



NAS South Weymouth

**Environmental Geographic
Information System
(EGIS)**

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What is GIS?

GIS = Geographic Information System

- **Computer-based tool used to display, store, manipulate, and analyze spatially referenced information**
- **Combines different information into layers which can be manipulated – can overlay analytical data, physical features (i.e. roadways), pictures (i.e. aerial photographs) and other information**
- **Query results can be displayed as a map or in tables using ArcView, a GIS application with an easy-to-use graphical user interface.**



What is EGIS?

EGIS = Environmental Geographic Information System

- **Developed by TtNUS for Navy to manage data and to assist in environmental cleanups**
- **Uses industry-standard software**
- **Designed with a customized graphical user interface**
- **Updated versions developed to take advantage of software design improvements**
- **Developed for more than 7 bases, including NAS South Weymouth**



EGIS Features

- **Designed and maintained for the management and presentation of environmental and spatial data**
- **Provides decision makers with access to complex data sets**
- **Customized tools for the non-GIS professional to access and analyze environmental data**
- **Not an automated decision making system but a tool to query, analyze, and map data in support of the decision making process**
- **Maintains full functionality for power users**



EGIS Features

- **Integrates environmental data along with existing infrastructure/facility spatial data through periodic updates**
- **Can be an important tool for coordinating with facilities management**
 - Known areas of contamination (IR Sites, AOCs)
 - Clean areas (Background locations)
 - Areas under study (EBS, CERCLA, MCP)
- **Accessible via desktop or internet**
- **Desktop & internet users require 3rd party software**



EGIS
Display Samples by Media
Analytical Query Tool
Criteria Comparison
Close Analytical Tables
Hide Unselected 'Locations:'
Show All Locations
Add Feature Theme(s)
Add Image Theme(s)
Post Location ID
Post Analytical Results
Remove Theme Labels
Site Manager
Building Locator
Boring Log Module
Institutional Controls
Project Status Module
Create Parameter Theme
Re-Label Parameter Theme
Create Time Trend Chart
Export Records to Excel
Create Map Layout
Facility Information
Launch S. Weymouth Web Site
Exit/Save

EGIS Menu Bar

Analytical

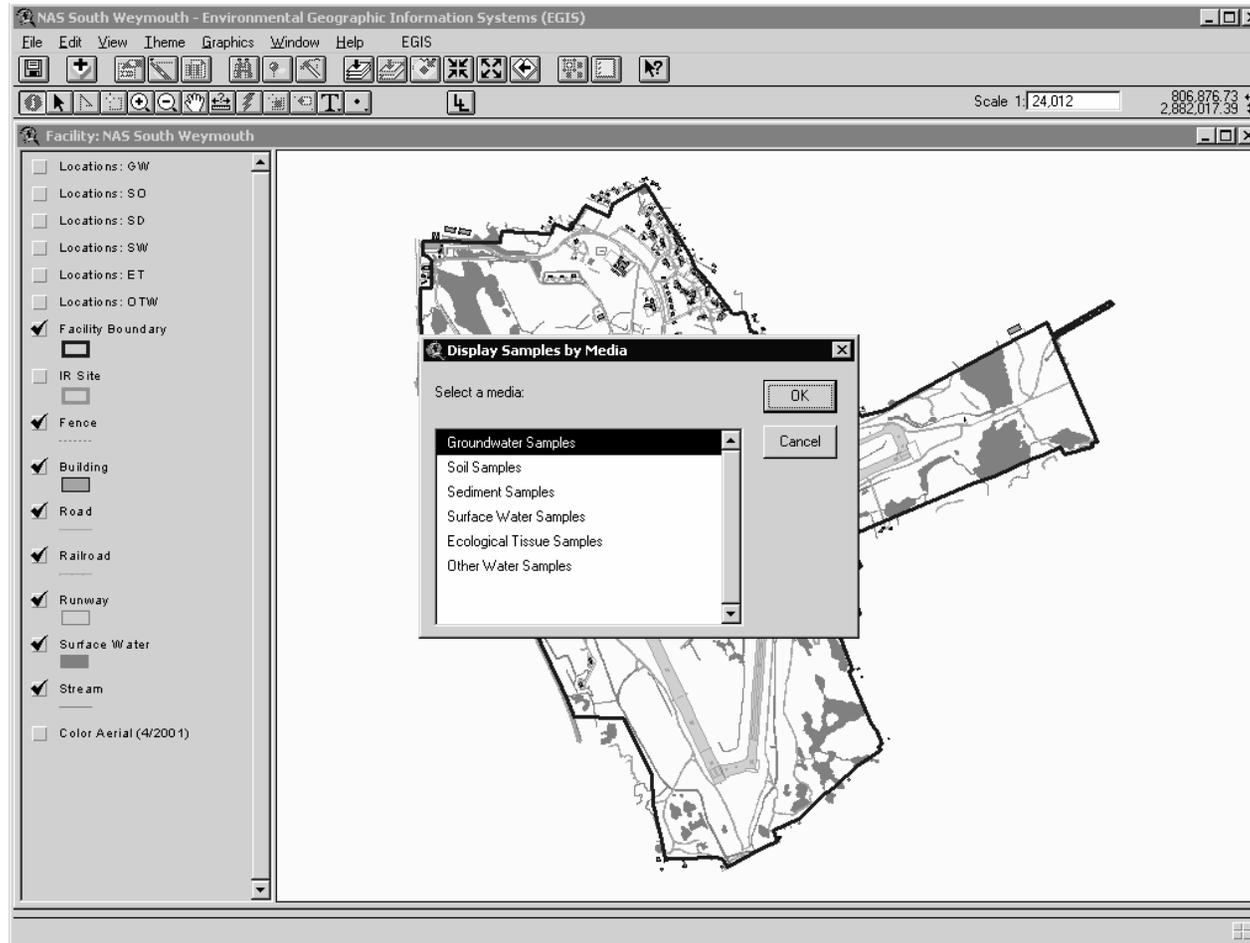
Spatial

GIS

Facility

Process Tools

Display Samples by Media





NAS South Weymouth EGIS Compilation

- **Extensive effort to collect historic analytical data**
 - Hard-copy reports – contractors include EA (EBS/IR sites) and TtNUS/ENSR (IR sites)
 - Varying electronic formats – Excel, Access, Word, FoxPro, etc.
- **Location data varied**
 - Survey data, GPS, CADD, field logs, figures
- **Other sample data collected from field notes, reports, logs, etc.**
 - Analytical results, sample dates and times, other sample collection details
- **Data continuously added to the database, then EGIS is periodically re-compiled**



NAS South Weymouth EGIS

DEMONSTRATION



NAS South Weymouth EGIS Summary

- **Currently funded by Navy to maintain web-based application through 2006**
 - Includes terminal server access, licensing, and seats for two concurrent users
- **Updates will be based on priorities, data format, and availability of funding**
- **Currently no standard for data collection**
- **Application calls for periodic updates (as major data sets are collected) and recompilation on an average of every 6 months**

Questions/Answers



Thank you!