



WisCALM 2022 Change Log

Water Quality Bureau, Environmental Division
Wisconsin Department of Natural Resources
September 2020 and December 2020

A significant number of organizational changes were made between the 2020 and the 2022 versions of Wisconsin’s Consolidated Listing and Assessment Methodology (WisCALM) guidance document. The 2020 version of WisCALM was organized by waterbody type. The 2022 version is organized by types of assessments. This document provides a comprehensive list of changes between the 2020 and 2022 versions of WisCALM. It also provides a crosswalk between the two versions’ Table of Contents, List of Tables, and List of Figures. The 2020 WisCALM version was used as the base (black text) and 2022 updates were added (marked in red). Unless noted elsewhere in this document, assessment methods remained the same.

An internal review of 2022 WisCALM took place from September 25th to October 11th, 2020 and a public comment period took place from October 12th to November 20th, 2020. Updates from these two review periods have been recorded at the end of this document.

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Changes made prior to review

New Pieces and Reorganization

- Added section noting major updates to this version of guidance: *2022 Version Updates*. Placed paragraph on GovDelivery in this section in a call-out box with the GovDelivery logo (originally in “Use of Monitoring Data from Other Sources” section (2.2)).
- Added section *2.1 Assessment Cycle Timeline*, to provide a general timeline followed by the Department. Also included 2022 cycle COVID-19 note.
- Added a callout box with WDNR Staff contact search information; put in new section *2.2 Public Participation*.
- Created subcategories for Category 2 (healthy waters) based on the amount of information used to make the healthy determination. Added a new Table 1 with these subcategory descriptions.
- Added paragraph in section 3.4 about the EPA’s ATTAINS database.
- Added section *3.5 Total Waters Baseline*. The values to be used in calculation of % water assessed.
- Created new section 4.0 called *General Aspects of Data Assessment*. The section is meant to house the aspects of assessment that apply to all assessment types. This took portions of 2020 WisCALM sections “2.0 Wisconsin’s Monitoring Program and Data Management”, “4.1 Lake Classification”, “4.2 Selecting Representative Stations”, “5.1 Stream and River Classifications”, and “5.2 Selecting Representative Stations”.
- Added section *4.2 Automated Assessment Packages*. This is meant to give a short description of what they are, how they’re used, and how to get to the detailed documentation for them. Section consolidates a lot of previously disparate information on assessment packages; allows other sections to be more succinct.
- Created section *5.0 Aquatic Life Use – General Condition Assessment* and moved general condition assessment information from previous sections 4.3 and 5.3.
- Created section *6.0 Aquatic Life Use – Impairment Condition Assessment*. Combines previous sections 4.5 and 5.4.
- Created new section on Temperature assessments for AL (6.4). Added new Table 16 with temperature criteria. Updated temperature assessment package and methods to include a margin of error from the instruments used.
- Created section *7.0 Recreation Use – Impairment Condition Assessment*. Combines previous sections 4.6 and 5.5.
- New section under Recreation for *E. coli*, *7.3 Pathogens – E. coli*.
- Created new section: *9.0 Wildlife Use – Impairment Condition Assessment*. Combines previous sections “4.8 Lake Impairment Condition Assessment: Wildlife Use” and “5.6 Stream and River Impairment Condition Assessment: Wildlife Use”.
- Created section *11.2 Alternative Restoration Plans*. Added new table outlining requirements for TMDL, TMDL-alternative, and Restoration Plan. Moved here some information formerly under “8.1 Priority Ranking for TMDL Development”.
- Added definitions to Appendix A, Acronyms and Terminology section for epilimnion, hypolimnion, metalimnion, and thermocline.
- Moved “Derivation of TSI General Condition Thresholds” formerly part of section 4.3 to Appendix B. Other parameters don’t have sections on how the thresholds were determined but this information is important to have available.

Clarifications and Updates

- Added to title page “Assessment Guidance for 2021 – 2022” to clarify the time period during which this guidance is used. The previous version of WisCALM was for 2019 – 2020. Note: until a new version of WisCALM is available the old version will be applicable even if outside the years indicated.
- Condensed information from section *2.4 Data Management* regarding SWIMS’ support of volunteers.

