

7400 Watershed Assessment Section

7429 TMDLs for Bacteria for the Inland Bays Drainage Basin, Delaware

(Buntings Branch, Little Assawoman Bay, Assawoman Bay, Indian River Bay, Iron Branch, Indian River, Rehoboth Bay, and Lewes-Rehoboth Canal Watersheds)

1.0 Introduction and Background

Water quality monitoring performed by the Department of Natural Resources and Environmental Control (DNREC) has shown that the waters of the Inland Bays Drainage Basin (Buntings Branch, Little Assawoman Bay, Assawoman Bay, Indian River Bay, Iron Branch, Indian River, Rehoboth Bay, and Lewes-Rehoboth Canal Watersheds) are impaired by high levels of bacteria and that the designated uses are not fully supported due to levels of this pollutant in these waters.

Section 303(d) of the Federal Clean Water Act (CWA) 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 is composed of three components, including a Waste Load Allocation (WLA) for point source discharges, Load Allocation (LA) for nonpoint sources, and a Margin of Safety (MOS).

DNREC listed the Inland Bays Drainage Basin on several of the State's 303(d) Lists and proposes the following Total Maximum Daily Loads regulation for *enterococcus* bacteria.

2.0 Total Maximum Daily Loads (TMDLs) Regulation for Inland Bays Drainage Basin

Article 1. The nonpoint source bacteria load in the fresh water portion of the Inland Bays Drainage Basin (Buntings Branch, Little Assawoman Bay, Assawoman Bay, Indian River Bay, Iron Branch, Indian River, Rehoboth Bay, and Lewes-Rehoboth Canal Watersheds) shall be reduced by 40 percent from the 2000-2005 baseline level.

Article 2. The nonpoint source bacteria load in the marine water portion of the Inland Bays Drainage Basin (Buntings Branch, Little Assawoman Bay, Assawoman Bay, Indian River Bay, Iron Branch, Indian River, Rehoboth Bay, and Lewes-Rehoboth Canal Watersheds) shall be reduced by 23 percent from the 2000-2005 baseline level.

Article 3. All point source bacteria loading in the Inland Bays Drainage Basin (Buntings Branch, Little Assawoman Bay, Assawoman Bay, Indian River Bay, Iron Branch, Indian River, Rehoboth Bay, and Lewes-Rehoboth Canal Watersheds) will be capped at the current, geometric mean concentration level of 35 CFU *enterococcus*/100mL until all point sources are eliminated as required in the 1998 Inland Bays Nutrient TMDL Regulation.

Article 4. Based upon cumulative distribution analyses and assuming implementation of reductions identified by Article 1 through Article 3 above, DNREC has determined that, with an adequate margin of safety, water quality standards will be met in the Inland Bays Drainage Basin (Buntings Branch, Little Assawoman Bay, Assawoman Bay, Indian River Bay, Iron Branch, Indian River, Rehoboth Bay, and Lewes-Rehoboth Canal Watersheds).

Article 5. Implementation of this TMDLs Regulation shall be achieved through the development and implementation of a Pollution Control Strategy. The Strategy will be

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developed by DNREC in concert with Tributary Action Teams, other stakeholders, and the public.

10 DE Reg. 1041 (12/01/06)