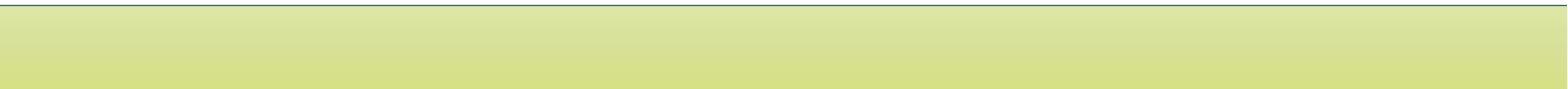


Climate Conversations Weather & Cyclone Bombs

St Mark's Creation Care Ministry

October 2025



Agenda

- **Land Acknowledgement:** Saint Mark's Cathedral acknowledges that we gather on the traditional land of the first people of Seattle, the Duwamish People, who are still here, and we honor with gratitude the land itself and the life of all the Coast Salish tribes.
- Opening Prayer
- Framework
- Discussion
- Actions
- Sharing and Q&A
- Closing Prayer

- **How to Handle Weather Changes like Cyclone Bombs**
- As the weather starts to turn cold and rainy in the Seattle area, we're likely to hear more about and experience cold spells or floods during the coming months. We may even learn new terms, as happened with "cyclone bomb" in 2024. While hurricanes, typhoons, floods and more may seem like they have little impact in Seattle, high winds and other changes are causing more impacts such as power outages and street blockages or home damage from fallen trees. We'll discuss the changing weather in the region and more broadly, the actual or potential impacts, and how to prepare for a changing climate in the autumn and year-round.

