Why We Need Food & Water Action on Climate Change

Climate change threatens our most essential resources: food and water. The United States must work urgently to deploy existing technologies and solutions for harnessing zero-emission, renewable energy and upgrade energy efficiency; the easiest reductions are in the dirty energy sources we need not use at all, fossil fuels. The call for genuine, emissions-free renewable energy dates back nearly 50 years. We need a New Deal-scale green public works investment with Apollo Project-level innovation to drive the rapid transition to clean energy.

At the same time, agriculture is a leading contributor to climate change. Our nation's agricultural policies incentivize unsustainable practices, rather than target inefficiencies. The way we produce food needs to be entirely revamped, and we must invest in the necessary resources and infrastructure to protect our water from the dire effects of climate change.

The United States can and should be a global leader on this ambitious path. We can achieve the goal of 100 percent clean, renewable energy by 2030 if we have the political will. Everyone in the United States must demand strong government policies and commit to aggressive action now.

Agriculture and Climate Change Are Connected

Climate change threatens our ability to feed people; in fact, it reduces the amount of available food. More frequent and intense natural disasters — such as droughts and floods — cost farmers money and hurt agricultural yields. Extreme weather events can also impact local economies and incomes, making food less affordable.[1] Globally, the total annual cost for natural disasters is estimated at $250-$300 billion, which includes the cost of disease outbreaks among livestock and crops.[2]

In the United States, the number of "billion-dollar climate events" has risen since 1980.[3] In 2018 alone, 14 climate events racked up more than $90 billion in damages, including agricultural losses.[4] California's five-year drought from 2012 to 2016 cost billions in agricultural economic losses.[5] Financial losses in agriculture from climate events can hurt local economies for years. Disasters also affect the health of livestock, aquaculture and forests.[6]

Our global food system is highly vulnerable to climate change; just nine plant species account for more than 66 percent of all crops.[7] As weather patterns change, some regions may be unable to support crops that were previously cultivated there.[8] Changes in rainfall and temperature threaten yield production and can devastate the global food supply. Warmer temperatures can encourage crop-eating insects to thrive in certain regions, and may lead to significant declines in yields of major grains.[9]

California's economy, for example, is highly dependent on irrigation and is very vulnerable to changing weather patterns.[10] It is also home to perennial tree crops like almonds and mandarins,[11] which are a huge investment, making it more challenging for farmers to adopt different crops in the face of a changing climate. Yield losses in California would have devastating effects on the national economy and food supply, considering that the state grows about half of all U.S. produce.[12]

As the planet continues to warm, these impacts will worsen. However, at the same time, agriculture is a leading source of human-caused emissions that are warming our planet.

Our Food System Drives Climate Chaos

Agricultural production contributes an estimated 15-25 percent of human-caused greenhouse gas emissions.[13] Livestock production contributes the bulk of agricultural emissions (around 80 percent).[14] The largest component of livestock's footprint is the production and processing of animal feed.[15] Other activities release the greenhouse gas methane, including enteric fermentation (a digestive process in cattle) and the processing and storage of manure.[16]

Crop production also contributes to climate-warming emissions. Monocultures dominate global agriculture, including corn and soybeans grown in the American Midwest and other regions.[17] The lack of intercropping and crop rotation make monocultures vulnerable to plant pests; many rely on chemical inputs like fertilizers and pesticides.[18] These are often produced with fossil fuels, further contributing to climate emissions.[19] In fact, in some cereal crop systems, the use of fertilizers represents the largest contribution of greenhouse gases.[20] Continuous monocultures can also impair agricultural soils, reducing their health and ability to sequester carbon.[21]

USDA PHOTO

A California almond orchard using flood irrigation to mitigate a 2015 drought.

Meanwhile, factory farms raise huge numbers of animals in confinement and produce enormous amounts of animal waste. This waste is often stored in lagoons before being transferred offsite or sprayed on fields, often at levels too high for the land to absorb, which can lead to nutrient runoff and pollution of water resources.[22] A better approach would be to integrate livestock into cropping systems, giving livestock access to pasture and using their manure as fertilizer, thereby solving the waste issue while also eliminating the need for synthetic fertilizers.

Across the entire life cycle of food production — from fertilizer and feed manufacturing to packaging, transportation and wasted food — agricultural releases are estimated at 19-29 percent of all human-caused climate emissions.

