

RECEIVED

APR 21 2014

CITY OF DUVALL

**WETLAND AND STREAM ASSESSMENT AND  
MITIGATION REPORT**

---

**State Route 203 Coe Clemons Creek  
Chronic Environmental Deficiency**

King County, WA

XL 4132

WIN A20305A

Prepared by

**Northwest Region**

March 2014



Washington State  
Department of Transportation

# **WETLAND AND STREAM ASSESSMENT AND MITIGATION REPORT**

---

## **State Route 203 Coe Clemons Creek Chronic Environmental Deficiency**

**March 2014**

**Prepared By:**

Trina Miller  
WSDOT Wetland Biologist  
206-440-4901

**Project Engineer:**

Hung Huynh, WSDOT Project Engineer  
206-440-4311  
Vanessa Ness, WSDOT Project Manager  
206-440-4334  
Jonathan Kim, WSDOT Project Design Lead  
206-440-4324

**Other Contributors and Role:**

Beth Toberer, WSDOT Biologist  
360-757-5996  
Kristin Murray, WSDOT Biologist  
360-788-7453  
Inez Arlene, WSDOT Landscape Architect  
206-440-4505

**Project Role:**

Maria Mayrhofer, WSDOT Environmental Coordinator  
206-440-4526

# Executive Summary

The Washington State Department of Transportation (WSDOT) proposes to correct environmental deficiencies and remove a fish barrier in Coe Clemons Creek along State Route (SR) 203 from Milepost (MP) 14.50 to MP 14.56 in Duvall, Washington. This project is identified as a Chronic Environmental Deficiency (CED) site by WSDOT and as a fish barrier by Washington Department of Fish and Wildlife (WDFW) and WSDOT. The SR 203 culvert crossing is almost fully blocked with sediment and has minimal clearance for water and material to pass through the structure. The resulting condition poses significant risk for damage to SR 203 roadway and nearby sewer line. The project proposes to remove and replace the existing undersized 6-foot by 6-foot concrete box culvert with a new 25-foot span structure, which will meet WDFW stream simulation criteria.

Two wetlands, two potential jurisdictional ditches and Coe Clemons Creek were identified and delineated in the project area by WSDOT biologists. The wetlands are palustrine forested, scrub-shrub, and emergent Ecology Category II wetlands that provide moderate to high hydrologic, water quality, and habitat functions for those functions present. Both wetlands are combination of riverine and depressional Hydrogeomorphic classes, regularly flooded by Coe Clemons Creek. Vegetated buffers next to wetland boundaries are non-mature forested or shrub dominated, other than the maintained road prism and a young riparian planting by the city of Duvall.

No sensitive plant species are currently known to occur within the project vicinity; however, Priority fish species are currently documented within Coe Clemons Creek and associated wetlands during very high flows. Wildlife species may also occur in the project vicinity due to the creek location and its forested riparian corridor. A separate Biological Assessment was prepared for the project to address potential presence of fish species listed as Threatened under Section 7 of the Endangered Species Act of 1973, as amended.

The proposed project will result in temporary impacts to wetlands, streams, and buffers with some minor permanent impacts to one wetland from converting the wetland to stream. A stream channel will be created through the wetland at the outlet from the culvert to facilitate stream flow. The project will minimize impacts to wetlands and streams during project construction by implementing standard temporary erosion and sedimentation control techniques. All temporarily impacted buffers and wetlands will be restored and planted with native species to enhance hydrologic, water quality, and habitat functions within the stream corridor in the project footprint.

The proposed project addresses fish passage barrier correction, potential environmental degradation from on-going maintenance, and roadway safety issues. Impact areas are minor and are included in this report along with the proposed on-site restoration. Removal of the fish barrier will provide a functional lift for Coe Clemons Creek and associated wetlands, as well as improve hydrologic, water quality, and habitat functions for both wetland systems.

# Table of Contents

<b>Executive Summary .....</b>	<b>i</b>
<b>Chapter 1. Introduction .....</b>	<b>5</b>
<b>Chapter 2. Proposed Project .....</b>	<b>6</b>
2.1 Location .....	6
2.2 Purpose and Description .....	6
<b>Chapter 3. Methods.....</b>	<b>8</b>
3.1 Wetland Identification, Delineation, and Classification .....	8
3.2 Stream Identification and Classification .....	9
3.3 Jurisdictional Ditch Identification .....	9
3.4 Wetland Functional Assessment .....	10
<b>Chapter 4. Existing Conditions .....</b>	<b>11</b>
4.1 Landscape Setting.....	11
4.2 Wetlands.....	14
4.3 Streams.....	24
4.4 Wildlife including Threatened, Endangered, and Priority Species.....	27
<b>Chapter 5. Ecological Assessment of Impact Sites and Mitigation Approach.....</b>	<b>29</b>
5.1 Wetland, Stream, Buffer and Jurisdictional Ditch Impacts.....	29
5.2 Restoration Goals, Objectives, and Performance Criteria.....	37
5.2.1 Goal .....	37
5.2.2 Objectives.....	38
5.2.3 Performance Criteria.....	38
5.2.3.1 Stream Channel Restoration .....	38
5.2.3.2 Establish Trees and Shrubs in the Riparian Buffer.....	38
5.3 Monitoring .....	39
5.4 Contingency Plan .....	39
<b>Chapter 6. References.....</b>	<b>41</b>
<b>Personal Communications .....</b>	<b>43</b>
<b>Appendix A—Plan Sheets (Wetland/Stream Locations) .....</b>	<b>44</b>
<b>Appendix B—Data Sheets .....</b>	<b>45</b>
<b>Appendix C—Wetland Rating Forms .....</b>	<b>46</b>
<b>Appendix D—Wetland Functional Assessment Forms .....</b>	<b>47</b>
<b>Appendix E—Plant List.....</b>	<b>48</b>
<b>Appendix F—Soil Survey Map .....</b>	<b>50</b>
<b>Appendix G—Wetland and Stream Impact Plan Sheets.....</b>	<b>51</b>
<b>Appendix H—Temporary Impact Planting Plan .....</b>	<b>52</b>