**Project Manager Qualifications**

Heather Johnson currently serves as a Senior Hydrologist with the Minnesota Department of Agriculture (MDA). She earned her BA in Environmental Studies from University of Minnesota – Duluth, and her MS in Water Resources Science from the University of Minnesota – Twin Cities. She has worked at multiple levels of government, including a Joint Powers Board, the Metropolitan Council, the National Weather Service and over 12 years at MDA.

Heather has been with the MDA for over twelve years, serving as both a hydrologist and for several years, Supervisor of the Monitoring and Assessment Unit, until taking a reduction in work hours to be home with her kids. She is currently a Senior Hydrologist, working on a large range of complex projects. She has successfully managed several large MDA Clean Water Fund Research Projects, providing oversight to outside contractors to ensure projects are completed on time, appropriate reports are submitted and the projects are held accountable on project goals and objectives. Each year she successfully leads a team of hydrologists in pulling together the MDA’s Water Quality Monitoring Report, a compilation of the previous year’s pesticide water quality data. She is Project Manager for Minnesota’s Runoff Risk Advisory Forecast ([www.mda.state.mn.us/rraf](http://www.mda.state.mn.us/rraf)) a tool designed to help farmers and commercial applicators determine the best time to apply manure. It is part of a regional Runoff Risk Advisory Forecast project which includes state and federal agencies in Wisconsin, Michigan, Minnesota and Ohio.

**Organization Description:**

Ambient water quality monitoring is conducted by the MDA Monitoring and Assessment Unit to evaluate the impact of agricultural chemicals, including pesticides and fertilizers, on groundwater and surface water from routine application. The data collected is used to identify compounds and/or places where concentrations may exceed established water quality benchmarks, guidance values, and/or standards, collectively referred to as reference values. This data is also used to identify trends regarding detection frequency and concentration of specific agricultural chemicals found in the waters of the state. The data can also prompt development, and the evaluation of effectiveness of best management practices (BMPs) for those specific compounds. The groundwater and surface water monitoring networks have evolved over the years to meet the needs of the state. The ambient water quality data collected is public information and is available by request or through the [Water Quality Portal](https://www.waterqualitydata.us/).

Guided by the Pesticide Control Law and the Comprehensive Groundwater Protection Act ([Minnesota Statutes 18B, 18C, 18D, and 103H](https://www.leg.state.mn.us/)) and the MDA's [Pesticide Management Plan](http://mdawebdev.prod.acquia-sites.com/protecting/waterprotection/pmp), the activities of the Monitoring and Assessment Program focus on:

* The collection and analysis of water samples from multiple locations throughout the agricultural and urban areas of the state to determine the identity, concentration magnitude and the frequency of pesticide presence in Minnesota's groundwater and surface water resources.
* Assessment of the long-term impacts of normal pesticide use on waters within the state.
* Conducting intensive monitoring of specific areas that are more sensitive to pesticide contamination based on geology, pesticide usage or based on historical data.
* Providing data to guide activities in the Pesticide Management Plan, including the development of best management practices to minimize the impacts of pesticide application to water resources.