The Phosphorus Index

Iowa NRCS Fact Sheet

Who is it for?

The Phosphorus Index helps agricultural producers, conservation planners and others to evaluate the current risk of P reaching surface waters from site-specific fields. It helps determine factors which dominate the risk. The bottom line is, it helps land managers make management decisions to reduce P loss to water bodies and improve nutrient use efficiency and crop profitability.

Who Developed the P-Index?

The Phosphorus Index was developed by Iowa State University, the National Soil Tilth Lab and USDA's Natural Resources Conservation Service. The Index is based on soil and water quality research in Iowa and other Midwest states.

Updates to the P-Index

The P-Index is updated to reflect current soils information and rainfall data.

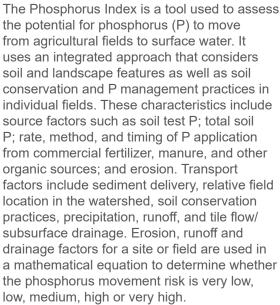
More Information about the P-Index

Additional information, including Guidance Document Phosphorus Index TN25 (formally named Technical Note No. 25, Iowa Phosphorus Index), the P-Index Calculator, and *Background and Basic Concepts of the Phosphorus Index* are available at <u>www.nrcs.</u> <u>usda.gov/resources/guides-and-instructions/</u> <u>nutrient-management</u>.

Or visit the Iowa Field Office Technical Guide (FOTG), Section 4, Conservation Practice Standards & Supporting Documents, <u>Nutrient</u> <u>Management (590)</u>, for more information.







Why was the P-Index developed?

Phosphorus is an essential element for plant and animal growth. But when phosphorus is lost from fields it can increase algae growth in surface waters. This results in eutrophication, or excessive algae growth. Eutrophication is a main cause of impaired surface water quality. Since most phosphorus adheres to soil particles, factors that affect soil erosion are critical to phosphorus movement. If soil erosion is controlled, loss of phosphorus is less severe. The index accounts for that. NRCS began the effort to develop the index to be used as part of its revised nutrient management standard (590).

2023