



Fish Passage



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Fish Passage Workgroup Chair

Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...

Goal: Vital Habitats – Fish Passage

Outcome:

Continually increase available habitat to support sustainable migratory fish populations in Chesapeake Bay freshwater rivers and streams. By 2025, restore historical fish migratory routes by **opening 1,000 additional stream miles**, with restoration success indicated by the consistent **presence of alewife, blueback herring, American shad, hickory shad, American eel and brook trout**, to be monitored in accordance with available agency resources and collaboratively developed methods.





How You Can Help



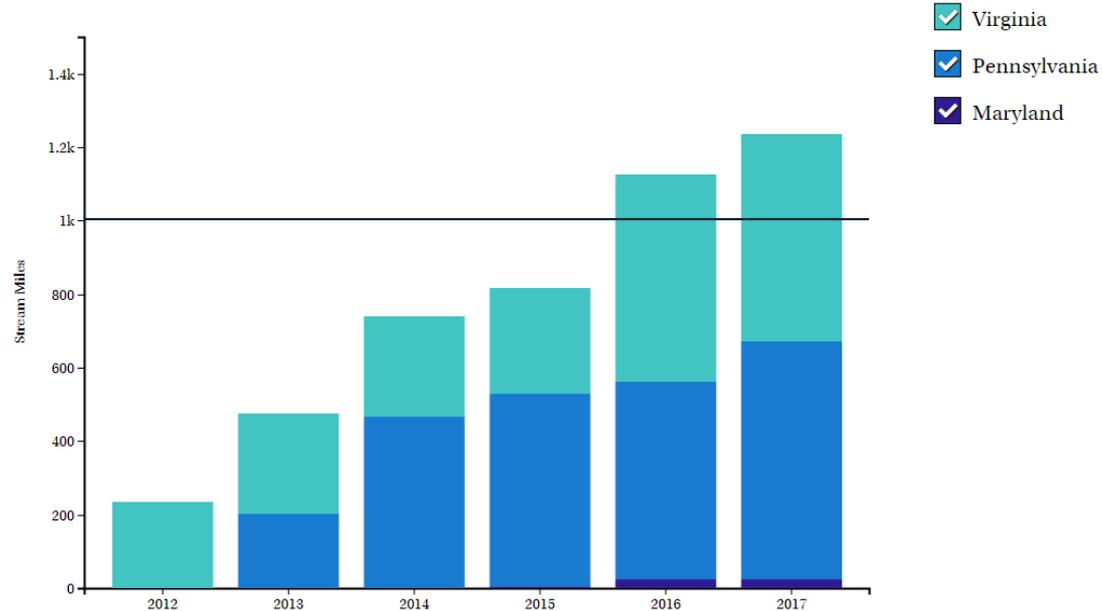
- Largest dam removal in state of Maryland ~ 30 foot dam with significant sediment release
- Patapsco monitoring data part of national discussion on sediment release during dam removals
- Presence/absence of target species being complete at removals
- New projects being planned watershed-wide
- Functional, highly efficient workgroup





What is our Expected and Actual Progress?

Stream Miles Opened to Fish Passage (Cumulative) (2012-2017)



