

Installation Overview

Questions? Contact Paul McGinley (715) 346-4501 paul.mcginley@uwsp.edu

Wisconsin Lake Modeling Suite (WiLMS)

1. Download from WDNR <http://dnr.wi.gov/lakes/model/>
2. Latest version 3.318 (7-25-05 update)
3. You can also download the documentation (right side of that web page)

Lake Management Tools

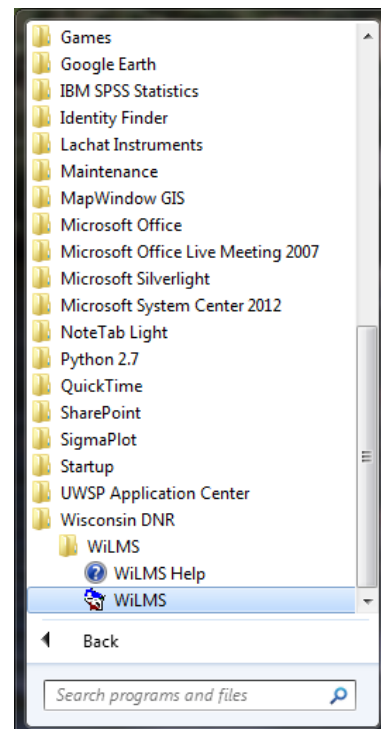
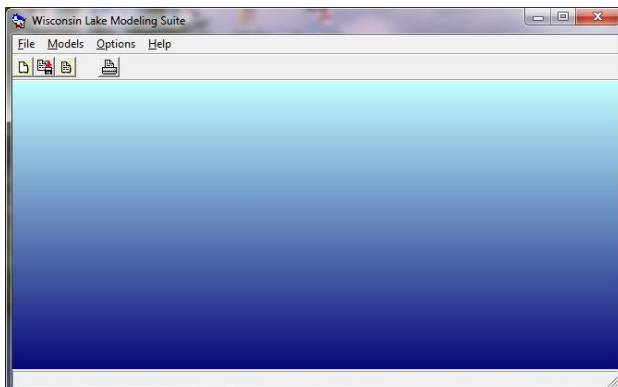
The Wisconsin Lake Modeling Suite (WiLMS) model is a lake water quality-planning tool. The WiLMS model structure is organized into four (4) principal parts, which include the front-end, phosphorus prediction, internal loading and trophic response.

Models Include:

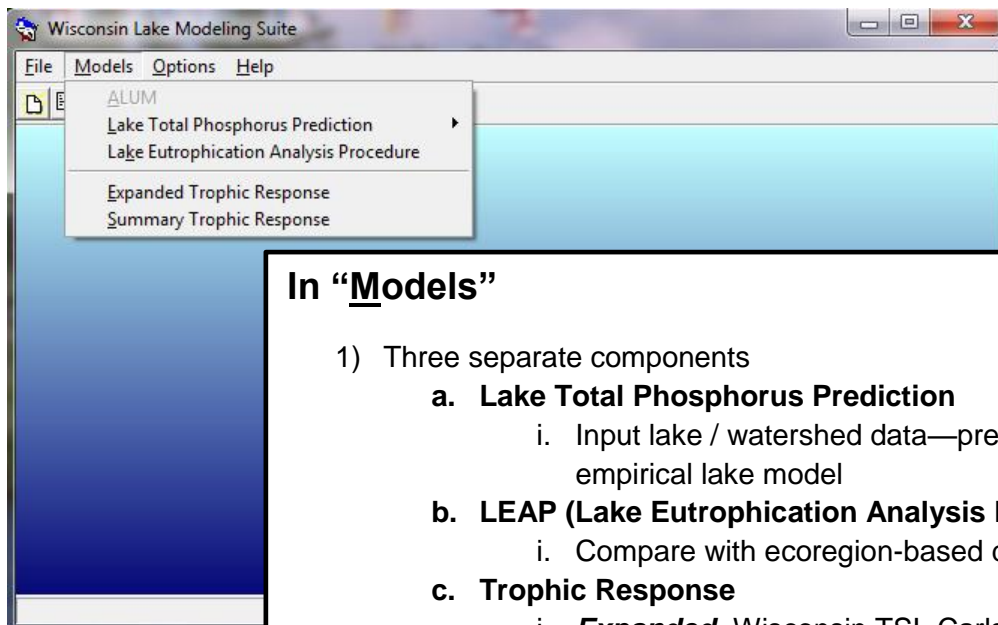
- **WiLMS 3.3.18 (7-25-05 update)**
Wisconsin Lake Modeling Suite is a screening level land use management/lake water quality evaluation tool.
To install [WiLMS 3.3.18 Zip file - 3,000kb](#)
 1. Download the WiLMS distribution file and save it in a temporary directory.
 2. Unzip the distribution file and run the **Setup** application from Windows.
 3. Select the **Repair** option from within the install program to update WiLMS and select **Finish** when complete.
- **Models distributed by the Army Corps of Engineers**
To [download Java apps](#)
 - Bathtub - Corps. of Engineers Reservoir Eutrophication Model.
 - Flux - Corps. of Engineers Tributary Loading Model.
 - Profile - Corps. of Engineers Pool Data Reduction Model.

