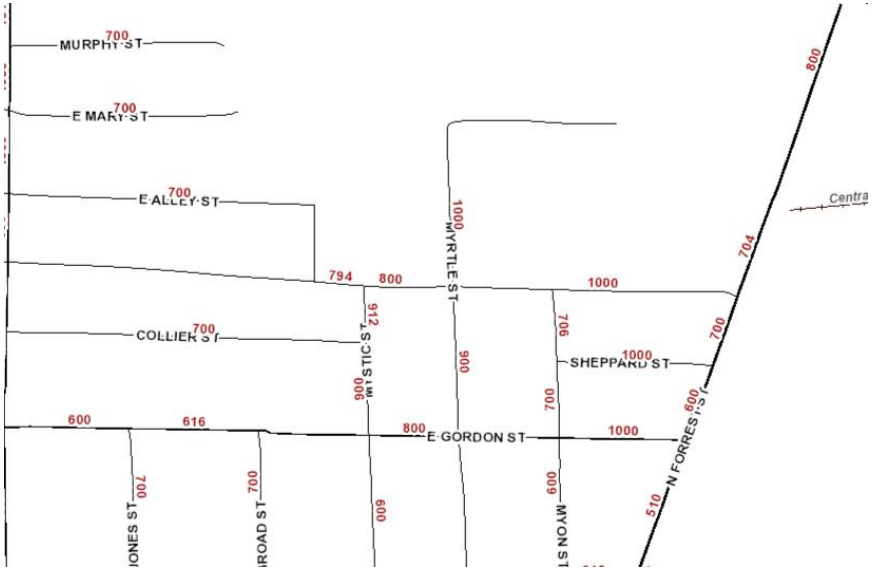
Southern Georgia Regional Commission

Geographic Information Services
Foundation, Funding and Follow-through

"Without geography, you're nowhere" – Jimmy Buffett

Parcels and Streets: the foundation of good things to come..

- **Both generate one-time funding and a potential stream of income for maintenance**
- **Enable immediate leverage to be put on freely available datasets such as soils, wetlands, elevations, etc.**
- **Facilitate the fast creation or reconciliation of complimentary layers (zoning, land use, special districts, city limits, etc)**
- **Enable Geocoding of nearly everything! (crimes, business licenses, etc) This puts traditional spreadsheets and databases in a spatial context quickly!**



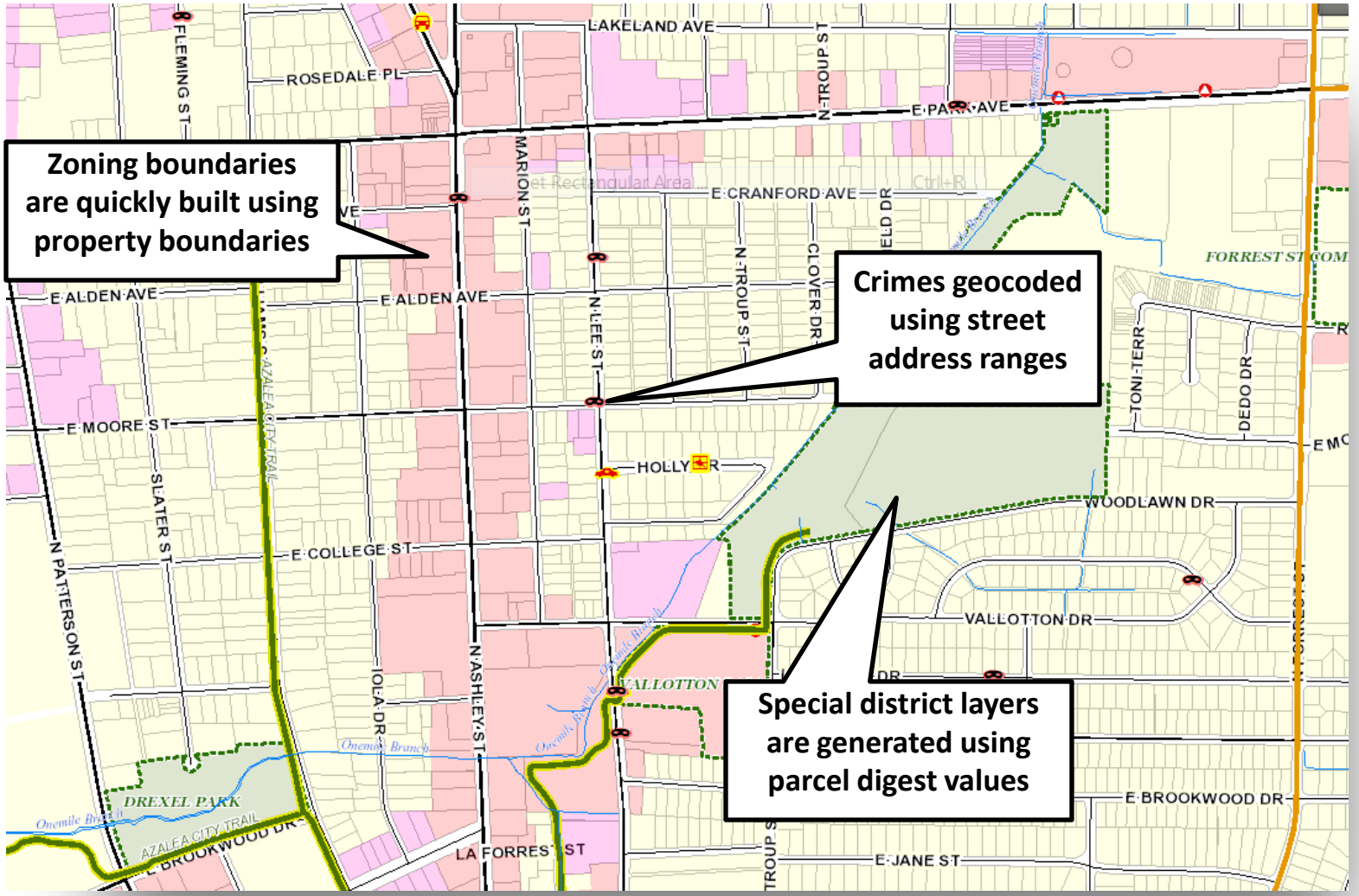
FAST ROI:

Analysis of parcel data for the City of Valdosta and city limit boundaries revealed $13.1 M in total property value that was incorrectly coded as being outside of the City.

15 minutes of analysis = >$1m in revenues.

Onward and upward!

Fast creation of complimentary layers is made easy with a solid foundation



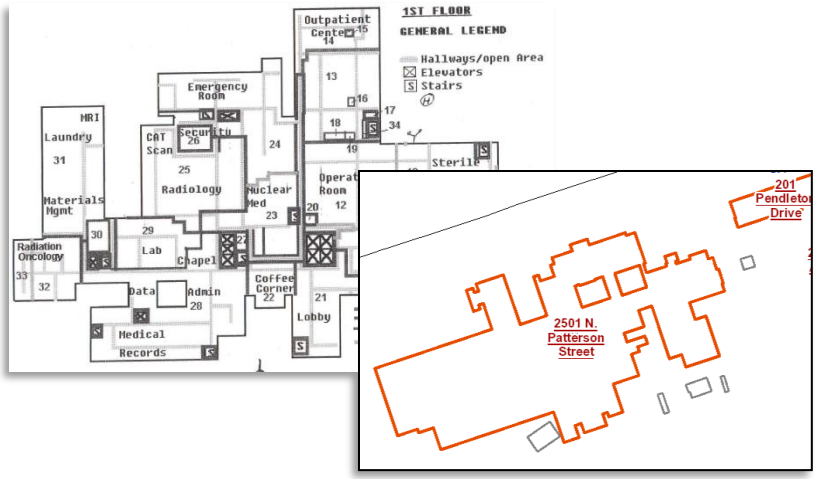
The production and maintenance of these layers generates:

- **Quick project and maintenance income streams**
- **More possibilities for SPATIAL analysis and ROI for the community**