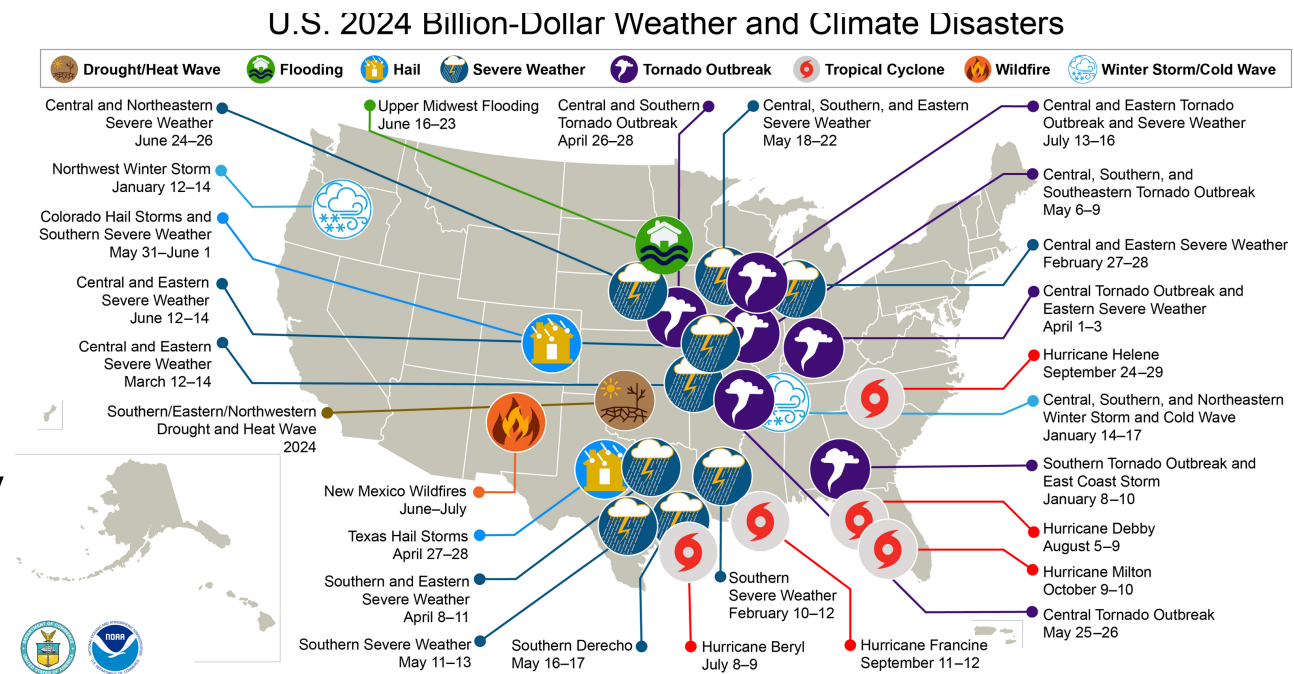
Opening Prayer

- Lord, we thank You for being faithful through every season, storm, and sunshine. You have never failed to provide, and You will never cease to care for Your children. We thank You for gentle rains, warming sunshine, refreshing winds, and calm nights. Even in extremes, You have kept us safe. We lift our gratitude for all the times You heard our cries and blessed the skies above us. May our hearts always return to thanksgiving, knowing that every good weather and every season of peace comes from Your hand.



Weather Events are Increasing

- In 2024, there were 27 confirmed weather/climate disaster events with losses exceeding \$1 billion in the US
 - They included 1 drought, 1 flood, 17 severe storms, 5 tropical cyclones, 1 wildfire, and 2 winter storms
- The 1980–2024 annual average is 9 events, per NOAA
- Aging infrastructure is vulnerable
- “People and governments are generally living in the past” and haven’t prepared (Insurance Journal)



Weather Events affect us in Washington

- From 1980-2024, 36 weather or climate events caused losses exceeding \$1 billion each in Washington.
 - They included 13 droughts, 3 floods, 1 freeze, 1 storm, 15 wildfires and 3 winter storms
- A winter storm alone, in January 2024, caused a \$1.7 billion loss
- By 2050, the severity of widespread summer drought is in Washington state is projected to quadruple. Among all US states, Washington is expected to suffer the single greatest increase.
- New words – Cyclone bomb



The Bible looks at Weather Events too

- Psalm 107: They cried out to the Lord in their trouble, and he brought them out of their distress. 29 He stilled the storm to a whisper; the waves of the sea were hushed. 30 They were glad when it grew calm, and he guided them to their desired haven.
- Jeremiah 17: Blessed is the man who trusts in the Lord, whose trust is the Lord. He is like a tree planted by water, that sends out its roots by the stream, and does not fear when heat comes, for its leaves remain green, and is not anxious in the year of drought, for it does not cease to bear fruit.



