ECOLOGY ACTION CENTER NEWS

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Urban trees are tough, but do we have their backs?

Across the country, cities and towns are recognizing their local trees as a public asset, and are taking steps to protect them. The municipal benefits of healthy mature trees can't be overstated - trees reduce flooding and pavement sun exposure which extends the life of critical infrastructure. Trees create a more inviting atmosphere for residents and visitors to stay and shop. City budgets can be tight, and investing in trees is incredibly cost effective - earning two to five times back in investment.[1]

Urban trees have to be tough to survive. They have to endure conditions like high exposure to traffic and pollution, small planting sites, and poor soil quality. Planting new trees is not always successful, especially without regular watering and care. It's also not a 1:1 game when you replace a mature tree with a new sapling. This is why serious consideration should be taken to protect as many urban trees as we can. These are trees that have adapted to survive their challenging environment and cannot reasonably be replaced.

Cities all over are using creative solutions to protect their trees. In Austin, Texas they have implemented a tree ordinance that protects all healthy trees 8" in diameter or larger.[2] Anyone looking to remove a tree on private or city property must get approval from the city first. If it is approved, they will still have to either replace the tree with a new one, or pay about $100 per inch diameter per tree to their tree mitigation fund.[2] This fund is used specifically to plant trees and maintain the existing tree canopy. Because of this ordinance, developers are incentivized to save as many trees as they can, and the city has gotten a significant flow of funds towards its tree care program. Conversely, there is no current policy in our community that requires repair or accountability to residents for any loss of trees. This issue is relevant to our community since currently there is a petition circulating to protect a rare dawn redwood tree at a local institution. This tree is among the 53 healthy, mature trees that are set to come down on the site for a construction project.

Both the town of Normal and the city of Bloomington are part of Tree City USA, which is a national program that requires a commitment to create a tree board or governing body, to have a tree care ordinance, and to spend at least $2 per capita on their tree canopy each year.[3] These are great steps, but certainly more could be done to protect our urban trees. Should our ordinances be revisited and strengthened? Are there trees here in our community that we can agree ought to be protected? In our constantly changing urban environment, every moment counts to protect our resident trees. We have to decide, will we have their backs?

Sources for Urban trees are tough, but do we have their backs?
1. "The Value of Trees" Arbor Day Foundation, 2025. https://www.arborday.org/value
2. City of Austin, Texas. "Environmental Criteria Manual - Section 3 - Tree and Natural Area Preservation" Austin, Texas municipal code, January 2, 2025. https://library.municode.com/tx/austin/codes/environmental_criteria_manual
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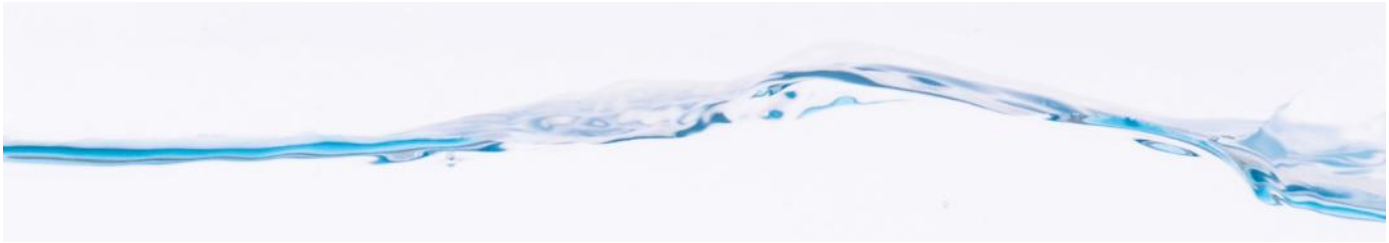
When Algorithms Get Thirsty: The Hidden Water Cost of AI



