# **GLOSSARY OF TERMS AND ABBREVIATIONS**

#### **AOC**

Area of Concern; a geographic area that fails to meet the objectives of the Great Lakes Water Quality Agreement [between Canada and the United States] and where such failure has caused or is likely to cause impairment of beneficial uses of the area's ability to support aquatic life.

# **ANS:** Aquatic Nuisance Species

## aquatic

Living or growing in or on water.

# aquatic nuisance species

Water-borne plants or animals that pose a threat to humans, agriculture, fisheries, and/or wildlife resources.

#### assemblage

A group of species found together in a particular area. An assemblage differs from a community in that an assemblage may not be a repeating pattern of species found together in similar habitat conditions.

#### baymouth bar

A long, narrow band of sand, deposited by waves across the mouth of a bay, often produced by the convergent growth of two spits from opposite directions.

# base flow

The sustained, or fair-weather, flow of a stream.

## benthic

Pertaining to the bottom of a body of water; usually refers to a bottom-dwelling organism.

#### **BMP**

Best Management Practices; an agreed-upon set of actions designed to reduce negative consequences and optimize benefits from a certain activity. For example, forestry BMPs are designed to reduce water quality degradation from harvesting timber or to reduce the visual impact from tree cutting. BMPs include the best structural and non-structural controls and operation and maintenance procedures available.

# CAC: St. Louis River Citizens Action Committee

## community

An association of interacting populations defined by their interactions or by the place in which they live. A community typically demonstrates a repeating pattern of associations in similar environmental conditions. Usually used as a shorthand notation for plant associations or plant communities; however it also may refer to human communities, depending on the context.

# conservation target

Rare or common plant or animal species, plant associations, aquatic habitats, or ecological systems of concern on which planning activities are focused in a conservation plan.

## ecological function

A role or service provided to the ecosystem. For example, primary production is an ecological function provided by green plants as they turn solar energy (an ecological component) into chemical energy (another ecological component).

# ecological process

Describes changes in, actions by, or interactions between ecological components. For example, erosion is an ecological process that carries sediment or soil from one location to another.

## ecological system

Ecological system or ecosystem; a living system made up of all the organisms in a given area together with the non-living components (e.g., climate, geology, etc.) that are present and the interactions between them. A group of plant associations that (1) occur together on the landscape; (2) are linked by ecological processes, underlying environmental features (e.g., soils, geology, topography), or environmental gradients (e.g., elevation, precipitation, temperature); and (3) form a robust, cohesive, and distinguishable unit on the ground.

# ecoregion

A geographic area defined by a shared set of physical and ecological characteristics including climate, geology, and vegetation.

## ecosystem

A group of interacting species combined with the physical environment.

### ecotype

A population or group of populations distinguished by morphological and/or physiological characteristics, interfertile with other ecotypes of the same species but usually prevented from naturally interbreeding by ecological barriers; a product of the genetic response of a population to a habitat.

## **EEZ:** Exclusive Economic Zone

#### emergent

Used to describe vegetation that is rooted on the bottom of a river or lake and has leaves that float on the surface or protrude above the water.

#### **EPA:** Environmental Protection Agency

#### estuary

Freshwater estuaries are areas of interaction between a river and nearshore lake water, where seiche activity and river flow create a mixing of lake and river water; may include bays, mouths of rivers, marshes, and lagoons. These ecosystems shelter and feed fish, birds, and wildlife. Most importantly, Great Lakes estuaries provide habitat for wildlife and for young-of-the-year and juvenile fish.

## estuarine

Pertaining to, or located in, an estuary.

# euryhaline

Descriptor of an organism that tolerates a wide range of salinity.

## exotic species

Species found beyond their natural ranges or natural zone of potential dispersal. Also referred to as non-native or non-indigenous species.

#### flats

A relatively uniform area of riverbed or lake bottom characterized by little bathymetric relief or structure.

#### **GIS**

Geographic Information System; a computer-based system used to store and manipulate geographic information. A GIS is designed for the collection, storage, and analysis of objects and phenomena where geographic location is an important characteristic or is critical to the analysis.

#### habitat

A broad term used to describe an identifiable area where a particular species or group of species live; a given habitat can be described by either physical features (such as water depth) or biological features (such as plant associations) or a combination of both.

# health of conservation targets

**Good** indicates a habitat or community closely resembling presettlement conditions or a species that is secure and reproducing in the Lower St. Louis River. **Fair** indicates a habitat or community that shows some alteration from presettlement conditions or a species that is either in decline or has declined but stabilized. **Poor** indicates a habitat or community that shows significant alteration from presettlement conditions or a species with a very low or non-existent local population.

HTAC: Harbor Technical Advisory Committee

# hydrologic regime

The pattern and process of water movement and change including rate, frequency, and magnitude of water level changes; may also be used to describe patterns of precipitation, particularly where those patterns influence changes in lake level or flooding.

**ICEC:** International Classification of Ecological Communities

IJC: International Joint Commission

**IUCN:** International Union for Conservation of Nature and Natural Resources

# industrial slip

For the purposes of this Plan, industrial slips include active and inactive boat slips used for industry, commerce, and recreation.

## industrially-influenced bays

For the purposes of this Plan, industrially-influenced bays have been impacted by commercial and residential development as well as industry.

## keystone species

A species having a disproportionately large influence on the structure and function of an entire ecosystem relative to its abundance; removal of a keystone species from an ecosystem causes major changes in ecosystem structure and often a loss of diversity.

