

# Climate Projections

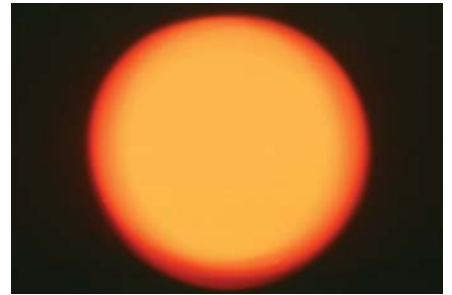
## Report for City of Iowa City : Spring 2016

The City of Iowa City, in an effort to better prepare for the coming impacts of climate change, has been coordinating with climatologists to predict how we might be affected. This report shows the findings of the study:

### Climate in the Heartland: Historical data and future projections

#### Changes so far:

- More frequent warm nights
- Nighttime temperatures have increased more than daytime temperatures
- Fewer cool summers
- Average date of first frost occurs one week later
- Average date of last frost occurs one week earlier, and
- More years in which we experience eight or more days with 1.25 inches or more of rainfall in one day, which can lead to flooding. Seven of the 12 highest years in which we have experienced this level of rainfall have occurred in the past 30 years.



Floodwaters over Dubuque Street, 2008

# The climate changes we can expect:

- Average temperatures in most future years will exceed extremes that used to occur only once per decade.
- Last frost in spring will occur earlier.
- First frost in fall will occur later.
- Spring precipitation is projected to increase.
- Excessive daily rainfall is projected to increase substantially.
- Annual temperature is expected to increase so much that the 30-year average temperature in the future will be well above the hottest years of the normal historical temperature range.
- From 2021-2050, annual precipitation is expected to increase by 10%, with another 5% by 2051-2080.
- Average annual temperatures are projected to increase by 2.7 degrees in the period 2021-2050.

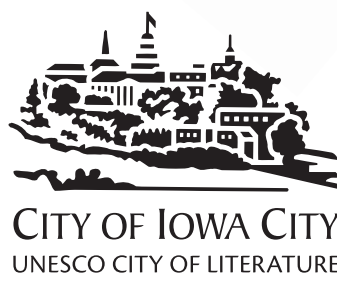


## Moving forward

In February 2016, the Iowa City Mayor signed the Compact of Mayors, a global coalition of city leaders launched at the 2014 United Nations Climate Summit to address climate change. By participating in the Compact, the Mayor commits to climate action by taking stock of greenhouse emissions and the current effects of climate change in the city, creating an action plan with clearly defined reduction targets, and implementing a common system of measuring emissions, monitoring climate risks, and tracking progress with regular reports.

As one of the key initiatives launched at the Climate Summit in 2014, the Compact of Mayors is the world's largest collective effort by cities to date to tackle climate change. For more information, visit [www.compactofmayors.org](http://www.compactofmayors.org).

**Climate change is  
not just a future problem,  
it is happening now.  
The time for adaptation is now.**



Spring 2016 Update

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