

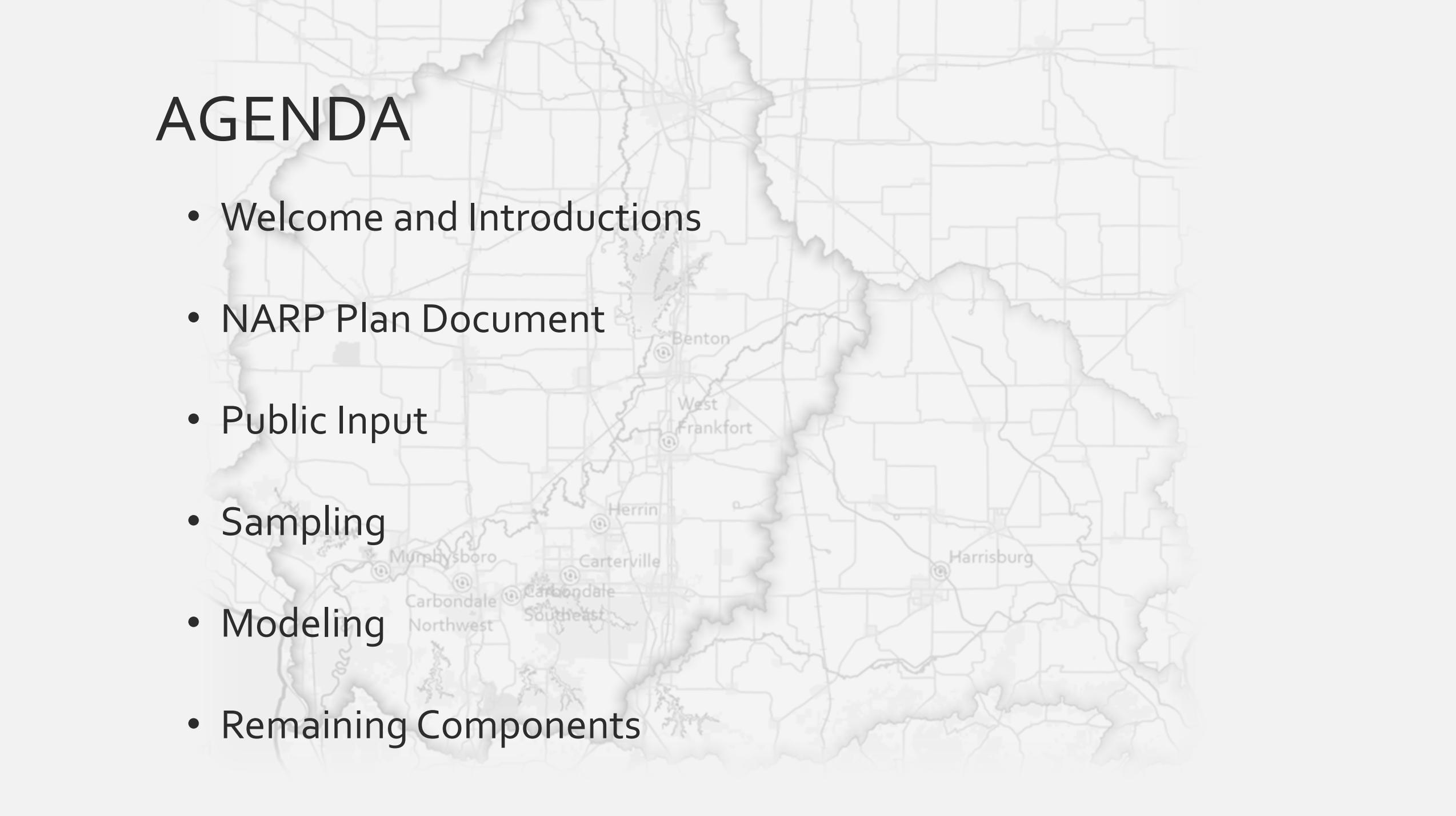


NUTRIENT ASSESSMENT REDUCTION PLAN

BIG MUDDY/SALINE RIVER WATERSHEDS

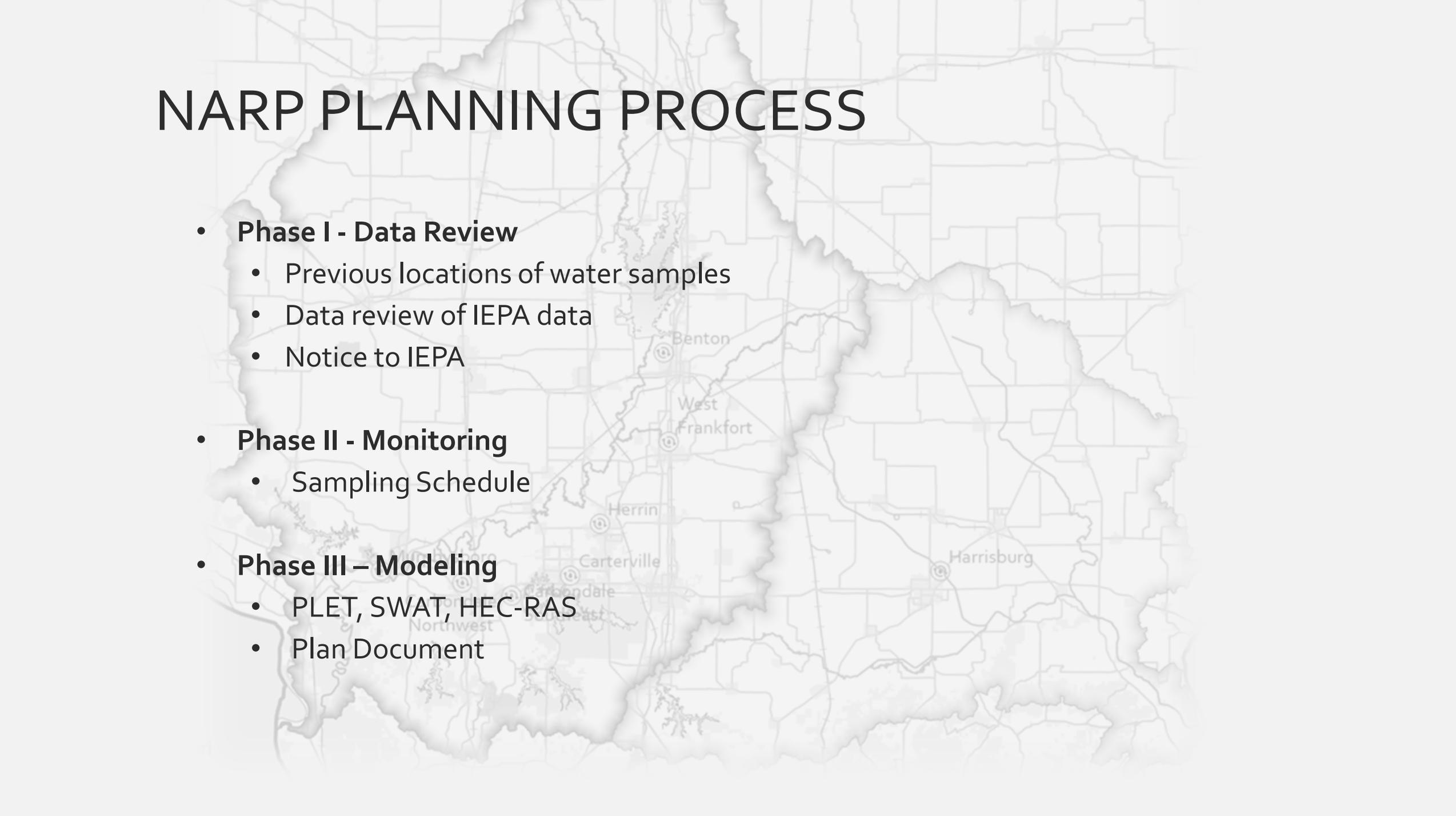
September 25, 2025

AGENDA



- Welcome and Introductions
- NARP Plan Document
- Public Input
- Sampling
- Modeling
- Remaining Components

NARP PLANNING PROCESS



- **Phase I - Data Review**
 - Previous locations of water samples
 - Data review of IEPA data
 - Notice to IEPA
- **Phase II - Monitoring**
 - Sampling Schedule
- **Phase III – Modeling**
 - PLET, SWAT, HEC-RAS
 - Plan Document

NARP PLAN DOCUMENT

1. Introduction
2. Watershed Geography and Land Use
3. Water Quality and Sampling Plan
4. Best Management Practices
5. Technical and Financial Assistance
6. Outreach and Education
7. Implementation and Milestones
8. Evaluation and Monitoring

PUBLIC INPUT/PARTICIPATION

Meetings:

- *Advisory Meetings*
- *Public Meeting – 9/15/25*

Participation:

- [*Agricultural Survey*](#)

Other:

- [*Website*](#)
- *Story Maps*

SAMPLING PLAN AND DATA

Sampling Data:

- 2023
- 2024
- 2025

	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Benton									
Carbondale									
Carterville									
Herrin									
Murphysboro									
West Frankfort									
Harrisburg									

Other:

- IEPA

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Benton												
Carbondale												
Carterville												
Herrin												
Murphysboro												
West Frankfort												
Harrisburg												

	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25
Benton										
Carbondale										
Carterville										
Herrin										
Murphysboro										
West Frankfort										
Harrisburg										

No Data Available
Missing Some Data
All Data Available

MODELS

PLET: Pollutant Load Estimation Tool

[BIG MUDDY PLET](#)

[SALINE PLET](#)

GIS: Spatial data and timelapses of sample

[BIG MUDDY SAMPLE](#)

[SALINE SAMPLE](#)

HEC-RAS: 2D Transport Environment with Temp

SWAT (BASINS): Soil and Water Estimation Tool

REMAINING COMPONENTS

Management Strategies for Phosphorus:

Agricultural

- *Survey*
- *Prior Proposals and Management Measures*
- *State and Local Initiatives*

Urban

- *Stormwater and Watershed Plans*
- *Public Input*

POTW P Mitigation/Removal

- *WWTP Practices*
 - *Needs*
 - *Based on P in Samples*
 - *NPDES Requirements*
 - *P Optimization Plan*
 - *Measures*
- *Survey?*
 - *Two Management Measures*

DISCUSSION