Wisconsin DNR is one of many partners charged with implementation of two overarching plans for Lake Superior, **WI’s Great Lakes Strategy** and the **Lake Superior Binational Program’s Lakewide Management Plan (LaMP)**. These plans have complimentary objectives and goals with a mission to protect and restore Lake Superior. DNR staff working within the Lake Superior Basin and associated Ecological Landscapes identified the following integrated priorities and actions they will focus their efforts on in 2013-2014.

### WI DNR Lake Superior Priority

**Priority 1:** Restore Environmental Health to the St. Louis River Area of Concern (AOC) and Other Areas of Contaminated Sediment on Lake Superior and Tributaries.

Refine delisting targets for the St. Louis River AOC, a reasonable timeframe for achieving goals, conduct monitoring and report on progress towards delisting targets. Expand AOC Legacy projects to include related habitat improvements and expand clean-up activities on non-AOC sites.

**WI Great Lakes Strategy Priorities Addressed:** Areas of Concern & Contaminated Sediment

**LaMP Objectives Addressed:** General, Chemical Contaminants, Aquatic Communities, Habitat, Human Health, Sustainability

### WI DNR Actions

A. Prioritize Funding and Implementation of Remedial Action Plans (RAPs) to meet Beneficial Use Impairment (BUI) Delisting Goals in the St. Louis River Area of Concern (AOC) with AOC Partners.

B. Partner with the St. Louis River Alliance to Educate and Engage Local Communities and Partners in the Implementation of AOC Remediation and Restoration Plans and Actions.

C. Assess and Pursue Cleanup of Contaminated Sediment Areas Within and Outside the AOC.
   1. Assess Sediment Quality of Howards Bay, St. Louis River Estuary.
   2. Pursue Characterization of Crawford Creek Sediments, Douglas County.
   3. Develop Contaminated Sediment Strategy & Database
   4. Pursue Clean-Up of Ashland NSPW Lakefront Superfund Site.

D. Assess the Impacts and Alternatives Associated with the U.S. Army Corps of Engineers Proposal to Dispose of Dredge Material.

E. Determine Appropriate Method and Model to Address the “Excessive Loading of Nutrients and Sediment” BUI.

F. Develop a Mercury TMDL for the St. Louis River with U.S. EPA and the Minnesota Pollution Control Agency (MPCA).
**Priority 1: Restore Environmental Health to the St. Louis River Area of Concern (AOC) and Other Areas of Contaminated Sediment on Lake Superior and Tributaries.**

Develop delisting targets for the St. Louis River AOC, a reasonable timeframe for achieving goals and monitor and report on progress towards delisting targets. Expand AOC Legacy projects to include related habitat improvements and expand clean-up activities on non-AOC sites.

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**WI Great Lakes Strategy Priorities Addressed:** Areas of Concern & Contaminated Sediment

**LaMP Objectives Addressed:** General, Chemical Contaminants, Aquatic Communities, Habitat, Human Health, Sustainability

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**WI DNR Actions**

**G. Complete 303d Impaired Waters Evaluation Report and Recommendations for the following Lake Superior Tributaries.**

1. Hog Island and Newton Creek.
2. Faxon Creek.
3. Nemadji River and Tributaries: Black River, Balsam Creek, Crawford Creek, Clear Creek and Mud Creek.
4. Bear and Bluff Creeks and Unnamed Tributaries.

**H. Analyze Fish Tumor Study Results related to “Fish Tumors and Other Deformities” BUI and Repeat Study in 2013.**

1. Conduct Clough Island Restoration & Assessment Project.
2. Continue Wetland Restoration at Pokegama-Carnegie Natural Area.
3. Assess and Develop a Remediation Restoration (R2R) Project for Pickle Pond with U.S. Fish and Wildlife Service.
4. Evaluate the Use of U.S. Army Corps of Engineers Dredged Material to Conduct another Beach Nourishment Project for Tern and Piping Plover Habitat.
5. Pursue Pokegama Carnegie Acquisition.
### WI DNR Lake Superior Priority

**Priority 2: Prevent and Control Aquatic Invasive Species (AIS).**

Take actions to prevent the introductions of invasive non-native species; prevent newly-introduced invasive non-native species from becoming naturalized or spreading to new areas; and minimize the impacts of existing non-native invasive species by utilizing and implementing the [Lake Superior Aquatic Invasive Species Complete Prevention Plan](#).

