
Plan Overview

A Data Management Plan created using DMPTool

Title: Watershed Data Management Plan

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Watershed Data Management Plan

Types of data

Preservation of all data, samples, physical collections and other supporting materials needed for long-term earth science research and education is required of all EAR-supported researchers.

The data to be collected will be water flux from terrestrial regions to streams and rivers. This flux will be collected monthly at three sites for two years. There will be seventy two data points. The second type of data will be Input Files for for the computer program Hydrological Simulation Program-Fortran (HSPF). The third type of data will be water flux and uncertainties in water flux that are generated using the computer Parameter Estimation (PEST). The third type of data will consist of the flux value ever hour for a period of two years at three different sites.

Data and metadata standards

Data archives must include easily accessible information about data holdings, including quality assessments, supporting ancillary information, and guidance and aids for locating and obtaining data.

The GPS coordinates of the sampling sites will be reported along with the sampling periods. The description of the input file data and the flux data are described in documentation for the computer program HSPF. The manner in which uncertainties are associated with the flux data will be explained using the documentation for the computer program PEST.

Policies for access and sharing

It is the responsibility of researchers and organizations to make results, data, derived data products, and collections available to the research community in a timely manner and at a reasonable cost. In the interest of full and open access, data should be provided at the lowest possible cost to researchers and educators. This cost should, as a first principle, be no more than the marginal cost of filling a specific user request. Data may be made available for secondary use through submission to a national data center, publication in a widely available scientific journal, book or website, through the institutional archives that are standard for a particular discipline (e.g. IRIS for seismological data, UNAVCO for GP data), or through other EAR-specified repositories. Data inventories should be published or entered into a public database periodically and when there is a significant change in type, location or frequency of such observations. Principal Investigators working in coordinated programs may establish (in consultation with other funding agencies and NSF) more stringent data submission procedures.

The three types of data will be published in peer-reviewed journals. The field data will also be submitted to the United States Environmental Protection Agency WQX data system. The second type of data will be offered to the HSPF database named HSPFParam.

Policies and provisions for re-use, re-distribution

For those programs in which selected principle investigators have initial periods of exclusive data use, data should be made openly available as soon as possible, but no later than two (2) years after the data were collected. This period may be extended under exceptional circumstances, but only by agreement between the Principal Investigator and the National Science Foundation. For continuing observations or for long-term (multi-year) projects, data are to be made public annually.

The results of the work will be published during or at the end of the funding period. The data will thus be available from journals or from the US EPA WQX Data System or the HSPF HSPFParam database. The data generated is expected to be useful to anyone doing watershed modeling work.

Plans for archiving and preservation of access

Remember - Data may be made available for secondary use through submission to a national data center, publication in a widely available scientific journal, book or website, through the institutional archives that are standard for a particular discipline (e.g. IRIS for seismological data, UNAVCO for GP data), or through other EAR-specified repositories.

Both peer-reviewed journals and the USEPA WQX system are expected to store the data for a long period of time.