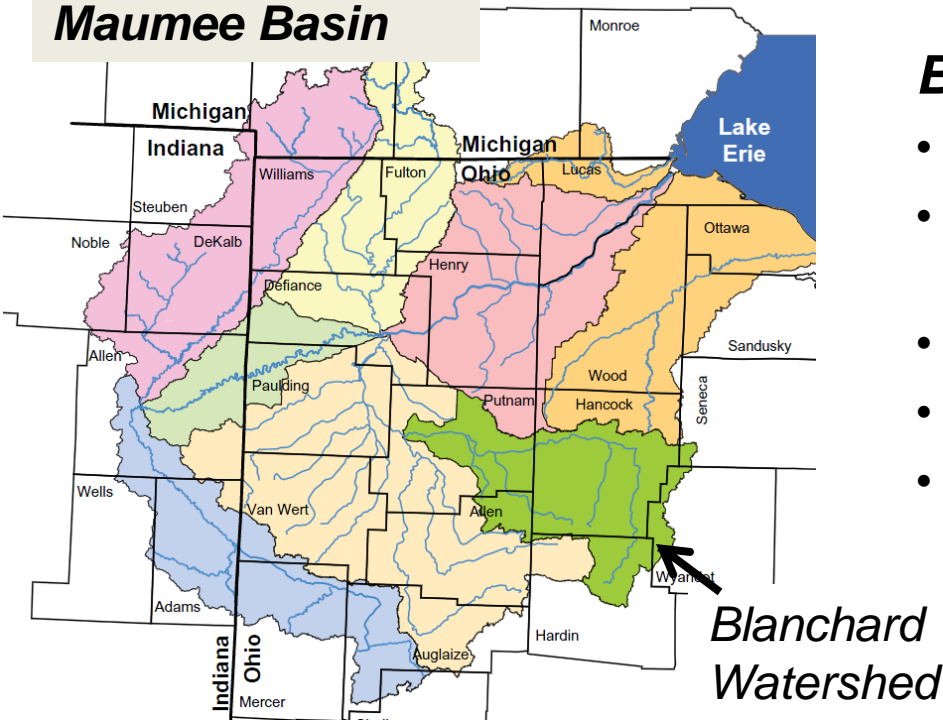


# Blanchard River Watershed: AnnAGNPS Modeling

- **Funding:** 516(e) Program – USACE Buffalo District / ERDC
- **Project partners:** LimnoTech, USDA-NRCS, USDA-ARS, USGS, University of Toledo, Heidelberg University
- **Goals:**
  - Identify high priority areas for sediment and nutrient loading
  - Compute export from watershed in response to management actions

## Maumee Basin



## Blanchard Watershed Characteristics

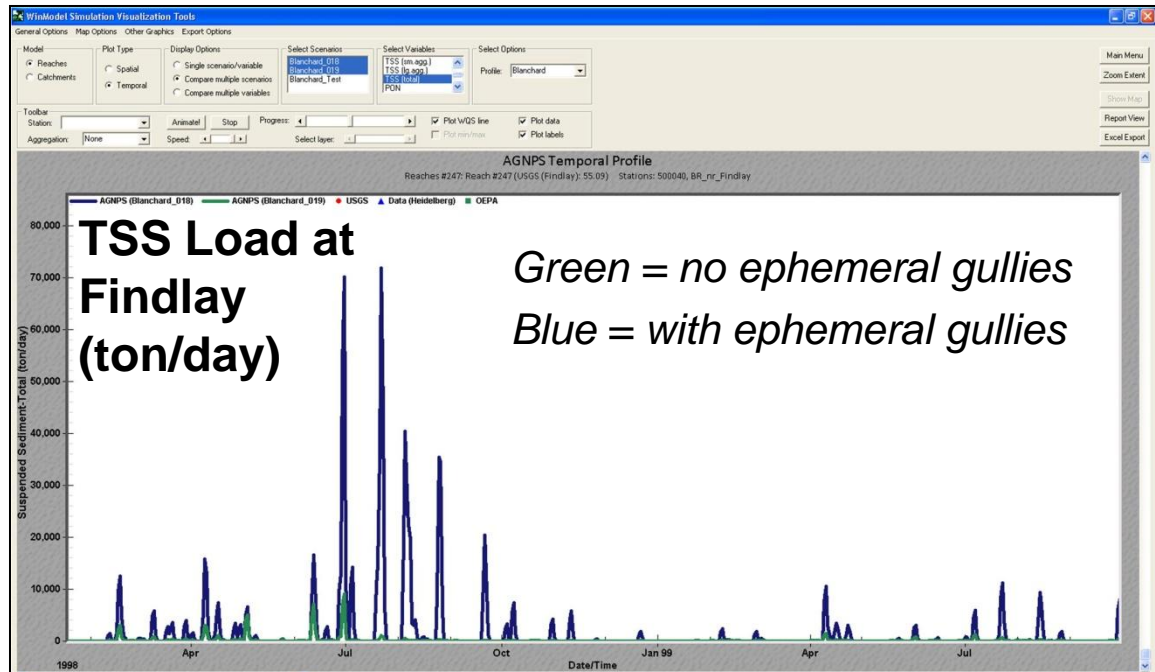
- 771 miles<sup>2</sup>
- Maumee Basin is largest tributary sediment source to Lake Erie
- Cropland > 80% (Beans, Corn, Wheat)
- Low slope (typically < 2%)
- Poorly drained soils (42% hydric)

