

# Weather Patterns and Climate Change

PREPARED TO CARE



Evangelical Lutheran Church in America  
God's work. Our hands.

Daily forecasts tell only a portion of our weather story. Weather patterns are affected by multiple meteorological factors, including climate change.

Human activity has been linked to the greater release of greenhouse gases (GHGs) into the atmosphere since the Industrial Revolution. These GHGs, in turn, have a significant impact on weather patterns, according to the U.S. Geological Survey of the U.S. Department of the Interior. GHGs act as a blanket around the earth, trapping heat radiation from the sun and increasing surface temperatures. GHGs alter climate by scattering and absorbing solar and infrared radiation. They may change the microphysical and chemical properties of clouds. Additionally, deforestation and other changes in land use have altered the amount of sunlight reflected back into space. The world's rising surface temperature may increase water evaporation and cause more droughts. As more moisture evaporates, it fuels more powerful storms. More heat in the atmosphere and warmer ocean surfaces can accelerate wind speeds in tropical storms. Weather patterns become more extreme.

*Mindful of the health and wellbeing of creation in a time of disasters intensified by climate change, this ELCA Advocacy resource series invites reflection on being #PreparedToCare.*

*Do you have a personal experience or impression that connects?*

*What are strengths of your congregation in this area?*

*How might you make a difference in your community?*



*Be part of the ELCA Advocacy network. Sign up for news and Action Alerts at impactful moments from [elca.org/advocacy/signup](http://elca.org/advocacy/signup).*

*“Christian concern for the environment is shaped by the Word of God spoken in creation, the Love of God hanging on a cross, the Breath of God daily renewing the face of the earth. We of the Evangelical Lutheran Church in America are deeply concerned about the environment, locally and globally, as members of this church and as members of society. Even as we join the political, economic, and scientific discussion, we know care for the earth to be a profoundly spiritual matter.”*

ELCA Social Statement: “Caring for Creation: Vision, Hope and Justice,” 1993

We see the effects of climate change all around us: severe heat waves, heavier precipitation, and greater incidence of hurricanes, floods, droughts, and wildfires. The permafrost is thawing, sea ice is melting, and rising sea levels are eroding our coastlines. These conditions destabilize the environment, contributing to migration, food insecurity, hunger and poverty, national security issues, ecosystem losses, and health problems.

## Faith reflections and policy decisions

A reflection on why Lutherans care for creation reads, “With the assurance of God’s presence in all things and a force of love behind all things, we are freed to see the world as it is without seeking to romanticize it or be blind to the evil and tragedy in life. We also welcome all that we can learn about our world through our strong reception of science, with openness to ecological realities and biological evolution. Science is so fundamental to

understanding the environmental crisis and so significant as part of our human efforts to address it. We do not fear the truth about ourselves and our world. Indeed, it is part of God's relation to the world." ("Why Lutherans Care for Creation: Building on Our Foundations" at [elca.org/resources/advocacy#environment](http://elca.org/resources/advocacy#environment))

In a statement for Earth Day 2018, the Rev. Elizabeth A. Eaton, presiding bishop of the ELCA, wrote, "An honest and credible look at the increasing environmental degradation and climate change names the neglect, carelessness and wrongs of industry, civil society and global governmental leadership. It also recognizes how human beings individually and collectively worsen the attacks on God's creation. As a church, we must confess our frequent lack of urgency in addressing environmental degradation and slow action to address a changing climate. We also must pledge to acknowledge the intersections of racial and environmental injustices and strive to involve the voices of those most affected in the process." (See [elca.org/News-and-Events/7922](http://elca.org/News-and-Events/7922))

## PRAYER FOR STEWARDSHIP OF NATURAL RESOURCES

"Almighty God, in giving us dominion over things on earth, you made us coworkers in your creation. Give us wisdom and reverence to use the resources of nature so that no one may suffer from our abuse of them, and that generations yet to come may continue to praise you for your bounty; through your Son, Jesus Christ our Lord. Amen."

Evangelical Lutheran Worship, page 80

## Vital support

Alert to the marginalized and vulnerable

Because the marginalized and vulnerable are most affected by environmental degradation, our failure to protect God's creation ultimately mirrors and deepens existing racial, gender and economic inequalities. Caring for creation means respecting environmental limits while pursuing economic growth that provides sufficient and sustainable lifestyles for all people.

Full funding urged

Climate finance includes financial support for adapting to and mitigating the effects of climate change, including capacity building, research and development, and wider efforts to shift the economy toward low-carbon, climate-resilient development. Several federal agencies sponsor programs that protect the environment. During the appropriations process, we seek full funding of such programs within the Environmental Protection Agency, Department of the Interior, Department of Energy, Department of Agriculture, and Department of State.

## Selected Significant Climate Anomalies and Events in 2016

### Further reading

"Transforming our world: the 2030 Agenda for Sustainable Development," <https://sustainabledevelopment.un.org/post2015/transformingourworld/>

Map graphic from <https://www.ncdc.noaa.gov/sotc/global/201613>

