

ENROLLED BILL

-- *Environmental Matters/Education, Health, and Environmental Affairs* --

Introduced by **Delegates Kullen and Bohanan**

Read and Examined by Proofreaders:

Proofreader.

Proofreader.

Sealed with the Great Seal and presented to the Governor, for his approval this
____ day of _____ at _____ o'clock, ____ M.

Speaker.

CHAPTER _____

1 AN ACT concerning

2 **Environment - ~~Water Pollution Control~~ - Patuxent River Watershed**

3 FOR the purpose of ~~establishing the total maximum daily load for nitrogen within the~~
4 ~~Patuxent River Watershed as a certain number of pounds per day; maximum~~
5 ~~concentration level for nitrogen and phosphorus for certain discharges; altering~~
6 ~~the calculation of concentrations and weights of phosphorus and nitrogen for~~
7 ~~certain purposes; requiring the Department of the Environment to adopt~~
8 ~~regulations that adjust the concentration and flow levels to ensure that the total~~
9 ~~daily load for nitrogen is not exceeded; requiring the Department to issue a~~
10 ~~permit to a sewage treatment plant with certain conditions; requiring a sewage~~
11 ~~wastewater treatment plant in the Patuxent River Watershed to implement~~
12 ~~technology to meet certain requirements by a certain date; prohibiting the~~
13 ~~Department from issuing certain permits that exceed certain effluent~~
14 ~~limitations for total point sources; requiring the Department to use the~~
15 ~~established cap for nitrogen in its permit process for a sewage treatment plant~~
16 ~~in the Patuxent River Watershed; requiring the Department to adopt~~
17 ~~regulations to lower a certain nitrogen concentration level as technology~~

1 improves beyond a certain nutrient removal technology; requiring the
 2 Department to conduct a certain review and submit a certain report by a certain
 3 date; requiring the Department to modify a certain permit under certain
 4 circumstances; stating the intent of the General Assembly *requiring certain*
 5 *upgrades to certain sewage treatment plants in the Patuxent River watershed on*
 6 *or before certain dates under certain circumstances; repealing certain obsolete*
 7 *provisions of law*; and generally relating to ~~water pollution control within the~~
 8 Patuxent River Watershed.

9 ~~BY repealing and reenacting, without amendments,~~
 10 ~~Article—Environment~~
 11 ~~Section 4-301~~
 12 ~~Annotated Code of Maryland~~
 13 ~~(1996 Replacement Volume and 2005 Supplement)~~

14 ~~BY repealing and reenacting, with amendments,~~
 15 ~~Article—Environment~~
 16 ~~Section 4-302 and 9-326~~
 17 ~~Annotated Code of Maryland~~
 18 ~~(1996 Replacement Volume and 2005 Supplement)~~

19 BY repealing
 20 Article - Environment
 21 Section 4-302.1
 22 Annotated Code of Maryland
 23 (1996 Replacement Volume and 2005 Supplement)

24 BY adding to
 25 Article - Environment
 26 Section 4-302.1
 27 Annotated Code of Maryland
 28 (1996 Replacement Volume and 2005 Supplement)

29 Preamble

30 WHEREAS, In December 1981 a consensus, called the Patuxent Charette
 31 Agreement, was reached for reversing declining water quality in the Patuxent River;
 32 and

33 WHEREAS, This consensus was reached between the State and the seven
 34 Patuxent River counties to substantially reduce the flow of phosphorus and nitrogen
 35 from sewage treatment plants to the Patuxent River; and

36 WHEREAS, The nutrient control policy under the Patuxent Charette Agreement
 37 provided that all facilities discharging over 500,000 gallons a day of wastewater must

1 remove phosphorus to 1.0 mg/l of wastewater and plan for a possible 0.3 mg/l
 2 phosphorus limit; and

3 WHEREAS, The nutrient control policy under the Patuxent Charette Agreement
 4 provided that all facilities plan for nitrogen removal to a limit of no more than 3.0
 5 mg/l; and

