

Additional supporting material for the manuscript: Joint analysis of stressors and ecosystems services to enhance restoration effectiveness

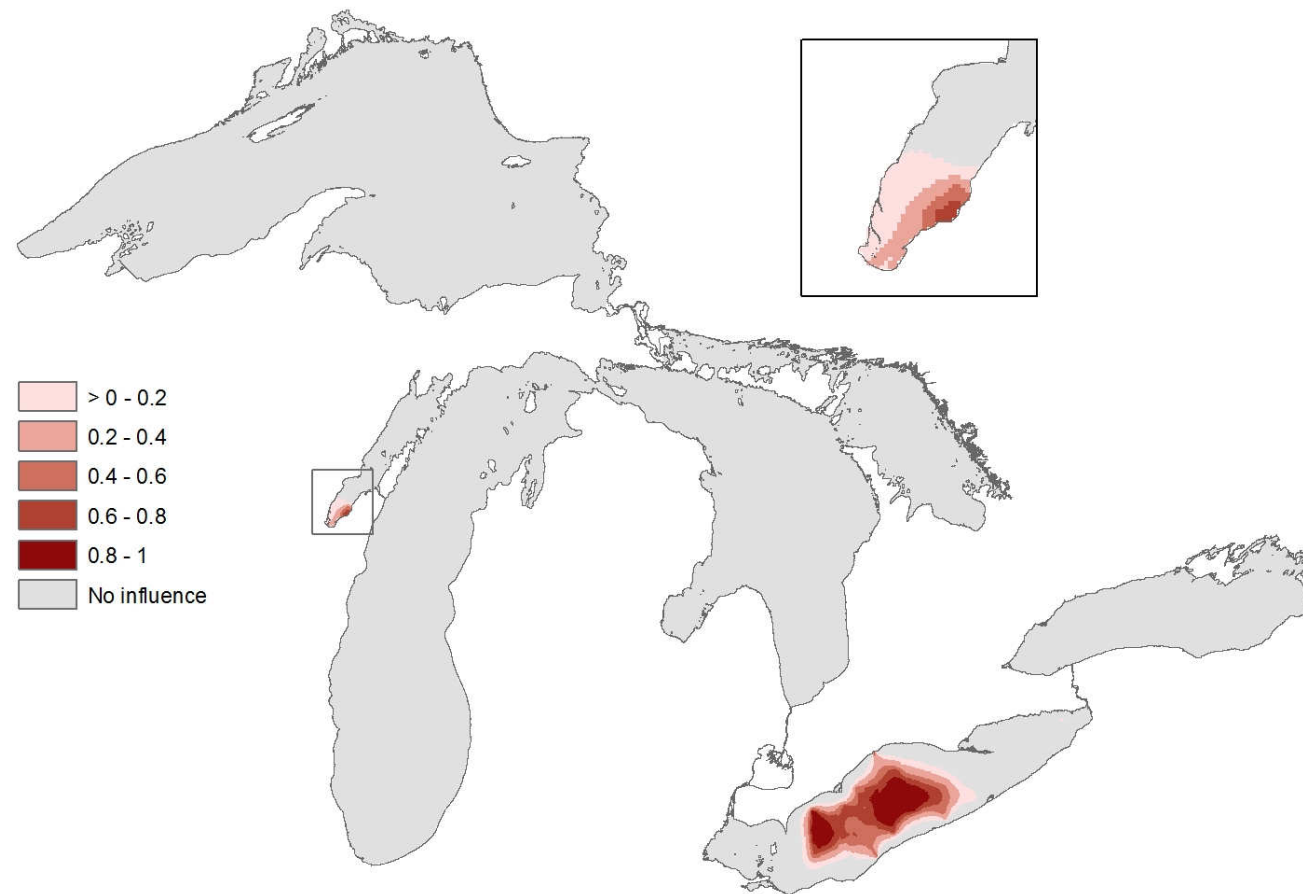
Maps of the intensities of 34 individual stressors in the Laurentian Great Lakes

Authors: J.D. Allan^{*†}, P.B. McIntyre[†], S.D.P. Smith[†], B.S. Halpern, G.L. Boyer, A. Buchsbaum, G.A. Burton Jr., L.M. Campbell, W.L. Chadderton, J.J.H. Ciborowski, P.J. Doran, T. Eder, D.M. Infante, L.B. Johnson, C.A. Joseph, A.L. Marino, A. Prusevich, J. Read, J.B. Rose, E.S. Rutherford, S.P. Sowa, A.D. Steinman

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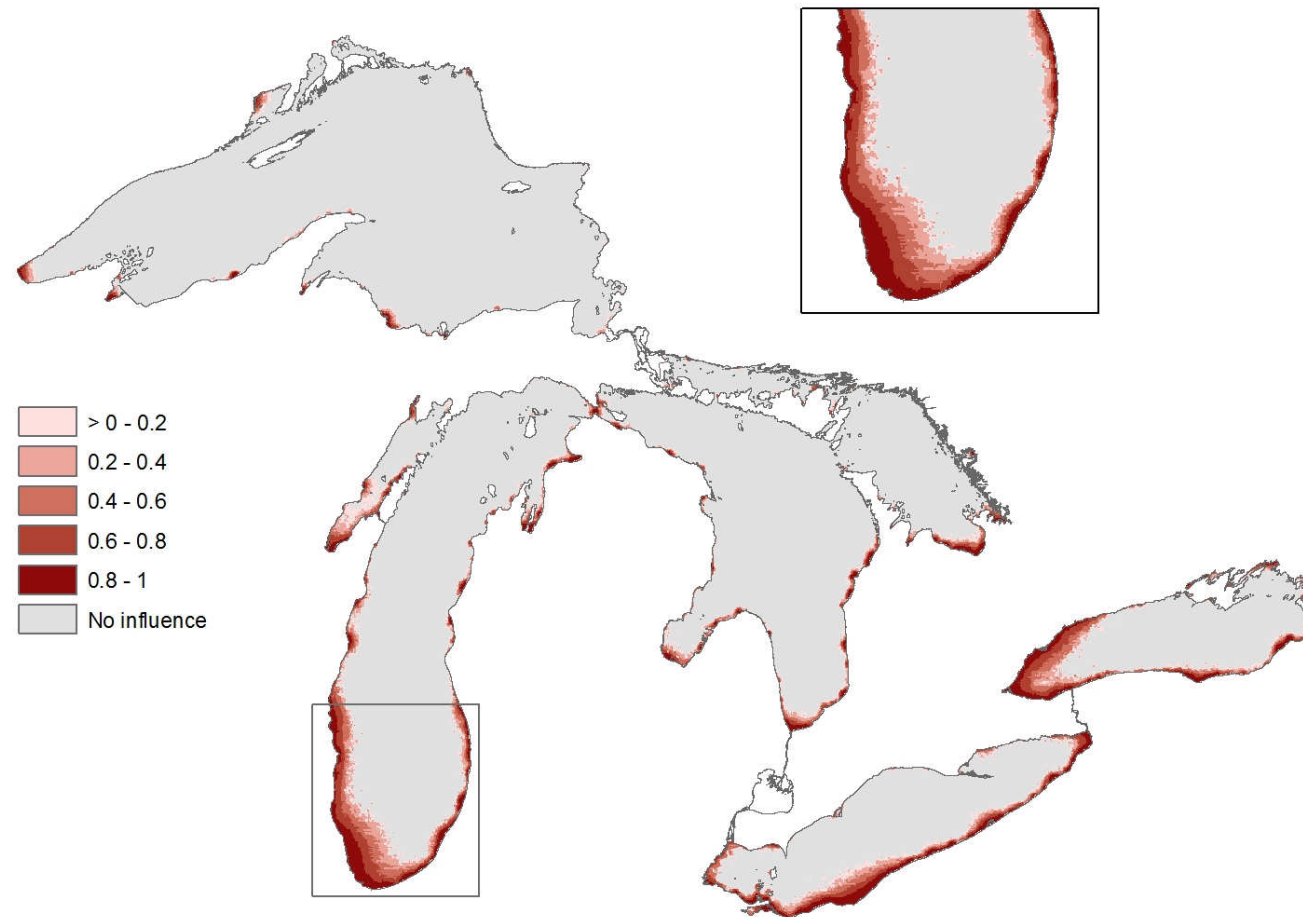
[†] Indicates equal contributions by these co-authors

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Aquatic Habitat Alterations



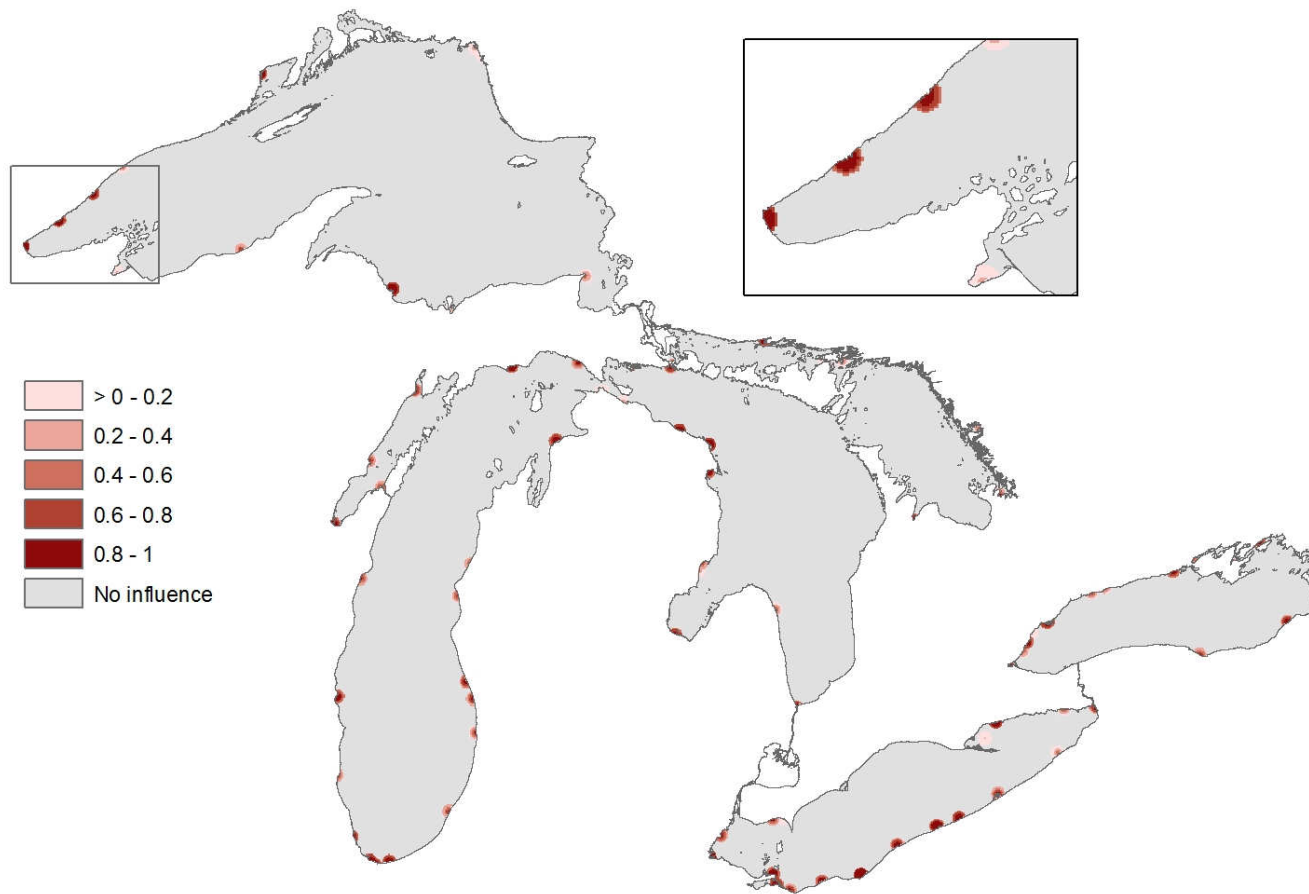
Spatial distribution of hypoxia as a stressor in the Laurentian Great Lakes (Inset: Green Bay, Lake Michigan).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Aquatic Habitat Alterations



