

INITIAL FORMATION OF THE U.S. GEOLOGICAL SURVEY
HYDROCLIMATIC DATA NETWORK

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ABSTRACT

The U.S. Geological Survey is working to define a hydroclimatic data network. The Geological Survey collects stream discharge data at more than 7000 sites throughout the United States. Many of these stations are operated to supply information about specific activities such as flood control, irrigation projects, or hydropower generation. As a beginning, the Geological Survey will attempt to identify stations that represent natural streamflow. Several lists of stations representing "natural" streamflow have been compiled in the past. While there is some overlap among these lists, a consistent compilation is preferred. The present effort is to produce one list identifying those stations having periods of record which would be suitable for mesoscale climatic analyses.

The selection criteria being used are:

1. Long records - at least 20 years but preferably 50 years or more,
2. Good quality data - particularly in terms of the stage and discharge accuracy,
3. Broad geographic and diverse climatologic representation,
4. Minimal anthropogenic effects - especially in the form of regulation or diversion, and
5. Medium size basin - ideally on the order of 100 to 1000 square miles.

In addition, the Geological Survey will review discontinued stations with long records for possible inclusion in the network. This will provide a single, well-defined data set of high-quality discharge stations suitable for mesoscale climatic analyses.