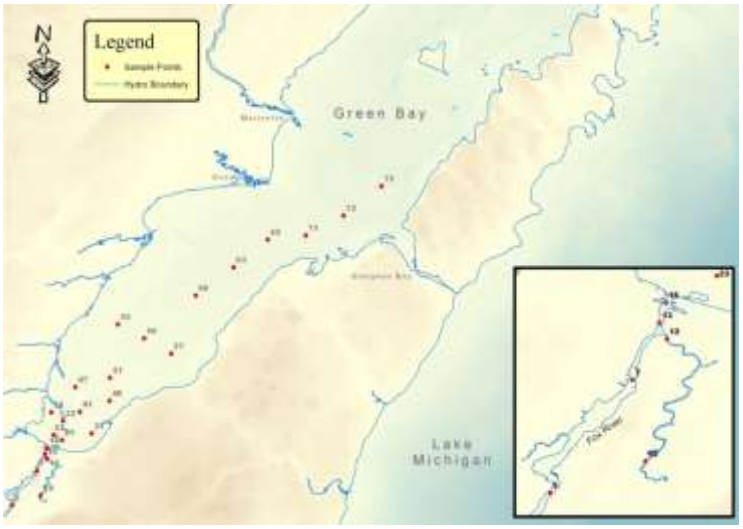
AQUATIC MONITORING PROGRAM – FAQs

Monitoring Our Waters. *NEW Water's Aquatic Monitoring Program (AMP) has been collecting data on Northeast Wisconsin's waters since 1986, which has been shared with academia, governments, nonprofit organizations and other water quality entities regionally, nationally, and internationally. This dataset is one of the most extensive water quality datasets on the Great Lakes. In 2014, the program collected 277 samples and analyzed for 13 parameters in the Lab, for a total of 3,685 samples collected and analyzed. AMP continues to collaborate in grants and projects to stay connected with current research and water quality issues in Green Bay and the Great Lakes region.*



Frequently Asked Questions:

What does AMP study?

- NEW Water's AMP has collected data on nutrients, contaminants, numerous physical parameters such as dissolved oxygen and temperature, light, suspended solids, and algal concentrations.

Isn't water quality improving in Green Bay?

- Since the passing of the Clean Water Act in 1972, industry has greatly improved the quality of their effluent into local waters. As such we have seen reductions in contaminants. The community is in final stages of a one billion dollar PCB clean-up project in the Fox River and great strides have been made in habitat restoration efforts along the Bay. The remediation of these issues has highlighted a larger issue of excess nutrient and sediment loading from our watersheds resulting in maintained poor water quality.

How is the health of the lower Green Bay?

- Water quality is improving; however there are still some *E. coli* concerns in algal mats that build up along shorelines. There are also toxins that can be produced by harmful algal blooms that if ingested can cause a health risk.

What is a "dead zone"?

- A better term is "hypoxic zone" meaning without sufficient oxygen. Every year there are temporary regions in the bay of Green Bay that see periods of little to no oxygen during the summer months.

What do we know about these "hypoxic zones"?

- They are caused by excess nutrients from urban and rural inputs entering an already nutrient rich system causing nuisance and sometimes harmful algal blooms. These blooms then sink to the bottom where they are consumed by bacteria that use oxygen and expel carbon dioxide. These organisms can do this at a rate quicker than the oxygen can be re-incorporated, thus creating low oxygen regions.
- The physical parameters that allow for mixing and water movement are determined by the hydrodynamics of Green Bay as well as Lake Michigan. All of which are linked to changing regional weather patterns.
- The number of days with low oxygen levels is increasing each year.
- We are observing two distinct patterns in location. One region develops in July along the south eastern portion of Green Bay. A second region then develops in the central mid-bay area of Green Bay in August and into September.

We have an excellent walleye fishery, and there's a "hypoxic zone"? How is this possible?

- Decreased contamination, improved spawning habitat, and stocking have helped game fish populations grow. Game fish are large enough to swim out of these hypoxic regions. Other fish such as the round goby or sculpin are bottom dwellers and have been observed beaching themselves in search of more oxygenated waters.