



Impact of Climate Change in New England

*Saugus River Watershed Council
Annual Meeting*

Union of Concerned Scientists
November 30, 2010

Water: A Vital Resource



Kevin Tavares

Vera Bogaerts

Changes in the Water Cycle



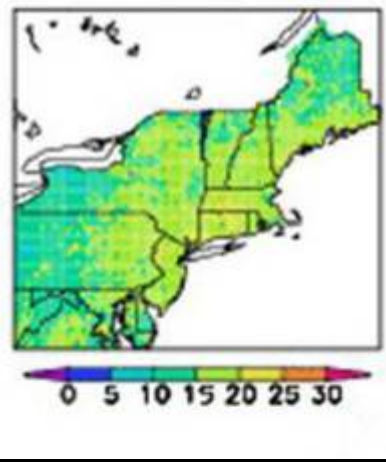
More water
when we don't
need it.

Art Otremba



Less water
when we do.

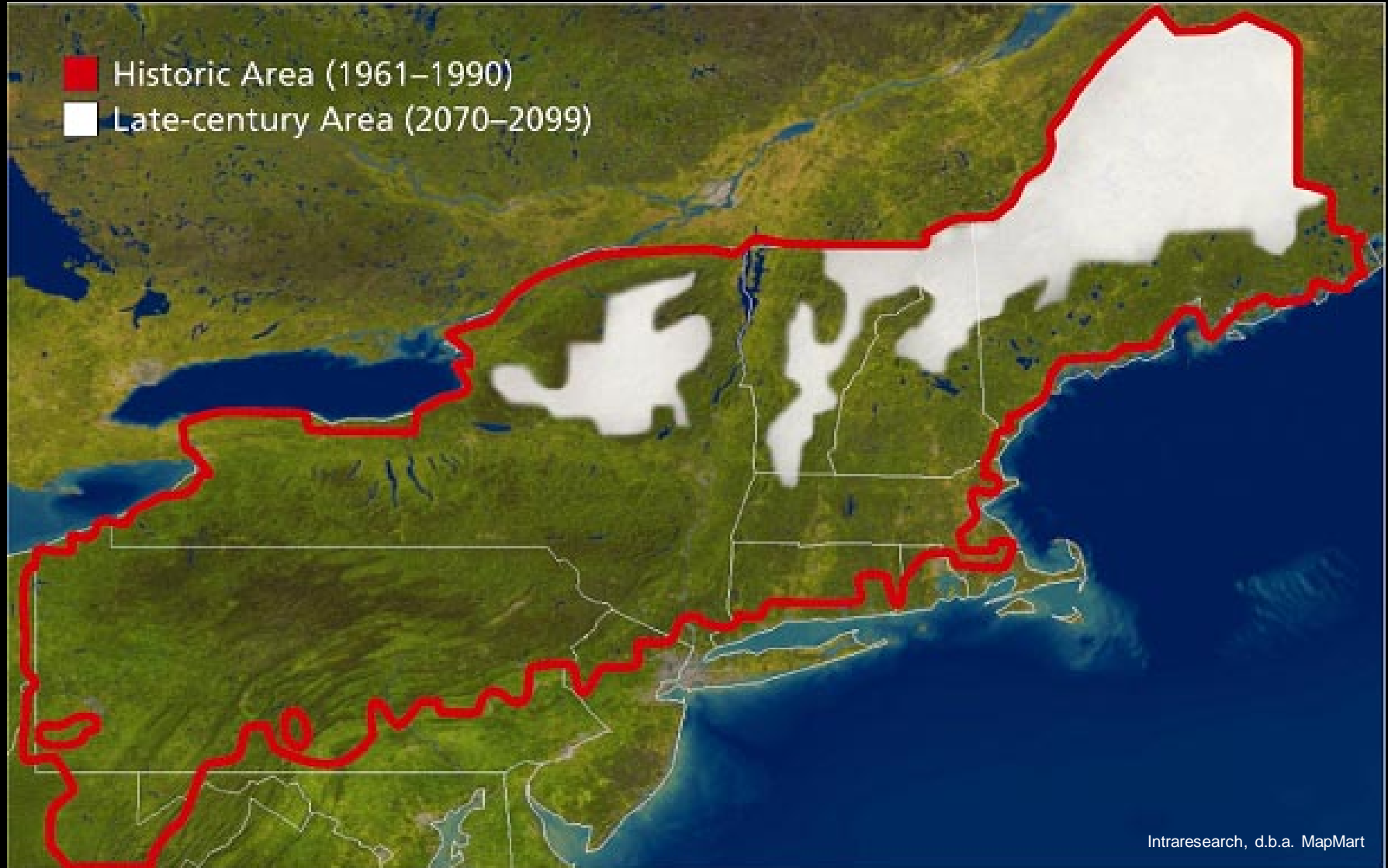
USGS/David Armstrong



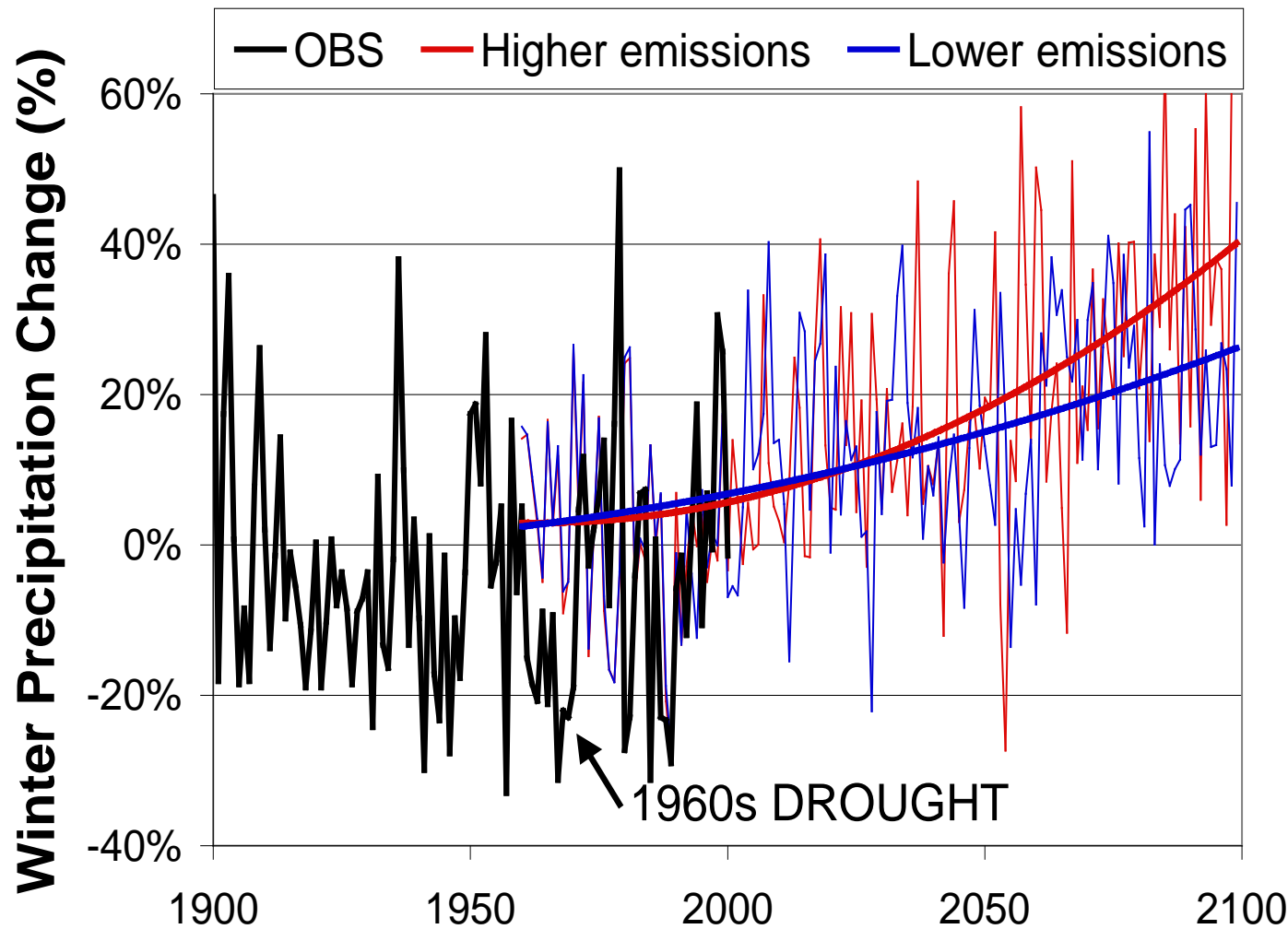
Increasing Summer Drought

- Over course of century, hotter summers are likely to feature increased evaporation rates and reduced soil moisture
- By end-of-century
 - short-term droughts projected to occur annually in Massachusetts, with higher emissions.
 - only slightly greater risk of drought under the lower emissions scenario.

The Changing Face of Winter



Increasing winter precipitation



As temps rise,
more
precipitation
falling as rain,
less as snow

Extreme Precipitation

- Heavy rainfall events are becoming more frequent across the Northeast
- Under both emissions scenarios
 - rainfall is expected to become more intense
 - periods of heavy rainfall are expected to become more frequent



Northeast Climate Impacts Assessment

