



Region 1 Disaster Preparedness and Response
 Evangelical Lutheran Church in America
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ELCA REGION 1 HAMMER & DANCE

July 13, 2021

United for Ministry in the Days of COVID-19
 Lutheran Social Service Agencies, Synods
 and ELCA Church Members Together

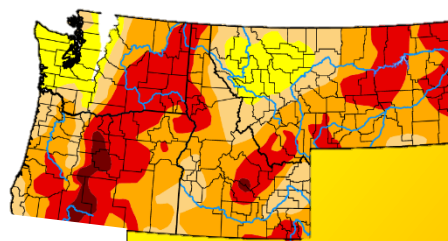
Region 1 Lutheran Disaster Preparedness & Response

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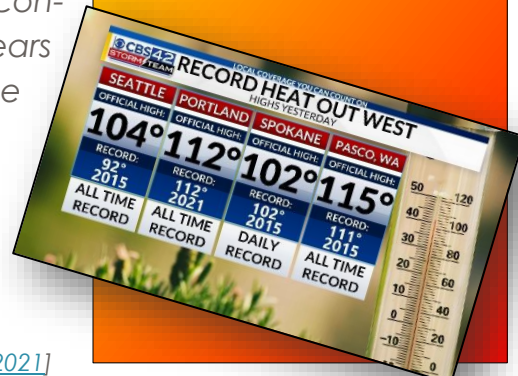
“Another week of hot, dry weather once again led to worsening drought conditions across the Northwest. Temperatures as high as 17 degrees above normal set more high temperature records across the region. The excess heat continued to increase evaporative demand, dry out soils and vegetation, and strain water resources. Many areas in the Northwest saw degradations and pacts across the region continue to build. In **Oregon** drought intensified and expanded. Soil moisture and streamflow conditions are among the driest going back to 1895. Dryland agriculture is suffering and fire risk has escalated. In **Washington**, abnormal dryness and moderate drought expanded. As of July 4, 84% of the state’s topsoil is short to very short of moisture, significantly impacting forage production. The data show that the state’s rangeland and pasture conditions are far worse this year when compared to all other years this century. In **Idaho** the Big Lost River is almost out of storage and priority water use is limited to early 1884 priorities. There are significant agricultural impacts to the state, including crop loss, a lack of forage, and animal deaths. **Montana** recorded less than 25% of normal precipitation in June, which is historically their highest precipitation month.”

[[U.S. Drought Monitor Western Drought Summary, July 8, 2021](#)]



Extreme Heat

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Extreme Heat

“It’s become a common concern in recent years — [extreme heat waves](#) plaguing the western United States. Now, for the third time since the beginning of June, a life-threatening heat wave is underway. While this event is not expected to be quite as unprecedented as the [Pacific Northwest heat wave](#) last week, all-time records will be challenged in major cities like Las Vegas, Fresno and Redding, California.

This latest heat wave comes on the heels of the [hottest June](#) on record for the United States. A new [study](#) published Wednesday shows the Pacific Northwest heat wave from June 27 to June 29 was made [at least 150 times more likely](#) by human-caused [climate change](#) and, even in today’s heated climate, is a rare 1-in-1,000-year event. The study, by a collaboration of 27 climate scientists, warned that if we keep warming the climate, extreme heat waves like that will happen once every 5 to 10 years by mid-century.”

[CBS News July 9, 2021]

