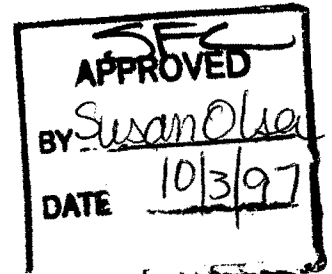


UNITED STATES
DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northeast Region
State, Federal & Constituent Programs Division



COMPLETION REPORT

Grantee: MARYLAND DEPARTMENT OF NATURAL RESOURCES

Project No: N/A

Grant No: NA36FU0335

Project Title: FISH PASSAGE IN MARYLAND

Period Covered: 08/01/93 - 02/28/97

Prepared by: LARRY LEASNER

Approved by: _____

Date: AUGUST 5, 1997

Statutory Funding Authority: Anadromous Fish Conservation Act
(P.L. 89-304)

- ☒ Chesapeake Bay Studies
- ☐ Endangered Species Act
- ☐ Interjurisdictional Fisheries
Act (Title III of P.L. 99-659)
- ☐ Magnuson Act
- ☐ Oyster Disease Research
- ☐ Saltonstall-Kennedy
- ☐ Unallied Industry Projects
- ☐ Unallied Science Projects

FISH PASSAGE IN MARYLAND

FINAL PROGRESS REPORT

August 1, 1993
JANUARY 1, 1997 TO FEBRUARY 28, 1997

NOAA Award No. NA36FU0335

Prepared by:

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and
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Job #1: Fish Passage Coordination

Coordination activities involved development and implementation of strategies, fish barrier removal, and expanding migratory fish restoration within Maryland. Efforts to increase public education and awareness about the Chesapeake Bay Directive were accomplished by visiting elementary schools, public functions, and providing workshops which trained qualified professionals to accomplish fish passage goals.

The Fish Passage Database, containing information related to nearly one-thousand known blockages to migratory fish in Maryland, has been updated and version two has been distributed.

Summary of Funding for Fish Passage Coordination

Budget	Expended	Remaining
45,000	45,000	0.00

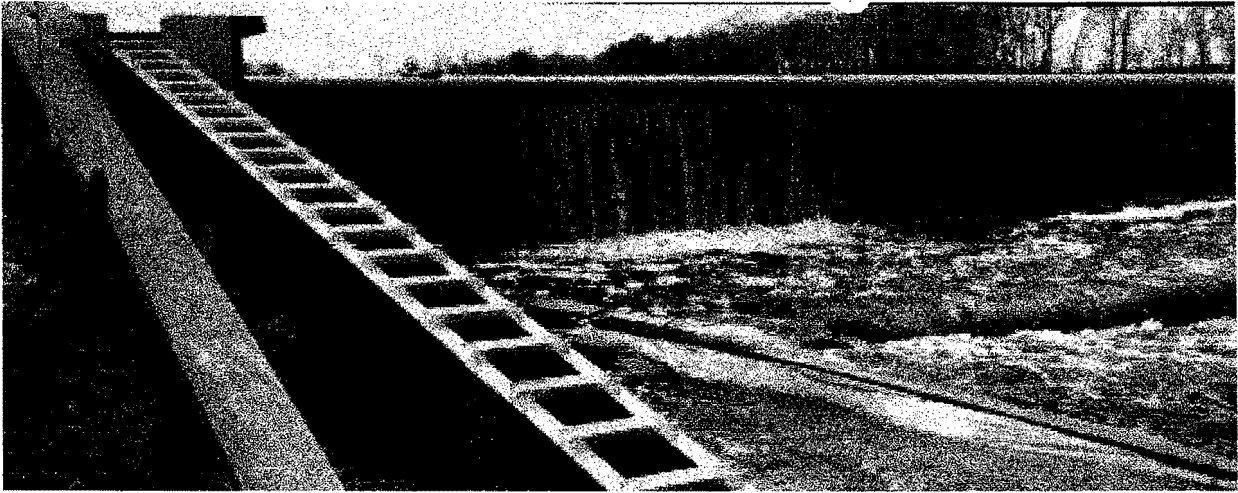
Job #2: Unicorn Dam Fishway

The Unicorn Dam Fishway is located in Queen Annes County on Route 313 just south of Millington at the Unicorn Hatchery. Unicorn lake consists of 43 acres and is open to the public and managed as a largemouth bass and bluegill fishery. The fishway, an Alaskan Steeppass, is a prefabricated aluminum flume with internal fins that slow the water for ascending anadromous and residential fishes. While construction was completed in December 1996, a void under the apron of the dam was discovered resulting in an emergency repair order to correct these problems. The emergency repair was completed and the fishway was operational in time for the 1997 spring spawning season. This project opened 22 square miles of watershed and supports 14.5 miles of suitable river herring spawning habitat.

