

Water Woes, Weird Weather & What We Can Do

Welcome to the Durham County Sustainability Team's monthly blog! Each month, we spotlight a different sustainability-style topic in a fun format with simple tips, local resources, and creative ideas about how to live more thoughtfully in our communities with the wonderful planet in mind. Learn more about our work at Durham County Sustainability at [GreenerDurham.net](https://greenerdurham.net) 

What On Earth Is Going On?

Like most of us, you've probably noticed something feels off about this summer. Folks around here often comment, "well, that's North Carolina for you!" when the weather seemingly can't make up its mind. It's true; living in NC often means fluctuations in weather. But, is what we've been feeling lately...normal? Even for our southern state, weather has been **especially WEIRD**. The alerts have been rolling in on the regular: Severe drought, water restrictions, severe storms, extreme heat advisories. So what's actually happening - and why?

Let's begin in the Pacific Ocean, thousands of miles from Durham.

Every few years, there's a massive stretch of ocean water near the equator that warms up - more than usual, we're talking BIG time. It happens naturally in Earth's cycle, a regularly occurring climate shift, that essentially moves and reverses whole jet streams (aka rivers of air) across the entire planet. The general ripple effects cause excess heat and drought in some regions and heavier rainfall in others. Essentially - taking us into extremes. Scientists call it **El Niño** (Spanish for "the little boy"), and this year, we're due for another one. On June 11th, **NOAA** officially confirmed that El Niño has arrived in 2026 - and they're calling it a "Super" El Niño.

So...what makes it super?

A "Super" El Niño simply means the Pacific Ocean is already starting off much warmer than during a typical El Niño. That extra warmth releases even greater amounts of heat and moisture into the atmosphere, strengthening the ripple effects around the globe. Basically, El Niño's taking the planet from warmer to super warmer.

That extra warmth? That's climate change. **Climate change** doesn't "cause" El Niño - but it does amplify everything. It makes dry periods drier and longer. When the rain finally does come, it often arrives all at once in heavy storms - faster than dry ground can absorb it, which makes the water run off and cause flooding. With this, we can expect to continue seeing extreme weird weather swinging in all directions. Yep! Humans are causing climate change on a dramatic scale, and climate change is causing the earth to behave like a Drama Queen in response 

Back to El Niño - a giant domino effect:

The Pacific Ocean warms...

>> which shifts the jet stream...

>> which changes where storms travel...

>> which reshuffles rainfall, flooding, drought, and heat across the world.

Are you a visual learner? Check out [this video](#).

Here's where the El Niño dominoes are falling around the world right now:

- 🌧️ **Southern US, Peru & Ecuador, parts of East Africa:** wetter than average - some relief from drought, but also flood risk
- 🌳 **Central America, the Caribbean, Indonesia, Philippines, northern Brazil, Southern Africa, South Asia:** drier than average, major drought and crop stress
- 🐟 **Peruvian coast:** fish populations collapse as warm water blocks nutrient-rich cold water from rising up (El Niño literally means "the little boy," named because Peruvian fishermen first noticed the warm water arriving around Christmas each year - and with it, far fewer fish)
- 🌾 **Global food supply:** wheat, corn, and rice face pressure as key growing regions in Southern Africa, South Asia, and Southeast Asia get too hot and dry simultaneously - food prices are expected to rise even further this year, with the heaviest impact falling on the world's most food-insecure communities

Now let's zoom it back into the **local level**.

💧 Closer to Home: Durham's Water Right Now

All of that global climate science has very real consequences, and we can feel it locally. **Here in Durham** we're seeing heat index temperatures reaching over 100°F far too often, and our water reservoirs are really hurting. This is serious, and there are some actions we can take! This one's important: We're currently under **Stage 2 Mandatory Water Restrictions**, which went into effect June 15th.

Here's what Stage 2 means for all Durham water customers:

🚫 NOT ALLOWED:

- **No spray irrigation;** no spray irrigation of landscapes with city water, including hose-end sprinklers
- **No washing vehicles;** don't use city water to wash vehicles (except at a commercial or institutional car wash)
- **No washing hard surfaces;** don't use city water to clean sidewalks, driveways, decks, or building exteriors (except for a health or safety issue, or before painting)
- **Fountains & ponds;** don't add water to decorative fountains, ponds, or pools (unless the water is recycled)

✅ STILL OKAY:

- **Hand watering;** drip irrigation, hand watering, and tree or shrub watering bags are still allowed
- **Pools & wading pools;** add water only to replace evaporation or spillage and to keep chemical feeders running

Typically, Durham runs on an **Odd-Even Watering Schedule** - but under Stage 2, that is no longer active. Stick to the rules listed above!

