

Aquatic Protected Areas:

A way to save Minnesota's lakes, rivers, and fisheries for future generations

Aquatic ecosystems around the world are suffering the effects of invasive species, climate change, eutrophication, overfishing, and overdevelopment that results in habitat loss. Lakes and rivers are especially affected—yet **current approaches to save them are failing** because they are not holistic.

Similar challenges face the world's oceans, but here a promising solution has emerged. Key areas of marine ecosystems and shorelines are protected so that these can maintain their species richness and resilience, while continuing to evolve in response to our changing world.

These **aquatic protected areas** (APAs) are usually managed by local groups/consortia. They anchor fisheries at a low cost and in a sustainable manner while providing significant numbers of large fish to areas outside them.

Protected areas have two basic forms—reserves that allow little or no use and, more commonly, preserves that allow some level of use. **Preserves seem to offer a feasible option for larger lakes and rivers**, where these could protect key portions but have minimal impact on the overall system and so benefit.

About 5 percent of the world's oceans are presently protected, and this target seems reasonable for protecting freshwater ecosystems. But species and habitats differ, and **scientific and policy research is needed** to advance and implement this concept. The way forward is along two paths, and at this point there is little likelihood of agency support. **The work to be done needs citizen support:**

1. Scientific research to establish the best starting place in Minnesota

Peter is taking a sabbatical leave in 2017-2018 to study the scientific underpinnings of aquatic protected areas (APAs) in Ontario, Florida, and Washington—similar to those that would be proposed for Minnesota. During his sabbatical, he will receive only half his salary and, to date, no funding for research. He hopes to raise \$25,000 to support APA research. You can support him via the University Foundation Fund 2241: Aquatic Protected Area Research. *For information on making a tax-deductible donation to the fund, please contact Peter Sorensen (soren003@umn.edu).*

2. Applied research and application in Minnesota

Minnesotans for Aquatic Ecosystems Resilience, a 501(c)(3) non-profit is being established to guide implementation of APAs in Minnesota. It will operate in cooperation with but independent of MLR and the University. It will establish specific scientific criteria that APAs will need to meet in MN to be successful, as well as policies that will need to be developed and then followed. Ultimately, the organization will seek an operating budget of \$100,000/year and staff, with matching funds and partnerships will be sought. *For more information, watch for an email (probably from MLR) within the next month.*

To learn more

An MPR story: <http://www.mprnews.org/story/2016/10/06/protected-lakes-marine-reserves>

Next event: April 22 TedX talk, Brainerd, <http://www.tedxgulllake.com/index.php/2017-presenters>

Future updates: MLR, Peter's Blog savingminnesotawaters.wordpress.com