Seattle faces Specific Hazards

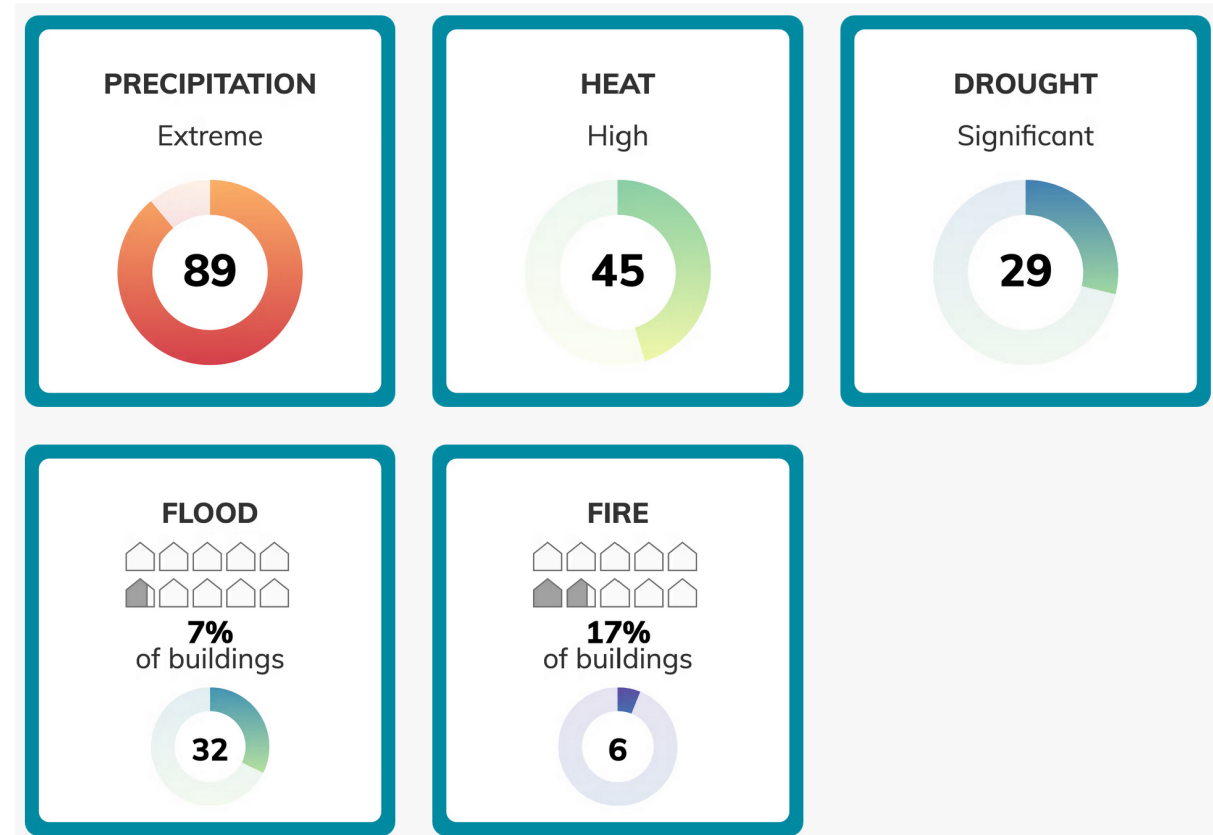
- Rain

Seattle experiences unique storm damages: wind-driven rain. Strong gusts combined with horizontal rain can force water under roof shingles, behind siding or through aging window frames.

- Homes that appear structurally sound can develop hidden leaks

- Trees falling

Tall evergreens can be major hazards during storms. Weeks of rain can leave the soil so saturated that roots lose their grip. If wind gusts to 40–60 mph, trees can come down on roofs, garages, and power lines.



Risk Level: Highest risk = 100

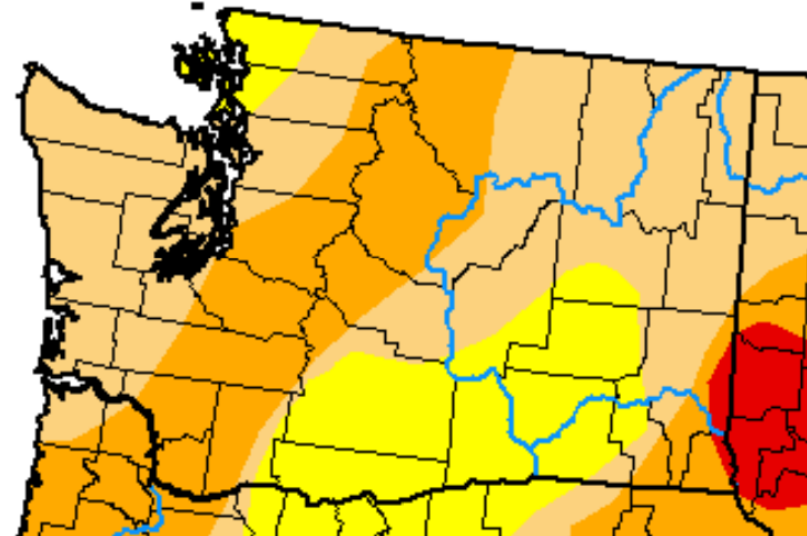
Seattle Hazards now include Heat, Drought

- Heat

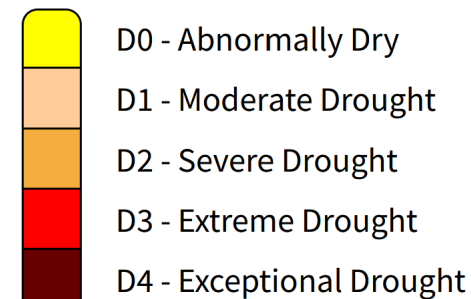
Washington summers are getting longer, hotter and potentially more dangerous.

- Drought

- Seattle shattered record highs this summer, including one of the latest 90-degree and above days ever recorded. Sept 16 high - 91 degrees
- By about 2050, a “normal” year in Washington will be warmer than the hottest year during the 20th century.



