National Rivers and Streams Assessment

Fact Sheet

March 2008

Purpose

Report on the condition of the Nation's rivers and streams.

Help States and Tribes implement rivers and streams monitoring and assessment programs.

Establish a baseline for rivers and conduct a trends assessment on wadeable streams.

What is the National Rivers and Streams Assessment?

The National Rivers and Streams Assessment (NRSA) is a statistical survey of flowing waters of the U.S. This survey is designed to:

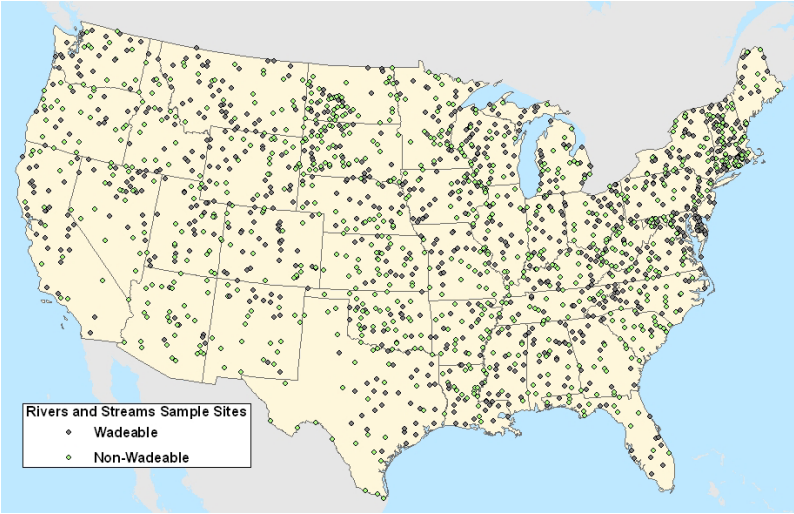
- Assess the condition of the Nation's rivers and streams;
- Help build state and tribal capacity for monitoring and assessment;
- Promote collaboration across jurisdictional boundaries;
- Establish a baseline to evaluate progress; and
- Evaluate changes in condition since the 2004 Wadeable Streams Assessment.

The NRSA is one of a series of water surveys being conducted by the U.S. Environmental Protection Agency, states, tribes, and other partners. In addition to rivers and streams, partners will also study coastal waters, wetlands and lakes in a revolving sequence. The purpose of these surveys is to generate statistically-valid and environmentally relevant reports on the condition of the Nation's water resources.

What key questions will the National Rivers and Streams Assessment address?

EPA will collaborate with State and Tribal partners to answer three key questions of the NRSA:

1. What percent of the Nation's rivers and streams are in good, fair, and poor condition for key indicators of ecological health and human influence?
2. What is the relative importance of key stressors such as nutrients and pathogens?
3. What are the trends in stream condition since the Wadeable Streams Assessment?



What flowing waters are included?

All streams and rivers within the contiguous U.S. that have flowing water during the study index period are included in the NRSA. This includes wadeable and non-wadeable rivers and streams, run-of-the-river ponds and pools, and Great Rivers. Not included are the portions of tidal rivers up to the head of salt.

What is the sampling design for the NRSA?

The sampling design for this survey is a probability-based network that will provide statistically-valid estimates of condition for a population of rivers and streams with a known confidence. A total of 1,800 sample sites were selected to represent the condition of rivers and streams across the country, 900 in each of the two categories of waters (wadeable and non-wadeable). Of the wadeable sites, 450 were selected from the original 2004 Wadeable Streams Assessment.

What will be measured?

The survey will measure a wide variety of variables intended to characterize the chemical, physical, and biological condition of the Nation's flowing waters. These include water chemistry, nutrients, chlorophyll-a, sediment enzymes, enterococci, fish tissue, physical habitat characteristics, and biological assessments including sampling of phytoplankton, periphyton, benthic macroinvertebrates, and fish community.

What is the status of the survey?

Two initial planning sessions for the NRSA were held in January and April 2007. At these meetings, states, tribes and other partners discussed sampling design, indicator selection, reference condition, data analysis, and how to use the surveys to enhance states' and tribes' ability to manage water quality. Discussions also addressed the inclusion of sub-populations such as urban, agricultural and forested areas.

State, tribal, and federal experts established workgroups to select appropriate survey indicators and field and analytical methods. Recommendations were then brought to the larger Steering Committee for final decisions and approval.

In March 2008, the state of Oklahoma hosted the first "train the trainer" session for field sampling methods. Field crews will attend training sessions held around the country in spring 2008, with field sampling to begin in summer 2008 and continue during summer 2009. A final report is scheduled for 2011.

What is the schedule for the NRSA?

The time line below lists the major phases of the survey and the year(s) they will be accomplished.

Activities				
2006 – 2007 →	2007 →	2008-2009 →	2009-20010 →	2011 →
Research	**Design**	**Field**	**Lab/Data**	**Report**
Scientific issues	Target population	Training	Lab analysis	Data analysis
Policy issues	Indicators	Site reconnaissance	Lab quality assurance	Presentations
Supplemental data analysis	Field/ Lab practices	Sample collection	Data entry	Peer review
Methods refinement	Quality assurance plan	Field quality assurance	Data quality assurance	Final report

For more information visit: www.epa.gov/owow/riverssurvey/

Or contact:
Treda Smith (Smith.treda@epa.gov)
Ellen Tarquinio (Tarquinio.ellen@epa.gov) or
Susan Holdsworth (Holdsworth.Susan@epa.gov)
Assessment and Watershed Protection Division (4503T)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

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