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An Act To Update Maine's Water Quality Standards

Submitted by the Department of Environmental Protection pursuant to Joint Rule 204. Reference to the Committee on Environment and Natural Resources suggested and ordered printed.

R(+ B. Hunt

ROBERT B. HUNT Clerk

Presented by Representative HARLOW of Portland.

1	Be it enacted by the People of the State of Maine as follows:
2	Sec. 1. 38 MRSA §361-A, sub-§1-L is enacted to read:
3	1-L. CFU. "CFU" means colony-forming units.
4 5	Sec. 2. 38 MRSA §464, sub-§4, ¶A, as amended by PL 2013, c. 193, §1, is further amended to read:
6 7	A. Notwithstanding section 414-A, the department may not issue a water discharge license for any of the following discharges:
8 9	(1) Direct discharge of pollutants to waters having a drainage area of less than 10 square miles, except that:
10 11	(a) Discharges into these waters that were licensed prior to January 1, 1986 are allowed to continue only until practical alternatives exist;
12 13	(b) Storm water discharges in compliance with state and local requirements are exempt from this subparagraph;
14 15 16 17 18	(c) Aquatic pesticide or chemical discharges approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency for the purpose of restoring biological communities affected by an invasive species are exempt from this subparagraph;
19 20	(d) Chemical discharges for the purpose of restoring water quality in GPA waters approved by the department are exempt from this subparagraph;
21 22 23 24 25 26 27 28	(e) Discharges of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety using materials and methods that provide for protection of nontarget species are exempt from this subparagraph. When the department issues a license for the discharge of aquatic pesticides authorized under this division, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website; and
29 30	(f) Discharges of pesticides approved by the department are exempt from this subparagraph that are:
31	(i) Unintended and an incidental result of the spraying of pesticides;
32	(ii) Applied in compliance with federal labeling restrictions; and
33 34	(iii) Applied in compliance with statute, Board of Pesticides Control rules and best management practices-:
35 36	(2) New direct discharge of domestic pollutants to tributaries of Class-GPA waters;
37 38	(3) Any discharge into a tributary of GPA waters that by itself or in combination with other activities causes water quality degradation that would impair the

1 2	characteristics and designated uses of downstream GPA waters or causes an increase in the trophic state of those GPA waters except for the following::
3 4 5 6 7	(a) Aquatic pesticide or chemical discharges approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency for the purpose of restoring biological communities affected by an invasive species in the GPA waters or a tributary to the GPA waters; or
8	(b) Discharges of pesticides approved by the department that are:
9	(i) Unintended and an incidental result of the spraying of pesticides;
10	(ii) Applied in compliance with federal labeling restrictions; and
11 12	(iii) Applied in compliance with statute, Board of Pesticides Control rules and best management practices.
13 14 15	(4) Discharge of pollutants to waters of the State that imparts color, taste, turbidity, toxicity, radioactivity or other properties that cause those waters to be unsuitable for the designated uses and characteristics ascribed to their class;
16 17 18 19	(5) Discharge of pollutants to any water of the State that violates sections 465, 465-A and 465-B, except as provided in section 451; causes the "pH" of fresh waters to fall outside of the 6.0 to 8.5 range; or causes the "pH" of estuarine and marine waters to fall outside of the 7.0 to 8.5 range;
20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37	(6) New discharges of domestic pollutants to the surface waters of the State that are not conveyed and treated in municipal or quasi-municipal sewage facilities. For the purposes of this subparagraph, "new discharge" means any overboard discharge that was not licensed as of June 1, 1987, except discharges from vessels and those discharges that were in continuous existence for the 12 months preceding June 1, 1987, as demonstrated by the applicant to the department with clear and convincing evidence. The volume of the discharge from an overboard discharge facility that was licensed as of June 1, 1987 is determined by the actual or estimated volume from the facilities connected to the overboard discharge facility during the 12 months preceding June 1, 1987 or the volume allowed by the previous license, whichever is less, unless it is found by the department that an error was made during prior licensing. The months during which a discharge may occur from an overboard discharge facility that was licensed as of June 1, 1987 must be determined by the actual use of the facility at the time of the most recent license application prior to June 1, 1987, whichever is greater. If the overboard discharge facility was the primary residence of an owner at the time of the most recent license application prior to June 1, 1987, or during the 12 months
38	prior to June 1, 1987, then the facility is considered a year-round residence.
39 40	"Year-round residence" means a facility that is continuously used for more than 8 months of the year. For purposes of licensing, the department shall treat an
41	increase in the licensed volume or quantity of an existing discharge or an
42	expansion in the months during which the discharge takes place as a new
43	discharge of domestic pollutants;

