

Rivers of the Anthropocene, Phase 1: A Comparative Study of the Ohio and Tyne River Systems

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Abstract

"Rivers of the Anthropocene" addresses a fundamental problem facing scholars and policy makers alike: despite important advances in our understanding of the earth as a system — one in which humans and human systems have become recognized as prime agents in effecting changes to the earth — we have yet to create an approach that brings together scholars of earth systems with scholars of human systems. This is to the detriment of our overall understanding of global ecological change and limits our ability to respond to escalating crises. Without integrating methods from the earth sciences, social sciences, and humanities, scholars of the environment lose important tools in tackling some of the biggest issues facing humanity in the 21st century. As humans continue to play an increasingly significant role in altering their planet, it is incumbent upon environmental scholars to understand the human-environment interface in all its complexities. It is not enough that scientists measure what humans have done or what they can do to shift environmental systems; it is necessary that they work hand-in-hand with specialists in human systems to understand the limits and feedback mechanisms that beliefs, practices, ideologies, social structures, and cultural norms impose on human action. A comparative study of international river systems is a good place to begin building more meaningful bridges across the science-humanities divide, and it addresses the pressing issue of global water insecurity, which 80% of the earth's population faces. The first stage of "Rivers of the Anthropocene" will create a flexible, interdisciplinary methodological and conceptual framework for examining the human-environment interface, one in which specialists in the earth sciences can learn from the approaches of the humanities and human sciences and vice versa.