

15A NCAC 02K .0503 REQUIRED MINIMUM FLOW FOR SMALL HYDROELECTRIC PROJECTS

(a) This Rule shall apply only to a dam operated by a small power producer, as defined in G.S. 62-3(27a), that diverts water from 4,000 feet or less of the natural stream bed. The length of the bypassed reach shall be measured from the toe of the dam to the point where the diverted water re-enters the natural channel, following the centerline of the natural channel.

(b) The minimum release for a hydroelectric project subject to this Rule shall be determined according to the procedures described in Subparagraphs (1)-(5) of this Paragraph. If at any time the inflow just upstream of the dam is less than the minimum flow required in the bypassed reach, then the minimum flow may be reduced to a level equal to this inflow.

- (1) If the aquatic habitat in the bypassed reach is rated poor, then the minimum release to the bypassed reach shall be determined as follows:
 - (A) If the 7Q10 is less than or equal to 10 percent of the mean annual daily flow, then the minimum release to the bypassed reach shall be the 7Q10 flow.
 - (B) If the 7Q10 is greater than 10 percent of the mean annual daily flow, and there are no existing point source discharges of wastewater to the bypassed reach, then the minimum release to the bypassed reach shall be 0.8 times the 7Q10.
 - (C) If the 7Q10 is greater than 10 percent of the mean annual daily flow, and one or more existing point source discharges of wastewater enter the bypassed reach, then the minimum release to the bypassed reach shall be the 7Q10 flow.
- (2) If the bypassed reach does not have an aquatic habitat rating of "poor," is not on a special case stream, and is located in the piedmont region, as defined in Rule .0501(h) of this Section, then the minimum release to the bypassed reach shall be determined as follows:
 - (A) If the 7Q10 is less than or equal to six percent of the mean annual daily flow, then the minimum release to the bypassed reach shall be 3.0 times the 7Q10 flow.
 - (B) If the 7Q10 is greater than six percent of the mean annual daily flow, and less than or equal to 10 percent of the mean annual daily flow, then the minimum release to the bypassed reach shall be 2.2 times the 7Q10 flow.
 - (C) If the 7Q10 is greater than 10 percent of the mean annual daily flow, then the minimum release to the bypassed reach shall be 1.2 times the 7Q10 flow.
- (3) The minimum flow determined by the procedures described in Subparagraphs (1) and (2) of this Paragraph may be adjusted downward by the Department if that adjustment would not result in significant loss of aquatic habitat. This adjustment may be based on factors including:
 - (A) the type of aquatic habitat present in the bypassed reach;
 - (B) the length of the bypassed reach.
- (4) If the applicant or owner disputes the minimum flow determined by the procedures described in Subparagraphs (1) and (2) of this Paragraph, he may undertake a site-specific field study, as defined in Rule .0501(j) of this Section, subject to the review and approval of the Department. The final minimum release required will not exceed the amount determined by the procedures described in this Section.
- (5) The minimum flow for a dam on a special case stream, or on a stream located in the mountain region, as defined in Rule .0501(h) of this Section, which does not exhibit poor aquatic habitat; shall be determined by a site-specific instream flow study, as defined in Rule .0501(j) of this Section. This study shall be conducted by the applicant or his consultants, and shall be subject to approval by the Department.

(c) A dam operated by a small power producer, as defined in G.S. 62-3(27a), which was operating to produce power as of October 13, 1994, and which is not under the jurisdiction of the Federal Energy Regulatory Commission, shall not be required by this Rule to increase its minimum flow above the amount required on October 13, 1994.

History Note: Authority G.S. 143-215.24; 143-215.25; 143-215.31; 143-215.32; 143-215.33; 143-215.36; Eff. December 1, 1994; Amended Eff. April 1, 1995; Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. December 23, 2017.