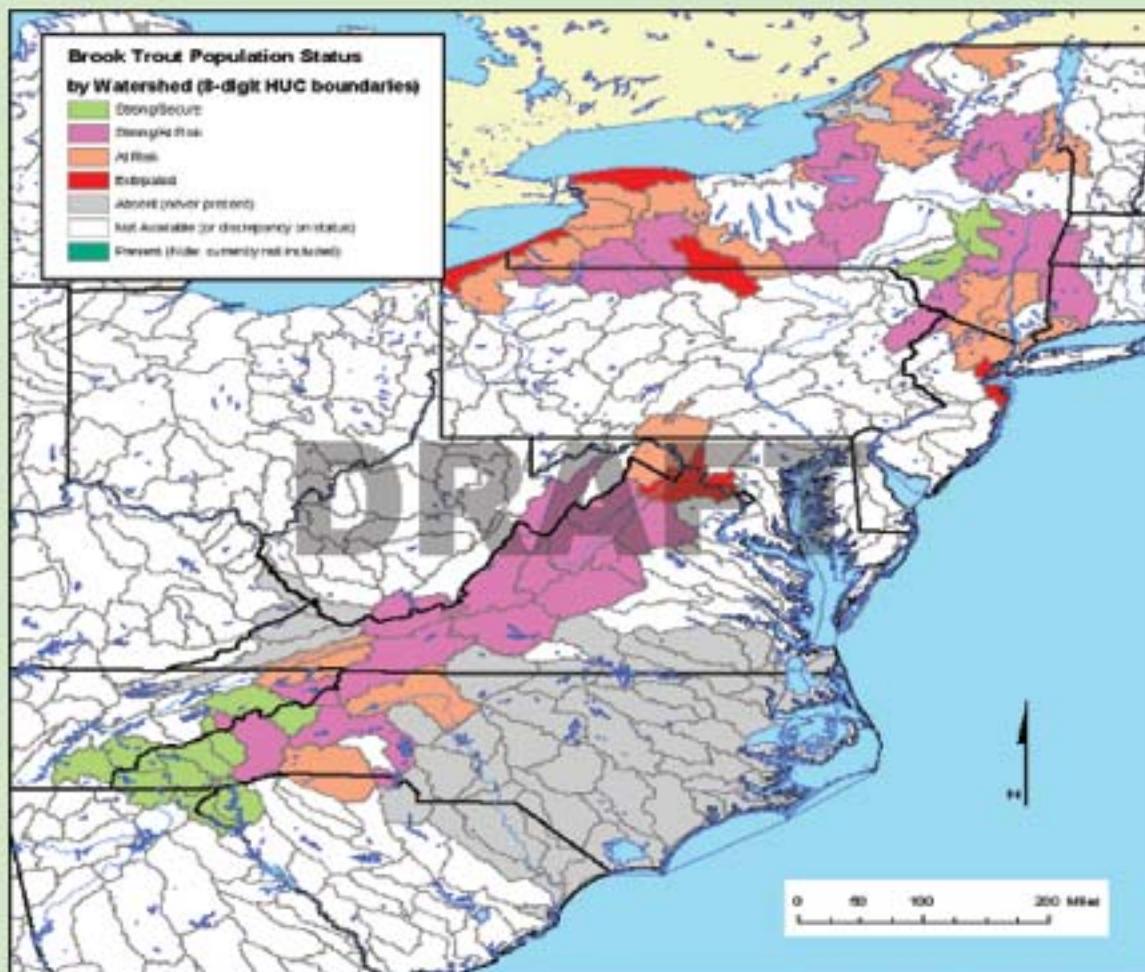


Brook Trout Population Status Project

The National Biological Information Infrastructure (NBII) (www.nbi.gov) is a broad, collaborative program to increase access to U.S. biological resources data and information through regional and thematic nodes. The thematic Fisheries and Aquatic Resources (NBII-FAR) node and the regional Southern Appalachian Information Node (NBII-SAIN), are working together with Federal and State management agencies and nongovernmental agencies to share information on eastern brook trout (*Salvelinus fontinalis*). The Eastern Brook Trout project is being used as a prototype for the planned National Fish Habitat Assessment Project, that is in preliminary planning stages of FWS, USGS/NBII, state, nongovernmental and other federal partners.

As an initial phase in this project, volunteers from three states (New York, North Carolina, and Virginia) provided preliminary data and feedback on whether brook trout population status could be assessed using 8-digit Hydrologic Unit Codes (HUCs). These volunteers were asked to assess each watershed area following the six categories based on a study of seven native [western] salmonid taxa (Thurow 1997) and to provide feedback on whether this level of detail could provide any meaningful management information. The smallest 8-digit HUC is 448,000 acres (NRCS).



