

# DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## DIVISION OF WATERSHED STEWARDSHIP

### Surface Water Discharges Section

Statutory Authority: 7 Delaware Code, Chapter 60; (7 Del.C., Ch. 60)

## PROPOSED

### REGISTER NOTICE

#### **7431 Total Maximum Daily Load (TMDL) for the Lums Pond Sub-Watershed, Delaware**

#### **Brief Synopsis of the Subject, Substance, and Issues**

The Department of Natural Resources and Environmental Control (DNREC) plans to conduct a Public Hearing regarding a Proposed Total Maximum Daily Load (TMDL) Regulation for nutrients and oxygen consuming materials for the Lums Pond Sub-Watershed. A TMDL sets a limit on the amount of a pollutant that can be discharged into a waterbody and still meet water quality standards. TMDLs are composed of Waste Load Allocations (WLAs) for point source discharges, Load Allocations (LAs) for nonpoint sources, and a Margin of Safety (MOS) to account for uncertainties.

#### **Possible Terms of the Agency Action**

The proposed TMDL Regulation calls for pollutant load reductions from point and nonpoint sources of the Lums Pond State Park, an area managed by the Division of Parks and Recreation, DNREC, and from nonpoint sources from the area surrounding the Lums Pond State Park. DNREC will work with local citizen groups and internally among the Division of Parks and Recreation, the Division of Water's Surface Water Discharges Section, and the Division of Watershed Stewardship to implement the point and nonpoint source load reduction requirements.

#### **Statutory Basis or Legal Authority to Act**

The authority to develop a TMDL is provided by Title 7 of the **Delaware Code**, Chapter 60, and Section 303(d) of the Federal Clean Water Act, 33 U.S.C. 1251 et. seq., as amended.

#### **Other Legislation That May be Impacted**

None

#### **Notice of Public Hearings and Comment Period**

The Public Hearing for the proposed TMDL Regulations for the Lums Pond Sub-Watershed will be held at 3:00 p.m., Tuesday, August 21, 2012, at the New Castle Conservation District, 2430 Old Country Road, Newark, DE 19702.

The hearing record for this proposed TMDL Regulation will remain open until 4:30 p.m., Friday, September 14, 2012. Please send written comments to Hassan Mirsajadi, Watershed Assessment and Management Section, Division of Watershed Stewardship, Department of Natural Resources and Environmental Control, 820 Silver Lake Boulevard, Suite 220, Dover, DE 19904-2464, (302) 739-9939, facsimile: (302) 739-6140, email: ([Hassan.Mirsajadi@state.de.us](mailto:Hassan.Mirsajadi@state.de.us)). All written comments must be received by 4:30 p.m., Friday, September 14, 2012. Electronic submission is preferred.

Copies of the Proposed TMDL Regulations and technical support document will be available as of Wednesday, August 1, 2012 on the Department's website at <http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessmentTMDLs.aspx> or by contacting Hassan Mirsajadi, Watershed Assessment and Management Section, Division of Watershed Stewardship, Department of Natural Resources and Environmental Control, 820 Silver Lake Boulevard, Suite 220, Dover, DE 19904-2464, (302) 739-9939, facsimile: (302) 739-6140, email: ([Hassan.Mirsajadi@state.de.us](mailto:Hassan.Mirsajadi@state.de.us)).

#### **Prepared By:**

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#### **7431 Total Maximum Daily Load (TMDL) for the Lums Pond Sub-Watershed, Delaware**

#### **1.0 Introduction and Background**

1.1 Water quality monitoring performed by the Department of Natural Resources and Environmental Control (DNREC) has shown that, within the Lums Pond Sub-Watershed, a small tributary southeast of Lums Pond that connects the Pond to a marina on the C&D Canal (Summit Marina) is impaired because of low dissolved oxygen. This small tributary receives pollutants from nonpoint sources, Lums Pond overflow, and the Lums Pond State Park Wastewater Treatment Plant discharge. A reduction of oxygen consuming pollutants and

nutrients from point and nonpoint sources within the sub-watershed is necessary to improve water quality in this tributary and attain applicable water quality standards.

- 1.2 Section 303(d) of the Federal Clean Water Act requires states to develop a list (303(d) List) of waterbodies for which existing pollution control activities are not sufficient to attain applicable water quality criteria and to develop Total Maximum Daily Loads (TMDLs) for pollutants or stressors causing the impairment. A TMDL sets a limit on the amount of a pollutant that can be discharged into a waterbody and still protect water quality. A TMDL has three components including a Waste Load Allocation (WLA) for point source discharges, a Load Allocation (LA) for nonpoint sources, and a Margin of Safety (MOS) to account for uncertainties and future growth.
- 1.3 DNREC has listed the Lums Pond Sub-Watershed on Delaware's 303(d) Lists and proposes the following Total Maximum Daily Load Regulation for nitrogen, phosphorus, and 5-day Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>) material.

## **2.0 Total Maximum Daily Load (TMDL) Regulation for the Lums Pond Sub-Watershed, Delaware**

- 2.1 The total nitrogen waste load allocation from the Lums Pond State Park Wastewater Treatment Plant shall be limited to 9 pounds per day.
- 2.2 The total phosphorus waste load allocation from the Lums Pond State Park Wastewater Treatment Plant shall be limited to 2 pounds per day.
- 2.3 The 5-day Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>) waste load allocation from the Lums Pond State Park Wastewater Treatment Plant shall be limited to 13 pounds per day.
- 2.4 The nonpoint source nitrogen load in the sub-watershed shall be reduced by 40 percent from the 2009-2011 baseline level. This shall result in an average of 30 pounds per day of nitrogen load.
- 2.5 The nonpoint source phosphorus load in the sub-watershed shall be reduced by 40 percent from the 2009-2011 baseline level. This shall result in an average of 1 pound per day of phosphorus load.
- 2.6 The nonpoint source CBOD<sub>5</sub> in the sub-watershed shall be reduced by 40 percent from the 2009-2011 baseline level. This shall result in an average of 88 pounds per day of CBOD<sub>5</sub> load.
- 2.7 Based upon water quality model runs and assuming implementation of reductions identified by subsections 2.1 through 2.6 above, DNREC has determined that water quality standards will be met in the Lums Pond Sub-Watershed with an adequate margin of safety.

**16 DE Reg. 186 (08/02/12) (Prop.)**