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eGIS Workshop

Division: SWD

Participant Team: SWF, Dennis Akins

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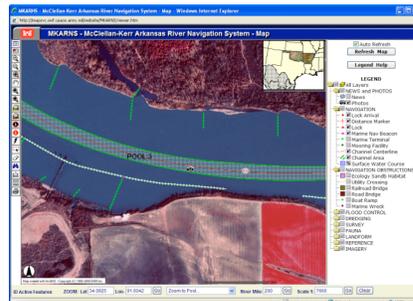
Slide 1



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Success Story 1

- MKARNS
 - Real-time, On-line live mapping.
 - Links to current P2 information.
 - Links to photos, news stories, etc.



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Slide 2

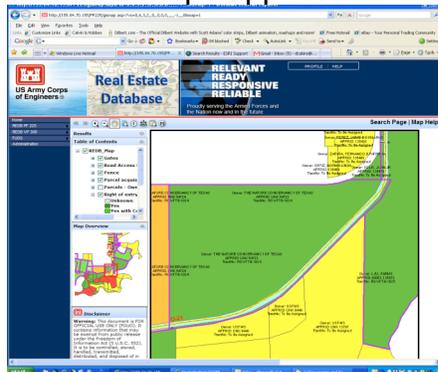


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Success Story 2

- Real Estate Database
 - Secure Web-based attribute editing. (7 Dist. in 2 Div.).
 - ArcGIS Server provides immediate map support.
 - ROE Document library.

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Success Story 3

- Lake Safety Database
 - Updated locally, available Division-wide
 - Ready for regional implementation

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Slide 4

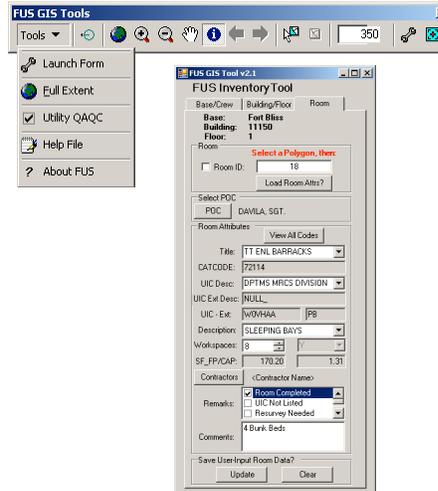


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Success Story 4

- FUS Tool
 - Populates Database for Facility Utilization Study
 - Goespatial data for every room, every building on base.

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Slide 5

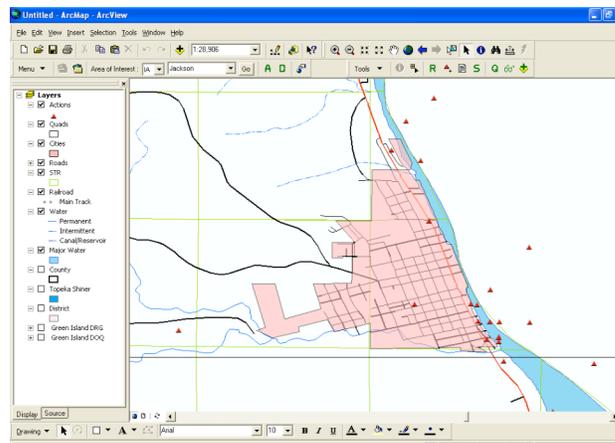


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Success Story 5

- Regulatory GIS Tools

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Biggest Challenges

- Identify district challenges in the use of advanced GIS tools?
 - Funding
 - Program level support
 - User education
- What are the **five** biggest challenges?
 - Funding
 - Program level support
 - Upper level management support
 - Visibility
 - Interagency agreements
- What are the obstacles you must overcome?
 - Education of upper level management
 - Institutional Inertia.
 - ACE-IT and Army data access restrictions

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District eGIS Vision

- What will your district eGIS look like in 3 years?
 - Established, multiple key geospatial positions
 - Multiple IDIQ for contract support
 - Large set of user groups
 - Capacity to support all USACE missions
 - Centralized, logical project and reference data
- How would you describe eGIS in 2011?
 - Enterprise GIS is an organization wide approach to GIS implementation, operation, and management. It integrates spatial data and technology across the organization, coupling centralized management with decentralized use.

