

Overview of USACE-OEPA Meeting on 2015 WQ Sampling

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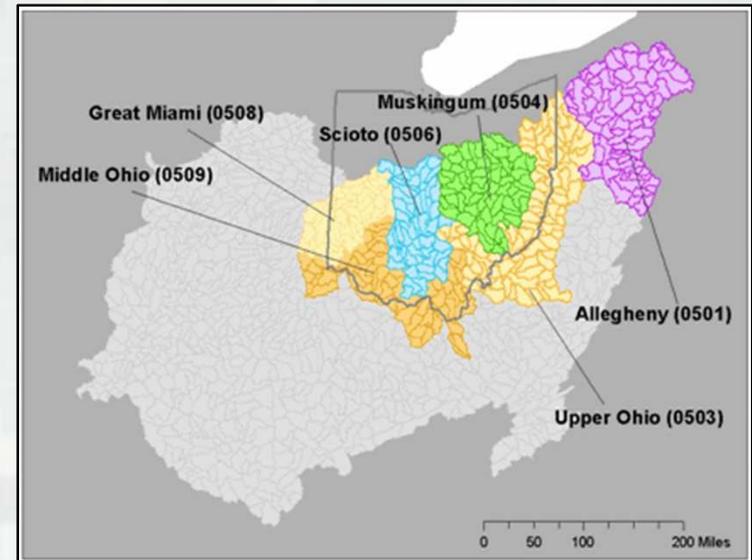


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Meeting Purpose

- Discuss USACE WQ Programs in OH
 - ▶ Louisville
 - ▶ Huntington
 - ▶ Pittsburgh
- Discussion
- Feedback



USACE Interest

- Strengthen partnerships
- Identify areas where agency missions overlap
- Leverage resources
- Eliminate duplication of effort
- Compliance (FWPCA / EO12088)



Attendance



- Clermont County Office of Environmental Quality
- City of Columbus
- SWCD of Harrison County

