

## Hydro Data Model

### Data Model User Group

Join the [data model user group](#) if you are an existing ArcGIS customer and want to learn more about design and architecture of personal or enterprise Geodatabase and become a part of Esri's growing data model community.

ESRI has developed models for Water Resources and has focused on surface water with input from key state, national, and international contributors. The ArcGIS Hydro model is available for review and download. We are also supporting a groundwater data model initiative and will eventually consider the full hydrologic cycle as part of the Hydro effort.

### ArcHydro Training Classes!

The instructor-led training classes provide an introduction to the Arc Hydro data model and associated software tools supporting hydrologic and hydraulic analysis with GIS. Two courses; ArcHydro GIS for Water Resources, and Hydrologic and Hydraulic Analysis can be found by searching the [ESRI Instructor-Led Training site](#).

If you are interested in downloading the most recent version of the ArcHydro tools please contact [ArcHydro](#).

For more information on the Water Resources data models please contact the [Water Resources Consortium](#). This site is hosted by the Center for Research in Water Resources (CRWR) of the University of Texas at Austin.

### User Forums

Visit the [Esri data model discussion forum](#) to share your ideas, thoughts, and questions with other users.

### Downloads - Case Studies

These Case Studies are a good starting point to learn about best practices for this discipline. These project examples include sample geodatabases, map documents, and documentation.

- [San Marcos Basin Case Study](#) Geodatabase (.mdb) and Map Document (.mxd) - zip format, 28490 kb
- [Hydro Data Model Poster](#) ArcGIS Hydro Data Model Visio.pdf - zip format, 17829 kb
- [ArcHydro GIS for Water Resources](#) pdf file - zip format, 19 kb
- [Hydrologic and Hydraulic Analyses Using ArcGIS](#) - zip format, 24 kb
- [Comprehensive Terrain Preprocessing Using Arc Hydro Tools](#) .pdf - zip format, 3756 kb

### Downloads - Design Templates

The Design Templates are the result of the community-based design process. The general concepts and terms for this discipline are described here. Tools and examples to create a template data model are also included for advanced users.

- [Arc Hydro Data Model Template](#) Visio, MS Access - zip format, 18865 kb
- [Framework Microsoft Repository](#) Microsoft Access/JET 4 - zip format, 254 kb
- [Hydro Microsoft Repository](#) Microsoft Access/JET 4 - zip format, 315 kb
- [Visio 2002 Update](#) Visio 2002 - zip format, 1050 kb

## Downloads - Tools

These tools have been developed together with the data models to provide new ways to leverage each industry specific model. They are designed to work with the data model templates and case studies, and can be used with the model, or with other data sets. These tools can be found on ArcScripts, and are not supported Esri software.

- [Arc Hydro Tools version 1.1 Final for ArcGIS 8.3](#) pdf, xml, htm, png, jpg, exe, msi, mso, txt - zip format, 19802 kb
- [Arc Hydro Tools version 1.1 Final for ArcGIS 9 \(9.0 or 9.1\)](#) pdf, xml, htm, png, jpg, exe, msi, mso, txt - zip format, 18819 kb
- [Arc Hydro Tools version 1.2 Final for ArcGIS 9.2](#) .pdf, .exe, .msi, and .txt - zip format, 18271 kb
- [Arc Hydro Tools version 1.2 Final for ArcGIS 9.0/9.1](#) .pdf, .exe, .msi, and .txt - zip format, 18277 kb
- [Arc Hydro Tools version 1.3 Final for ArcGIS 9.2/9.3](#) .pdf, .exe, and .txt - zip format, 21157 kb
- [Arc Hydro Tools version 1.4 Final for ArcGIS 9.3/9.3.1](#) .pdf, .exe, and .txt - zip format, 228 MB - URL format

## User Community

Oakland county has completed a version of their Hydrography data model that includes design concepts from ESRI's ArcHydro data model and the National Hydrography Dataset (NHD) known as NHDinGEO. The model contains point, line, and polygon geometry as well as a geometric network and two relationship classes. Also included in the model are tables that manage unique IDs across the entire Hydrography dataset. These IDs are helpful when using the ESRI ArcHydro tools, which model hydrologic flow for water resource management. The model can be found at the [Oakland County Hydrography Model Website](#).

For more information on the Hydro Data Model check out the [Arc Hydro Book](#).

Please check [Irrigation data model](#) created for Irrigation District user community. Any [feedbacks](#) are appreciated in order to enhance the model.