

Fish Passage Assessment – Project Deliverables.

Objectives: To complete a systematic assessment of all crossing structures in a defined watershed unit that will allow resource managers to understand the number and extent of fish passage problems and make effective decisions regarding which structures should be priorities to restore fish passage.

Key messages: The focus of this work is on fish passage and as such we are not collecting data for culverts that have been placed as drainage structures on non fish streams and cross drains.

The focus is to collect quality data for a system of stream crossings within areas having greatest value for fish.

REQUIRED OUTPUTS/DELIVERABLES

Each project area should submit the following information.

1. Field data collected for all structures assessed on fish streams. Work will be done to current standard and submitted to the new Provincial Stream Crossing Inventory System (PSCIS). The current standard and standardized excel template can be found on the [Fish Passage Activity Website](#). Detailed instructions on how to carry out the field assessments can be found in the **Field Assessment for Determining Fish Passage Status of Closed Bottomed Structures** found on the same website. Field sites where assessments are conducted should be flagged with Crossing ID, Crew Initials and Date.
2. For each and every assessment, a minimum five photos (in .jpg format) are required. These are also submitted to PSCIS and the submission will not validate until the correctly named photos for each site assessed are included in the same folder as the template. Required photos are: Upstream, Downstream, Inlet, Outlet and Barrel. To be recognized for validation, the photo names must include this description (ie, a photo of a culvert barrel must have 'barrel' within the filename. Additional photos (to a maximum of ten total) are permitted, and must have similarly descriptive names. All photos must reside in folders corresponding to the assessment's crossing ID. Each of these folders must be held in the same folder as the spreadsheet. Other things to keep in mind re: photos
 - Try to stand far enough away from the inlet and outlet so that the photos show the structure in context with the stream.
 - Photos should ideally be taken in snow-free conditions
 - Photos should be taken in good light conditions
 - Photos should clearly show the stream and culvert to accomplish that some underbrush may need to be cleared away before photos are taken.
 - Photos should not exceed 1 MB in size (640 x 480 resolution is adequate). It is easiest to set your camera up to shoot low-res images before you go in the field but if you forgot and have a number of large file size images to submit, you need to 'downsample' them using any one of a the image manipulation software

applications that are freely available on the internet. (Google 'free batch image resizer')

3. Digital copy of working maps, clearly identifying known or suspected fish streams, road networks, roads that have been assessed and identified sites for field data collection. Include information regarding roads not assessed due to deactivation or inaccessibility (over grown or structures that have failed making remainder of the road inaccessible).
4. A report – Which includes at least the following.....
 - Executive Summary
 - Study Area – description and map.
 - Scope of works completed.
 - Methods
 - Results including a Data summary table with structures number, Fish passage score and description of Fish presence Determination.
 - Analysis of Data collected including Habitat Gained Index (HGI)
 - Recommendations including - Priorities for fish passage restoration and any limitations and linkages. i.e. structure may be a priority but road that crosses downstream was not assessed due to access issues....linkages should relate structures that need to be fixed in conjunction to re-establish fish passage.
 - Map showing priority restoration sites.
 - Conclusions.

All works must be signed off by a qualified Registered Professional.

The data analysis, final mapping and report completion is to be developed in accordance with the requirements specified on the [Fish Passage Activity Website](#)