

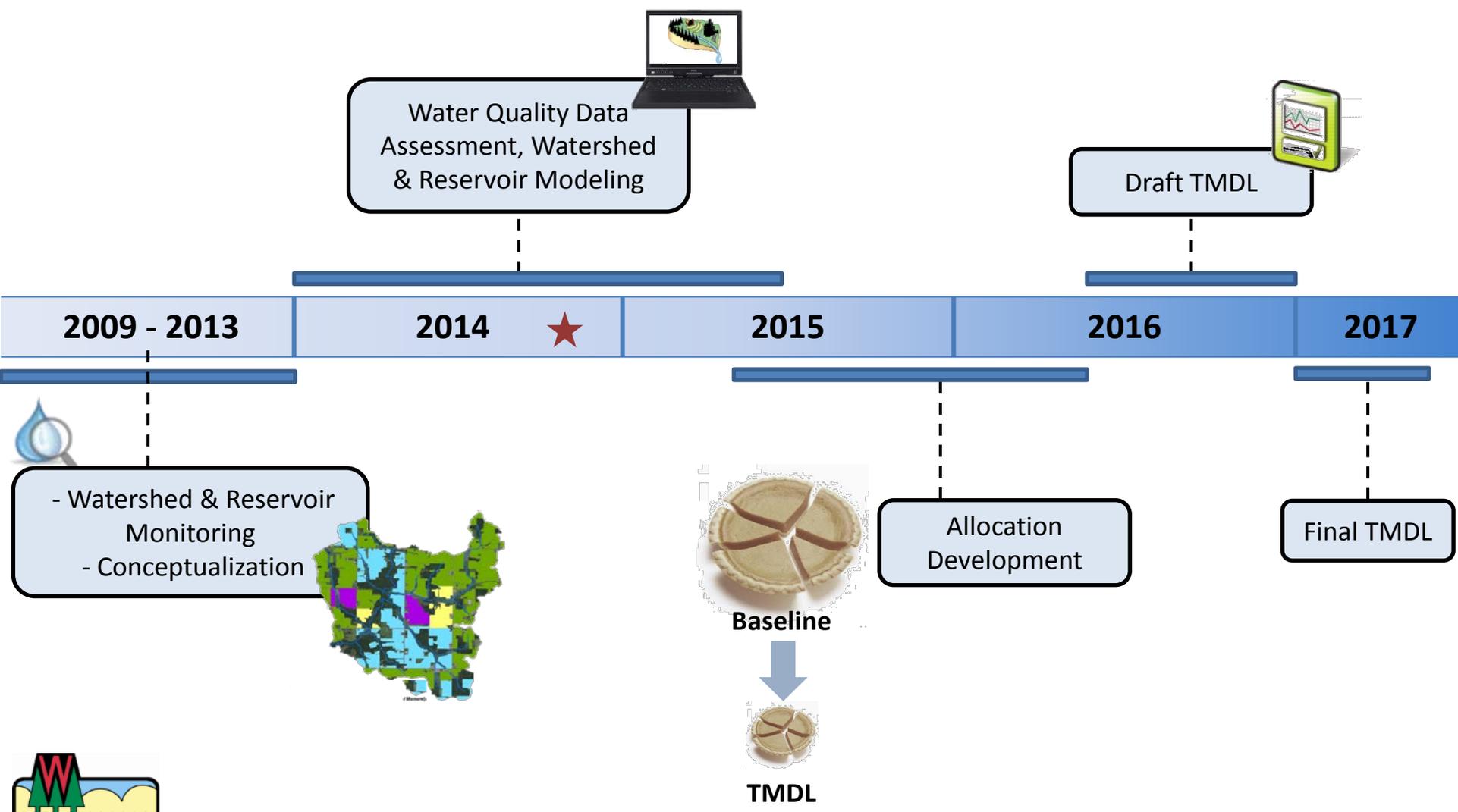
Wisconsin River TMDL

Modeling Progress Update from
Project Technical Team
(November 2014)