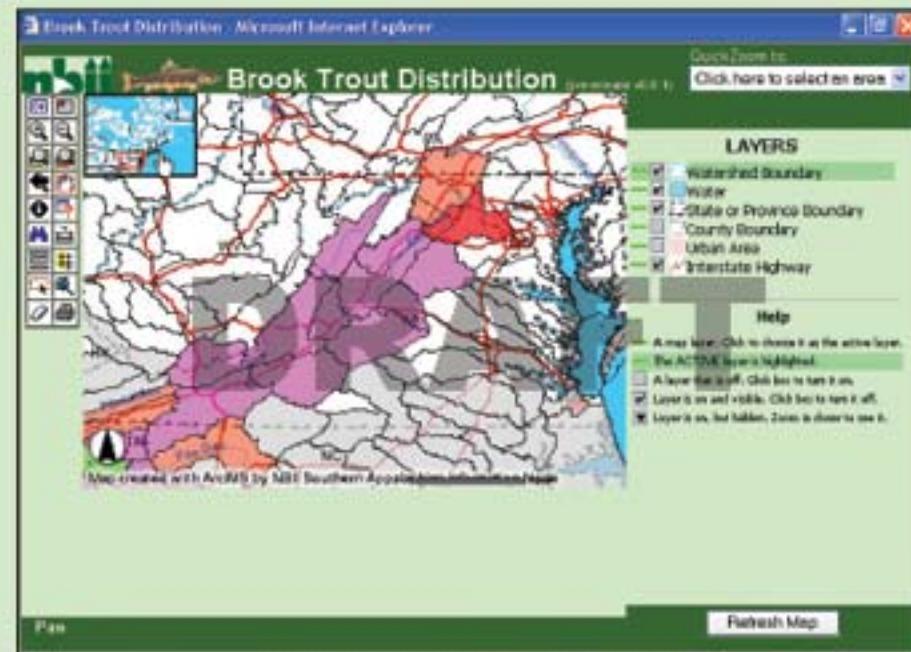
Preliminary data on Brook Trout Population status provided by New York, North Carolina and Virginia

References:

Thurow, R. F., Lee, D. C., and Rieman, B. E. 1997. Distribution and status of seven native salmonids in the Interior Columbia River Basin and portions of the Klamath River and Great Basins. *North American Journal of Fisheries Management* 17:1094-1110.

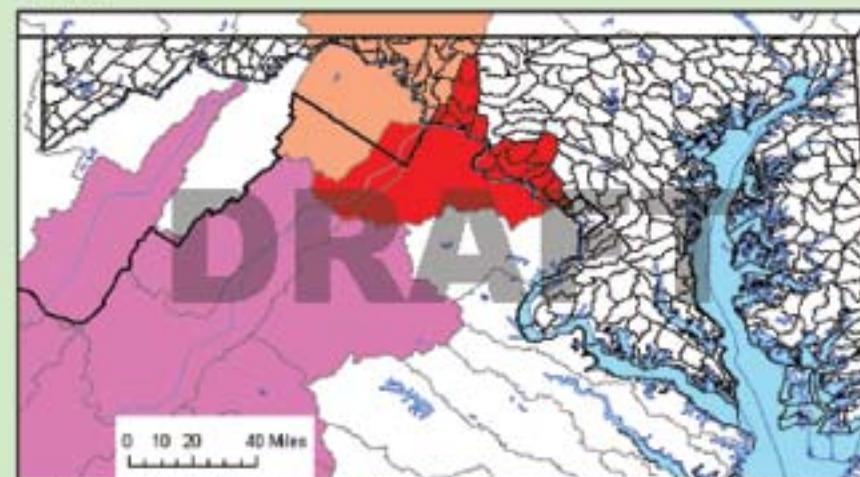
NRCS. Natural Resources Conservation Service National Cartography and Geospatial Center. Overview and History of Hydrologic Units and the Watershed Boundary Dataset (WBD). Available online (accessed 05Aug2004): <http://www.nrcs.nrcs.usda.gov/branch/gdb/products/watershed/history.html>

Poster created and produced by Shelaine Curd-Helrick at Information International Associates Inc. <http://www.iiaweb.com/>



Brook Trout Distribution: ArcIMS application

As part of this effort, NBII began developing an ArcIMS application where management agencies can visualize the current assessment of brook trout populations. In June 2004, this initial product was shared with more than 60 individuals from state and federal management agencies and nongovernmental agencies. They discussed the current status of eastern brook trout populations and began developing a strategy to reverse their decline.



Comparison of 8-digit HUCs (in Virginia) and 12-digit HUCs (in Maryland)

The next phases of this project include collaboration with the NBII Mid-Atlantic Node and among Federal and State management agencies and nongovernmental agencies incorporating data and expertise on brook trout populations together to visualize the current population status in the entire region at a finer scale. We are anticipating using 12-digit HUCs; this "sub-watershed level is typically 10,000 to 40,000 acres with some as small as 3,000 acres" (NRCS).