

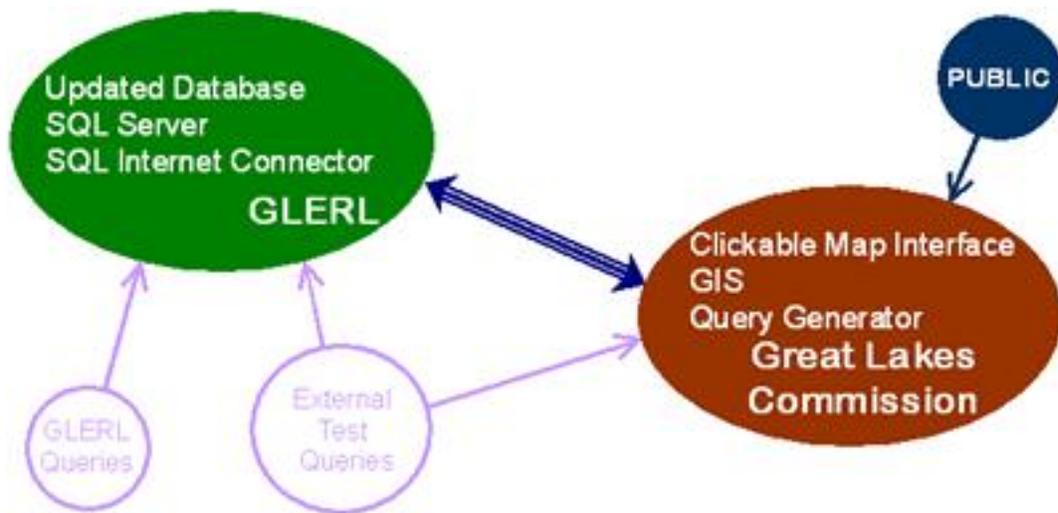
# Great Lakes Hydrometeorological Station Directory Database and Internet Web Development

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**This project was completed in 2001**

## Overview

A new directory of Great Lakes Hydrometeorological Station information will be built to serve those interested in hydrometeorological data availability within the Great Lakes. The new directory will consist of an updated database, maintained at GLERL, and available over the World Wide Web. The Great Lakes Commission will send, to GLERL, database queries over the World Wide Web as users of their site generate them. Their site will include a clickable map interface, currently built with Geographic Information System (GIS) technology on their in-house computers. From a user's perspective, he or she will be able to quickly and easily identify subsets of hydrometeorological stations based on location, data type, periods of record, and so forth through a graphical interface at a single web site and have an immediate listing of the information in any form desired.



## 2001 Accomplishments

The hydrometeorological station directory database and map interface were completed with the Great Lakes Commission; see: Great Lakes Hydrometeorological Station Directory.

## **2000 Accomplishments**

Updated information for the Great Lakes Hydrometeorological Station Directory. GLERL acquired station histories and put them into a common database format. We are still exploring infrastructure requirements and continuing costs of regular updates.

Built the database for the directory. All available information was added to a new database accessible via structured query language (SQL), installed this year at GLERL, and made available over the World Wide Web. This involved the creation of special web server software (written in Pascal) for the web site to allow the processing of embedded SQL commands in web site access code. The Great Lakes Commission transparently queries the database at GLERL in response to users of their web site. It consists of a clickable map interface operating on their geographic information system and integrated with a web server. The interface allows users to easily and intuitively formulate transparent queries for the station histories.

## **Products**

The Great Lakes Hydrometeorological Station Directory Database. It is accessible only at GLERL through a structured reference with embedded SQL commands.

The Great Lakes Hydrometeorological Station Directory Interface. It allows access to the database and is accessible over the Great Lakes Information Network (GLIN) at the Great Lakes Commission and consists of integrated GIS and web server applications. It is available now only in draft form and experimentally accessible (for now) over the World Wide Web at Great Lakes Hydrometeorological Station Directory.