New wetland function assessment tool in the works for two-state area

Wetland regulators in Minnesota and Wisconsin will soon have a new tool available to more efficiently assess wetland functions related to water quality, hydrology and ecology. This updated tool will replace existing wetland assessment methods in both states.

Wetland functions can include storing water, transforming nutrients, growing living matter and supporting diverse wetland plants. Wetland functions can benefit the wetland itself, the surrounding ecosystems and the communities in which they are located.

Under Minnesota's Wetland Conservation Act (WCA), certain functions must be considered when regulating wetlands.

To more efficiently and accurately assess these wetland functions, natural resources agencies in Minnesota and Wisconsin collaborated to develop the Rapid Assessment Method (RAM) tool. A steering committee oversaw the project; participating agencies included the Minnesota Board of Water and Soil Resources (BWSR), the Minnesota Pollution Control Agency, the Minnesota Department of Natural Resources, the Wisconsin Department of Natural Resources, the U.S. Department of Environmental Protection (EPA) and the U.S. Army Corps of Engineers' St. Paul District. A professional consultant assisted with the effort.

Members of the steering committee field-tested the RAM tool in spring 2024, resulting in refinements and improvements. The tool is expected to be available to wetland regulators later this year, along with a user guide and supporting resources.

RAM tool functions were selected based on regulatory requirements for wetlands in Minnesota and Wisconsin. The tool assesses 17 specific hydrologic,

Members of a steering committee representing state agencies from Minnesota and Wisconsin plus two federal agencies field-tested the RAM tool in May 2024 at a Washington County wetland. Developers anticipate the tool will be available later this year. **Photo Credit:** BWSR

water quality, ecological, climate and anthropogenic wetland functions. Like the current rapid response tool it's replacing, MN RAM, the new RAM tool will allow practitioners to assess wetland functional aspects in less than a day. The updated version modernizes and improves the methodology of the MN RAM tool, which was developed in the 1990s.

The RAM tool will help regulators evaluate wetland functions to inform regulatory and conservation decisions. For example, the tool can help determine which wetland functions a particular restoration project will enhance and improve. It can inform decisions about the amount and type of wetland mitigation needed. The tool can also help determine the amount and type of compensatory wetland mitigation banking credits generated by a wetland restoration, creation or other mitigation project. Overall monitoring, assessment and documentation about specific wetlands can also be stored and assessed using the tool.

"The RAM utilizes our best understanding of modern wetland science and will provide an important perspective of wetland functions and values to inform decisions local government units make when managing wetland resources," said BWSR Wetland Specialist David Demmer, who was involved in the project.

Project planning began in 2020. The EPA supported the efforts with a $393,312 Wetland Program Development Grant in late 2021. BWSR provided a $65,552 state match from the agency's WCA general fund.

The RAM tool will primarily be used by professionals — such as local government staff, state agency employees, Tribal Government staff and private consultants who are involved in wetland restoration and mitigation efforts. The tool includes a desktop component and a field component: Users answer questions on a spreadsheet using a computer, tablet, or cellphone. The spreadsheet calculates function rankings based on user input.

BWSR staff members write and produce Snapshots, a monthly newsletter highlighting the work of the agency and its partners.