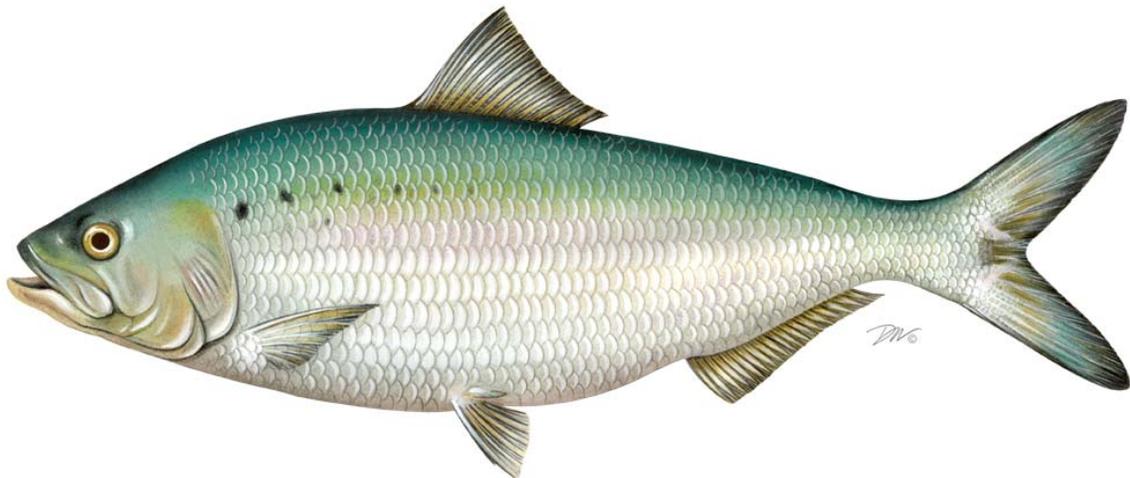


**District of Columbia Department of the Environment**

# **American Shad Habitat Plan**



Submitted to the Atlantic States Marine Fisheries Commission as a requirement of Amendment 3 to the Interstate Management Plan for Shad and River Herring

Approved February 6, 2014

## **District of Columbia's American Shad Habitat Plan**

### **District Department of the Environment**

This habitat plan is being submitted by the District Department of the Environment and covers the portions of the Potomac and Anacostia Rivers which fall within the borders of the District of Columbia. Historically adult and juvenile American shad populations have been present through all portions of the Potomac and Anacostia rivers within the borders of the District of Columbia. This plan will show what habitat is available for spawning and juvenile American shad within the District of Columbia.

#### **Habitat Assessment**

##### Potomac River

###### A) Spawning Habitat

Historical and current accessible in river and estuarine spawning habitat extends roughly 18.8 km and covers 1,388 hectares. This habitat represents the entire portion of the Potomac River as it flows through the District of Columbia.

###### B) Rearing Habitat

Historic and currently utilized in river and estuarine rearing habitat extends roughly 18.8 km and covers 1,388 hectares. This habitat represents the entire portion of the Potomac River as it flows through the District of Columbia.

##### Anacostia River

###### A) Spawning Habitat

Historical and current in river and estuarine spawning habitat stretches roughly 11 km and covers 378 hectares. This habitat represents the entire portion of the Anacostia River as it flows through the District of Columbia.

###### B) Rearing Habitat

Historical and currently utilized rearing habitat stretches roughly 11 km and covers 378 hectares. This habitat represents the entire portion of the Anacostia River as it flows through the District of Columbia.

#### **Threats Assessment**

##### Barriers to Migration

###### A) Inventory of Dams

There are no dams on the main stem of the Potomac or Anacostia rivers within the District of Columbia. The only dam of note is the dam at Peirce Mill on Rock Creek, a tributary of the Potomac River. This dam is managed by the National Park Service and serves as a historic and aesthetic site for the park service. The dam is located 11 km upstream from the mouth of Rock

Creek. Although the dam presents a barrier to migration for river herring, there is no evidence that American shad have ever reached the base of the dam. A Denil fish ladder has been constructed to allow passage of fish around the dam. Data is currently not available as to the effectiveness of the ladder for herring. Additional Information regarding the dam at Peirce Mill can be found at [www.nps.gov/pimi/index.htm](http://www.nps.gov/pimi/index.htm).

- B) Inventory of other human induced physical structures  
No data available
- C) Inventory of altered water quality/quantity  
No data available

#### Water withdrawals

- A) Inventory of water withdrawals  
No data available
- B) Assessment of water withdrawals  
No data available

#### Toxic and Thermal discharge

- A) There is one known thermal discharge located within the District of Columbia: Blue Plains Sewage Treatment Facility. This facility is managed by DC Water located at:  
5000 Overlook Ave SW  
Washington, DC 20032  
Current actions:  
The District Department of the Environment has no evidence that the discharge has any detrimental effects on the migration and utilization of spawning habitat for American Shad. A complete overview of the operations and regulatory oversight of this facility is available at [www.dewater.com](http://www.dewater.com)
- B) Additional discharges within the District of Columbia include combined sewer overflows. This is a system in which high rain events cause storm water runoff to mix with sanitary sewers, and excess loads are discharged into the Potomac and Anacostia rivers as well as Rock Creek. This system of sewer lines are also managed by DC Water located at:  
5000 Overlook Ave SW  
Washington, DC 20032  
Current actions:  
The District Department of the Environment, Fisheries Research Branch has no regulatory authority regarding these discharges. DC Water has detailed records and reports with oversight from the U. S. Environmental Protection Agency. Currently there are multiple projects in place to help update the city's sewage treatment facilities, ultimately reducing the number of discharges into the rivers and Rock Creek. A complete list of these projects as well as their progress can be found at [www.dewater.com](http://www.dewater.com).

## Channelization and Dredging

- A) The only known Channelization or dredging project located within the District of Columbia at this time is the runway extension project at Reagan National Airport. This project is being managed by the Metropolitan Washington Airports Authority located at:  
1 Aviation Circle  
Washington, DC 20001  
Current actions:  
District Department of the Environment currently has no data to determine possible impacts on American shad migration and utilization of historic habitat. A detailed account of this project can be found at [www.metwashairports.com](http://www.metwashairports.com).

## Land use

- A) Inventory of land use  
No data available

## Atmospheric Deposition

- A) Atmospheric deposition assessment  
No data available

## Climate Change

- A) Climate change assessment  
No data available

## Competition and Predation by Invasive and Managed Species

- A) Invasive species assessment  
The District Department of the Environment has been monitoring the population trends of two invasive species within the District of Columbia. These species include the blue catfish and Northern snakehead.  
Current Actions:  
The District Department of the Environment has an ongoing study examining stomach contents of the invasive blue catfish. To date, more than 500 blue catfish digestive tracts have been examined with no American shad observed. The opportunistic nature of the blue catfish still poses a potential impact to American shad populations within the District of Columbia.  
Goals:  
The District Department of the Environment has plans to continue this study to further understand the impacts that the blue catfish has on the resident and anadromous species within the District of Columbia.  
Timeline:  
The blue catfish stomach analysis study will continue until enough data has been gathered to determine the effects of this invasive species on the native and managed species of the District.

# District of Columbia Shad Habitat

