

WORDS TO ADD TO OUR VOCABULARY

ELEVATION	Civil engineering measures everything in feet, starting at sea level. The surface of our Spillway Discharge is 446.28 feet above sea level. In laymen's terms that is ZERO for us. Therefor the lake drops 54 inches in the winter and has risen 25 inches once in 30 years. The 50-year storm event is modeled to be 31 inches above the spillway surface.
CAUSEWAY	We do not have a Causeway. Our dam has a Spillway.
SPILLWAY	A Spillway is a structure used to provide the controlled release of water from a dam or levee downstream, typically into a river or stream bed. This can be over the top or thru controllable Floodgates. Spillways come in a variety of designs, Drop, Ogee, Siphon, Shaft and Side Channel.
DROP SPILLWAY	We have a Drop Spillway. Drop Spillways are designed for the Discharge to land on a mostly flat concrete surface allowing the water to then pass downstream into the stream or riverbed.
DISCHARGE	The amount of water the Spillway allows as normal planned discharge downstream on a daily or hourly basis, over the Headwall. This does not include the opening of the Floodgate.
HEADWALL	Center concrete section of a Drop Spillway. Headwalls may or may not have Floodgates designed into them.
WINGWALL	Downstream walls of Drop Spillway
SIDEWALLS	The higher side elements of a Drop Spillway on the downstream side
FLOODGATE	Adjustable gates used to control exiting water flow in a dam or levee. They come in many styles and designs from simple to complex. Our Floodgate is a manually installed sheet of iron. In the summer it holds back water for recreational use of the lake and in the winter, it allows us to discharge 4.5 feet of water elevation.
OVERTOPPING	This is a term to define a dam that is designed to allow surge elevations of water to run over the top of the dam with no damage or erosion to the surface of the dam.
RIGHT & LEFT	The sides of the dam or river when one is looking down stream.
50 YEAR STORM	A theoretical amount of rain that occurs once every 50 years. This amount of water is used to model an event on CAD to determine how high the water elevations will rise. By law, our dam is required to support the 50 year event based on height and discharge. Our model indicates that the water level of the lake would be 31 inches higher than average during a 50 year event.
WINTER LOW	This is the level of the lake once the gate is removed. It is controlled by the lowest height of the Floodgate culvert currently recorded as 441.78 feet above sea level or 54 inches below the Spillway discharge surface.

WORDS TO ADD TO OUR VOCABULARY, CONT.

LOI	Letter of Inspection. A formal document issued by the State of New Hampshire Department of Environmental Services (Dam Bureau) to identify deficiencies related to a privately owned dam. LOI's are considered strong recommendations. The FLIA has an open LOI that is driving this project.
LOD	Letter of Deficiency. LOD's are letter issued by DES that have more weight than LOI's and will be tracked closely by the State. Most often LOD's have specific tasks and completion dates associated with those tasks.
SDF	Spillway Design Flood. This is the flood condition adopted by an engineer for the design of a Spillway, Dam or Floodgate using the most severe combinations of meteorological and hydrological conditions as required by regulation.
WSEL	Water Surface Elevation. The Hight of the lake at any given time. (actual or theoretical)
NAVD88	North American Vertical Datum of 1988. The standard by which Civil Engineers manage height above sea level.
FREEBOARD	In boating it is defined as the height of a ship's deck above the water. In dam modeling it is height of the dam crest above the theoretical 50-Year Storm event WSEL.
DAM CREST	The highest point of any dam surface capable of holding back upstream water.