Food transportation, processing and packaging also contribute to agriculture's footprint. Across the entire life cycle of food production — from fertilizer and feed manufacturing to packaging, transportation and wasted food — agricultural releases are estimated at 19-29 percent of all human-caused climate emissions.[23] However, corporate agriculture willfully ignores these inefficiencies, encouraging pesticide-dependent monocultures, propping up factory farms and sacrificing more acreage to unsustainable ethanol production.

Bad Policies Encourage Overproduction and Prop Up Factory Farms

Programs such as federal subsidized crop insurance incentivize the planting of commodities like corn and soybeans.[24] Currently, the top four commodity crops — corn, soybeans, cotton and wheat — make up more than 70 percent of enrolled acres, while also qualifying for payouts in other programs.[25]

This system does a poor job of feeding people. For example, nearly 40 percent of U.S. corn goes into producing ethanol, and half of all North American crop calories are fed to livestock.[26] This means that the production of ethanol, a plant-based biofuel that is falsely marketed as being a "renewable" resource, also takes up a substantial amount of farming acreage.[27]

Ethanol is derived from biomass, a dirty energy source. It is propped up by a federal mandate that requires transportation fuels to contain biofuel.[28] The whole process from growing corn to processing it into a biofuel is climate polluting. Conventional ethanol production uses corn starch as a biofuel feedstock and releases greenhouse gas emissions.[29] Corn stover (primarily the leaves, husks, stalks and tassels) is the other main ethanol biofuel feedstock; research has shown that its removal from land decreases the amount of organic carbon in soil and increases carbon dioxide (CO_2) emissions.[30] Ethanol fuel also releases CO_2 during combustion.[31]

Many foods that directly feed humans (fruits, vegetables and nuts) are ineligible under subsidized crop insurance and other federal safety net programs.[32] The result is a system that incentivizes corn and soybean overproduction, further depressing prices and enabling feed manufacturers to purchase artificially cheap grain. This, in turn, props up the polluting factory farm system. Unsurprisingly, U.S. factory farms proliferated over the same time period that federal agricultural policy encouraged the overproduction of corn and soybeans.[33]

Our current farm safety net is a lose-lose situation even for many farmers of commodity crops, as it perpetuates depressed crop prices and low farm income. The real beneficiaries are the corporate food giants that purchase cheap grain to feed factory farms.[34] Additional public funding is directly captured by factory farms. For example, the Environmental

Quality Incentives Program (EQIP) is supposed to provide funding and technical assistance to farmers implementing conservation practices such as cover cropping (plants grown to help manage or protect soil) and stream protection.

However, the 2002 Farm Bill made changes to EQIP to allow factory farms to participate, including a mandate that 60 percent of all funding go toward livestock operations (reduced to 50 percent in the 2018 Farm Bill).[35] EQIP-funded projects come at the expense of small livestock and crop farmers who are turned away due to limited funding.[36] In Iowa, nearly one-third of all EQIP funding from 1997 to 2015 went to factory farm practices, including $62 million to build facilities to store animal waste. These funds could have instead supported 7,500 additional projects at smaller farms.[37]

Furthermore, each year millions of public dollars flow to factory farms to finance projects such as anaerobic digesters — an expensive, unproven technology for turning animal waste into electricity.[38] In California, digesters are being increasingly promoted as a means to reach greenhouse gas reduction goals,[39] and the state's 2019-2020 budget backs biogas and forces California to invest in more dirty dairy digesters.[40]

Biogas is a mixture of gases produced after plant and animal materials such as manure from factory farms, sewage sludge and food waste are broken down by microorganisms in a process called anaerobic digestion.[41] Biogas includes waste methane from different origins, including livestock manure.[42] Methane is nearly 90 times more powerful as a greenhouse gas than carbon dioxide over a 20-year period.[43] Burning biogas also releases CO_2 and other pollutants including nitrogen oxides (NO_x), ammonia and hydrogen sulfide.[44]

Food System Solutions Are Climate Solutions

Our public dollars are investing in an old, polluting system that is incompatible with climate target goals. The mentality of squeezing as much "productivity" out of the land as possible — through intensive monocropping or factory farms — got us into the mess we are in today. Instead, we need to recognize the interplay between farmland and the surrounding ecosystem. This includes integrating practices that maintain soil health and protect organisms vital to food production, from pollinators to soil microorganisms.[45]

Monocropping is the agricultural practice of growing a single crop year after year on the same land.

