

# TOTAL MAXIMUM DAILY LOADS

## What Producers and Agricultural Business Owners Should Know

Alexa J. Lamm & Pei-wen Huang<sup>1</sup>

Total Maximum Daily Loads (TMDLs) are determined and managed by the Florida Department of Environmental Protection to protect human health and aquatic life. A TMDL is a unit to indicate the maximum amount of a pollutant that a water body can receive and still meet water quality standards.

### Some things to know about TMDLs:

In Florida, two agencies are involved in setting rules for ensuring good water quality in Florida's rivers, streams, lakes, canals, and estuaries: The U.S. Environmental Protection Agency (USEPA) and the Florida Department of Environmental Protection (FDEP). The USEPA ensures that states have appropriate rules to protect water quality. The FDEP creates the processes to follow to achieve water quality goals.

1. A water body is assigned a **designated beneficial use** which could be:
  - Class I - Potable Water Supplies
  - Class II - Shellfish Propagation or Harvesting
  - Class III - Fish Consumption, Recreation
  - Class IV - Agricultural Water Supplies
  - Class V - Navigation, Utility and Industrial Use
2. Water quality of the water body is compared to **water quality standards** for that designated use. Florida uses numeric criteria for nutrients. A numeric standard defines the maximum nitrogen and/or phosphorus concentration in a water body that will maintain its designated use (see <http://edis.ifas.ufl.edu/pdffiles/SS/SS52800.pdf>).
3. If the surface water does not meet water quality standards, it is considered **"impaired."** This means it is polluted to the extent that it is not meeting the designated use. It might be too polluted to swim in, or too polluted to harvest shellfish.
4. When a water body is impaired, a Total Maximum Daily Load (TMDL) of pollutant is calculated for it. A **TMDL** is established for each pollutant of concern for the impaired water body. Excessive nitrogen and phosphorus often come from fertilizers, and sometimes from leaky septic tank systems and faulty water treatment plants.

For more information visit [www.piecenter.com/pep](http://www.piecenter.com/pep).

<sup>1</sup>Authored by Alexa J. Lamm, Assistant Professor, Department of Agricultural Education and Communication and Associate Director, UF/IFAS Center for Public Issues Education at the University of Florida and Pei-wen Huang, Graduate Assistant, Department of Agricultural Education and Communication, University of Florida. Funding provided by UF/IFAS Extension.