

ABSTRACTS

BIOLOGICAL SCIENCES – AQUATIC

MONTANA CHAPTER OF THE AMERICAN FISHERIES SOCIETY 41ST ANNUAL MEETING

WARMING TO THE FUTURE: PREPARING FOR THE POTENTIAL EFFECTS OF CLIMATE CHANGE ON MONTANA'S AQUATIC RESOURCES

FEBRUARY 12-14, 2008

BILLINGS, MONTANA

2008 INVITED AND CONTRIBUTED PAPER ABSTRACTS

Over 180 members of the Montana Chapter of the American Fisheries Society gathered in Billings, Montana, February 12-14th for the 41st annual meeting of the Chapter. The meeting was organized around the theme of “*Warming to the Future: Preparing for the Potential Effects of Climate Change on Montana's Aquatic Resources*” and the opening plenary session included six very informative papers discussing science and policy related to this topic. **Mike Phillips** and **Dave McGinnis** set the stage by discussing the changing broad scale climate patterns and potential future climate trends and policy needs. The remaining plenary speakers — **Bruce Anderson, Robert Gresswell, Jack Williams, and Bruce Riemen**—brought the issue to ground and focused on the implications of a changing climate on habitat, stream temperatures, and native fishes. A consistent message to a somber audience was that climate change will likely be the biggest issue that aquatic biologists, managers, researchers, and practitioners have ever faced. Consider this: along with 1998, the first five years of the twenty first century were the hottest on record; arctic sea ice has lost nearly half its average thickness since 1950; greenhouse gas concentrations in the atmosphere are approximately 40% higher than pre-industrial levels; growing seasons at higher latitudes are approximately two weeks longer than in the 1950s; and the list goes on. Recognizing much uncertainty, and in some ways incredulity regarding the science of climate change, it is becoming increasingly clearer that change is afoot. What that change means for Montana's aquatic ecosystems remains a difficult question. The plenary session was organized in attempt to catalyze our members to keep this issue in the forefront of their professional activities. How can we as administrators, managers, and researchers better prepare for climate change related issues that seem an inevitable future? Will we be able to respond to a public and constituencies looking to us for guidance and solutions? Is there data that can be collected, research that can be conducted, policies that can be enacted, or activities and traditions that can be changed that will allow us to be better prepared and more proactive to address this issue? Of course there are, but they may not be easy.

The following abstracts presented at the 2008 annual meeting, which cover a range of topics from climate change to big river management, from native fish management and restoration to research on non-game fishes, demonstrates the wide reaching, important and timely work conducted by Montana's fisheries professionals. Based on this and past meetings,

there is little doubt that the dedicated individuals, agencies, and organizations represented by the Montana Chapter of the American Fisheries Society will continue to strive to meet the challenges posed by a changing future.

Carter G. Kruse, President. Montana Chapter of the American Fisheries Society.