

LEAGUE OF WOMEN VOTERS **Climate Cricie Series** Climate Skeptics say that although Climate Change may be real, they don't know why it's happening. Science says: Global Temperatures increased from 1850 to 2018 Vertical scale: 2.5°F (1.4°C) in 0.25°F steps Blues are colder Reds are warmer Global Comparisons of Average Annual Temperature - 1850 to 2018

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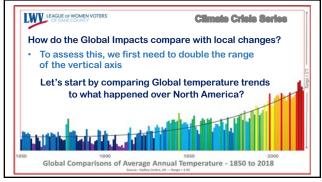
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LEAGUE OF WOMEN VOTERS **Climate Crisis Series** Increases in CO₂ have been documented since 1958 And the rate of increase

LEAGUE OF WOMEN VOTERS' **Climate Crisis Series** What Processes in the Atmosphere Cause "CO₂Warming"? Increasing CO2 disrupts the normal role of the atmosphere as a 'radiator' that balances incoming solar radiation and outgoing terrestrial radiation by: Reducing the loss of heat through the atmosphere to space and Increasing rewarming of the earth's surface by the atmosphere.

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LEAGUE OF WOMEN VOTERS' **Climate Crisis Series** How do the Global Impacts compare with local changes? To assess this, we first need to double the range of the vertical axis Global Comparisons of Average Annual Temperature - 1850 to 2018



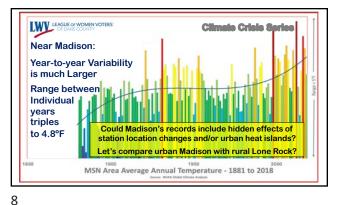
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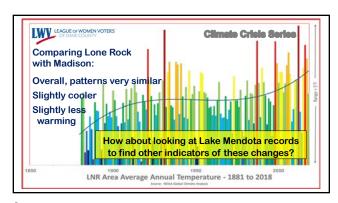
For North America:
Range of individual years between 1910 and 2018 increased to 3.2°F (from 2.4°F Globally)
Range of best-fit trendline increased to 2.2°F (from 1.7°F)
Let's compare this with changes around Madison

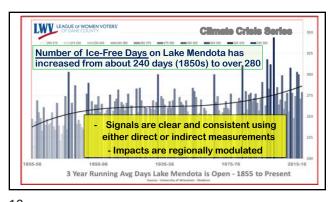
1850

1990
North American Average Annual Temperature - 1881 to 2018

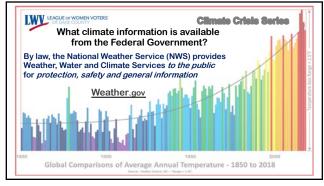


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What climate information is available from the Federal Government?

Tasks focus on Observations, Analyses and Forecasts
These include:
General forecasts of weather, rivers/coasts, and climate
Warnings of hazardous weather and flooding potential
Other extreme weather/climate events
Shared global responsibility for international aviation and marine forecasts, as well as space weather products

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