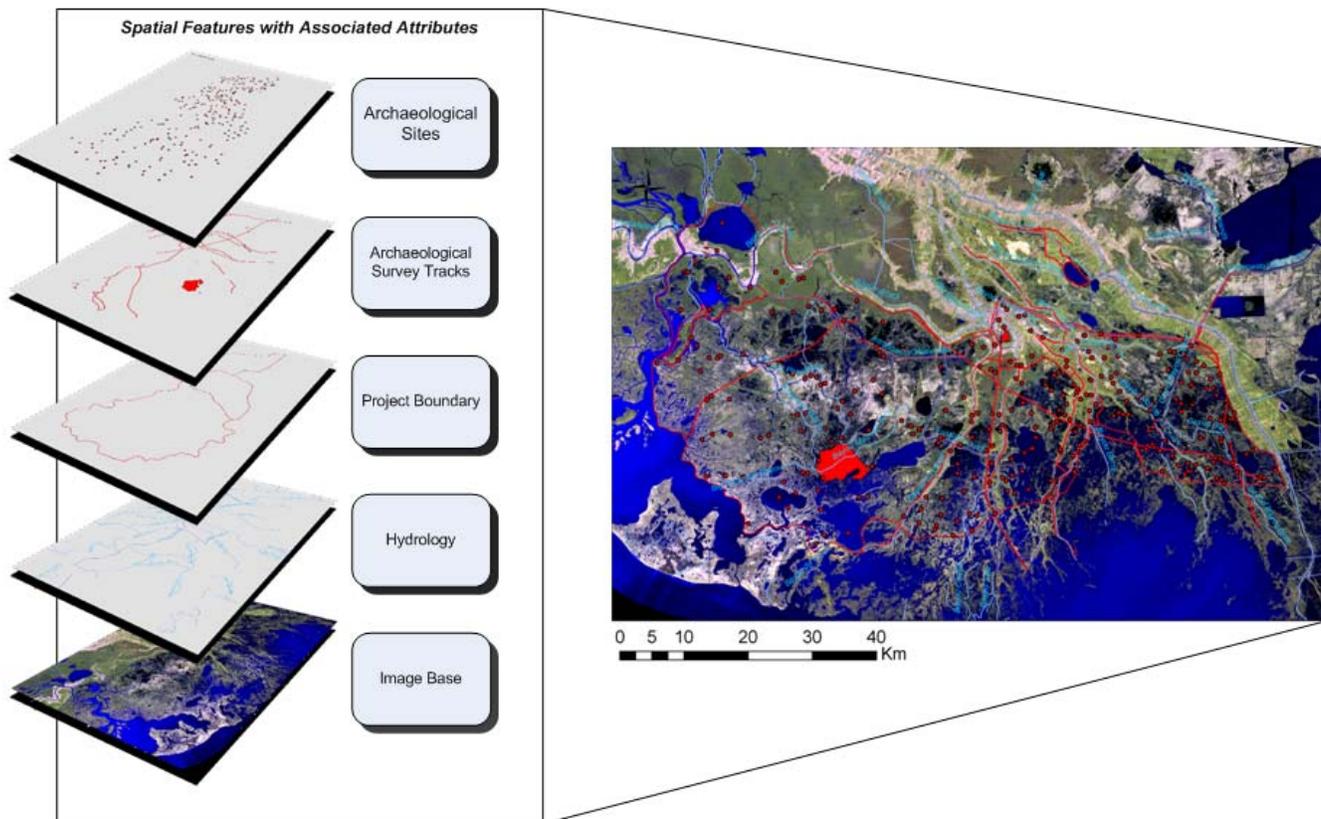




## What is GIS?

Geographic Information System or GIS is a term used to generally define any system developed to “store, manipulate, analyze, and output map-based, or spatial, information.”<sup>1</sup> More specifically, a GIS is a computer-based system comprised of computer hardware, software, personnel, and most importantly, a powerful means of performing complex spatial analysis with resultant display and output information that is stored and maintained within the system itself.<sup>2</sup>



**Figure 1. Generalized GIS Schematic**

In other words, a GIS provides the end-user with a powerful tool that allows for spatial objects or features - such as rivers, trees, topography, or potentially historical buildings or foundations - to be collected, managed, and available for analysis. The GIS also allows for the collection and management of associated non-spatial characteristics, or “attributes”, of those spatial features. Once analysis is complete, the GIS can generate and directly output results as maps, tables, charts, or histograms.

<sup>1</sup> Steinberg, Steven J. and Sheila L. Steinberg. 2005. *Geographic Information Systems for the Social Sciences: Investigating Space and Place*. London, U.K.: Sage Publications, Inc. Pg. 7

<sup>2</sup> *ibid.* pg. 8