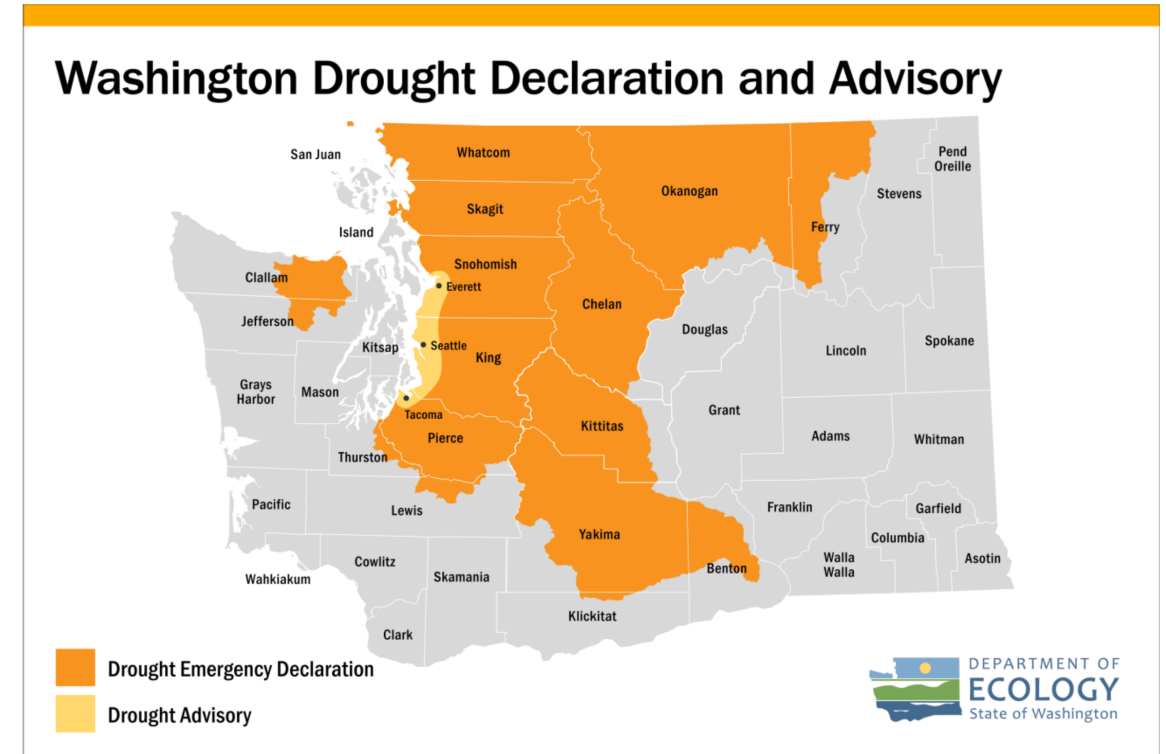
U.S. Drought Monitor Categories



Impacts of Climate Change

Climate change results in:

- Increased potential for extreme rainfall or snowfall because warmer air can hold more water vapor.
- Increased frequency and intensity of heat waves
- Particulate pollution and health issues
- Disease



Looking Ahead

- Temperature rise of 3.6° 2030-2050
- Increase in precipitation
 - Urban drainage impact
- Less snowpack
 - Water supply is sensitive to climate change because management is based on the timing of precipitation and snowmelt
- Sea level rise of 3-22 inches by 2050
 - Port of Seattle is affected by flooding



