
IMPLEMENTATION

24. TEN-YEAR TIMELINE

Last updated: 10-2008

The Monitoring Team has developed a ten-year timeline from 2009 to 2019 (Figure 4). Because of uncertainties in budget allocations, this timeline should be viewed as flexible and will evolve as projects move forward. The timeline is divided into five sections:

- Monitoring Teams and Programmatic Evaluation
- Tier 1 Baseline monitoring
- Tier 2 & 3 monitoring for targeted evaluations and management effectiveness/compliance
- Database Development
- Other (e.g. budget analyses, Quality plans)

The Water Division Monitoring Team and Technical Teams meet on a regular basis throughout the year (quarterly meetings are not shown on timeline). These teams are charged with programmatic direction and evaluation, and are described more fully later in this chapter (see “Responsibility for Program Implementation & Evaluation”).

Tier 1 monitoring is subdivided into Technical Team planning. Each Technical Team has identified outstanding issues that they will work to resolve in order to refocus current monitoring effort. These items are shown on the timeline as short- to mid-range plans scheduled for the next three years (through 2008). Each Technical Team will also have ongoing evaluation and planning schedules that will occur on a regular basis, to continue to identify future directions. Because Tiers 2 and 3 are conducted on an as-needed, targeted basis, it is more difficult to project future program needs in these areas.

Other related initiatives include database development, QMP review, and budget planning. The Quality Management Plan is reviewed and revised every five years. Budget initiatives for monitoring funding are prepared biennially.

Through ongoing review and evaluation of these monitoring programs, the WDNR is committed to steady progress towards meeting current and future needs.

Figure 4. Ten-Year Implementation Timeline for Wisconsin's Water Division Monitoring Strategy.

Monitoring Teams & Programmatic Evaluation

- A. Set biennial sampling designs – Jan/Feb of odd years
- B. Review progress toward meeting biennial sampling designs & adjust course as needed – Jan/Feb of even years
- C. Biennial work planning – Jan/Feb of odd years
- D. Prepare biennial budget initiatives for monitoring funding – Fall of odd years
- E. Complete Quality Management Plan (QMP) revision – June 2010 and every 5 years thereafter

Tier 1 Monitoring (Baseline)

Lakes:

- L1. Review monitoring needs and discuss ways to integrate between WT and FM - ongoing
 - L1.1 Incorporate Critical Habitat Area Designations into FM or WT lakes sampling plan - March 2009
 - L1.2 Review/revise lake monitoring protocols in light of National Lake Assessment report – 2009-10
 - L1.3 Consider implementing a random statewide survey of lakes (i.e. repeat Lillie Mason survey) in conjunction with next National Lake Survey – 2011-12
- L2. Long Term Trend Lake Monitoring – Ongoing, 62 lakes per year
 - L2.1 Evaluate LTT lakes data & make final modifications to lake list –December 2009
 - L2.2 Schedule additional monitoring on LTT lakes for paleo core, plant surveys, critical habitat designations if needed – 2009-11
 - L2.3 Recruit CLMN volunteers for remaining LTT lakes that don't have them – 2009 and beyond
- L3. Fully fund and implement FQI plant surveys – Ongoing, 30-40 lakes per year
 - L3.1 Update baseline plant monitoring protocol – April 2009
 - L3.2 Conduct targeted plant surveys to finalize lake assessment thresholds - 2009
 - L3.3 Resume randomized schedule for aquatic plant monitoring – 2010 and beyond
 - L3.4 Start rotation of lakes to revisit periodically - 2010
- L4. Complete Fisheries Assessments in 150 lakes each year – ongoing
 - L4.1 Review/revise Fisheries Assessments - lakes sampling workplan – March 2009
 - L4.2 Refine Fisheries Metrics for lake classes – December 2009
- L5. Satellite lake clarity support through contract with ISS – ongoing
 - L5.1 Initiate 1-time sampling of color/DOC through CLMN – 2009
 - L5.2 Coordinate CLMN sampling with Satellite schedule - ongoing
 - L5.3 Develop report on satellite clarity trends – Every 2-3 years; 2009 and beyond
- L6. Add shoreline assessments to baseline monitoring
 - L6.1 Refine protocol - 2009
 - L6.2 Pilot on LTT lakes - 2010
 - L6.3 Implement statewide on random set of lakes (same as plant surveys?): 2011 and beyond
- L7. Coordinate lake monitoring activities with Citizen Lake Monitoring Network – ongoing
 - L7.1 Add color to CLMN chemistry protocol – 2010

Streams (not updated):

- S3. Complete evaluation of LTT streams data and recommend uses & modifications – Spring 2005

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- S1. Complete prototype of Lyons' model for describing fish community condition by strata – Continuing 2006 (will be refined after initial implementation)
 - S2. Application of a statewide probability-based sampling effort – Jan. 2006
 - S3. Sample least-impacted reference streams to develop statewide reference conditions – Begin late 2006
 - S4. Develop monitoring strategy for Lake Superior south shore streams to address hydrologic stability, Brook Trout habitat restoration and sediment loading to Lake Superior. (date not provided)

Rivers:

