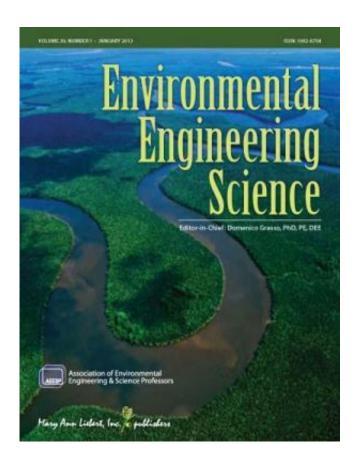


Can we save our urban water systems?

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Existing urban water systems are at the end of their design lifetimes. New, innovative solutions are needed, and these must combine technology and engineering with an understanding of social systems and institutions. The current issue of *Environmental Engineering Science*, the Official Journal of the Association of Environmental Engineering and Science Professors, focuses on Re-inventing Urban Water Systems. Of



particular note is an insightful article that presents the challenges and opportunities facing urban water system innovation.

The article, entitled "The Innovation Deficit in Urban Water: The Need for an Integrated Perspective on Institutions, Organizations, and Technology," contends that for new innovations to be implemented successfully, engineers must understand the social, economic, institutional, and political mechanisms that underlie the humantechnology interface. Coauthors Michael Kiparsky, David Sedlak, Barton Thompson, and Bernhard Truffer (University of California at Berkeley School of Law; University of California at Berkeley School of Engineering; Stanford Law School and Woods Institute for the Environment, Stanford, CA; and Swiss Federal Institute of Aquatic Science and Technology, Dübendorf, Switzerland, respectively) are all members of a U.S. National Science Foundation Engineering Research Center focused on developing new approaches to urban water infrastructure - ReNUWIt (Reinventing the Nation's Urban Water Infrastructure).

"The Kiparsky paper and the EES special issue are timely and are destined to be among the most influential and important contributions to the field of environmental engineering in recent times," says Domenico Grasso, PhD, Editor-in-Chief and Provost, University of Delaware. "The holistic approaches outlined are not only well suited for addressing the complex problems of the urban infrastructure but may serve as a template for addressing many other sociotechnological challenges of the 21st century."

Guest Editors of this special issue of *Environmental Engineering Science* on Re-inventing Urban Water Systems, David Sedlak, Jörg Drewes, Colorado School of Mines, Golden, and Richard Luthy, Stanford University, compiled a series of articles that focus on topics including innovation in complex systems; active management of natural systems to



enhance the performance of urban water infrastructure; and management of concentrates from water treatment processes.

"Our modern urban water infrastructure is one of the greatest engineering achievements of the 20th century," says Jennifer Becker, President of the Association of Environmental Engineering and Science Professors. "This important issue of EES highlights a paradigm shift in our <u>urban water</u> systems and that technological innovations are urgently needed if the growing demands for water and other resources are to be sustainably met."

Provided by Mary Ann Liebert, Inc

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