## State of the Bay 2008

# An Environmental Report Card on the Status and Trends of Ecosystem Indicators

#### State of the Bay Report

- •Assesses the status and trends of Great Lakes ecosystem health indicators
- •Measures progress towards Lower Green Bay and Fox River Remedial Action Plan objectives for water quality, contaminants, drinking water, wildlife, fish, other aquatic life, habitat, and recreational use
- •Are conditions getting better, worse, or staying the same?
- •The first report was published in 1990 as a capsule report on water quality and condition of water-related resources of Green Bay
- •The second report was published in 1993 and drew attention to the fact that the lower Fox River and Green Bay are at the downstream end of a very large drainage basin.
- •The third report is being developed as a web site.

#### **Indicator Assessment for Lower Green Bay**

The current status and overall trend for each indicator has been determined based on available data.

Indicator :	<b>Current Status Lower Green Bay</b>	Trend
Total Phosphorus (nutrient)	Poor	Deteriorating
Ammonia 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Good	Undetermined
Total Suspended Solids	Poor	Unchanging
Chlorophyll a (a measure of algae abundance)	Poor	Unchanging
Water Clarity / / /	Poor	Unchanging
Dissolved Oxygen	Fair 🧸	Undetermined
Drinking Water	Poor	Unchanging/
Contamination	Poor All	Unchanging
Water Levels	Below Average	Declining
Sport Fishing	Good, 45	Undetermined
Recreational Boating	Good	Undetermined
Beach Health	Fair	Undetermined
Land Cover	Mixed	Deteriorating
Aquatic Invasive Species	Poor H	Deteriorating
Benthic Macroinvertebrates	Poor	Unchanging
Coastal Wetlands	Fair	Unchanging
Walleye / ///	Good.	Undetermined
Yellow Perch	Mixed	. Improving
Spotted Musky	i r WiGood ₩ :=	Improving

#### tatus Categories:

**Good**: The state of the ecosystem component is presently meeting ecosystem objectives or otherwise is in acceptable condition.

Fair: The ecosystem component is currently exhibiting minimally acceptable conditions, but it is not meeting established ecosystem objectives, criteria, or other characteristics or fully acceptable conditions.

Poor: The ecosystem component is severely negatively impacted and it does not display even minimally acceptable conditions.

Mixed: The ecosystem component displays both good and degraded features.

Undetermined: Data are not available or are insufficient to assess the status of the ecosystem component.
<u>Trend Categories:</u>
<u>Improving:</u> Information provided shows the ecosystem component to be changing toward more acceptable

conditions.

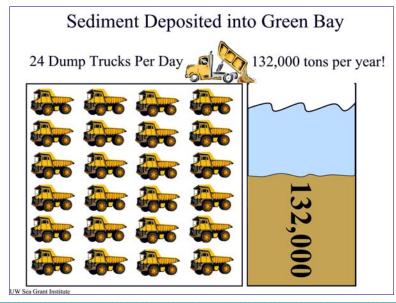
**Unchanging**: Information provided shows the ecosystem component to be neither getting better nor worse. **Deteriorating**: Information provided shows the ecosystem component to be departing from acceptable conditions. **Undetermined**: Data are not available to assess the ecosystem component, so no trend can be identified.



Map of the entire Green Bay drainage basin. The Fox-Wolf basin is shaded in yellow. The Area of Concern is shaded on the inset map.

### Beneficial Public Uses of they Green Bay Area of Concern are Impaired or Restricted due to Excess Nutrients, Suspended Solids, Contaminants, Land Use Changes and Invasive Species

	8	Restrictions of Fish and Wildlife Consumption	8	<b>Restrictions on Dredging Activities</b>
(	8	Tainting of Fish and Wildlife Flavor	NI	Eutrophication or Undesirable Algae
	NI	Degradation of Fish and Wildlife Populations	NI	Degradation of Aesthetics
	8	Fish Tumors and Other Deformities	NI	Loss of Fish and Wildlife Habitat
	8	Bird or Animal Deformities or Reproduction Problems	NI	Degradation of Phytoplankton and Zooplankton Populations
	8	<b>Degradation of Benthos</b>	NI	Beach Closings
		= Impaired Use		Nutrient Impaired Use



Nutrient and solids loading impact many of the desirable uses of the bay.