

The National Water Program Research Strategy



Strategy Objectives

The *National Water Program Research Strategy* (the *Strategy*) comprehensively defines the research needed by the National Water Program to address EPA's Strategic Goals and Sub-objectives for clean and safe water.

The *Strategy* will achieve three objectives:

- ensure the national Water Program's research, science, and technology needs are identified and documented in a comprehensive plan that supports our commitment to collaborative corporate planning, prioritization, and research management to meet the environmental goals of the National Water Program;
- expand research partnerships and collaborations across EPA and the federal research family;
- engage the broader research community in the investigation of water research needs.

What you will find in the *Strategy*:

Four Priority Research Themes

Five Technical Tool Areas

A Three Tiered Hierarchy of Research Needs



The *Strategy* is available online at: www.epa.gov/waterscience/strategy.

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Four Research Themes

The *Strategy* is organized in four chapters that discuss high level research Themes selected by the OW Executive Committee for Research (ECR) to represent comprehensive water research priorities.



Healthy Watersheds and Coastal Waters Research Needs

Research under this theme is used by programs to improve water quality to protect and restore waters to their designated uses, thereby protecting the health of humans, aquatic life and wildlife.

Safe Drinking Water Research Needs

Research under this theme is used in programs that provide safe drinking water and protect sources of drinking water.

Sustainable Water Infrastructure Research Needs

Research under this theme is used in programs that protect water resources by promoting conservation and efficient water use, supporting innovative drinking water and wastewater infrastructure design and renovation, enabling effective decentralized wastewater treatment programs, evaluating point source abatement and control programs, and other wastewater management functions.

Water Security Research Needs

Research under this theme investigates ways to better secure the nation's drinking water and wastewater systems against threats and attacks, with a focus on the nation's drinking water and wastewater supply, infrastructure, treatment, and distribution systems.

Technical Tool Areas

To organize the research needs within each theme and communicate them more clearly to collaborators, the research needs were grouped by the type of technical tool areas they address. Research needs fell into the following five technical tool areas.

- Aquatic Life Health Effects
- Human Health Effects
- Method Development
- Occurrence and Exposure
- Treatment Technologies and Effectiveness

Tiered Hierarchy of Needs

The research needs within each technical tool area were sorted into three tiers to communicate the relevant driver and urgency. The criteria to classify a need for each tier are given below.

- Tier 1: On critical path to satisfy a statutory, regulatory, court ordered, or Agency/Office strategic obligation.
- Tier 2: Supports, augments, or improves existing and adequate tools, guidance, or policy, or would enhance new critical path research products.
- Tier 3: Investigates potential environmental concerns of the future, or takes advantage of a serendipitous opportunity to leverage resources or an initiative.