Overall Project Timeline

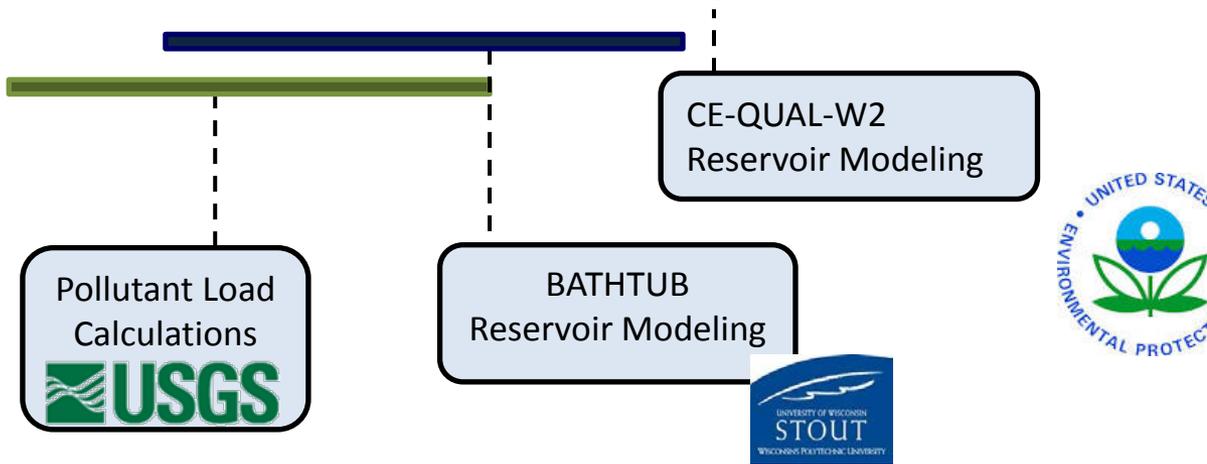
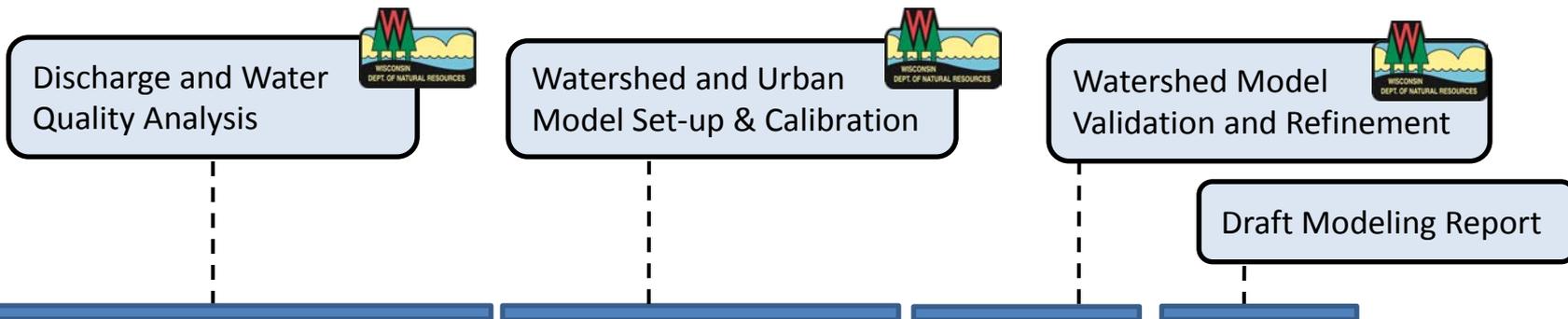
Estimated Timeline (as of November 2014)