- Updated Period of Record paragraph under *4.1 Data Requirements* to be more specific about distinction between use of 5-year vs 10-year period.
- Added 5-year period of record columns to former Table 1 for quick reference (now Table 6).
- In section *4.3 Assessment Unit Delineation* – updated word tense so it outlines what is done, not ‘what one could do’.
- In section *4.4 Lake Classifications* – updated definitions of Seepage and Drainage.
- Updated Total Phosphorus and Chl-a calculation steps for clarity – no methodology changes.
- Updated DO assessment steps – no methodology change. New Table 17 to show DO specific criteria.
- Updated available Monitoring Standard Operating Procedures in *12.0 Quick Link Guide*. Changed subsection title to “Monitoring Strategies, Protocols, and Standard Operating Procedures”. Added link to this section under Representative Data (page 14).
- Updated all webpage links to align with new (Aug 2020) WDNR webpages.

Removals

- Removed staff-specific instructions including Figure 7 and Figure 14 under “Selecting Representative Stations”.
- Removed previous Beach *E. coli* assessment methods. These were replaced by the new *7.2 Pathogens – E. coli* section, written for the newly approved *E. coli* criteria.
- Removed previous contents of Appendix D: Methodology for Using Field Data to Identify and Correct Wisconsin Stream Natural Community Misclassifications. Appendix is redundant, available in earlier versions of WisCALM, and available as a stand-alone document. An updated version of this document is in development.
- Removed Appendix E: Consensus-Based Sediment Quality Guidelines Recommendations for Use and Application. This document is linked multiple times throughout the document. Appendix is redundant, available in earlier versions of WisCALM, and available as a stand-alone document.

Changes made after review periods

Formatting

- Simplified cover page.
- Finalized guidance on guidance documents was available in December 2020; in compliance with this guidance a page of statutory authority, state and federal, was added before the table of contents.
- Addition of subsection numbering.
- Made most tables similarly formatted (blue headings, most borders showing).

Clarifications and Updates

- Updated member roles of the Natural Resources Board.
- Added link to ORW ERW webpage in callout box under *1.3 Anti-degradation*.
- Updated language of broad steps in section *2.1 Assessment Cycle Timeline* to have active verbs.
- A new inbox was created for public questions on water quality (DNRWYWaterbodyAssessments@wisconsin.gov); we are moving away from the “Impaired Waters” inbox. The new email replaced the Impaired Waters inbox in section *2.2 Public Participation*.
- Placed a callout box with a link to the Water Condition Lists webpage in section *2.3 Water Condition Categories and Lists*.
- Added Fish IBIs to list of assessment packages in section *4.2 Automated Assessment Packages*.

- Simplified the Natural Community descriptions in section *4.6.2 Natural Communities*. Added new Table 8 with condensed information for Natural Communities' mean water temperature, annual 90% exceedance flow, flow-based fish community, and temperature-based fish community.
- Table 20: Added language for Total Phosphorus Minimum Data Requirements to match current protocols in written section.
- Section *7.3 Pathogens – E. coli*; updated seasonal range to align with permittee disinfection time period after additional consultation with DNR Wastewater staff. The new language reads, "The assessment period in Wisconsin is May 1 to September 30. This time period is considered the default and can be extended beyond these dates based on recreation time frame for individual waterbodies.*". The caveat reads, "*This default period is consistent with the time frame during which dischargers typically disinfect their wastewater. Recreational patterns vary across the state. If recreational use on a specific waterbody or group of waterbodies is known to occur outside this date range the assessment period can be expanded based on best professional judgment on patterns of use."
- Section *7.3 Pathogens – E. coli*; clarified depth of samples.
- In sections *10.6.3 EPA Approved TMDL or Alternative Restoration Plan* and *11.2 Alternative Restoration Plans*, the language was clarified to distinguish between the 4B and 5W (EPA: 5-*alt*) alternative plans. WDNR plans that qualify for these subcategories were clarified in these sections and in all tables with 4B and 5W definitions. A new subsection, *11.2.2 Adaptive Management Plans (AMPs)*, was added to define this plan type.
- Updated consumption values for PFOS in *APPENDIX C. Summary of Fish Tissue Criteria for Fish Consumption Advice* based on WDNR and Wisconsin Department of Health Services (WDHS) revised PFOS meal threshold values.