

9/25/2012

New DEQ ArcGIS Viewer

How to use it and how we
made it



How to use it:

Viewer Demonstration

ArcGIS Viewer

- Contains a variety of data maintained and used by DEQ
 - Local DEQ Office Locations
 - Air Quality Facility Locations and Air Quality Monitoring Sites
 - Land Protection Facility Locations
 - Water Quality Data and Facility Locations
 - Data from other State Agencies
 - Base map information
- <http://gis.deq.ok.gov/flexviewer/>

How we made it:

DEQ GIS Subcommittee

DEQ GIS Subcommittee

- Membership includes GIS representatives from each Division
- Hold monthly group meetings
- Working group meetings are also held at other times
- Holds yearly officer elections

DEQ GIS Subcommittee Members

- Roy Walker – Chairman – IT Department (OMES)
- Amy Brittain – Co-Chair – Land Protection
- Heather Mallory – Secretary – Land Protection
- Toni Payne – Air Quality
- Michael Reid – Land Protection
- Sherri Tilley – Water Quality
- Joe Long – Water Quality
- Tim Ward – Water Quality
- Mark Hildebrand – Water Quality
- Matt Pace – Environmental Complaints
- Matt Johnson – Environmental Complaints
- Pam Baldwin – State Environmental Lab
- Chris Monk – IT Department (OMES)
- Rene Roy – IT Department (OMES)

What is the purpose of the DEQ GIS Subcommittee?

- Provide geospatial and GIS uniformity to the Agency
- Ensure Agency meets Federal and State requirements for geospatial data and GIS
- Establish and maintain GIS/GPS standard operating procedures (SOPs) for the Agency
- Provide annual updates to the existing statewide data layers for the Agency
- Provide educational resources and opportunities

GIS Subcommittee Goal

- Updating the old ArcIMS Viewer has been a goal of the Subcommittee for a long time!
- Original data viewer is based on old technology
- Divisions wanted the opportunity to update data layers themselves and as often as needed

Esri Discovery Workshop

- November 2011 – GIS Subcommittee met with Esri representatives to discuss:
 - GIS Workflow
 - Data Management
 - Analysis and Planning
 - Field Mobility
 - Operational Awareness
 - Public Awareness/Outreach

Esri Discovery Workshop Follow Up

- In March 2012 Esri visited DEQ again and helped to install ArcServer 10 on test server
- Meet with GIS Subcommittee to demonstrate advantages of centralized SDE and ArcGIS Mobile
- This was the push we needed to start the new GIS Viewer project

Software

- ArcGIS Server 10.0
- ArcGIS Desktop 10.0
- FlexViewer 2.5
- SQL Server 2008
- Test and Production environments – virtual

Flex Viewer Development

- Created SDE database for each division
- Each division imported data layers using ArcInfo
- Layer symbology was created using MXD files for each data layer.
- Map Services were generated by IT using the MXD files.
- IT configured FlexViewer to use map services to display layers

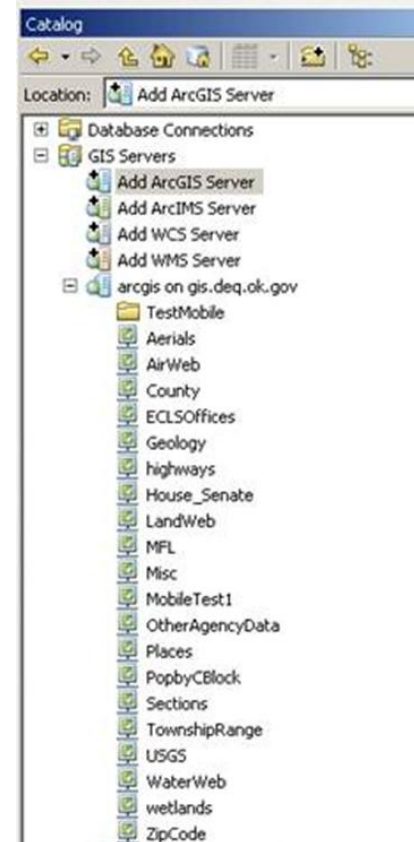
Widgets

- GIS Subcommittee members provided IT with a list of tools.
- Widgets were downloaded from the ArcGIS Code Gallery:
<http://help.arcgis.com/en/webapps/flexviewer/gallery.html>
- IT configured widgets to work with our data
- Some widgets were modified with Adobe Flash Builder to provide additional functionality