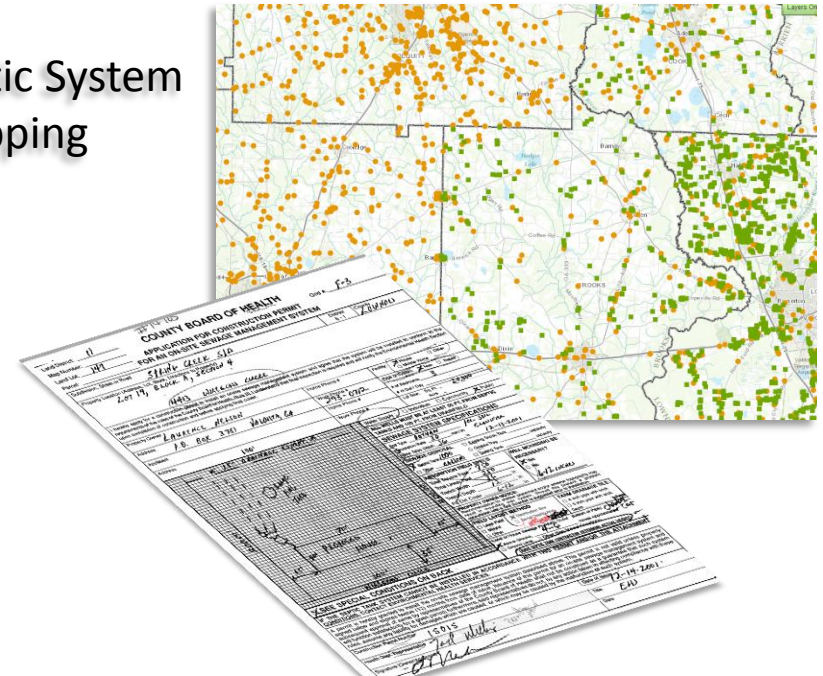
Utilities

Cemetery Mapping

Emergency Response Plans

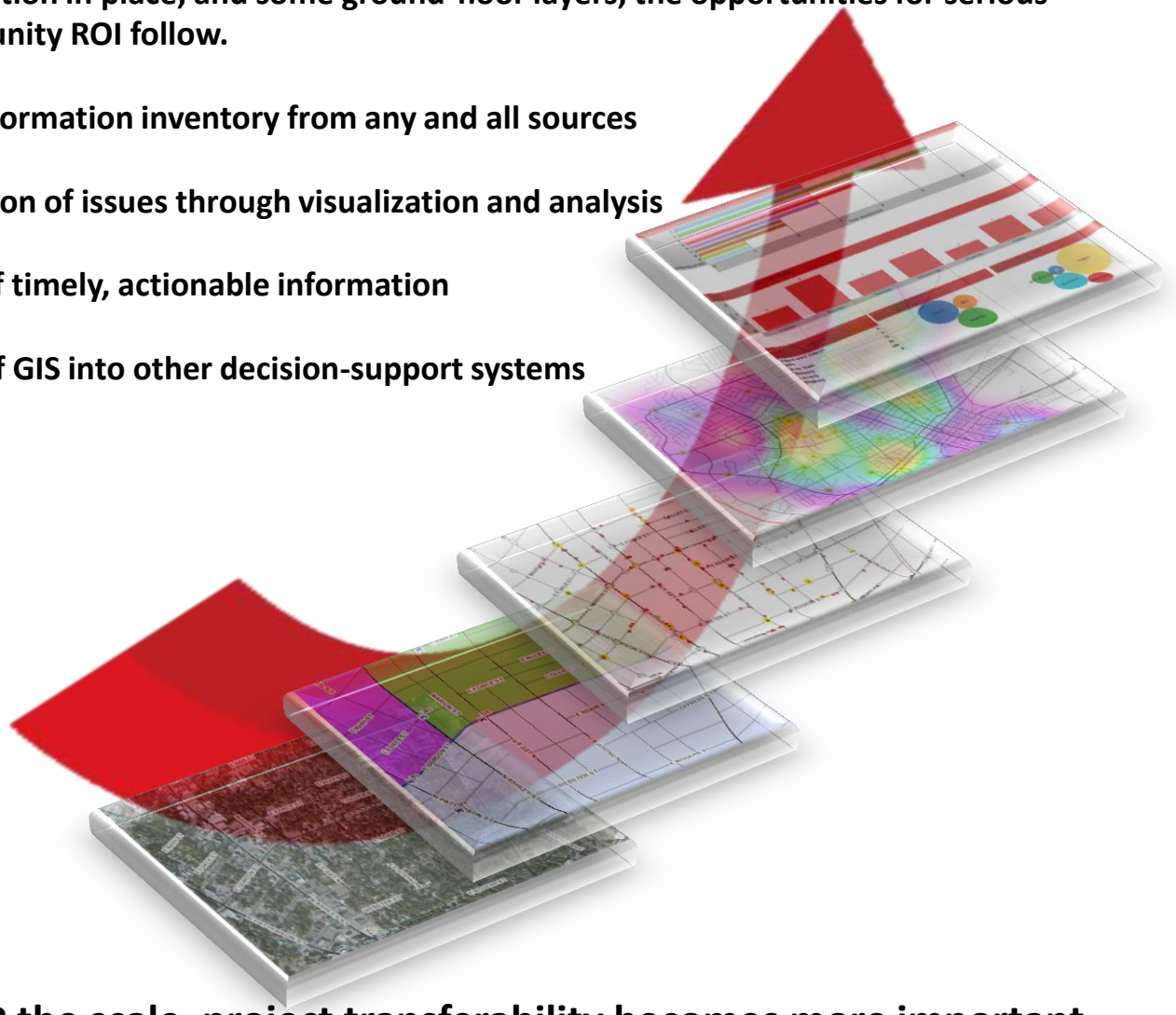


Septic System Mapping



Onto the REAL FUN(ding)!