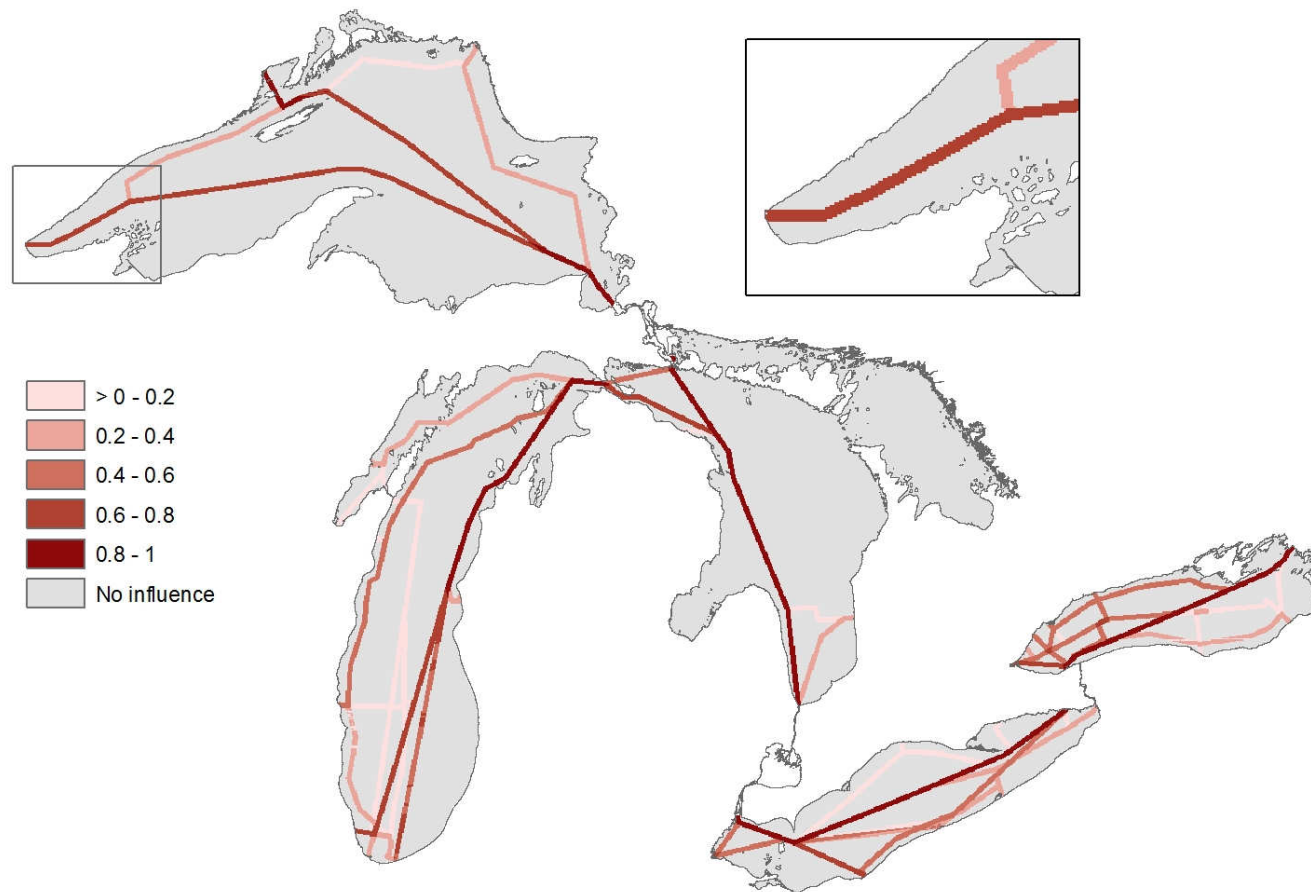
Spatial distribution of light pollution as a stressor in the Laurentian Great Lakes (Inset: Southern Lake Michigan).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Aquatic Habitat Alterations



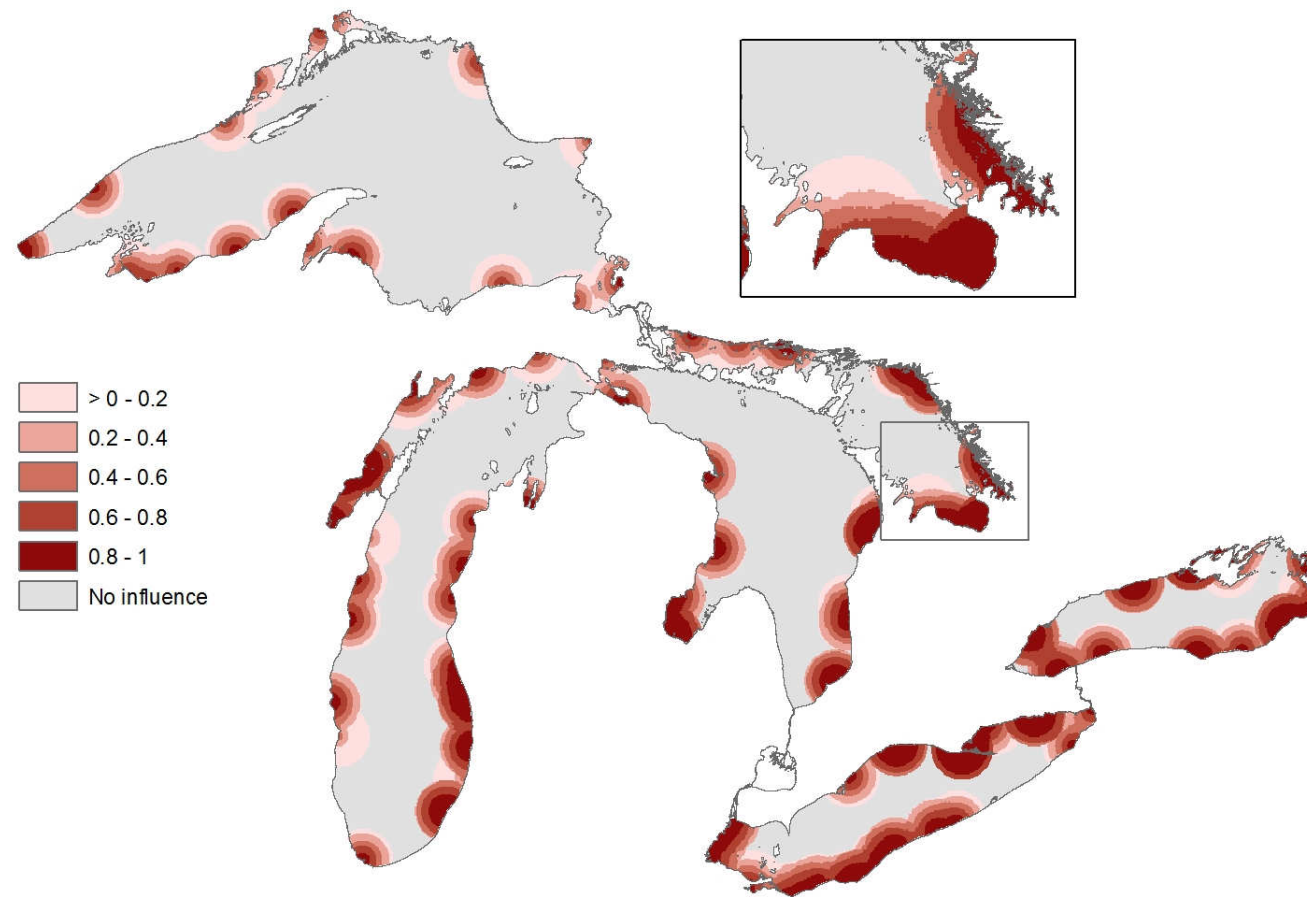
Spatial distribution of industrial ports and harbors as a stressor in the Laurentian Great Lakes (Inset: Western Lake Superior).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Aquatic Habitat Alterations



Spatial distribution of shipping lanes as a stressor in the Laurentian Great Lakes (Inset: Western Lake Superior).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Aquatic Habitat Alterations



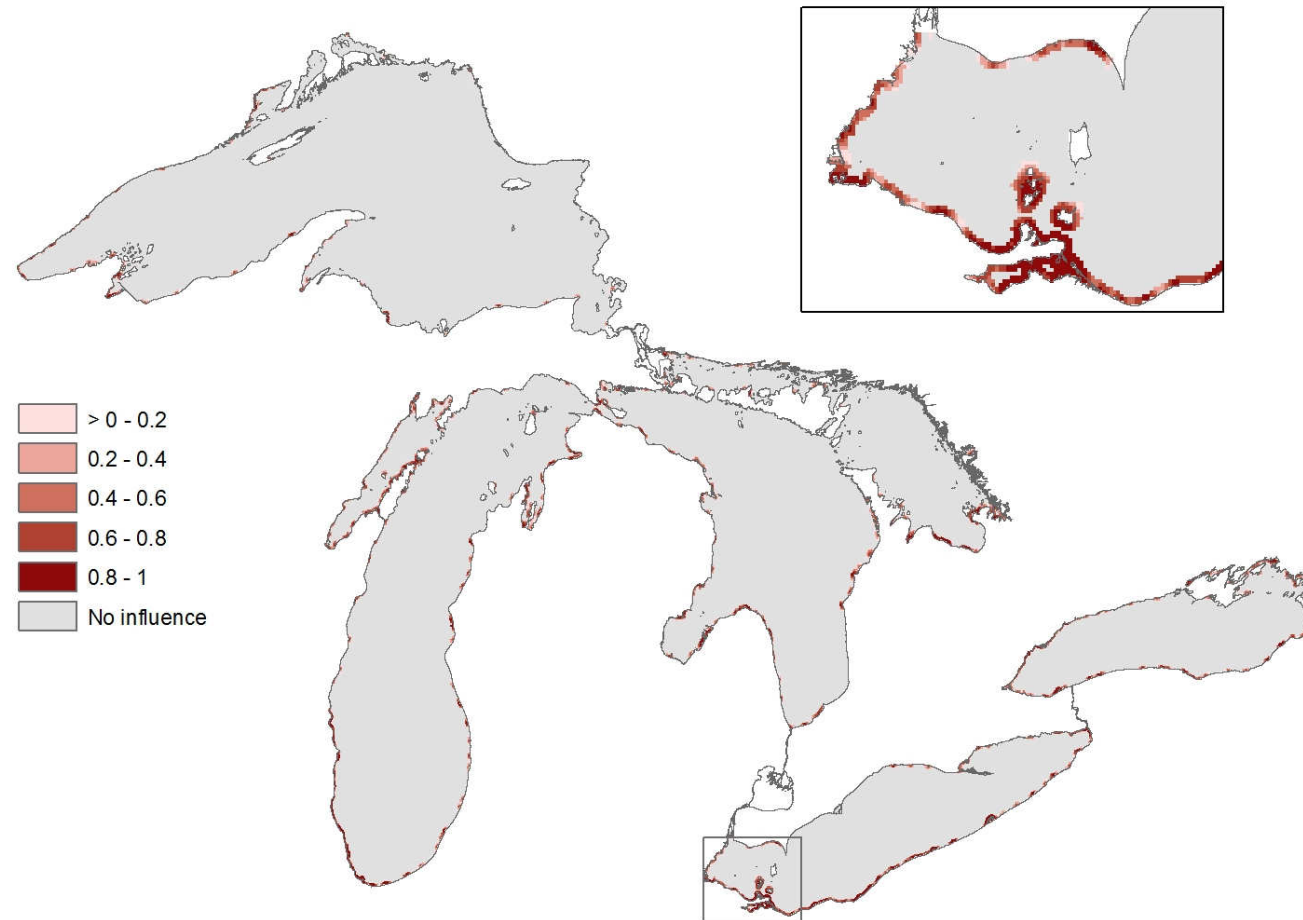
Spatial distribution of tributary dams altering flow and sediment retention in the Laurentian Great Lakes (Inset: Georgian Bay, Lake Huron).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Aquatic Habitat Alterations



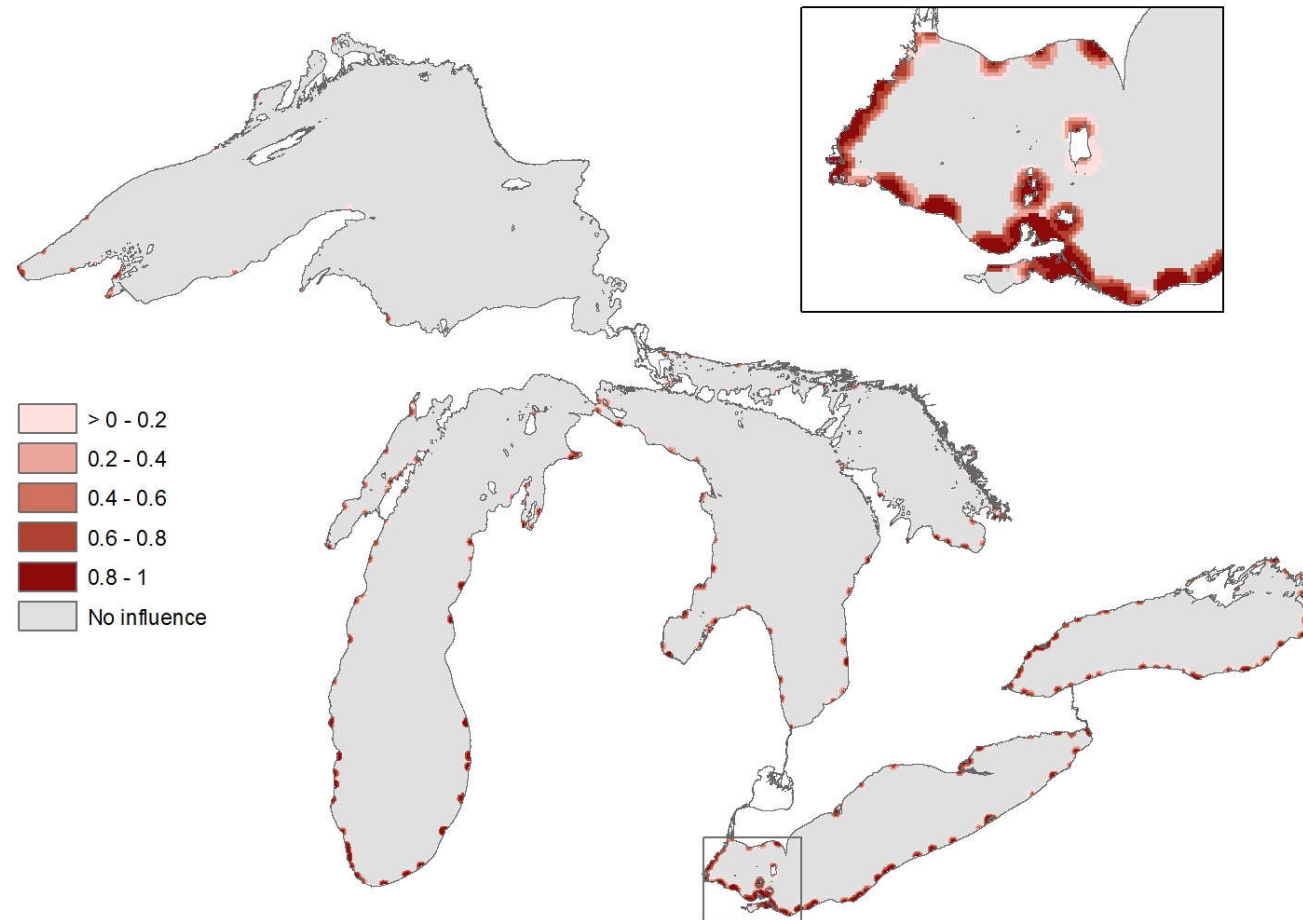
Spatial distribution of shoreline hardening as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Aquatic Habitat Alterations



