

Seney National Wildlife Refuge (NWR) Observed Pool Level Data (1936-2015)

Assessment Methods

Seney National Wildlife Refuge (Refuge) staff have established annual pool level objectives annually since the initial flooding of the pools (1936-1942). Over the years, Seney NWR's pools have been manipulated for a variety of purposes; including, but not limited to, protecting nesting loons, swans, and geese, supporting prey populations of fish-eating birds, suppressing undesirable woody vegetation, increasing waterfowl access to submergent vegetation and invertebrates, and facilitating prescribed fires. Refuge staff have established management objectives for the following pools from 1936-2015: A-1, B-1, C-1, D-1, E-1, F-1, G-1, H-1, I-1, J-1, North Show Pool, South Show Pool, Upper Goose Pen, Lower Goose Pen, A-2, C-2, M-2, T-2, C-3, Delta Creek Pool, and Marsh Creek Pool.

In order to determine whether these objectives are being met, Refuge staff and/or volunteers check the pools to record the current pool elevation from the installed gauge. If the water level is too low or too high, boards are added or removed from the nearby water control structure. The following locations are checked annually: A-1, B-1, C-1, D-1, E-1, F-1, G-1, H-1, I-1, J-1, North Show Pool, South Show Pool, Upper Goose Pen, Lower Goose Pen, A-2, C-2, M-2, T-2, C-3, Delta Creek Pool, Marsh Creek Pool, Ducey Creek, Clark Creek, Holland Ditch, Driggs River, Walsh Creek, Marsh Creek, and Walsh Creek/C-3.

A Microsoft Excel file titled "SNWR_Observed_Water_Level_Data_1936-2015" was created with separate spreadsheets for each year. The observed pool levels for each year were manually entered by hand into the appropriate Excel spreadsheets. Observed pool level data for the following years were unable to be located: 1936-1966, 1968-1978, 1980, 1982 1986, 1989, 1998, and 2000. It should be noted that a number of locations were not observed as frequently as the others, so the available data varies from location to location. The 1971 and 1980 spreadsheets show the maximum and minimum gauge readings for each month due to a lack of additional data.

Prior to 2012, pool levels were not based on feet above sea level and only served as a reference for each pool. In 2012, Seney National Wildlife Refuge contracted Vince Capeder (contract hydrologist for the Region 3 Regional Office) to determine accurate elevations (feet above sea level) and to assist with installing gauge panels for each pool. Refuge staff and volunteers determined the minimum and maximum pool elevation levels in 2012 and 2013. The maximum elevations above sea level were determined in 2012 and the minimum elevations were determined in 2013.

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