Dam Construction and Reconstruction: How to Proceed

Notification
Before any construction of a dam can begin, it is necessary to notify the proper agencies. These agencies include, but are not limited to the NHDES Dam Bureau.

Applications
The first step in the process is to make a preliminary check to see if a dam application is necessary. New Hampshire’s statues state that “dam” means “any artificial barrier, including appurtenant works, which impounds or diverts water, and which has a height of 6 feet or more, or is located at the outlet of a great pond. A roadway culvert shall not be considered a dam if its invert is at the natural bed of the water course, it has adequate discharge capacity, and it does not impound water under normal circumstances. Artificial barriers which create surface impoundments for liquid industrial or liquid commercial wastes, septage or sewage, regardless of height or storage capacity, shall be considered dams. An artificial barrier at a storm water detention basin, which impounds 0.5 acre-foot or less of water during normal conditions, shall not be considered a dam unless its height is 10 feet or greater or its maximum storage is 6 acre-feet or greater.”

Under most circumstances, it is also necessary to apply for Wetlands Dredge and Fill approval in conjunction with the dam application.

Upon their receipt of these applications, the respective agencies begin to investigate the impact of the proposed projects by conducting field investigation and evaluating data submitted on, or with, the applications.

Obtaining approval for your dam
Once the application has been received by the NHDES Dam Bureau and the proposed site has been inspected, the technical staff assigns the dam a reference number and determines its proper hazard classification. The NHDES Dam Bureau classifies all dams in the state into one of four categories: High Hazard, Significant Hazard, Low Hazard and Non Menace. These classifications reflect the probable anticipated detrimental effects of the dam’s failure.

Because of the varying consequences between the classifications, the design requirements that each must meet also vary. Therefore, once a classification has been assigned to a dam, the Dam Bureau may
require the applicant to submit an additional fee, additional information such as plans, specifications, or engineering reports and/or make design modifications. When enough information has been gathered and all requirements are met, the engineering staff sends the proposal, with recommendations, to the bureau’s administrator for appropriate action.

After Approval
Once approval for the construction of the dam has been granted by the NHDES Dam Bureau, it then becomes contingent of the Wetlands Bureau approval and any other applicable permits. Should the NHDES Wetlands Bureau deny the associated application, then the dam approval becomes void. If the NHDES Wetlands Bureau approves the project, then both the dam and the wetlands permit are issued simultaneously. Each permit has a number of conditions which must be met as part of implementing the project.

For Copies of Regulations
A copy of the New Hampshire Code of Administrative Rules, Env-Wr 100-700, is available online or for purchase from the NHDES Public Information Center at (603) 271-2975. This book contains a detailed explanation of all the information covered in this bulletin, as well as other issues pertinent to NHDES Dam Bureau.

For more information relative to the design, construction, maintenance and operation of dams, please contact the NHDES Dam Bureau at (603) 271-3406 or email damsafety@des.nh.gov. General information is available at NHDES Dam Bureau Webpage. You may also visit our office at 29 Hazen Drive, Concord, NH.

This fact sheet is accurate as of December 2019. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.