The South Florida Information Access (SOFIA) System

Heather S. Henkel[1] and Roy Sonenshein[2]

[1]U.S. Geological Survey, Coastal and Watershed Studies, St. Petersburg, Florida

[2]U.S. Geological Survey, Center for Water and Restoration Studies, Miami, Florida

The South Florida Information Access (SOFIA) system was created by the U.S. Geological Survey (USGS) in 1995. Its mission is to provide easy access to information about research projects and products generated as part of the USGS South Florida Priority Ecosystem Studies (PES) Program and other Federal, state, and local science providers. SOFIA provides this service by integrating information systems and tools enabling efficient storage, organization, and search and retrieval of scientific information about the south Florida ecosystem. SOFIA was designed to benefit three major user groups: USGS program managers and scientists working with the South Florida PES Program, managers and scientists working for other organizations involved with Everglades restoration, and members of the public interested in USGS research and/or the science behind the Everglades restoration effort.

SOFIA is an evolving and dynamic system that builds on the ever-increasing sophistication of new information technology. The current architecture consists of three integrated components: website, data, and metadata. The SOFIA website (*http://sofia.usgs.gov/*) contains links to project descriptions, proposals, publications, data (through links to our data exchange site), metadata, presentations, and contact information, as well as general interest items, such as photographs and posters. The SOFIA site also is a portal through which you can access our extensive database and internet map server (IMS).

Data is served by three mechanisms on the SOFIA website. The Data Exchange (http://sofia.usgs.gov/exchange/) provides access to files organized by project. The projects are further organized using six primary themes: biology, chemistry, ecology, geology, hydrology, and mapping. The second mechanism of serving data is through a web interface (http://www.envirobase.usgs.gov) to an SQL-based database. The third mechanism of serving data is through a web-based map server. The map server, which is being developed using ArcIMS software, will provide a means of accessing information stored in the SOFIA database and the SOFIA data exchange website through a geospatial query. The map server will provide access to related information stored on the SOFIA website and in the SOFIA database.

Large amounts of data have been collected by USGS personnel in south Florida. With good, FGDC-compliant metadata the data are available to a much wider set of customers through web-based queries. The SOFIA web site has all the available metadata accessible by several methods. There is a navigation button for Metadata and each project home page has a listing for its associated metadata for the project and for the data. All of the projects funded in FY 2003 and FY 2004 have current metadata. Work is continuing on updating the metadata for completed projects and for remaining data sets that do not have metadata yet.