Agenda

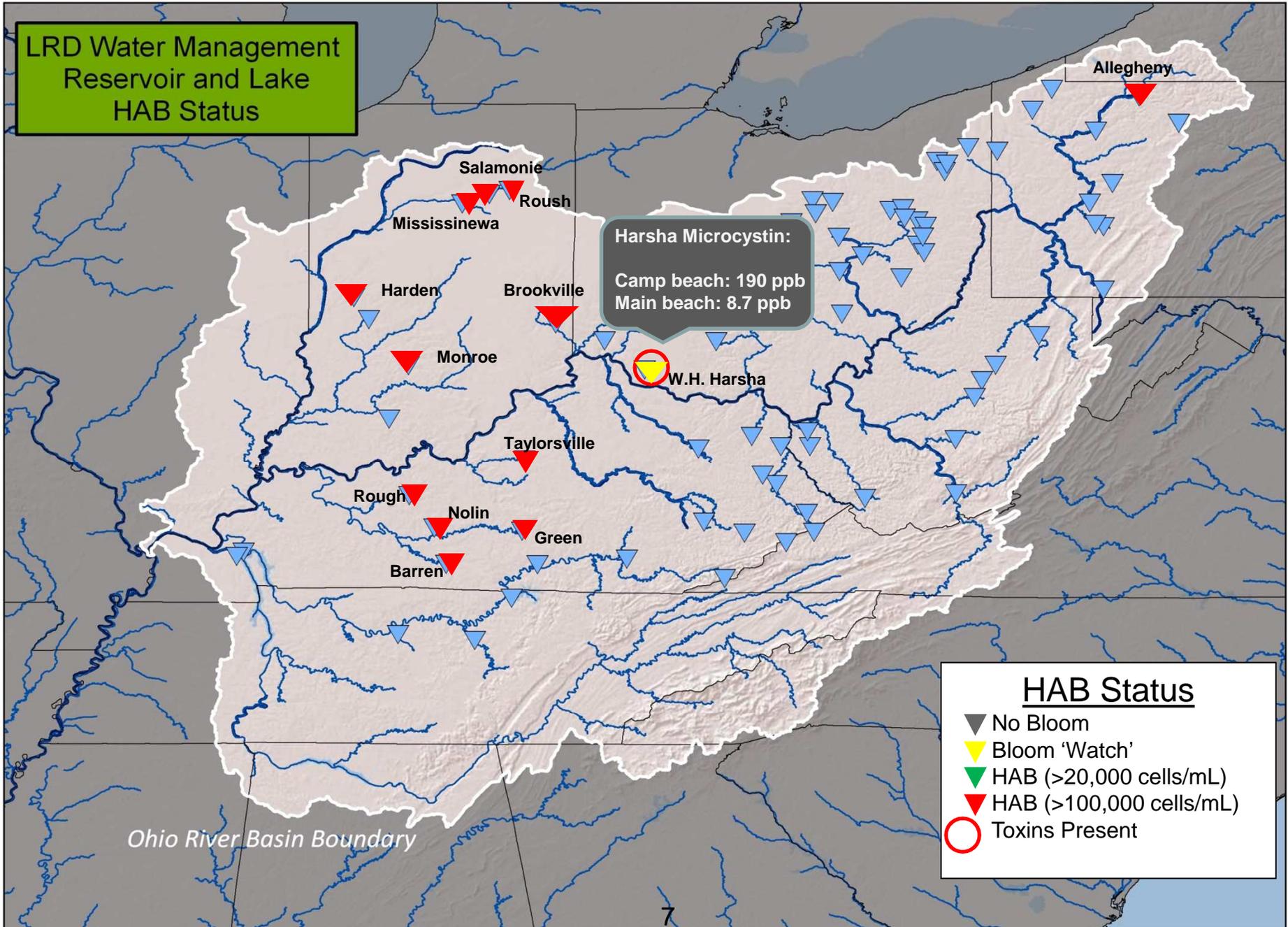
- Louisville District WQ Program: **Jade L. Young**
- USACE Reservoir Operations: **Andrew N. Johnson**
- Huntington District WQ Program: **Steven W. Foster**
- Pittsburgh District WQ Program: **Rosemary J. Reilly**
- Open Discussion



Specific Information Shared

- USACE District Water Quality Programs
 - ▶ District details
 - POCs
 - Reservoirs and watersheds
 - ▶ Mission and objectives
 - ▶ Survey and study types
 - ▶ Data and analyses
 - ▶ 2014/2015 sampling plans and schedules





HAB Response in OH

Have fun on the water, but know that blue-green algae are in many Ohio lakes. Their toxins may be, too.

Be Alert! Avoid water that:

- looks like spilled paint
- has surface scums, mats or films
- is discolored or has colored streaks
- has green globs floating below the surface



Avoid swallowing lake water.

For more information, visit ohioalgaefinfo.com or call 1-866-644-6224.



