

North End Diversion and Retention Pond

The construction of this project was complete in November 2005 with the purpose of diverting and retaining storm water runoff from farm fields lying to the north of Granite Lake. The drought during 2006 furnished no opportunity to measure the operation design characteristics of runoff diversion and runoff retention.



March of 2007 provided two snowfalls of 12 and 13 inches that contained sufficient moisture to produce a runoff filling the retention pond with approximately 30 inches of water. A gage constructed of PVC with quarter foot markings was placed over a steel post driven into the bottom at the pond's deepest point. Soil uptake and evaporation had lowered the pond water level to 24 inches at gage installation. The frost was still in the ground making gage installation easier.



Gage observations are taken every two days to record a rate of water level decline of the pond. The initial decline was slow, since ground frost was impeding ground uptake. A rain shower of 2.4 inches increased the pond level for several days. The frost came out on April 5th, lowering the pond water level dramatically to 6 inches. By April 7th, the pond water level dropped to zero. It appears the pond is performing as designed. It needs to completely drain within 72 hours without frost in the ground. The graphic below shows water level decline over observation period.

