BIG HOLLOW Watershed Project

DES MOINES COUNTY SOIL & WATER
CONSERVATION DISTRICT
3625 FLINT RIDGE DRIVE
BURLINGTON IA 52601
(319) 237-3968
thomas.brockett@usda.gov

News: **March 2026**

Cost Share Opportunities

Cover crop- $30 per acre. (Cover crops can be chopped or grazed.)

No Till- $15 per acre

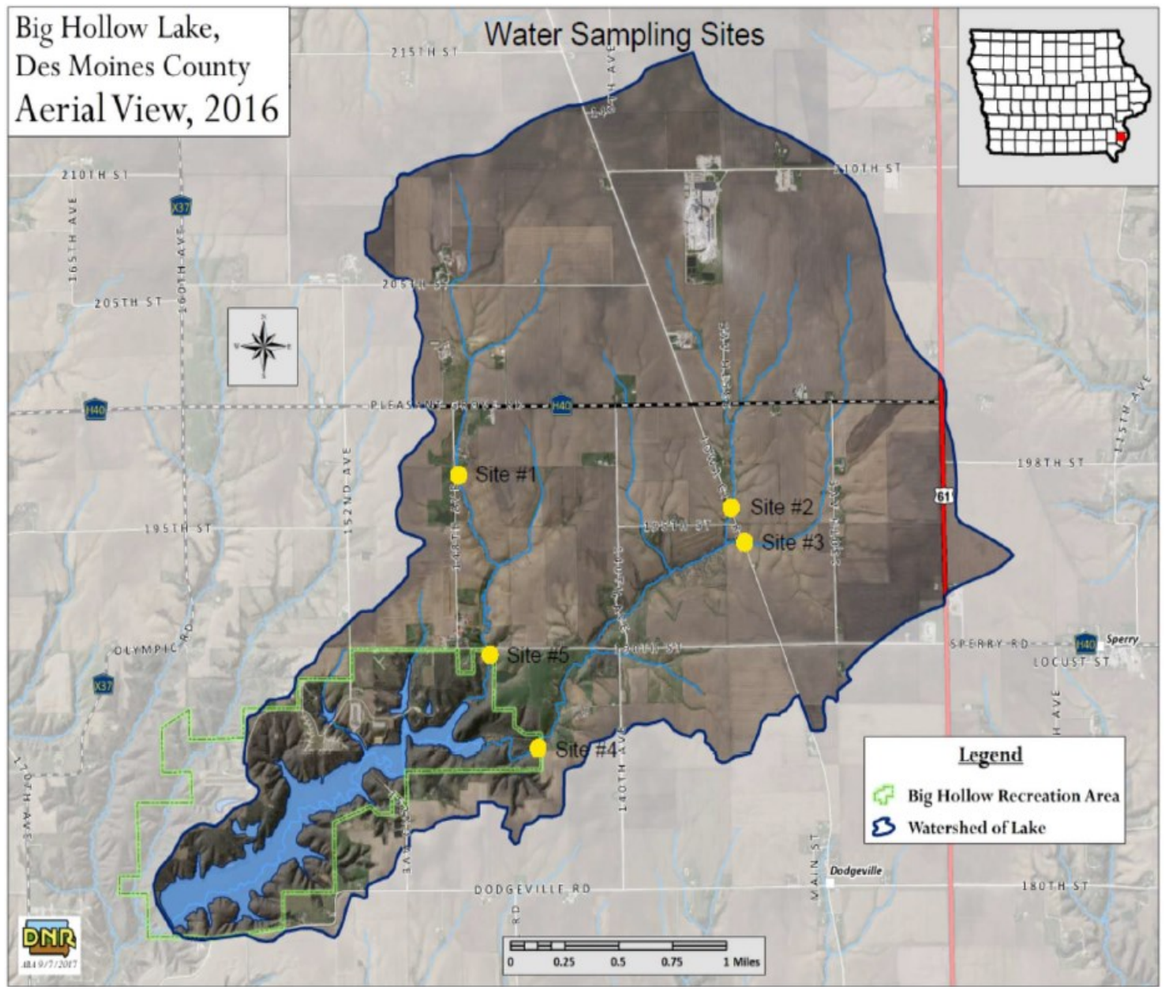
Terrace, Grass Waterways, and Water and Sediment Control Basins– Up to 75% cost share.