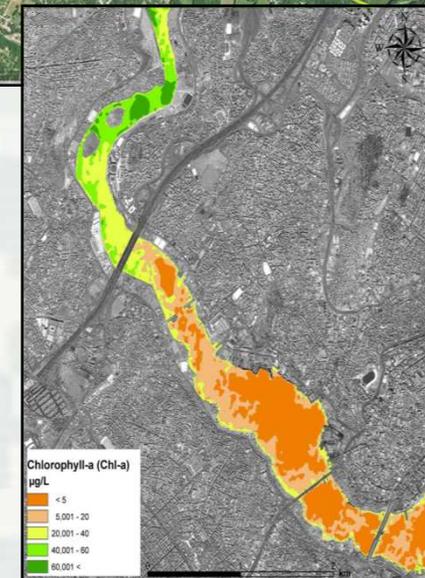
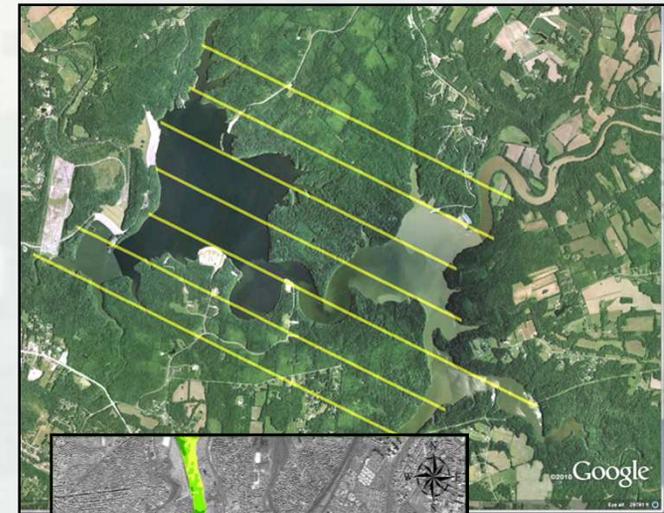
- State continues to sample beaches
- USACE reports HABs through OEPA's HAB mailbox
- USACE may or may not collect samples (TBD) as needed
- "Living" agreement and plan



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2014 Remote Sensing Pilot Project

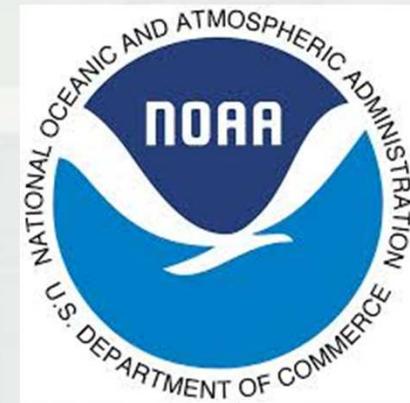
- To support HAB Field
- Comparing
 - ▶ Satellite derived multi- and hyperspectral data
 - ▶ Airborne derived hyperspectral data
 - ▶ Field measured reflectance
 - ▶ Field WQ parameters
 - ▶ Grab samples
- Data crunching stage



