MANAGING WATER RESOURCES DEVELOPMENT IN A CHANGING CLIMATE
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Climate change has captured public attention in recent years. This is particularly evident in the water resources community where we are seeing climate change come into watershed assessments, engineering design, and environmental requirements. Articles in this issue demonstrate the range of discussions taking place across the country on water resources. These topics represent a cross-section of presentations planned for AWRA's spring specialty conference in Anchorage, Alaska.

INTRODUCTION

4 Understanding Climate Change and Water Resources: How Far Have We Come in the Last 10 Years: Where Do We Go From Here? ... Michael R. Lilly

FEATURE ARTICLES

6 Warmer Winters and Warmer Nights: A Mixed Blessing ... Ed Berg
Climate changes and ecosystems responses can be difficult to understand. What differences do changes make between day and night conditions? This article presents a discussion about some of the various ecosystem processes that work at these timescales.

8 Integrated Watershed Scale Response to Climate Change for Selected Basins Across the United States ... Steven L. Markstrom and Lauren E. Hay
As the questions of climate change has moved from “if” it is happening to “how” it is changing our environment, it has become important to have regional assessment designs to allow us to better understand how changes are occurring now and in the future. The authors are using the Precipitation Runoff Modeling System (PRMS) to assess the potential effects of long-term climate change on 15 basins representing different hydroclimatic regions in the United States.

11 Climate Change and Transboundary Water Resources ... Chundun Prakash Khedon, Rosario Sanchez, and John R. Giardino
Management of water resources at international boundaries can be complex and involves the mixing of laws and management approaches from many different perspectives. The additional complexity of climate change will likely change some of the ways people look at managing water at international boundaries, as well as whether we have to go back and evaluate past treaties and management practices.

14 Adapting to Climate Change Through Sustainable Design and Reduced Water Demand ... Jack Hébert and Michael Lilly
Northern communities in Alaska are dealing with both extreme environments and rapid changes in climate conditions. This article shows how some simple methods of reducing water use may help reduce the impacts of future water supply variability. An adaptive approach related to water supply and uncertainty involving demand reduction is discussed.
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An Observation From the Editor-in-Chief ... This month’s issue of Water Resources IMPACT got away from us. Problems with authors’ schedules and Conference scheduling ended up putting us behind the eight-ball so that we could not get a completed issue out in a timely manner – hence the issue you hold in your hand. This will not happen again. From now on, your editorial board will have a “back-up” issue prepared so that scheduling problems will not interfere with the timely distribution of our bi-monthly issues. I apologize for the unacceptable delay for this issue, and I assure you that you can expect to receive your IMPACT “on time” in the future.

N. Earl Spangenberg

Front Cover ... Photo is of Portage Creek that flows from Portage Lake into Turnagain Arm, the bay that is just south of Anchorage heading toward Seward – Courtesy of Gary Whitton, Fairbanks, Alaska.

AWRA ... Community, Conversation, Connections

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