

Confronting Climate Change in the Great Lakes Region Technical Appendix

The Changing Character of the Great Lakes Region

*This document, written by John Magnuson, University of Wisconsin, is a technical appendix providing further detail on human health-related information in the Report on **Confronting Climate Change in the Great Lakes Region** available at www.ucsusa.org/greatlakes/ (Kling et al. 2003).*

In “Confronting Climate Change in the Great Lakes Region” we make the point that climate is a significant component of one’s “sense of place,” and that climate change is affecting the very character of the Great Lakes Region. For illustrative purposes we have included a graphic showing how the projected future climate in a Great Lakes state will feel like the climate currently in another, more southern state (see Figure 16 in the Great Lakes report).

What do we mean by “sense of place”? The following quotes reflect both historical and contemporary perspectives of those who study people’s “sense of place” and the human experience in landscapes.

“Place can acquire deep meaning for the adult through the steady accretion of sentiment over the years.” (Tuan 1977:32)

“What begins as undifferentiated space becomes place as we get to know it better and endow it with value.” (Tuan 1977:6)

“The place has become a shaping partner in our lives, we partially define ourselves in its terms, and it carries the emotional charge of a family member or any other influential human agent.” (Ryden 1993: 66)

“Place implies a degree of stability, an anchor for the self or group.” (Stedman 2002)

“Place can serve as an important anchor for self-definition, especially given the importance of place stability.” Stedman (2002)

“A knowledge of place is grounded in those aspects of the environment which we appreciate through the senses, color, texture, slope, quality of light, the feel of wind, the sounds and scents carried by that wind.” (Ryden 1993: 38)

“Landscape characteristics matter a great deal to sense of place; the quality of the physical environment underpins both place attachment and satisfaction. Accordingly, the effects of landscape change on human attitudes and behaviors can be modeled.” (Stedman forthcoming a)

The report lays out what features of the North Temperate Region surrounding the Great Lakes we are and may be losing in the future. The loss of winter as we know, for example, is often unappreciated until one begins to evaluate the importance of winter in one's connection to a particular region or place or in the character of the region in which we live. Our songs, our art, our literature include winter as a strong element. We like to ice fish; we hunt deer with snow on the ground; we like cross-country skiing during the winter holiday, or to skate and have sleigh rides; we have fun traveling by snowmobile; and we even have dog sledding. For those providing services in support of these activities, the loss of winter (as we know it) has direct economic consequences.

Other losses associated with the changing character of the Great Lakes Region as climate change proceeds include the loss of trout in inland lakes, reduction in the lengths of trout streams, and northward shifts of the southern boundary at which stream trout can be fished. We are also likely to lose the boreal forest and some of the mammals and birds with which we have grown up or which we would like to bring back. All of these changes and losses erode our sense of place. There are even direct losses to our sense of place from the rising temperature itself: cool summer nights and comfortable summer temperatures with open windows are likely to become less and less common.

Research on people's sense of place can serve the needs of resource managers, who are increasingly interested in place issues, but have yet to determine how to integrate this concept with everyday management concerns. For example, such research may help translate the more complex or abstract place concepts into more familiar ones such as people's beliefs, attitudes, and behaviors in place and around natural resources (Stedman forthcoming b).

Can we live without winter as we know it, without stream trout fishing, without growing our traditional crop, without our windows open in summer? Yes we can, but not without a feeling loss of the character of the individual place we call home and have grown to love, and wish to pass on to our descendants.

References

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