

Utilizing GIS and Geospatial Databases to Effectively Process and Manage Environmental Data

Principal Investigators: Joel Schlagel, Martha Bullock

Objective: Identify emerging technologies available to facilitate the input, storage, and access of spatial data for use in Corps projects.

Benefit: Spatial data and GIS applications have become standard analysis tools in the management of Corps projects. While many projects can be managed independently, there is an increasing need for Corps Districts and Divisions to manage projects and associated spatial data collectively on a regional scale. Doing so requires standard procedures and effective data structures, all of which can be readily acquired using the spatial data and technical expertise available within the Corps.

In this workshop, we will discuss the resources and methodologies available to Program and Project managers for incorporating spatial data into the management of both small-scale and large-scale projects. We will identify emerging technologies for the acquisition of spatial data, new architectures for storing and accessing spatial data, and new approaches to distributing data and analyses via the world-wide-web or through desktop applications. We will also demonstrate applications currently being used to support several Corps programs.

Product: Documentation of workshop topics and tutorials, including a list of software and data resources and example applications that are successfully utilizing spatial data. We will also provide the Corps community with a greater understanding of the potential uses of spatial data and GIS applications.

Location: ERDC-CRREL Hanover, NH Remote Sensing/GIS Center Training Room

Date: 8-9 September, 2004 (Full day Wednesday, half day Thursday)

Number of Attendees: 30

**Utilizing GIS and Geospatial Databases to Effectively Process and Manage Environmental Data
Water Resource Operations Technical Support (WOTS) Technical Workshop**

Wednesday 8 September: 8:30am - 5:00pm

8:30am – 8:50am :	Welcome, CRREL/Center overview Course Logistics	Tim Pangburn Martha Bullock
8:50am-9:00am :	Class Overview	Martha Bullock
9:00am-9:45am :	GIS in the Corps – Past, Present, and Future	Joel Schlagel
9:45am-10:00am :	Break	
10:00am-10:45pm :	Examples of Current Corps Applications/Analyses	Steve Gaughan Tim Baldwin Joel Schlagel
10:45am-11:00pm :	Spatial Data Standards	Martha Bullock
11:00am-11:30pm:	Sources of Spatial Data	Martha Bullock Brian Tracy
11:30am-12:00pm :	General Discussion, Questions	All
12:00pm-12:30pm :	Lunch	
12:30pm-3:00pm :	Architectures for Storing and Accessing Spatial Data	Joel Schlagel
3:00pm-3:15pm :	Break	
3:15pm-4:30pm :	Lab – Creating a Project, Part 1: Data Acquisition, Review, Storage, and Management	Martha Bullock
4:30pm-5:00pm :	General Discussion, Questions	All

Thursday 9 September: 8:30am - 12:00pm

8:30am-9:15pm :	Applications/Resources for Viewing/Using Spatial Data	Martha Bullock
9:15am-11:00am :	Lab – Creating a Project, Part 2: Developing and Producing the Application	Martha Bullock
11:00am-12:00pm :	General Discussion, Questions, Workshop Summary	All