GEORGIA FORESTWATCH
PRESERVE PROTECT RESTORE GAFW.ORG

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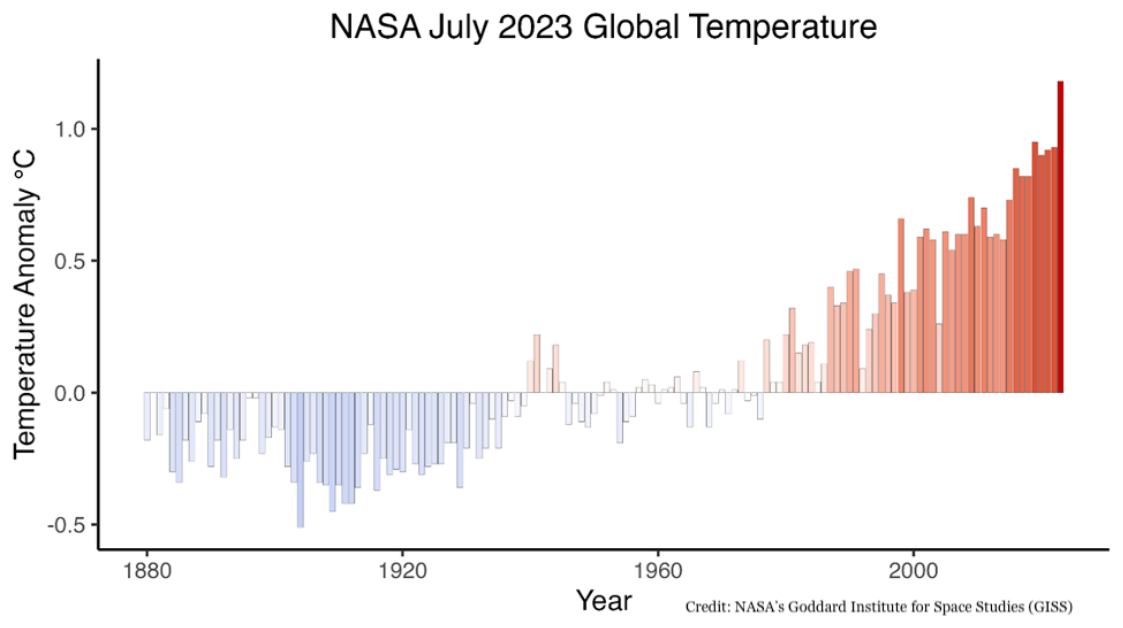

The Hottest Summer in Human History

The earth is baking, the oceans are boiling, and the forests are burning. The evidence of human-caused climate change is incontrovertible and apparent everywhere we look. While Earth's climate **has changed throughout its history**, the current warming is happening at a rate not seen in the past decamillennium, and evidence of a changing climate is readily apparent for even the most scientifically challenged. According to the Intergovernmental Panel on Climate Change (**IPCC**), "Since systematic scientific assessments began in the 1970s, the influence of human activity on the warming of the climate system has evolved from theory to established fact."

Earth's climate has changed throughout history. Just in the last 800,000 years, there have been eight cycles of ice ages and warmer periods, with the end of the last ice age about 11,700 years ago marking the beginning of the modern climate era and human civilization. Most of these climate changes are attributed to **very small variations in Earth's orbit** that change the amount of solar energy our planet receives. Scientific information from natural sources (such as ice cores, rocks, and tree rings) and modern equipment (like satellites and instruments) all show signs of a changing climate. From global temperature rise to melting ice sheets, irrefutable evidence of a warming planet abounds.

- July 2023 was 0.43 degrees Fahrenheit warmer than any other July in **NASA's record**, and it was 2.1 degrees warmer than the average July between 1951 and 1980. "This July was not just warmer than any previous July – it was the

warmest month in our record, which goes back to 1880," said GISS Director Gavin Schmidt. "The science is clear this isn't normal. Alarming warming around the world is driven primarily by human-caused greenhouse gas emissions."