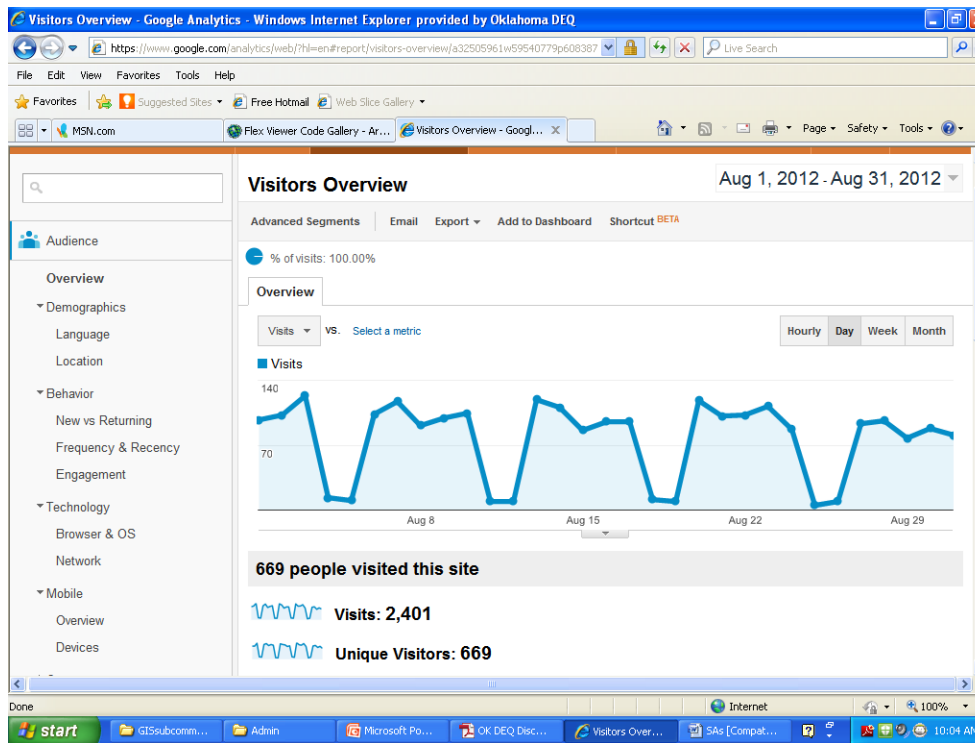
Image Service

- <http://gis.deq.ok.gov/arcgis/services>
- ArcGIS Online

The screenshot shows the 'General' dialog box in ArcGIS. It is titled 'General' and has a close button (X) in the top right corner. The main heading is 'Choose the type of ArcGIS Server connection'. There are two radio buttons: 'Internet' (selected) and 'Local'. Under 'Internet', there are two text boxes for 'Server URL'. The first contains 'http://gis.deq.ok.gov/arcgis/services' and the second contains 'http://www.myserver.com/arcgis/services'. Under 'Local', there is a text box for 'Host Name'. Below these is a section for 'Authentication (Optional)' with text boxes for 'User Name' and 'Password', and a checked checkbox labeled 'Save Username/Password'. At the bottom are three buttons: '< Back', 'Finish', and 'Cancel'.



Google Analytics



Issues

- Flash versions
- Caching large data sets
- Customization of widgets
- Training and software
- Workflow and database permissions
- Test environment vs. production environment
- Old ArcIMS viewer
- IT consolidation

Future Goals

- Real time updating
- One data viewer
- Upgrade to 10.1
- Customize widgets
- Mobile App
- Project specific viewers

Our Contact Information:

Heather Mallory

405-702-5135

Heather.mallory@deq.ok.gov

Amy Brittain

405-702-5157

Amy.brittain@deq.ok.gov

Chris Monk

405-702-1187

Chris.monk@deq.ok.gov

Questions?

