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## FOR IMMEDIATE RELEASE

### **Newly Released Climate Analysis Projects Denver Metro Area Expected to Experience More 100 Degree Days**

**June 8, 2017** - [The Rocky Mountain Climate Organization](#) (RMCO) today released [a new climate analysis](#) that projects the Denver metro area will see an increase in the frequency and extent of extreme heat days by mid-century, and even larger increases later, without significant global efforts to reduce greenhouse gas emissions.

According to the analysis, a typical year in the Denver metro area in 2040-2059 is projected to average seven days a year 100° or hotter, and a full month's worth—34 days a year— in 2080-2099. The hottest year in mid-century is projected to have 25 days 100° or hotter, and the hottest year late in the century to have 72.

“This would be fundamentally different from the climate we know here, which only rarely hits 100 degrees,” said Stephen Saunders, president of RMCO. “If we keep changing the climate as we are now, before the end of this century we could have the current extremes of Tucson, AZ.”

Commissioned by the City and County of Denver's [Department of Environmental Health](#) (DEH), the analysis provides information to help Denver implement its [Climate Adaptation Plan](#), released in 2014 and provides further foundation for Denver's ambitious 80 percent reduction in Greenhouse Gas emissions by 2050 goal.

“The recent pullout from the Paris Agreement by the U.S. only accelerates our efforts to continue to protect Denver's community from the impacts of climate change,” said Bob McDonald, Executive Director of DEH. “These projections powerfully illustrate how much difference it makes in Denver whether future heat-trapping emissions continue increasing or are reduced.”

In the following key projections for the metro area, the medians of the projections from multiple climate models based on two possible levels of future heat-trapping emissions: The first reflects the current trajectory with continued high increases; the second scenario reflects very low emissions from rapid and

sustained global reductions in emissions. Projections are shown for mid-century (2040 – 2059) and late in the century (2080 – 2099).

#### **Days 100° or hotter in typical years:**

- From 1970 – 1999, Denver averaged less than one day per year.
- With continued high emissions, 100° temperatures or hotter are projected to average seven days per year by mid-century and 34 days per year by late century.
- With very low emissions, the metro area is projected to have only two such days in mid-century and one day late in the century.

#### **Days 100° or hotter in extreme years:**

- In 2012, Denver's hottest year on record, there were six days 100° or hotter.
- With continued high emissions, in the hottest year projected in the 2040-2059 time period, there would be 25 such days. In the hottest year in 2080-2099, there are projected to be 72 such days.
- Included in the projections above are that the hottest year in mid-century year would have 11 *consecutive* days 100° or hotter, and the hottest late-century year would have 38 straight.
- With very low emissions, the hottest year in mid-century is projected to have 10 days 100° or hotter, and the hottest year late in the century to have eight.

#### **The average temperature of the 30 hottest days in a year:**

- From 1970 – 1999, averaged 93 degrees.
- With continued high emissions, the metro area is projected to average 99 degrees by mid-century, and 104 degrees by late century.
- With lower emissions, the metro area is projected to average 97 degrees in both time periods.

The projections also suggest that heavy storms may become more frequent. Storms with less than a quarter-inch of precipitation in a day are projected to have little change in their frequency, regardless of emissions levels. **Storms of a half-inch of precipitation or more** in a day:

- With continued high emissions, such storms are projected by mid-century to become 15 percent more frequent, and by late in the century, 31 percent more frequent.
- With very low emissions instead, such storms are projected to average 25 percent more frequent by mid-century and 17 percent more frequent by late in the century.

Denver's Climate Adaptation Plan identifies an increase in temperatures as one of the top three impacts Denver residents may face from climate change. In 2015, Denver released a new [Climate Action Plan](#) with a new long-term greenhouse gas reduction goal to reduce community-wide emissions 80 percent below 2005 levels by 2050. The plan also called for a robust stakeholder engagement process, which kicked off in 2016 to identify strategies to achieve the ambitious long-term goal.

In September, RMCO and DEH released preliminary results from this analysis, covering typical years. The final report released today newly includes the projections for extreme years, too.

Additional information is available at [www.rockymountainclimate.org/extremes/denver](http://www.rockymountainclimate.org/extremes/denver).

*The Rocky Mountain Climate Organization spreads the word about what a disrupted climate can do to us in this region and what we can do about it. More information is available at [www.rockymountainclimate.org](http://www.rockymountainclimate.org).*

*As Denver's local accredited public health agency, the Department of Environmental Health (DEH) is dedicated to advancing Denver's environmental and public health goals. The divisions of DEH include: Denver Animal Protection, Community Health, Environmental Quality, Office of the Medical Examiner, and Public Health Inspections.*

*For more information about Environmental Health visit [www.Denvergov.org/EnvironmentalHealth](http://www.Denvergov.org/EnvironmentalHealth). Follow us on [Twitter.com/DenEnviroHealth](https://twitter.com/DenEnviroHealth).*

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