BROOK TROUT — Catch and Release

What is being considered?

The department is considering implementing both of the regulatory changes described below.

1) Require catch-and-release only in all put-and-take waters statewide.

This would require the release of all brook trout caught from any water designated as a put-and-take trout fishing area. A person would not be allowed to have any brook trout in possession while fishing in these areas. All brook trout caught would be required to be released and returned to the water.

Catch-and-release of brook trout from put-and-take waters will reduce the harvest of brook trout in these areas by anglers who are targeting stocked trout. Forty-five percent of trout anglers indicated harvest is a motivating factor to angling in stocked streams, thus more brook trout caught in these streams may be harvested than would normally occur if no trout were stocked.

2) Require catch-and-release only in all waters east of Interstate 81 (I-81).

This would require the release of brook trout caught from all waters east of I-81. A person would not be allowed to have any brook trout in possession while fishing anywhere east of I-81. All brook trout caught would be required to be released and returned to the water.

Maryland has the southernmost Piedmont brook trout population in the US, a unique occurrence which warrants further protection. Brook trout in Maryland's Piedmont region are at higher risk of further loss if the climate continues to trend warmer and human impacts continue. Harvesting any brook trout in the central part of the state could have adverse impacts on population recruitment, genetic fitness, and future existence. Given the declining populations in central Maryland, the department believes catch-and-release regulations will help to minimize population impacts from harvest of the largest most fecund adults, afford additional years to spawn, and increase recreational opportunities by increasing the probability of catching a brook trout more than once.

Why is this change necessary?

The goal of these changes is to eliminate harvest of brook trout adults in our most pressured waters (i.e., put-and-take areas) and stressed populations (east of I-81).

Recent results from a five-year statewide brook trout survey (2014-2018) indicated an overall 27 percent additional loss in occupied brook trout watersheds since 1987. The central part of the state, east of I-81, experienced the greatest decline, with a 20.1 percent loss in the Catoctin Mountain region and a 50 percent loss in the Piedmont region. The Piedmont region is generally an urban and densely populated area susceptible to a warmer climate given its lower elevation, all of which put additional stressors on the remaining brook trout populations.

Brook trout are listed in Maryland's State Wildlife Action Plan (SWAP) as a Species of Greatest Conservation Need (SGCN). Human population growth, urbanization, and climate change have resulted in considerable habitat degradation; mainly through loss of forest cover and riparian zones, increased water temperatures, and siltation. Consequently, brook trout are found in less than 35 percent of historically occupied subwatersheds in Maryland. In an effort to maintain and enhance the current brook trout populations, the department is in the process of developing a conservation plan to improve population resilience. Additionally, Maryland is a signatory partner of the Chesapeake Bay Agreement. The Agreement includes the Brook Trout Outcome, which calls for an eight percent increase in occupied habitat by 2025.

Catch-and-release regulations for brook trout were implemented in the upper Savage River in Garrett County in 2007. An anticipated benefit from the regulation was to protect the largest fish (most fecund, best spawning success) during low flow and poor reproduction years to sustain brook

trout in subsequent years when conditions are better. Annual brook trout population monitoring has indicated that the upper Savage River supports a stable population even with the normal environmentally driven annual fluctuations. Furthermore, compared to pooled sites open to harvest by anglers (2 fish per day, no closed season) from around the state, the upper Savage River has maintained statistically significant greater brook trout densities for each year of monitoring following the regulation change.

Results from the department's 2016 wild trout angler preference survey indicated 85.7 percent of respondents support more restrictive regulations to conserve brook trout, and catch-and-release was the most popular option. Additionally, the department stocks around 330,000 hatchery raised trout, 175,000 east of I-81, to provide anglers a recreational and consumptive option. The department believes that the value of releasing native brook trout is greater, both socially and ecologically, than harvest, especially given the abundant opportunity to harvest stocked trout.

Brook trout populations are inherently variable in recruitment and abundance. Droughts, high flows, and anchor ice are all factors that can impact recruitment and future abundance. Catchand-release regulations will not correct population declines attributed to weather extremes, climate change, and land use changes but may minimize further loss due to harvest during stressful periods when large adults are most vulnerable.

Who will this affect?

Recreational anglers who catch brook trout.

When will this be effective?

The department would like this change to be effective January 1, 2021; however the exact date has not been determined. The department will follow our normal scoping and proposal procedures.

Has this change be discussed with advisory commissions?

This idea was scoped with the Sport Fisheries Advisory Commission and Tidal Fisheries Advisory Commission at their April 2020 meetings. Commissioners recommended moving forward with scoping.