**LaMP Objectives Addressed:** General, Aquatic Communities, Habitat

**WI Great Lakes Strategy Priorities Addressed:** Aquatic Invasive Species, Habitat

**Other Plans Addressed:** Lake Superior Aquatic Invasive Species Complete Prevention Plan

### WI DNR Actions

A. Continue Implementation of the WDNR’s Ballast Water Program and General Permit.

B. Contribute to U.S. Army Corps Inter-Basin Transfer Study.

C. Assess Hog Island Inlet for Eurasian Water Milfoil and Evaluate Corrective Action.

D. Evaluate Methodologies to Inventory and Monitor the Lake Superior Nearshore for AIS.

E. Develop and Seek Funding to Pilot a Lake Superior Coastal Community AIS Media Campaign.

F. Pilot Modified Project Red Workshops in the Lake Superior Basin with the River Alliance.

G. Distribute Wetland Invasive Species and Best Management Practices Information to AIS County Coordinators and Other Basin Partners.

H. Continue to Control Phragmites at Bark Bay State Natural Area.

I. Continue AIS Early Detection Monitoring on Inland Lakes in Basin.
Priority 3: Assess the Status and Condition of Lake Superior’s Nearshore, Tributaries, Wetlands and Subwatersheds in Wisconsin.

Decision makers and natural resource managers will have the best possible information on the health of the nearshore and water resources in Lake Superior and the basin on which to base their management decisions. Assessing the existing condition of water resources in the basin will allow for the establishment of targets to restore ecosystem health or to protect and maintain clean water and healthy aquatic ecosystems. Assessment tools can provide a means to identify trends and track changes to these water resources and monitor climate change impacts.

LaMP Objectives Addressed: General, Chemical Contaminants, Aquatic Communities, Human Health

WI Great Lakes Strategy Priorities Addressed: Habitat & Species, Coastal Health, Nonpoint Source Pollution, Persistent Bioaccumulative Toxins (PBT’s), Information & Indicators

WI DNR Actions

A. Develop a Nearshore Monitoring Plan for WI Lake Superior Waters Focused this Two Years on the Water Quality and Aquatic Invasive Species Components.

B. Conduct Baseline Monitoring and Assessment on Lake Superior Tributaries.
   1. Continue Tyler Forks Baseline Monitoring.
   2. Continue Long-Term Trend Monitoring on the Bad & Brule Rivers.
   3. Continue Tributary Phosphorus/Nutrient Monitoring on the Bad, Bois Brule, Nemadji and the St. Louis Rivers.

C. Expand and Update the Inventory of Lake Superior and Coastal Wetlands.

D. Complete Floristic Quality Assessment of Basin Wetlands and Pilot Wetland Flood Attenuation Study in the City of Superior.

E. Partner with the National Estuarine Research Reserve and Others to Pursue Funding and Development of a Landscape Level Wetland Functional Assessment within Douglas County.
Priority 4: Enhance Fish and Wildlife Habitats and Populations by Restoring and Protecting Wetlands, Rivers, Streams, Lakes and Associated Uplands.

Utilize the Wildlife Action Plan, Ecological Landscapes Handbook and Lake Superior Ecosystem Goals to identify essential habitat, species priorities and management opportunities with an ultimate goal of protecting and restoring habitats critical to meeting recovery targets. Conservation of biological diversity through rehabilitation of native fish populations, species communities, and their habitats is a high priority. Priority areas for protection and restoration are wetlands, tributary streams and conifer dominated uplands. Priority targets for fish and wildlife management include lake sturgeon, lake trout, brook trout, walleye, species of greatest conservation need (e.g. piping plovers), common terns, trumpeter swans and breeding pairs of waterfowl.

