

Ohio River Spill Modeling

Informational Item

Technical Committee Meeting
June 16–17, 2015

Background

- ▶ Ohio River Spill Modeling System
 - Developed in 2001
 - Based on USGS BLTM model
 - Uses USACE CASCADE flows
- ▶ Predicts plume time-of-travel
 - Leading edge; peak; trailing edge
- ▶ Estimates pollutant concentration
- ▶ Utilized to:
 - Inform water utilities and others of spill location
 - Inform sampling crews where to monitor
- ▶ Recent Elk River spill highlighted issues

Modeling Issues/Needs

- ▶ CASCADE model being phased out
- ▶ Model has several bugs which must be worked around
- ▶ Limited spatial extent of model runs
 - Only models 50 river segments per run
 - Does not include tributaries
- ▶ Handling of model inputs/outputs cumbersome
 - Slows down modeling time
- ▶ Limited trained users



Spill Model Upgrade

Funding provided by US EPA

- Work completed by modeling contractors

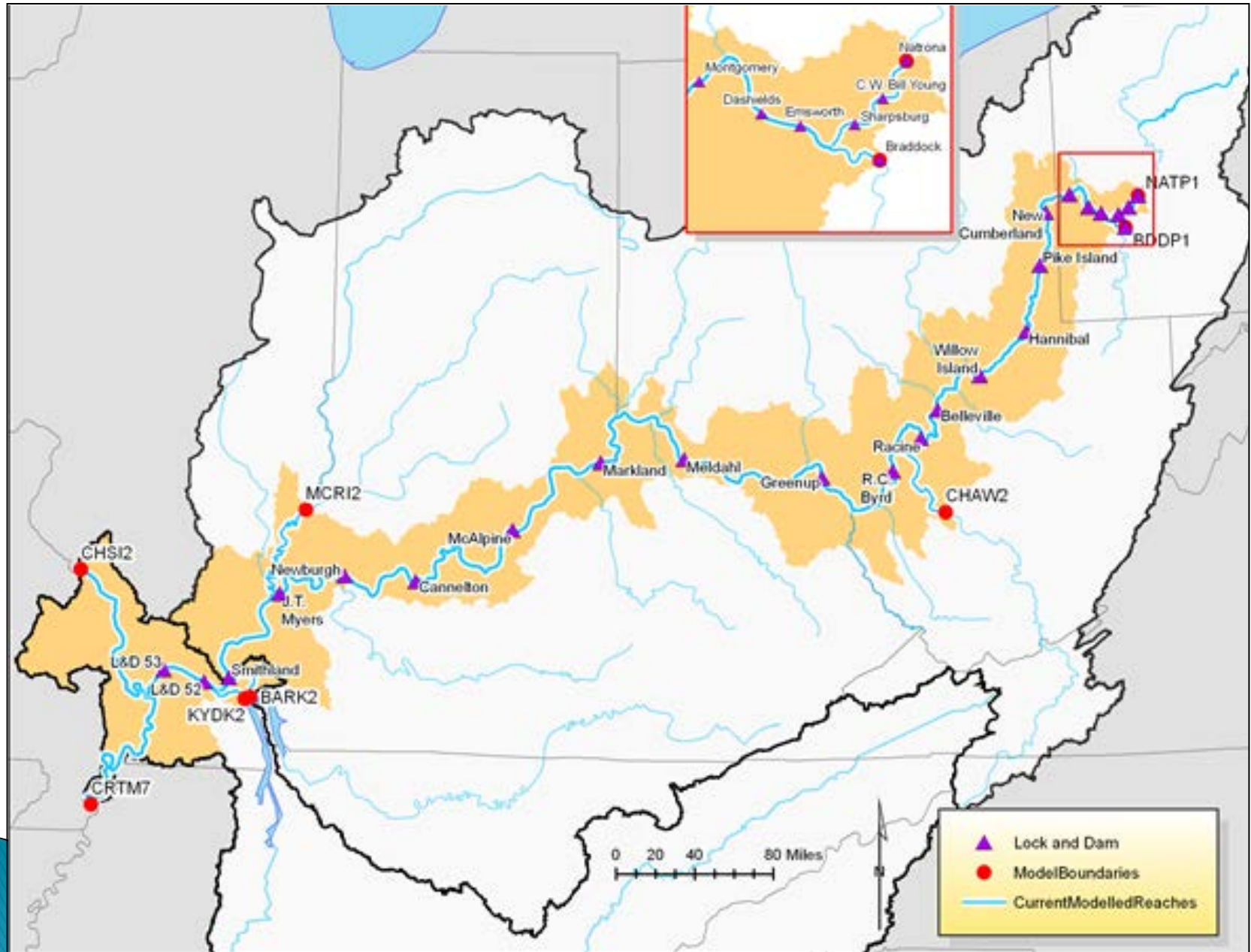
Phase 1 – Completed*

- Expanded geographic extent of model runs
- Includes major tributaries
- Web-based (remote access)

Phase 2 – Complete in FY16

- Incorporate GIS component
- Connect to relevant databases

Current HEC-RAS Model Extent



Questions?

