## Simplified Type A Hydraulic Report Outline for Fish Barrier Projects (Opportunity-Based Retrofits)

## **Project Site Conditions**

Describe the existing project site. Also describe how water moves within the project site. This would include describing:

- Are there any unstable slopes on or adjacent to the existing (or proposed) WSDOT right of way (ROW)?
- What is the vegetative land cover of the project area?
- Are wetlands identified in the project area? If yes, describe the wetland locations.
- How much right of way there is within the site and are easements being acquired for the work?
- Are there water supply wells within 100 feet of the project site? If yes, identify well locations (well locations can be found at <u>Ecology Well Site</u>).
- Is the project site within a 100 year floodplain (floodplain location can be found on <u>FEMA maps</u>)? If yes, describe location of floodplain.
- What is the existing land use in and adjacent to the site (include any protected cultural resources, historical sites, parkland, and wildlife and waterfowl refuges, and 4(f) or 6(f) properties).
- Are there hazardous or dangerous materials on or adjacent to the site? If yes, describe what type and where the materials are.
- Describe the existing stormwater discharge locations from the WSDOT ROW and their conditions.

Provide an aerial photo of the existing project site:
Existing Water Quality Conditions  Describe how close each discharge legation is to a receiving hody of water
Describe how close each discharge location is to a receiving body of water.
For each waterbody listed, is the waterbody part of an Ecology/EPA approved TMDL <sup>1</sup> ?
Yes , No .
If yes, list applicable pollutants.
For each waterbody listed, is the waterbody on Ecology's Category 5/303(d) list of impaired
waterbodies?
Yes , No
If yes, list applicable pollutants.
Has WSDOT Maintenance or others identified water quality issues in the project area?
Yes 🗆 , No 🗆
If yes, describe issues.
Existing Stormwater Treatment Facilities and Conveyance
Describe any existing stormwater BMP within the project limits. Check the Highway Activity Tracking System (HATS), Stormwater BMP Specifications (SWABS) web application, as-builts,
Tracking System (11/119), Stormwater Birit Specifications (577/105) web application, as builts,
<sup>1</sup> WSDOT's <u>Water Resources</u> webpage has a link to guidance for <u>Identifying Impaired Waterbodies</u>
in the GIS Workbench. <b>NOTE: The GIS workbench may not have the most up-to-date information</b> , so

<sup>&</sup>lt;sup>1</sup> WSDOT's <u>Water Resources</u> webpage has a link to guidance for <u>Identifying Impaired Waterbodies</u> in the GIS Workbench. **NOTE: The GIS workbench may not have the most up-to-date information**, so the guidance includes instructions to verify GIS workbench data by using Ecology's tools (which do not show mile post information): use Ecology's <u>Water Quality Atlas</u> in Microsoft Edge for best performance), or Ecology's <u>Water Quality Assessment Tool</u> which may be easier for identifying 303(d) listed water bodies.

and hydraulic reports for this information. Determine which PGIS areas within the project limits already have runoff treatment.

## Proposed Stormwater Treatment BMPs and Conveyance

The PEO shall provide the following:

- List all of the stormwater treatment BMPs that will be designated by existing site conditions or constructed by the project and describe the location of each. Also list the areas treated by each BMP.
- Specify if each BMP is designed to full or partial HRM BMP design standards.
- Describe what partial HRM BMP design standards means for each BMP listed.
  - Provide a design narrative and calculations for each BMP contrasting full design standards versus partial standards.
- Are there any critical public infrastructure or utilities in the project area that may be affected or may need to be moved due to the new BMPs?
- Describe how the local maintenance office will maintain the new BMPs and what access will they need for each BMP?

The PEO shall fill out the Stormwater Design Documentation Spreadsheet and include it as Appendix I of this simplified Type A Hydraulic Report.

Provide a Stormwater BMP Maintenance Plan for each BMP.