Legacy Geospatial Data Warehouse And Discovery Portal (Phase 1)

Project 07-341

Background:

For many years, the Legacy Program has produced a constant stream of valuable data for managing DoD natural resources, cultural resources, and land use management. Much of this data is spatial in nature; it exists in disparate formats, in many different locations, and it is difficult to determine the currency and provenance of these data due to imperfect metadata records. DoD has an imperative to leverage these Legacy investments as far into the future as possible by organizing the data and making it more accessible to decision makers and GIS data consumers.

The Defense Installation Spatial Data Infrastructure (DISDI) program is focused on organizing the people, policies and practices necessary to institute optimal processes for acquiring, stewarding and sustaining spatial information resource investments to support DoD efforts to improve stewardship of geospatial investments, sharing of geospatial information, and reducing redundant investments. DISDI develops enterprise spatial data requirements to ensure spatial data standards (mapping standards) comply with key DoD initiatives.

Objective:

The objective of this project was to perform geospatial analysis on existing Legacy Project geospatial data to ensure that data was compliant with the Spatial Data Standard for Facilities, Infrastructure, and Environment (SDSFIE) 2.610 and made available in a web-portal for visualization. The final products are a series of reports on all Legacy Project GIS data, SDSFIE complaint Legacy Project GIS data, an analysis paper on DoD options for hosting GIS data, and a pilot GeoDatabase posted on the DISDI Portal.

Summary of Approach:

Contractor GIS analysts worked closely with Legacy Program staff to collect and examine existing Legacy Program spatial data dating back to 1998. Existing tools were used to perform analysis on existing data files, conversion of GIS data in to SDSFIE 2.610 compliant data, generation of reports on the process, and creation of a set of GeoDatabases for the DISDI Portal. Prior to the final DISDI Portal delivery, contractor analysts conducted interviews with project leads or technical experts of three DoD web capabilities: the DISDI Portal, USACE CorpsMap, and the Fort Future "Sustainable Installations Regional Resource Assessment" to draft an analysis white paper of alternatives of GIS data hosting.

Benefit:

The results of this project provided the OSD Legacy Program with a set of harmonized SDSFIE 2.610 Legacy Project GeoDatabases, available for review via the DISDI Portal (planned).

Accomplishments:

An inventory and review of Legacy Projects documented GIS databases for 37 projects consisting of 36,300 total files. Reports were generated covering SDSFIE compliancy and data translation for all project GIS databases. In addition, project metadata and a project deliverable package "Read-Me" document were produced in the initial GIS data analysis. This analysis identified 23 Legacy Projects with GIS data, or 5136 total GIS layers (309 with SDSFIE compliant names). An Inventory Analysis Worksheet was built to track GIS data per project. A pilot set of GeoDatabases (ESRI format and included Non-SDS tables) used eight of those projects equaling 546 GIS layers. This pilot set was made available on the DISDI Portal. The 8 projects included in the pilot study were:

- 00-114: Ecoregional Planning - Edwards Plateau
- 01-135: Prioritizing Conservation Strategies - Cook Inlet Ecoregion (2000 & 2001)
- 05-158: Grand Bay-Banks Lake Stewardship Partnership - Phase II
- 05-266: DoD Cultural Resources Data Layer for Readiness Planning
- 05-271: Prescribed Burns and T&E Reptile/Amphibian Species (Eastern Box Turtle)
- 05-278: SERPPAS
- 06-334: The North Carolina Sandhills Weed Management Area

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