

## BUI 1. Fish Consumption Advisories

**Target:** There are no Area of Concern-specific fish consumption advisories issued for the St. Louis River by the State of Minnesota or the State of Wisconsin. Tissue Concentrations of contaminants of concern in representative samples of resident fish are not significantly elevated from regional background samples.

## BUI 2. Degraded Fish and Wildlife Populations

**Target:** In consultation with their federal, tribal, local and nonprofit partners, state resource management agencies concur that diverse native fish and wildlife populations are not limited by physical habitat, food sources, water quality, or contaminated sediments.

## BUI 3. Fish Tumors and Deformities

**Target:** Incidence rates of contaminant-related internal and external tumors and deformities in resident benthic fish species, including neoplastic or preneoplastic liver tumors, do not exceed incidence rates from unimpaired areas elsewhere in the Great Lakes basin.

## BUI 4. Degradation of Benthos

**Target:** The benthic community in historically degraded areas (e.g., chemically, biologically, or physically degraded areas) of the Area of Concern (AOC) does not significantly differ from unimpacted sites of comparable characteristics within the AOC. Benthic communities' characteristics including native species richness, diversity, abundance, and functional groups will be considered when comparing sites.

## BUI 5. Restrictions on Dredging

**Target:** All contaminated sediment hotspots within the AOC have been identified and implementation actions to remediate contaminated sites have been completed. There are no special handling requirements of material from routine navigational dredging due to contamination originating from controllable sources within the AOC.

## BUI 6. Excessive Loading of Nutrients and Sediments

**Target:** Nutrient and sediment levels have not been shown to impair water quality and habitat, and do not restrict recreation, including fishing, boating, or body contact in the estuary and within western Lake Superior based on the following criteria:

1. All federal, state, and local point source and nonpoint source discharge permits in the AOC are in compliance with regard to controlling sources of nutrients (particularly nitrogen and phosphorous), organic matter, and sediment.
2. Total phosphorus concentrations in the Lake Superior portion of the AOC do not exceed 0.010 mg/l (upper limit of oligotrophic range).
3. There are no exceedances of the most protective water quality standard for either state in the western basin of Lake Superior due to excessive inputs of organic matter or algal growth attributed to loadings from wastewater overflows into the St. Louis River.
4. Total phosphorus concentrations within the St. Louis River portion of AOC do not exceed an interim guide of 0.030 mg/l (upper limit of mesotrophic range) or the most restrictive water quality standards. This ensures that anthropogenic sources and activities in the St. Louis River Area of Concern do not result in excessive productivity and nuisance conditions within the St. Louis River Estuary.

## **BUI 7. Beach Closings and Body Contact**

**Targets:** Sources of stormwater and wastewater discharge to the St. Louis River Area of Concern have been identified and measures to reduce the risk of human exposures to disease causing microorganisms have been implemented.

There are no body contact advisories due to the presence of harmful chemicals at contaminated sites.

No water bodies within the AOC are included on the list of non-attaining waters due to controllable sources of disease causing microorganisms or chemicals in the most recent State of Wisconsin and State of Minnesota Section 303(d) programs.

## **BUI 8. Degradation of Aesthetics**

**Target:** There are no verified persistent occurrences of objectionable properties in the surface waters of St. Louis River Estuary during the previous five year period. "Persistent occurrences" are defined as objectionable properties that occur more than two times per year and are greater than ten days in duration.

## **BUI 9. Loss of Fish and Wildlife Habitat**

**Target:** State resource management agencies concur, in consultation with their federal, tribal, local, and nonprofit partners, that a reasonable amount of fish and wildlife habitat, given the presence of industrial development in the estuary, that is currently degraded is enhanced, rehabilitated, and protected against further loss of habitat.

The following benchmarks could be used as an interim guide:

1. All contaminated sediment hotspots within the AOC have been identified, implementation actions to remediate contaminated sites have been completed.
2. Programs are in place to discourage further proliferation and to prevent further introduction of non-native invasive species.
3. At least 50 percent of known degraded aquatic habitat acreage (approx. 1700 acres) is rehabilitated through implementation of projects, such as those outlined in the Lower St. Louis River Habitat Plan (SLRCAC, 2002), Appendix 9 – Habitat Plan Implementation Strategy Worksheets (SLRCAC, 2009).
4. Additional aquatic or hydrologically connected habitat throughout the AOC watershed has been successfully protected and rehabilitated sufficiently to maintain healthy fish and wildlife populations through implementation of projects, such as those outlined in the Lower St. Louis River Habitat Plan (SLRCAC, 2002), Appendix 9 – Habitat Plan Implementation Strategy Worksheets (SLRCAC, 2009).