- R1. Develop and test macroinvertebrate IBI tailored to rivers of Wisconsin. Decide if macroinvertebrate monitoring is appropriate for biocriteria, and if so, develop macroinvertebrate sampling strategy – 2009
- R2. Determine how to use recommendations on performance characteristics of fish sampling methods; determined sampling frequency – annual vs. rotations – 2009
- R3. If approved, incorporate macroinvertebrate IBIs and fish sampling decisions into rivers sampling strategy –2010
- R4. Develop methods for monitoring and evaluating riverine Great Lake Areas of Concern relative to their BUI targets. (date not provided)
- R5. Complete Rivers Long Term Trend analysis. – Dec. 2009

Wetlands (not updated):

- W1. Complete initial design of wetland project tracking geodatabase; begin collecting data – Spring 2006. Complete year one dataset for calendar year 2006 – Spring 2007
- W2. Complete Milwaukee River and Mead Lake Level 1 Wetland Assessment pilot projects – Dec. 2006
- W3. Complete Floristic Quality Assessment Survey in Southeast Region – Dec. 2006
- W4. Work with Great Lakes Monitoring staff, EPA-GLNPO, & Great Lakes Consortium on monitoring of Great Lakes coastal wetlands. Investigate collaborative projects (start with AOC projects, Lower Fox in 2006) – 2006 onward
- W5. Develop methods for evaluating restoration and mitigation projects – Oct. 2006-Oct. 2008 for pilot project IF Wetland Grant is awarded
- W6. Complete statewide Reed Canary Grass mapping – July 2007
- W7. Work with Data Management Team to determine data structure for future wetland site monitoring data, starting with Floristic Quality Assessment data after SER survey (task W3) is complete (plant inventories, community type, locational data) –begin in 2007 onward
- W8. Work with Wisconsin Wetlands Association to develop a landowner/citizen's manual "A Guide to Understanding Wetland Health" (pursue this after WWA completes Wetland Threats Analysis in 2007) – target 2007-2008
- W9. Complete Level 1 assessment for focus watersheds in Upper Rock River Basin – Oct. 2008
- W10. Develop methods for monitoring and evaluating Coastal Estuaries and Wetlands. – 2010

Citizen Monitoring (not updated):

- C1. Implement Level II Pilot Projects –Spring/Summer 2006
- C2. Prepare summary report from pilot projects and recommend next steps for Citizen-Based Water Monitoring Network – November/December 2006
- C3. Coordinate UWS-LSRI citizen stream and wetland monitoring project into Wisconsin's Lake Superior monitoring plan. –2009

Groundwater: **the Groundwater timeline is highly tentative due to funding restrictions in the groundwater program*

- G1. Complete first "Condition of the Groundwater Resource" report – late 2009
- G2. Establish a process for prioritizing potential sites for medium and small stream flow monitoring – late 2009
- G3. Complete pilot basin baseline assessment of shallow aquifer systems (Phase I) – late 2010

Great Lakes:

- GL1. Determine whether to continue, restructure, or end Cladophora/nutrient monitoring – 2008
- GL2. Review funding for Great Lakes beach pathogen monitoring, determine whether to monitor different indices, and determine whether WDNR should serve as the lead state agency for this work – 2008
- GL3. Develop a report on Lake Michigan phosphorus loading monitoring – 2011 (and every 5 years thereafter)
- GL4. Determine whether to continue monitoring lower food web in the Great Lakes. (date not provided)
- GL5. Develop and implement a monitoring strategy for the near shore areas of Lake Superior including the Areas of Concern. –2011

Tier 2 & 3 Monitoring (Targeted & Management Monitoring)

- A. Regions identify which targeted sites or special projects should be incorporated into work plans – January of odd years
- B. Complete methodology for evaluating nonpoint source performance standards – 2009
- C. 303(d) listing methodology adopted into Code – 2009-2010
- D. Sampling of all public wells is completed on a 9-year cycle – complete in 2010 (cycle repeats)

Integrated 303(d)/305(b) reporting

- A. Complete designing and implementing proposed use designation and assessment program changes –2009
- B. Assess data for integrated reporting – odd years
- C. Assemble data for 303(d)/305(b) Reports biennially – due April of even years

Database Development

- A. Develop reports that directly support work tracking for monitoring Technical Teams (administrative reports, etc) (2009)
- B. Advance data integration between SWiMS and the Fish Database (reports, etc.) (ongoing)
- C. Support assessment methodology with enterprise data systems (ROW, WATERS, SWiMS, Fish Database) (2010)
- D. Continue to enhance regional expertise to ensure long-term success (ongoing)
- E. Support watershed planning to meet CWA goals, including supporting updates to water assessments recommended under the Assessment Methodology Team recommendations report and meeting federal requirements for reporting under our CWA 106, 305b, and 319 grants. (2010)
- F. Continue to support integrated reporting to ensure high quality impaired waters data and general assessment data. (2010)
- G. Identify a database solution to support random stratified sample design/probabilistic monitoring and associated assessments. (2011)
- H. Make reports from WATERS and SWiMS that are directly supportive of program priorities (ongoing)