Large-scale Monitoring Data Inventory Projects Sponsored by US Geological Survey

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Two related efforts are being undertaken by the US Geological Survey (USGS) of the US Department of the Interior (DOI) to consolidate information and data from monitoring networks over large geographic areas in the US – one at a regional scale and one at a national scale.

Development of a Geospatial Inventory of Environmental Monitoring Resources in the Southeast: DOI Southeast Climate Science Center. The DOI Southeast Climate Science Center (SECSC), based at NC State University, is initiating a project with the objective to develop an inventory of physical, chemical, and biological data from terrestrial, aquatic (including coastal), and atmospheric monitoring networks in the southeast region. A primary focus will be the development of a geospatially-searchable portal for metadata about existing monitoring networks. The region of interest is the region encompassed by the SECSC and the Southeast Association of Fish and Wildlife Agencies. The metadata portal will provide links to data useful for science being conducted as part of the Science Plan for the SECSC, which is designed to provide physical and biological research, ecological forecasting, and multi-scale modeling for Southeastern resource managers. The portal will also provide a centralized location for information and links to data relevant to adaptive management efforts and decision-support tools developed in conjunction with Landscape Conservation Cooperatives, and to other conservation partners.

A National Compilation and Inventory of Water-Quality Monitoring Data: USGS National Water Quality Assessment Program. Specific objectives of this project are to compile readily available water-quality data from federal, state, and regional government agencies, and non-governmental organizations; inventory, catalogue, and summarize these data; and determine the suitability of these data for addressing key environmental issues, such as energy development, nutrient enrichment, land use effects, and climate change. Water quality data types targeted in the compilation include surfacewater and groundwater chemistry, aquatic biota, and streamflow. This compilation will be used initially to perform an inventory describing current and historic water-quality monitoring data available to address regional- to national-scale water resource issues; and to delineate available data relevant for several current or planned projects, such as the National Network of Reference Watersheds and Monitoring Sites and "Cycle 3" (2013 to 2023) of the USGS National Water Quality Assessment Program. The USGS will use this data compilation in collaboration with other agencies involved with multi-state water-policy issues, assessments, and planning. Data from 32 states in the northeast, southeast, and midwest U.S. are currently being compiled, with the intent to expand to national coverage.

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