Note: Restaurants are being encouraged to only serve water when asked. Only ask if you need it, and drink it if you have it 🙏

Check current reservoir levels and the full restriction details: durhamnc.gov/1061/Durham-Saves-Water



“But what can I do, I'm just one person.” – said 8 billion people

You're not alone if you think this is all pretty scary - even seemingly hopeless. But there are many reasons why we should continue to hope. The best thing we can do is **hope through action**. Our everyday choices matter enormously and every single one of us makes a difference one way or another, so let's make a good difference together!

Pitch In, Save Water - The simplest, highest-impact things you can do:

Around the house:



Shorten showers by even 2 minutes - save those precious gallons



Only run the dishwasher and washing machine when full



Turn off the tap while brushing your teeth or washing dishes



Fix any leaky faucets or running toilets (a leaky toilet can waste 200 gallons a day!)

Upgrading a toilet? Durham's [Toilet Rebate Program](#) can help

Around the yard:



Water early morning or evening to reduce evaporation



Use a drip line or hand water so every drop reaches the roots



Lay 2–4 inches of mulch around plants and trees to help hold moisture in the soil



Capture rain when it does come! Check out Durham's discounted [Rain Barrel Sale](#)



Don't Forget Our Tree Friends

Our trees are working overtime right now. Durham trees which provide cool shade during these extreme heat waves, slow stormwater and absorb flooding when heavy rain does arrive, give home to other stressed critters, and clean our air. But with drought, thirsty stressed trees can quietly weaken a tree before it ever looks sick. Signs to watch for: leaves wilting, browning at the tips, or showing early fall color.

A few things that really help:



Mulch first. Healthy, organic-rich soil works more like a sponge, storing water underground so roots can draw on it for weeks after a storm. Compacted soil just runs off before the trees can really drink it up. A 2-4 inch layer of wood chips (kept a few inches away from the trunk) is the single most impactful thing you can do.



Water slowly and deep. For mature trees, the root zone can spread three times as far as the edge of the canopy. Spend at least 5 minutes giving the tree a good slow drink right around the trunk.



Check the soil, not the calendar. Get a pinch of dirt from under the tree's canopy and roll it in your fingers. If it sticks together, there's enough moisture. If it's dry and crumbly, it's time to water.

More tree care from local experts at Leaf & Limb:

- [Video: Drought Is Here: How to Save Your Trees Without Wasting Water](#)
- [Why Drought Hits Some Trees Harder: It Starts With the Soil](#)
- [7 Ways to Help Your Trees and Shrubs During \(and After\) a Drought](#)



More GOOD News

Here's the other side of the coin - and it connects right back to what we said up top. When the rain does finally arrive, it can come hard and fast. Dry, compacted soil can't absorb it quickly enough, which is why drought and flooding aren't opposites - they often follow each other in the same season.

Hurricane season runs June 1 through November 30, and the **GOOD NEWS** this year is that El Niño is

doing something helpful here: El Niño is serving as a sort of wind "wall" over the Atlantic, which tears apart storms before they can really build and intensify. We're actually in for one of the quietest hurricane seasons in over a decade!

But - and this is the part worth sitting with - Hurricane Helene and others are a reminder that it only takes one hurricane to cause major disaster. So it's important to understand that a quieter season means better odds, but not zero risk. So let's be prepared, shall we?! 🙏🙏

Hurricane Prep

1. WATCH: [Hurricane Preparedness Video](#) (English, Spanish, ASL)
2. DOWNLOAD: [Hurricane Safety Checklist](#) (9 languages)
3. SIGN UP: [ALERT Durham](#) (emergency and weather notifications straight to your phone)
4. SAVE: [PBS Emergency Management Livestream](#) (stay informed during an emergency)

Know the terms:

- "Hurricane Watch" - conditions *possible* within 48 hours
- "Hurricane Warning" - conditions *expected* within 36 hours
- "Tropical Storm Warning" - tropical storm winds possible within 36 hours



Too Cool Tuesdays

While we're talking about staying prepared: extreme heat is its own serious health risk this summer. This summer, Durham County is doing **Too Cool Tuesdays**, where we share easy tips on how to stay safe and cool. Follow us and look out for Too Cool Tuesdays [here](#)!

[Sign up for NC Heat Health Alerts HERE](#) and share the link with someone who might need it. Older neighbors, people without AC, outdoor workers, young kids, folks who take prescription medication are all at higher risk for heat exhaustion or stroke. Give them a heads-up and check on them on the hot days - it can genuinely make a difference ❤️

Bringing Home the Bigger Picture

El Niño reminds us that we live on a connected planet. What happens in the Pacific touches farmers in Southern Africa, fishing communities in Peru, shoppers paying more for food like rice and wheat - and Durham community members undergoing a water use restriction.

We get to choose how we respond. Let's choose to have hope through action, be proactive, and take some good deep breaths - best of all, let's stick together and look after one another, Durham 🤝

Small, consistent actions. Togetherness. That's how Durham weathers it all. 🌱

Stay cool,

~ Your Durham County Sustainability Team

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