6 WHEREAS, After 25 years, several of the sewage treatment plants covered by the
 7 policy are not meeting the standards envisioned by the Patuxent Charette Agreement;
 8 and

9 WHEREAS, The living resources of the Patuxent River have yet to be restored due
 10 in part to the failure to meet the standards of the Patuxent Charette Agreement; and

11 WHEREAS, There is new technology, called "enhanced nutrient removal," that
 12 can reduce phosphorus and nitrogen from sewage treatment plants to levels of 0.3
 13 mg/l of phosphorus and 3.0 mg/l of nitrogen; and

14 WHEREAS, In 2004, the Bay Restoration Fund was created for the purpose of
 15 paying the costs of upgrading sewage treatment plants in the State to achieve
 16 "enhanced nutrient removal"; and

17 WHEREAS, The technology and funding now exist to make the restoration of the
 18 Patuxent River a priority; now, therefore,

19 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF
 20 MARYLAND, That the Laws of Maryland read as follows:

21 **Article - Environment**

22 ~~4-301.~~

23 ~~(a) In this subtitle, the following words have the meanings indicated.~~

24 ~~(b) In this subtitle the word "Watershed" means the Patuxent River~~
 25 ~~Watershed and the Severn River Watershed.~~

26 ~~(c) The "Patuxent River Watershed" is the land and water area from which all~~
 27 ~~water drains either directly or indirectly to the Patuxent River.~~

28 ~~(d) The "Severn River Watershed" is the land and water area from which all~~
 29 ~~water drains either directly or indirectly to the Severn River.~~

30 ~~4-302.~~

31 ~~(A) The General Assembly declares that the Patuxent River and the Severn~~
 32 ~~River are a great natural asset and resource to the State and the counties through~~
 33 ~~which they run. As a result of poorly treated effluent discharged from sewage disposal~~
 34 ~~plants and erosion and silt deposited in the rivers from construction and development~~
 35 ~~on land in the Watershed, the Patuxent River and Severn River are being polluted~~

1 and despoiled to a degree that fish, marine life, and recreational use of the rivers are
2 being adversely affected and curtailed.

3 ~~(B) THE GENERAL ASSEMBLY FINDS THAT IN ORDER TO RESTORE WATER~~
4 ~~QUALITY IN THE PATUXENT RIVER, THE STANDARDS OF THE 1981 PATUXENT~~
5 ~~CHARETTE AGREEMENT, A CONSENSUS TO SUBSTANTIALLY REDUCE THE FLOW OF~~
6 ~~PHOSPHORUS AND NITROGEN FROM SEWAGE WASTEWATER TREATMENT PLANTS TO~~
7 ~~THE PATUXENT RIVER, MUST BE IMPLEMENTED AND ENFORCED WITHIN THE~~
8 ~~PATUXENT RIVER WATERSHED.~~

9 [4-302.1.

10 (a) (1) Except as provided in paragraph (2) of this subsection, for purposes of
11 this section, concentrations and weights of phosphorus and nitrogen shall be
12 calculated on a monthly average basis.

13 (2) Nitrogen concentrations and weights shall be calculated only during
14 the period of April 1 through October 15 of each year and the nitrogen removal
15 requirements of this section are applicable only during this period.

16 (b) All sewage treatment plants discharging over 500,000 gallons of
17 wastewater daily into the Patuxent River or any of its tributaries shall:

18 (1) On or before January 1, 1989, remove phosphorus to a level of not
19 more than 1.0 milligram per liter of wastewater effluent; and

20 (2) On or before July 1, 1989, complete planning to anticipate the need
21 for the future addition of facilities to remove:

22 (i) Phosphorus to a level of not more than 0.3 milligram per liter of
23 wastewater effluent; and

24 (ii) Nitrogen to a level of not more than 3.0 milligrams per liter of
25 wastewater effluent.