Spatial distribution of shoreline extensions as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Aquatic Habitat Alterations

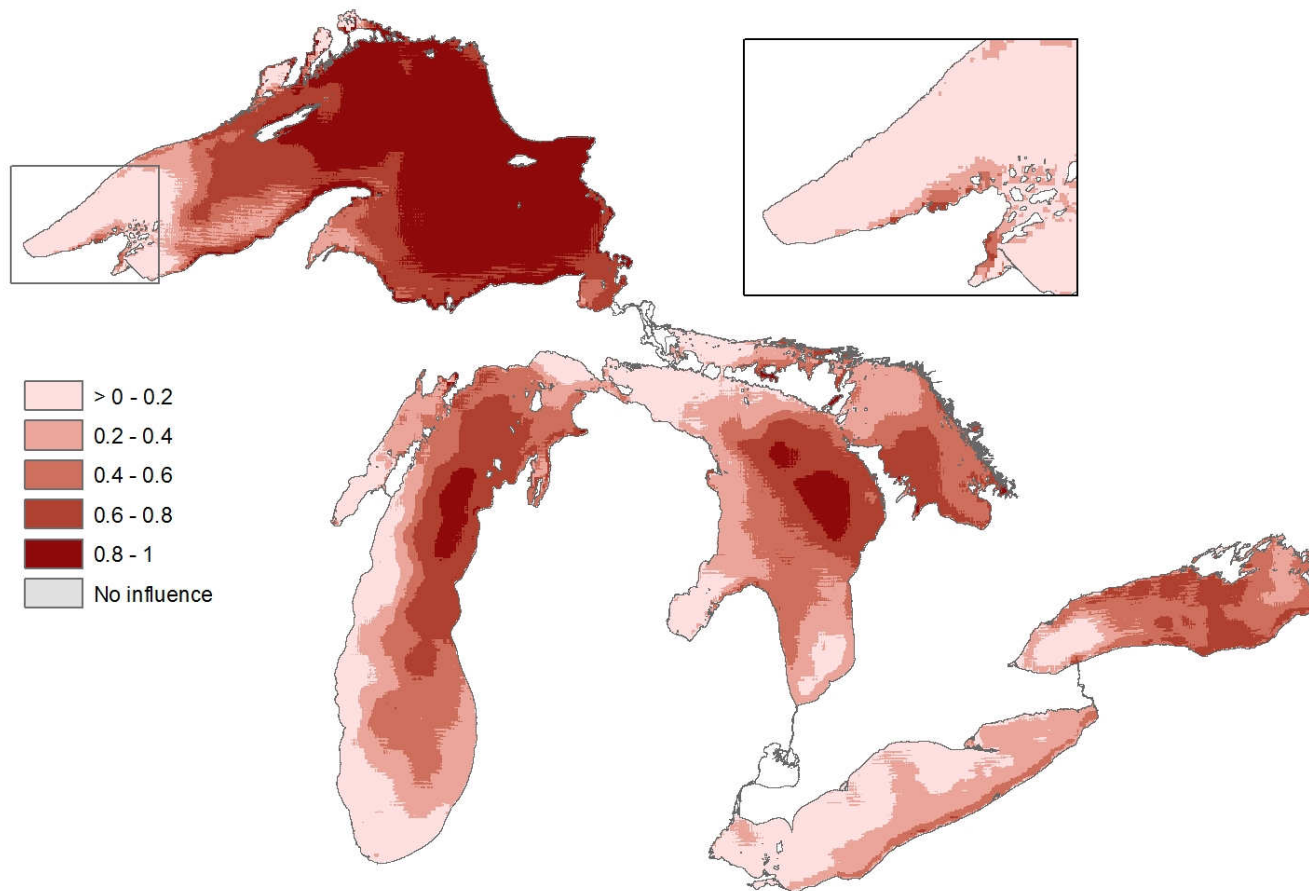


Spatial distribution of marinas as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).



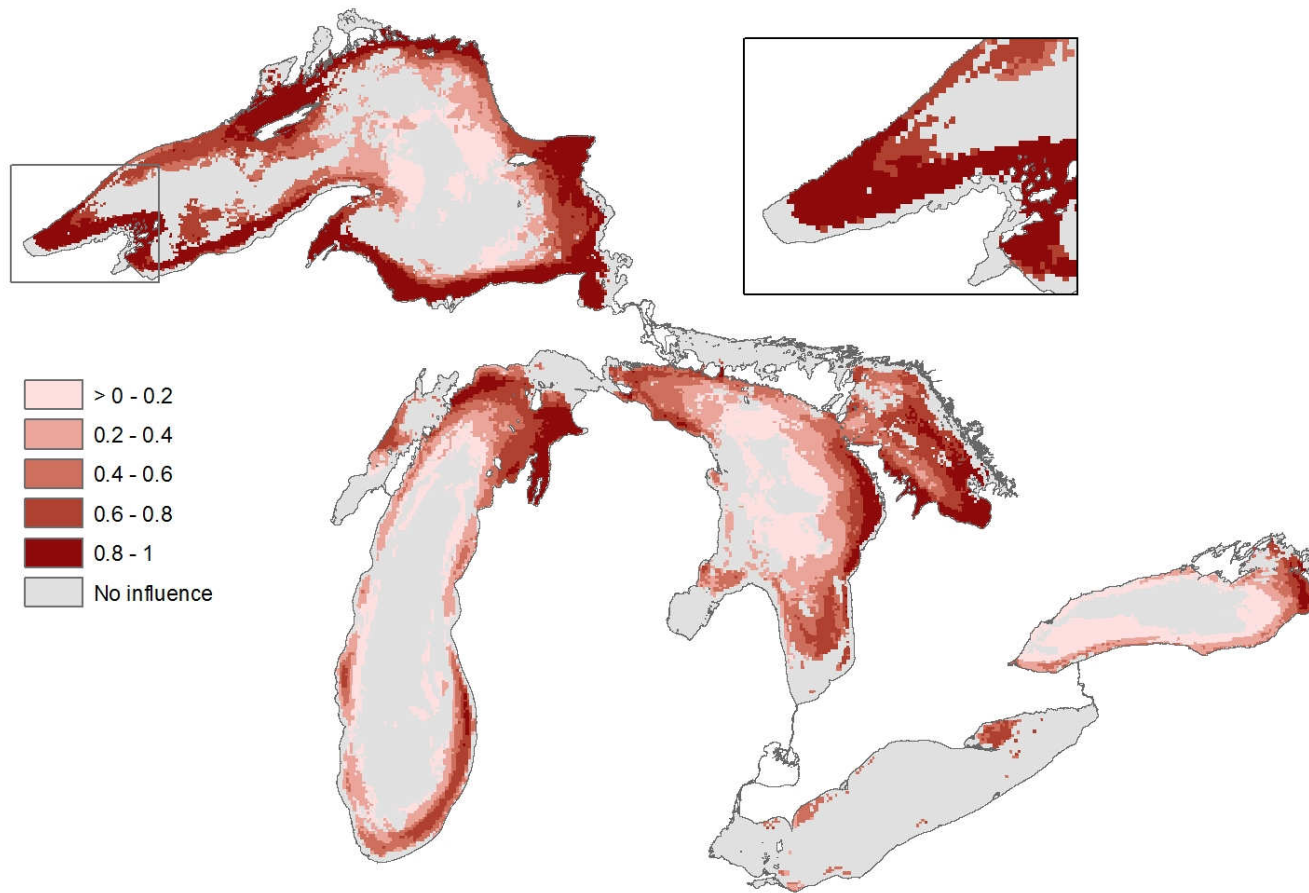
Spatial distribution of water level change as a stressor in the Laurentian Great Lakes (Inset: Saginaw Bay, Lake Huron).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Climate Change



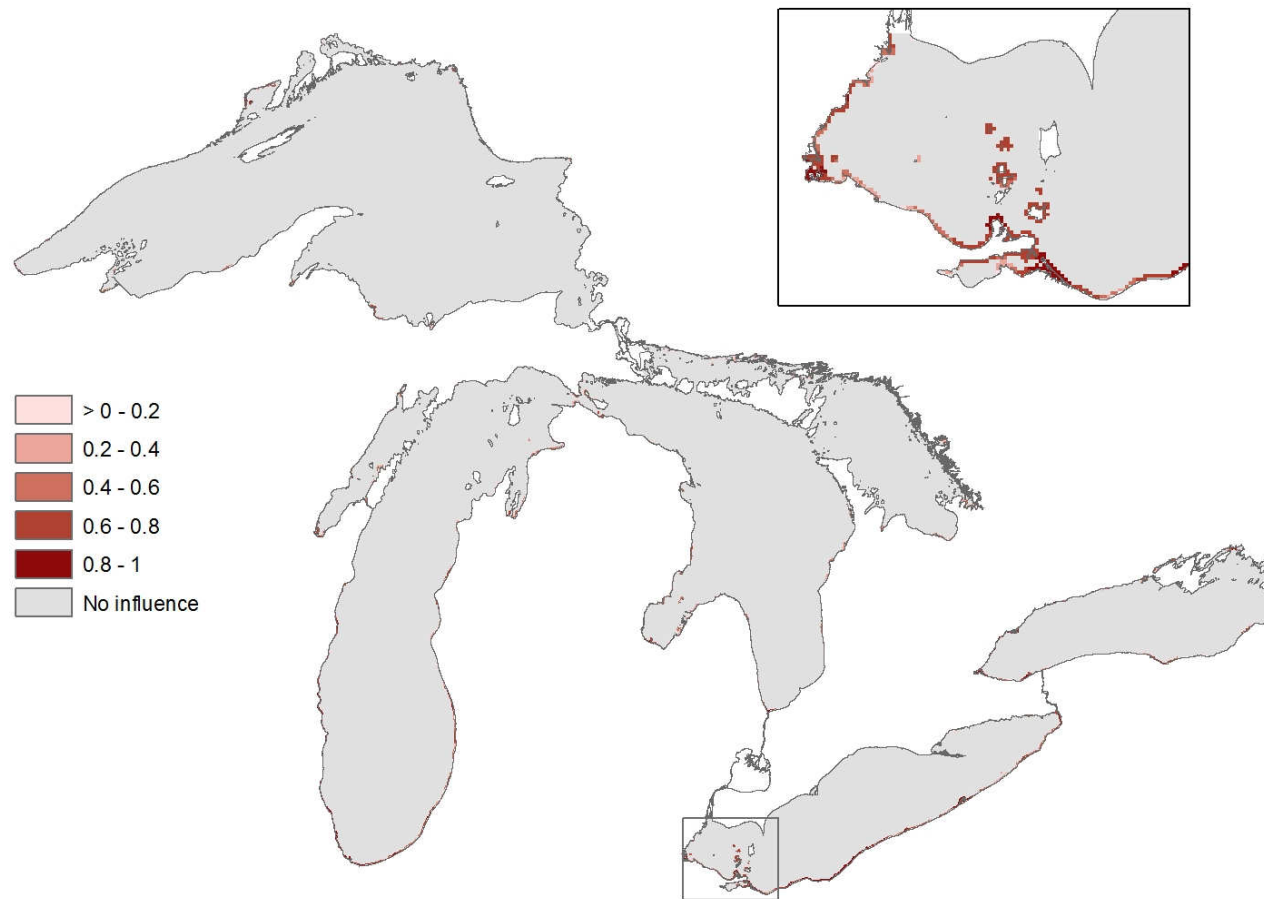
Spatial distribution of summer water temperature warming as a stressor in the Laurentian Great Lakes (Inset: Western Lake Superior).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Climate Change



Spatial distribution of decreasing winter ice cover as a stressor in the Laurentian Great Lakes (Inset: Western Lake Superior).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Coastal Development



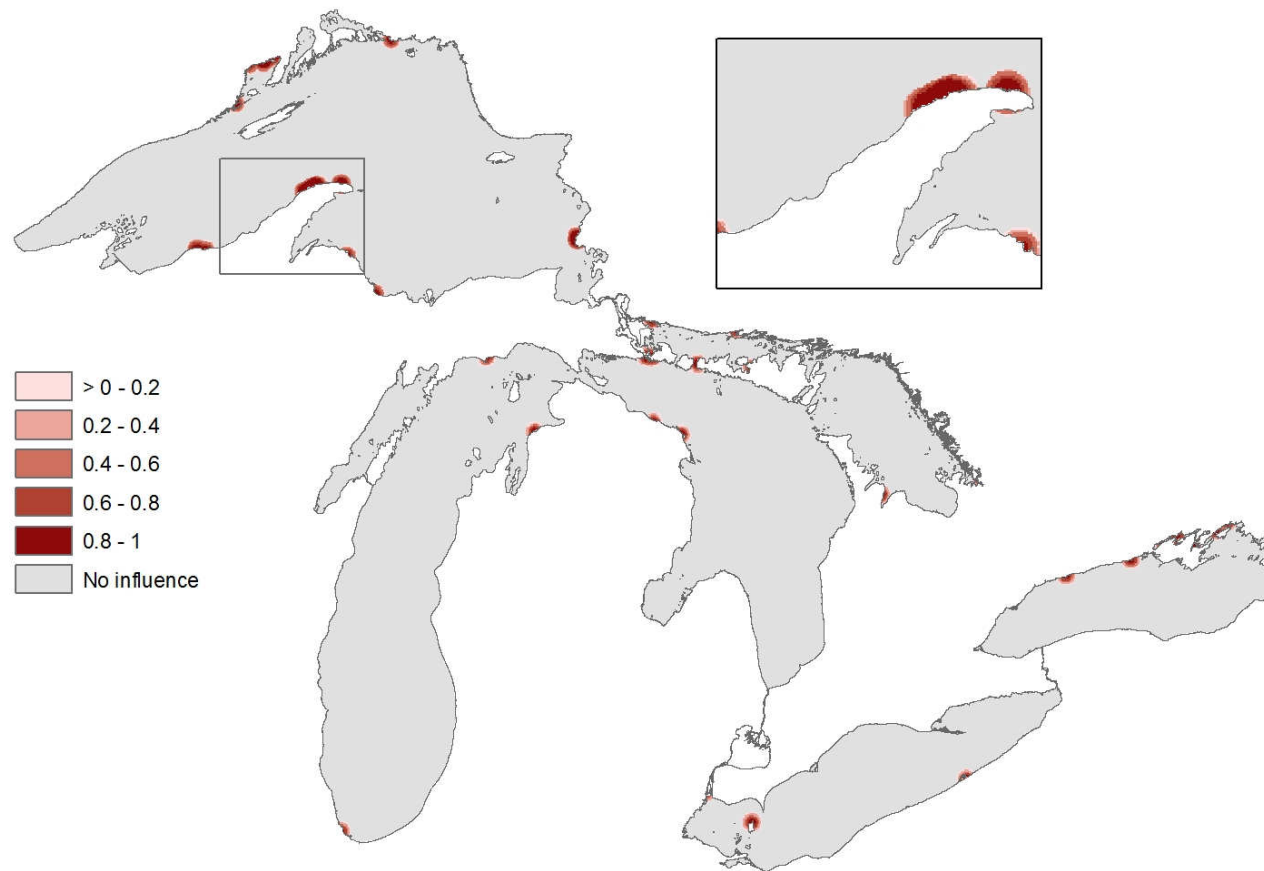
Spatial distribution of coastal development as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Coastal Development



