# Wisconsin River TMDL Model Integration

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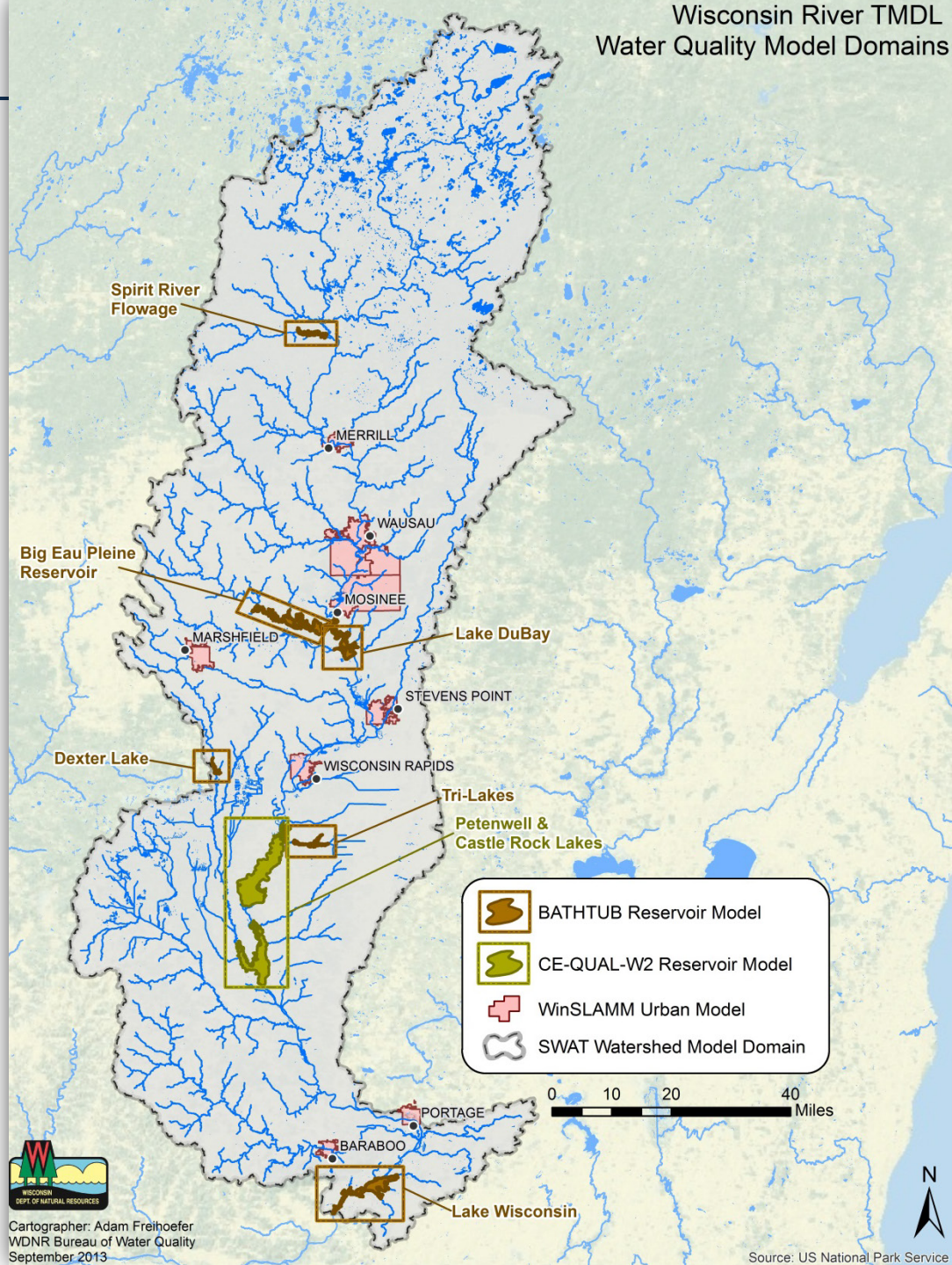
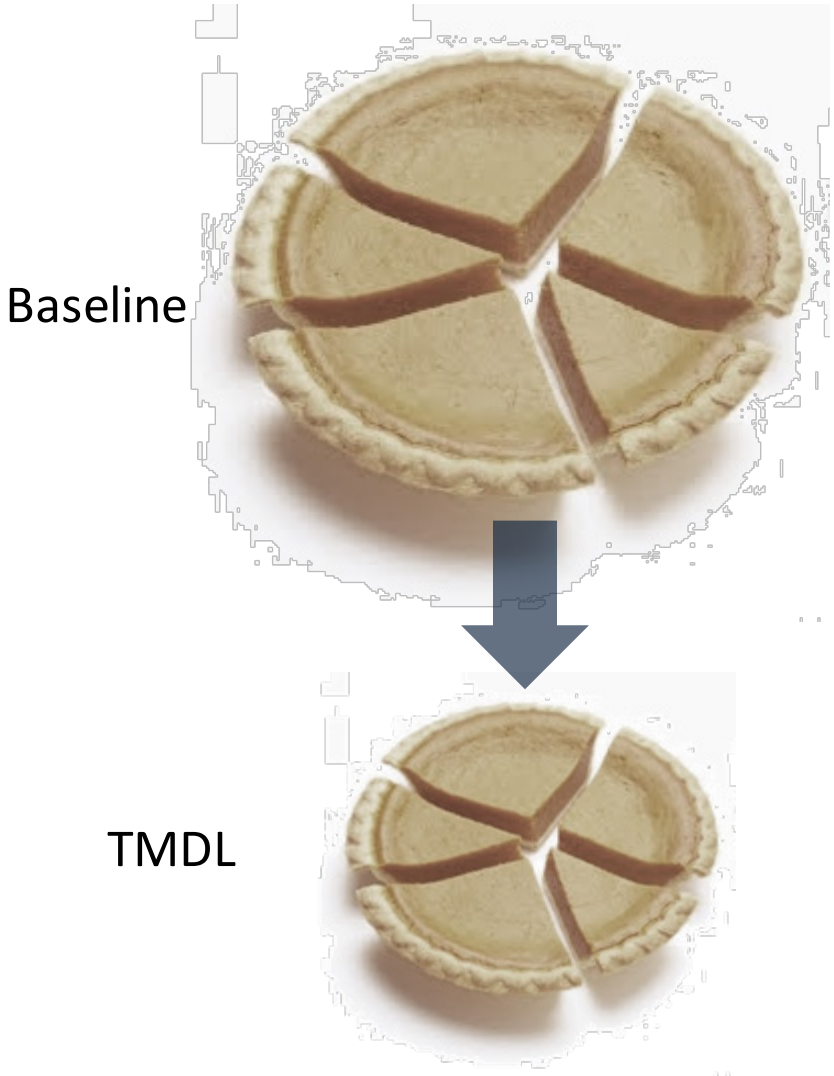
# Model Domains