- **With a solid foundation in place, and some ground-floor layers, the opportunities for serious funding and community ROI follow.**
  - **Growth of information inventory from any and all sources**
  - **Communication of issues through visualization and analysis**
  - **Production of timely, actionable information**
  - **Integration of GIS into other decision-support systems**

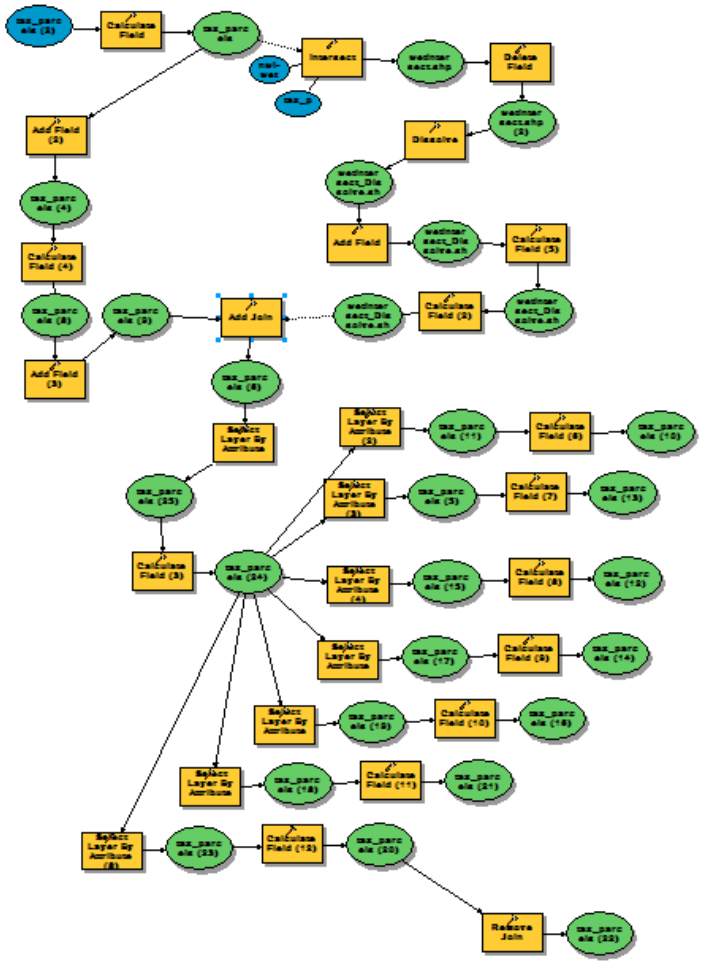


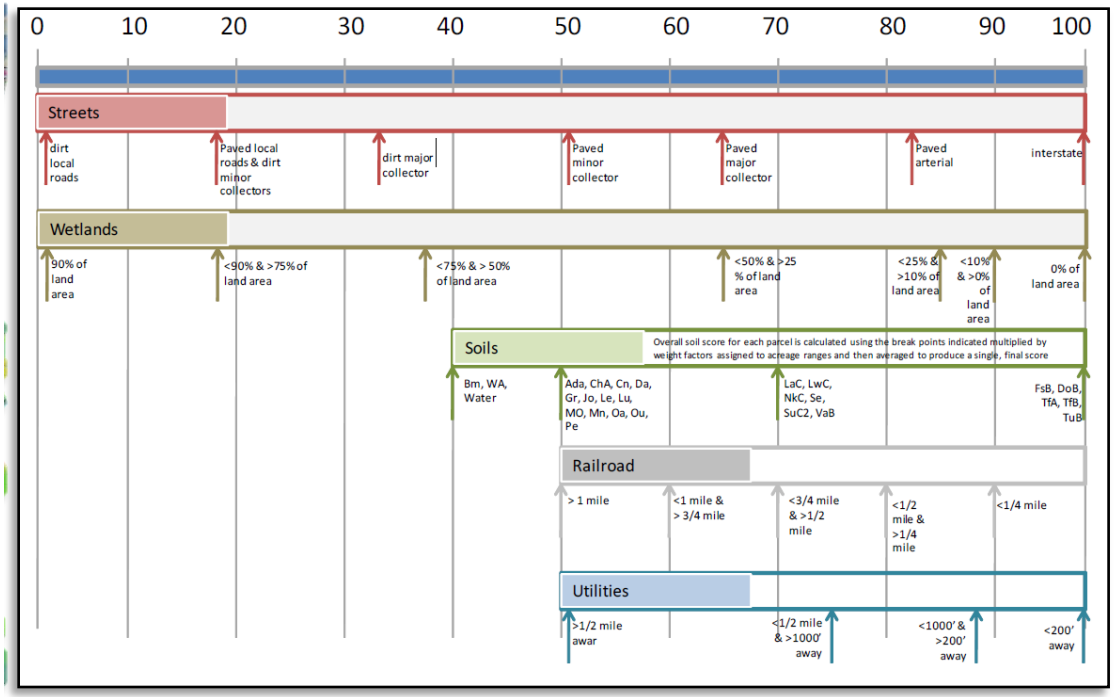
As you move UP the scale, project transferability becomes more important. Not just from community to community, but from practice to practice

Land Ho!

