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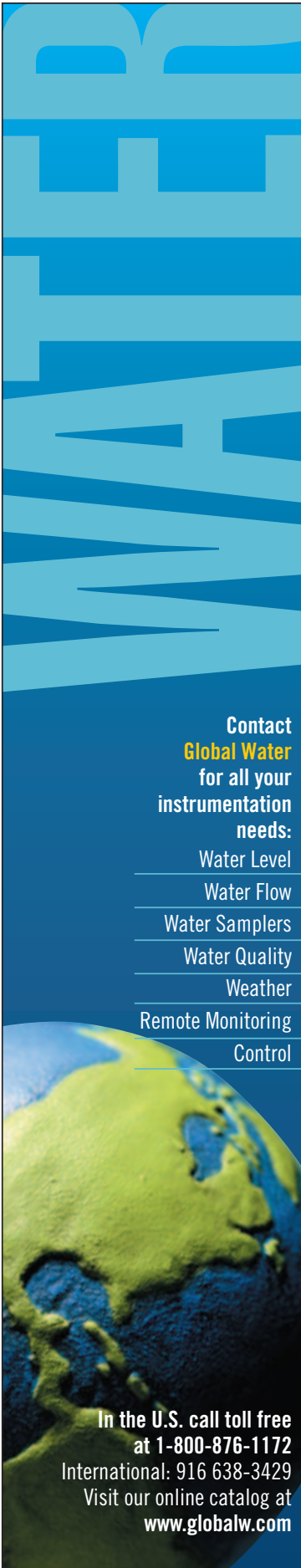
May 2003 | Volume 5 | Number 3

**Water Resources/Hydrology
At The Extremes**

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WATER RESOURCES/HYDROLOGY AT THE EXTREMES

Associate Editor
CHARLES W. SLAUGHTER
(cslaugh@uidaho.edu)

We look at selected aspects of water resources “extremes” in this issue of IMPACT. Extremes of climate and extremes of individual precipitation, snowmelt, and runoff events, including “catastrophic” geologic processes, must be considered in improved water resources management.

OVERVIEW

- 3 Water Resources/Hydrology at the Extremes**
Charles W. Slaughter (cslaugh@uidaho.edu)

FEATURE ARTICLES

- 4 Community Planning for Floods in Arid Regions**
John Cobourn (cobournj@unce.unr.edu)
Steven R. Lewis (lewiss@unce.unr.edu)
Alluvial fans are often preferred development locations in arid regions, because they offer sites elevated from normal stream channels. Flash floods on alluvial fans can be rapid, localized, and catastrophic. This risk should be recognized by planners and developers.
- 10 Post-Eruption Hydrology and Sediment Transport in Volcanic River Systems**
Jon J. Major (jjmajor@usgs.gov)
Volcanic eruptions are “extreme” geologic events that can have devastating geomorphic and hydrologic consequences, as demonstrated by the 1980 eruption of Mount St. Helens in Washington.
- 16 Water Resources Management: A Challenging Issue for Tropical Islands in the Western Pacific**
Shahram Khosrowpanah
Leroy Heitz (lheitz@uog.edu)
Islands in the Western Pacific face unique water management challenges, including marked seasonal variation of precipitation, susceptibility to typhoon damage, limited access to safe drinking water, aging water delivery systems, and lack of a tradition of water conservation.
- 19 Intense Precipitation in Cuba**
Eduardo O. Planos Gutiérrez (planos@met.inf.cu)
Frederick N. Scatena (fns@sas.upenn.edu)
Cuba frequently receives very large rainfall. Recognition of the magnitude and spatial distribution of extreme rainfall will help in planning for management and mitigation of the resulting extreme runoff.
- 21 Extreme Flow Events in the Arctic Islands of North America**
Ming-ko Woo (woo@mcmaster.ca)
Permafrost underlain ecosystems have pronounced and extreme variability in hydrologic regimes. Streamflow is concentrated in a very short snowmelt and runoff season characterized by strong daily seasonal and interannual variability.

WATER RESOURCES

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POWER SHIFTS IN WATER MANAGEMENT
FAYE ANDERSON
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SEPTEMBER 2003

FRAMEWORK FOR MONITORING
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NOVEMBER 2003

SOCIAL FOUNDATIONS OF WATER MANAGEMENT
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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 listed on pg. 1 or the Editor-In-Chief N. Earl Spangenberg at (espangen@uwsp.edu).

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[Cover Photo: Slide Mountain south of Reno, Nevada, showing the flood debris at the foot of Ophir Creek – by P.A. Glancy, USGS]