

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

# IMPACT

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HOMELAND  
SECURITY

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## HOMELAND SECURITY

Associate Editor • **ERIC J. FITCH** • [fitche@marietta.edu](mailto:fitche@marietta.edu)

Homeland Security, as has been demonstrated since the turn of the millenia, deals not just with deliberate acts of hostility waged by foreign forces on one's native soil but also from the impacts of natural phenomena on the lives and property of people. In this issue, we try to address the gamut of these issues from a variety of perspectives. We begin with an article assessing the response by the authorities to Hurricane Katrina and its aftermath. Next the safety, security and utility of America's ports and harbors are addressed by one of our leading authorities in this area of maritime law and policy. Our third article deals with the role of the U.S. EPA in protection of drinking water supplies. In a related article, from the perspective of a local public health officer, a true water planning Gordian knot is addressed: the provision of security for the thousands of water and wastewater facilities found in our nation and the coordination of federal, state and local health and safety agencies to aid in this protection. Finally, for the "whiz bang" members of our readership, we have an article from a group of researchers at Sandia National Labs discussing their work in developing new technologies to safeguard water resources.

### OVERVIEW

#### 4 Water Resources and Homeland Security - An Introduction **Eric J. Fitch** ([fitche@marietta.edu](mailto:fitche@marietta.edu))

How do we get a handle on this thing called "Homeland Security" and what does it mean to the management of water resources? How do we incorporate considerations of the actions of hostile humans and the impacts of natural hazards into coherent plans for protecting lives and property? How can we assure safety in our ports, harbors, rivers, and major lakes and of the waters carried within?

### FEATURE ARTICLES

#### 5 Hurricane Katrina: Implications for Building and Living in Harm's Way **Stephen P. Leatherman** ([Stephen.L Leatherman@fiu.edu](mailto:Stephen.L Leatherman@fiu.edu))

The recent spate of hurricanes, especially Katrina, has sparked a public debate about the best way to build and live on the coast in harm's way of storm surges and waves. The options range from merely rebuilding in the same footprints to a radical paradigm shift in construction for coastal high hazard areas.

#### 9 Securing Our Maritime Transportation System for the Future **Malcolm Williams** ([mwumuc@yahoo.com](mailto:mwumuc@yahoo.com))

Ports and harbors are critical for the national defense, economy, and well being. They are also areas that are vulnerable to attack from human and natural agents and from neglect by political and economic entities.

#### 12 The Role of the U.S. Environmental Protection Agency in Protecting America's Drinking Water Supply **Regan Murray** ([Murray.Regan@epa.gov](mailto:Murray.Regan@epa.gov)) and **Steve Allgeier**

Drinking water safety is a critical area of concern, especially in light of the events of 9/11 and subsequently threats to homeland security. Roles and steps the USEPA is taking to secure the safety of our drinking water?

#### 16 Water Utilities and Emergency Preparedness Planning **Rebecca Head** ([rebecca\\_head@monroemi.org](mailto:rebecca_head@monroemi.org))

In the post 9/11 environment, the USEPA and the Congress authorized the National Drinking Water Advisory Council to form a special group to address the safety and security of critical water infrastructure - particularly local water and wastewater utilities. This group was called Water Security Working Group or WSWG and it was their job to come up with a report and a program for dealing with these issues.

#### 19 New Technologies for Securing Water Safety: Research at Sandia National Laboratories **Ray Finley** ([REFINLE@sandia.gov](mailto:REFINLE@sandia.gov)), **Sean McKenna**, **Howard Passel**, and **Jeffrey J. Danneels**

After 9/11, many concerns were raised about the vulnerability of our water systems to malicious contamination and other attacks. The national laboratories have stepped up to these challenges across Departments and Agencies. Sandia National Laboratories have lent their expertise to come up with new technologies to detect and prevent harm to the nation's water supplies.

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**MARCH 2006**

USING THE NATIONAL HYDROLOGY DATA SET  
JEFFREY D. SIMLEY (GUEST EDITOR) ([jdsimley@usgs.gov](mailto:jdsimley@usgs.gov))

**MAY 2006**

ADAPTIVE MANAGEMENT  
GERALD SEHLKE (GUEST EDITOR) ([gerald.sehlke@inl.gov](mailto:gerald.sehlke@inl.gov))

**JULY 2006**

SUSTAINABLE WATER RESOURCES  
HARRY ZHANG (GUEST EDITOR) ([Harry.Zhang@parsons.com](mailto:Harry.Zhang@parsons.com))

**SEPTEMBER 2006**

MANAGEMENT IMPLICATIONS OF CLIMATE CHANGE  
JOHN FURLOW (GUEST EDITOR) ([furlow.john@epa.gov](mailto:furlow.john@epa.gov))

**NOVEMBER 2006**

MILLENNIUM DEVELOPMENT GOALS  
FAYE ANDERSON ([faye\\_anderson@comcast.net](mailto:faye_anderson@comcast.net))

All of the topics listed above are subject to change. For information concerning submitting an article to be included in the above issues, contact the designated Associate Editor or the Editor-In-Chief N. Earl Spangenberg at ([espangen@uwsp.edu](mailto:espangen@uwsp.edu)).



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