If you have any questions or would like us to look at a proposed project give us a call or stop by the NRCS Office.

Tom Brockett

319-753-6221 Ext 3

Watershed Monitoring Report 2025



Conservation Partners:

USDA United States Department of Agriculture
Natural Resources Conservation Service

IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

DNR

DES MOINES COUNTY SOIL & WATER CONSERVATION DISTRICT

Funding provided by the Iowa Department of Agriculture & Land Stewardship – Division of Soil Conservation and Water Quality and by the Iowa Department of Natural Resources through a grant from the U.S. Environmental Protection Agency under the Federal Nonpoint Source Management Program (Section 319 of the Clean Water Act).

Equal Opportunity Employer

Five sites on the tributaries to Big Hollow Lake were monitored monthly for the following parameters: ortho-phosphate, total phosphorus, nitrate + nitrite nitrogen, and total suspended solids. The primary nutrient of concern for Big Hollow Lake is ortho-phosphate. This is the type of phosphorus that is easily taken up by aquatic plants and algae. Because this type is not attached to sediment, subsurface tile drainage is often a phosphorus transport pathway. High levels also indicate the importance of nutrient management practices such as manure and fertilizer application as sources of dissolved phosphorus. Orthophosphate levels above 0.15 mg/L are generally considered too high for lakes, often triggering excessive algae growth and harmful eutrophication. While there were a few instances of samples nearing that level, more often than not, the samples were below the detection level for orthophosphate in 2025.

