



**The Center for Global Change
and Arctic System Research**

University of Alaska Fairbanks
P.O. Box 757740
Fairbanks, AK 99775-7740
phone 907/474-5698
fax 907/474-6722
<http://www.besis.uaf.edu>

Editors:

Gunter Weller and Patricia A. Anderson,
Center for Global Change and Arctic
System Research, University of Alaska
Fairbanks.

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Alison York
Laura Morisky

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Deb Coccia

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Implications of Global Change in Alaska and the Bering Sea Region

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"It is the first, and in a way the most important task of science to enable us to predict future experience, so that we may direct our present activities accordingly."

Heinrich Hertz, 1894

FOREWORD

In a 1992 address to the American Association for the Advancement of Science, Dael Wolfle, distinguished scholar and senior science advisor, talked about the issue of prediction in science. He said that a major goal of science is to obtain a sufficiently robust understanding of a set of phenomena so that one can make accurate predictions of events that have not yet occurred. This was also the purpose of the discussions at the workshop reported in these proceedings. The topic was global change and the likely regional impacts in Alaska and the Bering Sea region expected as a consequence of global change.

While considerable uncertainties still exist about the exact nature of these impacts, there can no longer be any doubt that major changes in the climate have occurred in recent decades in the region, with visible and measurable consequences following the climate changes. Even greater impacts are likely in the future; some of them will be positive while others will be detrimental to human activities. Our purpose in organizing the workshop was to bring scientists and stakeholders, the people affected by change, together to discuss the future, based on what we know and what we can predict with some confidence, and to begin a dialog about possible mitigation or adaptation measures.

The process of getting the stakeholders and scientists together to discuss the relevant issues was an important product in itself. This and the published proceedings can be the basis of successive improvements in future workshops. It is clear that a definitive assessment of climate impacts is not possible immediately but will need annual updates as new information becomes available and is considered. Since the regional impacts assessments have become a high priority in many countries, including the United States where the U.S. Global Change Research Program (USGCRP) is taking the lead, such future workshops will undoubtedly occur. This workshop was part of a series of USGCRP regional climate change workshops being held in 1997 and 1998 as a first step in a U.S. national assessment of the consequences of climate change.

Gunter Weller and Patricia Anderson
Center for Global Change and Arctic System Research
University of Alaska Fairbanks

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