Willamette Basin Review Feasibility Study

APPENDIX L

Public Comment Summary

June 2018
Federal Interest/Authority

State Interest/Authority

Proposed Action

1. The TSP is a balanced solution.
   Response: Thank you for the comment.

2. Water allocations were from a system perspective, not individual subbasins.
   Response: This is because many users can be served by multiple reservoirs and it maintains future flexibility. This is also in-line with system pricing for irrigation and M&I storage.

3. The TSP does not aim for future adjustment of allocations.
   Response: None.

4. The TSP does not aim for future adjustment of allocations.
   Response: None.

5. The TSP does not aim for future adjustment of allocations.
   Response: None.

Unused Water

Allocation Alternatives

1. First priority should be to keep water instream (or in reservoirs). Second priority is appropriating water to its highest and best public use. Municipal water agencies should not be allowed to seize rights to unallocated water without a clear demonstration of near-term need.
   Response: There is insufficient storage to reallocate for all users peak demands. Reallocation one sector at greater than the peak 2070 demand is not an equitable distribution of the conservation storage and not justifiable.

2. The allocation of stored water for fish and wildlife should be enough to meet flow targets for threatened salmon and steelhead more often.
   Response: No reallocation alternative would result in meeting flow objectives for fish and wildlife more often than objectives are met now.

3. The reduction from 2070 demands show for Reallocation Alternative D treats all use categories equally. Under this reallocation alternative, F&W would be allocated 962,800 acre-feet of WVP conservation storage – a reduction of 39.5 percent from the F&W peak volume of 1,590,000 acre-feet. The reduction to the F&W allocation under Reallocation Alternative D mirrors the reduction imposed on the combined M&I and AI peak demands in Year 2070, excluding Year 2020 Reclamation contracts, is 406,000 acre-feet, and is comprised of 159,750 acre-feet for M&I and 246,250 (addition of 81,400 acre-feet of Year 2020 Reclamation contracts brings the total to 327,650 acre-feet) acre-feet for AI. The sum of reduced M&I and reduced AI demands for Reallocation Alternative D is 245,850 acre-feet, and is comprised of 73,300 acre-feet for M&I and 172,550 (excluding 81,400 acre-feet in Reclamation contracts in Year 2020) acre-feet for AI. The total reduction for the combined M&I and AI demands from the combined peak demands equals 160,150 acre-feet (406,000 acre-feet – 245,850 acre-feet), a 39.5 percent reduction.

4. The reallocation of stored water for fish and wildlife would be better able to carry out its commitments to ESA-listed fish by allocating this water to fish and wildlife directly.
   Response: Joint-use water is only available when the pools fill above about 1.2 MAF. When the pools fill, natural streamflow is often enough to meet the targets. Even under current conditions, targets are fully met. Defer final response until final decision on allocation volumes is determined.

5. The TSP is a balanced solution.
   Response: Thank you for the comment.

6. The draft report proposes a reallocation of water stored for Agricultural irrigation ("AI") use to dedicated volumes for other uses.
   Response: This is incorrect. The proposed reallocation is from joint-use storage in the federal reservoirs (i.e., all the purposes) to specific use. The state storage certificate lists the use of the stored water as irrigation. After the reallocation, the storage certificate would be changed to recognize other uses.

7. Water allocations were from a system perspective, not individual subbasins.
   Response: This is because many users can be served by multiple reservoirs and it maintains future flexibility. This is also in-line with system pricing for irrigation and M&I storage.

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10. The TSP is a balanced solution.
    Response: Thank you for the comment.
Non-Allocation Alternatives

11 The report should include a discussion of non-WVP sources of water that may be available for water source redundancy. The report should refer to surplus agreements to satisfy redundancy issue since redundancy is included in the reallocation volumes. See FR/EA Section 4. ASR is used as a redundancy source. The comment suggests that a declaration of emergency could be used as a means to achieve water source redundancy, though such a declaration would not provide water source redundancy. An emergency declaration by the Governor, under drought, does not waive the requirement of a state water right. A drought declaration can open up some expedited water right options, but you must have an existing water right in place (one that does not require, water supply constraints), you don't have to access to, and the options are only good for a year. The state would still require a permit to use stored water, even surplus stored water.

12 Surplus water contracts do not provide the reliable water supplies water providers require, and therefore cannot provide a sound basis for investment in water supply infrastructure.

13 Conservation should be fully explored in detail. Future demands should include increased conservation methods for both M&I and AI. The Corps could strengthen this part of its analysis by analyzing the extent to which municipal conservation measures are, in fact, being implemented, and the extent to which additional measures may temper future municipal and industrial needs.