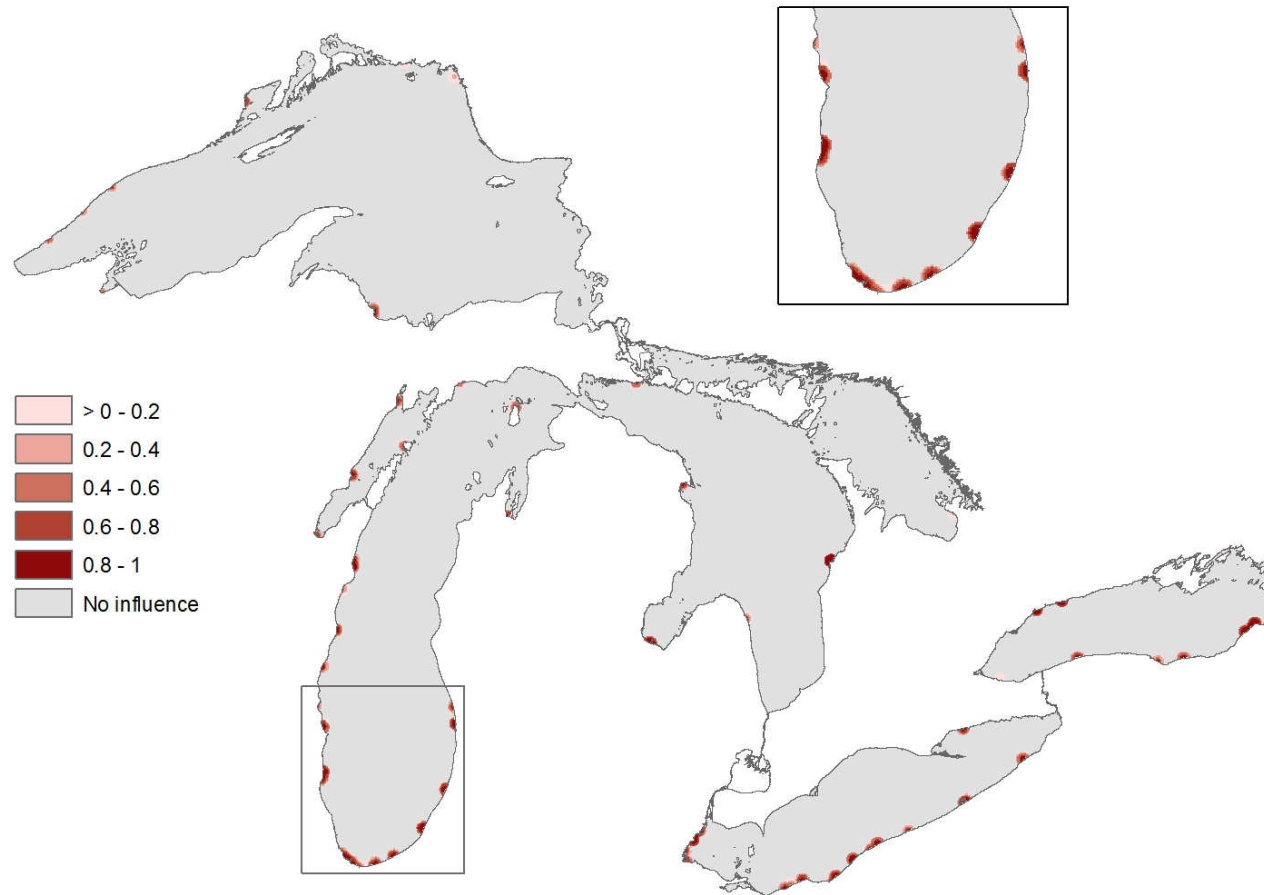
Spatial distribution of coastal roads as a stressor in the Laurentian Great Lakes (Inset: Southern Lake Michigan).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Coastal Development



Spatial distribution of coastal mines as a stressor in the Laurentian Great Lakes (Inset: Keweenaw Peninsula, Lake Superior).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Coastal Development



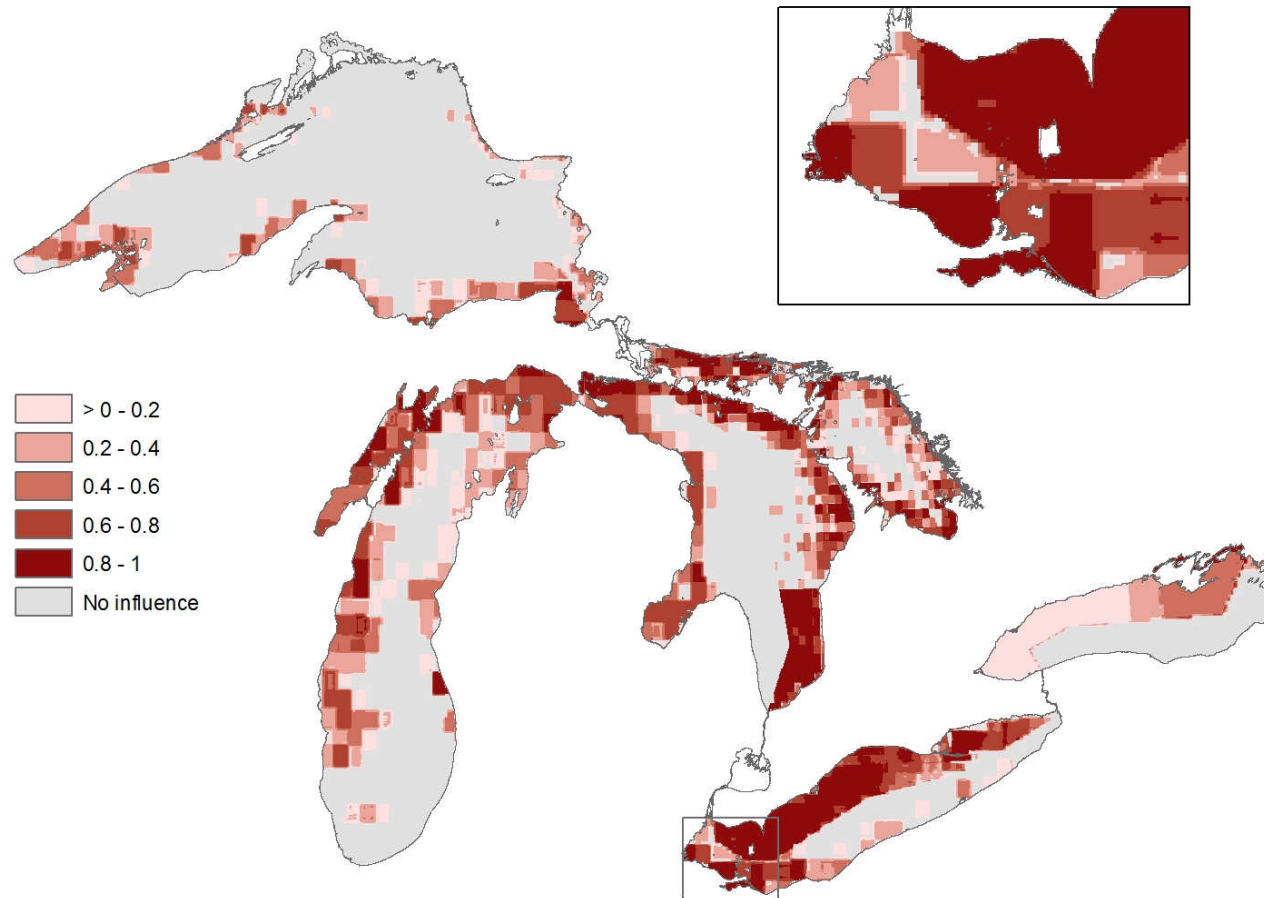
Spatial distribution of coastal power plants as a stressor in the Laurentian Great Lakes (Inset: Southern Lake Michigan).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Coastal Development



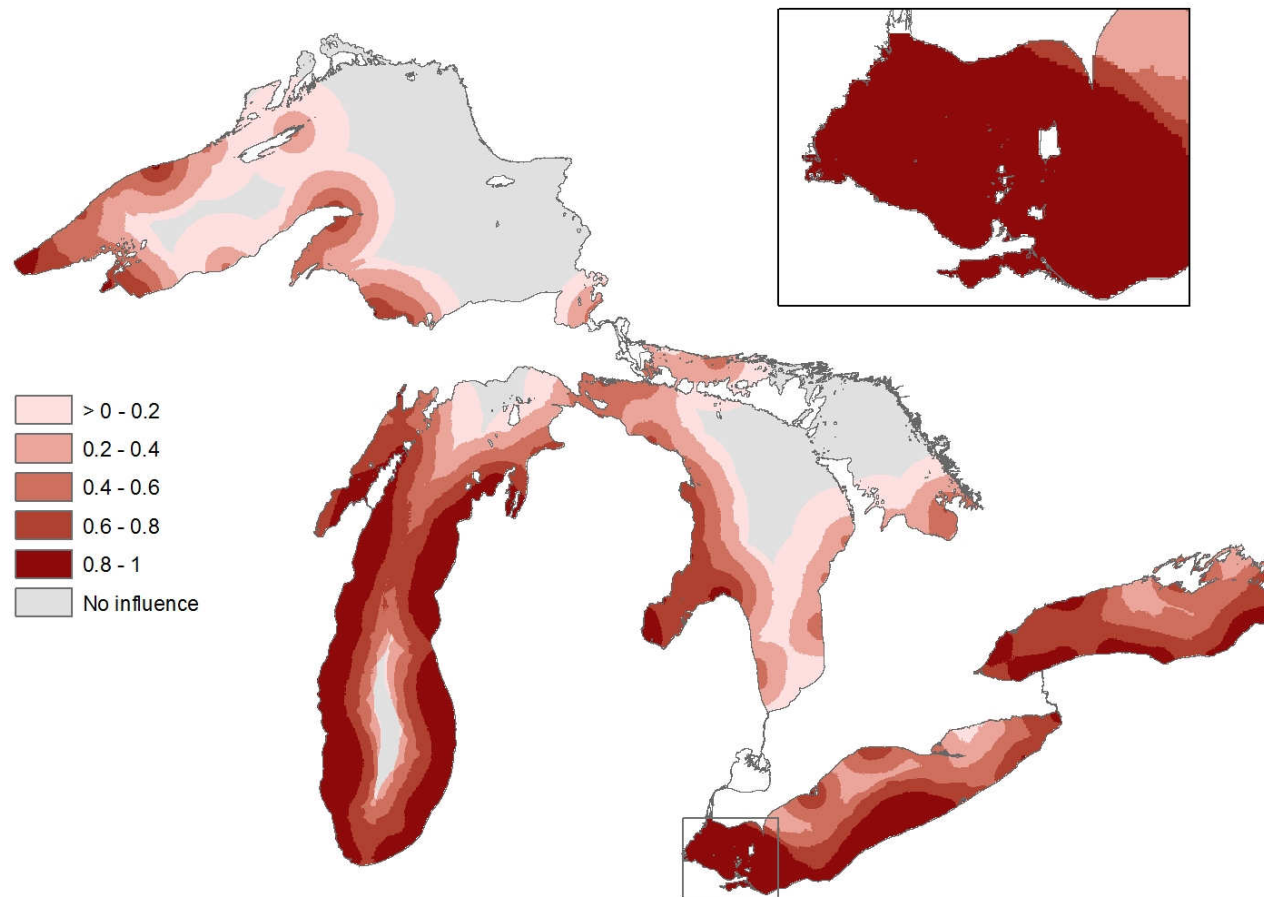
Spatial distribution of coastal recreational use as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Fisheries



