

W A T E R R E S O U R C E S

IMPACT

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ENVIRONMENTAL FLOWS

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ENVIRONMENTAL FLOWS

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Guest Editors

Nicole Silk (nsilk@tnc.org) and Andrew T. Warner (awarner@tnc.org)

This issue of *Water Resources IMPACT* focuses on environmental flows and sustainable water management.

INTRODUCTION: ENVIRONMENTAL FLOWS

3 The Sustainable Waters Program

Nicole Silk (nsilk@tnc.org)

The Sustainable Waters Program provides environmental flows through collaborative science and river management.

3 Collaboration and Environmental Flows

Clay J. Landry (landry@waterexchange.com)

A collaborative effort with The Nature Conservancy's Sustainable Water's Program.

FEATURE ARTICLES

4 Water: One Resource, Many Uses

Lisa T. Morales (Lisa.T.Morales@hq02.usace.army.mil) and
Larry J. Prather

Demands on our nation's waters are increasing with often competing needs and society is looking to water managers for answers. The U.S. Army Corps of Engineers looks at the problems and solutions for our changing water needs.

6 Incorporating Environmental Flows Into Water Management

Andrew T. Warner (awarner@tnc.org)

Innovative water policy around the world is beginning to define and implement environmental flows – meeting the needs of people and nature.

10 Models and Software for Supporting Ecologically Sustainable Water Management

John T. Hickey (john.t.hickey@usace.army.mil)

The U.S. Army Corps of Engineers has been developing tools for protecting and restoring environmental flows on rivers across the country.

15 Green River, Kentucky, Conservation Project

W. Michael Turner (michael.turner@lr102.usace.army.mil)

Collaboration and partnerships are the key to meeting multiple demands on a river system. The Green River in Kentucky has been benefiting from a nonformal collaboration.

18 Bill Williams River, Arizona: Restoring Natural Variability in an Arid Lands River

Andrew Hautzinger (andrew_hautzinger@fws.gov)

The Alamo Dam on the Bill Williams River in Arizona is being re-operated to provide for the plants and animals that rely on its instream flows in a dry, desert system.

21 Savannah River, Georgia: Science to Support Adaptive Implementation of Environmental Flows to a Large Coastal River, Floodplain, and Estuary

Amanda Wrona Meadows (awrona@tnc.org),

Darold Batzer, Merryl Alber, and Rebecca R. Sharitz

A look at the Savannah River shows how a flood prone system can be managed to protect homes and cities while sustaining the estuary and other areas dependent on its water flows by being adaptive and responsive.

25 Willamette River, Oregon: Moving Toward Basin-Wide Flow and Floodplain Restoration Contaminants (CREEC)

Leslie B. Bach (lbach@tnc.org), **Matthew Rea,**

Mary Karen Scullion, Karl Kanbergs, and Jeff J. Opperman

In the Willamette basin, a process of unique partnership, collaborative approaches for synthesizing scientific information and developing environmental flow recommendations, and an adaptive and integrative framework for implementing these changes is working to protect the whole basin.

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(Opinions expressed by our columnists are their own and do not represent the opinion or position of AWRA.)

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SEPTEMBER 2007

MEASURING MONITORING PERFORMANCE BY LOCAL WATERSHED GROUPS

WINFIELD G. WRIGHT (GUEST EDITOR)

LAUREL E. PHOENIX (PHOENIXL@UWGB.EDU)

NOVEMBER 2007

WATER RESOURCES DISASTER RECOVERY

ERIC J. FITCH (FITCHE@MARIETTA.EDU)

JANUARY 2008

GIS AND WATER RESOURCES

LORRI PELTZ-LEWIS (GUEST EDITOR)

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