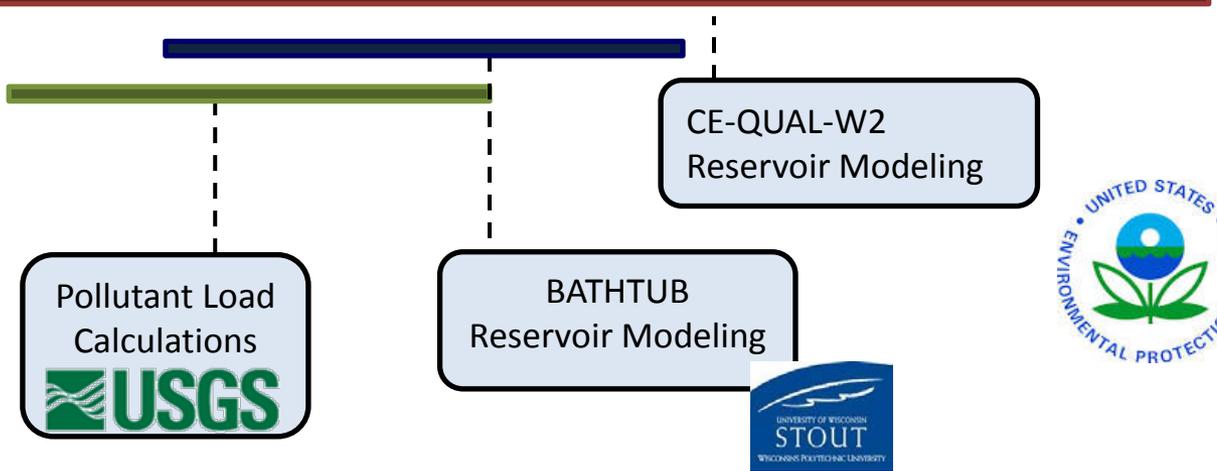
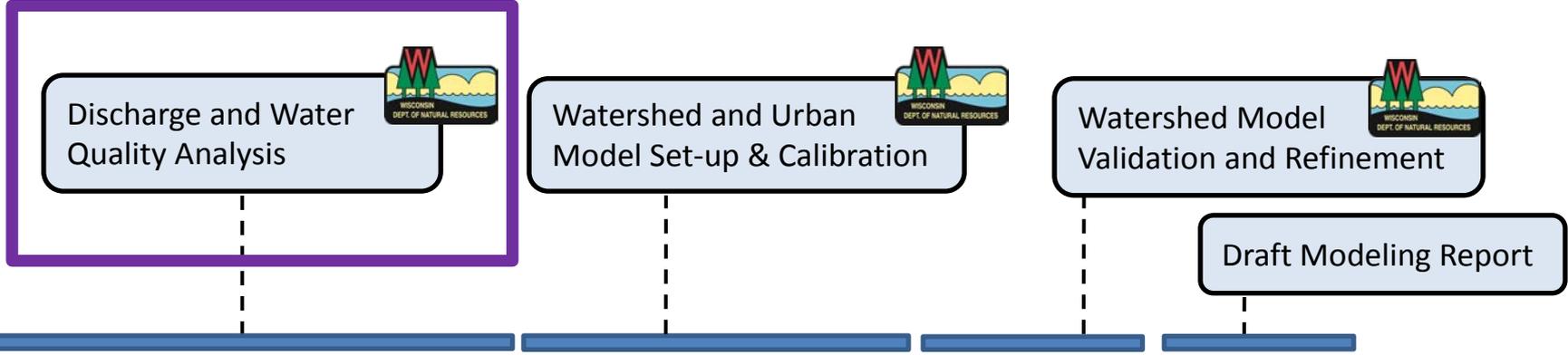
Detailed Technical Project Timeline



Estimated Timeline (as of November 2014)



Detailed Technical Project Timeline



Progress as of November 2014

- Discharge Analysis
 - Obtained and reviewed surface water effluent load information from basin engineers and compiled into Access database
 - Working with wastewater staff to compile info on facilities that intake river water, so loads can be adjusted accordingly.
 - Working with wastewater staff to determine loadings from NCCW general permits
- Water Quality Analysis
 - Review and compilation of monitoring data as needed for delivery to contractors (UW-Stout, EPA, USGS)
 - Compilation of other monitoring data ongoing