LaMP Objectives Addressed: General, Aquatic Communities, Terrestrial Wildlife, Habitat

WI Great Lakes Strategy Priorities Addressed: Habitat & Species

### WI DNR Lake Superior Priority

### WI DNR Actions

A. Conduct Lake Superior Shoreline Restoration and Research in the City of Ashland.

B. Identify Structures on Tributaries that Obstruct Fish Passage and Develop a Plan to Restore Fish Passage in Partnership with Local and Governments, Watershed Groups and the Great Lakes Stream Connectivity Initiative.

C. Evaluate Potential Fish Habitat Restoration/Enhancement Projects for Resch Creek and the Iron River Associated with Orienta Falls Property.

D. Continue Boreal Forest Restoration in Area 1 of the Brule River State Forest.

E. Conduct Terrestrial Invasive Species Control on State Properties.

F. Assist the Lake Superior Binational Program Develop a Lake Superior Biodiversity Conservation Strategy.

G. Pursue Land Acquisitions of State Properties in Areas Identified as a Priority for Protection within Approved Project Boundaries.
### WI DNR Lake Superior Priority

**Priority 4: Enhance Fish and Wildlife Habitats and Populations by Restoring and Protecting Wetlands, Rivers, Streams, Lakes and Associated Uplands.**

*LaMP Objectives Addressed:* General, Aquatic Communities, Terrestrial Wildlife, Habitat

*WI Great Lakes Strategy Priorities Addressed:* Habitat & Species

**Priority 5: Restore and Protect Coastal Health.**

Protect public health through identification and elimination of pollution sources that can cause bacterial closings at beaches or contaminate source drinking water supplies, as well as impacts to coastal water quality and biota.

*LaMP Objectives Addressed:* General, Chemical Contaminants, Aquatic Communities, Human Health

*WI Great Lakes Strategy Priorities Addressed:* Habitat & Species, Coastal Health

### WI DNR Actions

**H.** Initiate and Conduct Master Planning for State Owned Properties.

2. Continue Copper Falls State Park Master Planning.
3. Conduct Biotic Inventory and Begin Master Planning for the St. Louis and Red Rivers Streambank Protection Area in Partnership with the National Estuarine Research Reserve.

**I.** Develop Lake Superior Fisheries Management Plan.

**J.** Seek Funding and Partners to Restore Wetlands at the Brule River State Forest and Port Wing Abandoned Sewage Lagoons.

**A.** Pursue a No Discharge Zone (NDZ) Designation for Wisconsin Waters of Lake Superior.

**B.** Coordinate Implementation of the Beach Act.
**Priority 6: Reduce Nonpoint Source Pollution by Slowing the Flow of Runoff.**

Partners have identified the primary source of nonpoint pollution in the basin is a result of increased runoff flows across the landscape that enters Lake Superior tributaries. This increased flow is causing channel erosion and degradation and excessive sedimentation into Lake Superior. The goal is to reduce the amount of phosphorus, sediment and bacteria from urban and rural nonpoint sources by establishing riparian buffers on agricultural land along lakes and streams, as well as installing other best management practices throughout the Lake Superior Basin to slow the flow and reduce sedimentation into water resources.