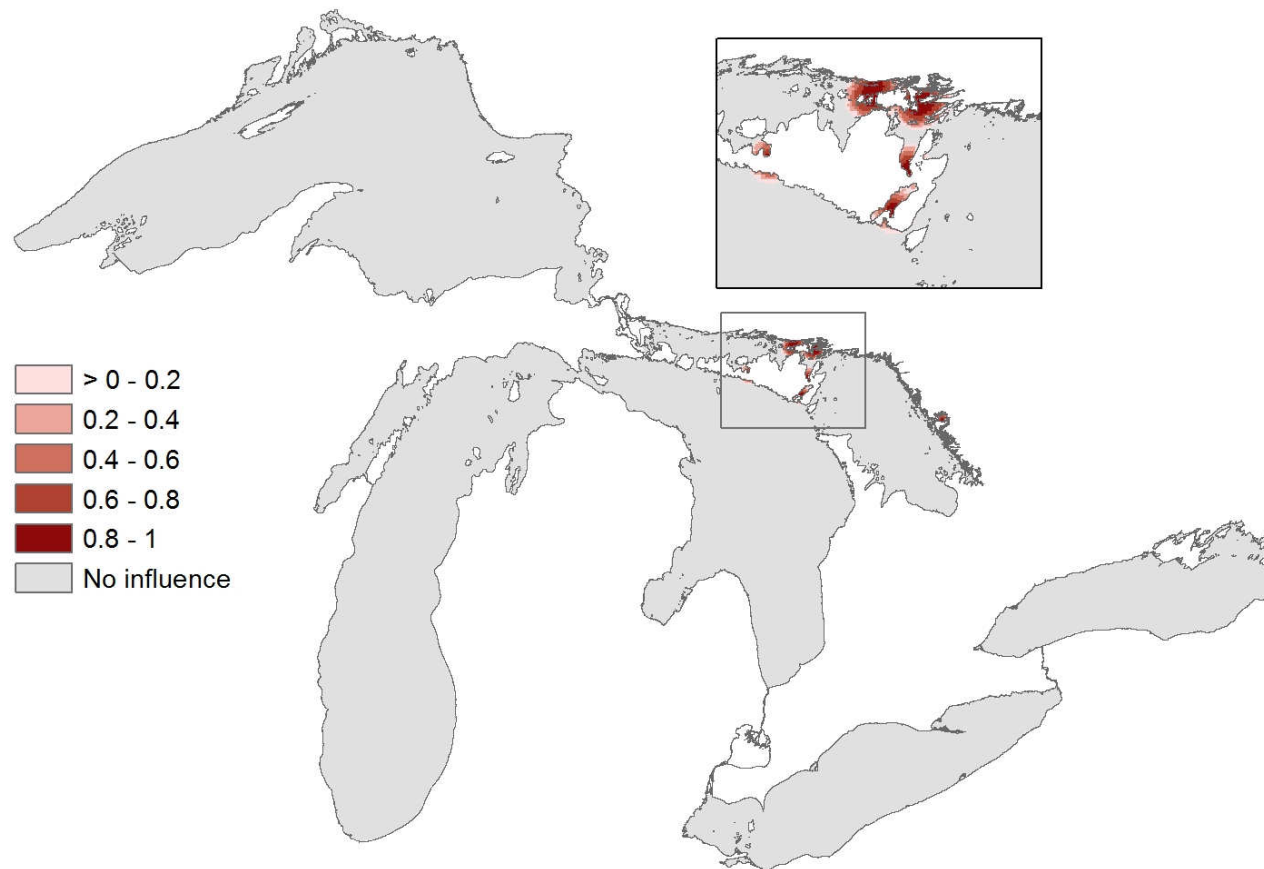
Spatial distribution of commercial fishing as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Fisheries



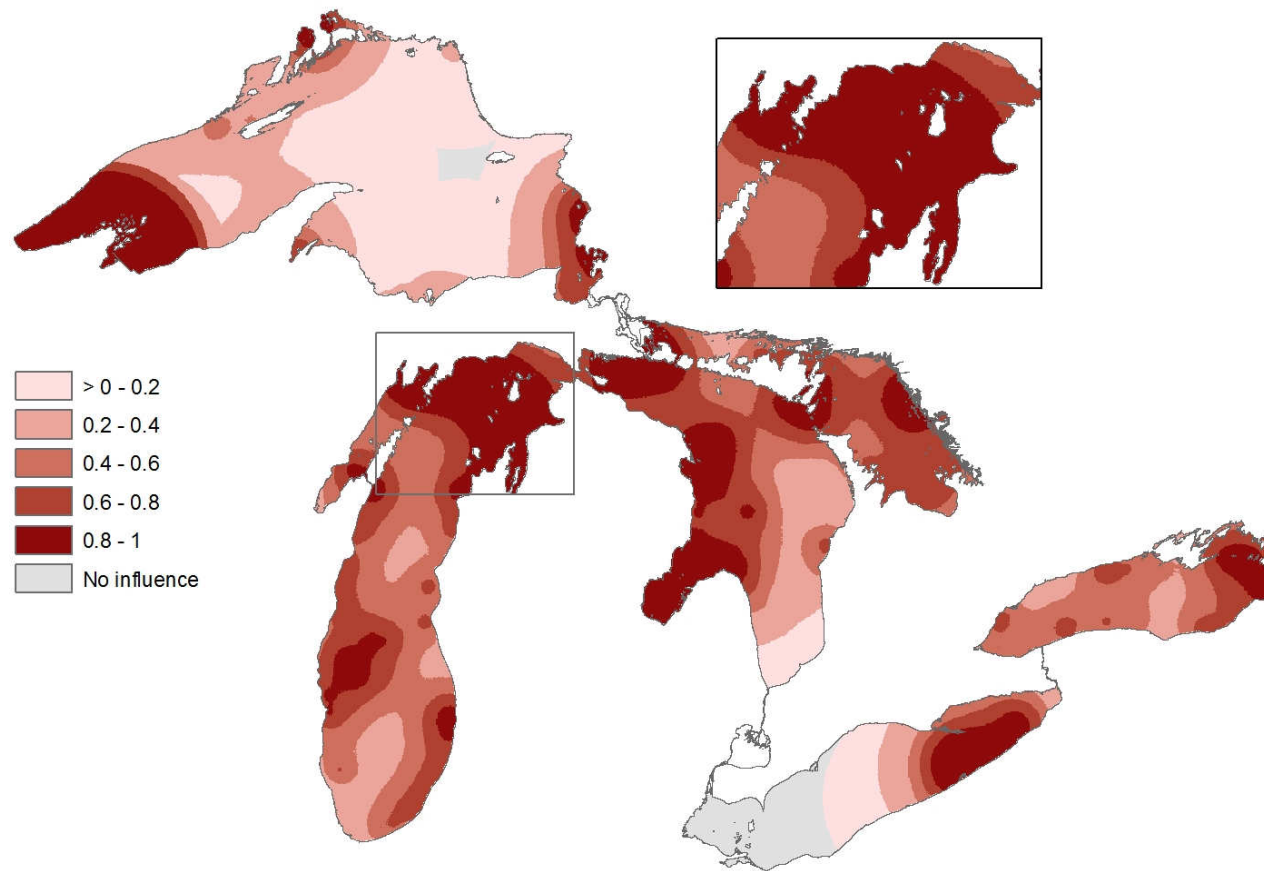
Spatial distribution of recreational charter fishing as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Fisheries



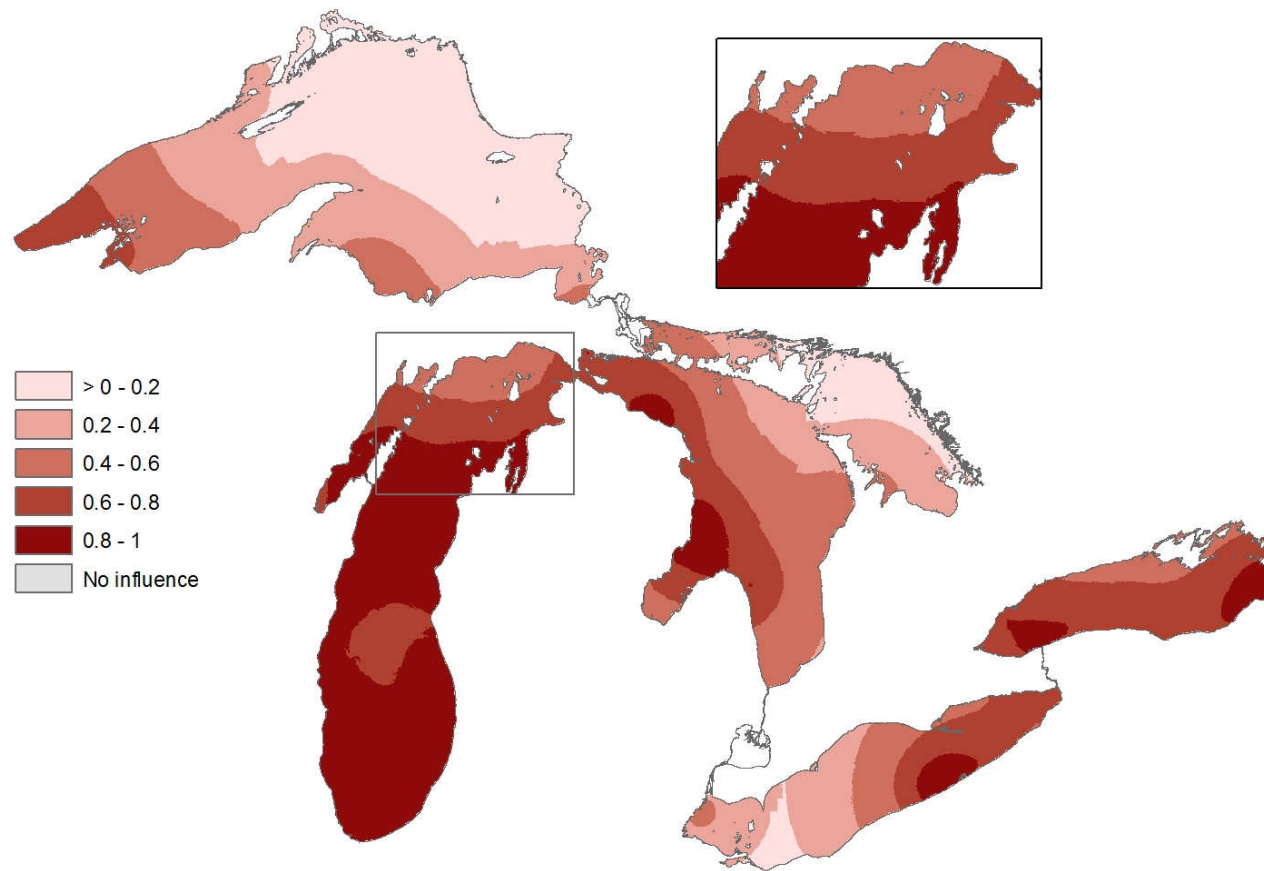
Spatial distribution of aquaculture as a stressor in the Laurentian Great Lakes (Inset: North Channel, Lake Huron).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Fisheries

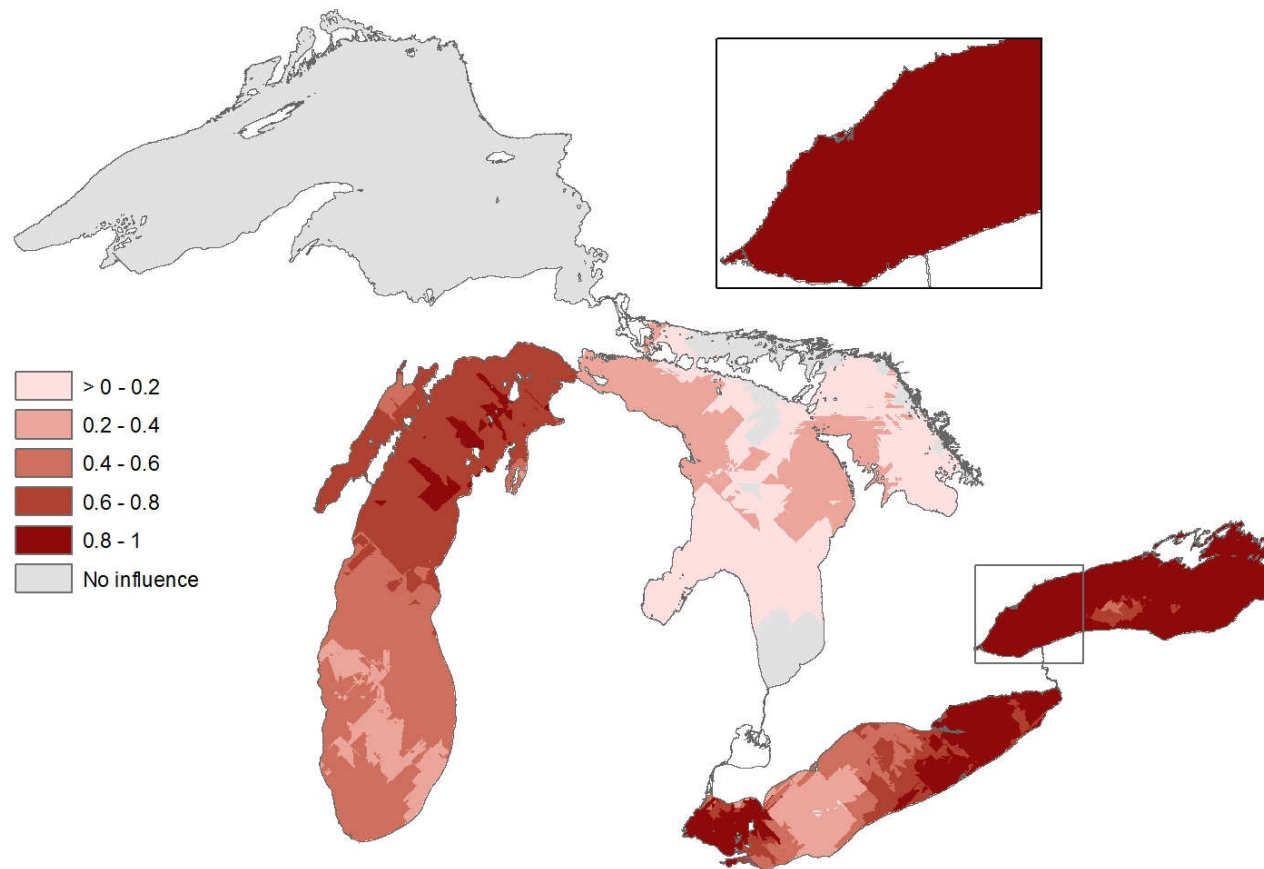


Spatial distribution of native fish stocking as a stressor in the Laurentian Great Lakes (Inset: Northern Lake Michigan).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Fisheries