14 The review addressed current and future demand, but did not address any future or additional storage options.

15 M&I users have unused water rights and they can increase water conservation practices to reduce future demands.

16 Report does not take into account discontinued industrial uses that can offset new industrial uses, nor does the report evaluate potential new groundwater sources for municipal and industrial supplies.

No Action Alternative

17 The No Action Alternative should limit AI contracts to 95,000 af as required in the 2008 BiOp.

Demand Analysis

General

18 Demands must be informed by water rights affected by conversion of MPSFs. They were; AI demands for stored water include an estimated volume that would be impacted by conversion of MPSFs. See Sections 3.3.4 and 5.2.3 of the FR/EA. None.

19 Demands must be informed by reasonable considerations of new or additional uses and preserve the opportunity for new or enhanced infrastructure. See Appendix A. New/additional demands are projected for the 2020-2070 period of analysis. None.

20 Users allocations should not be reduced to retain storage in joint-use. There is insufficient storage to reallocate for all users peak demands. Recommended Plan is Alternative C which does not include Joint-Use storage.

M&I Demands

21 The report should estimate minimum needs for M&I (including no new growth inducing supply), as was done for FW demands which were estimated using minimum flow targets from the BiOp.

22 Redundant water sources are of fundamental importance in water supply planning.

23 M&I realization should be based on the 2070 peak demand estimates. Recommended Plan changed to Alternative C which is 2070 demands.
Consumptive demands should be broken out into essential and non-essential categories, e.g. critical use for human health and safety for M&I.

Essential and non-essential uses of water come into play for each M&I system as a part of water curtailment planning, which include proactive measures that M&I systems take to respond to short-term water supply shortages. Short-term water supply shortages can, for example, be classified as Routine Summer Advisory, Moderate, Severe, and Critical. During deficit water year types, it is likely that the curtailment plan will be enacted to some degree for an unspecified period of time. When enacted, M&I systems ask their customers to limit water use, promote already-existing conservation measures, and as supply shortages move toward the "Critical" phase of a supply shortage (or even "Extremes"), and prohibit water use for a variety of non-essential activities. While the segmentation of consumptive demands into essential and non-essential activities is important for drought planning, the realisation of WVP storage is not geared toward "emergency supply". Rather, an objective of the realisation is to meet forecasted M&I peak season needs (see Appendix A for a discussion of deficits) through the year 2070.

Evidence that daily average and peak per capita water demands are falling in Oregon, it would be expected that water demand would increase at a rate slower than the rate of population growth.

The report erroneously assumes that municipal water use in the future will continue at the same per capita rate as today. See response to comment 25. A future conservation achievement goal is not used in water supply planning, and cannot be applied universally to the study area M&I systems.

Municipal and industrial water demand projections should be to identify the most probable future water demand and not, as in the reallocation report, the highest conceivable future water demand.

Reallocation for AI should be based on ODA analysis. There is a discrepancy between the ODA and Corps analysis. The comment reflects a preference that is not consistent with the FR/EA study goals, which include a fair reallocation of WVP conservation storage. The AI allocation is not based on an expectation of induced growth (see Appendix B), as the AI allocation is made to accommodate future growth in permitted acreage expected to be irrigated. Minimum needs for AI are estimated and discussed in Appendix B, but are not based in the realisation. Equating minimum tributary flow objectives with minimum AI needs is not logically consistent, as the minimum tributary flow objectives are a threshold by which compliance with the BOP is measured.

The comment suggests that production of agricultural crops related to human food production are considered "critical" or "essential"; and all other agricultural crops are deemed "non-essential". From this, it can be further inferred that production of the Willamette Valley's most predominant cash crop (sod/grass seed) would be deemed "non-essential" using the logic of the comment, and completely disregards the crop's economic value to individual farms, and the region. The only preference the state can provide is water for human consumption and livestock, during times of drought, and it must be approved by the Water Resources Commission.

The AI estimate is reasonably founded on the historical growth in permitted acreage - derived from OWRD WRS data. The analysis does not assume maximum water use on every acre, though the duty rate of 2.5 acre-feet per acre is used in the estimate of AI permit demands, which are founded on WIRD regulations. Granted, the duty rate will be used in the water right (which would be sourced from WVP conservation storage), though the analysis clearly states that use is expected at a volume less than 2.5 acre-feet per acre.
To estimate future agricultural demand, the draft study used 2.5 acre-feet per acre duty as the basis for its analysis. This is a higher duty than the actual use of most current irrigators, thus it builds in an amount that may accommodate increased demand as a result of climate change. This estimate could instead reflect potential improvements in agricultural demand with advanced irrigation technologies.