26 (c) On or before October 1, 1991, the Parkway Sewage Treatment Plant and
27 the Western Branch Sewage Treatment Plant shall remove nitrogen to a level of not
28 more than 3.0 milligrams per liter of wastewater effluent discharged into the
29 Patuxent River or any of its tributaries.

30 (d) On or before October 1, 1991, the Patuxent Plant in Anne Arundel County
31 and the Maryland City Plant shall:

32 (1) For that portion of wastewater flows in excess of the 1981 average
33 daily flow, remove nitrogen to a level of not more than 3.0 milligrams per liter of
34 wastewater effluent discharged into the Patuxent River or any of its tributaries; or

35 (2) Remove nitrogen from the total flow of wastewater effluent
36 discharged into the Patuxent River or any of its tributaries, if the resulting level of

1 nitrogen reduction is equivalent to nitrogen reduction achieved under item (1) of this
2 subsection.]

3 4-302.1.

4 ~~(A) FOR PURPOSES OF THIS SECTION, CONCENTRATIONS AND WEIGHTS OF~~
5 ~~PHOSPHORUS AND NITROGEN SHALL BE CALCULATED ON A DAILY BASIS FOR THE~~
6 ~~CALENDAR YEAR.~~

7 ~~(B) ON OR BEFORE JANUARY 1, 2014 2012, UNLESS A MORE ADVANCED~~
8 ~~UPGRADE OR UPGRADE SCHEDULE IS REQUIRED BY A STATE OR FEDERAL LAW OR~~
9 ~~REGULATION, IF FUNDING IS AVAILABLE FROM THE BAY RESTORATION FUND, A~~
10 ~~NONFEDERAL, PUBLICLY OWNED WASTEWATER TREATMENT PLANT THAT~~
11 ~~DISCHARGES WASTEWATER INTO THE PATUXENT RIVER OR ANY OF ITS TRIBUTARIES~~
12 ~~SHALL IMPLEMENT THE TECHNOLOGY NECESSARY TO REMOVE: DISCHARGES~~
13 ~~WASTEWATER INTO THE PATUXENT RIVER OR ANY OF ITS TRIBUTARIES AND HAS A~~
14 ~~DESIGN CAPACITY OF AT LEAST 500,000 GALLONS PER DAY SHALL UPGRADE TO~~
15 ~~ENHANCED NUTRIENT REMOVAL, AS DEFINED UNDER § 9-1601 OF THIS ARTICLE.~~

16 ~~(1) PHOSPHORUS TO A LEVEL OF NOT MORE THAN 0.3 MILLIGRAM PER~~
17 ~~LITER OF WASTEWATER EFFLUENT; AND~~

18 ~~(2) NITROGEN TO A LEVEL OF NOT MORE THAN 3.0 MILLIGRAMS PER~~
19 ~~LITER OF WASTEWATER EFFLUENT.~~

20 ~~(C) AS TECHNOLOGY IMPROVES BEYOND ENHANCED NUTRIENT REMOVAL,~~
21 ~~THE DEPARTMENT SHALL ADOPT REGULATIONS THAT LOWER THE NITROGEN~~
22 ~~CONCENTRATION DESCRIBED IN SUBSECTION (B) OF THIS SECTION TO A LEVEL THE~~
23 ~~DEPARTMENT DETERMINES IS TECHNOLOGICALLY FEASIBLE.~~

24 ~~(D) THE DEPARTMENT SHALL:~~

25 ~~(1) REVIEW THE ANNUAL PROGRESS OF UPGRADES FOR WASTEWATER~~
26 ~~TREATMENT PLANTS IN THE PATUXENT RIVER WATERSHED; AND~~

27 ~~(2) ON OR BEFORE DECEMBER 1 OF EACH YEAR, SUBMIT A REPORT, IN~~
28 ~~ACCORDANCE WITH § 2-1246 OF THE STATE GOVERNMENT ARTICLE, TO THE~~
29 ~~GENERAL ASSEMBLY, AND TO THE GOVERNOR.~~