- Watershed response
  - ✓ Entire basin
- Urban / stormwater response
  - ✓ Urban Areas
    *MS4, cities and villages*
- Empirical reservoir response
  - ✓ Spirit River Flowage
  - ✓ Big Eau Pleine Reservoir
  - ✓ Lake DuBay
  - ✓ Dexter Lake
  - ✓ Tri Lakes
  - ✓ Lake Wisconsin
- Mechanistic reservoir response
  - ✓ Petenwell
  - ✓ Castle Rock



# Model Integration Database Functions

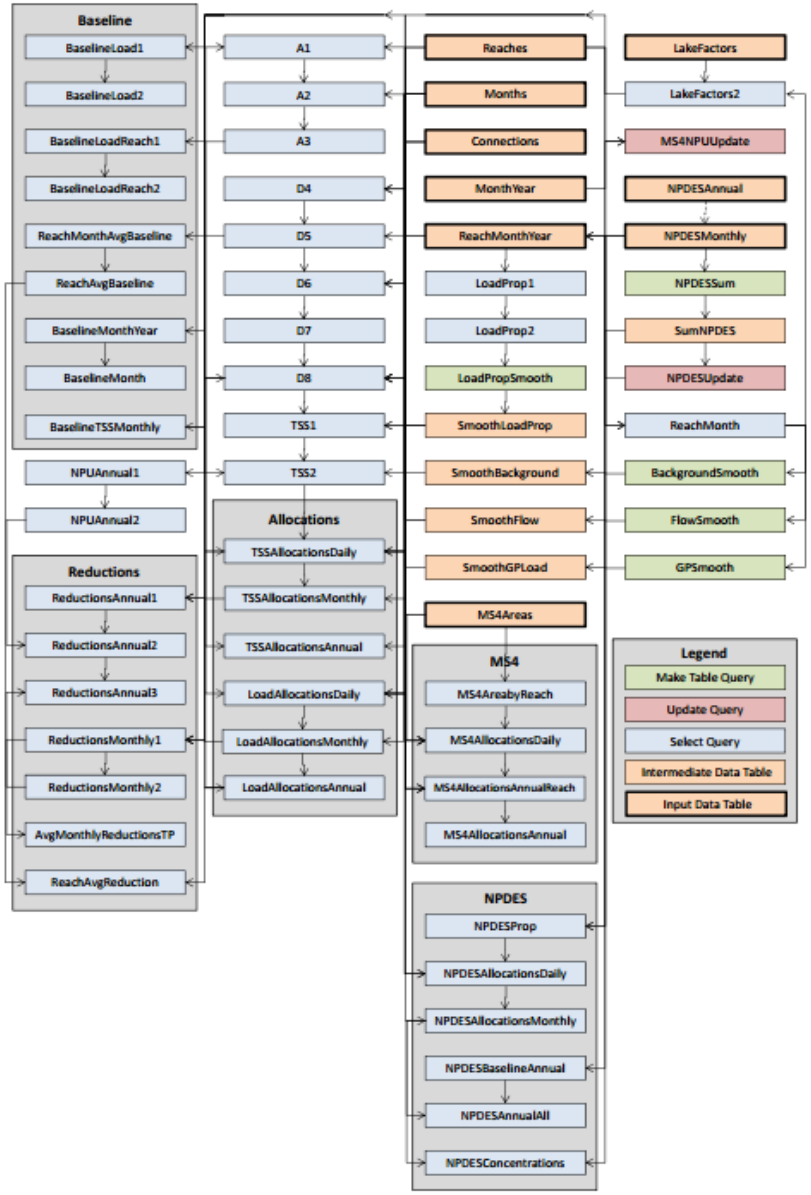
- Platform for storing and organizing model inputs and outputs
- Record of complete multi-model architecture
- Will be used to calculate:
  - Loading capacity
  - Load allocations
  - Percent reductions



# Model Integration Database Design

- Microsoft Access Database
- Similar to Rock River TMDL database, with a few differences:
  - Many more reaches
  - Reservoir models
- Calculations performed dynamically using SQL
- Results will be summarized on a monthly basis
- Results may be exported as spreadsheets

Rock River TMDL Database Schematic



# Discussion

Questions?