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Creating the “**Superior Bio-Preserve**”

The Superior Bio-Preserve is an ambitious plan to protect and restore the biological integrity and hydrology of the Lake Superior watershed and the Laurentian forest Province. This includes parts of Wisconsin, Minnesota, Michigan and Ontario. The conservation plan will create maps effectively advocate for the creation of protected wildlife corridors to connect large tracts of public (Federal, State and County forests) land to avoid fragmentation. Tribal rights and First Nation values towards land tenure will also be incorporated.

The goal is to maintain biodiversity, genetic exchange, evolutionary processes and ecosystem services for future generations. Using the science of Conservation Biology, this will be a health care plan for this Bio-Region. Lake Superior is the most important fresh water lake in the Western Hemisphere. This action is needed now, given climate change and current extinction rates. The urgency is alarming given the utter absence of meaningful Governance or Agency action to address these landscape land health issues.

Keystone species recovery is central to wildlife management and needs to be a priority. All species play a unique part in maintaining an intact wildlife structure. Beavers as ecosystem engineers are one of the most important keystone species that support biodiversity. Currently beavers are overharvested and unappreciated by the very agencies that are entrusted to manage them. Beaver created wetlands are the gardens of productivity for all wildlife. Beavers change the hydrology of rivers to the benefit of all by improving water quality and stabilizing watersheds.

Prior to settlement (pre-1600) the Western Great lakes landscape had one of the highest densities averaging 20 to 30 beavers per square mile in North America. Beaver colonies dominated the rivers and streams. Established over generations, beaver wetland complexes dams formed stair step gradients on



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all the rivers and streams in this region. These wetland complexes were rich habitats of plants, insects, fish, amphibians, reptiles, birds and mammals. The hydrology of the wetlands complexes cleaned the waters and stabilized flow volumes during wet and dry periods. They also stabilized stream temperatures, cooling base flows during the summer and warming the water in winter. Over winter survival of many species is higher in beaver ponds because of water temperature stability.

Currently the landscape of the North Woods in the Western Great Lakes is still permeable and biological intact enough to allow for a full restoration. The globally significant, successful recolonization of wolves in the Western Great Lakes (WGL) is evidence of that. Across the WGL, the recovery of beaver populations (just like wolves) is critical to preserving biodiversity and water quality.

This effort will advocate for a “Land Ethic” and the protection and management of beaver populations across this bio-region to restore biodiversity and the watershed hydrology of Lake Superior