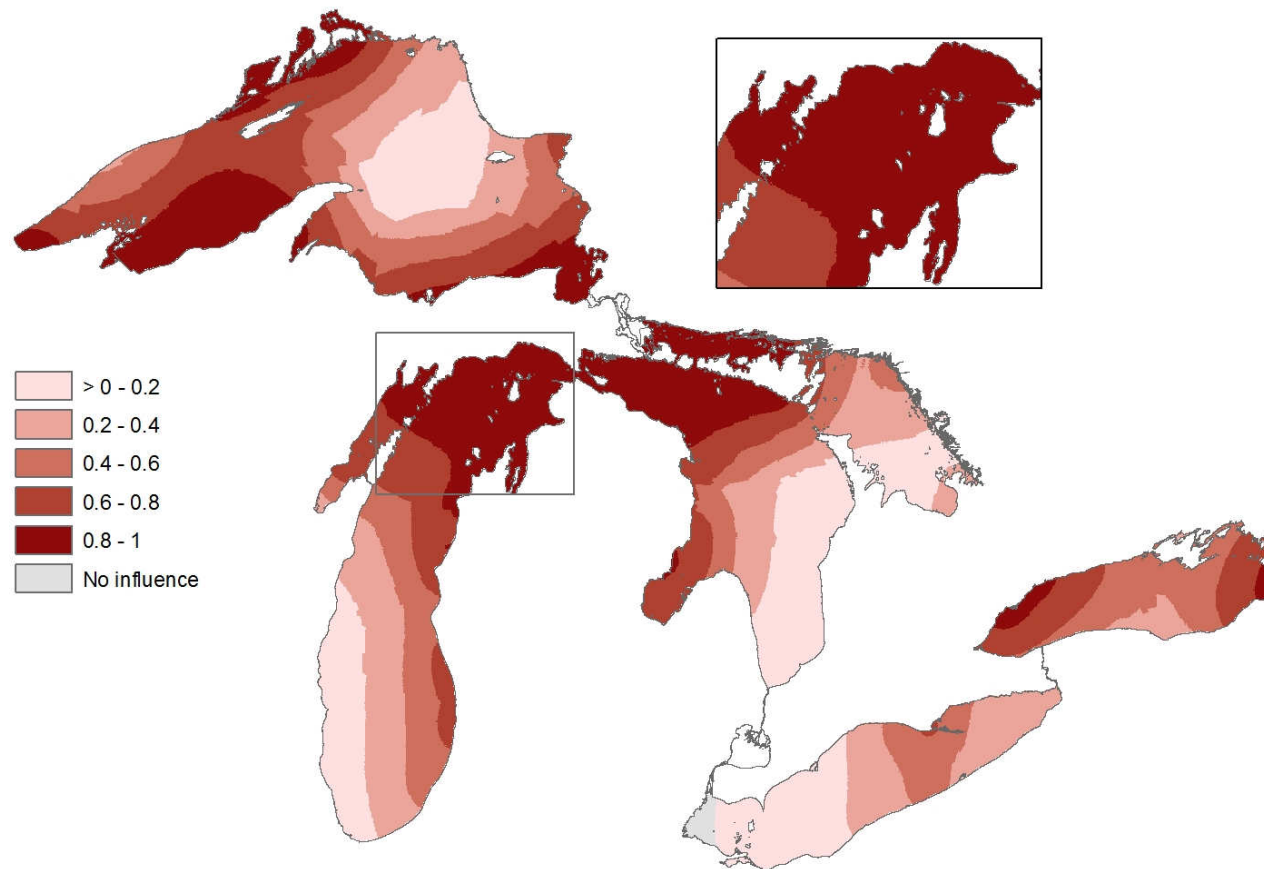


Spatial distribution of non-native fish stocking as a stressor in the Laurentian Great Lakes (Inset: Northern Lake Michigan).



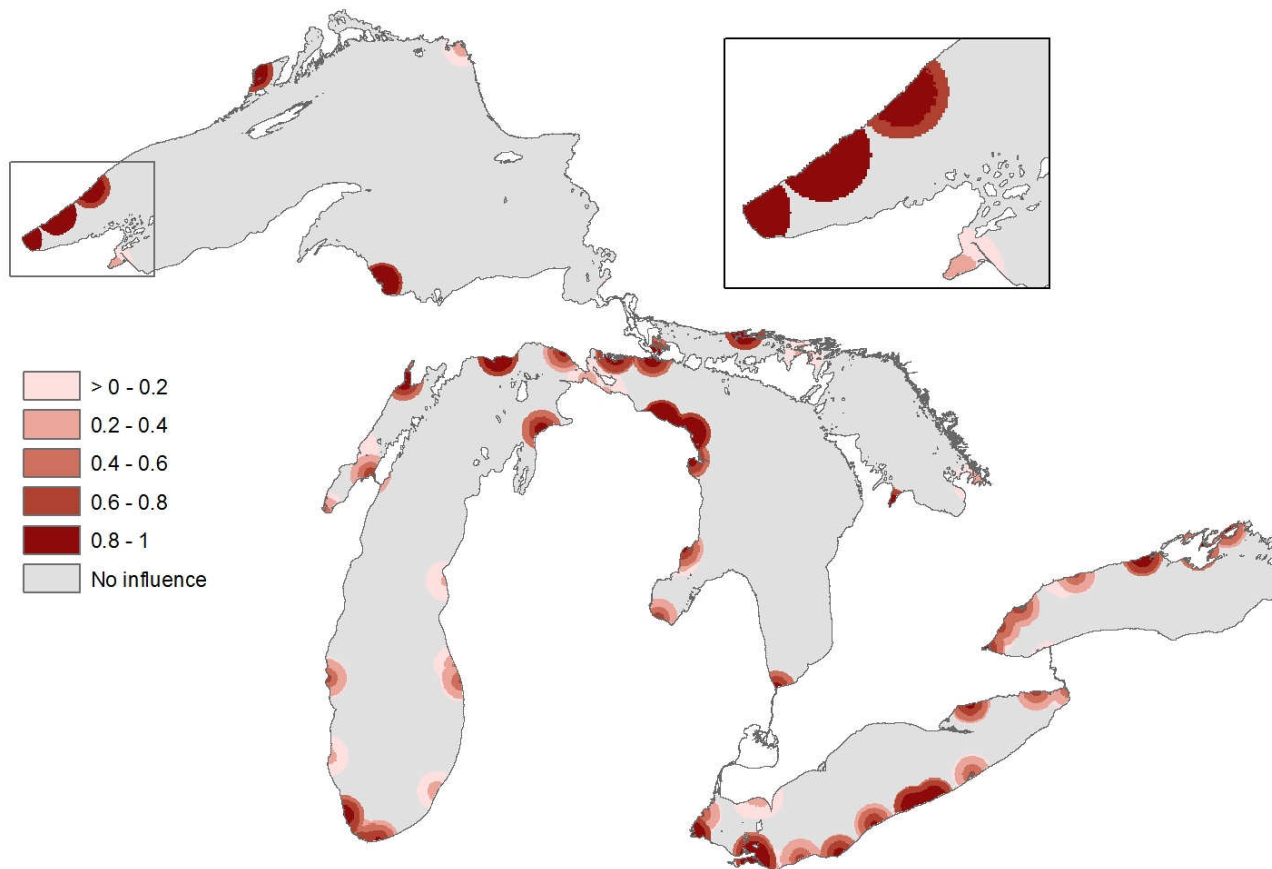
Spatial distribution of invasive zebra and quagga mussels as a stressor in the Laurentian Great Lakes (Inset: Western Lake Ontario).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Invasive and Nuisance Species



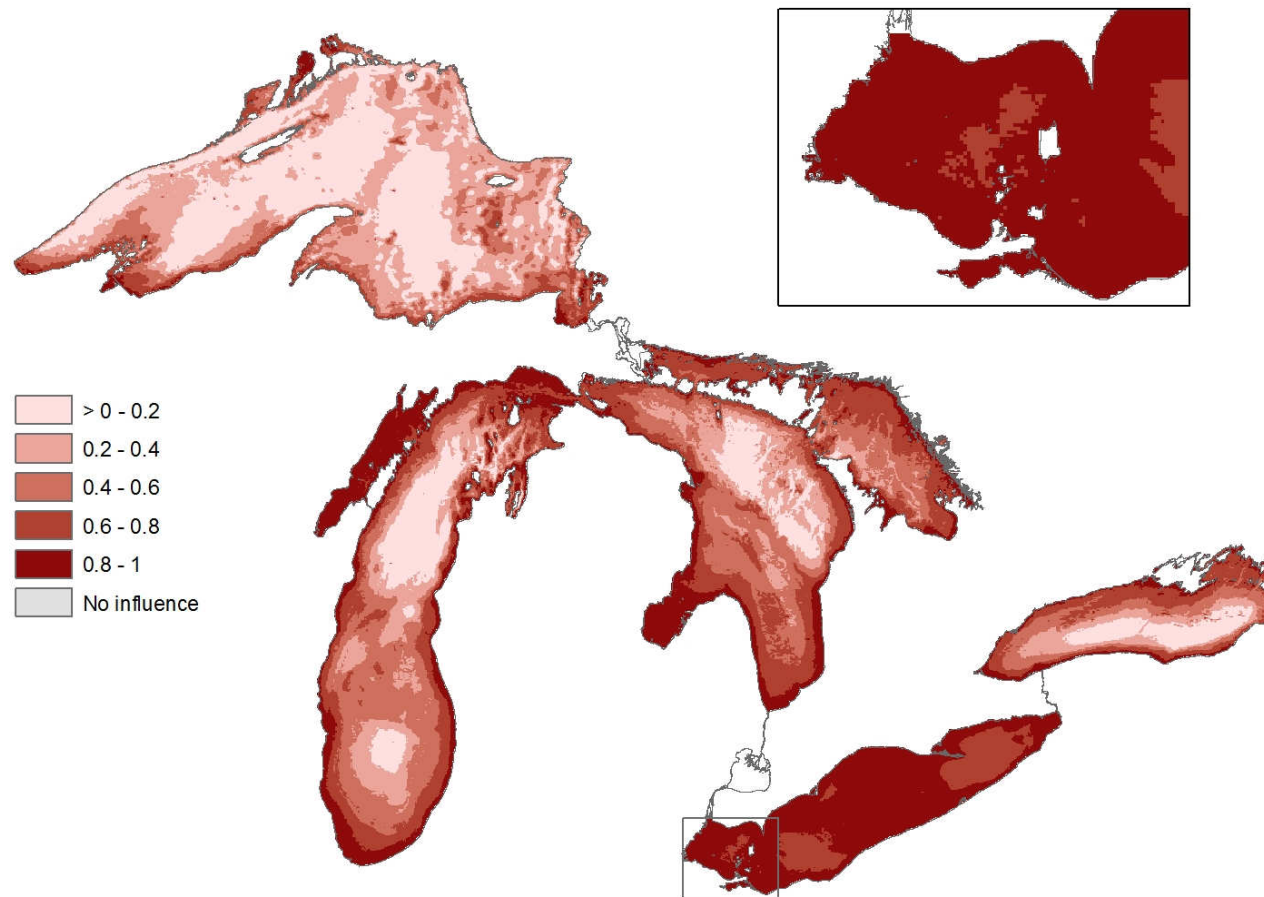
Spatial distribution of invasive sea lamprey as a stressor in the Laurentian Great Lakes (Inset: Northern Lake Michigan).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Invasive and Nuisance Species



Spatial distribution of ballast water invasion risk as a stressor in the Laurentian Great Lakes (Inset: Western Lake Superior).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Invasive and Nuisance Species



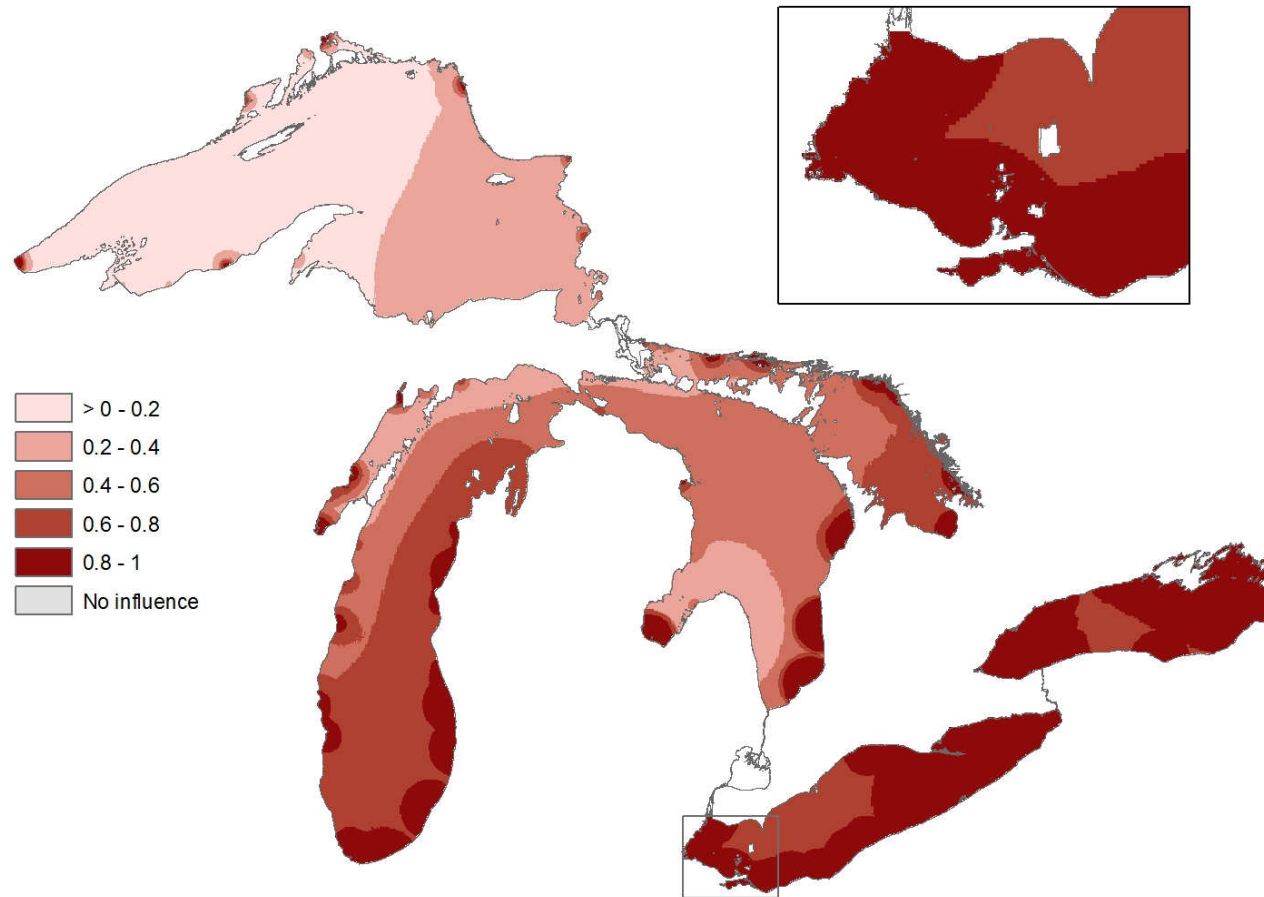
Spatial distribution of round goby probability of occurrence as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Invasive and Nuisance Species