Remote Sensing Pilot Collaborators



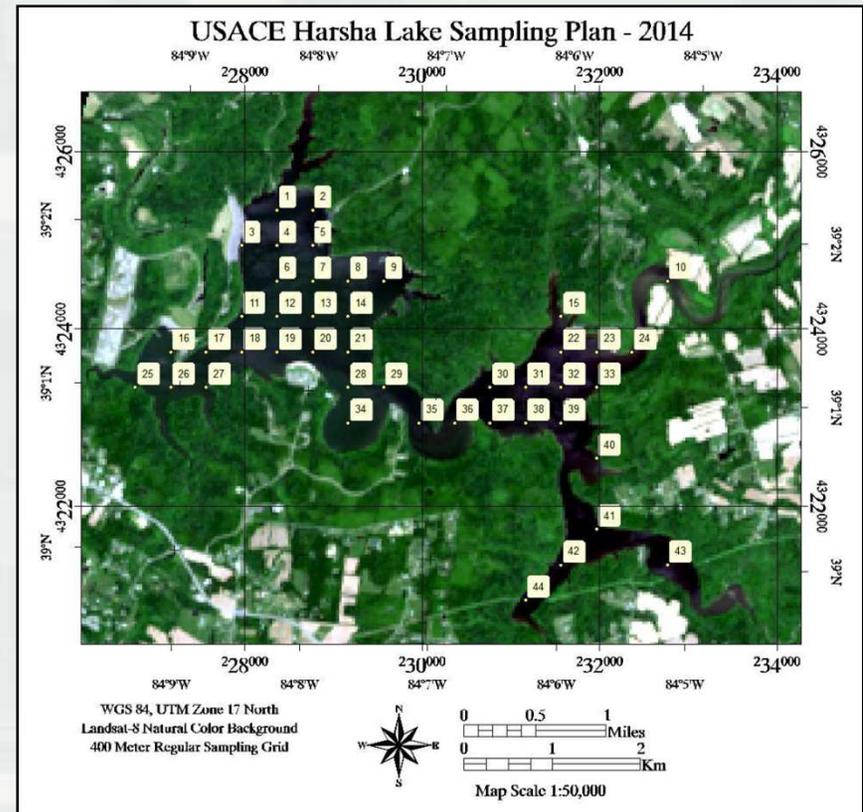
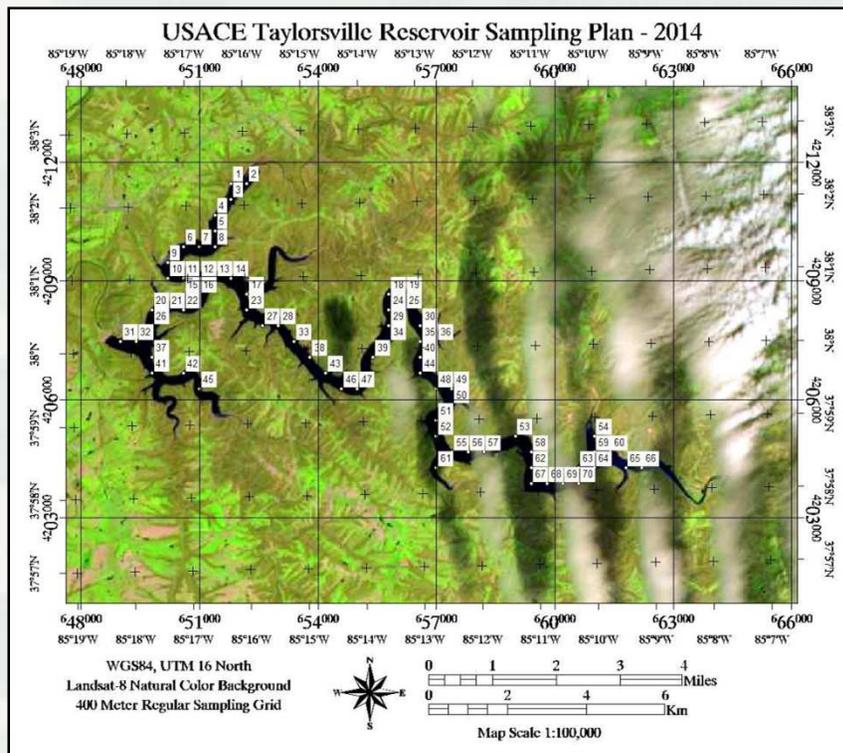
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2014 Remote Sensing Pilot Project

Taylorville Sampled June 18, 2014



Harsha Sampled June 27, 2014



Environmental Flows

- April 24, 2014, the COE's Chief of Engineers Environmental Advisory Board recommended that the COE initiate environmental flows (E-Flows) from as many of its dams as possible.
- During the late summer/fall of 2014, several meetings were held with state agencies to discuss options and get feedback.
- A meeting between members of the COE and TNC was held in Cincinnati on September 16-17, 2014. Specific attention was placed on past success stories and proposed E-Flow related enhancements to COE multipurpose flood control projects. These enhancements included both operational and structural modifications.
- Plans differ per District.



Additional Highlights and Discussions



- Fish management
- Reservoir Operations Influence
- TMDLs
- Mahoning Shale Gas
- Modeling



USACE Louisville District Website

- <http://www.lrl.usace.army.mil/>

The screenshot shows the homepage of the USACE Louisville District website. At the top, there is a header with the US Army Corps of Engineers logo and the text "LOUISVILLE DISTRICT". Below the header is a navigation menu with links for "ABOUT", "BUSINESS WITH US", "MISSIONS", "LOCATIONS", "CAREERS", "MEDIA", "LIBRARY", and "CONTACT". The main content area features a "Photo of the week: Autumn colors" section with a photograph of a river and trees. To the right of the photo are three large buttons: "Recreation" (green), "Water Information" (blue), and "Regulatory/Permitting" (red). A red arrow points to the "Water Information" button. Below the photo and buttons are sections for "Latest News Releases", "Latest Stories", and "Connect with us" (Facebook and Twitter). The "Connect with us" section includes a Facebook widget showing the "Louisville District, U.S. Army Corps of Engineers" page with 2,198 likes.



