

# Supplement Guidance to the Stormwater Retrofit Assessment on Fish Barrier Projects

The [Stormwater Retrofit Assessment on Fish Barrier Projects](#) shall be completed for all fish passage projects prior to Project Summary submittal for HQ review. A separate assessment is required for each fish passage site in a project. This supplemental guidance provides more detailed information to complete the stormwater retrofit assessment.

This assessment is in addition to these required stormwater treatments:

1. All fish barrier projects that meet or exceed the [Highway Runoff Manual](#) (HRM) thresholds for Minimum Requirement 5 (runoff treatment) in HRM Figures 3-1, 3-2, and 3-3 will provide the appropriate runoff treatment per the HRM.
2. If a fish barrier project will impact existing BMPs within the project limits, those BMPs shall be replaced and shall not be considered part of this stormwater retrofit assessment.

The purpose of this assessment is to identify all opportunity-based retrofits adjacent to fish barrier corrections. The results of the assessment will be a list of opportunity-based retrofit stormwater BMPs proposed and documentation of which are approved for inclusion in the project scope.

Fish barrier projects in the vicinity (typically ¼ mile) of high or medium stormwater retrofit needs shall follow direction to scope and propose BMPs in accordance with the stand-alone stormwater retrofit program. Headquarters Hydraulics, ESO, and CPDM will review these proposed BMPs based on the performance goals of the stormwater retrofit program, and provide final concurrence for inclusion of BMPs to be delivered in conjunction with the fish passage project but funded from the stormwater retrofit program.

## **Timing**

The stormwater retrofit assessment shall be completed during scoping and shall be finalized with the Project Summary.

## **Objectives and Applicable Design Guidelines**

The stormwater retrofit assessment will evaluate the fish barrier project for opportunity-based stormwater retrofits and the feasibility of those retrofits.

HQ ESO has determined and mapped high and medium priority stormwater retrofit need areas along WSDOT highways. All highway segments not designated as high or medium priority stormwater retrofit need areas are defined as low priority stormwater retrofit need areas.

- The scope of work for a fish barrier project that has a high or medium stormwater retrofit need area within a ¼ of the project limits shall include designs or identify opportunity-based stormwater retrofits that:
  - meet full HRM BMP design standards (preferred); or
  - meet partial HRM BMP design standards
  - already exist (to full or partial HRM BMP design standards) based on project site conditions
    - For example, an existing grassed roadway embankment slope that receives stormwater sheet flowing from the roadway might only need minor grading and/or documentation as a vegetated filter strip designed to partial HRM BMP standards to be classified as an opportunity-based stormwater retrofit.
- The scope of work for a fish barrier project that does not have a high or medium stormwater retrofit need area within a ¼ of the project limits (i.e.; only has low priority need areas) shall include low cost designs or identify low cost opportunity-based stormwater retrofits that:
  - already exist (to full or partial HRM BMP design standards) based on project site conditions
    - For example, an existing grassed roadway embankment slope that receives stormwater sheet flowing from the roadway might only need minor grading and/or documentation as a vegetated filter strip designed to partial HRM BMP standards to be classified as an opportunity-based stormwater retrofit.

### **Geographic Scope**

Increasing project limits is not required to implement the opportunity-based stormwater retrofits being assessed. However, if it is feasible to increase the project limits to accomplish more stormwater retrofits and take advantage of existing site conditions, the scoping engineer shall document the rationale used and contact the HQ Hydraulics Section to initiate the increase in project limits.