November 7, 2019

Lake Superior Committee Environmental Priorities

As detailed in a Joint Strategic Plan for Management of Great Lakes Fisheries (Joint Strategic Plan), degradation of water quality, destruction of physical habitat, and impairment of ecosystem components essential to the well-being of fish remain a major cause of impairment of Great Lakes fish communities and fisheries. Strategic procedures identified in the Joint Strategic Plan direct lake committees to identify environmental issues that may impede achievement of their fish-community objectives and to work within governmental initiatives, such as the Great Lakes Water Quality Agreement, that provide opportunities for achieving, refining, and assessing progress toward environmental and fish-community objectives.

In 2016, the Council of Lake Committees (CLC) adopted its Environmental Principles for Sustainable Fisheries in the Great Lakes Basin to help guide individual lake committees as they identified and prioritized environmental issues that impede achievement of their Fish Community Objectives. The CLC recognized that diverse functional habitats are required for sustainable fish production; protection and improvement of fish habitat should occur systematically, cumulatively, and collaboratively; fishery value should be accommodated in decisions that affect functional habitats; and manageable sources of anthropogenic stress are pathways for addressing impediments to functional fish habitats.

Using the above strategic guidance, the Lake Superior Committee (LSC) developed a short-list of high priority environmental impediments and recommended actions that are critical for achievement of the Fish Community Objectives in Lake Superior. The Lake Superior Technical Committee conducted a technical inventory and assessment of functional habitats in Lake Superior, as they relate to production of fish stocks of common concern, identification of impediments to production of fish stocks of common concern that provide broad benefits to fisheries, and recommended actions to address these impediments. The technical inventory and assessment was then prioritized based upon the Lake Superior Committee’s determination of benefits associated with the outcomes of the actions identified in the inventory and assessment. Results of that process identified a short-list of high priority regional and site-specific actions that, if achieved, would move the Lake Superior Committee closer to achievement of its Fish Community Objectives.

The environmental priorities chosen by the Lake Superior Committee for this five-year period should improve the production potential of fish species of common concern, including lake sturgeon, lake trout, lake whitefish, walleye, and brook trout as these priorities are addressed. The environmental priorities are detailed below.

http://www.glf.org/lakecomm/lsc/lschome.php
1. Hydrologic modification of regulated tributary flows within the basin to provide minimum flows that meet reproductive and early life-history requirements for migratory species including lake trout, walleye, brook trout, and lake sturgeon. Specific focal areas to address hydrological modifications that impact fish production include:
   - Montreal River
   - St. Louis River
   - Michipicoten River

Actions might include modification of water management plans to ensure minimum base flows and moderated flows when species identified above are utilizing the tributaries for reproduction and early life-history.

2. Hydrologic modification of unregulated tributary flows within the basin to provide minimum flows to meet reproductive and early life-history requirements for brook trout. Specific focal areas to address hydrologic modifications that impact fish production include tributaries along the south shore of Lake Superior in Wisconsin and on the Bayfield Peninsula (including the Brule, Bark, Cranberry, Flag, Sloux, and Onion rivers, and Fish, Frog, Thompson, and Whittlesey creeks). Priority actions include implementation of land conservation measures that reduce surface runoff and sedimentation, and increase infiltration.

3. Protection of Buffalo Reef and nearshore areas in Traverse Bay from further encroachment of stamp sands, and long-term mitigation. Buffalo Reef serves as an important reproductive and nursery area for lake trout and lake whitefish that support fisheries in Lake Superior.

4. Additional habitat restoration in the St. Louis River and Bay area including restoration of connected coastal wetlands and floodplains and enhancement of spawning habitat for additional lake sturgeon and walleye production.

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