Growing more food will not ensure that hungry people are fed. Roughly 815 million people globally are hungry; 75 percent of them are family farmers who together produce the majority of the world's food.[46] A report from the Food and Agriculture Organization of the United Nations highlights how sustainable agriculture can not only meet environmental goals but also close this hunger gap. To do so, we must put family farmers at the center, drawing on their local expertise while shortening the production chains between grower and consumer and investing in local markets.[47]

Emerging research suggests that sustainable practices that focus on soil health (avoiding pesticides, practicing diversification and crop rotation, and planting cover crops) can increase yields over the long run, potentially closing yield gaps between conventional and alternative systems.[48] A recent series of case studies from the U.S. Department of Agriculture (USDA) shows how such practices can increase yields and profits while reducing farmer costs.[49] Intensive farming and chemical inputs, on the other hand, reduce soil fertility and threaten future productivity. They also harm pollinators, pollute ecosystems and make farmland more vulnerable to a changing climate.[50]

We could raise more food with fewer emissions if we instead devoted more fields to growing crops for direct human consumption.[51] We must also change the way we raise livestock for food and the roles that meat and dairy play in our diets.[52] The livestock sector uses an enormous amount of land, replacing vast amounts of natural carbon sinks. If it continues business as usual, the sector would account for nearly half of the allowed emissions by 2030.[53] Integrated crop and livestock systems can reduce greenhouse gas emissions by using manure as crop fertilizer while also producing their own feed.[54] Alongside this, we can shift our diets to more appropriate levels of sustainably produced meat and dairy.

At the same time, shifting away from water-intensive industrial agriculture is an essential aspect to dealing with both our warming planet and the water crisis. Agriculture is both a victim of and a significant contributor to water scarcity. Climate change will exacerbate this problem.[55]

Water in Peril: A Freshwater and Infrastructure Emergency

Climate-altering greenhouse gas emissions from our energy and food systems pose serious risks to our water. More frequent and intense droughts will cause water shortages, leading to overreliance on and possible depletion of groundwater supplies, which can impact utilities.[56] In the United States, our outdated water infrastructure, which was built based on the more stable weather patterns of the past, is unprepared and overwhelmed in the face of these challenges.[57] Consequently, we face water scarcity, deterioration of source water quality, service disruptions from extreme weather, flooding and sewage overflows, and a deepening water affordability crisis.

Water and wastewater services may become less reliable as our climate changes, especially when met with extreme weather events. Weather disturbances ranging from hurricanes to droughts can cause water system disruptions, including a pause in operations, loss of supply or restrictions on water use, and degraded water quality.[58] With more intense rainfall and the rise of more extreme weather-related events, water and wastewater systems will experience more flooding, power outages and infrastructure damage, leading to far less reliable services.[59] Flooding due to storms and sea level rise will regularly overwhelm sewer systems, causing sewage overflows and requiring utilities to adapt or relocate.[60] Without federal support, these changes will likely increase water service rates for customers, because of the extremely high costs for utilities to become climate resilient.[61]

Climate change also has real impacts on the quality and quantity of fresh water and will exacerbate water shortages worldwide.[62] Water quality issues plague the water that is still available, from pollution from runoff to toxic algal blooms. All levels of government need to prepare our water systems to ensure safe and reliable service in the face of our changing climate. Our water and wastewater systems will have to adapt.

Hurricanes and Infrastructure: Katrina, Sandy, Harvey and Maria

The earth is warming.[63] And this warmer air holds more energy that feeds hurricanes, which have even worse storm surges due to rising sea levels.[64] These increased weather events have been catastrophic to water infrastructure, and they will only get worse.

Katrina

Hurricane Katrina hit New Orleans in 2005 and within days affected more than 1,220 drinking water systems and 200 wastewater treatment plants in Alabama,

Widespread flooding throughout New Orleans in the aftermath of Hurricane Katrina in 2005. NOAA PHOTO

Louisiana and Mississippi.[65] Two weeks after landfall, the majority of these systems were still unable to provide necessary services: only 30 percent of the drinking water systems and 40 percent of the wastewater treatment plants were back in operation.[66] In New Orleans, half of the lift stations used in wastewater treatment were still out of service eight months after the hurricane hit.[67]