USACE Louisville District Website

LOUISVILLE DISTRICT

US Army Corps of Engineers

Search Louisville District

HOME > MISSIONS > CIVIL WORKS > WATER INFORMATION

Water Information

The Water Management section is responsible for the daily operation of twenty multi-purpose reservoir projects within the Louisville District and the collection and dissemination of data associated with those projects in regards to reservoir control and water quality. Water Management is supported by the Water Control Team and the Water Quality Team.

Quick Links

- 3-day NWS River Forecast
- Daily Lake Report
- Daily River Report
- Quantitative Precipitation Forecasts

| Water Control | Water Quality |
|---|---|
| Current Stage Data | Water Quality Home |
| DCPs by Basin | Harmful Algal Blooms (HABs) |
| External Links | Other Concerns |
| Lake Information | Updated Lake Temperatures and Dissolved Oxygen Levels |
| Navigation Conditions | Biological Assessments |
| Other USACE Information | |

LOUISVILLE DISTRICT

US Army Corps of Engineers

Search Louisville District

HOME > MISSIONS > CIVIL WORKS > WATER INFORMATION > WATER QUALITY

Louisville District Water Quality

Legend

- Lock & Dam
- River
- Lake Project
- City

Click here for a larger map.

Water Quality Program

The Water Quality Team is responsible for monitoring and evaluating water quality in the 20 reservoirs and 542 river miles of the Ohio River that are within the Louisville District civil works boundaries. This effort includes measurement of selected physical, chemical, and biological parameters at river and lake project stations.

Biological assessments of water quality, including benthic macroinvertebrates from inflow and tailwater stations, are monitored for each lake project to provide information regarding short and long term trends in water quality conditions not readily detectable based on measurements of physical and chemical parameters alone. Also, routine phytoplankton analyses as well as harmful algal bloom (HAB) monitoring are performed at the projects within the Louisville District civil works boundaries.

Lake project personnel take frequent and regular measurements of temperature and dissolved oxygen at the dam site during lake stratification (Spring to Fall), which are made available in Updated Lake Temperatures and Dissolved Oxygen Levels.

Water Quality

- [Water Quality Home](#)
- [Harmful Algal Blooms \(HABs\)](#)
- [Other Concerns](#)
- [Updated Lake Temperatures and Dissolved Oxygen Levels](#)
- [Biological Assessments](#)
- [Water Quality Data](#)
- [Useful Links](#)
- [Contact Water Quality](#)

Water Quality Photos

Caption

«PREV NEXT»