Development Suitability of Parcels using Cumulative Scoring Model

VALDOSTA • LOWNDES COUNTY
Industrial Authority

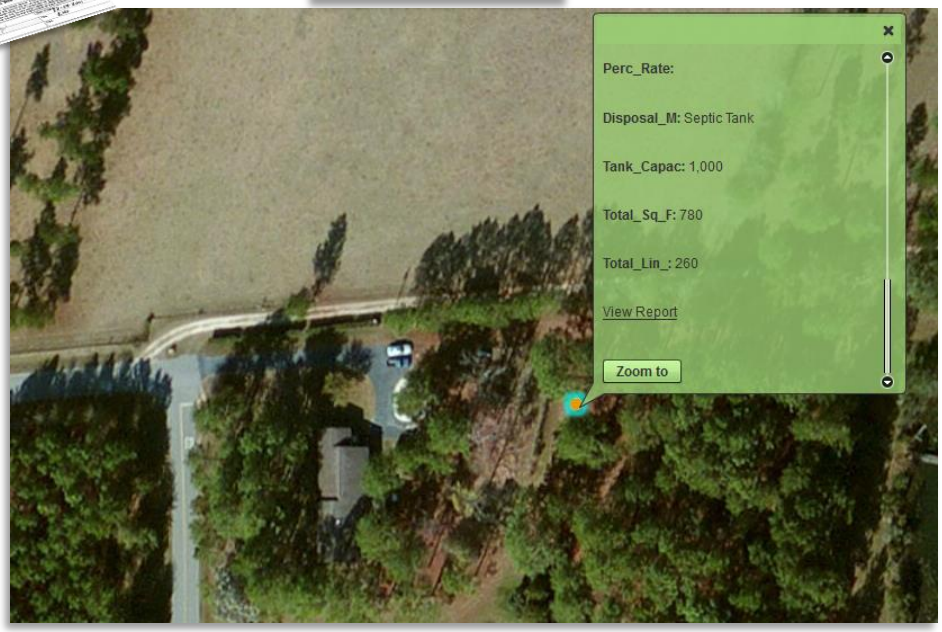




- **Analysis of over 50,000 land parcels with weighted scoring for transportation, wetlands, soils, railroad, utilities and acreage**
- **Analysis models constructed allows replication of this project in other communities as well as tuning of weight for each criteria category**
- **Delivered defendable results that were acted on by development authority.**

From small dots to state dollars!

WellSTROM
Well and Septic Tank Referencing and Online Mapping



- **Web based, secured application**
- **Started as a $3k pilot project. Continues as a $13k maintenance contract with State DHR**
- **Covers entire state and ALL well and septic system inspections/installations**
- **Links directly to state database**
- **Data is now used to generate pollution susceptibility indexes for certain critical resource areas in the state**

Red denotes required fields.

Construction Permit Number: OSC13700201 [View Permit]
County: Tift
County Code: 137
Health District: 8-1
Subdivision:
Lot:
Date: August 15 2012

Property Location/ Address

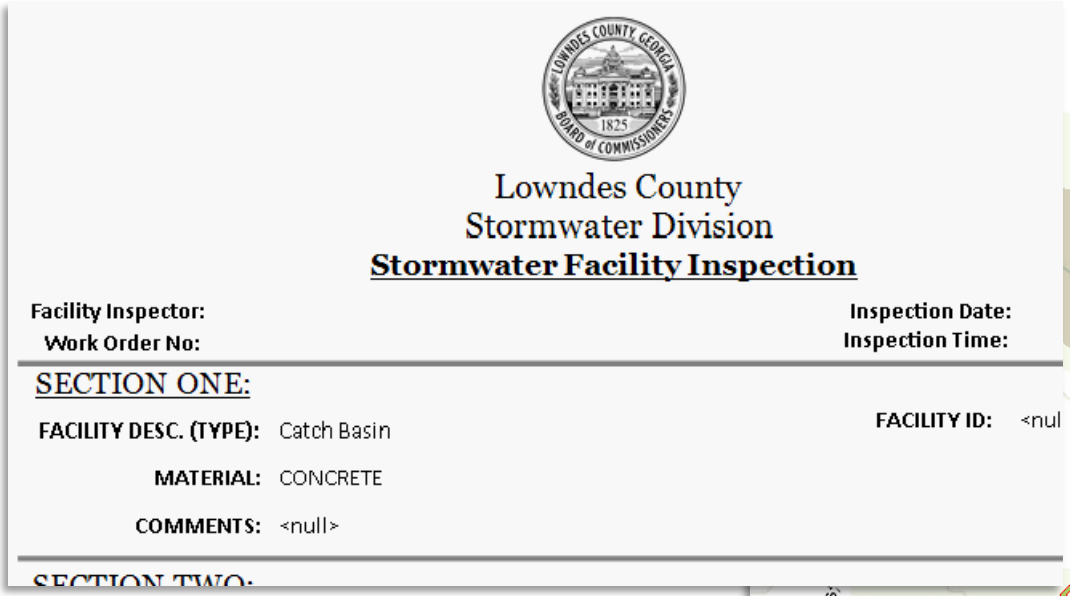
61 DUANE DR
TIFTON, GA 31794
Property Owner's Name: Eloise Scarborough Torrence

