



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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October 17, 2016

TO: Recipients of the Chehalis Basin Strategy State Environmental Policy Act (SEPA) Draft Programmatic Environmental Impact Statement (EIS)

FROM: Gordon White, Washington State Department of Ecology, Program Manager, Shorelands and Environmental Assistance Program

RE: Addendum to Chehalis Basin Strategy SEPA Draft EIS

The Washington State Department of Ecology (Ecology) has prepared this document to addend the Chehalis Basin Strategy Draft EIS published on September 29, 2016.

This addendum provides additional information regarding the nonproject actions evaluated in the EIS, and does not substantially change the analysis of impacts, action elements, or combined alternatives in the existing Draft EIS. This addendum consists of three changes to the information contained in the Draft EIS:

1. Contribution of managed forestlands to salmon habitat potential
2. Additional information regarding the contribution of managed forestlands to salmon habitat potential when considering climate change.
3. Correction to Table 4.8-3: Potential Response in Salmonid Abundance to Habitat Change in the Chehalis Basin from Climate Change and Aquatic Species Habitat Actions.

The information in this addendum, along with the supporting figures, reflects updates to the following Draft EIS sections: Aquatic Species Habitat Actions (Sections 4.8.4.2.1 and 4.8.7.2.2), Alternative 1: 2014 Governor's Work Group Recommendation (Section 5.3.2), Alternative 4: Restorative Flood Protection (Section 5.6.2), and Comparison of Alternatives (Section 5.7). In addition, information in the Executive Summary has been updated (pages 11 and 35). A footnote has been added to the updated text to reference this addendum. This addendum does not change the public comment period on the Draft EIS (ends October 31, 2016).

Prior Environmental Review

The following information was previously provided in the Draft EIS when describing the contribution of managed forestland to salmon habitat potential as part of the Aquatic Species Habitat Actions:

Addendum to Chehalis Basin Strategy SEPA Draft EIS

“The contribution of managed forestlands to salmon habitat potential varies, with a range of 63% (spring-run Chinook salmon) to 99% (chum salmon) benefit for the low restoration scenario, and a range of 18% (spring-run Chinook salmon) to 87% (chum salmon) benefit for the high restoration scenario, compared to current conditions (see Figure 4.8-2). The low restoration scenario is focused on spring-run Chinook salmon spawning reaches, with habitat potential primarily located in the upper Chehalis Basin in managed forestland.” (Section 4.8.4.2.1)

The contribution of managed forestlands to salmon abundance would, on average, contribute 87% of restoration benefit for the low scenario and 57% for the high scenario, with the most benefit to chum salmon because much of their habitat is located in the Satsop, Wynoochee and Wishkah basins that are largely managed forestland.” (Sections 5.3.2 and 5.6.2)

Draft EIS Addendum

Based on additional review of the modeling results, Ecology has determined that the Draft EIS overestimated the contribution of managed forestland and underestimated the contribution of active restoration in lowland areas to salmon habitat potential, and that individual species benefit differently than was previously identified. As described in Section 4.8.4.2.1 of the Draft EIS: “Salmon abundance would be increased by actions in two different geographic areas of the Chehalis Basin: areas that are in active timber management (managed forestland), which are generally located in the upper Chehalis Basin and fall under the Washington FPA and Habitat Conservation Plans, and areas downstream of the managed forestlands in lowland areas of the basin where active habitat restoration is proposed under the Aquatic Species Habitat Actions. Under current Forest Practice rules, changes to improve the conditions of the riparian corridor and reduce impacts from road building and fish barriers (such as culverts) have taken place on publicly and privately managed forestland. In the lowland areas, restoration measures would include active riparian restoration and other habitat actions described in Section 2.3.3.3.”