- A **study** by the EU's **Copernicus Climate Change Service** showed that the first three weeks of July were the warmest three weeks ever recorded. The month started with the daily global mean surface air temperature record broken four days in a row, from July 3-6. All days throughout the rest of July were hotter than the previous record set on August 13, 2016, making the 29 days from July 3-31, 2023, the hottest 29 days on record.
- According to the **National Oceanic and Atmospheric Administration** (NOAA) reported that the global ocean surface temperature hit a record high for the **fourth-consecutive month**. Globally, July 2023 set a record for the highest monthly sea surface temperature anomaly — which indicates how much warmer or cooler temperatures are from the long-term average — of any month in NOAA's climate record, with an anomaly of 1.78 degrees F. A sea temperature reading from the **Manatee Bay, FL buoy** in the final week of July reached an astronomical 101.1 degrees Fahrenheit.
- **NOAA also reported** that July 2023 set a record for the lowest global July sea ice extent (coverage) on record. Globally, sea ice extent in July 2023 was about 470,000 square miles (about twice the area of Texas), less than the previous record low from July 2019.
- NOAA found that the seven-month period of January to July 2023 has produced the highest number of billion-dollar weather or climate disasters since 1980. These included tornadoes, flooding, cold waves, and severe weather.

"A warming planet … means that we need to be prepared for the impacts of climate change that are happening here and now," said Sarah Kapnick, NOAA chief scientist. "From devastating coral bleaching, deadly heat wave, poor air quality, and destructive severe weather, this has been the summer of extremes."

There is no single solution to addressing the climate crisis. It requires a cohesive collective effort to adjust how we humans live and interact with the natural world. GAFW, nor any other single organization or government, can fully address what is needed to halt the damage we are doing to our children's planet alone; however, GAFW will continue to vocally challenge the commercial cutting of our state's national forest lands and the short-term economic gains promoting this practice. A healthy and standing Chattahoochee Oconee National Forest is not the sole solution to the climate crises, but neither is there a solution that does not include keeping our forests standing in Georgia.

Environmental Justice in Hazardous Waste Clean-Ups

Join our partner **Science for Georgia**, for an upcoming event updating their initiative to map hazardous waste sites and environmental justice indicators in Georgia. Environmental issues are unique because they are not confined to the geographic location of their origin, and this lack of containment means that we all pay the price for environmental damage around the world. Using Geographic Information Systems (GIS), we can visualize how the burden of environmental degradation is dispersed in different locations. This doesn't always happen equitably, however. Enter environmental justice, which describes how we address the disproportionate burden of environmental issues among marginalized groups.

This has been identified fairly recently compared to other environmental issues, so most environmental policy was not created with environmental justice in mind. This is certainly true in the case of Georgia's **Hazardous Waste** and **Solid Waste** Trust Funds. These were created to provide funding to help clean up abandoned hazardous waste sites and landfills, but the current prioritization of these sites does not take environmental justice concerns into account. The Georgia Water Coalition and Science for Georgia seek to bring awareness to this issue by using GIS in hopes that the funding will be given to the communities most in need.

Sci4Ga will be presenting this work at **Atlanta Science Tavern** on Aug 26th! You can come to see it live, in person, at Manuel's Tavern at 7 pm.

Register here or watch it **streaming here**.

GA DNR Protecting the Endangered Coosa Moccasinshell

Photo: DNR tracking the Coosa Moccasinshell with a PIT tag reader.

The **Coosa Moccasinshell** is a critically endangered mussel. Once found throughout the Coosa basin above the fall line, it is now restricted to about 8 miles of the Conasauga River in Tennessee and Georgia. As part of the recovery effort for this species, GADNR partnered with the Alabama Aquatic Biodiversity Center to propagate Coosa Moccasinshell. Eighty individuals were released in **Armuchee Creek** with **passive integrated transponder** (PIT) tags. The reader records the GPS location of each PIT tag. Since each tag has a unique alphanumeric code, they can track growth and survival data on an individual level.

According to the GA DNR **Biodiversity Portal**, threats to the mussels include sedimentation due to inadequate buffer zones, development, and agriculture. Poor agricultural practices, industrial effluent, and sewage treatment plant discharges also degrade water quality for the mussels.

Georgia Climate Pollution Reduction

ENVIRONMENTAL PROTECTION DIVISION

The **Inflation Reduction Act** was passed entirely along party lines (**Senate**/**House**) and signed into law by President Biden a year ago on August 16, 2022. Marking the most significant action Congress has taken on clean energy and climate change in the nation's history, it has redefined American leadership in confronting the existential threat of the climate crisis.

As part of the IRA, the Climate Pollution Reduction Grants (CPRG) program will

provide $5 billion in grants to states and local governments to develop and implement plans to reduce **greenhouse gas** (GHG) emissions and other harmful air pollution.

