US Army Corps of Engineers®
Philadelphia District

PROJECT FACTSHEET

Fairmount Dam Fishladder, Schuylkill River
Philadelphia, PA

October 2008

CONGRESSIONAL DISTRICTS: Reps. Brady (PA-1), Fattah (PA-2)

APPROPRIATION / PHASE:
Continuing Authorities / Construction

BUSINESS PROGRAM:
Ecosystem Restoration

AUTHORITY: Section 1135(b) of the Water Resources Development Act of 1986, as amended.

LOCATION: The area is located along the Schuylkill River in the City of Philadelphia, Pa. approximately 10 miles above the confluence of the Schuylkill River and the Delaware River.

DESCRIPTION: The previous ladder had poor flow conditions at the fishway entrance, impeding entry by fish, as well as inappropriate internal flows, impeding passage of fish that do manage to enter the structure. These factors limit the successful migration of anadromous fish, including shad and river herring. The future success of several upstream fish ladders is dependent on improving the operation of this ladder. The improvements under construction at the Fairmount Dam fish ladder include:

- Increasing attraction flow from the present ~ 20 cubic feet per second (cfs) to ~ 100 cfs, through piping additional water to the entrance of the ladder by repairing the non functional additional flow pump on site;
- Replacing the old additional flow pump's butterfly valve and it's 24 inch pipe with a new butterfly valve and 30 inch pipe to transport water downstream to the fish ladder entrance (this will allow for optimal attraction flow at the fish ladder entrance);
- Increasing the width of slots between each cell from the present 12 inches to 18 inches in width to allow for optimal passage of shad;
- Changing pool to pool (cell to cell) elevation drop from the present 12 inches down to 9 inches;
- Reconstructing the exit channel to allow for a perpendicular to flow exit from the ladder; this reconstruction will alleviate one of the primary problems being experienced by the ladder, and that is accumulation of trash and debris at the upstream, exit of the ladder;
- Installing a new gate at the exit of the ladder;
- Replacing the current intake screen with one that has vertical bars at least 12 inches apart and has no horizontal bars - which the current one does;
- Installing articulated weir gates to control water surface elevation in the entrance channel;
- Installing an approximately 20 x 3 ft non-overflow section on the crest of the dam adjacent to the fish ladder to prevent water from the spillway from competing with water from the fish ladder entrance;
- Reconstructing the entrance to the ladder;

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- Replacing the damaged viewing window screening found inside the last cell of the ladder;
- Rewiring the viewing window room to restore electric power;
- Installation of a real-time camera to allow viewing of fish passing through the ladder to individuals in the interpretive center across the river from the ladder as well as via the internet;
- Installing wrought iron fencing for site security;
- Installing grating over cells of the ladder; and constructing restorative landscaping at the site.

STATUS: The construction contract was awarded in FY07. Construction of the project will last approximately 11 months.

FINANCIAL DATA ($000)	Fed	Non-Fed	Total
Planning & Design Analysis	364	0	364
Construction	2,136	800	2,936

BUDGET DATA ($000)		Comments
Thru FY 04	315	
FY 05	9	
FY 06	743	
FY 07	1,433	
FY 08	580	

SPONSOR: City of Philadelphia, Water Department

PROJECT MANAGER: Terry Fowler
(215) 656-6575
theresa.a.fowler@usace.army.mil