

**Table 1. Substantive Revisions Made to Biological Assessment for Chehalis River Flood Damage Reduction Project from September 2020 Draft to September 2021 Final.**

<b>BA Section</b>	<b>Section Name</b>	<b>Revision from 2020 BA Draft</b>
<b>Entire</b>	NA	Throughout the document, references to the “primary” and “secondary” analysis areas have been changed to “upstream” and “downstream” areas. The original intent of using primary and secondary was to reflect the geographic areas impacted from construction or operation, and the use of upstream and downstream better reflects this intent.
<b>Entire</b>	NA	Reference to “direct” and “indirect” effects have been updated to reflect the current ESA terminology (i.e., consequences of the Proposed Action).
<b>1.1.3</b>	Conceptual Mitigation Program	Text has been added to clarify that the assessment of impacts on ESA-listed species and critical habitat does not rely upon future beneficial effects of the Conceptual Mitigation Program that are proposed for non-listed anadromous salmonids in the Chehalis River basin.
<b>1.2</b>	Purpose of the Action	A sentence is added to refer the reader to the SEPA and NEPA DEISs for a more comprehensive discussion on anticipated project benefits to address flood damage and disruptions in the basin.
<b>Former 1.5</b>	NA	A section was removed from the Draft BA that described the anticipated term of ESA consultation for the Proposed Action. Information regarding the life of the facility is now incorporated into the introduction under Section 3.0.
<b>4.3.1</b>	Conceptual Vegetation Management Plan	This section has been updated with information from the current Conceptual Vegetation Management Plan.
<b>4.3.2</b>	Quarry Site Preparation	This section has been updated to reflect the removal of the Huckleberry Ridge site as an option for quarry development. The Huckleberry Ridge site is no longer under consideration and has been removed from all sections of the BA.
<b>4.8.4</b>	Fish Salvage	Section updated to clarify that ESA-listed fish are not expected to be encountered during fish salvage activities at the FRE dam site.
<b>4.10</b>	Pile Driving	Section updated to define limiting operating procedures that would be implemented during impact pile driving in the vicinity of suitable nesting habitat for marbled murrelets.
<b>4.13</b>	Construction Schedule	Table 4-4 has been updated to include anticipated schedule for selective tree harvest proposed under the Conceptual Vegetation Management Plan.
<b>4.14.1</b>	General Construction Best Management Practices	Section updated to include reference to a proposed nesting habitat suitability survey protocol, included as a new appendix to the Final BA.
<b>4.14.5.1</b>	Blast Timing Restrictions	Section updated to include Impact Pile Driving.
<b>5.2.5</b>	Duration of Temporary Inundation Pool	Clarified the period evaluated to determine FRE operations and flood frequency periodicity.
<b>7.0</b>	Proposed Action – Conceptual Mitigation Program	Section updated to clarify that the assessment of impacts on ESA-listed species and critical habitat does not rely upon future beneficial effects of the Conceptual Mitigation Program that are proposed for non-listed anadromous salmonids in the Chehalis River basin.

<b>8.4.3.2</b>	FRE Operation Effects – Upstream Reaches: Instream Temperature	This section was updated to include the FCZD’s April 2021 Water Temperature Model Sensitivity Analysis and associated findings. The analysis is included as a new appendix.
<b>8.4.4.2</b>	FRE Operation Effects – Downstream Reaches: Instream Temperature	This section was updated to include the FCZD’s April 2021 Water Temperature Model Sensitivity Analysis and associated findings. The analysis is included as a new appendix.
<b>9.0 and 9.4</b>	Southern Resident Killer Whale and Critical Habitat	Sections updated to reflect the designation of critical habitat previously proposed along the U.S. West Coast in the action area. The designation is effective as of September 1, 2021.
<b>9.6.2</b>	Effects Conclusion: SRKW Critical Habitat	The conference determination for proposed critical habitat has been removed and replaced with a NLAA effect determination.
<b>12.5.5</b>	Bull Trout: Effects of Conceptual Mitigation Program	Statements added to clarify that the effects determination for Bull Trout does not rely upon the benefits expected under the Conceptual Mitigation Program.
<b>12.5.6</b>	Bull Trout Critical Habitat Effects	Statements added to clarify that the effects determination for Bull Trout critical habitat does not rely upon the benefits expected under the Conceptual Mitigation Program.
<b>12.5.6.5</b>	Bull Trout Critical Habitat Effects	Section updated to include FCZD’s 2021 temperature sensitivity analysis, the results of which indicate that the Proposed Action would result in reduced instream temperature effects on PBF 5 compared to previously modeling efforts.
<b>16.5.1.5</b>	Marbled Murrelets: Effects of Conceptual Mitigation Program	Statements added to clarify that the effects determination for marbled murrelets does not rely upon the benefits expected under the Conceptual Mitigation Program.
<b>16.5.2</b>	Marbled Murrelets: Effects (Disturbance)	Effects analysis updated to discuss potential disturbance from implementation of the habitat suitability survey proposed as part of the Proposed Action. The survey protocol is included as a new appendix to the Final BA.
<b>19.5.2.1 and 19.6.2.1</b>	Effects of FRE Operations on EFH: Water Temperature (upstream and downstream analysis reaches)	These sections were updated to include the FCZD’s April 2021 Water Temperature Model Sensitivity Analysis and associated findings. The analysis is included as a new appendix.