HIP Project Review
Comment Tracking

Project Information:

Project Name: Elmer Dam Fish Passage
BPA Project #: 1992-026-01
Contract #:
Sponsor: Levi Old – Trout Unlimited
Designer: Chris Boyd - River Structures Consulting
PM/COTR: Tracy Hauser - BPA
Manager: John T. Skidmore, Oregon Implementation Manager, EWL

Review Information:

Date: December 10, 2020
Review Iteration (%): 30% Design Iteration
Review Schedule:
- EC Lead to compile and send 30% comments to Sponsor
- Sponsor to reply to comments before proceeding to 80% (a brief description or indication that the comment will be addressed is all that is needed)

HIP Reviewers:

HIP Program Lead: Daniel A. Gambetta, ECF
EC Lead: Travis Kessler, ECF
Technical Lead: Sean P. Welch, P.E., EWP

Agency Team Members:

NMFS Branch Chief: Bill Lind, NMFS, Southern Snake Branch Chief
NMFS Biologist: Sarah Fesenmyer and Jim Morrow
NMFS Engineer: Not Required
USFWS Field Office: Marisa Meyers, USFWS La Grande Field Office
USFWS Reviewer: John Stephenson

Activity Categories: **Risk Level:**

1e - Provide Fish Passage at and Existing Facility — Medium
Overall Project Risk — **Medium**

Documents Reviewed:

Elmer Dam Fish Passage 30 Percent Basis of Design Report, October 2020

#	Reviewer (Org.)	Date	Document	Page/ Section	Comment		Response by (Org.)	Date	Comment	Status (BPA to Update)
1	S. Welch (BPA)	9/8/2020	Elmer Dam Fish Passage 30% Basis of Design Report	General	The reviewer understands the primary objective of this project being the improvement of the fish passage at the existing Elmer Dam. Following review comments will be directed at that component of the project.		C. Boyd (RSC)	9/21/20	As discussed in the Report, we recommend that modifications to the intakes, adjacent oxbows, and the dam itself could provide additional benefits to downstream passage and overall stream health. We would appreciate BPA's consideration of all the recommended alternatives as described in the report.	Open (Requirement)
2	S. Welch (BPA)	9/8/2020	Elmer Dam Fish Passage 30% Basis of Design Report	General	Please provide documentation of ODFW Fish Passage and NMFS fish passage review, comments and approvals.		C. Boyd (RSC)	9/21/20	The Report has been distributed to ODFW, NMFS, and USFWS as well. We have provided the 15% Design & Alternatives Analysis Report as a courtesy copy asking if there are any major concerns, then the 30% Design & BoD will be distributed for formal review and comment.	For Information Only

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3	S. Welch (BPA)	9/8/2020	Elmer Dam Fish Passage 30% Basis of Design Report	General	Please include in future submittals the substantiating hydraulic analysis that demonstrate the passage hydraulics for the proposed ladder and compliance with OAR Div 412 and NOAA Passage Criteria.		C. Boyd (RSC)	9/21/20	The fishway configuration and geometry will be provided with the 30% Design and will be based on OAR Div 412 and NOAA Passage Criteria. The preliminary and final design will include the specific hydraulic analysis for the fishway. **RSC Update (12/22/20) – Per the discussion during the 30% design review meeting, hydraulic analyses will be submitted for review at 60%.**	Open (Requirement)
4	S. Welch (BPA)	9/8/2020	Elmer Dam Fish Passage 30% Basis of Design Report	General	Please provide the operations and maintenance agreement for the proposed fish ladder and identification of the proposed party whom will hold responsibility for maintenance and operational requirements (including debris removal, maintenance, flash board operation etc.).		L. Old (TU) J. Webster (USWCD)	9/21/20	The project team will work with the landowners to decide upon operation and maintenance responsibilities when the project moves from 30% to 80%.	Open (Requirement)