The city's largest drinking water plant was underwater for nearly two weeks and was unable to supply safe drinking water to residents for weeks.[68] Water and wastewater systems throughout the area experienced intense flooding, leading to power outages and raw sewage overflows.[69] This extreme flooding also caused extensive damage to underground infrastructure such as service pipes, leading to problems long after the storm had passed from sinkholes to leaks and more sewer overflows.[70] New Orleans continues to suffer from ongoing flooding and inadequate infrastructure.[71]

Hurricane Katrina disproportionately affected New Orleans' African-American residents, which accounted for nearly 75 percent of the city's displaced population.[72] A decade after Katrina ravaged New Orleans, 60 percent of the city's African-American population said that Louisiana had "mostly not recovered," compared to 80 percent of white residents who found that the state had "mostly recovered."[73] Nearly half of New Orleans' African-American population said that their quality of life in their communities was "worse" than it was before the historic storm; only 13 percent of white residents said the same.[74]

Sandy

In 2012, Hurricane Sandy ravaged the U.S. East Coast. The storm surge caused billions of gallons of raw and partly treated sewage to flood waterways in New York and New Jersey, which overflowed and inundated streets.[75] The regional sewage system was not designed to withstand a storm of this caliber.[76] Afterward, experts advised residents of New York City, its northern suburbs, Long Island and New Jersey to conserve water and take extra caution by boiling it before consumption.[77] Purifying drinking water with tablets was also recommended.[78] Overall, damage to public drinking water systems resulted in the State of New York issuing more than 60 boil advisories.[79] In New Jersey, 35 water systems issued boil advisories.[80]

Aerial view of the flooding and structural damage caused by Hurricane Sandy in 2012. U.S. COAST GUARD PHOTO

Widespread damage in New Jersey led then-Governor Chris Christie to issue an Executive Order declaring a water emergency. Water restrictions were put in place to reduce the volume of water delivered to the already overburdened wastewater treatment facilities.[81] In total, the state experienced damage to 70 drinking water systems and 80 wastewater treatment plants that left it with a $2.6 billion tab.[82]

Harvey

In 2017, Hurricane Harvey made landfall along the Texas coast, with the eye of the storm hovering in place for four days.[83] Historic amounts of precipitation resulted in cataclysmic flooding, 61 inoperable public water systems and more than 200 boil advisories.[84] Water shortages after the storm resulted in

Widespread residential flooding in Port Arthur, Texas after Hurricane Harvey, 2017. SC NATIONAL GUARD PHOTO extreme price gouging of bottled water, with prices as high as $99.[85] Nearly a week after landfall, at least one town still lacked access to safe drinking water.[86]

Hurricane Harvey posed unique challenges since it made landfall in the nation's largest petrochemical hub. More than 100 Harvey-related toxic releases contaminated the air, land and water.[87] The heavy rains released dozens of tons of industrial toxins including benzene, butadiene and other known carcinogens into neighboring communities and waterways.[88] In Baytown, Texas alone, nearly half a billion gallons of industrial wastewater mixed with stormwater gushed from a single chemical plant.[89] Barely any of these discharges were investigated by federal regulators; a majority were not publicized until later.[90]

Maria

Also in 2017, Puerto Rico was devastated by Hurricane Maria, which significantly damaged the island's water system.[91] A week after Maria made landfall, nearly all of Puerto Rico's 3.4 million residents struggled to find food and a majority lacked access to safe drinking water.[92] Without power, their water system could not operate the equipment to treat and distribute water.[93] While San Juan experienced sporadic water service, people living farther away needed to bring large trash cans and buckets to collect water from distribution stations.[94] Three weeks later, 80 percent of the population was still without power, and more than 30 percent still lacked access to safe drinking water.[95]

The situation was so dire that the U.S. Environmental Protection Agency had to issue a warning for desperate people not to consume water from wells at contaminated toxic Superfund waste sites.[96] But even before Maria ravaged Puerto Rico, the island suffered from a troubled water system, with the worst drinking water contamination problems of any U.S. state or territory.[97] Maria merely worsened Puerto Rico's water woes, which included impaired sewerage treatment plants and old water lines that are now even more prone to leaking.[98]

Residents desperate for clean drinking water crowd a water distribution center in Juncos, Peurto Rico. FEMA PHOTO

Freshwater Under Threat

Beyond jeopardizing vulnerable infrastructure systems, climate change threatens our planet's limited freshwater resources. Already, in part due to climate change, an estimated 80 percent of the world's population is faced with water insecurity, which means that people lack access to affordable, safe, clean drinking water.[99] An estimated 1.3 billion people suffer from outright water scarcity[100] — the lack of sufficient water resources to meet demands — because of water shortages or inadequate infrastructure.[101] Climate change will deepen this water crisis.[102]