- 1(7) After the Administrator of the United States Environmental Protection2Agency ceases issuing permits for discharges of pollutants to waters of this State3pursuant to the administrator's authority under the Federal Water Pollution4Control Act, Section 402(c)(1), any proposed license to which the administrator5has formally objected under 40 Code of Federal Regulations, Section 123.44, as6amended, or any license that would not provide for compliance with applicable7requirements of that Act or regulations adopted thereunder;
- 8 (8) Discharges for which the imposition of conditions can not ensure compliance
 9 with applicable water quality requirements of this State or another state;
- 10 (9) Discharges that would, in the judgment of the Secretary of the United States
 11 Army, substantially impair anchorage or navigation;
- 12 (10) Discharges that would be inconsistent with a plan or plan amendment
 13 approved under the Federal Water Pollution Control Act, Section 208(b); and
- 14 (11) Discharges that would cause unreasonable degradation of marine waters or
 15 when insufficient information exists to make a reasonable judgment whether the
 16 discharge would cause unreasonable degradation of marine waters.
- Notwithstanding subparagraph (6), the department may issue a wastewater discharge
 license allowing for an increase in the volume or quantity of discharges of domestic
 pollutants from any university, college or school administrative unit sewage facility,
 as long as the university, college or school administrative unit has a wastewater
 discharge license valid on the effective date of this paragraph and the increase in
 discharges does not violate the conditions of subparagraphs (1) to (5) and (7) to (11)
 or other applicable laws.
- 24 Sec. 3. 38 MRSA §464, sub-§4, ¶D, as amended by PL 1991, c. 159, is further 25 amended to read:
- 26 D. Except as otherwise provided in this paragraph, for the purpose of computing 27 whether a discharge will violate the classification of any river or stream, the 28 assimilative capacity of the river or stream must be computed using the minimum 7day low flow which that can be expected to occur with a frequency of once in 10 29 years. The department may use a different flow rate only for those toxic substances 30 31 regulated under section 420 and for those nutrients specified in department rules. To use a different flow rate, the department must find that the flow rate is consistent with 32 33 the risk being addressed.
- 34 Sec. 4. 38 MRSA §465, sub-§3, ¶B, as amended by PL 2005, c. 409, §1, is 35 further amended to read:
- B. The dissolved oxygen content of Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of Escherichia coli

bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of <u>64</u> <u>100 CFU</u> per 100 milliliters <u>over a 90-day interval</u> or an instantaneous level of <u>236</u> <u>320 CFU</u> per 100 milliliters <u>in more than 10% of the</u> <u>samples in any 90-day interval</u>. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures.

7 Sec. 5. 38 MRSA §465, sub-§3, ¶C, as amended by PL 2007, c. 291, §4, is
 8 further amended to read:

9 C. Discharges to Class B waters may not cause adverse impact to aquatic life in that 10 the receiving waters must be of sufficient quality to support all aquatic species 11 indigenous to the receiving water without detrimental changes in the resident 12 biological community.

13(1) This paragraph does not apply to aquatic pesticide or chemical discharges14approved by the department and conducted by the department, the Department of15Inland Fisheries and Wildlife or an agent of either agency for the purpose of16restoring biological communities affected by an invasive species.

17 (2) For the purpose of allowing the discharge of aquatic pesticides approved by 18 the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not 19 20 cause adverse impact to aquatic life as long as the materials and methods used provide protection for nontarget species. When the department issues a license 21 for the discharge of aquatic pesticides authorized under this subparagraph, the 22 23 department shall notify the municipality in which the application is licensed to 24 occur and post the notice on the department's publicly accessible website.

25 Sec. 6. 38 MRSA §465, sub-§4, ¶B, as repealed and replaced by PL 2005, c.
 26 409, §2, is amended to read:

B. The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply.

- (1) The 30-day average dissolved oxygen criterion of a Class C water is 6.5 parts
 per million using a temperature of 22 degrees centigrade or the ambient
 temperature of the water body, whichever is less, if:
- 36(a) A license or water quality certificate other than a general permit was37issued prior to March 16, 2004 for the Class C water and was not based on a386.5 parts per million 30-day average dissolved oxygen criterion; or
- 39 (b) A discharge or a hydropower project was in existence on March 16, 2005
 40 and required but did not have a license or water quality certificate other than
 41 a general permit for the Class C water.