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eGIS Workshop

Division: SWD

Participant Team: SWT, Sarah Priesten

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Success Story 1

- Grand Lakes study: Working with local and state government to develop eGIS for project to share and communicate information regarding project
- Partnered with Fort Worth District to obtain cross training
- Potential sharing and management of licenses between SWF and SWT

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Biggest Challenges

- Identify district challenges in the use of advanced GIS tools?
TRAINING
- What are the **five** biggest challenges? Funding, Personnel, Training, Equipment, Management Support/Lack of vision
- What are the obstacles you must overcome? Management support to recognize GIS in district; funding, personnel

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Division: SWD
Participant Team: SWG, David Petit

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SWG Success Story Clear Creek Flood Control Study

More about searching, understanding, and utilizing data.

Acquire current aerial photography, elevation data, and land parcel data

Integration of parcels, elevation, other data sets

All utilize the same data sets

Successful sharing of common data sets for consistency in analysis

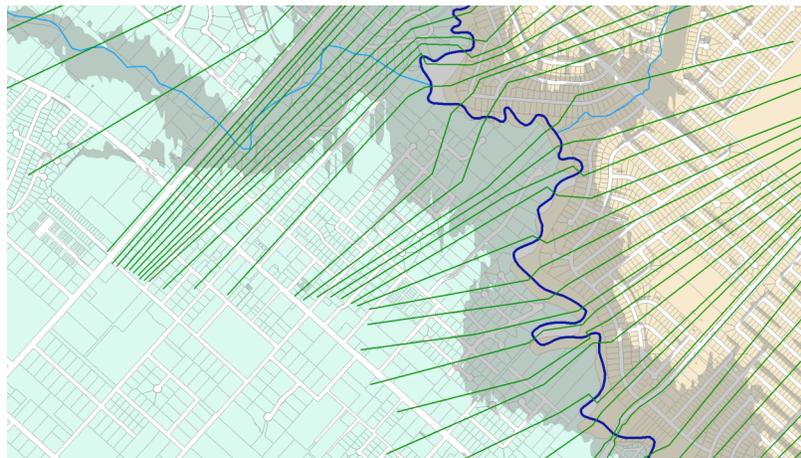
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Slide 13



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SWG Success Story Clear Creek Flood Control Study



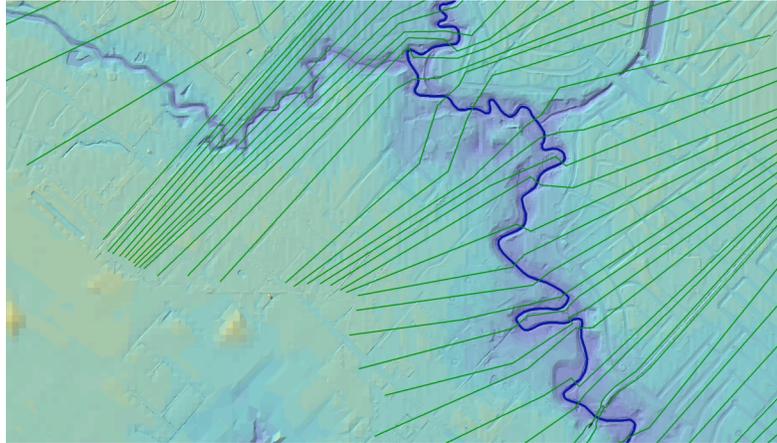
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SWG Success Story Clear Creek Flood Control Study



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Biggest Challenges

- Everyone needs to recognize there are new tools available to accomplish work.
- Biggest challenges?
 - Communicate data requirements to all.
 - Share work results.
 - Search for data before creating it.
 - Share cost of data development.