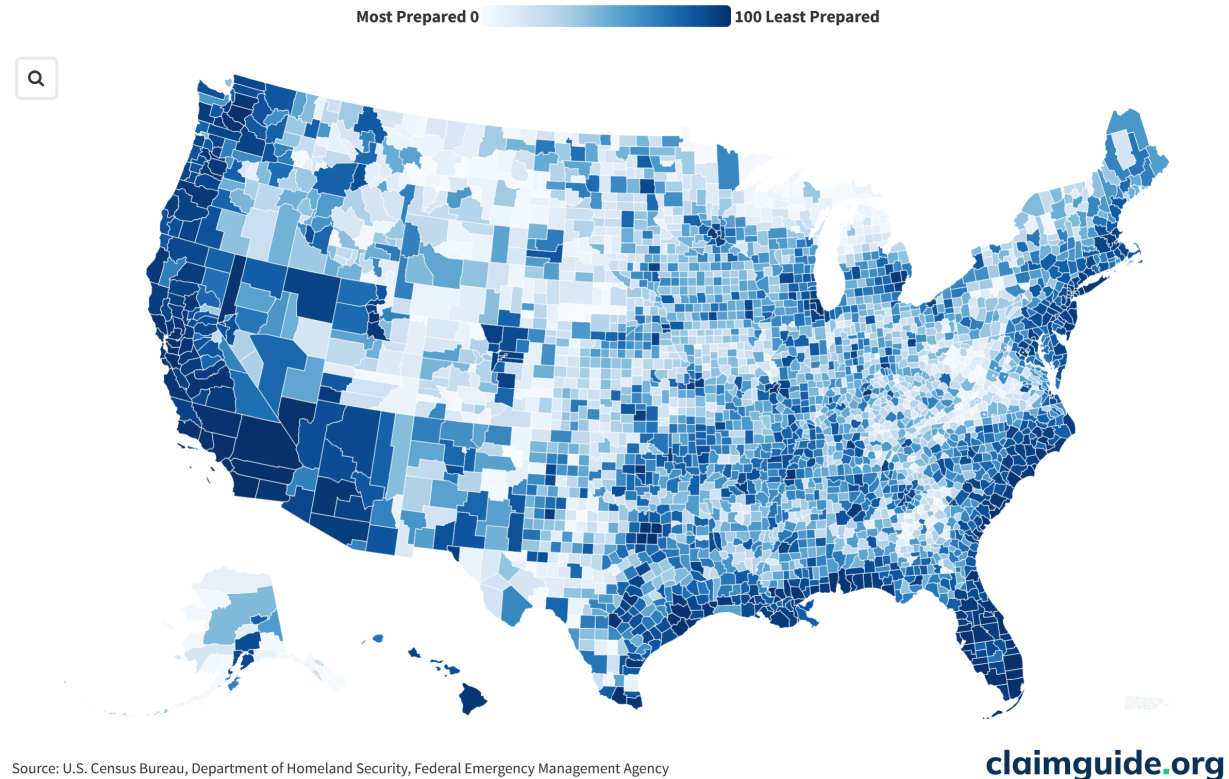
Personal Impacts of Climate Change

- Higher insurance costs
- Higher payments for healthcare
- Higher prices of groceries
- Extreme heat can cause heat exhaustion or heat stroke, which can damage the brain and other vital organs
- Severe weather impacts mental health
- Socioeconomic impacts such as food insecurity, displacement & public health



King County is not Fully Prepared

- Washington is the sixth-worst state for climate disasters and King is its least prepared county, ClaimGuide's risk assessment of over 3,000 U.S. counties found
- The Pacific Northwest faces new climate change-related threats like summer wildfires, winter flooding and weather-related power outages
- King County has a risk rating of 99.65 out of 100 and faces anticipated annual losses of \$774 million, per the study.
- Washington had 88 disaster declarations between 2014 and 2024, and annual losses of over \$2 billion per year in damage



Discussion & Breakout Session

Questions:

