April–September forecast at The Dalles, March forecast sets Lake Roosevelt Incremental Storage.

The Service supports this recommendation.

5. Page 44, Section 6.15.1, Reservoir Operations: Add that the elevation at John Day between 262.5–264 feet is referred to as MIP (Minimum Irrigation Pool).

The Service supports this recommendation.