Revised text and associated figures (Section 4.8.4.2.1): “The contribution of managed forestlands to salmon habitat potential varies, with a range of 5% (fall-run Chinook salmon) to 26% (steelhead) and 31% (coho salmon) benefit for the low restoration scenario, and a range of 10% (fall-run Chinook salmon) to 54% (steelhead) and 57% (coho salmon) benefit for the high restoration scenario, compared to current conditions (see Figure 4.8-2). The low restoration scenario is focused on spring-run Chinook salmon spawning reaches, with habitat potential primarily located in the upper Chehalis Basin in managed forestland with some reaches in the middle and upper mainstem Chehalis River. The high restoration scenario would result in a larger proportion of restoration benefit from active restoration in lowland areas outside managed forestlands, due to an increased level of restoration in a wider array of reaches throughout the Chehalis Basin.”

Corrections to Table 4.8-3 – Potential Response in Salmonid Abundance to Habitat Change in the Chehalis Basin from Climate Change and Aquatic Species Habitat Actions (Section 4.8.7.2.2): The results within the following columns were transposed and have now been corrected: with climate change and high restoration (20% of reaches) and with climate change and low restoration (60% of reaches).

Table 4.8-3

Potential Response in Salmonid Abundance to Habitat Change in the Chehalis Basin from Climate Change and Aquatic Species Habitat Actions

SPECIES (CURRENT HABITAT POTENTIAL)	CHANGE IN ABUNDANCE IN NUMBER OF FISH (%)				
	WITH CLIMATE CHANGE ONLY	WITH CLIMATE CHANGE AND LOW RESTORATION; 20% OF REACHES	WITH CLIMATE CHANGE AND HIGH RESTORATION; 20% OF REACHES	WITH CLIMATE CHANGE AND LOW RESTORATION; 60% OF REACHES	WITH CLIMATE CHANGE AND HIGH RESTORATION; 60% OF REACHES
Coho salmon (40,642)	-22,390 (-55%)	-3,865 (-10%)	4,728 (12%)	27,684 (68%)	61,395 (151%)
Fall-run Chinook salmon (25,844)	-6,969 (-27%)	-4,602 (-18%)	-566 (-2%)	-2,236 (-9%)	8,654 (33%)
Winter/fall-run chum salmon (190,550)	-8,270 (-4%)	15,445 (8%)	28,232 (15%)	29,261 (15%)	59,272 (31%)
Spring-run Chinook salmon (2,146)	-1,869 (-87%)	-1,075 (-50%)	-452 (-21%)	1,088 (51%)	5,467 (255%)
Winter-run steelhead (6,800)	-3,741 (-55%)	-894 (-13%)	194 (3%)	2,711 (40%)	6,347 (93%)

Source: ICF 2016

New text and associated figures (Section 4.8.7.2.2): “Future climate conditions in the Chehalis Basin are expected to appreciably reduce the habitat potential for salmon. However, active restoration in lowland areas is anticipated to moderate these changes, especially when considering the high restoration scenario. Figure 4.8-4 shows the increase in benefit from managed forestlands and active restoration in lowland areas outside of managed forestlands.”

Revised text (Sections 5.3.2 and 5.6.2): “The contribution of managed forestlands to total salmonid abundance would, on average, contribute 59% of the restoration benefit for the low scenario and 27% for the high scenario. Most of the benefit of riparian and fish passage improvements in managed forestlands would accrue to coho and steelhead because a larger portion of their habitat is located in the Satsop, Humptulips, and Wynoochee basins that are largely managed forestland.”

Revised text (Section 5.7.2): “The contribution of managed forestlands to total salmonid abundance would, on average, contribute 59% of the restoration benefit under the low scenario and 27% under the high scenario.”