EPA's goal for CPRG is to help states and the largest metropolitan statistical areas develop plans to reduce the contributor to climate change, greenhouse gases. On June 30, 2023, the State of Georgia was awarded the $3 million noncompetitive planning grant to develop a state-wide climate action plan. Likewise, the Atlanta Regional Commission received the $1 million noncompetitive planning grant to develop a climate action plan for the **Atlanta metropolitan statistical area** (includes Dawson & Pickens counties and a large portion of the **Oconee Ranger District**).

CPRG requires the following three key deliverables:

- A Priority Climate Action Plan (PCAP), due on March 1, 2024;
- A Comprehensive Climate Action Plan (CCAP), due June 30, 2025; and
- A Status Report, due at the close of the 4-year grant period.

The **Georgia EPD Air Protection Branch** will work with various state agencies, the Atlanta Regional Commission, industry, community, and environmental organizations, and other stakeholders to develop Georgia's climate action plan. This plan will include a GHG emissions inventory, potential GHG reduction measures, and low-income and disadvantaged communities (LIDAC) benefits analysis.

The first CPRG Zoom stakeholder meeting is scheduled for August 29, 2023, from 10:00 - 11:45 am. Learn about EPD's work to develop Georgia's climate action plan and opportunities for engagement. Attendance is limited to 300 registrants. **Register here.**

More information here and register for future notifications.

Donate to GAFW Today

Upcoming GAFW Outings & Outreach

Friday, August 25 - Come see us at **Patagonia Buckhead**, 4-7 pm

Thursday, August 31 - **GAFW Book Club Meeting**, Zoom (*The Changing Blue Ridge Mountains* by Brent Martin)

Saturday, September 9 - **Outing! Foxfire Museum Guided Tour**

Sunday, September 10 - Come see us at the **Elachee Wildlife Festival**, 10 am - 2 pm.

Saturday, September 16 - Come see us at **Dahlonega Trail Fest**

Saturday, September 23 - Come see us at **Patagonia Beltline**, 10 am - 2 pm

Thursday, September 28- **GAFW Book Club Meeting**, Zoom (*Deliverance*, by James Dickey)

Saturday, September 30 - **Outing! Project Chimps Private Group Tour**

Saturday, October 14 - **Save the Date!** GAFW Annual Retreat at Red Top Mountain. **SPONSOR US NOW**

Saturday, October 21 - **The Second Wurst Festival Ever** , Fannin Brewing Company, Blue Ridge, GA (Tickets on sale soon)

Thursday, October 26 - **GAFW Book Club Meeting** , Zoom (*Haints on Black Mountain* by Ann Hite)

Friday, October 27 - Outing! Core Preserve at Lula Lake Land Trust

Thursday, November 30 - **GAFW Book Club Meeting** , Zoom (*Literary Field Guide to Southern Appalachia,* Edited by Rose McLarney, Laura-Gray Street, and L. L. Gaddy)

Thursday, December 28 - GAFW Book Club Meeting , Zoom (*The Lost Book of Eleanor Dare* by Kimberly Brock)

GAFW Outings on Meetup

If this email was forwarded to you, **please register here** to receive GAFW updates.

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Thank You

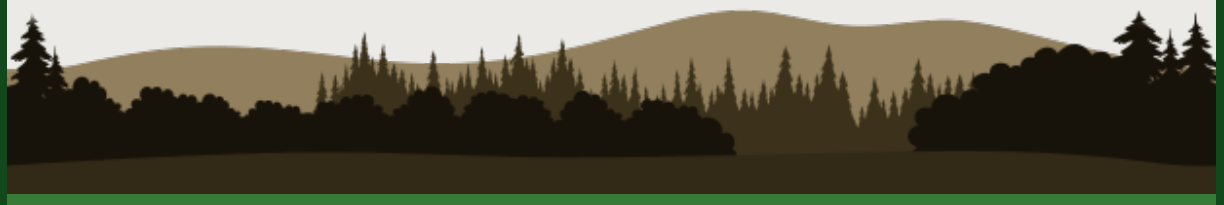
Georgia ForestWatch is the only nonprofit organization with a mission solely dedicated to ensuring the Chattahoochee-Oconee National Forests remain healthy and available for future generations, and we can only pursue our mission with the support of the community.

Please support our mission by ensuring your **membership is up to date** and providing **additional support** as you are able.

On behalf of our entire national forests in our beautiful state, we thank you for your support.

Our Mission

Our mission is to preserve and protect our national forests.



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