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Biggest Challenges

- Obstacles to overcome.
 - The desire to protect the work you create
 - Costs associated with maintaining software at the enterprise level
 - Aversion to data acquisition not directly associated with a project or study

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District eGIS Vision

- District eGIS in 3 years.
 - Should be mostly integrated into daily work of all functional areas
 - A tool to develop maps, conduct analyses, and monitor District activities
- eGIS in 2011.
 - Fully integrated into all functional areas
 - Should become another common tool used by most personnel

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Division: SWD

Participant Team: SWL, William Penn

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Success Story 1

- IDENTIFIED FEATURES IMPACTED BY RAISING THE CONSERVATION POOL AT BULL SHOALS LAKE. ANALYSIS IS PART OF THE WHITE RIVER MINIMUM FLOW STUDY.
- Describe the technology solution – HIGH RESOLUTION IMAGERY AND ELEVATION DATA.
- What contributed to its success? DESIGNATED PROJECT FUNDS
- HIGH RESOLUTION IMAGERY AND ELEVATION DATA WAS USED TO IDENTIFY LAKE FACILITIES THAT WILL BE IMPACTED BY RAISING THE LAKE CONSERVATION POOL. THE DATA ALLOWED US TO MORE ACCURATELY ESTIMATE MITIGATION AND RELOCATION COSTS.

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Biggest Challenges

- Identify district challenges in the use of advanced GIS tools? FUNDING AND TRAINING
- What are the **five** biggest challenges? FUNDING, AVAILABLE PERSONNEL, TRAINING, INADEQUATE SERVERS AND SERVER CONNECTIONS, LACK OF PROGRAMMING EXPERTISE
- What are the obstacles you must overcome? THE FIVE BIGGEST CHALLENGES LISTED ABOVE

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Participant Team: Anjna O'Connor

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DHS Fence Project

- Construction progress based on GIS/GPS data
- P2/RMS linked to fence locations
- Earned value automated in Google Earth (ERDC)
- Provides senior leadership with visualization of project data
 - Cost basis
 - Terrain
 - Proximity to levees, river
 - Real estate issues
 - Environmental concerns

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GIS-Google Earth-P2 Integration

- **GIS capability**
 - ArcGIS architecture to provide geospatial data for multi-agency use
 - Data management, analysis, map production
 - Construction progress reporting based on GPS data collection
- **Google Earth**
 - Ease of use/customer familiarity
 - Partnered with ERDC-ITL to incorporate secure Google Earth capability into ArcGIS platform
 - Customer can use free ERDC-ITL enterprise client
 - 3D visualization used for communicating project issues related to terrain and/or context to other features (Example: Correlate fence construction cost to terrain conditions)
- **P2**
 - Partnered with ERDC-ITL to extract real time P2 data for earned value in a Google Earth environment
 - Structured WBS to reflect level of granularity needed for this program

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DHS Fence Project

The collage displays various components of the DHS Fence Project website:

- Secure Border Initiative Tactical Infrastructure Program Management:** A login page with fields for Username and Password, and a 'Login' button.
- Dashboard:** Features a bar chart, a circular gauge, and a map of the United States with project locations marked.
- San Diego Project A-1:** A detailed view of a specific project, including a map of California and a table with columns for 'Project Name', 'Status', and 'Priority'.
- Real Estate Database:** A search interface with a 'SEARCH' button and a 'RESULTS' section.
- Report Selector:** A window for selecting reports, with a 'Generate Report' button.
- 3D Pie Chart:** A 3D pie chart showing data distribution across different categories.

Slide 25

GIS in Program Mgmt Website

The screenshot shows the GIS interface of the DHS Fence Project website:

- Header:** 'Secure Border Initiative Tactical Infrastructure Program Management' with a logo and a 'Help' link.
- Navigation:** A menu bar with options: Dashboard, GIS Map, Reports, Project Setup, View Projects, Document Library, Administration, Real Estate Overview, Sector Book.
- Legend:** A list of project types and their corresponding colors:
 - CBP Sectors: D-5B, D-6, E-2A, E-2B, E-3, F-1, H-2A, I-1A, I-1B, I-1C, I-1D, I-1E, I-1F, I-1G, I-1H, I-1I, I-1J, I-1K, I-1L, I-1M, I-1N, I-1O, I-1P, I-1Q, I-1R, I-1S, I-1T, I-1U, I-1V, I-1W, I-1X, I-1Y, I-1Z
 - States: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
 - VF300 Proposed: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
 - Proposed Fence, Phase II: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
 - Proposed Fence - Levee: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
 - Proposed Fence - Right of Entry Status: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
 - VF300: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
 - VF300 Access Roads: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
 - VF300 As-built Vehicle Barrier: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
 - VF300 Proposed Vehicle Barrier: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
 - VF300 Construction Staging Area: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
- Map:** A map of the United States showing project locations. The scale is 1:117,000,004. The map shows various colored regions corresponding to the legend.
- Navigation:** A 'Navigation' dropdown menu with options: Coordinates, Search Features, Construction Status.

