

GLBET GIS/DSS Committee FY2003 Action Plans

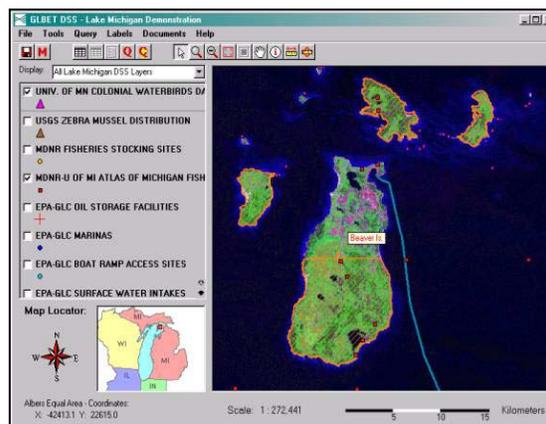
Geographic Information Systems (GIS) and Decision Support Systems (DSS) are mechanisms that can be used to provide managers with information needed to make sound resource management decisions. The role of the GIS/DSS Committee is to examine the use of geospatial data, technologies, and analyses within the Great Lakes basin and assist the other committees with implementing this technology to effectively manage the resources.

Strategic Plan for Developing Implementation Recommendations

Over the last two years, the GIS/DSS committee has developed a draft strategic plan for the Team by investigating the capabilities and issues within both regions and recommending strategies for implementing the technology. During FY2003, the GIS/DSS committee will finalize the strategic plan and present this information to the Team, Region 3, and Region 5.

Lake Michigan Islands Pilot Decision Support System

The GIS/DSS committee determined that the understanding and use of geospatial technologies was limited by the exposure to Service personnel. A pilot project was developed in coordination with the GLBET Islands committee to identify and prioritize island information within Lake Michigan. The Lake Michigan Islands Pilot DSS has been developed by the USGS – Upper Midwest Environmental Science Center and distributed on cd to the committee members. In FY2003, the GIS/DSS committee will continue to improve the DSS and meet with Islands committee members and Refuge personnel to determine the ease-of-use, identify further needs, and update the functionality of the system.



Great Lakes Basin Decision Support System

With the completion of the Lake Michigan Islands Pilot Decision Support System, the GIS/DSS committee is expanding the system to include the remaining Great Lakes basins. In FY2003, the committee will begin developing decision support systems for each individual lake including Lake Ontario, Lake Erie, Lake Huron, and Lake Superior. Each system will provide refuge personnel and other interested parties the ability to answer questions related to islands within the Great Lakes basin using spatial and non-spatial data.

Lake Sturgeon Tributary Inventory

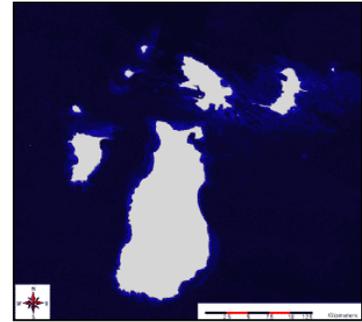
Coordination and information sharing is an important part of managing the resources on a landscape level. The GIS/DSS committee has assisted the GLBET Lake Sturgeon committee with developing a Lake Sturgeon tributary database. Currently, field staff have been

StudyID	Study Start	Study End	Ongoing	Point of Contact
10101	1995	2001	<input type="checkbox"/>	Baker, E
10201	1995	2001	<input type="checkbox"/>	Baker, E
10202	1954	2001	<input checked="" type="checkbox"/>	Weisser, J
10301			<input checked="" type="checkbox"/>	Bassett, C
10401	1995	2001	<input type="checkbox"/>	Baker, E
10501	1995	2001	<input type="checkbox"/>	Baker, E
10601	1995	2001	<input type="checkbox"/>	Baker, E
10701			<input checked="" type="checkbox"/>	Auer, N
10801			<input type="checkbox"/>	Elliott, R
10901	1995	2001	<input type="checkbox"/>	Baker, E
10902	1954	2001	<input checked="" type="checkbox"/>	Weisser, J

entering Lake Sturgeon sampling information into a database structure that will link to the National Hydrographic Dataset (streams) for display in an interactive web-based application. In FY2003, the GIS/DSS committee will continue the development of the database with the Lake Sturgeon committee and collaborate with the USGS – Upper Midwest Environmental Science Center on the development of the application.

Spatial Data Development for the Great Lakes Basin

The ability to make sound management decisions depends on the quality and availability of information. In FY2003, the GIS/DSS committee will continue to compile and create base layer data for the Great Lakes basin. The first priority is to complete the digitizing of Island polygons for the entire basin (excluding Lake Michigan which was completed by the USGS Great Lakes Science Center. Other data sources will be identified and compiled for aquatic and terrestrial components of the basin.



Great Lakes GIS Coordination

Implementing geospatial technologies within the ecosystem approach of the Great Lakes basin depends on coordination between field stations, programs, regions, agencies, and countries. There are similar projects and efforts under way within the basin by a number of different agencies. Most cooperation and coordination has been through contacts by individual staff or separate working groups. A recent conference call has set up communications between some vital staff within the Great Lakes basin and identified similar projects and areas of overlap where we can start working together. In FY2003, the GIS/DSS committee will be part of a volunteer coordination group and assist with the development of a Great Lakes GIS listserv for sharing information and techniques within the geospatial technology community.