2014 JORDAN LAKE SNAPSHOT

Mike Backus continued his outstanding job in regular water quality monitoring and in checking the lake levels through the sandpoint well installed in 2013. The average water clarity in Jordan Lake for 2014 was 13.4 feet. Although this is in the very good category, it is lower than past years. By July 2014, the water clarity was only registering about 10 feet, where it continued through August and into September. Research will be conducted during the winter of 2014-2015 to try to determine the cause of this change. The total phosphorus level remained very low at 9.7 micrograms/liter (very good), as did the chlorophyll-a (associated with the amount of algae in the water) level at 3.6 micrograms/liter (very good).

The sandpoint well monitoring showed an average water depth of 5.2 feet. The range went from 4.25 feet in August 2013 to 6.1 feet in early 2014. This means a total vertical variation of 1.85 feet in a little over a year, which is not uncommon for a natural lake.

2015 JORDAN LAKE SNAPSHOT

Mike Backus again performed regular water quality monitoring and lake level monitoring. Average summer water clarity for Jordan Lake this year was 14.9 feet in the east basin and 14.7 feet in the west basin (both in the 'very good' category). Total phosphorus continued to be low in both basins, with the east basin average scoring 12.1 micrograms/liter and the west at 11.5 micrograms/liter (both in the 'good' category). Algae levels stayed low, with chlorophyll-a averages at 3.5 micrograms/liter in the east basin and 3.2 micrograms/liter.

Backus also assisted staff of the Wisconsin Department of Natural Resources in doing an early AIS detection survey of Jordan Lake. This protocol involves a visual survey for invasive aquatic plants and animals, as well as using towing nets to check for zebra mussels and water fleas. No new invasive were discovered during this process.

Charophytes are plant-like algae that occur in clear hard water lakes. The rarest of *Charophytes* , *Lychnothamnus barbatus* (Bearded Stonewort), was found in Wolf Lake in Adams County in 2010; it had never before been found in the Western Hemisphere. By 2012, it had also been verified in Jordan Lake. The identification of this species in Wisconsin has been big news in the algae world. The New York Botanical Garden, along with staff from the WDNR, Adams County LWCD, and the University of Maryland, continued to study this species, looking at its habitat and trying to discover how long it has been in Wisconsin. So far, it has been found in 8 lakes in Adams County, 5 in Waushara County, and one in Sauk County.