Artificial Intelligence (AI) functions as a practical tool to access information and incite fascination through marvelous spectacles of video and picture generation. Although tech companies repeatedly emphasize the importance of AI in our lives, there is an ever-growing resource crisis taking place in the background of AI development. Intense water demand from AI data centers has the potential to cause severe effects on our infrastructure, drinking water supply, and ecosystems across the U.S. On-site water use by U.S. data centers is expected to reach 150-280 billion liters per year, doubling the rates of consumption in 2023.[1] This water cannot be easily recycled back into society as, once withdrawn from a drinking water supply, it is chemically treated to prevent bacterial contamination of data equipment and corrosion making it unsafe for human consumption.[2]

Data centers are the backbone of AI, containing networking equipment that allow programs to run computations. When a prompt is sent to an AI platform like ChatGPT, a procedure is initiated in which a server in a data center completes thousands of calculations in order to estimate the most applicable words in relation to the prompt. These calculations generate heat, and require cooling systems to function as a deterrent against possible hardware issues.[3] These cooling systems are extremely water intensive. An average data center might use around 300,000 gallons of water per day, but larger hyperscale data centers may consume 5 million gallons of water daily.[2] Furthermore, these tech companies are withdrawing water from areas that need it most. An S&P analysis revealed that 43% of data centers around the globe are located in areas experiencing high water stress, and one-fifth of data centers in the U.S. are present in areas experiencing extreme levels of water stress.[1,4]

Given the radically cheap cost to withdraw freshwater, it is easy to understand tech companies' decision to continue consuming. It is estimated that in 2023, it cost $5.56 per 1,000 gallons for commercial users to withdraw water.[4] Due to this remarkably cheap cost, data center operators choose to draw water from local sources which impacts drinking water supply for communities who rely on them. Following a citizen-led lawsuit in the city of The Dalles Oregon, it was found that Google was responsible for 29% of The Dalles' entire water consumption in 2022, withdrawing an astonishing 355 million gallons of water and tripling their consumption in the town in the past five years.[5]

So, the next time you find yourself consulting ChatGPT over a problem, think about the impact your query may have on local water supplies and consider using an AI free search engine instead!

PaintCare Launches Free Statewide Paint Takeback Program in Illinois

Effective December 1, 2025, Illinois residents and businesses have a new, convenient way to dispose of leftover paint! The Illinois Environmental Protection Agency approved PaintCare's Illinois Paint Stewardship Program plan in October and has now announced 300 collection sites across the state.
McLean County now hosts four easy, year-round drop-off locations for latex and oil-based paints. See specifics about these local paint drop-off locations at RecycleBN.org.

- **Sherwin Williams** – 115 Krispy Kreme Drive, Bloomington
- **R.P. Lumber** – 2440 S. Main Street, Bloomington
- **Sherwin Williams** – 1906 E. College Avenue, Normal
- **R.P. Lumber** – 208 W. Cherry Street, LeRoy

Accepted Paint Materials

- Interior & exterior architectural paints: latex, acrylic, water-based, alkyd, oil-based, and enamel paints (including textured coatings)
- Deck coatings and floor paints (including elastomeric)
- Primers, sealers, and undercoaters
- Stains
- Shellacs, lacquers, varnishes, and single-component urethanes
- Waterproofing concrete, masonry, and wood sealers/repellents (not tar or bitumen-based)
- Metal coatings and rust preventatives

Materials Not Accepted

- Leaking, empty, or unlabeled containers
- Paint thinners, mineral spirits, and solvents
- Aerosol spray paints
- Auto and marine paints
- Art and craft paints
- Caulks, epoxies, glues, and adhesives
- Paint additives, colorants, tints, and resins
- Wood preservatives containing pesticides
- Roof patch materials
- Asphalt, tar, and bitumen-based products
- Two-component coatings
- Deck cleaners
- Traffic and road marking paints
- Industrial Maintenance (IM) coatings
- OEM (shop-applied) paints and finishes

