

The current outcome for the Fish Passage Workgroup reads as follows: **“During the period of 2011-2025, restore historical fish migratory routes by opening 1,000 additional stream miles, with restoration success indicated by the presence of blueback herring, alewife, American shad, hickory shad, brook trout and/or American eel.”**

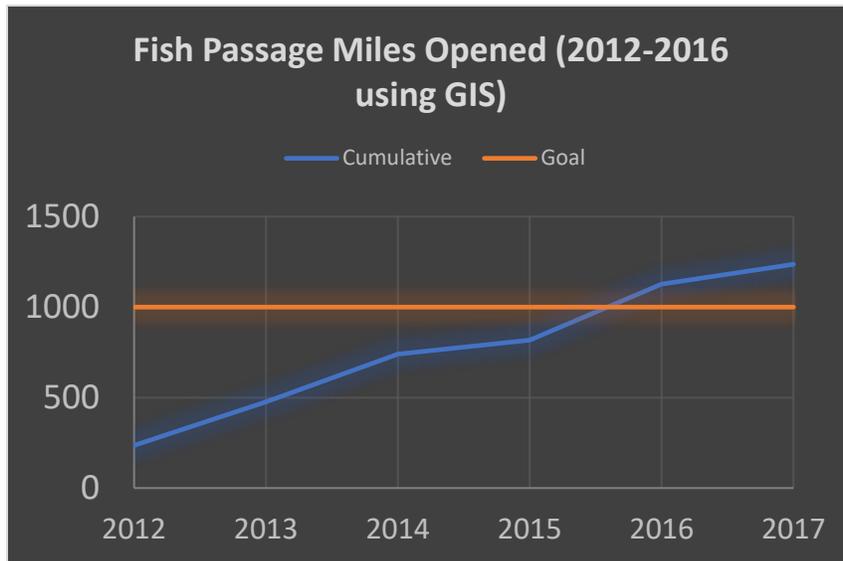
- Brook trout and American eel use upstream habitat in addition to mainstem miles. In order to restore their historical migratory routes, **we must include all of the upstream habitat** in the calculation of river miles opened.
- The Fish Passage Prioritization Tool (developed by TNC in partnership with NOAA and **partially funded by the Chesapeake Bay Program**) measures functional network mileage in a consistent and precise way across projects, allowing for comparison between state coordinators. The tool, which has been in use at the partnership since 2014, also allows for **consistent record keeping and prevents data loss**, avoiding pitfalls of previous methods.
- Previously, no maps could be generated showing watershed-wide successful fish passage efforts. With the new tool and method, the **workgroup can graphically show where fish passage efforts have been successful** and where additional efforts are needed.
- The Fish Passage **experts have agreed that the Fish Passage Prioritization Tool is far superior** to previous methods used for mileage calculations. This method **advances the science** from using one’s professional judgement to trace USGS paper maps with a measuring wheel to using 1:24,000 resolution stream maps in a geographical information system specifically produced for the purpose of calculating stream miles.

Below is a comparison of the total stream miles opened using the old and new methodologies. The goal mileage for each time period is also indicated.

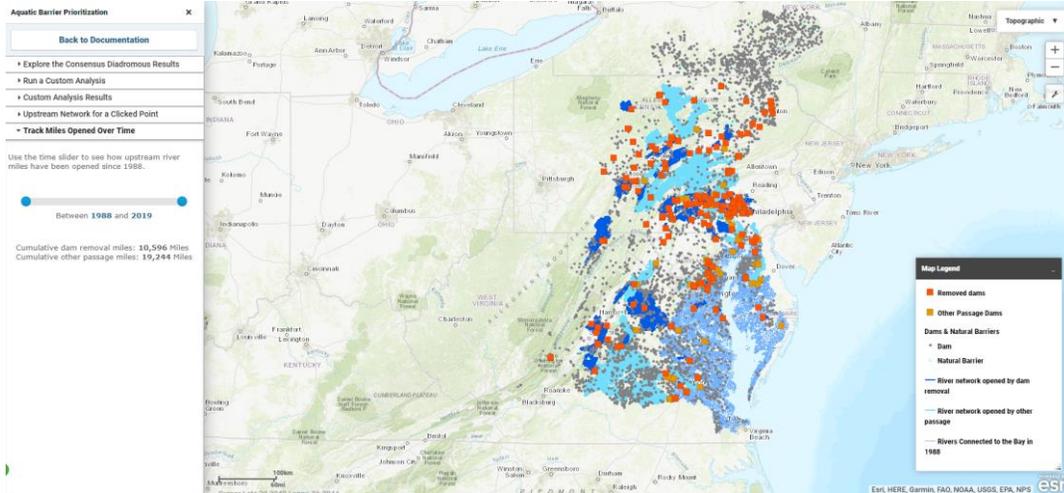
Time Period	Mileage Goal	Old Mileage Method	TNC Tool Mileage Method
1989-2005	1357	1841.3	22,726.50
2005-2014	1000	815.4*	6,020.84
2011-2015	1000	328.9*	2,062.40

No miles were calculated using the old method after 2013

- Chesapeake Progress states: “Because this outcome’s mileage target was set under a previous method of calculation, it is an **unfit benchmark against which to measure progress**. While much of the “low-hanging fruit” with regards to dam removal has been picked, our partners will continue to open stream miles for access by migratory fish. Opportunities to restore fish passage through the retrofitting or removal of culverts—in addition to the removal of dams—are also being investigated.”
- **The Management Board approved the 2016-2019 work plan for the Fish Passage Workgroup which included both using the Fish Passage Prioritization Tool to calculate stream miles opened and the target rate of 132 miles opened every two years.**



- Using the Fish Passage Prioritization Tool, the Fish Passage Workgroup was able to **exceed the outcome mileage in late 2015, an achievement celebrated at the SRS kickoff event in February 2017**. Partners have continued to remove obstructions to fish passage at a rate of 132 miles every 2 years since then. This graph was created using publicly available data from Chesapeake Decisions.



- Each range or red dot represents a dam removal or fish passage project. Blue areas represent streams opened to the target species and anywhere in the watershed that is not blue is not currently open. While the outcome of this workgroup has been met, there is **significant work left to be done** to open fish habitat. Nearly 4000 dams still block fish passage in the Chesapeake Bay watershed.
- The Fish Passage Workgroup will continue to open fish passage at a rate of 132 miles every two years.