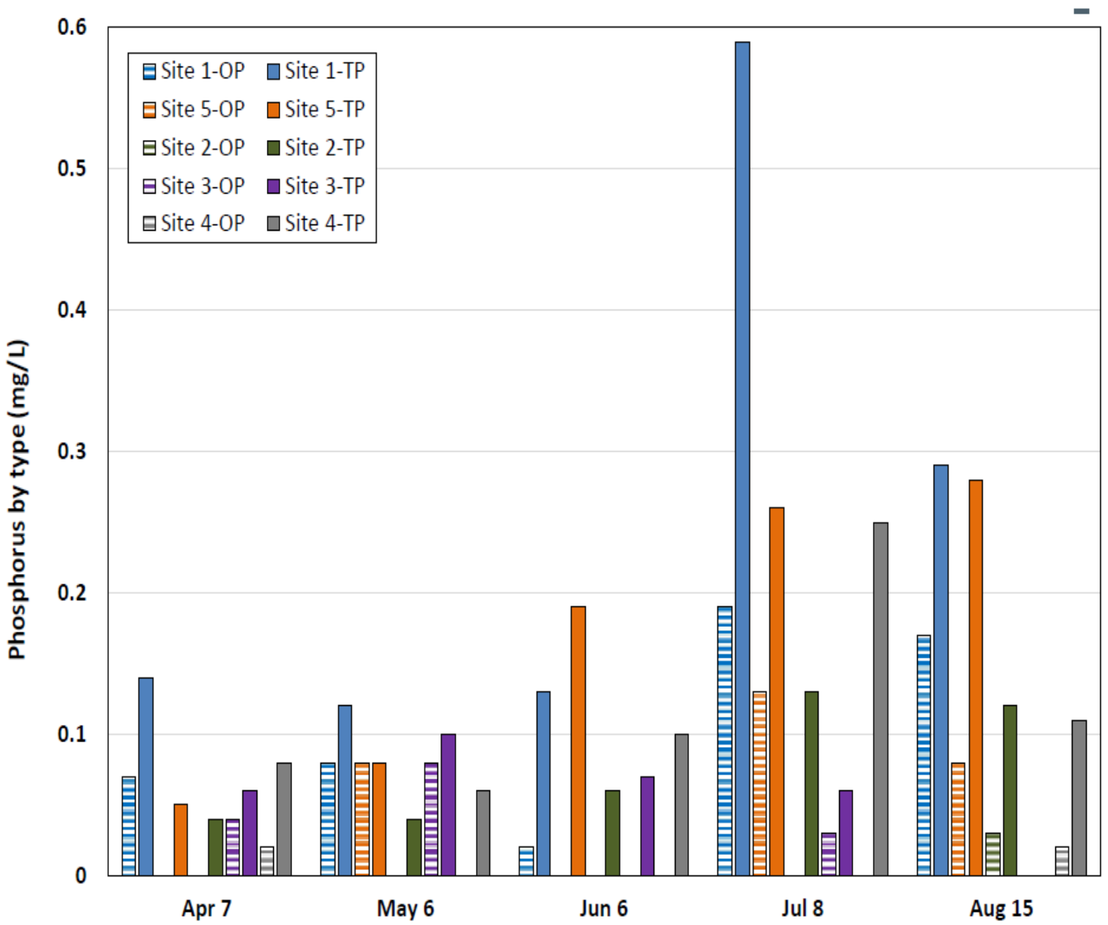


Figure 8. Phosphorus levels by type and site in 2025. Orthophosphate represented by striped columns and total phosphorus by solid columns.

Most of the phosphorus measured was sediment attached phosphorus and the western tributary (sites 1 and 5) generally had higher levels. Sampling also indicated that the tributaries are contributing excess amounts of nitrate + nitrite nitrogen to the lake. While this does not impact algal growth in lakes, as phosphorus is the limiting factor, it can have significant impacts on human health. The current water quality standard for nitrate in Iowa for drinking water is 10mg/L, and levels measured in the Big Hollow Lake tributaries were sometimes almost double that standard.

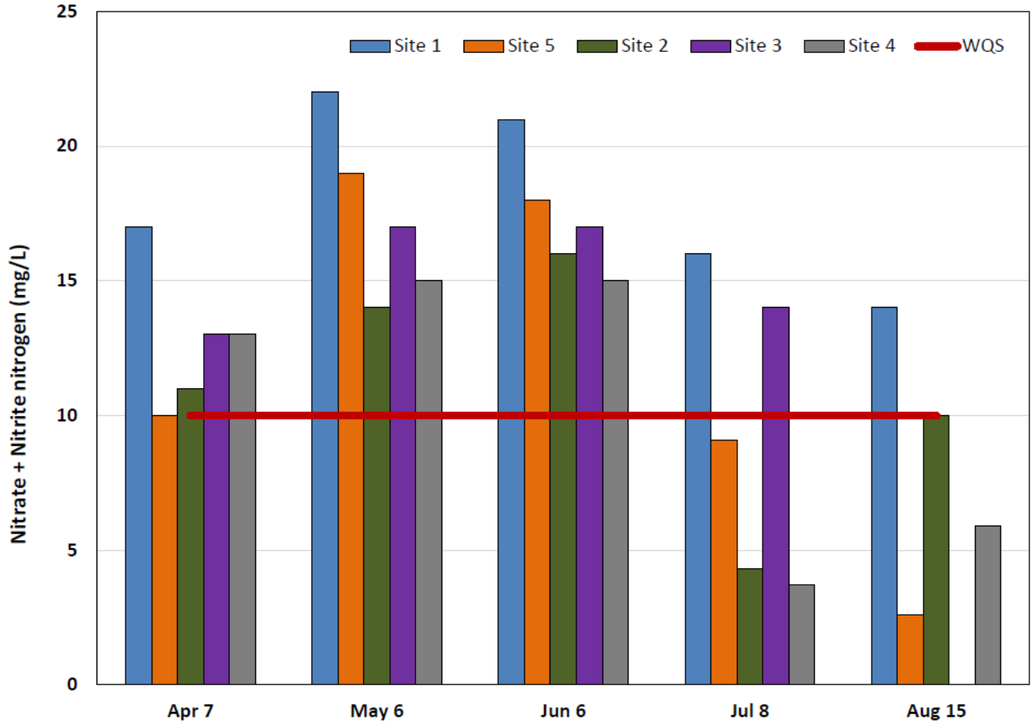


Figure 9. Nitrate + nitrite levels by sample date and sample site for 2025.