

Safe Guarding Humans and Pets from Toxic Algae Blooms

The Situation

In 2015 toxic levels of algae were discovered in Homme Dam and the dam was closed belatedly to safe guard users. North Dakota State University (NDSU) Extension, Walsh County Three Rivers 319 program and National Resources Conservation Service (NRCS) needed to be on top of this potential danger in 2016.

Extension Response

Extension's response was to partner with NRCS and the Walsh County Soil Conservation District (SCD) to monitor the kind of algae and the toxicity of the algae in the water by taking samples and using our microscope to identify different kinds of algae. When algae known to be toxic was found, water samples were sent to laboratories to determine the level of toxicity. NDSU Extension agent Brummond provided information through: two meetings, five radio programs, 2 newspaper columns and 50 personal contacts. NDSU Extension along with the Walsh County Three Rivers Soil Conservation District (SCD) 319 program advised Walsh County on closing the beaches and the dam to swimming and water sports.

Impacts

- Walsh County used the information from the water analysis to close the dam to swimming and water sports and ordered and posted signage to stop usage of the water.
- The closure was lifted when the influx of fresh water and the death of the algae in the water caused it to return to safe levels through a collaboration of efforts of community organizations.

Health and Economic Impacts

Although, children and pets were exposed to high levels of toxic algae prior to the

closing, none had serious reactions. A concentrated effort was made by Extension to communicate about the algae and the only exposure known was to a few pets. When toxic levels were reached, swift action was effective in stopping the exposure and reduced serious health risk and potential lives. Thousands of dollars were potentially saved in health care and legal action against the county.

Feedback

"The signs kept us out of the water. We would not have known how potentially serious this was." – Camper at the park

"Even though this is having a huge impact on our park I respect your advice on keeping the signs in place until it is safe." – County Commissioner

Public Value Statement

The development of relationships and collaboration between agencies helps to prevent health emergencies, and protect the health of North Dakota citizens and their animals.

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