Slide 26

View by Project, Sector, State, Congressional District, etc

Secure Border Initiative
Tactical Infrastructure Program Management

Dashboard | GIS Map | Reports | Project Setup | View Projects | Document Library | Administration | Real Estate Overview | Sector Book | Help | Logout

Regions: [Dropdown] | Maps: [Dropdown]

Scale: 1:89,196 | X: -1334235 | Y: -691253

Layers

- SBI Net Towers
- Border Monuments
- OBP Stations
- LPOEs
- PF225
 - PF225 Access Roads
 - PF225 As-built Fence
 - PF225 Proposed Fence
 - Proposed Fence, Phase I
 - Proposed Fence, Phase II
 - PF225 Proposed Fence - Levee
 - PF225 Construction Staging Area
 - PF225 - Right of Entry Status
- VF300
 - VF300 Access Roads
 - VF300 As-built Vehicle Barrier
 - VF300 Proposed Vehicle Barrier
 - VF300 Construction Staging Area

Navigation: [Dropdown] | **Coordinates**: [Dropdown]

Results: [Dropdown] | **Search Features**: [Dropdown] | **Construction Status**: [Dropdown]

Slide 27

Construction Data from P2 and Program Mgmt Website

E-2B

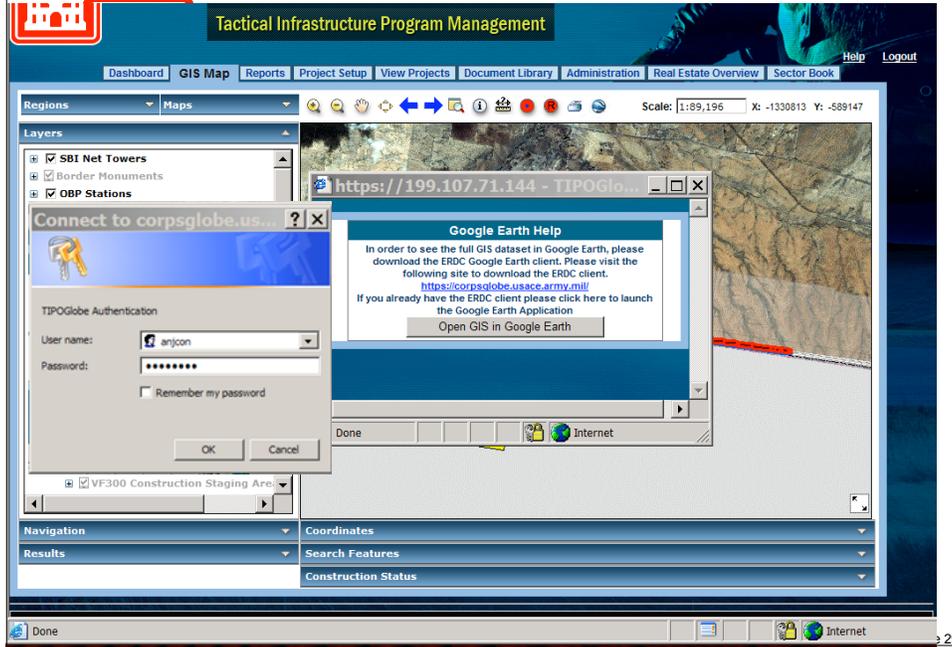
Project Manager	Eric Eldridge
SBI Project ID	2011-1
BP Project ID	TCA-NCO-1b
Project ID	E-2B
Phase	Phase I
Fence Type	Design-Build Mesh
Length (miles)	6.89
Completed Miles	6.90
Est. Cost	\$23945043.0000
Est. Duration (Days)	37
Real Estate Certified	9/12/2007
Environmental Planning Complete	11/10/2003
Issue RFP	7/30/2007
Est. Award Date	8/20/2007
Construct Authority	8/20/2007
Construction Complete	11/21/2007

[Click For More Information](#)

Directions: [To here](#) - [From here](#)

Slide 28

Integration of ERDC Google Earth Capability



Construction Progress – Daily reporting via GPS Earned Value – Real time link to P2

