Global warming is an undeniable reality, according to the latest (2007) report from the Intergovernmental Panel on Climate Change (IPCC), an international group of scientists convened by the United Nations. The evidence is clear and noticeable: a rising average global air temperature, widespread melting of glaciers and polar ice, and rising mean sea levels worldwide. The report sounds the alarm that the Earth is warming, and that major components of our climate system are already responding to that warming.

What will global warming mean for our region? The “Climate Change in the Great Lakes Region” seminar series provides a forum to begin this important discussion. Over the next several months, experts will speak at sites throughout Wisconsin to discuss what is known, what is predicted and what can be done to adapt. The series begins with a keynote presentation by Dr. Kevin Trenberth, a leading climate researcher from the National Center for Atmospheric Research and one of the authors of the current IPCC report. Subsequent talks will highlight how climate change could affect our property, water resources, fisheries, and public health.

2007 SEMINAR SERIES:

**MARCH 13**
THOMAS E. CROLEY II
Research Hydrologist, Great Lakes Environmental Research Laboratory

Great Lakes Climate Change Hydrologic Impact Assessment
Green Bay, Wisconsin

KEN POTTER
Professor of Civil and Environmental Engineering, UW-Madison

Adapting Stormwater Management to Climate Change
Green Bay, Wisconsin

**APRIL 23**
KEVIN TRENBERTH
Senior Scientist, National Center for Atmospheric Research

KEYNOTE PRESENTATION:
Global Warming Is Unequivocal
Morgridge Auditorium, Grainger Hall
Madison, Wisconsin

**JUNE 7 & 11**
JOHN MAGNUSON
Emeritus Professor of Zoology and Limnology, UW-Madison

Climate Change and the Waters of Wisconsin
Superior and Milwaukee, Wisconsin

**AUGUST 8**
TIM ASPLUND
Water Resources Specialist, Wisconsin Department of Natural Resources

Climate Change and Wisconsin’s Lakes and Groundwater
Ashland, Wisconsin

**AUGUST 15**
PHILIP KEILLOR
Coastal Engineering Specialist (Retired)
UW-Madison Sea Grant Institute

How Climate Change May Affect Coastal Property Owners
Mequon, Wisconsin

**SEPTEMBER 12**
JONATHAN PATZ
Associate Professor of Environmental Studies and Population Health Sciences, UW-Madison

Climate Change and Public Health Concerns
Madison, Wisconsin

**SEPTEMBER 24**
BRIAN SHUTER
Research Scientist, Ontario Ministry of Natural Resources and Adjunct Professor of Zoology, University of Toronto

Climate Change and Fisheries
Manitowoc, Wisconsin
Effects of Climate Change on the Fish and Fisheries of the Great Lakes Basin

Brian Shuter
Research Scientist, Ontario Ministry of Natural Resources and Adjunct Professor of Zoology, University of Toronto

The commercial and sport fishery on the Great Lakes is valued at more than $4 billion annually. In Wisconsin alone, Great Lakes trout and salmon fishing stamp fees bring in nearly $1.7 million a year. However, the Great Lakes fishery is still struggling to recover from several heavy blows over the last two centuries. Fish populations declined dramatically in the late 19th century from overfishing, pollution and habitat destruction. In addition, the opening of the Welland Canal in 1829 and St. Lawrence Seaway in 1959 cleared the way for a long line of invasive species that continue to threaten the fishery today.

Our changing climate is one of the latest threats to the valuable Great Lakes fishery. According to the latest report from the Intergovernmental Panel on Climate Change, freshwater fish of the Great Lakes Basin are expected to be significantly affected by climate change. Brian Shuter will present evidence for recent and future changes in the aquatic “climates” of the Great Lakes, based on historical analyses of data from Lake Erie and other Great Lakes. These results suggest that essential habitats for some native fish populations will shrink significantly, while habitats for other native and some nonnative species will expand. Shuter will discuss the mechanisms underlying these changes and review policy options for mitigating their effects.

Brian Shuter received his doctorate in aquatic ecology at the University of Toronto in 1975. He is currently a research scientist with the Ontario Ministry of Natural Resources and an adjunct professor at the University of Toronto. His research has focused on the role of climate in shaping the distributions and life histories of freshwater fish. Over the last decade, he has helped review potential impacts of climate change on freshwater fish for the federal government of Canada, the American Fisheries Society, the International Joint Commission, the Ecological Society of America and the Union of Concerned Scientists.