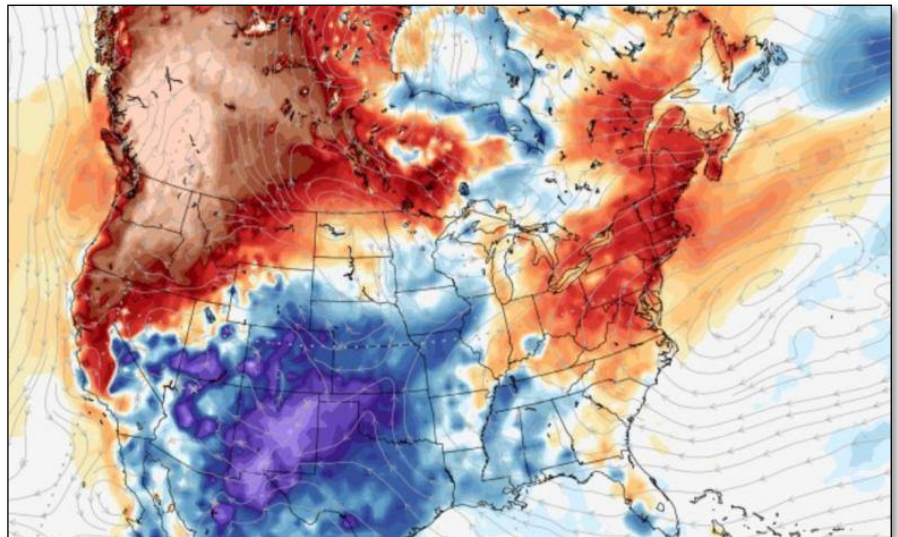
Heat Dome

High-pressure atmospheric conditions combine to act as a lid on the atmosphere.

In a process known as convection, warm air attempts to escape but the high-pressure dome causes it to sink back down to earth.



As winds move the hot air east, the jet stream traps the air where it sinks, resulting in heat waves. Source: NOAA



“About 800 people died across the Pacific Northwest during the heat wave, a number that will probably still go up as officials examine medical records and statistics in the coming weeks and months. The peak temperature was 121.3 degrees Fahrenheit on June 29 in Lytton, British Columbia. After setting heat records for Canada on three consecutive days, the town was mostly destroyed by a wildfire driven by hot winds in the dried out forests nearby.”

[Inside Climate News, July 7, 2021]

The extreme heat waves currently cycling through British Columbia and the Pacific NW are not directly drought related. These temperatures are caused by a “heat dome” which is an area of high pressure which captures hot air. Normally, this would be considered simply a rare weather event, but climate scientists understand our current experience differently.

“The Pacific Northwest heat wave should be a big warning, said [Dim Coumou](#), with the Institute for Environmental Studies at VU Amsterdam and the Royal Netherlands Meteorological Institute. It shows that climate scientists don’t understand the mechanisms driving such exceptionally high temperatures, suggesting “we may have crossed a threshold in the climate system where a small amount of additional global warming causes a faster rise in extreme temperatures.”

[Inside Climate News, July 7, 2021]

Our experiences of drought, heat and wildfire are connected by climate change. The prospects are for continued challenges in the years to come. [Drought maps](#), [wildfire tracking](#) and new terms like “[heat domes](#)” increasingly demand our understanding, mitigation and preparation.

Smashing Old Records

It is not just record high daytime temperatures that have been falling the past few weeks, but nighttime temperatures as well.

"Last month was the [hottest June on record](#) in North America, with more than 1,200 daily temperature records broken in the final week alone. But overlooked in much of the coverage were an even greater number of daily records set by a different — and potentially more dangerous — measure of extreme heat: [overnight](#) temperatures.

On average, [nights are warming faster than days](#) across most of the United States, according to the 2018 [National Climate Assessment](#) Report. It's part of a global trend that's being fueled by climate change.

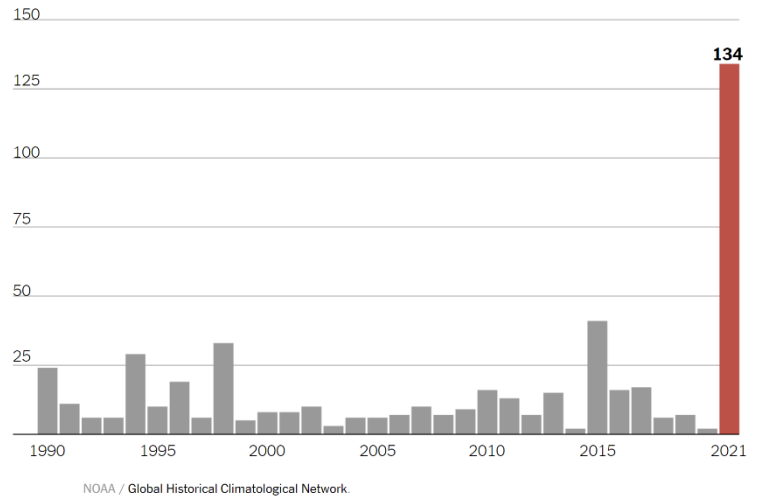
Unusually hot summer nights can lead to a significant number of deaths, according to climate scientists and environmental epidemiologists, because they take away people's ability to cool down from the day's heat." [\[New York Times, July 9, 2021\]](#)