Contact information
For Questions or Information about these Models, please contact:
[Tim Asplund - Limnologist](#)
Division of Water
Bureau of Watershed Management

4. Install the program / and run by clicking on the WiLMS Wisconsin Map icon -- usually installed in
 - a. "All Programs"
 - i. "Wisconsin DNR"
 1. WiLMS

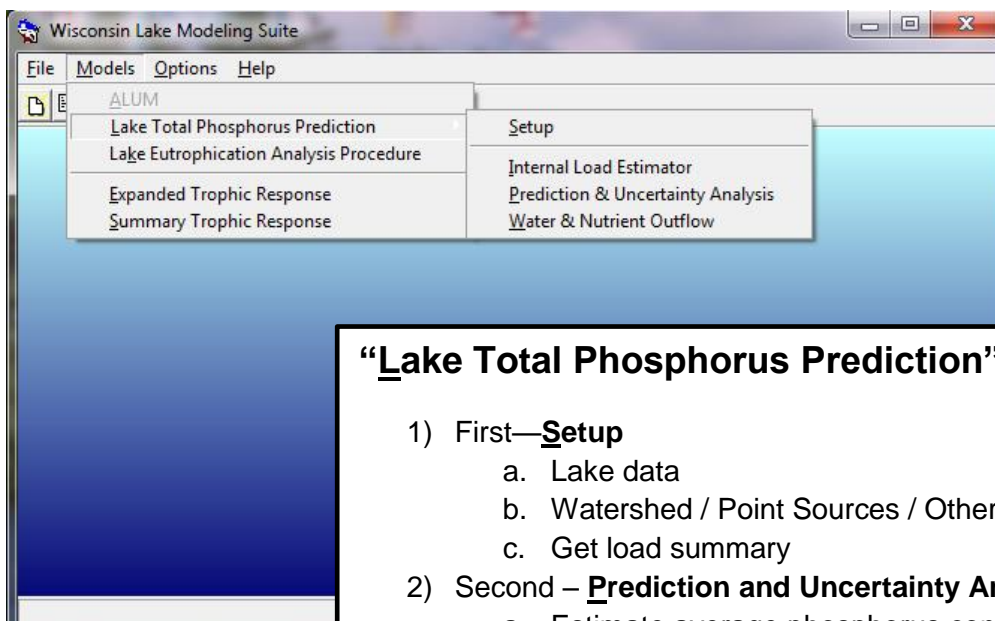


5. Congratulations—it's loaded—now you can explore the “Models” tab (this is where we'll start during our workshop)



In “Models”

- 1) Three separate components
 - a. **Lake Total Phosphorus Prediction**
 - i. Input lake / watershed data—predict TP using empirical lake model
 - b. **LEAP (Lake Eutrophication Analysis Procedure)**
 - i. Compare with ecoregion-based data set
 - c. **Trophic Response**
 - i. **Expanded**- Wisconsin TSI, Carlson TSI, predictive equations for Secchi and Chlorophyll
 - ii. **Summary** – Wisconsin TSI and predictive



“Lake Total Phosphorus Prediction”

- 1) First—**Setup**
 - a. Lake data
 - b. Watershed / Point Sources / Other P Loads
 - c. Get load summary
- 2) Second – **Prediction and Uncertainty Analysis**
 - a. Estimate average phosphorus concentration
 - b. Compare different estimation methods
- 3) Third –
 - a. Explore sensitivity to load reductions
 - b. Possibly use **Water & Nutrient Outflow**