

Supplement Guidance to the Stormwater Retrofit Assessment on Fish Barrier Projects (updated 3/31/2022)

The [Stormwater Retrofit Assessment on Fish Barrier Projects](#) shall be completed for all fish passage projects during the pre-design phase 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.

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 Environmental Services Office (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 OR is in an urbanized area shall include designs or identify opportunity-based stormwater retrofits that:
 - meet full Highway Runoff Manual (HRM) Best Management Practice (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) OR is not in an urbanized area 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.

Determining the Stormwater Retrofit Priority

Log into the [webWSPMS](#) application and input the Location of the site. Be sure to increase the mile posts by ¼ mile on each side of the project limits. Click on the Data Components and turn on the “Stormwater Retrofit” option under the “Environmental” group of options and hit Update Components. Medium and High stormwater retrofit locations will show up with respect to the mile post limits. If nothing shows up under Stormwater Retrofit information (No Data), then the project is in a low priority stormwater retrofit location.

Determining if the Project is in an Urbanized Area

Go to the [Asset Management Application](#). Turn on the following layers by checking each box:

- 1) More Highway Layers > Groups > Fish Passage > WSDOT Fish Passages
- 2) Urban Growth Areas > Urban Growth Areas limits

Then use the search bar in the upper left to enter in the fish passage site id to go right to it. If the fish passage site is in an Urban Growth Area, it meets the criteria.

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.

Documentation Requirements

If any of the 3 conditions below are met, the fish barrier project must use the [Type A hydraulic report outline](#) or Region specific hydraulic report template:

1. The fish barrier project meets or exceeds the [Highway Runoff Manual](#) (HRM) thresholds for Minimum Requirement 5 (runoff treatment) in HRM Figures 3-1, 3-2, and 3-3, and will provide the appropriate runoff treatment per the HRM.
2. If a fish barrier project will impact existing stormwater BMPs within the project limits, those BMPs shall be replaced and shall not be considered part of this stormwater retrofit assessment.
3. Runoff treatment is provided to meet ESA programmatic consultation commitments.

If none of the above conditions are met and stormwater retrofit BMPs are approved per the assessment, the fish barrier project can use the [Simplified Type A hydraulic report outline](#).