Communities have found their networks of cooling centers, water distribution, and 211 phone emergency services to be less robust than needed for recent heat waves in the Pacific Northwest. As is often the case in disasters, underserved and underrepresented communities suffer the most. Many heat related deaths experienced this past month have been among seniors who are socially isolated and without air conditioning. House-less communities often do not get the word about concerns such as heat and feel unable or unwilling to abandon temporary living quarters to go to cooling centers. In addition:

"Neighborhoods of color affected by redlining, historic bank and government-sponsored housing discrimination, are five degrees hotter than non-redlined neighborhoods since they have dramatically less tree cover. In Portland, OR, they're a shocking 13 degrees warmer ([NPR](#)). Communities of color are where state and business elites dump toxic chemicals, coal-fired power plants, and chemical factories across the country. "The climate emergency will have a disproportionate impact on Black and Brown communities" ([Guardian](#)) since "the lack of equitable investment in low-income communities leaves people even more at risk for climate change impacts" ([NRDC](#))." [\[Anti-Racism Daily, July 12, 2021\]](#)



More nighttime temperature records were broken this June than in any previous June on record



The Church: Table Centric, Bread Biased

8th Sunday after Pentecost

July 18, 2021 – [Mark 6:30-34, 53-56](#)

“Come away to a deserted place all by yourselves and rest a while.” We see that Jesus and his disciples are busy and sought after. We see that they withdraw for a little R&R, and people continue to find them. We relate. Yet, Jesus is moved by my compassion more than fatigue. Wherever he goes he is known. Are we?

9th Sunday after Pentecost July 25,

2021 – [John 6:1-21](#) *“Then they*

wanted to take Jesus into the boat, and immediately the boat reached the land toward which they were going.” After

Jesus feeds the 5000 they want to make him king. After the disciples fear for their lives on a stormy sea they want to take Jesus into their boat. In neither case does Jesus comply. Yet, people are fed, and the disciples arrive on shore safely. What does this mean?

Thank you for welcoming Dave Brauer-Rieke into your pulpit for 5th Sunday sermons over the past year of COVID-19. As we return to face-to-face worship Dave will no longer be offering 5th Sunday sermons. However, if he can be of service to you in other ways please do not hesitate to ask. dave@climateimagination.com

10th Sunday after Pentecost

August 1, 2021 – [John 6:24-35](#)

“This is the work of God, that you believe in him whom God has sent.” It is not Jesus who is to handle the politics of feeding. It was not Moses who gave us manna in the wilderness. Jesus’ message is not about feeding, or saving, or serving. It is about coming together. Jesus’ teaching is about unity and community.

11th Sunday After Pentecost

August 8, 2021 – [John 6:35, 41-51](#) *“It*

is written in the prophets, ‘And they shall all be taught by God.’ Everyone who has heard and learned from the Father comes to me.” Jesus’ message is

about coming together. It is about unity and community. As a family gathers for dinner, or the church for Holy Communion, so Jesus is the Bread of Life. He is the center of who we all care together.



Dealing with Heat

Extreme heat conditions are especially dangerous for the young and old and for pets. Children, seniors and anyone with health problems should stay in the coolest available place, not necessarily indoors. Monitor them throughout the day for signs of a heat-related illness. [The Centers for Disease Control and Prevention](#) have issued several tips to follow during periods of extreme heat:

WHO ARE AT RISK OF HEATSTROKE?

Precautions during summer

- Wear a cap/hat or use an umbrella when going outdoors
- Drink lots of water throughout the day
- Do not leave children and any other dependents in cars under scorching sun

HEAT EXHAUSTION	OR	HEAT STROKE
Faint or dizzy		Throbbing headache
Excessive sweating		No sweating
Cool, pale, clammy skin		Body temp. above 104° Red, hot, dry skin
Nausea or vomiting		Nausea or vomiting
Rapid, weak pulse		Rapid, strong pulse
Muscle cramps		May lose consciousness

HOW TO HELP PEOPLE SUFFERING FROM HEATSTROKE

- Move them indoors, place their feet higher than their body, and remove their outer clothing
- Pour cold water on their body
- Apply cold towel/ice to their groin and armpits
- Do not cover the whole body with wet fabric
- Rush them to nearest hospital or dial 911

Prevention:

- NO ALCOHOL
- DON'T WEAR THE THICK CLOTHES
- LIMIT OUTDOOR TIME
- WEAR PROTECTION
- USE A SUNSCREEN USE AN UMBRELLA
- DRINK ENOUGH WATER
- COOL SHOWERING