Summary of Funds for Unicorn Dam

Budget	Expended	Remaining
265,753.82	265,753.82	0.00

Includes \$170,000 in job #1 funds, \$45,000 in federal funds shifted from the federal portion of the Simkins fishway to Unicorn to help cover emergency dam repair costs and \$14,365 in unexpended funds from job #4 & 5.



Alaskan Steeppass fishway at Unicorn dam.

Job #3: Simkins Dam, Fishway Federal Portion(formerly Andover Branch)

The private owner of the Andover Branch dam would not grant the Fish Passage Program permission to enter the property to design or construct the proposed fishway. As a consequence of these delays the Andover Branch project was postponed indefinitely.

The funding for Job #3, with the approval of NMFS, was allocated to the Simkins Fish Ladder construction. By the end of the grant period, construction of the Simkins fishway was 75% complete. A summary of the progress and expenditures for Simkins Dam is included in Job #6 below.

Job #4: District Weir #1 AND Job #5: District Gauging Station Weir

Rock Creek is a large stream that flows 31 miles from the Upper Montgomery County, Maryland through northwest Washington, D.C. to join the Potomac River. Since the construction of grain mills in the late 18th century, small structures have blocked the migration of river herring and white perch. The goal was to remove two such small structures blocking the passage of fishes on Rock Creek within the boundaries of the Rock Creek National Park. The first blockage, Job #4, was an abandoned sanitary sewer line covered by a flat concrete weir. The other blockage, job #5, that is located upstream of Job #4 is a U.S. gauging station weir. The removal of these two barriers is a significant step toward restoring historic spawning habitat in the Rock Creek watershed. Job #4 and Job #5

were completed in October 1995 which together reopened one mile of habitat up to the Pierce Mill dam, which will be addressed by the District of Columbia in a future year.

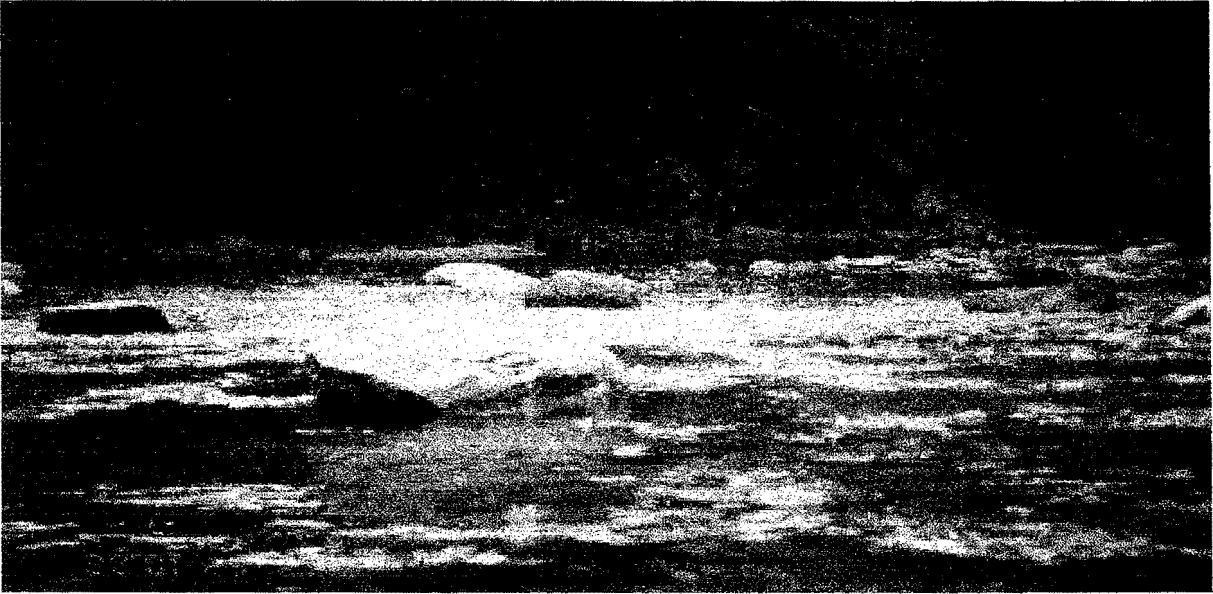
Summary of Funding for the Rock Creek Sites

Budget	Expended	Remaining
70,500	56,134.21	14,365.79*

*Remaining funds were shifted to the Unicorn fishway



Job #4, abandoned sanitary sewer line before removal.



Job #4, after sewer line removal.



Job #5, weir, before removal



Job #5, weir, during removal.



