Projected Future U.S. Soil Moisture Patterns

Percent Reduction in June-August Soil Moisture

2xCO₂
Increasing drought previously reduced soil stability
Changing drought frequencies will shift wildfire distributions
Increasing Spring Flooding
Hurricane frequencies and intensities and sea levels will shift
Storminess and storm intensity is increasing
Early spring moisture may increase
Future Warming in the Great Lakes Region
Future rainfall amounts in the Great Lakes Region
Future climates can be understood in terms of today’s geography.
Frequency of heavy rainfall events in the Great Lakes Region is increasing.
Wildfowl populations decline
Fish populations undergo stress

Lake Michigan Fish Kill
from page 23

Photo Credit: John J. Magnuson
Wetter springs, drier summers

Precipitation Shifts Signal Trouble for Farmers
Great Lakes water levels decline
Climate Changes Projected for the Pacific Northwest: Available Water

The graph shows the predicted flow in 2050's compared to the present flow. The predicted flow is higher during the spring and summer months, reaching a peak in May and June, whereas the present flow is lower and more consistent throughout the year.
Historic Changes in Wildfires

Pacific Northwest Fires, 1921-2000

Area Burned in Millions of Acres

OR-WA-ID — 5 per. Mov. Avg. (OR-WA-ID)
Pacific Northwest: Changing Salmon Populations
Pacific Northwest: Declining Surface Water for Irrigated Farming
Pacific Northwest: Declining Water for Summer Power
Assessments used here

Confronting Climate Change in the Great Lakes Region
Impacts on Our Communities and Ecosystems

IMPACTS OF CLIMATE VARIABILITY AND CHANGE
Pacific Northwest

PREPARING FOR A CHANGING CLIMATE
The Potential Consequences of Climate Variability and Change

Great Lakes Overview
A Report of the Great Lakes Regional Assessment Group
For the U.S. Global Change Research Program
October 2000

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