Stay hydrated

- Don't wait until you're thirsty. Drink plenty of water (not very cold) or other, non-sugary, decaffeinated and non-alcoholic fluids, regardless of activity levels.
- Replace Salt and Minerals: Heavy sweating removes salt and minerals from the body that need to be replaced. A sports drink can replace the salt and minerals you lose in sweat.
- Keep Pets Hydrated: Provide plenty of fresh water for your pets, and leave the water in a shady area.
- Check with your doctor if:
 - You are on a fluid restrictive diet or have a problem with fluid retention, ask your doctor how much fluids are safe to drink.
 - If you are on a low-salt diet, have diabetes, high blood pressure, or other chronic conditions, talk with your doctor before drinking a sports beverage or taking salt tablets.

On the move

- Slow down: reduce, eliminate or reschedule strenuous activities until the coolest time of the day.
- Dress for summer. Wear lightweight, loose fitting, light-colored clothing to reflect heat and sunlight.
- Avoid hot and heavy meals. They add heat to your body. Instead, eat light, cool, easy-to-digest foods such as fruit or salads.
- If you pack food, put it in a cooler or carry an ice pack. Don't leave it sitting in the sun. Meats and dairy products can spoil quickly in hot weather.
- Minimize direct exposure to the sun. Sunburn reduces your body's ability to dissipate heat.
- Do not leave children or pets in a car, even for a minute or with the windows cracked. Temperatures inside a car can rise quickly, even on days where the outside temperature is 70 degrees.

On the move (cont.)

- Check belt buckles and car seats before placing your child in the car. They could get burnt from heated metal buckles.
- Be good neighbor: Check on older, sick, or frail people who may need help responding to the heat.
- Don't leave valuable electronic equipment, such as cell phones and GPS units, sitting in hot cars.

At home

- Use air conditioners or spend time in air-conditioned locations, such as malls and libraries.
- Use portable electric fans to exhaust hot air from rooms or draw in cooler air.
- Do not direct the flow of portable electric fans toward yourself when room temperature is hotter than 90 degrees Fahrenheit. Dry, blowing air can dehydrate you faster.
- Take a cool bath or shower.
- Do not take salt tablets unless specified by a physician.
- Make sure rooms are well vented if you are using volatile chemicals.



Ways Extreme Heat Fuels Inequality

1. "People without air conditioning are more likely to die from extreme heat."

More than 100 people died in Oregon due to heat-related complications in recent weeks, and the majority of them lacked air conditioning. In most of the world, air conditioning is out of reach for people living in.

2. The rise in air conditioner use fuels climate change.

The global rise of air conditioning disastrously fuels climate change. The cold air released into people's homes requires a lot of energy from power grids that rely on fossil fuels, which releases greenhouse gases into the atmosphere. Air conditioners, along with refrigerators, often use hydrofluorocarbons (HFCs) to treat hot air, and HFCs are a greenhouse gas that absorbs heat several thousands times more effectively than CO₂. For people living in poverty, this means more exposure to dangerous living conditions and higher energy costs.

3. Electricity blackouts primarily affect those in poverty.

While power grids in areas affected by the recent heat wave largely withstood the subsequent increase in energy use, analysts have noted that when blackouts happen, they disproportionately affect low-income people. Globally, up to 1.2 billion people still lack regular access to electricity, a situation that leaves them specially vulnerable to rising temperatures.

4. Heat waves severely impact outdoor laborers.

Sebastian Francisco Perez, a 38-year-old farm worker in Oregon, died in June from prolonged exposure to extreme heat. His death revealed the extreme working conditions that outdoor laborers are subjected to during heat waves. Between 1992 and 2017, at least 815 outdoor laborers died from heat stress in the US, and 70,000 more were injured. Climate scientists warn that health complications and mortality rates will rise in the years ahead for people who have to earn their income while toiling outside.

The climate crisis is fundamentally about inequality — wealthy people can elude the consequences of climate change, swathed as they are in air conditioning, armed with the ability to up-and-go to a new part of the world at a moment's notice, while the majority of the human population struggles under deteriorating conditions. The heat waves devastating communities worldwide can't be stopped, the sun can't be unplugged, the weather can't be controlled. But it's entirely possible to change how we take care of each other and how we live with and on the planet." [Global Citizen, July 9, 2021]