

## National Water Quality Monitoring Council

RESOLUTION RECOMMENDING THAT THE ADVISORY COMMITTEE ON WATER INFORMATION ACCEPT THE RECOMMENDATION THAT THE NATIONAL WATER QUALITY MONITORING COUNCIL DESIGN A COLLABORATIVE AND MULTIPURPOSE NATIONAL NETWORK OF REFERENCE WATERSHEDS FOR FRESHWATER STREAMS

**Whereas**, a significant challenge faced by water resource scientists in the public and private sectors is the need for reliable data and information from watersheds that are minimally disturbed by human activities to provide: (1) an understanding of natural patterns of variability necessary to differentiate changes from those due to land and water use from those changes associated with natural climatic cycles; and (2) reference information that can inform water management decisions such as those guiding the establishment of water-quality criteria and establishing appropriate expectations for watershed restoration.

**Whereas**, the National Water Quality Monitoring Council has been working to implement The Strategy for Improving Water-Quality Monitoring in the United States and is recommending the development of a collaborative and multipurpose, national network of reference watersheds and monitoring sites that would provide quality assured data and information to address the aforementioned needs; and,

**Whereas**, the Council believes that the needs expressed in this request, and the examples established through the design and implementation of the Ground Water Monitoring Network through the Subcommittee on Groundwater, can be the basis of an efficient, logical, and sustainable approach; and,

**Whereas**, the Council can appoint an executive committee and can assemble technical steering subcommittees to undertake this substantial effort:

**Now Therefore Be it Resolved** the Council recommends that the Advisory Committee on Water Information accept its request, subject to the following:

1. The scope of the collaborative effort will initially be limited to freshwater streams. If successful, future collaborations would expand to freshwater lakes and wetlands. A tiered framework consisting of three different types of activities linked together by research and modeling will be used to better understand the interrelations between stream hydrology, water quality, aquatic biota, and quantitative measures of groundwater, atmospheric deposition, and other components of the hydrologic cycle (see attachment).
2. The network design will emphasize the chemical, physical, and biological aspects of water quality and water quantity as important to evaluating the influence of land use change, water use, atmospheric deposition, and climate change on freshwater ecosystems.
3. The network design will integrate, to the extent possible, with the existing reference site networks.
4. Adequate time and resources are available through the participants in this collaborative effort.

This resolution was approved by the ACWI membership on July 13, 2011.