August 14, 2013 **MONITORING REPT #12**

EAST & WEST DEEP-WATER STATIONS, GREEN LAKE, GREEN LAKE COUNTY, WI, USA.

Sunny with dead, flat calm today. Many, many gulls have arrived. Surface has foam, molted gull feathers, floating clumps of macrophytes. Saw wonderful large school of **minnows** near surface at east deep-water station. Noticed 3 carp and 3 pan fish at pier. Wild celery leaves (*Vallisneria)* appearing very often in littoral zone all over lake. Macrophytes are growing thickly toward littoral zone surface between and far out from piers and are covered with very large quantities of attached filamentous algae: *Zygnema, Mougeotia, Spirogyra* & especially *Rhizoclonium*. Duck weed and skim of *Anabaena* floating at surface at west station today - probably because so calm.

Recently the **harvester came to my pier** while I was on the pier and I watched it go around the pier area as DNR recommends. After the harvester left, the weeds were still thick, tall and covered with same thick algae. The mess of thick plants and algae seemed to rise up again and were not improved by the presence of the harvester. (Photo taken) The harvester should have accumulated a large, heavy load of aquatic plants just at my pier with the quantity of them we have this summer. The harvester visit was very disappointing. Perhaps heavy algal quantity is causing problems with unsuccessful cutting through aquatic plants' (macrophytes') stems.

Will a new harvester be able to cut deeper? And unload onto the transport barge when cutting very large quantities of weeds? Problems persist and abound for the use of this lake for those who live here and wish to use it for their enjoyment. Boat navigation in some places on lake is difficult due to weeds, too, resulting in motor problems.

				CUSTER COLORS		
STATIONS	TIME	SECCHI (FT)	SURFACE TEMP (F)	½ SECCHI	½ M	LAKE OBSERVATIONS
WEST	10:50	**18.0** Ft	73 F	4.0	2.0	Murky & green
EAST	11:20	**12.0** Ft.	75 F	4.0	2.0	Murky & green

AIR TEMP: 71 F west; 73 F east.

My perception of Green Lake today **= 4.** "Desire to swim and lake enjoyment very much reduced." (Many abundant floating and attached aquatic plants in littoral zone covered by masses of green filamentous algae).

Microscopic observations of plankton samples collected at both East & West deep-water stations via 17 ft. Wisconsin Plankton Net vertical pulls. These organisms are estimated into four categories below:

	Very Abundant	**Abundant**	**Infrequent**	**Present**
Blue-greens:	*Anabaena* *Coelosphaerium* *Microcystis*	*Gomphosphaeria* *Nodularia*	*Gloeocapsa* *Gleotrichia*	*Aphanotheca*
Greens:		*Botryococcus, Coelastrum* Little Green Balls *Sphaerocystis*	*Oocystis,* *Pediastrum*	*Mougeotia* *Golenkinia* *Gloeocystis* *Spirogyra, Tetraspora*
Dinoflag. & Protozoa:	*Ceratium* *Vorticella*	(Interesting protozoan colony = Pseudodendromonas?)		"ice-cream cone"
Diatoms:	*Fragilaria*	*Meridium?*		
Desmids & "Golden":	*Dinobryon*	*Staurastrum* *Synuria* & another moving colony (ball)	*Stentor*	*Cosmarium* Unknown Strands
Zooplankton:	Cyclopoids Daphnidia Nauplii	immature zebra mussels		
Metazoans & Rotifers:	*Conochilus unicornis*	*K. cochlearis*	*Collotheca (no tube)* *Polyarthra*	*Ascomorpha*
Others:	Pieces of plants & animals! , Debris Filaments of terrestrial seeds Conjugation in green algal filaments		Tiny, Flat, Round, Fast, Colorless Clear, sharp and long Empty cells in algal filaments	Cyclop's egg clusters

Mary Jane Bumby, Volunteer Monitor, Green Lake, WI **Report #12: August 14, 2013**