Septic Contractor: Cauthen Jr, William R.
License Number: 11863

Section A - General

Water Supply: Private
Type of Structure: Single-Family Residence
Structure Age: > 1 Year
Sewage System: Repair
Age of System (repairs): >40
In Subdivision: NO
Water Usage By: Bedroom Numbers
Number of Bedrooms/ Gallons Per Day: 3
Level of Plumbing Outlet: Ground Level
Lot Size: 10.94

Managing Stormwater made easy!



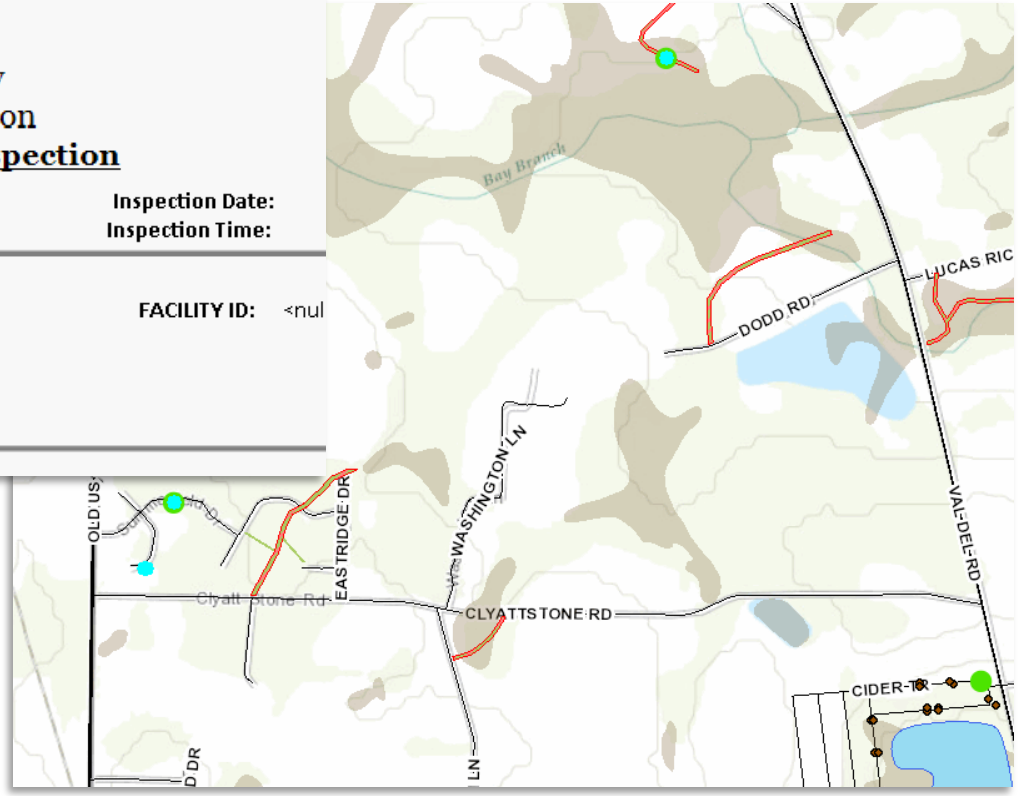
Lowndes County
Stormwater Division
Stormwater Facility Inspection

Facility Inspector:
Work Order No:
Inspection Date:
Inspection Time:

SECTION ONE:

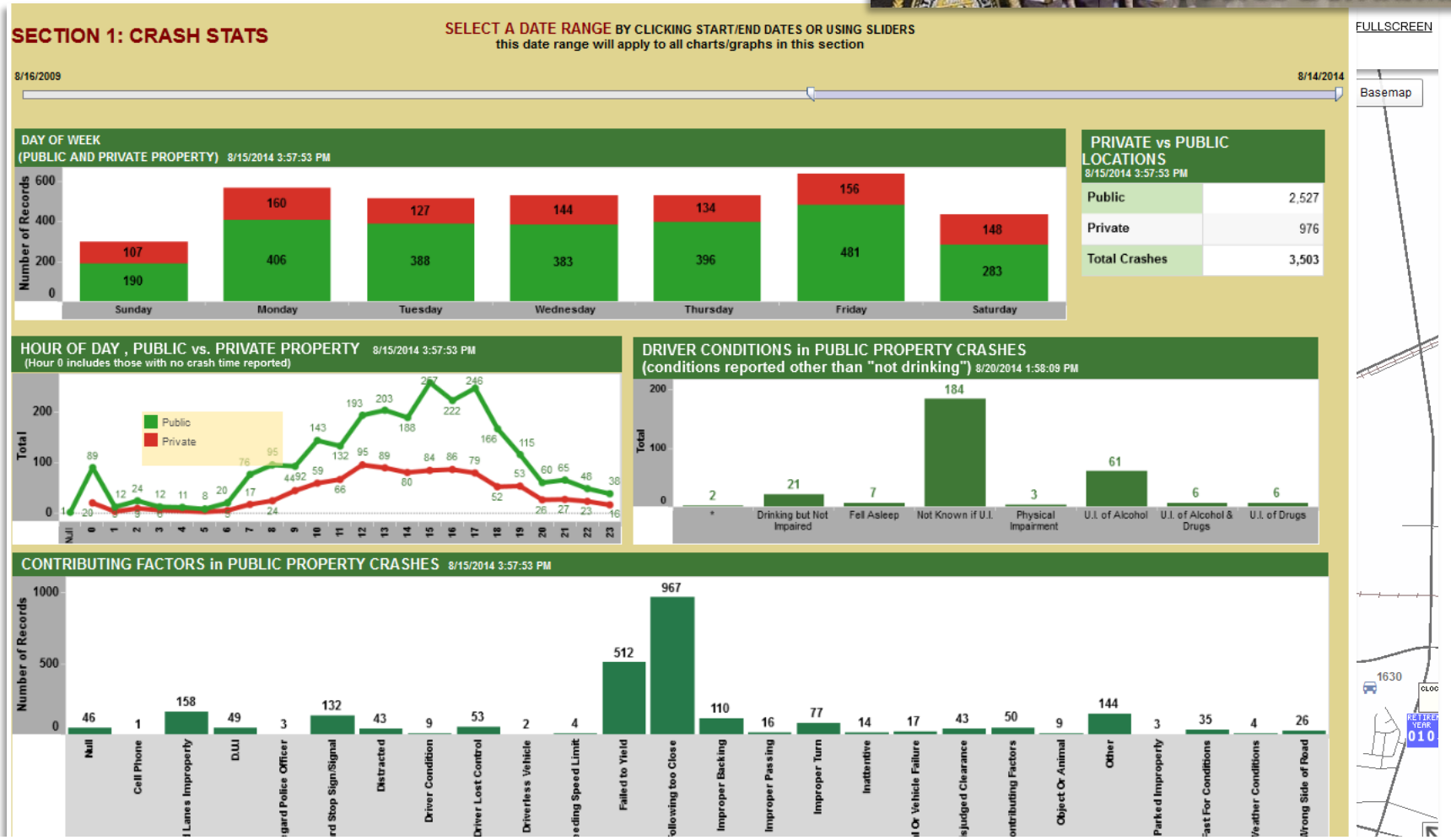
FACILITY DESC. (TYPE): Catch Basin
FACILITY ID: <nul
MATERIAL: CONCRETE
COMMENTS: <null>

SECTION TWO:



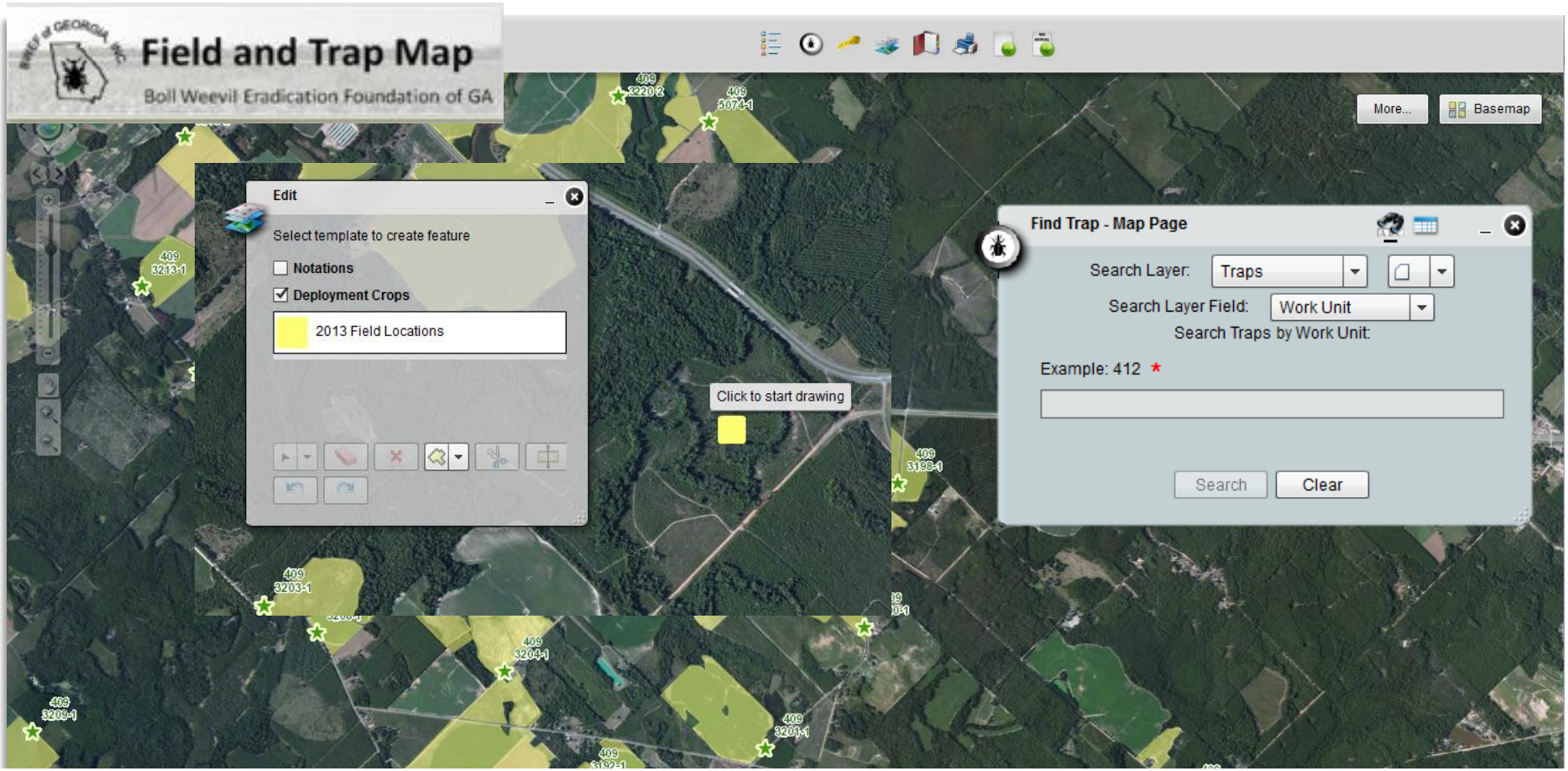
- **Mobile Application using web services**
- **Real time data update and communication between field crew and office personnel.**
- **Mapping and reporting of inspections and maintenance combined.**
- **NPDES Phase II required permit reports for the state run from real time GIS data, allowing for digital submission.**
- **Work Orders created for maintenance required.**

A valuable perspective on policing…



- Web based, secured application accessible from desktops and within patrol cars
- 3 second AVL updates for each car in fleet
- Real time crime reporting. Automatic geocoding of each incident immediately after submitted
- Access to crime analysis tools – “pin” map as well as real time density
- Search tools for property owners, addresses, streets, ets
- Includes real time charting for crash, burglary and part 1 crimes

The GIS bug bites Boll Weevil Eradication Foundation…



- Web based, secured application accessible from desktops
- As traps are placed in field, GPS records the location. Trap locations are uploaded nightly into mapping app
- Field locations/shapes are edited directly into mapping app by BWEF monitoring staff from their home computers.
- Real-time, online map generation tools for field use
- Generates ~$18k per year in maintenance/modifications and SGRC doesn't EDIT/BUILD the data!
- Makes management of state cotton monitoring manageable for the 15 staff member BWEF
- Has delivered a tool to BWEF that finally accounts for actual acres of cotton each year

Secrets to Success..

- **A solid foundation of property and street/road data is vital!**
- **Exploit the free resources of data! These can immediately get you hitting home runs for your communities**
- **Look for traditional data and map it! excel, sql, dbase, etc.**
- **RECYCLE data.**
- **INVEST in a solution to common needs around the district/state**
- **Strive to deliver actionable output!**
- **Make that investment into "transferable" technology. Not just from one community to next but from one application to the next. Example: code written for auto updates of crime data was exploited to make the BWEF trap location updates possible.**
- **Embed your GIS outputs into current decision-support systems. Example: burglary crash charting used by VPD, Or including reporting tools in apps that reduce cross-application workflows**