#### lacustrine

Pertaining to, or living in, lakes or ponds.

# **LANDSAT**

Land-Surface Observation Satellite system; a system of satellites that take pictures while orbiting the earth from pole to pole at a distance of about 570 miles. Each full picture covers an area of approximately 13,000 square miles.

# lower estuarine (dredged) river channel

For the purposes of this Plan, "lower estuarine (dredged) river channel" includes the authorized federal navigation channel where the Army Corps of Engineers is authorized to perform maintenance dredging for commercial navigation.

MDNR: Minnesota Department of Natural Resources

MIC: Metropolitan Interstate Committee

**MPCA:** Minnesota Pollution Control Agency

# **NatureServe**

A non-profit conservation organization that works with member programs - the network of natural heritage programs and conservation data centers in the United States, Canada, Latin America and the Caribbean - to develop and provide information on native plants, animals, and ecological communities.

NISA: National Invasive Species Act (1996) NRCS: Natural Resources Conservation Service OHV

Off-highway vehicles, a broad term that includes, but is not limited to, all-terrain vehicles (ATV), off-road vehicles, and off-highway motorcycles.

#### **PAH**

Polynuclear aromatic hydrocarbons; a family of organic chemicals based on the chemical structure of benzene. PAHs result from incomplete combustion of organic chemicals and are associated with grease and other components derived from petroleum byproducts. Some examples of the many PAH compounds include; benz(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, chrysene, phenanthrene, and pyrene.

# palustrine

Pertaining to, or living in, wet or marshy habitats.

#### **PCB**

Polychlorinated biphenyls; PCBs are a group of over 200 nonflammable compounds formerly used in heating and cooling equipment, electrical insulation, hydraulic and lubricating fluids, and various inks, adhesives, and paints. These compounds are highly toxic to aquatic life, persist in the environment for long periods of time, and are bioaccumulative. PCBs are suspected carcinogens and are linked to infant development problems.

# peak flow

The highest discharge of a stream.

# plant association

An assemblage of plant species with a certain species composition, uniform habitat conditions, and a uniform structure. An example of a single plant association would be the "Maple - Yellow Birch Northern Hardwoods Forest." This plant association has a species composition dominated by sugar maple and yellow birch. Basswood, red maple, white pine and a few other tree species may appear in the canopy, but the maple and birch are consistently dominant. Its habitat conditions are typically relatively rich, mesic soils over glacial till in the cooler climates of the western and central Great Lakes region. Its structure is a forest (other structures include woodlands, savannas, shrublands or grasslands).

#### plant community

A less technical term for plant association.

# presettlement

Presettlement is not a precise term, but it is widely used and understood to describe conditions before large-scale human alterations of the landscape. This term is commonly used to describe vegetation maps derived from land surveys conducted under the jurisdiction of the United States Public Land Survey. In many areas, it is believed Native Americans influenced vegetation structure and composition through setting fires. And some of the surveys were not complete before Euro-Americans had settled and also started to alter the landscape.

#### **RAP**

Remedial Action Plan; a plan developed for an Area of Concern, describing the environmental problem, defining impaired uses, evaluating in-place and alternative remedial measures, identifying agencies responsible for implementation, evaluating implementation, describing surveillance and monitoring, and confirming restoration of uses.

#### riverine

Formed by a river or situated along the banks of a river

#### seiche

A tidal-like rise and fall of water in large lakes, which occurs after water is piled up on one side of the lake by wind or high barometric pressure; when this force diminishes, the water rocks back and forth from one shore to the other with decreasing amplitude.

#### source of stress

Actions or entities that cause a stress.

#### **SOGs**

Sediment Quality Goals

# **SQTs**

**Sediment Quality Targets** 

#### stress

Processes or events, both direct and indirect, that cause negative ecological or physiological impacts on conservation targets.

# submergent

Used to describe vegetation that is rooted on the bottom of a river or lake and has leaves that stay submerged below the surface of the water

#### tannin/tannic acid

A naturally occurring chemical compound found in a variety of plants, including peat and other wetland species. Tannic acid released from peat and other decaying vegetation imparts a brown, root-beer-like color to water.

target: See conservation target.

## terrestrial

Living or growing on land.

#### threat

Factors that have a direct and negative impact on the health of conservation targets or that negatively impact the ecological systems and processes that support and maintain the conservation targets. Threats are described in two parts: stresses and the sources stress.

TNC: The Nature Conservancy

#### turbidity

Cloudiness or reduced clarity of water due to the presence of suspended matter.

UMD: University of Minnesota - Duluth

UMD-NRRI: University of Minnesota - Natural Resources Research Institute

# umbrella species

A species whose habitat and other requirements are such that if the species is protected, most of the biodiversity that shares the ecosystem with the umbrella species will also be effectively protected; a species that could serve as a surrogate conservation target for a wide range of other species and plant communities.

U.S. ACOE: United States Army Corps of Engineers

U.S. EPA: United States Environmental Protection Agency

U.S. FWS: United States Fish and Wildlife Service

**UWS:** University of Wisconsin - Superior

## viability

The overall current health of a conservation target in a given location; viability is assessed according to the size, condition, and landscape context of the conservation target in the given location.

**WDNR:** Wisconsin Department of Natural Resources

WLSSD: Western Lake Superior Sanitary District, located in Duluth, Minnesota