



Ohio Administrative Code

Rule 1501:21-11-05 Hydrologic and hydraulic investigations.

Effective: May 24, 2018

(A) Hydraulic and hydrologic analyses shall be accomplished using methodologies and computer analyses developed by the division of water resources, the United States army corps of engineers, the United States geological survey, the natural resources conservation service, the United States bureau of reclamation, the national weather service, or others which employ sound engineering basis and are specifically approved by the chief. Both present and projected future land uses shall be considered in determining the runoff characteristics of the drainage areas. The more severe of these two conditions shall be used in the design.

(B) For dams, the hydrologic and hydraulic assumptions and design calculations used in spillway designs shall be included in the design submittal. These shall include, but not be limited to:

(1) Rainfall and runoff data;

(2) Reservoir inflow hydrographs;

(3) Reservoir area-storage volume elevation data to the top of dam elevation;

(4) Spillway elevation-discharge data;

(5) Reservoir flood routings and backwater analyses, except as provided in rule 1501:21-13-03 of the Administrative Code; and

(6) A dam failure analysis as may be required by the chief for downstream hazard evaluation.

(C) For levees, the hydrologic and hydraulic assumptions and design calculations used shall be included in the design submittal. These shall include, but not be limited to:

(1) Discharge/probability data;



- (2) Hydrographs;
- (3) Valley cross-sections;
- (4) Descriptive hydraulic information concerning bridges and other structures that influence the hydraulic characteristics of the watercourse;
- (5) Stream elevation-discharge-storage data; and
- (6) Stream flood routings and flood profiles.