116th MAINE LEGISLATURE

FIRST REGULAR SESSION-1993

Legislative Document **No. 1019**

H.P. 752 House of Representatives, March 25, 1993

An Act to Establish a Monthly Average Dissolved Oxygen Standard for Class C Waters.

Reference to the Committee on Energy and Natural Resources suggested and ordered printed.

Joseph W. Mayo

JOSEPH W. MAYO, Clerk

Presented by Representative ANDERSON of Woodland.
Cosponsored by Senator VOSE of Washington and
Representatives: GOULD of Greenville, LORD of Waterboro.

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 38 MRSA §465, sub-§4, ¶B, as affected by PL 1989, c. 890, Pt. A, §40 and amended by Pt. B, §63, is further 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~~. 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. For purposes of applying a 30-day average criterion for protection of other salmonid life stages, a dissolved oxygen content of no more than 5.5 parts per million must be used. Between May 15th and September 30th, the number of Escherichia coli bacteria of human origin in these waters may not exceed a geometric mean of 142 per 100 milliliters or an instantaneous level of 949 per 100 milliliters. The board shall ~~promulgate~~ adopt rules governing the procedure for designation of spawning areas. Those rules must include provision for periodic review of designated spawning areas and consultation with affected persons prior to designation of a stretch of water as a spawning area.

STATEMENT OF FACT

Under current law, discharges to Class C waters may cause some changes to aquatic life as long as the receiving waters are of sufficient quality to support all species of fish indigenous to the receiving waters and to maintain the structure and function of the resident biological community. At a minimum, Class C waters may not have a dissolved oxygen content of less than 5 parts per million or 60% of saturation, whichever is higher. In identified salmonid spawning areas, in order to protect the embryo and larval stages of salmonids, a higher dissolved oxygen concentration may be required. In determining the appropriate dissolved oxygen levels, the Legislature and the Board of Environmental Protection have utilized the guidelines set out in the federal Environmental Protection Agency's Quality Criteria for Water, 1986, known as the "Gold Book."

The Gold Book guidelines establish that a 5 parts per million dissolved oxygen concentration would correspond to moderate production impairment in other salmonid life stages. A 6 parts per million concentration would correspond to a slight production impairment. The Environmental Protection Agency notes

that these criteria represent worse-case conditions and the conditions "will be better than the criterion nearly all of the time at most sites." As a result, for Class C waters only, when calculating a 30-day mean average dissolved oxygen concentration, a 5.5 parts per million concentration, the average of 5 parts per million and 6 parts per million, has been selected.