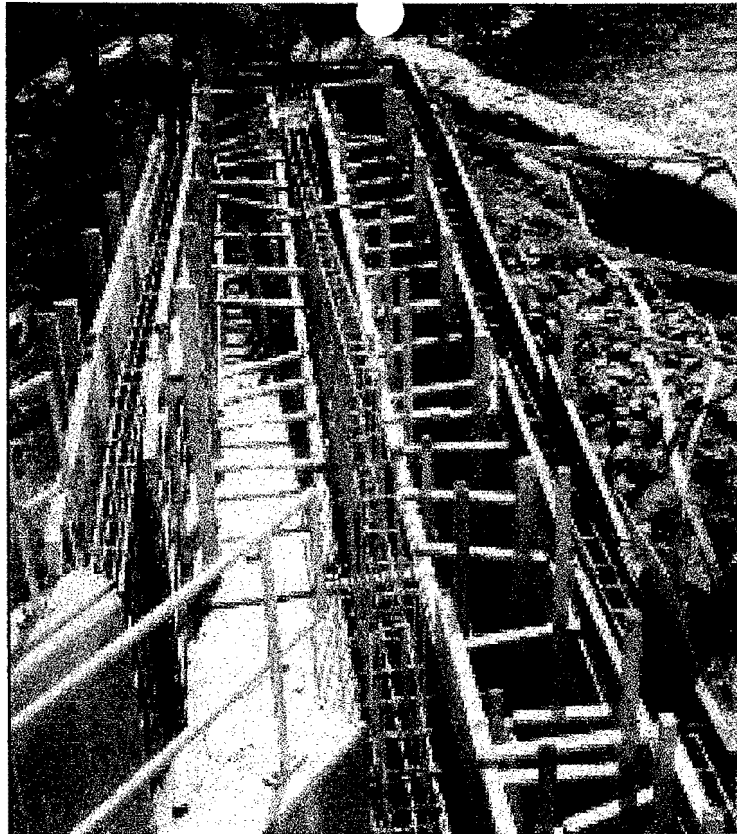
Job #5, weir, after removal.

Simkins fishway

March 1, 1997

Lower leg:
foundation and
slab poured,
rebar & wall
forms in place,
nearly ready
for concrete
pour (center of
photo).

Upper leg:
construction
complete (lower
left corner).



Job #7: Patuxent River Fish Passage Mitigation Projects

► **Horsepen Branch Dam (PXU-05), Near Bowie, MD.**

The Horsepen Branch Dam was located adjacent to Bowie Race Track in Prince George's County off Bowie Racetrack Road. The dam was removed because it had not served a useful purpose in many decades. This project was completed in November 1995, and has reopened ten miles of historic stream spawning habitat.

► **Evergreen Road Culvert on Towser's Branch (LPX-19)**

The Evergreen Road Culvert is located in Anne Arundel County at Evergreen Rd. The blockage was removed by installing a new culvert pipe, the bottom of which is 18 inches below the stream invert. This project was completed in October 1995 and reopens .4 miles of spawning habitat.

► **Sands Road Culvert on an Unnamed Tributary (PXM-42)**

This project has been deferred for future consideration due to

abnormally low flows observed at this tributary site.

► **Midway Branch, Range Road Culvert (LPX-09)**

This project has been delayed. It will likely be completed in the next grant period.

Summary of PEPCO Funding for the Patuxent River Sites

Budget	Expended	Remaining
177,500	116,418.22	61,081.78

Job #8: State Management for Fish Passage

State management and coordination with State Highway Administration activities were as follows:

Work continues with the Maryland State Highway Administration (SHA) with whom Maryland DNR has an agreement to provide fish passage at SHA owned sites every year. SHA provides design and construction for selected anadromous fish blockages by the two agencies.

During the last quarter of the grant period engineering designs were submitted and approved for the following State Highway Administration Year #3 sites:

- * Turville Creek, Route 589
- * Nassawango Creek, Route 12
- * Gilbert Run, Route 6

The permits for construction have been approved for Turville Creek and Gilbert Run. As a result of underbidding, Turville Creek and Gilbert Run had to be re-advertised. Nassawango Creek construction should be completed in the second quarter of the new year.

Summary of State Management Funds

Budget	Expended	Remaining
38,658	38,658	0

Job #9: Little Falls Survey

Little Falls dam is located in the upper Potomac River in Montgomery County. Originally built near the turn of the century for water supply, and reinforced by a second dam structure in 1959, Little Falls dam impedes migratory fish access to 11 miles of Potomac River mainstem spawning and nursery habitat. A fishway installed in the middle of the dam during 1959 was not suitably placed for migratory fish and remains nonfunctional. In 1993 and 1994, field work was performed in preparation to model river flows. Information gained from the survey and the gauge readings were sent to the Conte Lab for use in the construction of a physical model of the Little Falls dam site. This modeling resulted in the decision to construct a 24-foot notch with three labyrinth weirs. Construction is expected to begin in October 1997 so that the fishway will be operational in time for the 1998 spawning runs.

Summary of Funding for Little Falls

Budget	Expended	Remaining
15,000	18,446.50	3,446.50

WME 11/1991