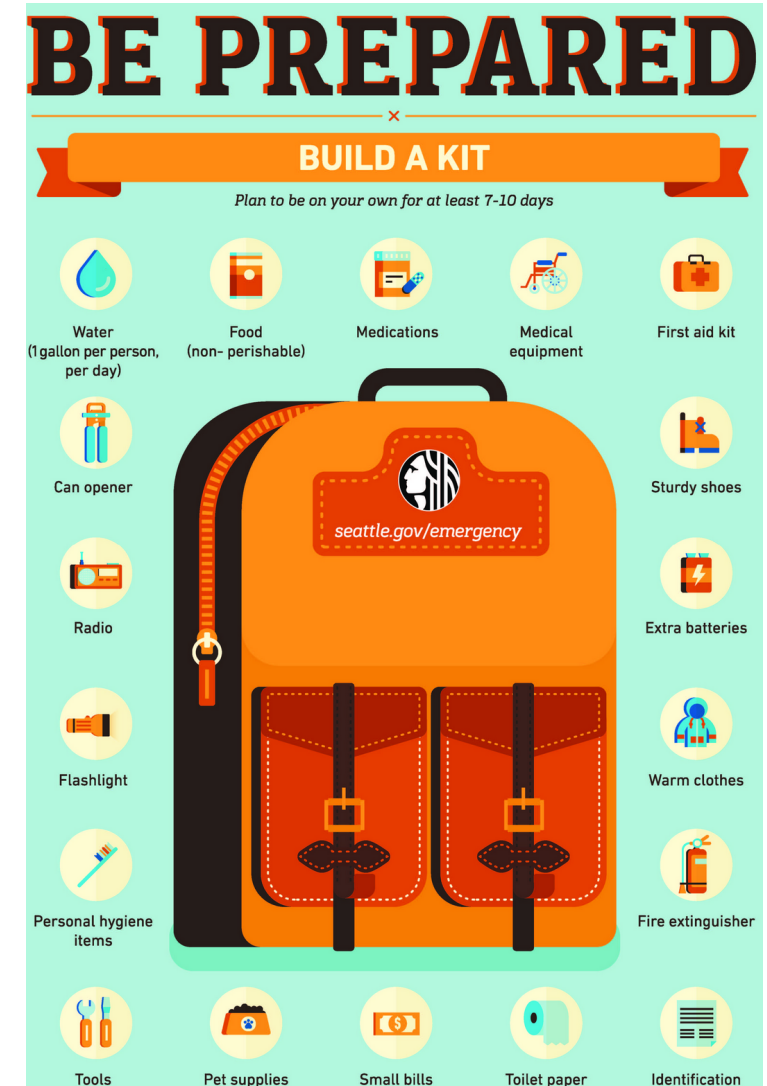
- 1 What weather-related impacts of climate change have you experienced?
- 2 What preparations have you made for severe weather events?
- 3 How can you encourage the state, county or city to improve?



Personal Preparedness is Essential

- Have supplies for at least 3 days: water, non-perishable food, radio, flashlight, batteries, first aid kit, and medications
 - Have supplies for children, people with special medical needs, and pets
 - Prepare 1 gallon of water per person per day
- Make a transportation plan and a communications plan
- While power outages won't affect most water supplies, freezing temperatures or earthquakes can

Source: <https://www.seattle.gov/emergency-management/prepare/prepare-yourself>



Rain and Floods

- Keep rain gear handy
- Paint and repair paint gaps
- Check for and repair foundation cracks
- Put valuables on high shelves
- Clear the drains
- Don't drive into deep water
- Check your insurance



Heat

- Insulate your home
- Heat control window film and curtains
 - Close curtains to minimize heat increases
- Adjust cooking timing or temperatures
- Reduce the hot water heater temperature
- Create shade with awnings or plants
- Install or use vents to release heat



Drought

- Mitigation can save lives, reduce the risk of damage to your property and lower insurance costs
- Dryness can cause a house foundation to shift, crack, and sink. When rain returns, it causes the soil to expand
- Hydrate the soil
- Plant trees further from the house
- Plant drought-tolerant shrubs, near the house, to retain moisture
- Repair cracks
- Choose low-flow appliances
- Stop leaks



Fires, and Smoke from Fires

- Check air quality at [AirNow.gov](https://www.airnow.gov) and stay indoors when the AQI/PSI index is 150+
 - Lower for some groups
- Postpone outdoor activities
- Close windows and doors
- Use an indoor portable air filter
- Consider wearing an N95 mask
- In an area at risk of fire, remove flammable vegetation and wood chips, and remove flammable doormats or other materials