30 ~~(E) (1) THIS SUBSECTION APPLIES TO A WASTEWATER TREATMENT PLANT~~
31 ~~WITHIN THE PATUXENT WATERSHED THAT EXPANDS BEYOND ITS CURRENT DESIGN~~
32 ~~CAPACITY AND CREATES ADDED FLOW INTO THE PATUXENT RIVER OR ITS~~
33 ~~TRIBUTARIES.~~

34 ~~(2) IN KEEPING WITH THE INTENT OF THE 1981 PATUXENT CHARETTE~~
35 ~~AGREEMENT, THE DEPARTMENT SHALL MODIFY A DISCHARGE PERMIT THAT HAS~~
36 ~~BEEN ISSUED TO A WASTEWATER TREATMENT PLANT TO ENSURE THAT:~~

37 ~~(1) EFFLUENT LIMITATIONS FOR NITROGEN FROM ALL POINT~~
38 ~~SOURCES ARE NOT EXCEEDED; AND~~

1 ~~(H) TOTAL NITROGEN LOADS INTO THE PATUXENT RIVER~~
2 ~~CONTINUE TO BE REDUCED.~~

3 ~~(B) ON OR BEFORE JANUARY 1, 2016, UNLESS A MORE ADVANCED UPGRADE~~
4 ~~OR UPGRADE SCHEDULE IS REQUIRED BY A STATE OR FEDERAL LAW OR~~
5 ~~REGULATION, IF FUNDING IS AVAILABLE FROM THE BAY RESTORATION FUND, A~~
6 ~~NONFEDERAL WASTEWATER TREATMENT PLANT THAT DISCHARGES WASTEWATER~~
7 ~~INTO THE PATUXENT RIVER OR ANY OF ITS TRIBUTARIES AND HAS A DESIGN~~
8 ~~CAPACITY OF AT LEAST 50,000 GALLONS PER DAY SHALL UPGRADE TO ENHANCED~~
9 ~~NUTRIENT REMOVAL, AS DEFINED UNDER § 9-1601 OF THIS ARTICLE.~~

10 ~~(C) ON OR BEFORE JANUARY 1, 2020, UNLESS A MORE ADVANCED UPGRADE~~
11 ~~OR UPGRADE SCHEDULE IS REQUIRED BY A STATE OR FEDERAL LAW OR~~
12 ~~REGULATION, IF FUNDING IS AVAILABLE FROM THE BAY RESTORATION FUND, A~~
13 ~~NONFEDERAL WASTEWATER TREATMENT PLANT THAT DISCHARGES WASTEWATER~~
14 ~~INTO THE PATUXENT RIVER OR ANY OF ITS TRIBUTARIES AND HAS A DESIGN~~
15 ~~CAPACITY THAT IS LESS THAN 50,000 GALLONS PER DAY SHALL UPGRADE TO~~
16 ~~ENHANCED NUTRIENT REMOVAL, AS DEFINED UNDER § 9-1601 OF THIS ARTICLE.~~

17 ~~(A) FOR PURPOSES OF THIS SECTION, CONCENTRATIONS AND WEIGHTS OF~~
18 ~~PHOSPHORUS AND NITROGEN SHALL BE CALCULATED ON A DAILY BASIS FOR A~~
19 ~~CALENDAR YEAR.~~

20 ~~(B) (1) FOR THE PATUXENT RIVER WATERSHED, THE TOTAL MAXIMUM~~
21 ~~DAILY LOAD FOR NITROGEN IS 1,200 POUNDS PER DAY FROM ALL POINT SOURCES.~~