Sources for When Algorithms Get Thirsty: The Hidden Water Cost of AI

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3. Verma, Pranshu, and Shelly Tan. "A Bottle of Water per Email: The Hidden Environmental Costs of Using AI Chatbots." *Washington Post*, The Washington Post, 18 Sept. 2024, www.washingtonpost.com/technology/2024/09/18/energy-ai-use-electricity-water-data-centers/.
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5. Rogoway, Mike. "Google's Water Use Is Soaring in the Dalles, Records Show, with Two More Data Centers to Come." *Oregonlive*, 17 Dec. 2022, www.oregonlive.com/silicon-forest/2022/12/googles-water-use-is-soaring-in-the-dalles-records-show-with-two-more-data-centers-to-come.html.
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The Fire isn't Always so Delightful: Natural Gas Safety

Winter is here! It's time for months of bundling up, grabbing a hot drink, and relaxing in a warm house. But the furnace that keeps you comfortable can also be a hidden hazard that could quickly ruin your cozy night. That hazard is your furnace's fuel: natural gas.

When used correctly in a home, natural gas is a safe and relatively cheap fuel for household heating needs. While it still emits carbon dioxide, it emits far less harmful byproducts/pollution than similar fuels such as coal and wood. However, as a flammable fuel, natural gas poses a danger if used incorrectly. When it leaks, it not only creates a fire and explosion hazard, but also a human health hazard.

Hidden gas leaks are more common than you might think. Of the homes that the EAC has performed energy audits in this year, 26% of them had leaks in their gas lines. While many gas leaks will show NO symptoms, there are easy signs to watch out for, such as

- Abnormally high usage on your bill (take factors such as weather and time of year into consideration as well)
- A hissing noise coming from the gas lines
- A rotten-eggs smell (gas companies add an odorant called mercaptan to detect gas leaks as natural gas is naturally odorless)
- Suddenly dead or dying plants
- Air bubbles in standing water such as mud or puddles (typically symptoms of a leak in the underground gas main)
- Sudden headaches and nausea while in the home

If you notice any of these symptoms, vacate all people and pets from the building and call your gas provider's emergency number, which always be listed on your gas bill. If you smell gas or hear a loud hissing noise from a line, call 911 as well.

In addition to leaks, natural gas appliances present a health hazard when incomplete combustion occurs. This happens when there is not enough oxygen supply in the area of the home known as the Combustion Appliance Zone, or CAZ. When natural gas does not combust completely, it not only runs the appliance less efficiently, but it creates harmful byproducts such as soot and carbon monoxide, which presents a very dangerous health hazard.

ALWAYS install a carbon monoxide detector in your house by your bedroom (so you can hear it more easily at night), and optionally install one in your home's CAZ to detect carbon monoxide at its source. Look for early signs of incomplete combustion as well, such as a yellow flame in the appliance (natural gas should always burn blue), and soot build-up around the appliance. If you notice either of these things, have your appliance serviced or replaced immediately. If your carbon monoxide detector goes off, ALWAYS vacate the building and call 911.

Always service your gas appliances at least once a year, to ensure they are working safely, and watch for the previously mentioned symptoms of gas leaks/incomplete combustion in your home. Following these tips will ensure your gas appliances run cleanly and safely, so that the fire remains delightful inside your home.

ECOLOGY ACTION CENTER

Plant a Tree for Christmas

Donate to the Ecology Action Center's Tree Corps program on behalf of someone you love and give the gift of trees for a brighter, greener world!

Visit: ecologyactioncenter.org/christmas

TREE CORPS

GROW SOLAR BLOOMINGTON-NORMAL

2025 Program: Results

In 2025, the Grow Solar program resumed after a 5 year pause. This year was very successful, resulting in an average of $1,200 in savings for each user's first year!

Across 4 Grow Solar Programs, the EAC has helped add over 1,178 kW of new solar energy on 95 homes and businesses. The 2025 program concluded with 40% more installations than the 2019 program, a reflection of our community's commitment towards clean energy

20
Installations

201.5
kW of Capacity

2,300,000
Lbs. of CO^2 Offset

$135,742
Total saved in Year 1 Utility Costs

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The Ecology Action Center will make reasonable accommodations for participation in public programs and services. To request accommodation, please call 309-454-3169x11 or go to ecologyactioncenter.org/accommodation. Please provide two weeks advance notice if possible.

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