

Brook Trout (*Salvelinus fontinalis*)

The native distribution of fall-spawning brook trout (*Salvelinus fontinalis*) includes northeastern North America from the Canadian Maritimes to Hudson Bay and extends south through the Driftless region of Minnesota, Iowa, Wisconsin, and Illinois and the Great Lakes region and down the Appalachian Mountains to northern Georgia, spanning four regions in the State of the Trout report. Brook trout populations can often be comprised of resident individuals that have relatively small home ranges or reside in a single stream or lake because connectivity to suitable habitat in nearby streams is absent. However, some populations that occupy large interconnected habitats can exhibit seasonal movements from streams into larger rivers and lakes for feeding, from lakes to streams for spawning, or to estuaries. Additional details on the variety of life histories and an overview of specific threats are provided in the regional sections.

The rangewide status of brook trout is summarized below but each region where brook trout occur also have status classifications that are specific to each region. Relative to many other native salmonids, brook trout status is better off as they have a widespread historical distribution and currently occupy at least half of that distribution in most regions, with some exception such as in the southern Appalachians where their distribution is more restricted. The

early and widespread culture and stocking of brook trout has aided in their current status, with some uncertainty as to whether existing populations represent native genetic lineages or

those of a few populations comprising hatchery strains. Threats also vary regionally, but on the average are moderate compared to other native trouts.



Brook Trout (Rangewide)

Category	Status	Explanation
Listing status	Green	Species of Special Concern (IA, MD, NJ, OH, SC, TN)
Current range	Green	~50 – 90 percent of historical habitat currently occupied; widely stocked outside of historical habitat
Historical range	Green	Broad historical range from Georgia, Maine, and west through Lake Superior and Upper Mississippi
Climate change	Yellow	Higher frequency of larger floods and warming temperatures, particularly in the Southeast
Energy development	Yellow	Shale gas development in Mid-Atlantic, and mining of frack sands for hydraulic fracturing in Midwest
Non-native species	Red	Introduced salmonids pose threats across range that vary by region
Water demand	Yellow	Localized water demand can influence flows
Data issues	Yellow	Species databases exist but exclude Midwest populations and genetics data. State databases also exist