Aquatic Barrier Prioritization X

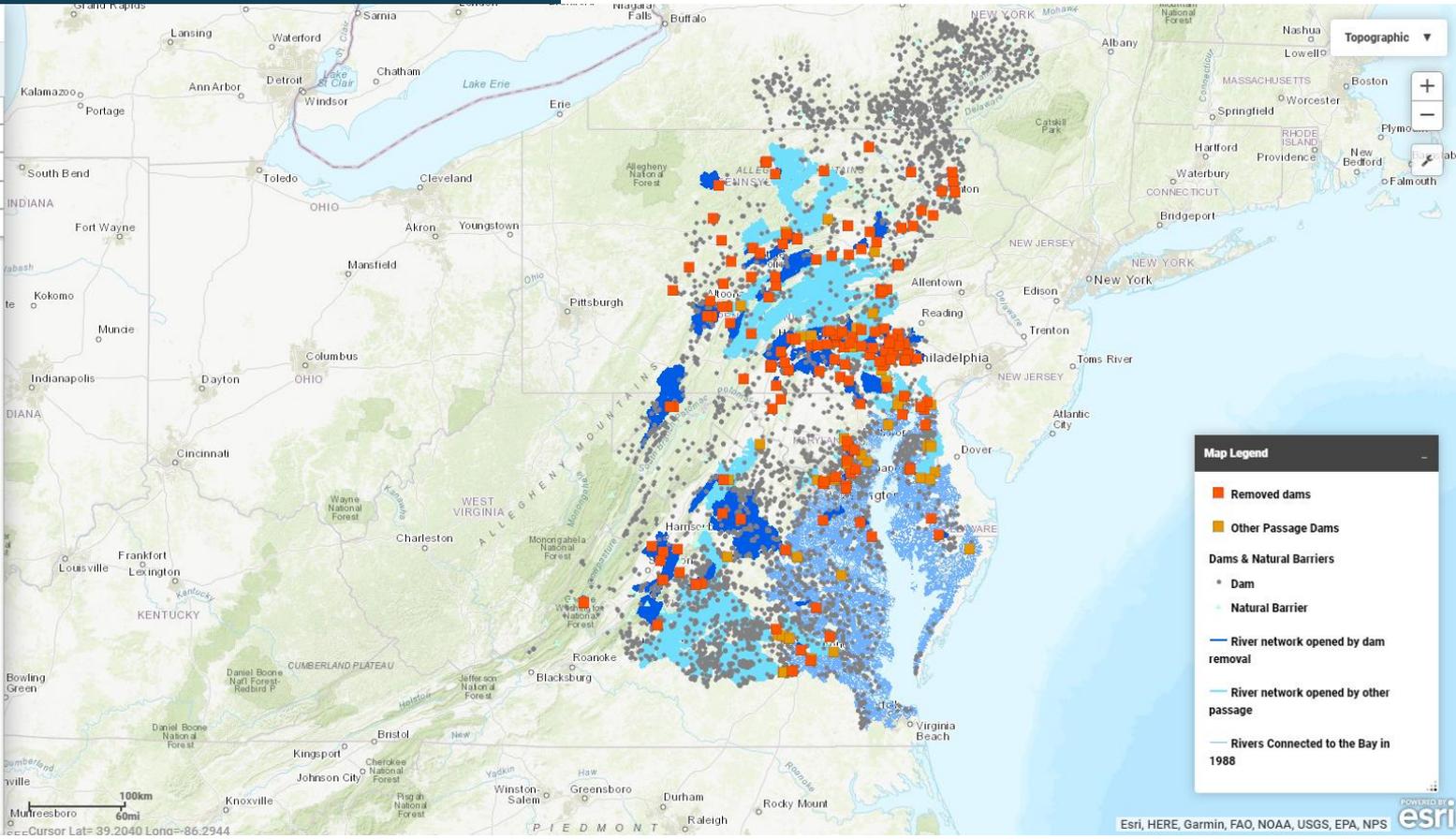
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- ▶ Explore the Consensus Diadromous Results
- ▶ Run a Custom Analysis
- ▶ Custom Analysis Results
- ▶ Upstream Network for a Clicked Point
- ▼ Track Miles Opened Over Time

Use the time slider to see how upstream river miles have been opened since 1988.



Cumulative dam removal miles: 10,596 Miles
Cumulative other passage miles: 19,244 Miles



Map Legend

- Removed dams
- Other Passage Dams
- Dams & Natural Barriers
 - Dam
 - Natural Barrier
- River network opened by dam removal
- River network opened by other passage
- Rivers Connected to the Bay in 1988



Successes and Challenges

- Interest by dam owners is still a major challenge
- Incentives for removal are needed to gain interest in dam removal - mitigation credit one option; coordination with dam safety offices
- Little work to date on road-stream crossings

Learn

There are over 165,000 road-stream crossings in the Chesapeake Bay. Road-stream crossings need to be addressed and represent a scale much larger in number than dam removals. A different approach is needed



Photo by: Ethan Nedeau: MA Stream Crossings Handbook



On the Horizon

- Given the focus on increasing storm events and higher river flows, addressing fish passage at road-stream crossings at the same time is a common sense approach.
- Guidance being developed for fish passage at road-stream crossing with possible funding from GIT if selected.
- U.S. Army Corps of Engineers recently released guidance on mitigation crediting for dam removals and other river obstructions. State of Maryland developing draft mitigation calculator

A large, stylized, blue letter 'A' is positioned on the left side of the slide. The background behind it is a dark blue vertical band, which is part of a larger design consisting of horizontal stripes in shades of blue and green.

Adapt

How does all of this impact our work?



Based on what we learned, we plan to ...



Double box culvert at Dingle Road (Inter-Fluve Inc. photo)



Replaced with an Open Bottomless Arch Culvert (Paul Nguyen photo)

- Opportunities to restore fish passage through the retrofitting or removal of culverts—in addition to dam removal—are being investigated and incorporated into our two year action plan.



Help

*How can the Management Board
lead the Program to adapt?*



Help Needed

- Bring awareness to dam safety programs that dam removal is a viable option to consider along with the usual “repair or replace” options under dam safety regulations and planning.
- PA – excellent job! Model coordination
- MD – stalled with new leadership pending at DNR and MDE. Need renewed emphasis on these talks.
- VA – staff from dam safety to attend VA Fish Passage Task Force Meetings



Discussion