22 ~~(2) THE DEPARTMENT SHALL ADOPT REGULATIONS THAT ADJUST THE~~
23 ~~CONCENTRATION IN MILLIGRAMS PER LITER AND THE FLOW IN MILLION GALLONS~~
24 ~~PER DAY TO ENSURE THAT THE TOTAL DAILY LOAD FOR THE PATUXENT RIVER~~
25 ~~WATERSHED DOES NOT EXCEED THE TOTAL MAXIMUM DAILY LOAD SET FORTH IN~~
26 ~~PARAGRAPH (1) OF THIS SUBSECTION.~~

27 ~~(3) IN ACCORDANCE WITH PARAGRAPH (2) OF THIS SUBSECTION, THE~~
28 ~~DEPARTMENT SHALL ISSUE A PERMIT TO A SEWAGE TREATMENT PLANT THAT~~
29 ~~INCLUDES EFFLUENT LIMITATIONS AS DETERMINED NECESSARY TO ENSURE THAT~~
30 ~~THE TOTAL MAXIMUM DAILY LOAD FROM ALL POINT SOURCES IS NOT EXCEEDED.~~

31 ~~(C) ON OR BEFORE JANUARY 1, 2011, A SEWAGE TREATMENT PLANT THAT~~
32 ~~DISCHARGES WASTEWATER INTO THE PATUXENT RIVER OR ANY OF ITS TRIBUTARIES~~
33 ~~SHALL IMPLEMENT THE TECHNOLOGY NECESSARY TO REMOVE:~~

34 ~~(1) PHOSPHORUS TO A LEVEL OF NOT MORE THAN 0.3 MILLIGRAM PER~~
35 ~~LITER OF WASTEWATER EFFLUENT; AND~~

36 ~~(2) NITROGEN TO A LEVEL OF NOT MORE THAN THE LEVEL~~
37 ~~ESTABLISHED IN ACCORDANCE WITH SUBSECTION (B) OF THIS SECTION.~~

1 9-326.

2 (a) (1) ~~[The] EXCEPT AS PROVIDED IN PARAGRAPH (2) OF THIS~~
3 ~~SUBSECTION, THE Department may make the issuance of a discharge permit~~
4 ~~contingent on any conditions the Department considers necessary to prevent violation~~
5 ~~of this subtitle.~~

6 (2) (1) ~~FOR THE PATUXENT RIVER WATERSHED, AS DEFINED IN § 4-301~~
7 ~~OF THIS ARTICLE, THE DEPARTMENT SHALL IMPOSE A CAP ON THE TOTAL POINT~~
8 ~~SOURCE LOAD FOR NITROGEN THAT DOES NOT EXCEED 1,200 POUNDS PER DAY.~~

9 (II) ~~THE DEPARTMENT MAY NOT ISSUE A PERMIT THAT ALLOWS A~~
10 ~~PERMIT HOLDER WITHIN THE PATUXENT RIVER WATERSHED TO DISCHARGE IN~~
11 ~~EXCESS OF THE EFFLUENT LIMITATIONS FOR TOTAL POINT SOURCES IMPOSED~~
12 ~~UNDER SUBPARAGRAPH (I) OF THIS PARAGRAPH.~~

13 ~~[(2)] (3) In permits for the discharge of pollutants from publicly owned~~
14 ~~treatment works, the Department:~~

15 (i) ~~May impose as conditions appropriate measures to establish~~
16 ~~and insure compliance by industrial users with any system of user charges required~~
17 ~~by State or federal law or by any rule, regulation, or guideline adopted under State or~~
18 ~~federal law; and~~

19 (ii) ~~Shall impose as conditions requirements for the permit holder~~
20 ~~to provide information about new introductions of pollutants or substantial changes~~
21 ~~in the volume or character of pollutants being introduced into the treatment works.~~

22 (b) ~~Issuance of a discharge permit is contingent on the grant by the permit~~
23 ~~holder to the Department of a right of entry on the permit site at any reasonable time~~
24 ~~to inspect and investigate for violation or potential violation of any condition of the~~
25 ~~permit.~~

26 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect
27 October 1, 2006.