

## Introduction

For most of the U.S. livestock industry, nutrients in manure represent the single largest threat to water quality. Thus, choices made relative to the management of nutrients within a livestock operation are absolutely critical to protecting water quality.

If managed correctly, manure is an excellent plant nutrient source and soil “builder,” resulting in many important environmental benefits. Soils regularly receiving manure require less commercial fertilizer (conserving energy and limited phosphorus reserves), are higher in organic matter contributing to greater soil productivity, and may experience less runoff and erosion and better conservation of moisture. However, an increased risk to water quality will result from excess application of manure nutrients to a cropping system.