GIS Applications in Hydrology and Hydraulics Questionnaire

September 30, 2008

The Subcommittee on Hydrology set up a workgroup to organize and publicize information on GIS applications in the fields of hydrology and hydraulics. This scope has been expanded to include related water quality, watershed management, and ecological sciences GIS applications. This work is intended to make information on GIS applications in hydrology and hydraulics more generally available. This questionnaire is designed to gather limited but key information about a particular GIS application in order for a potential user to decide if the application fits his/her computer system, data requirements, and physical system to be modeled.

These applications should be public domain and supported by user documentation. Availability on the web is not necessary if the application can be distributed on CD ROM or through e-mail requests. If a short abstract, fact sheet, or technical paper is available on the application, please attach a copy.

Name of Application, date, version number: BASINS version 4.0

Contact (with e-mail, web site, and/or phone number):
http://www.epa.gov/waterscience/BASINS/ , James N. Carleton, carleton.jim@epa.gov

Brief Description: BASINS is an extensible, open-source GIS-based (MapWindow) Decision Support System that integrates watershed models with ready access to data (flow, meteorologic, water quality, and various GIS layers). BASINS includes tools for setting up surface water model runs, and processing and visualizing data and model output. See website for more information.

Platform/operating system: Windows 98 or above.

Web-based or desk-top application ? Desk-top with web based data through a Data Download Tool.

Data Requirements: Windows 98 or better.

Data format and compatibility: ESRI GIS standardized shapefile or GRID format among others.

Will the application import and export data files? Yes, both.

Is the application flexible to couple with external programs and user created executables? Yes

Are system and user documentation available? Yes, on website and online under the Help Menu. Are example applications available? yes

Does the application require prior installation of ESRI software? No, Open source Mapwindow software (www.mapwindow.org) .   If so, which products?

Is there a user group or hotline-type support? There is a listserve called BASINSINFO that users can subscribe to.

Please return the questionnaire to William Merkel at william.merkel@wdc.usda.gov. If there are questions or concerns please contact him at 301-504-3956. Thank you.