Detailed Technical Project Timeline



Discharge and Water Quality Analysis



Watershed and Urban Model Set-up & Calibration



Watershed Model Validation and Refinement



Draft Modeling Report



Pollutant Load Calculations

BATHTUB Reservoir Modeling



CE-QUAL-W2 Reservoir Modeling



Progress as of November 2014

SWAT Model Setup

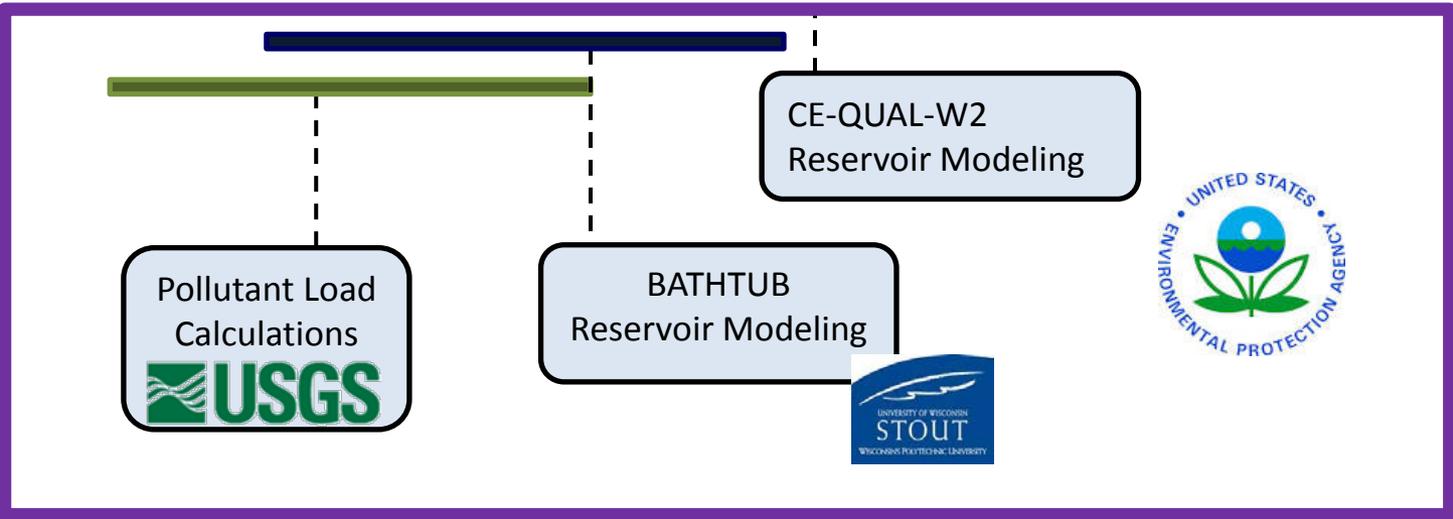
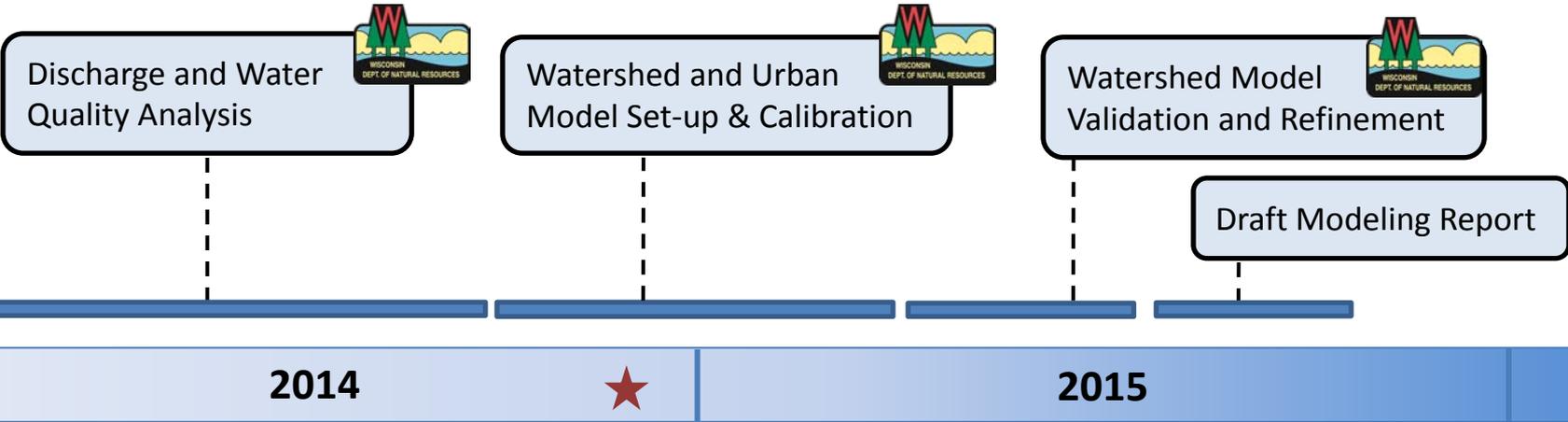
- Set-up SWAT model runs to test and incorporate new data layers
- Testing run times with different data types

SWAT Model Dataset Development

- **Subwatershed Definitions** - HUC 10 to HUC 12 scale sub-basins, with breaks added where required to address impaired water segments, point sources, and other features.
- **Reservoir Characteristics** - Geometric properties required for SWAT configuration
- **Internally Drained Areas/ Wetlands**
- **Land Use/Land Management** (tech memo online)
- **Soils** (SSURGO-based)
- **Baseflow Separation**
- **Annual Water Budget**
- **Climate**

- MS4 urban area map finalized and distributed to permitted MS4s
- Delineated reach sheds within urban model area of permitted MS4s, will be distributed with SWAT model
- Urban model soil texture layer developed

Detailed Technical Project Timeline



- Flow and water quality monitoring data for 38 sites delivered to USGS, including flow data from WVIC and Alliant Energy
- “Load calculating” is underway by USGS

Reservoir Modeling

Progress as of November 2014

Bathtub Modeling



- Bathymetry, reservoir and river/stream monitoring data delivered to UW-Stout
- Model Setup is underway by UW-Stout
- Water quality calibration work can begin upon completion of load calculations

CE-QUAL-W2 Modeling



- EPA contractor selected Sept 2014
 - RTI (prime)
 - LimnoTech (Sub)
- Kickoff Meeting October 21, 2014
- QAPP development underway; Draft due Dec 5, 2015
- Modeling to begin upon completion and EPA approval of QAPP
- EPA must be cc'ed on all communications with contractors