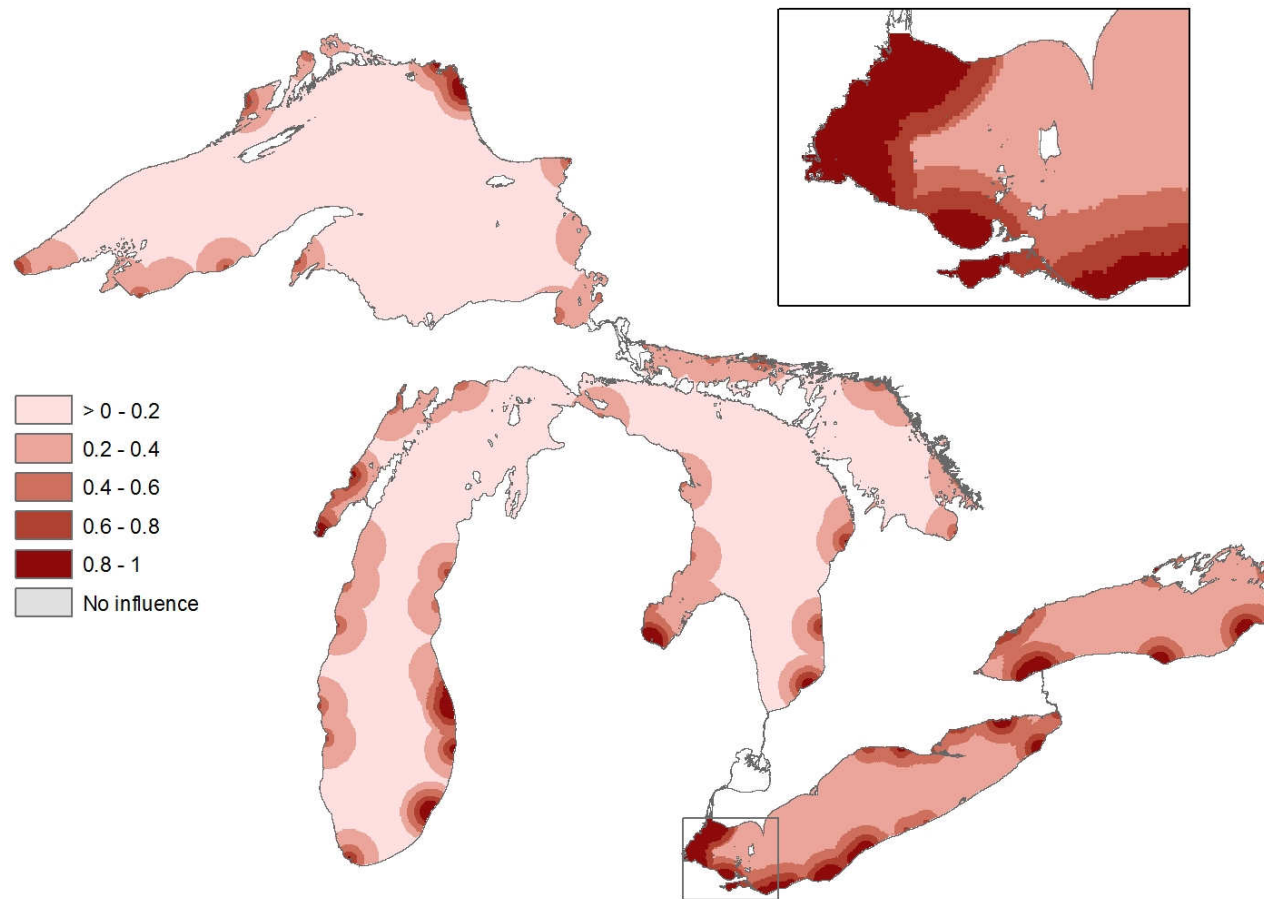
Spatial distribution of proximity to invasive *Phragmites australis* patches as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Nonpoint Pollution



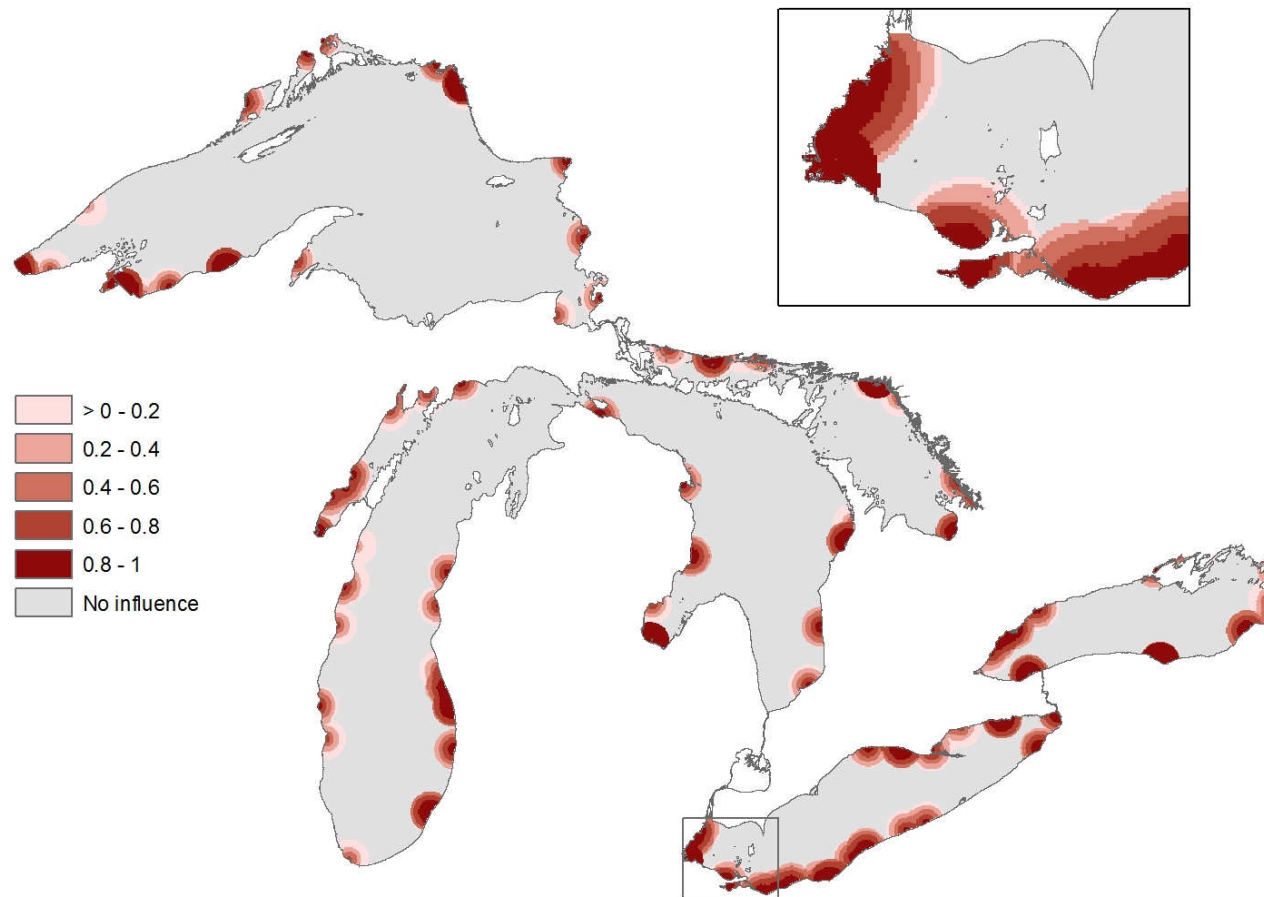
Spatial distribution of nitrogen loading as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Nonpoint Pollution



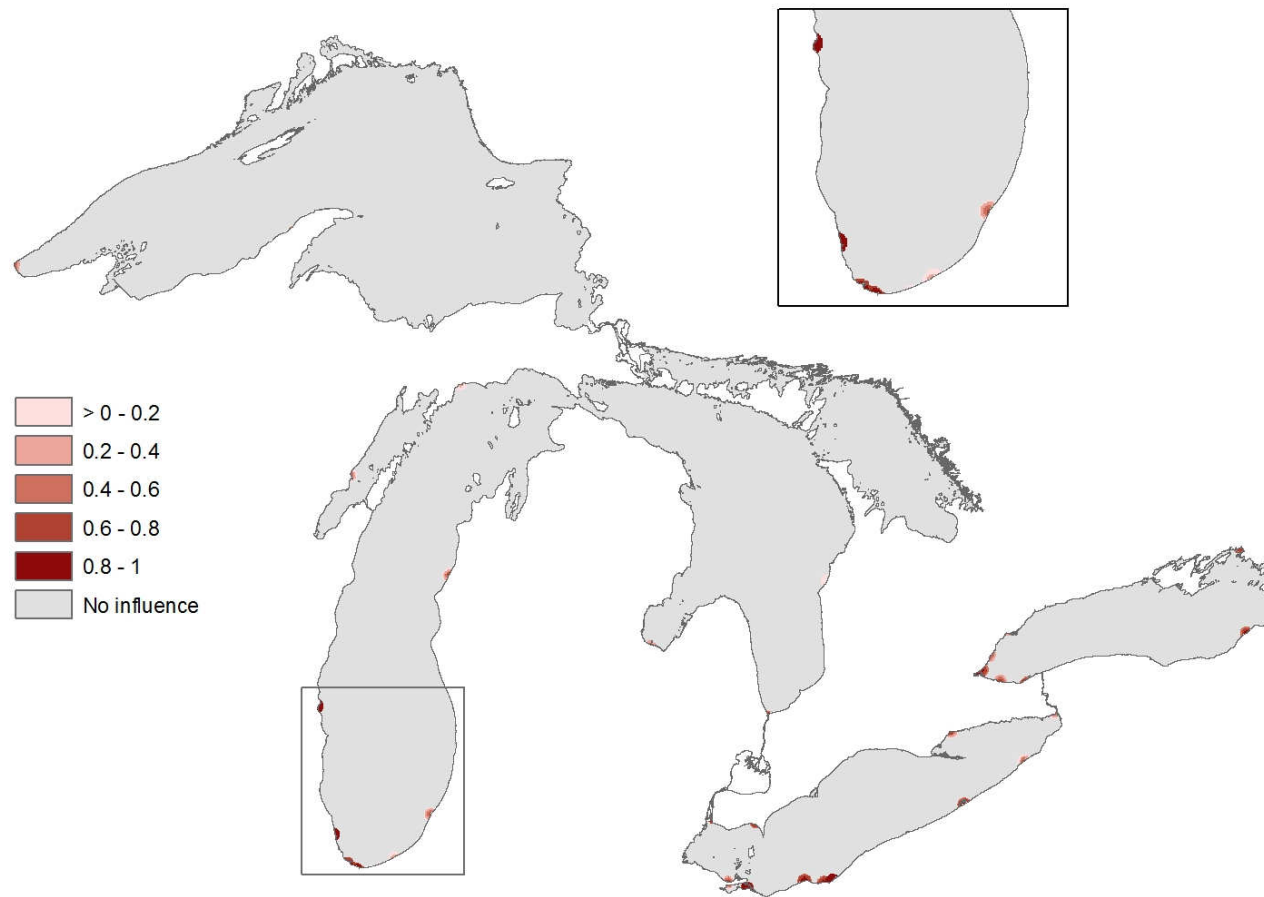
Spatial distribution of phosphorus loading as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Nonpoint Pollution