- 1 This criterion for the water body applies to licenses and water quality certificates 2 issued on or after March 16, 2004.
- 3 (2) In Class C waters not governed by subparagraph (1), dissolved oxygen may
 4 not be less than 6.5 parts per million as a 30-day average based upon a
 5 temperature of 24 degrees centigrade or the ambient temperature of the water
 6 body, whichever is less. This criterion for the water body applies to licenses and
 7 water quality certificates issued on or after March 16, 2004.
- 8 The department may negotiate and enter into agreements with licensees and water 9 quality certificate holders in order to provide further protection for the growth of 10 indigenous fish. Agreements entered into under this paragraph are enforceable as 11 department orders according to the provisions of sections 347-A to 349.
- 12 Between May 15th and September 30th, the number of Escherichia coli bacteria of human and domestic animal origin in Class C waters may not exceed a geometric 13 14 mean of 126 100 CFU per 100 milliliters over a 90-day interval or an instantaneous level of 236 320 CFU per 100 milliliters in more than 10% of the samples in any 90-15 day interval. In determining human and domestic animal origin, the department shall 16 17 assess licensed and unlicensed sources using available diagnostic procedures. The 18 board shall adopt rules governing the procedure for designation of spawning areas. 19 Those rules must include provision for periodic review of designated spawning areas 20 and consultation with affected persons prior to designation of a stretch of water as a spawning area. 21
- Sec. 7. 38 MRSA §465, sub-§4, ¶C, as amended by PL 2005, c. 182, §5, is
 further amended to read:
- C. Discharges to Class C waters may cause some changes to aquatic life, except that the receiving waters must be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. This paragraph does not apply to aquatic pesticide or chemical discharges approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency for the purpose of restoring biological communities affected by an invasive species.
- Sec. 8. 38 MRSA §465-A, sub-§1, ¶B, as amended by PL 2007, c. 292, §23, is
 further amended to read:
- 33 B. Class GPA waters must be described by their trophic state based on measures of the chlorophyll "a" content, Secchi disk transparency, total phosphorus content and 34 other appropriate criteria. Class GPA waters must have a stable or decreasing trophic 35 state, subject only to natural fluctuations and must be free of culturally induced algal 36 blooms that impair their use and enjoyment. The number of Escherichia coli bacteria 37 of human and domestic animal origin in these waters may not exceed a geometric 38 mean of 29 100 CFU per 100 milliliters over a 90-day interval or an instantaneous 39 40 level of 194 320 CFU per 100 milliliters in more than 10% of the samples in any 90-41 day interval.
- 42 Sec. 9. 38 MRSA §465-B, sub-§2, ¶B, as amended by PL 2005, c. 409, §3, is 43 further amended to read:

1 B. The dissolved oxygen content of Class SB waters must be not less than 85% of 2 saturation. Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a 3 geometric mean of 8 30 CFU per 100 milliliters in any 90-day interval or an 4 5 instantaneous level of 54 110 CFU per 100 milliliters in more than 10% of the 6 samples in any 90-day interval. In determining human and domestic animal origin, 7 the department shall assess licensed and unlicensed sources using available 8 diagnostic procedures. The numbers of total coliform bacteria or other specified 9 indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish 10 11 Sanitation Program, United States Food and Drug Administration.

12 Sec. 10. 38 MRSA §465-B, sub-§3, ¶B, as amended by PL 2005, c. 409, §4, is 13 further amended to read:

14 B. The dissolved oxygen content of Class SC waters must be not less than 70% of 15 saturation. Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a 16 geometric mean of 14 30 CFU per 100 milliliters in any 90-day interval or an 17 instantaneous level of 94 110 CFU per 100 milliliters in more than 10% of the 18 19 samples in any 90-day interval. In determining human and domestic animal origin, 20 the department shall assess licensed and unlicensed sources using available diagnostic procedures. The numbers of total coliform bacteria or other specified 21 22 indicator organisms in samples representative of the waters in restricted shellfish harvesting areas may not exceed the criteria recommended under the National 23 24 Shellfish Sanitation Program, United States Food and Drug Administration.

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SUMMARY

This bill updates Maine's water quality standards by aligning state law with the federal Clean Water Act regarding pesticide application to control invasive plants and mosquito-borne disease and authorizing the Department of Environmental Protection to use an alternative low-flow requirement when assessing the impact of nutrients on water quality, contingent upon the department's adopting nutrient rules.