Chapter 8. Fox River Watershed Investigation Web Site

The Fox River Watershed Investigation Web site (http://ilrdss.sws.uiuc.edu/fox) is the information hub for the project. It is hosted as part of the Illinois Rivers Decision Support System (ILRDSS) to provide easy access to data and information used in this project.

8.1. Current Features

Current features displayed on the Fox River Watershed Investigation Web site (Figure 8.1) include a publications database, publications bibliography, Web Mapping application, and downloadable versions of Geographic Information Systems (GIS) datasets, water quality database, Data Loader & Viewer program, and the phase I report.

8.2. Publications Database

This database contains links to publications found in the initial literature review of the study area. It is searchable by title, authors, abstract, time period, and several other criteria. The current database contains 35 publications.

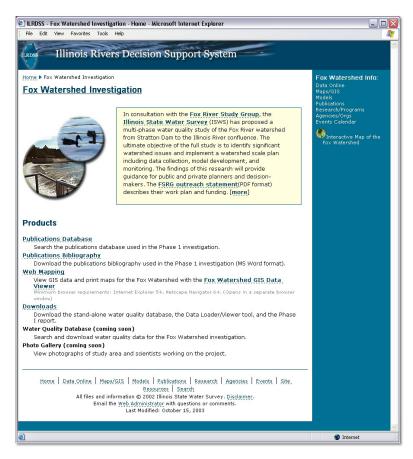


Figure 8.1. Fox River Watershed Investigation Web site

The publications database is stored in SQL Server 2000 as a series of relational database tables. Figure 8.2 below shows a schematic of the database design.

A master publications table (1) is directly linked to a series of cross-referenced tables (2), which, in turn, are linked to tables describing models, water quality parameters, features (lakes, streams, etc.), and sample sites (3). This design provides maximum flexibility by allowing any number of publications to be associated with any number of models, parameters, etc.

8.3. Publications Bibliography

This document cites literature sources used in phase I research. It also includes publications not specific to the Fox River Watershed.

8.4. Web Mapping Application

Using a Web browser, the user can view geospatial data and print maps of the Fox River watershed. User instructions are found by loading the Fox River watershed GIS Data Viewer and clicking on the link titled "help."

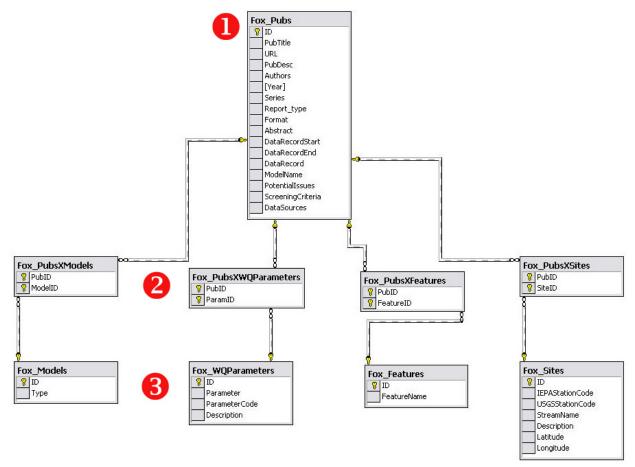


Figure 8.2. Diagram of the Fox River watershed publications database

8.5. Geographic Information System Datasets

All GIS datasets used in the Web mapping application are available for individual download from the ILRDSS Web site.

Geospatial datasets for the project were compiled from a variety of sources and sometimes edited to fit within the Fox River watershed boundary. Metadata for each dataset can be viewed at the Web site either using the tools available within the Web mapping application, or by visiting the project homepage (http://ilrdss.sws.uiuc.edu/fox) and clicking on the following links: "Downloads" \rightarrow "GIS Datasets" \rightarrow Metadata button (meta) next to each dataset.

Current GIS datasets include, but are not limited to:

Ambient Water Quality Monitoring Station Locations
Discharge Gaging Station Locations
Elevation (DEM)
FoxDB Water Quality Sample Locations (updated periodically)
Hydrography (rivers, streams, lakes) National Hydrography Dataset
Landcover
NPDES Permit Locations
Sediment Monitoring Station Locations
Dams on the main stem of the Fox River
Towns
Watershed boundary (HUC12)

8.6. Downloads

Weather Stations

Several products can be downloaded from the Web site including the FoxDB water quality database (Microsoft Access format), Data Loader & Viewer program, GIS datasets, and the phase I report. Appendix 2 provides the data dictionary for the FoxDB. Appendix 4 provides directions for installing and using the Data Loader & Viewer program.