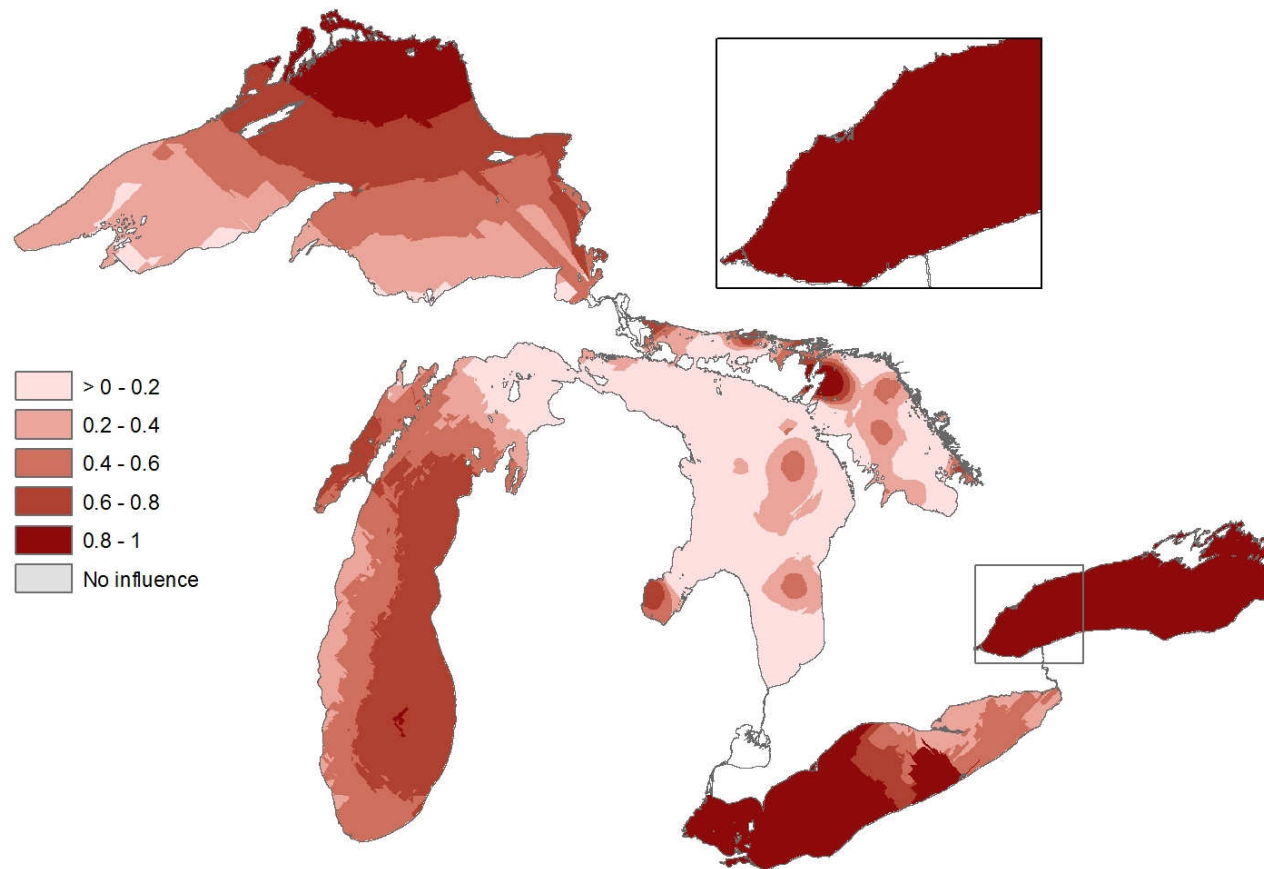
Spatial distribution of suspended sediment loading as a stressor in the Laurentian Great Lakes (Inset: Western Lake Erie).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Nonpoint Pollution



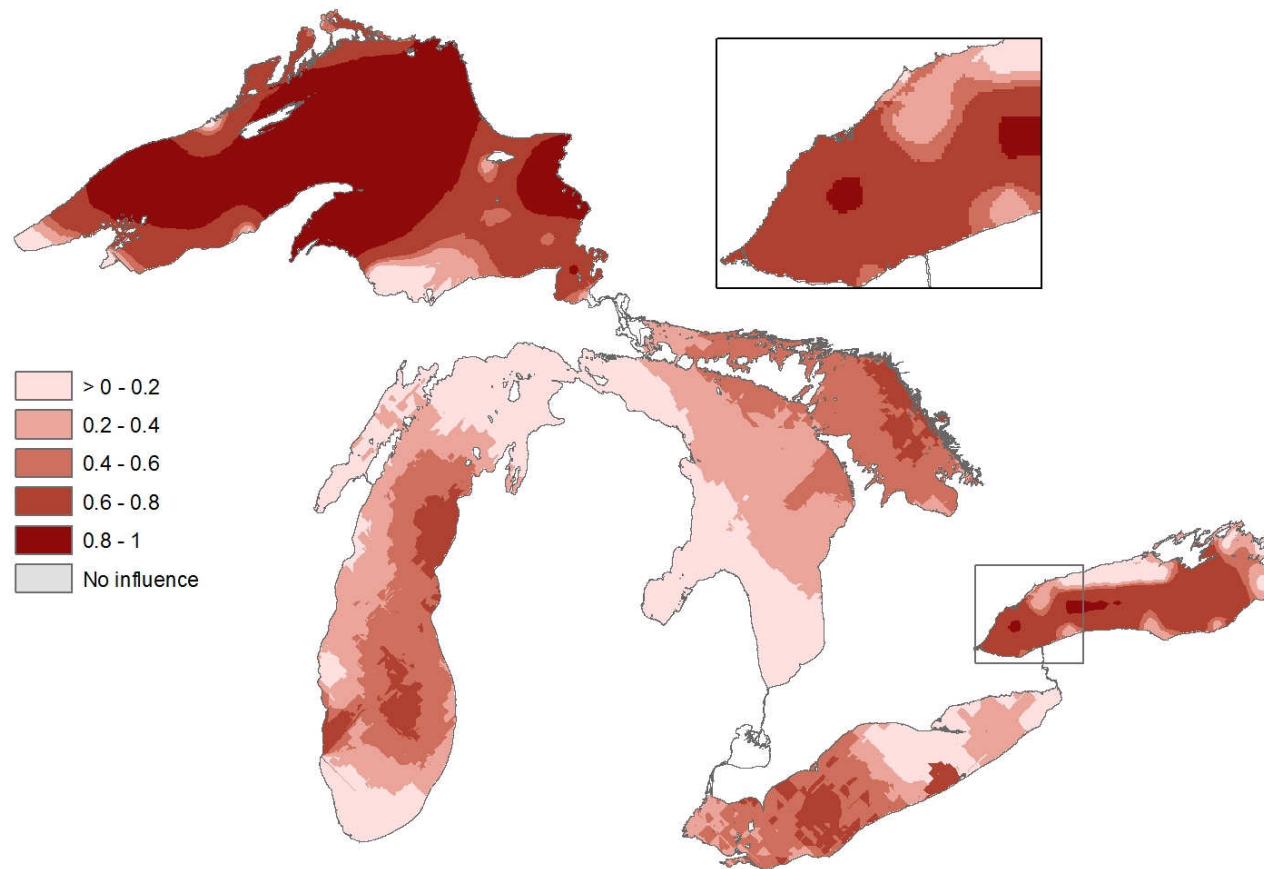
Spatial distribution of combined sewer overflows (CSOs) as a stressor in the Laurentian Great Lakes (Inset: Southern Lake Michigan).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Toxic Pollutants



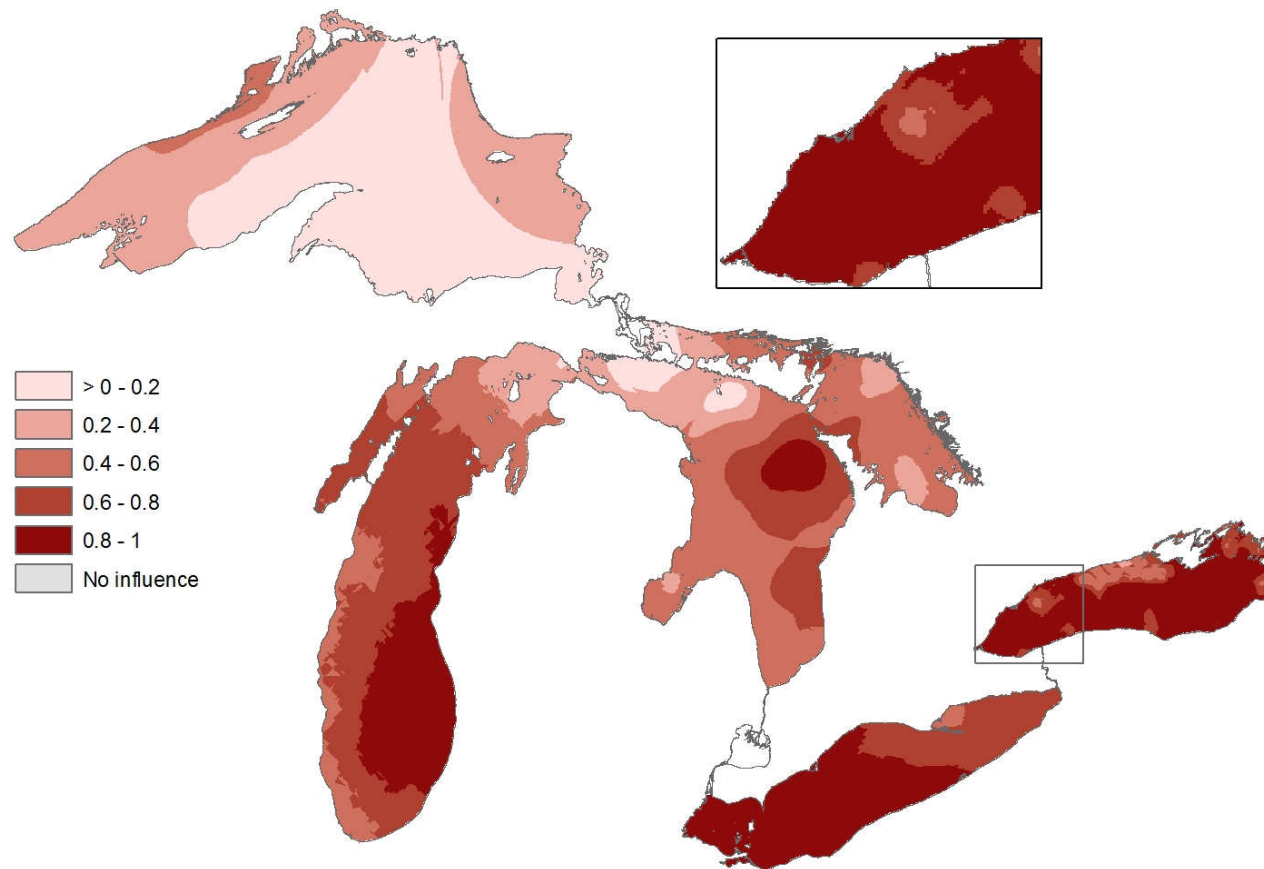
Spatial distribution of mercury as a stressor in the Laurentian Great Lakes (Inset: Western Lake Ontario).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Toxic Pollutants



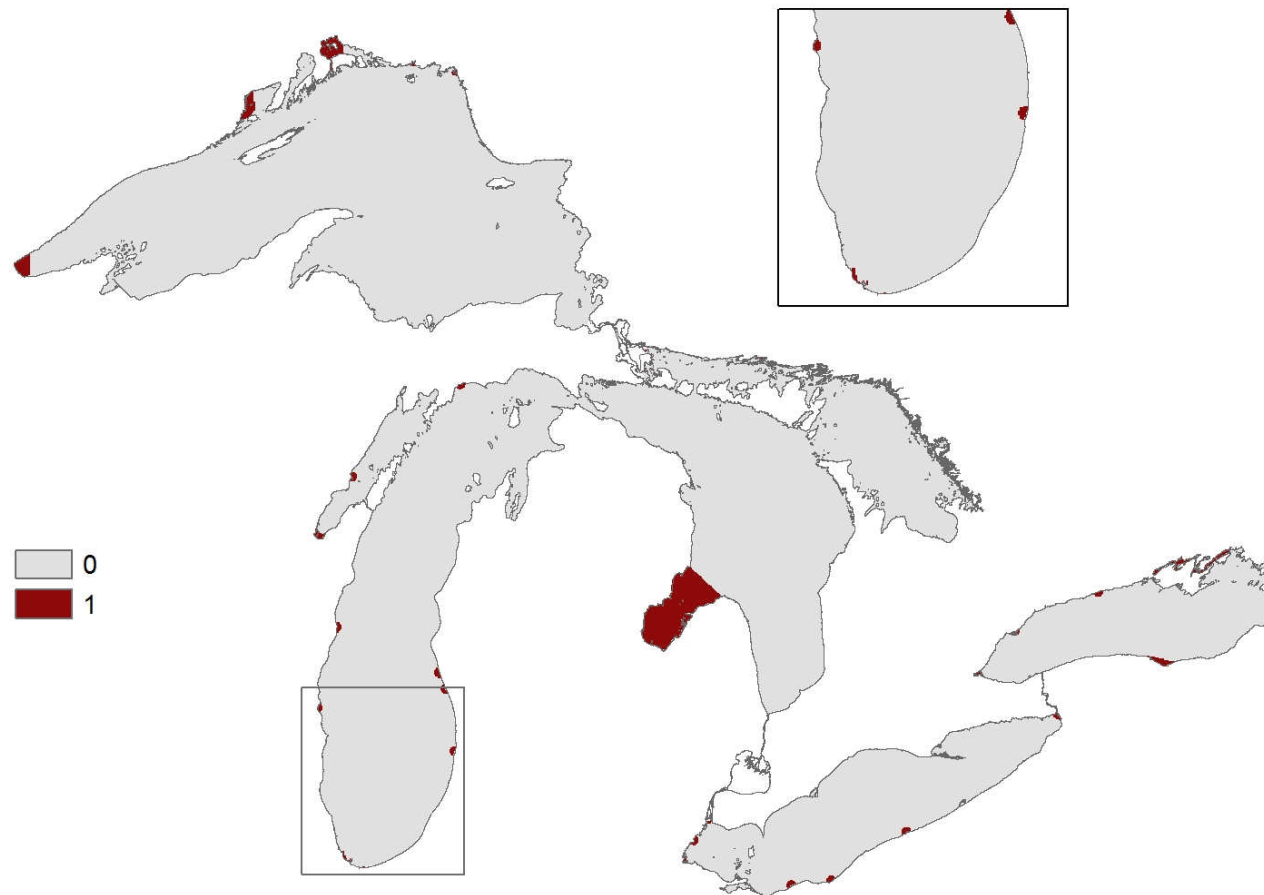
Spatial distribution of copper as a stressor in the Laurentian Great Lakes (Inset: Western Lake Ontario).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Toxic Pollutants



Spatial distribution of PCBs as a stressor in the Laurentian Great Lakes (Inset: Western Lake Ontario).

Individual stressor maps accompanying Allan et al. manuscript
Stressor category: Toxic Pollutants



Spatial distribution of Areas of Concern (AOCs) in the Laurentian Great Lakes (Inset: Southern Lake Michigan).