For more information, please contact:

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Figure 4.8-2

Potential Response in Salmonid Abundance to Habitat Change in the Chehalis Basin from Active Restoration Outside Managed Forest Compared to Managed Forestland

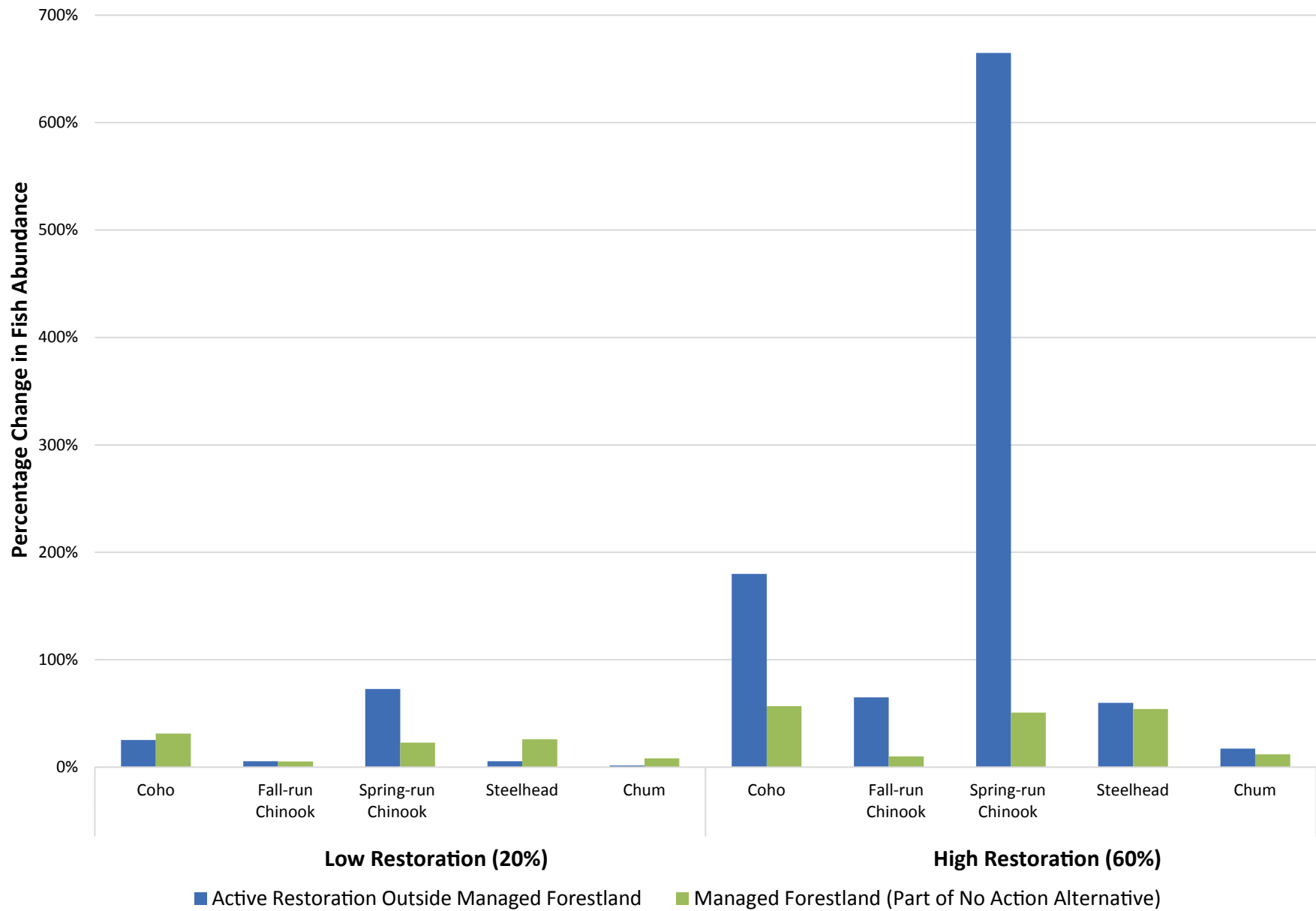


Figure 4.8-4

Potential Response in Salmonid Abundance to Habitat Change in the Chehalis Basin from Climate Change (Active Restoration Outside Managed Forest Compared to Managed Forestland)

