15A NCAC 18C .0403 SURFACE WATER FACILITIES

(a) Unimpounded Stream. Both the minimum daily flow of record of the stream and the estimated minimum flow calculated from rainfall and run-off shall exceed the maximum daily draft for which the water treatment plant is designed, with due consideration given to requirements for future expansion of the treatment plant. The Department shall approve a water plant capacity greater than the minimum daily flow of record of the stream if rules or regulations of other government agencies will not be violated.

(b) Impoundments. Raw water storage capacity shall be sufficient to reasonably satisfy the designed water supply demand during periods of drought.

(c) Clearing of Land for Impoundment. The area in and around the proposed impoundment of class I and class II reservoirs shall be cleared as follows:

- (1) The area from normal full level to five feet below the normal pool elevation of the impoundment shall be cleared and grubbed of all vegetation and shall be kept cleared until the reservoir is filled. Secondary growth shall be removed prior to flooding.
- (2) The entire area below the five-foot water depth shall be cleared and shall be kept cleared of all growth of less than six inches in diameter until the reservoir is filled. Stumps greater than six inches in diameter shall be cut off at ground level.
- (3) All brush, trees, and stumps shall be burned or removed from the proposed reservoir.

(d) Existing Impoundments. Existing impoundments shall be approved as raw water sources if the following conditions are met.

- (1) The requirements of Paragraph (c) of this Rule and Section .0200 of this Subchapter shall be met.
- (2) A class I or class II reservoir shall meet the requirements of Section .1200 of this Subchapter.
- (3) The supplier of water shall have an engineer, along with other consultants as needed, conduct a study of the impoundment and provide the Department with information to determine whether the requirements of this Subchapter are met. The study shall include:
 - (A) plans and specifications of the impounding structure;
 - (B) information concerning clearing of the land for the impoundment, as provided in Paragraph (d) of this Rule;
 - (C) information concerning sources of pollution on the watershed;
 - (D) documentation of control by the supplier of water of the impoundment and 50-foot margin around the impoundment measured from the normal pool elevation;
 - (E) information concerning the quality of the water and sediments which could cause water quality fluctuations, such as lake stratification, turnover, and algae bloom; and
 - (F) other information necessary to show that the proposed source will meet the requirements of this Subchapter.

(e) A margin of at least 50 feet around a class I and class II reservoir, measured from the normal pool elevation, shall be owned or controlled by the supplier of water.

(f) Intakes, Pumps, Treatment Units, and Equipment. Raw water intakes, pumps, treatment units, and equipment shall be designed to provide water of potable quality that meets the water quality requirements stated in Section .1500 of this Subchapter.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977; Amended Eff. July 1, 1994; July 1, 1992; September 1, 1990; Readopted Eff. July 1, 2019.