



Contents lists available at ScienceDirect

Journal of Great Lakes Research

journal homepage: www.elsevier.com/locate/jglr

Commentary

Editorial – Growing the seed for a Great Lakes Commons

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ARTICLE INFO

Article history:

Received 26 February 2015

Accepted 21 April 2015

Available online xxx

Communicated by Robert Hecky

Index words:

Great Lakes

Commons

Metanoia

Reverence

Collaboration

Water

The people living within the Great Lakes Basin must come together and begin to deeply believe that these waters and all their ecological connections are a *Commons*: an entire ecosystem on which we depend, if we want life therein to survive and thrive. Humankind finds itself at a critical juncture; we need to begin to make radically different personal, management and governing choices than we have, if we want to sustain the planet and our lives and those of generations to come. This editorial is a call to develop a way of thinking about and caring for these great water bodies into the future. We look both at the cost of our continued unrelenting extraction and misuse of precious natural resources and what can be learned from commons and indigenous understandings and approaches to water. Our goal is to nurture reflection on a bold and significant change in how we might restructure our lives in relation to this ecosystem.

Ecosystem disturbances visited upon the Great Lakes in the 21st Century include some that are surprisingly similar to those that were held at bay in the decades since the signing of the Great Lakes Water Quality Agreement in 1972. These current disturbances are seen in the spread and the growing diversity of invasive species, the increasing discharge of phosphorus from point and nonpoint sources, and in the

atmospheric deposition of ubiquitous toxic chemicals (e.g. mercury). Other threats continue to surface including those related to energy extraction, pharmaceuticals and climate change. It is *the thesis* of this editorial that the larger Great Lakes community of citizens, scientists, policy makers, and regulators is poorly positioned to successfully address these disturbances to the degree achieved in the 20th Century. Three considerations are cited here as supporting that point of view.

First, if we think of scale (local → regional → global), the scope of these problems has grown to the point where some consider them to be intractable. Ecosystem disruptions addressed from the 1970s through the 1990s offered targets amenable to mitigation: e.g. a spatially localized and vulnerable life stage facilitating control of the sea lamprey, an effective and economically feasible technology capable of reducing phosphorus levels in wastewater effluents and a specific airborne chemical contaminant, toxaphene, amenable to elimination through regulation in commerce. Today, we face trillions of mussels distributed over millions of hectares of lake bottom, unprecedented loads of bioavailable phosphorus delivered from highly agricultural watersheds and increased volumes of human effluents and a toxic substance, mercury, the management of which is opposed by many for economic and energy policy reasons, and more. One could be forgiven for viewing these disruptions as intractable.

Second to consider is a societal failure to disengage from what might be termed a Manifest Destiny environmental worldview. It is not difficult to imagine that North American settlers moving west in the 1800s viewed natural resources as being inexhaustible, in fact, infinite. Today, many cling to the notion of the Lakes as infinite and ever resilient, despite clear evidence of humankind's impact on them and, more broadly, on the global environment. It has been well demonstrated that little success can be expected in addressing environmental assaults through policy and regulation without deep-seated citizen concern and robust involvement. Thus, we find ourselves facing seemingly intractable problems, while lacking sufficient community outcry and action to provide the catalyst necessary to change course.

And our third consideration is that we believe that the Great Lakes are presently facing an *end game* scenario. In chess, the end game is that stage where fewer pieces remain on the board, where strategic options are limited and where the challenge is to find a win where there is no obvious way to win.² The challenge that we face is clearly evident in the degree of development experienced near large cities (e.g. Toronto,

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Ontario) and in the intensity of agriculture within certain watersheds (e.g. Ohio's Maumee River). More broadly, an emerging challenge is seen in the increasing presence of ecologically-disruptive pharmaceuticals in Great Lakes waters. We find ourselves revisiting and responding to problems strikingly similar to those of the 20th Century, but having 'no obvious way to win'. We cannot 'find a win' without both a paradigm shift and a more complete engagement by the Lakes community, the driving force in the policy and regulatory processes. Citizen re-engagement and expansion of the grassroots base will require a *metanoia*, a change in the way humans perceive the nature and value of the Great Lakes and the immediacy and significance of a commitment to effective management.

Change is needed at two levels to create 'a way where there is no way'. At one level, humankind must be encouraged to develop, perhaps re-establish, a *reverence* for the Great Lakes. This perspective must resonate within us at a much deeper level than do commodity-based concepts such as 'beneficial use' or 'ecosystem services.' We must recognize that the Great Lakes are a gift and a responsibility 'held in common' by the peoples and communities of the Lakes. On a second level, humankind must come together as a community, as representatives of that *Commons*, bringing reverence, knowledge, experience and insight to

bear on matters of Great Lakes management and governance. It is of value to the *Commoners* to realize that their voice matters and that their actions are vital to how we care for the Lakes, the entire ecosystem and its connection to the whole Earth.

It is critical that there be continued exploration of diverse approaches to water stewardship and ecological governance that may be applied in achieving a sustainable future. Under an endgame scenario it is no longer sufficient to 'seek a win' using a dated, reactive, micro-restoration approach; we need to change at the level of human thought and engagement. We see much to draw on and the possibility of a path forward in commons and indigenous water governance, both longstanding traditions that reflect a commitment to shared responsibility, the integrity of the ecosystem, a multi-generational perspective, and community-wide stewardship. We have offered here some preliminary thoughts on how this change in thinking about our waters could begin and, in particular, the value of *Commons* and indigenous peoples' approaches in guiding us along the path to achieving that change. We hope that, through this editorial, we have stimulated interest in a *metanoia* that will help rekindle reverence for the Great Lakes and enable us to achieve a sustainable future for these inland seas supporting generations to come.