

INPUT DATA

The model input data are collected from various sources and reformatted to form a consistent framework for the model to use. The input data can be split into three categories; meteorology (Table 9-2), consumptive use (Table 9-3) and the input data that defines the watershed (Table 9-4).

Meteorology

The precipitation and potential evaporation time-series define the primary hydrologic drivers for HSPF. For HSPF, potential evaporation is defined as the evaporation from a shallow body of water subject to full exposure to sun and wind.

Both precipitation and the core evaporation datasets came from the National Land Data Assimilation Systems (NLDAS). The NLDAS is a quality controlled, meteorological dataset developed to be spatially and temporarily consistent across the contiguous United States (Xia, et al., 2012).

NLDAS has core project support from the NOAA Climate Program Office's Modeling, Analysis, Predictions, and Projections (MAPP) program. It is a collaboration project among the following groups:

- NOAA/NCEP's Environmental Modeling Center (EMC)
- NASA's Goddard Space Flight Center (GSFC)
- Princeton University
- University of Washington
- NOAA/NWS Office of Hydrological Development (OHD)
- NOAA/NCEP Climate Prediction Center (CPC)

The NLDAS project also includes four different hydrology models, with the precipitation data as part of the forcing dataset. Table 9-5 lists all the variables in the forcing dataset.

Table 9-2. HSPF meteorological boundary conditions

Data	Data Source
Precipitation	National Land Data Assimilation System (NLDAS)
Evaporation	National Land Data Assimilation System (NLDAS) and USGS Evapotranspiration project in Florida