



DEMO INFO



An Introduction to the Rouge Geographic Information System

What is a Geographic Information System (GIS)?

A GIS is a highly specialized computer-based system. It consists of computer hardware and software, a database of information, and the user.

What is a GIS used for?

A GIS is used for organizing spatial information, mapping, and solving complex research, planning, and management problems.

How does a GIS work?

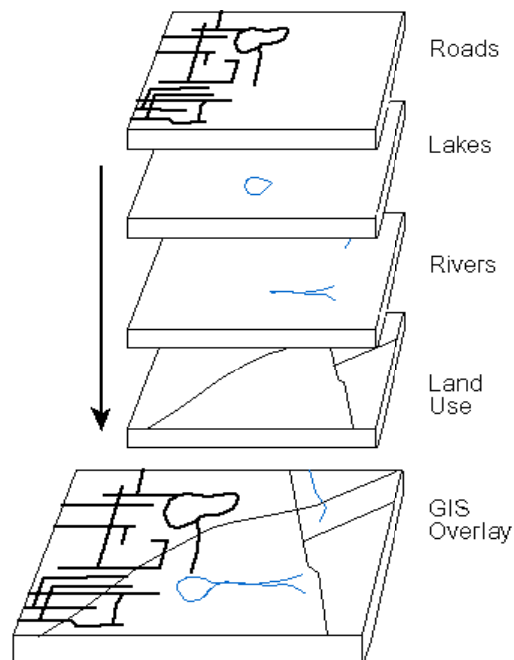
A GIS expands the two-dimensional nature of a map to include information from a database. For example, a map can tell you where a river is located, but a GIS can show you where it is located, what its average flow is, how clean the water is, how many people use it, or how close the nearest boat launch is.

What types of information can be stored in the database?

The data can be either geographical (roads, rivers, soil types, or land use) or non-geographical (water quality, soil erodibility, or business name).

What role does a GIS play in the Rouge Demonstration Project?

The Rouge River National Wet Weather Demonstration Project will take an important step forward in using a GIS to help solve pollution problems and assist various parties in complying with state and federal regulations.



A GIS can overlay many layers of environmental information for planning and analysis.

What general questions will the Rouge GIS answer?

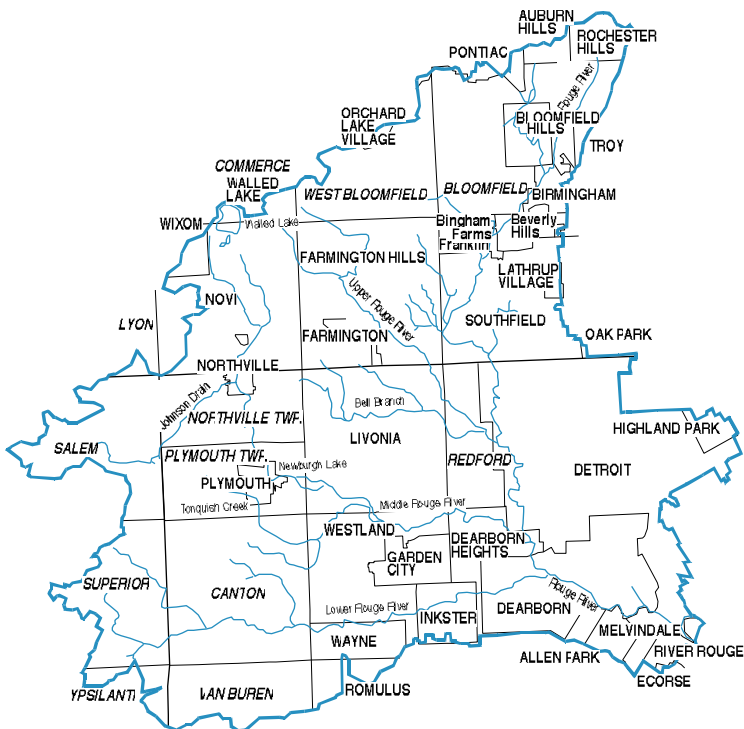
The Rouge GIS will allow users to answer questions concerning: (1) characteristics, (2) spatial conditions, (3) trends, and (4) cause and effect.

Characteristics: Answers the question “what’s here?” It can be used to identify geology, soil types, land uses, zoning, etc. . . at a particular point on the earth’s surface. An example of a question the Rouge GIS could answer is “what’s the land use at this location?” A user could choose the location on a map, display land use information on the computer screen, and find a wetland at that location.

THE ROUGE RIVER PROJECT
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BRINGING OUR RIVER BACK TO LIFE



The Rouge River Watershed – There are 48 communities in three counties within the Rouge River Watershed.

Spatial conditions: Answers the question “where is?” A GIS can select locations which satisfy certain conditions. An example of a question the Rouge GIS could answer is “Where is an area within 50 feet of the Rouge River with sandy soils and steep slopes?”

Trends: Answers the question “what has happened?” GIS users can identify changes in geographic conditions over time. An example of a question the Rouge GIS could answer is “how have land uses in the Rouge River watershed changed since 1978?”

Cause and Effect: Answers the question to “what if” scenarios. This is often referred to as modeling. An example of a question the Rouge GIS will help answer is “What if it rained an inch per hour for three days – what will be the impact on water quality?”

Why is asking these questions important?

These questions have been asked for years. We now have the capability to answer them with the automated techniques of a GIS. With these answers – as well as a whole new list of questions – we can now address a wide variety of environmental problems and implement effective programs for environmental protection.

What else will the Rouge GIS do?

In addition to helping answer questions and supporting management decisions, the Rouge GIS will help us better understand the Rouge River Watershed. By preparing numerous maps, the Rouge GIS will help us visually understand where the pollution problems exist and what we can do to reduce them.

The Rouge GIS will also integrate with the roles and responsibilities of environmental management in Wayne County, creating the foundation for moving the Rouge GIS to other watersheds.

How can the Project help you?

The Rouge GIS is being designed to serve as a warehouse of information. It will help communities manage their resources (both natural and facilities). The Rouge GIS can support, complement, or enhance new or existing geographic information systems in southeast Michigan. Examples of how the Rouge GIS will be able to help include:

- analyses that are not possible (or not economically feasible) at the local level,
- analyses and mapping for communities that do not have a GIS, or
- technical support for communities developing a GIS.

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If you have any questions about the Rouge GIS or the Rouge Project, in general, please call the Rouge Hotline at (888) 223-2363 or visit our web site at <http://www.rouge.com>.