**LaMP Objectives Addressed:** General, Chemical Contaminants, Aquatic Communities, Human Health

**WI Great Lakes Strategy Priorities Addressed:** Habitat & Species, Coastal Health, Nonpoint Source Pollution

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<td><strong>Priority 6:</strong> Reduce Nonpoint Source Pollution by Slowing the Flow of Runoff.</td>
<td><strong>A.</strong> Develop a Slow the Flow White Paper and Action Plan with Partners.</td>
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<td><strong>Partners have identified the primary source of nonpoint pollution in the basin is a result of increased runoff flows across the landscape that enters Lake Superior tributaries. This increased flow is causing channel erosion and degradation and excessive sedimentation into Lake Superior. The goal is to reduce the amount of phosphorus, sediment and bacteria from urban and rural nonpoint sources by establishing riparian buffers on agricultural land along lakes and streams, as well as installing other best management practices throughout the Lake Superior Basin to slow the flow and reduce sedimentation into water resources.</strong></td>
<td><strong>B.</strong> Develop and Conduct a Wetland Functional Assessment for the Marengo River Watershed to Identify Priority Wetland Restoration and Protection Areas to Slow the Flow.</td>
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Priority 7: Reduce and Eliminate Sources of Persistent Bioaccumulative Toxic Substances (PBT's) into the Lake Superior Basin as Outlined in the Zero Discharge Demonstration Program (ZDDP).

The goal of the ZDDP is to virtually eliminate a group of nine persistent, bioaccumulative, and toxic pollutants released in the basin by 2020. “The Nine” pollutants are mercury, PCB’s, dioxin, hexachlorobenzene, octachlorostyrene and 4 pesticides; dieldrin, chlordane, DDT and toxaphene.

LaMP Objectives Addressed: General, Chemical Contaminants, Human Health

WI Great Lakes Strategy Priorities Addressed: Persistent Bioaccumulative Toxins (PBTs)
**Priority 8: Team Up with Partners to Protect and Restore Lake Superior.**

Many partners are needed to effectively and successfully protect and restore Lake Superior and basin resources. WDNR will continue to support and participate in new and existing partnerships to foster collaboration and coordinated efforts to protect and improve the health of Lake Superior.

**LaMP Objectives Addressed:** General, Sustainability

**WI Great Lakes Strategy Priorities Addressed:** Sustainable Development

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<td><strong>A.</strong> Serve on the Lake Superior Binational Program Work Group and Committees to Develop and Implement the Lake Superior Lakewide Management Plan (LaMP)**</td>
<td><strong>B.</strong> Serve on the St. Louis River Area of Concern (AOC) Coordinators Team.</td>
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<td><strong>C.</strong> Serve on the St. Louis River Alliance’s Habitat Committee</td>
<td><strong>D.</strong> Serve on the Chequamegon Bay Area Partnership (CBAP) and Steering Committee.</td>
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<td><strong>E.</strong> Participate on the Lake Superior Basin Team.</td>
<td><strong>F.</strong> Serve on the National Estuarine Research Reserves Advisory Board.</td>
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<td><strong>G.</strong> Serve on the Northwoods Cooperative Weed Management (NCWMA) Partnership Team.</td>
<td><strong>H.</strong> Serve on other Partnerships as Invited.</td>
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A Vision for Lake Superior

As citizens of Lake Superior, we believe...

that water is life and the quality of water determines the quality of life.

We seek a Lake Superior watershed...

that is a clean, safe environment where diverse life forms exist in harmony; where the environment can support and sustain economic development and where the citizens are committed to regional cooperation and a personal philosophy of stewardship;

that is free of toxic substances that threaten fish, wildlife and human health; where people can drink the water or eat the fish anywhere in the lake without restrictions;

where wild shorelines and islands are maintained and where development is well planned, visually pleasing, biologically sound, and conducted in an environmentally benign manner;

which recognizes that environmental integrity provides the foundation for a healthy economy and that the ingenuity which results from clean, innovative and preventive management and technology can provide for economic transformation of the region;

where citizens accept the personal responsibility and challenge of pollution prevention in their own lives and lifestyles and are committed to moving from a consumer society to a conserver society; and

where there is greater cooperation, leadership and responsibility among citizens of the basin for defining long term policies and procedures which will protect the quality and supply of water in Lake Superior for future generations.

Endorsed by the Lake Superior Binational Forum on January 31, 1992, as an expression of the hearts and minds of all of us.