The Willamette Basin has limited water conveyance infrastructure and Willamette Valley soils are not particularly suited to irrigated agriculture. The Corps should not encourage speculative new investments that may end up stranded.

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The reallocation of WVP conservation storage does not encourage speculative new agricultural irrigation investments. The adverse impacts of climate change are likely to affect future agricultural demand. Without climate change impacts, the Corps should not encourage speculative new investments that may end up stranded.

The 2008 BiOp instream flows were based upon best available information. Gaps in our understanding of how flows affect basic aspects of the river ecosystem and many fundamental objectives remain. For native riparian vegetation, and native herpetofauna, flow recession rate and lower volume in summer as compared to the 2008 BiOp objectives were identified as potentially beneficial. For other taxonomic groups, there was not clear evidence that changing flow targets from the 2008 BiOp would result in measurable biological benefits, in part due to high summer temperatures which cannot be regulated by WVP dams. For the mainstem Willamette River, the most influential parameter in a decision model was water year type. The FR/EIA redo not seek to establish optimal flows, nor does the FR/EIA assume that the BiOp minimum flow objectives address all F&W needs. Rather, the FR/EIA seeks to develop an allocation of WVP conservation storage that achieves compliance with BiOp minimum flow objectives to the maximum extent possible while providing WVP conservation storage for consumptive uses.

Future diversions were estimated for municipal users that have existing rights without conditions related to streamflows. These diversions were included in the no action and TSP model runs. New AI diversions that would be comparable to the future demands projected for agricultural, municipal, and industrial uses. This oversight could be partially corrected with appropriate consideration of how climate change is likely to affect future diversions. Examinations of whether the 2008 BiOp targets are the correct flows to sustain fish.

We recommend the Corps consider calculating current demand for ESA-listed fish as the volume of water required to meet 2008 flow objectives as often as they were predicted to be "equalled or exceeded" in the jeopardy opinion, and adding in future demand predicted under climate change as well as the potential need for higher flows to maintain suitable water quality and habitat. This peak demand could then be used for the determination of an appropriate allocation volume for fish and wildlife.

The flow dataset used for the analyses covered the Period of Record 1928-2008. Basin-wide datasets, including all reservoir inflows and local flows downstream of the dams, along with irrigation use estimates, will not be available for modelling until approximately 2020 or 2021, when the 2008 Level Modified Flows will be available. Potential hydrograph changes associated with projected climate change are addressed in Appendix K. None.

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None.

The draft study does not project any change in demand for ESA-listed fish that would be comparable to the future demands projected for agricultural, municipal, and industrial uses. This oversight could be partially corrected with appropriate consideration of how climate change is likely to affect future diversions. Examinations of whether the 2008 BiOp targets are the correct flows to sustain fish.

None.

None.

None.

None.

None. None.

None.
Appendix G will be updated to include some additional results, such as the flow at Oregon City above Willamette Falls. The final report will include non-exceedance plots at Salem and at Oregon City above Willamette Falls. These will be included in the revised Appendix G, which documents the ResSim analyses. The main report will not be revised to include these.

Environmental Affects

Appendix G will be updated to include some additional results, such as the flow at Oregon City above Willamette Falls.

Note that Appendix G, for ResSim Analyses, contains additional modeling results. The main report presents a summary of the results, but this appendix contains more individual analysis details.

46 Modeling of TSP performance relative to the BiOp, and the key assumptions, should be better explained.

47 Stored water released under a water supply contract is protected from the point of release to the point of diversion, therefore M&I and AI stored water contracts will directly reduce the deficits identified in Appendix C.

48 Need to assess impacts below Salem, as well as fish needs and impacts to fish flows.

49 Stored water released for consumptive purposes is protected from the point of release to the point of diversion from other consumptive uses, though returned to the system at a diminished amount. Please see Appendices E, F, G, and H for analyses that describe the impacts of M&I and AI stored water contracts in meeting the BiOp minimum flow objectives for the No-Action Alternative and the TSP.

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56 Stored water released under a water supply contract is protected from the point of release to the point of diversion, therefore M&I and AI stored water contracts will directly reduce the deficits identified in Appendix C.
The Corps does not fully ascertain the extent of effects to fish and wildlife and excluded effects to downstream riparian habitats from detailed consideration. As a result, ESA-listed Chinook salmon and steelhead are the only fish and wildlife taxa specifically mentioned in the report, the effects on them are not fully described.

