



Technology & Development Status Report

Engineering Program

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PROJECT: **Aquatic Organism Passage** **CENTER:** [SDTDC](#)

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PROJECT OBJECTIVES

In order to determine the scope of the fish passage challenge faced by the Forest Service, a national standardized protocol for evaluation of existing fish-passage stream crossings must be established and used exclusively. Several assessment methods have been developed and tested in localized environments. This project will analyze these existing methods, then make any necessary modifications to develop a national standardized assessment form. Key experts in the Fisheries Program, Engineering, and Hydrology will develop this form with input from all Forest Service Regions. The project includes collecting existing data, modify, and create a prototype national assessment/prioritization form, then conduct field tests in various environments. Development of a "front end" database system attached to INFRA will maintain the information gathered and allow access from the INFRA database system.

Develop a design manual which consolidates methods and procedures required to analyze existing or design new fish passage culverts. Collect existing methodology on each element (biologic, hydrologic, geomorphic and engineering) required for a successful design. Incorporate these methodologies with current design details, specifications and drawings into a comprehensive design manual. Interagency expertise will be used to develop an interagency design manual.

Develop a Study Guide and Test. This guide will be the bases for training and will include, in part, the design manual criteria and the national standardized inventorying/prioritizing methods (both to be developed).

The goal is to develop a certification program to verify that those trained to handle fish passage concerns will do so using the latest technologies and knowledge in the field.

Develop a video, or multimedia program that will introduce Forest Service personnel to the challenges faced in Fish Passage. This program will discuss items such as consequences for not passing fish. This also serves as a medium for tech transfers. The products developed here will complement the training effort since the video can be used as a training tool. The intent of this awareness project is to study how to address the different groups in the forest service and develop mediums to reach each of the groups, (i.e. the content of the video presentation will be different for line officers then the video presentation for field trained personnel).

Changes to objectives: The design manual was not developed as an interagency product because consensus would have been impossible to develop.

The idea of a certification program, with Study guide and test was dropped. Instead, a 5-day training course is offered for project teams.

SIGNIFICANT ACCOMPLISHMENTS

- fsweb link --> [Aquatic Organism Passage](#)

Output:

Planned: -Develop a national protocol to assess the ability of aquatic organisms to migrate through culverts.

-Develop a design manual to evaluate, design, and construct appropriate aquatic organism passage structures.

-Develop a study guide and provide training on the process to evaluate, design, implement, and monitor aquatic organism passages.

-Develop an awareness video or other media to introduce agency personnel to the challenges faced in providing adequate passages for aquatic organisms.

Actual: Please refer to fsweb website above for the most current information.
