

Allocating Water: Economics and the Environment An Introduction

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Issue 131 of the *Journal of Contemporary Water Research and Education* draws from the 2004 UCOWR/NIWR Annual Conference held July 20-22 in Portland, OR. The 2004 conference immediately followed the loss of over 30,000 salmon and the near loss of the endangered silvery minnow due to low flows in the Klamath and Rio Grande Rivers, respectively. As of this writing, drought continues in the West, especially the Pacific Northwest, which usually enjoys abundant winter rain and snowfall, and at Lake Powell water levels are the lowest in a decade. The Bureau of Reclamation study, *Water 2025*, has identified areas throughout the West that are most likely to suffer acute water shortfalls, such as the Klamath and Rio Grande. These are fundamentally problems of water allocation not only between off-stream uses, but between these and the environment itself.

To address these fundamental problems of water management, this issue presents two perspectives—economic and ecological—and the difficult relationship between them. We begin with Henry Vaux's presentation of the 2004 National Academy of Sciences report *Confronting the Nation's Water Problems: The Role of Research*, a work of great interest to the academic community whose responsibility is to provide relevant scientific and scholarly analysis to the broader water management community. The discussion then shifts to Clifford Russell and Mark Sagoff who explore the philosophical divide between economic and ecological approaches to natural resource issues and the steep challenges facing quality inter-disciplinary work. Robert Young, who was presented with UCOWR's 2004 Warren A. Hall Medal, carries the discussion further by exploring methodological issues

that underlie an economic approach to water allocation. Charles Howe, the 2003 Warren A. Hall Medal winner, then shows how the separation of river basins, such as the Colorado, into multiple jurisdictions complicates the implementation of joint solutions at the basin scale, perpetuating instead "jurisdictional externalities." Joseph Dellapenna critiques the view that markets can directly allocate water to its highest and best uses by equalizing marginal benefits across all water uses. Instead, externalities, historic legal rights and regimes, and the common property nature of water all work to thwart the efficient allocation of water through markets. Anthony Williardson, Associate Director of the Western Water States Council, follows with a description of that body's 40-year process of grappling with western water issues. J.B. Ruhl teaches us, however, that it is no longer just the West that struggles with water allocation decisions. Florida, Alabama, and Georgia have also failed to agree on how the waters of the Apalachicola-Chattahoochee-Flint river basin should be managed when the needs of metropolitan Atlanta are incompatible with the needs of the long-standing oyster fisheries in the river's estuary. Michael Thabault of the U.S. Fish and Wildlife Service brings us back to the river as a habitat for endangered species whose flow needs are complex and can be in conflict with the needs of off-stream withdrawals. Finally, Ruth Mathews of The River Matters presents an approach to consensus-based problem solving that utilizes adaptive management as its core.

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