New science is available to inform flow needs for fish and a summary will be added into the FSEAs. In 2016 and 2017 a multi-disciplinary scientific team developed and analyzed fundamental objectives for instream flow management which included diverse taxonomic groups. There was not clear evidence that changing flow targets from the 2008 BiOp would result in measurable biological benefits for listed fish in the mainstem Willamette River, in part due to high summer temperatures which cannot be regulated by WVP dams. In the tributaries, analysis of flow-habitat relationships for Chinook salmon and steelhead spawning, incubation, fry and juvenile life stages was completed in the North and South Santiam, and for spawning and incubation needs in the McKenzie and Middle Fork has been completed. Predicted changes to water levels downstream of WVP-reserviors is the primary influencing factor in considering the potential for changes that could affect the environmental resources of the riparian corridor. The riparian corridor’s environmental resources that could be affected by changes in water elevations are at risk during periods of draw-down as part of flood risk management operations. Bank-full flows occur as part of flood risk reduction operations and generally do not occur during the conservation season.

The proposed changes to releases from reservoirs would accumulate slowly over the period of analysis and even when fully realized (as of 2070), would result in changes to riverine flows that would be within the range of observed flows and associated water surface elevations under current conditions. Because of the overt inability of implementing the TSP to effect change to the physical environment that would be different from the range of conditions currently observed, effects to downstream riparian habitats were eliminated from detailed consideration.

The Corps should prepare EIS.

Study results in a draft Finding of No Significant Impact. EIS is not needed.

Instream installation

57

The Corps is consulting with NMFS to ensure ESA obligations, regarding threatened salmon and steelhead, are met with implementation of the reallocation.

58

Flexibility will be available without the joint use pool once any water not under contract will be available for joint-use management.

59

Existing BOR contracts should not be impacted. This project will not drive changes to the existing water service contracts. Conversations among the Corps, BOR and OWRD are ongoing.

60

The Corps needs to work with the State and BOR to answer questions regarding implementation of prioritization of existing rights and new water rights, including how existing rights could be impacted by conversion of MPSFs and how existing users may be impacted by the reallocation. Conversion of MPSF is outside the scope of this project; however, the volume of storage that may be affected by the conversion of MPSF was included in the Agricultural Irrigation demand estimate and the reallocation volume. Conversations among the Corps, BOR and OWRD are ongoing.

61

The interplay of federal contracts, state water rights, and district held water rights are woefully understated in the Draft Study and the resulting TSP. Report does not adequately recognize possible conflict and uncertainty in protecting stored water releases for fish. Report needs to distinguish between instream water rights in live flow and in-stream water rights in stored water. Appendix G details the amount of diversions, return flows, and project releases of stored water used for new demands as appropriate. Appendix G also shows the increases in live flow from already permitted water rights as developed in Appendix F. Reclaim output does not distinguish between live flow and stored flow releases. Protection of instream flows will occur after the use is changed on the storage certificates.

62

This change in character of use on the storage rights will impact established water rights. Changing the character of use is done by submitting a water right transfer application. During the application review process, inquiry to an existing water right is examined. “Injury” or “Injury to an existing water right” means a proposed transfer would result in another, existing water right not receiving previously available water to which it is legally entitled. The OWRD must evaluate whether the proposed transfer would result in injury to an existing water right. https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3202

63

Concerns with transparency of people managing water. How well will the results be communicated, reviewed and measured, and ultimately identifying who gets to make the decisions and be held accountable? No change to existing interagency team. Information is available from the Corps’ public website.

64

Report does not provide an adequate explanation of why the reallocation is a necessary precursor to a “transfer” to change the character of use under the storage certificates held by the Bureau of Reclamation (“BOR”). Suggested change: Provided a detailed explanation whether and why the reallocation is required before a change in the character of use under the water storage certificates and whether other options are available to permit contracting for needs other than irrigation. Include in the explanation a discussion of the transfer for the City of Creswell. The Report also should address whether BOR could change the certificates to provide for joint use without assigning specific amounts to specific uses and whether that would allow contracting for needs other than irrigation without a reallocation.

65

The study is necessary to understand how much storage (and by extension, stored water) is available from the federal projects to transfer to other uses, like fish and wildlife, future irrigation, and future municipal or industrial use. Reallocation of storage is required for the M&I purpose as federal storage agreements for M&I use can only be for storage specifically dedicated to this purpose. Irrigation contracts from BOR can be written on joint-use storage space, as is currently being done.

66

Other

Climate change analysis did not account for impacts to groundwater. Concur. Climate impact analyses are based on stream flow with the exception of AI, which was based on climate change-induced impacts to ambient temperature.

67

Public review period was insufficient. Stakeholders should have been provided an additional 30 days to comment. Typical public review period for an Environmental Assessment is 30 days. The public was provided 59 days to review the draft integrated feasibility study report/environmental assessment.

68