# Project Steps and Status

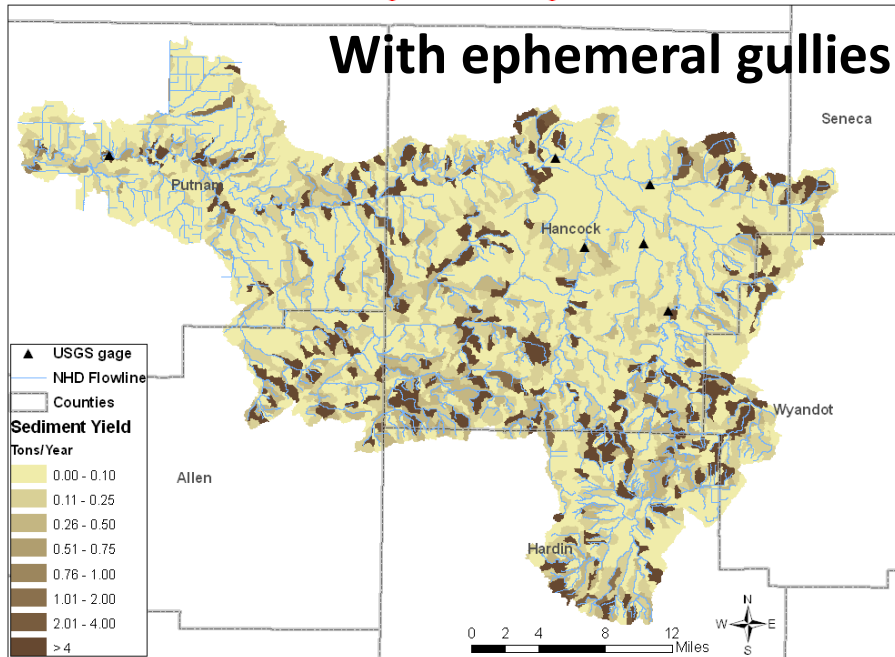
- ✓ Project initiation and kick-off
- ✓ Model input development (spatial, time series)
- ✓ Model setup and parameterization
- Model calibration (*in progress*)
- Model application of management alternatives
  - Lye Creek Action Plan (1/6 of watershed)
  - Watershed-wide alternatives
- Reporting
- Outreach with watershed stakeholders
  - Blanchard River Watershed Partnership
  - Environmental Defense Fund
  - Northwest Ohio Flood Mitigation Partnership
  - Putnam Soil and Water Conservation District
  - Ohio DNR
  - Hancock Regional Planning Commission
  - URS (Flood Mitigation Project)

BMP/Land Management Practices
Conservation Tillage
Conservation Crop Rotation
Contour Farming
Cover Crops
Grassed Waterways
Field Borders
Filter Strips
No-Till Farming
Nutrient Management
Residue Management
Strip cropping

# Preliminary AnnAGNPS Results



Blanchard Watershed  
AnnAGNPS Modeling - Annual Average Sediment Yield



Blanchard Watershed  
AnnAGNPS Modeling - Annual Average Sediment Yield