Currently, the world is faced with a global water emergency, with 25 percent of the population under "extremely high" water stress, meaning that water withdrawals for industry, agriculture and municipal uses exceed 80 percent of annual available supplies.[103] In 2013, the U.S. Government Accountability Office surveyed state water managers and found that 80 percent of respondents anticipated water shortages to occur sometime in their state "under average conditions" by 2023.[104]

The freshwater supplies of five states (Arizona, California, Colorado, Nebraska and New Mexico) are significantly stressed.[105] New Mexico, faces significant water stress that is comparable to that in the United Arab Emirates.[106] Some of these states rely heavily on irrigated agriculture (such as nut crops in California and cotton in Arizona) rather than planting crops more suited to the climate.[107]

Climate and freshwater systems are complexly interconnected.[108] As the Intergovernmental Panel on Climate Change has explained, "Any change in one of these systems induces a change in the other."[109] Climate change will intensify prolonged drought conditions, decrease freshwater availability and hinder groundwater recharge.[110] Some parts of the United States, particularly the Southwest and Southern Great Plains, will experience more frequent and intense droughts,[111] which have an enormous impact on water resources. During droughts, freshwater supplies can become dangerously low as evaporation from increased temperatures occurs, hindering groundwater recharge and impacting surface water levels and supplies.[112] Water utilities can suffer under these conditions, especially those that depend on groundwater.[113]

Pollution and Scarcity

Climate change-fueled water contamination will further erode access to safe water. Water quality and water scarcity are also directly linked.[114] Water scarcity occurs when the water demand nears or exceeds the available supply.[115] It is difficult for freshwater bodies to process pollution discharges from varying agricultural, urban and industrial uses, which means that the contamination of water sources can be a significant cause of water scarcity.[116]

Warmer temperatures combined with increasingly extreme storm events and droughts will lead to more water pollution.[117] Heavy and intense rainfall events create more storm runoff that can contaminate surface waters. As rainfall hits saturated or impervious surfaces, such as roads, it cannot infiltrate the ground and instead flows overland as runoff, picking up pollutants along the way.[118] And industrial sites that are ravaged by natural disasters can release toxins into the environment and water supplies. For example, after Hurricane Harvey devastated the Gulf Coast, several water systems went offline, dozens of spills from sewage and wastewater systems released contaminants, and more than 30 industrial facilities reported chemical spills.[119]

In addition, increasing temperatures melt snowpack, ice caps and glaciers.[120] Glacial melting causes sea levels to rise,[121] which increases saltwater intrusion in many freshwater sources, reducing the amount of drinkable water.[122] Rising ocean temperatures will lead to more rapid evaporation.[123] Likewise the increase in frequency, size and severity of wildfires associated with climate change can have huge impacts on water sources in burned areas. These regions have more soil and stormwater runoff, increasing the amounts of sediment, nitrogen, phosphorus and trace metals present in the water, as well as causing higher turbidity and more organic material to enter the water.[124]

Glacial melting causes sea levels to rise, which increases saltwater intrusion in many freshwater sources, reducing the amount of drinkable water.

Algal blooms from agricultural pollution also threaten safe drinking water and are exacerbated by climate change.[125] Algae occur naturally in surface waters, but under the right conditions (warm water, adequate sunlight, and high nitrogen and phosphorous levels) algae can swiftly proliferate and form blooms.[126] Blooms that impair ecosystems or pose hazards to human health are known as harmful algae blooms.[127] The growing trend toward the increasing size, frequency and duration of harmful algae blooms in the United States will only worsen as global temperatures continue to rise.[128]

Conclusion: Tackling Climate Change to Save Our Most Essential Resources

The United States is a major contributor to climate change through fossil fuel emissions and agricultural production.[129] Globally, natural disasters have increased significantly since 1980,[130] and our planet is increasingly impacted by extreme weather events.

