

COMMUNITY NOTICE

Pilot Study to Preserve and Enhance Water Quality

June 16th, 2022 - This notice is to inform members and the public of Jocko Point about a new initiative currently underway through the Nipissing First Nation (NFN) Environmental Department. To preserve and enhance water quality along the western portions of the Great North Bay area and the Jocko Point Community shoreline, NFN in partnership with EM-Fluids, has deployed three EMF-1000 units.

The units were deployed on June 6, 2022 and are part of a yearlong pilot project investigating novel and natural solutions to combat algal blooms and high nutrients within the study area.

The EMF-1000 uses a proprietary electromagnetic signal (less than 1 watt) that propagates throughout the water column (effective up to 40 acres), increasing interfacial gas transfer rates across the water-air boundary. This allows oxygen and other critical gases to diffuse into the water faster, improving aerobic conditions in the waterbody, enhancing productivity, and reducing excessive nutrients.

The primary objective of this pilot is to test the unit's ability to increase aquatic gas exchange and suppress algal growth along the shoreline. While the study area has seen intermittent algal blooms, this year's study will examine the unit's impact on future events.

In summary, the EMF-1000 is expected to impact the waterbody by:

- Enhancing the rate of gas exchange across the water body surface
- Increase oxygen throughout the water body
- Improve aerobic conditions and associated microbes while suppressing anaerobic microbes responsible for foul odors
- Improve organic / detritus digestion by aerobic microbes
- Reduce excess biological nutrients (Nitrogen, Phosphorus, etc.)
- Increase aquatic animal populations and suppress algal overgrowth
- Other beneficial impacts specific to pre-existing site conditions

The units will also be collecting data on the following parameters:

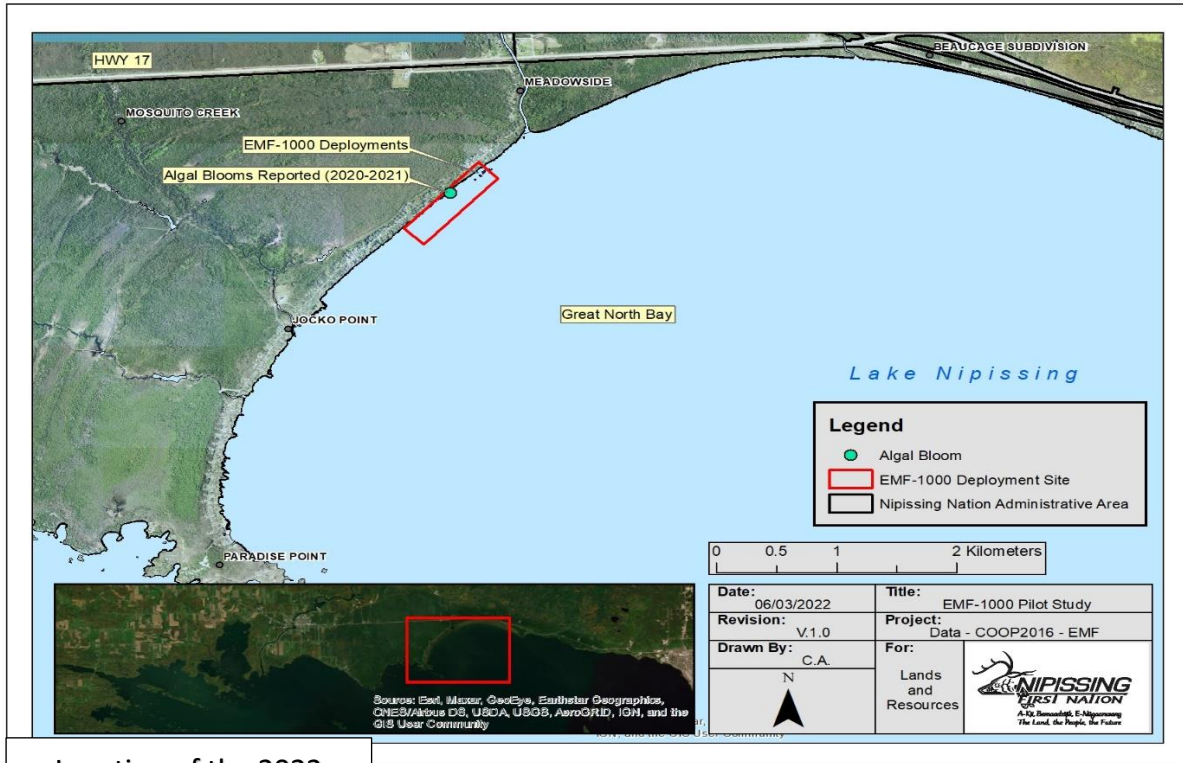
- Dissolved oxygen
- Water temperature
- Location data

Boaters are asked to avoid tampering with the units if they encounter them. Units are geo-fenced and moving the unit will activate failsafe measures to prevent loss of unit and associated data (tracking and locking of the unit).

Please see page 2 for a map showing the location of the pilot study and image of the EMF-1000 units.

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Location of the 2022 EMF-1000 pilot study

Should you have any questions or concerns, please contact:

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A deployed EMF-1000 unit, June 06, 2022