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5	S. Welch (BPA)	9/8/2020	Elmer Dam Fish Passage 30% Basis of Design Report	General	Please demonstrate how the proposed technical fishway will meet the volitional passage objectives with minimal operational manipulation or constraint. Specifically, how will forebay intake flow and stage vary with water withdrawal scenarios relative to species and lifestage migratory periods? As a component of this assessment please demonstrate any risks to functional passage as a result of operational characteristics of the system. It is expected that the appropriate hydraulic analysis will be provided to substantiate this assessment.		C. Boyd (RSC)	9/21/20	Given the established water rights and operation of the dam, the fishway may not be in compliance with OAR/NOAA over all flow regimes (ie, all possible forebay and tailrace elevations). The fishway will be designed to meet criteria for flows expected during the key adult migratory periods. These criteria will be presented in the 30% Design & BoD Report for review and concurrence. Multiple fishway entrance slots and exit orifices will be evaluated during the design to determine the maximum practical range of flow regimes (ie, hydraulic differential) that can be accommodated while ensuring passage during the key biological time periods. **RSC Update (12/22/20) – Per the discussion during the 30% design review meeting, the fishway design will be submitted for review at 60%.**	Open (Requirement)

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6	T. Kessler (BPA)	9/10/20	Elmer Dam Fish Passage 30% Basis of Design Report	General	Please show any access roads as well as staging, storage, and stockpile areas that would be used for equipment and construction materials. Keep these areas 150 feet or more from natural waterbodies (Catherine Creek) and wetlands or on an adjacent established road area in a location and manner that will preclude erosion into, or contamination of, the stream or floodplain. Staging areas may be closer than 150 feet if the area is above (elevation) the 100-yr floodplain and spill prevention measures are approved by BPA. **BPA Response (12/10/20): Please make drawings easier to read. It appears that the proposed staging and access areas are within 150 feet from Catherine Creek. Can you please show the 100-year floodplain boundary so that we can confirm the staging and access areas are above the 100 year floodplain elevation?**		C. Boyd (RSC)	9/21/20	Staging, access, and work areas will be identified in the 30% Design submittal, including the HIP IV conservation measures. At this time only preliminary survey and hydraulic modelling information is available, but this data will be further refined during the final design. **RSC Update (12/22/20) – Civil drawings have been updated to more clearly articulate that the 100-year floodplain extends well beyond the project limits – see the notes and FEMA FIRM included on Sheet G02. This assumption will be confirmed with the no-rise analysis.**	Request Additional Information
7	T. Kessler (BPA)	9/10/20	Elmer Dam Fish Passage 30% Basis of Design Report	General	Please ensure the Ordinary High Water (OHW) line and FEMA 100-year floodplain boundary are included on all plan sheets. **BPA Response (12/10/20): Please clearly show OHW and the 100-year floodplain boundary on all sheets.**		C. Boyd (RSC)	9/21/20	The OHW line will be included on the 30% drawings to the extent that it's available from the survey and hydraulic modelling. The FEMA 100-year floodplain boundary will be included on the 30% drawings. **RSC Update (12/22/20) – See response to Comment 6. Similar notes have been added to all relevant Civil drawings.**	Request Additional Information

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8	T. Kessler (BPA)	9/10/20	Elmer Dam Fish Passage 30% Basis of Design Report	General	Please include erosion control best management practices that will be utilized for the project to limit sediments from entering Catherine Creek and adjacent wetlands. **BPA Response (12/10/20): Comment addressed.**		C. Boyd (RSC)	9/21/20	Erosion control BMPs will be included in the 30% Design submittal.	Closed
9	T. Kessler (BPA)	9/10/20	Elmer Dam Fish Passage 30% Basis of Design Report	General	Please add the general conservation measures from the HIP IV into the first several pages of the design set. **BPA Response (12/10/20): Comment addressed.**		C. Boyd (RSC)	9/21/20	HIP IV general conservation measures will be included in the 30% Design submittal.	Open (Requirement)
10	T. Kessler (BPA)	9/10/20	Elmer Dam Fish Passage 30% Basis of Design Report	General	Please include all areas where ground disturbing activities, temporary access roads, equipment and vehicle storage, and stockpiling will occur within the APE. If any areas of the project occur outside of these areas after BPA consults on the original APE, they will have to be re-consulted on. Encompassing the entire project area within the APE the first time around will greatly reduce any back and forth with the contractor archaeologist and BPA. **BPA Response (12/10/20): Please make drawings easier to read.**		C. Boyd (RSC)	9/21/20	Areas of disturbance will be included in the 30% Design submittal. **RSC Response (12/22/20) – Site drawings have been updated to more clearly define the APE as well as relevant site features such as the existing access road.**	Request Additional Information

