



# Rhode Island SALTWATER ANGLERS FOUNDATION

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## FISH LADDER GRANT (from page 1)

Increasing the river herring spawning populations in the Saugatucket River will hopefully substantially enrich the forage fish populations in the main river, as well as the lower river estuary, Point Judith Pond and Block Island Sound.

Based on the extent of the spawning and nursery habitat in the Saugatucket watershed, this system has the potential to support river herring populations of over 200,000 spawning adults.

The Saugatucket River is a small, coastal watershed (11,018 acres) that flows into the northern end of Point Judith Pond in South Kingstown. It is the largest river system contributing to Block Island Sound.

Runs of diadromous fish (river herring and American eel) were once plentiful in the Saugatucket River but disappeared from the watershed with the construction of mill dams in the 1800's. Efforts to restore diadromous fish to the watershed began in the 1970's with the construction of the first fish ladder at the Main Street dam in Wakefield. Shortly after, a second fish ladder was constructed at the Palisades Mill in Peacedale providing access for spawning fish into the Peacedale Pond.

A third ladder was eventually constructed at the outflow of Indian Lane in 2003. The DEM Division of Fish and Wildlife has executed easements with the respective landowners in order to maintain and operate each of the ladders.

Most recent observations and assessments by RIDEM, NOAA and USFWS fish passage engineers have identified several problems, as well as opportunities to improve, fish passage performance at both the Palisades Mill and Indian Lake fish ladders.



The Saugatucket River runs from Indian Lake to the north to the northern end of Point Judith Pond and empties into Block Island Sound.



The Palisades Mill Fish Ladder to include an extension and new baffle system. See yellow in photo.

The Nature Conservancy is working closely with RIDEM F&W to schedule these modifications for improving the fish ladders during the fall of 2018.

The National Marine Fisheries Service has listed river herring (both alewives and bluebacks) as "species of concern" and continues to evaluate the status of Atlantic Coast river herring populations. River herring is listed as NOAA *trust resources* and are federally managed through the Atlantic States Marine Fisheries Commission (ASMFC).

Currently there is a moratorium on the taking of river herring in Rhode Island freshwater and marine waters.

### WORK TO BE DONE Indian Lake Fish Ladder.

Each spring, the upstream movement of herring has been delayed. Fish have been observed stacking up in the ladder pools and have had to be manually netted and released into the head pond (Indian Lake). Based on current USFWS engineering criteria, modifications (design changes) will be made to the ladder to revise hydraulic conditions and improve the upstream passage of fish through the ladder. These improvements will include increasing the number of concrete weirs in the ladder and revising the orientation of the low flow notches.

### Palisades Fish Ladder.

Modifications are necessary to improve attraction to the entrance to the ladder as well as decreasing water velocities in the fishway to meet acceptable levels for the passage of river herring.

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