OBG PRESENTS:

Crude by Rail – New York State’s Inland Geographic Response Plans
A Complete GIS Solution from our client, the NYSDEC.
Introductions

Scott Stanton
• Scientist/GIS Project Manager, OBG
Comprehensive, integrated solutions

Advanced Manufacturing
Energy
Environment
Water
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Our story by the numbers...

- Over 26 offices throughout the United States
- 1945 rich history of employee ownership
- 1,000 employees creating a better future by making a difference each day
- $208M in annual revenues

Commitment to corporate social responsibility and employee engagement.

Purposeful growth and sustainable financial performance.
Figure 4-2: Major Northeast Bound Rail Transport Routes for Bakken Crude

Why GRPs Now?

“Unit” Trains = Single Commodity
30,000 Gallons/Car x 100 Cars = 3 Million Gallons
Within ½ Mile:
- 1464 Schools & Daycares
- 269 Public Water Supply Points
- 1,278 Water Wells
- 7,846 Wetlands
- 1,358 Streams
- 98 Rare / Unique Habitats
What are GRPs?

Geographic Response Plans (GRPs) are map-based, location-specific contingency plans:

- Completed for all 21 crude-by-rail counties
- Greater focus on potential impacts to humans
- Three types (General, Site-Specific, Site-Specific Strategy)
- Notification & Physical Action Strategies
- Valuable planning tool for the first 24 hours and beyond

NYS GRPs
GRP Development Considerations

If there was a spill “here”...

How can we *prevent or minimize* the damage?

### Notification Strategies – Who you gonna call?

- Schools, hospitals, daycares, etc.
- Water supply intakes – water plant operators
- Evacuate, Shelter-in-Place, or “Close that Valve”

### Physical Action Strategies – Things you can DO!

- Deploy boom to stop or divert oil
- Build berms, dikes, block culverts, etc
County GRP steering committees

Working meeting (3-4 hours)

DEC & contractor compiled info

Review & comment period

County & local ownership
Site Specific GRP
Site-Specific GRP: A Closer Look
Site-Specific GRP – Backside
General GRP
General GRP
General GRP - Backside
Site Specific Strategies
Booming Opportunity
Damming Opportunities
Infrastructure for Field Activities

ArcGIS Online
- Data Access/Sharing
- Collaboration
- Templates

ArcGIS Server
- In-House
- Web Enables GIS

OBG Servers
- SQL Server
- Network Drives
- GIS Maps & Data
Site-Specific Strategies – Collector for ArcGIS

**Booming Opportunities**

- **LABEL**: 217-0
- **LABEL1**: 300'
- **LON**: -74.86
- **LAT**: 43.04

**INTERSECTION**
ERIE CANAL AT MOHAWK ST

**COUNTY**: Herkimer

**CHECKED BY**: Rob Schrader

**DATE**: August 10, 2016

**ADDITIONAL COMMENTS**
OSRO will deploy boom. Out of scope for First Responders.

**BOAT REQUIRED**: Yes

**FIELD VISIT**: Yes

**FIELD TEST**: No

**DIRECTION**: West

**ATTACHMENTS**
- Photo1.jpg
  Downloaded
Site-Specific Strategy – Data Driven Pages
Site-Specific Strategy – Data Driven Pages

- All text and pictures are data driven from the Collector App and Geoprocessing functions.
NYSDEC
Emergency Response Trailer
Permanent Infrastructure
First Response and Beyond

- Anchor Points
- Permanent boom – Staged in fixed containers – used for larger bodies of water.

Prioritized for protecting critical areas throughout the state

- Impacted by a spill
- Could be used to supplement the mobile spill response trailers throughout the state.

Access Limitations?

- Areas with limited access and mobile assets cannot assist.

Critical for not only first responders, but NYSDEC spill contractors and state contractors.
• GNOME – General NOAA Operational Modeling Environment.

• “Most probable” areas for oil accumulation.

• This modeling help us narrow down where to investigate.
Permanent Infrastructure
GIS Online
NYSDEC Inland Geographic Response Plans

Location specific plans developed to provide guidance for oil spill responses from crude by rail transportation.

Unique plans that differ from traditional GRPs by extending contingency planning to cover spills on land, in addition to surface water-based spills.

Geographic Response Plans (GRP)

328 GRPs created for 21 Counties across NYS.

225 Oil Protection Strategies created for NYS.

Local first response agencies from each county participated in creation.

Designed and delivered spill response trailers to all 21 counties along the major rails.

Developed and presented training programs for spill response for each county.
Thank You

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