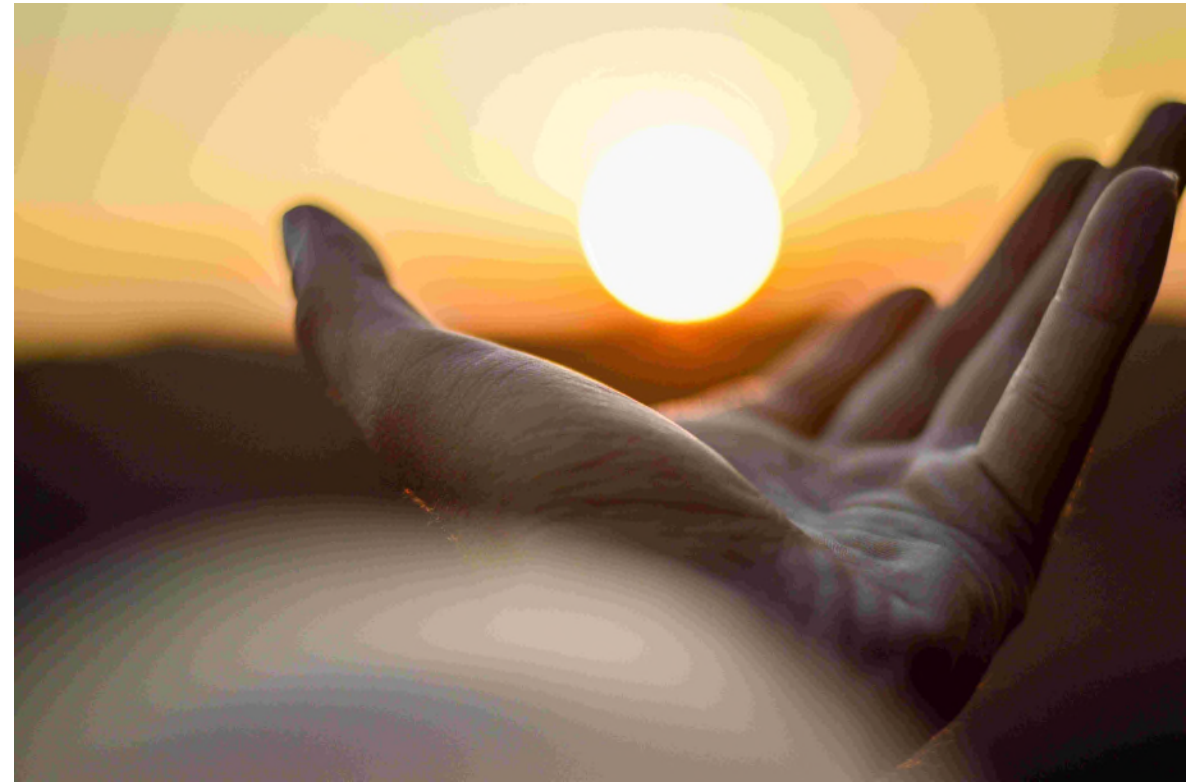
Windstorms

- Evaluate nearby trees in advance and prune them if needed
- Stay indoors
- Avoid driving or walking outside
- Stay away from windows and doors
- Move to a small interior room
- Prepare for a power outage
 - Emergency kit and food supplies
 - Adjust electricity usage
 - Keep the refrigerator closed
 - Backup battery



Reasons for Hope

- Community members are stepping up to help each other in difficult times
- State and local governments are starting to take action
- Renewable energy is becoming mainstream
- Startups are developing innovative solutions



Sharing, Discussion and Q&A

Questions

- 1 What do you have in your emergency kit?
- 2 What changes do you make when severe rain or wind is forecast?
- 3 What gives you hope that we can cope with severe weather?



Make a Difference

*The way I see it, if you want
the rainbow, you gotta put
up with the rain – Dolly
Parton*

*It wasn't raining when Noah
built the ark – Howard Ruff*

*We cannot stop natural
disasters but we can arm
ourselves with knowledge:
so many lives wouldn't have
to be lost if there was
enough disaster
preparedness – Petra
Nemcova*
Petra Nemcova

Closing Prayer

Lord, we lift up not only our own homes and lands but the whole earth before You. Send good weather where drought has struck, balance where floods have come, and peace where storms have destroyed. Remember nations in famine, villages in floods, and cities in storms. Bless the entire world with skies that bring life, not destruction. Let all creation reflect Your glory and all people recognize Your hand in every sunrise and every rainfall. Amen