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11	T. Kessler (BPA)	9/10/20	Elmer Dam Fish Passage 30% Basis of Design Report	General	Has the APE had a wetland delineation completed recently? If not, what is the wetland delineation schedule? Please consult with the USACE project manager early in the process to determine whether or not a delineation is necessary for the site. What is the status of the RGP-6? **BPA Response (12/10/20): Acknowledged.**		C. Boyd (RSC) L. Old (TU) J. Webster (USWCD)	9/21/20	A wetland delineation has not been completed. The wetland delineation will be completed (if necessary) after the 30% Design & BoD has been approved. TU and USWCD will work together with OR DSL and USACE to determine the need for a wetland delineation.	Request Additional Information
12	S. Welch (BPA)	12/10/20	Elmer Dam Fish Passage 30% Basis of Design Report	General	At the 30% design completion level, existing condition hydraulic analysis should be provided that evaluate the flow interactions with the project reach under existing conditions. The existing condition hydraulic analysis shall demonstrate water surface and velocity profiles. The modeling results should describe the hydraulic interactions of the dam, fish way, diversions, pumps, head gates and other appurtenances within the project reach. These outputs should be provided for all critical hydrologic events including the appropriate recurrence interval flows and regulatory fish passage requirements.		C. Boyd (RSC) L. Old (TU) J. Webster (USWCD)	12/22/20	RSC Update (12/22/20) – Per the discussion during the 30% design review meeting, the hydrology, hydraulic and fishway designs will be submitted for review at 60%.	Request Additional Information

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13	S. Welch (BPA)	12/10/20	Elmer Dam Fish Passage 30% Basis of Design Report	General	Results of the preceding hydraulic assessment should be used in the assessment of the current project reach condition and interpretation and decision making that shape the proposed alternative. This analyses will be used to support the "with and without" project analyses and demonstrate how the proposed project will ultimately improve hydraulic conditions for volitional passage, irrigation requirements.		C. Boyd (RSC) L. Old (TU) J. Webster (USWCD)	12/22/20	Per the discussion during the 30% design review meeting, the hydrology, hydraulic and fishway designs will be submitted for review at 60%.	Request Additional Information
14	S. Welch (BPA)	12/10/20	Elmer Dam Fish Passage 30% Basis of Design Report	General	All design features shall be developed with sustainability, operability, and minimization to impacts to riverine processes (flow, sediment, debris, etc.). For example, any instream infrastructure (such as pump intakes) shall be placed as close to the bank line as possible or located in an off bank vault. Lateral projection of pump intakes into Catherine Creek will be allowed only if they can be removed after irrigation season.		C. Boyd (RSC) L. Old (TU) J. Webster (USWCD)	12/22/20	Per the discussion during the 30% design review meeting, the irrigation designs will be submitted for review at 60%.	Request Additional Information

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15	S. Welch (BPA)	12/10/20	Elmer Dam Fish Passage 30% Basis of Design Report	General	Per the HIP Handbook, **Initial Review of Plans and BDR (typically 30%):** Preliminary drawings, specifications, a draft Basis of Design Report, and other supporting documentation (profiles, details, cross sections, quantities, technical analyses/appendixes, etc.) for the preferred project alternative will be submitted for review. It is expected that the hydraulic and hydrologic analyses described above, foundation conditions and geotechnical analyses and stability evaluations of existing infrastructure that will be impacted by this project.		C. Boyd (RSC) L. Old (TU) J. Webster (USWCD)	12/22/20	Per the discussion during the 30% design review meeting, the hydrology, hydraulic and fishway designs will be submitted for review at 60%.	Request Additional Information