Total Maximum Daily Load - TMDL

Total **M**aximum **D**aily **L**oad is a politically correct phrase used to describe water pollution. The total maximum daily load is the amount of pollution a waterway can absorb before environmental degradation occurs. All waterways in Florida will eventually have a TMDL number set for them.

The TMDL concept was created by the Federal Clean Water Act (CWA) of 1972 in response to the catastrophic degradation of U.S. waters by industrial pollution. In theory, each waterway has a threshold of pollution it can accept before habitat degradation and public health decline occurs.

The CWA requires that all waterways be assessed for their physical condition and level of contamination. Following this, the "pollution carrying capacity" of the waterway is to be assessed. In the event the existing pollution is higher than the "healthy" level of pollution established for the waterway, regulatory agencies are to work with polluters to abate the contamination. Regulatory agencies are also supposed to restrict new environmental resource permits that would increase pollution loading. However, not every waterway is treated equally. For example, waterways that are currently impaired due to industrial pollution from paper mills, have lower standards than waters with no industrial inputs.

The concept of the TMDL is a little confusing because the rule was not made to eradicate pollution, but to set it at the level where harm occurs to public health or to the natural ecology of the waterway.

Example: Elevated nitrate levels are found in the Middle Suwannee River. The high nutrients cause undesirable algae to grow explosively which "shades out" desirable aquatic plants. It also depletes the oxygen in the water and causes fish and other aquatic life to die. According to the Clean Water Act, this waterway would be considered impaired. The nutrients can be traced and are discovered to be from municipal sewage treatment plant effluent, septic tanks and runoff from large dairy, poultry and row crop agriculture operations.

Now that the waterway is listed as impaired, methods such as upgraded wastewater treatment and agricultural best management practices would be mandated by the State. In addition, no new permits would be issued for uses that will add nitrates to the waterway.

There is a major weakness in the TMDL rule in that if there is not an obvious pollution source, the date for implementation of the TMDL is set back to a date in the far future.

Example: Many types of fish in Florida's waters have a health warning for mercury contamination. Those fish at the top of the "food chain" have the highest mercury levels in their tissues. Because it is very difficult to determine the origin of the mercury input, these TMDL's have been set back until 2011—even though

the Florida Department of Health has issued fish consumption warnings all over the state. The following website lists fish and waterways of concern.
http://www.doh.state.fl.us/environment/community/fishconsumptionadvisories/index.html

Sadly, many of Florida's waters are still too polluted for safe swimming and fishing. Some coastal beaches in the Suwannee Sound were posted as unsafe for swimming in late summer 2006 due to coliform bacterial infestation. Only a few places on Florida's coasts are able to support a viable shellfish harvest due to the presence of dangerous bacteria.

Florida has attempted to conform to the Clean Water Act of 1972 by developing the Impaired Waters Rule. The Florida DEP has made the process of "listing" a waterway as impaired so difficult that many extremely polluted waters have been taken off the list.

The Southeast Clean Water Network has worked with various advocacy groups, including Save Our Suwannee, and has challenged the Impaired Waters Rule insisting that the rule is not stringent enough to protect Florida's waters.

In October of last year, the Southeast Clean Water Network and the St. Johns Riverkeepers prevailed in a case against the US Environmental Protection Agency (EPA). The Federal Judge ordered the parties to prepare for trial. The EPA then rescinded its approval of the Impaired Water Rule standards for Florida and the FDEP began the process to come up with a new rule.

The case was initiated to force the Florida Department of Environmental Protection (FDEP) to enforce water quality standards adopted in Chapter 62-302 of the Florida Administrative Code. Florida's water quality standards were developed as a result of the Federal Clean Water Act of 1972 and were intended to keep Florida's waters safe for drinking, swimming and fishing. After the original rules were adopted, the FDEP developed a second set of standards called the Impaired Waters Rule which contains loopholes that exempt numerous waterways and industrial users from the FAC standards.

In January, the FDEP introduced a new rule that is as almost as ineffective as the old one. On July 13th, Linda Young of the Clean Water Network and the St. Johns Riverkeepers filed suit again in an attempt to force the State to keep Florida's waters healthy and not cave in to corporate polluters.

Save Our Suwannee is participating by looking through any and all historical monitoring records for the Suwannee and its tributaries. SOS is looking for viable data that was not used in the TMDL listing process. Several creeks in the Suwannee River Basin were originally listed as "impaired" due to low dissolved oxygen and the presence of coliform bacteria. Some springs and river sections were also listed as impaired due to nitrate pollution and/or damaged biological systems.

For more information regarding this issue, you can go to:
http://www.cwn-se.org/tmdl.html

http://www.dep.state.fl.us/water/tmdl/background.htm

http://www.dep.state.fl.us/water/TMDL/stat_rep.htm

http://oaspub.epa.gov/waters/state_rept.control?p_state=FL