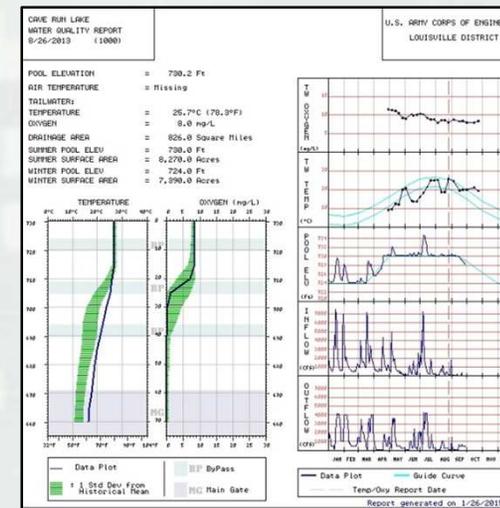
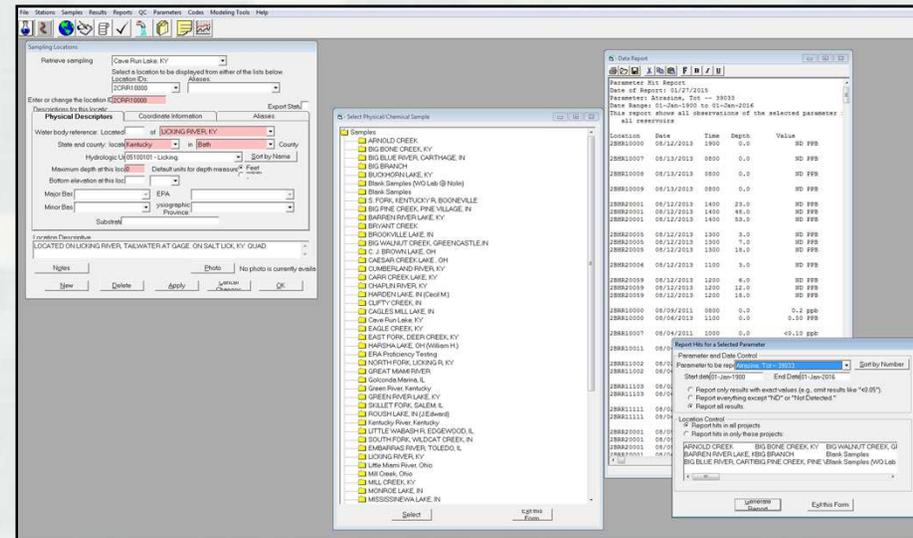
About

Contact



Data Management

- Data Analysis Software for Lakes Estuaries and Rivers (DASLER)
 - ▶ Interfaces with Access
 - ▶ Developed with Corps funding
- Stay informed on other systems
 - ▶ AQUARIUS
 - Other Corps Districts



Data Availability



- Best way is to contact District POC

- ▶ Louisville
 - Jade Young
- ▶ Huntington
 - Steve Foster
- ▶ Pittsburgh
 - Rose Reilly



Opportunities Identified

- Impairments to drinking water
- Sportfish growth rate potential models
- Compliance
- Volunteer program utilization
- Environmental flows discussions
- Data sharing



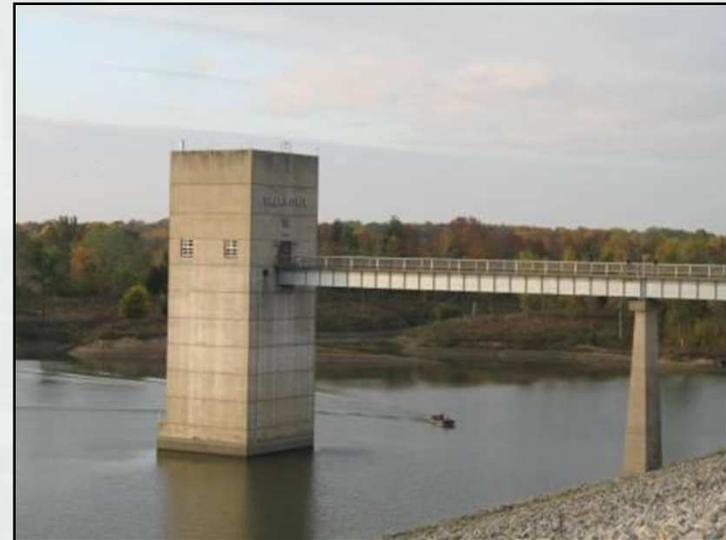
Future Meetings Ideas

- Earlier in year
- Send information up front to allow for review
- Break into “regions” ~2 meetings
- Invite more local players (water utilities, etc.)
- New locations discussed
- **Annual Event**



USACE Future Outlook

- Steady budget = shrinking program
- Increasing pressure to demonstrate value
- Increasing need to leverage resources with others



Questions?