These disasters can curtail freshwater supplies, and our water systems are aging and unprepared to meet the challenges associated with climate change-fueled natural disasters. Hurricanes can take systems completely offline. Flooding and sea level rise further threaten systems and can force infrastructure relocation, heavy rainfall leads to more sewage overflows, and the total cost of climate adaptation for our water and sewer systems is high, nearing $1 trillion by 2050.[131]

Climate change also threatens our ability to feed a growing population, with future droughts and famines potentially leading to more political unrest and displacement of people. At the same time, agriculture remains a leading contributor to climate change. A recent report found that food producers have the largest external environmental costs of any industry analyzed.[132]

Our planet is cooking, with 2015 through 2019 on record as the five warmest years ever.[133] The earth has already warmed 1 degree Celsius since the dawn of the Industrial Revolution; another 0.5 degree rise could cause irreversible damage, potentially making parts of the world uninhabitable this century.[134] We must make enormous cuts in our greenhouse gas emissions in order to avoid the most severe impacts to our most essential resources: food and water. Climate change has already begun to impact freshwater resources and food production across the globe.

Mitigating the worst effects of climate change will require fundamental, systemic transformation.

A first step would be rapidly decarbonizing our grid so that we can hit net-zero global emissions by 2050 (this requires a transition to 100 percent renewable energy), and we must make significant changes to our agricultural system.[135]

Agricultural recommendations:

We need to swiftly transform our food system into one that produces fewer emissions and is resilient to a changing climate.[136] We can achieve this, but only if we revamp our farm policies to put farmers and consumers — not big agribusinesses — at the center. We should:

Fix the farm "safety net." Our farm safety net incentivizes the planting of top commodities like corn and soybeans on monocultures. We need a dramatic shift in agricultural policy that ties in climate-smart practices while incentivizing the planting of more crops that directly feed humans. We can curb overproduction of commodities.

Invest in research for sustainable practices. The USDA spends billions of dollars each year on agricultural research, yet only a small slice of this goes into research on sustainable systems.[137] Federal dollars should prioritize research practices that improve sustainability, help farmers adapt to climate change, and work toward creating sustainable systems. State legislatures can also earmark funding toward sustainable practices, as is happening in California and Maryland.[138] State extension services have long played an important role in disseminating new practices to farmers and can be an important facilitator to connect farmers with this growing body of research on climate-friendly practices.[139]

Increase grants for conservation practices and close loopholes that enable factory farms to capture this funding. Federal dollars can help farmers implement these sustainable practices. Existing programs like EQIP pay farmers to implement conservation practices such as planting cover crops or protecting streams. Yet Big Ag has hijacked this program, and now factory farms gobble up a significant share, using these funds to build methane-releasing manure storage facilities or to transport their wastes to other communities. We need to prevent factory farms from participating in EQIP and other conservation funding, and to end the funding of dirty practices. This would free up more funding for farmers interested in incorporating truly sustainable practices on their farms.

Ban factory farms and support a just transition. Finally, we must ban new factory farms and the expansion of existing ones while aiding current factory operations in transitioning to integrated crop and livestock systems. We must also invest in local markets and the required infrastructure to help farmers bring their products to market.

Water recommendations:

Climate change threatens our freshwater supplies and the functioning of our critical water services. We need all levels of government to work together to tackle this crisis and protect our water resources. We must overhaul our country's outdated water and sewer systems to bring them into the climate reality of the 21st century. We should:

Build more resilient water infrastructure, including: adding more redundancy in drinking water distribution to avoid outages during disasters even if one pipeline fails; reinforcing the structural integrity of water systems; having backup power sources so that systems can continue operating even during extreme weather events; increasing wastewater storage capacities to prevent flooding and combined sewage overflows; building protective infrastructure that blocks flooding; relocating treatment plants and facilities as necessary under more extreme scenarios; reinforcing infrastructure like dams and spillways for more extreme flooding events; protecting infrastructure by moving it above ground to decrease the risk of damage from floods or storms; and improving modeling, planning and real-time monitoring to account for increasingly extreme rainfall and flooding.

Protect our water as a public trust. As safe water becomes increasingly scarce, we must fight off efforts to treat it like a commodity. It is more urgent than ever to prevent water privatization, water bottling and water markets. We cannot price our way out of water shortages, and we need water resources to go to the highest public benefit, not the highest bidder.

Create a water trust fund to fully fund our public water infrastructure. It is urgent that Congress create a dedicated source of federal support for our public water and sewer systems to meet the growing demands of our changing climate. One model is the Water Affordability, Transparency, Equity and Reliability (WATER) Act in Congress. Without delay, we must fully fund our water infrastructure to make water safe, affordable and accessible for all.

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