Big Ag Is Draining Utah Dry

The American West is facing a water crisis, compounded by climate change, a history of bad policy, and a refusal to stand up to Big Agribusiness. Despite a wet winter in early 2023 providing a short-term respite, a long-term megadrought persists across the region, as groundwater storage is being depleted after decades of over-withdrawals.[1] Corporate farms remain unfazed by this fact, continuing to abuse water supplies to prop up factory farms that, in turn, worsen the climate crisis and associated drought. The West is ground zero for Big Ag's assault on our water and climate future, and states must halt the expansion of these mega-farms and reallocate water for truly beneficial uses.

Bad Policy Threatens Colorado River Supplies

The Colorado River is one of the most regulated rivers in the world, due in no small part to its famous interstate water agreement: the Colorado River Compact.[2] Established in 1922, the Compact theoretically distributes 16 million acre-feet of water annually to seven states and Mexico. The Upper Basin states of Colorado, New Mexico, Utah, and Wyoming are obligated to deliver 7.5 million acre-feet to the Lower Basin states of Arizona, California, and Nevada, and the Upper Basin can only take its shares from what remains.[3] Utah receives 11 percent of the Colorado River's allocations, equivalent to around 1.7 million acre-feet.[4]

The Colorado River Compact formed during a period of abnormally wet rainfall, resulting in an agreement that allocated 15 million acre-feet annually between the states. Yet in recent decades, only 12 to 13 million acre-feet have flowed through the river each year, further exacerbated by a treaty guaranteeing Mexico 1.5 million acre-feet.[5] The Compact relies on fixed numbers, leaving little room for declining supplies and potentially leaving Upper Basin states unable to fulfil their obligations to the Lower Basin.[6] Reservoirs along the Colorado River have reached record lows in the past few years, forcing the U.S. Bureau of Reclamation to begin curbing supplies to Lower Basin states.[7]

Following months of dispute, Lower Basin states came to a tentative agreement in May 2023, promising voluntary reductions of 3 million acre-feet by 2026.[8] While sparing Utah for now, solutions to this crisis will require all states' participation. The Lower Basin's proposal is insufficient for long-term security, cutting nowhere near enough water to restore water levels along the river.[9]

Growing Water Scarcity in Utah

Utah faces serious threats from climate change, with the Great Salt Lake especially at risk. As climate change intensifies and the state's population skyrockets, the lake has already shrunk by two-thirds since the late 1980s and is expected to shrink even more. This will cause arsenic and

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other toxins to blow from the sandy bottom and threaten the health of nearby residents.[10] The state overall is expected to see dramatically less water available over the next century, as snowpack and river flows decline with temperatures that are rising faster than the national average.[11]

The Colorado River is Utah's most trusted water source, providing 27 percent of water used and benefiting 60 percent of Utahans. Part of the state's allotment is also reserved for future development of the Lake Powell Pipeline, which would divert flows across the state to growing urban populations. In 2020, the state passed a resolution to encourage further development and use of the river's water, noting that increased future demands will require it.[12] But with the future of the pipeline's titular Lake Powell so uncertain, the project may have nothing to pump by the time it is built.[13]

Alfalfa Production Abuses Utah's Dwindling Supplies

The specter looming behind Utah's water problems is the 1.2 million acres of irrigated agriculture being grown in the second driest state in the U.S.[14] Over 80 percent of the state's water is directed to agriculture.[15] Agriculture also consumes the vast majority of Utah's Colorado River allotment, irrigating more than 300,000 acres of land.[16]

Alfalfa and hay are the only viable crops in many high-elevation regions of Utah, occupying over 80 percent of agricultural land.[17] They are also some of the worst options for a drought-stricken state. Food & Water Watch estimates that producing the 2 million tons of alfalfa grown in 2022 required 343 billion gallons of water in consumptive use — equivalent to 60 percent of the state's Colorado River allocation.[18] Consumptive use defines water that is lost through evaporation and transpiration and unavailable for future reuse, as opposed to withdrawals that may flow back into the ecosystem through runoff from irrigation.[19] Not all this irrigation water is sourced from the Colorado River, but the numbers are telling.[20]

About 30 percent of Utah's alfalfa is exported overseas, meaning that up to 1 million acre-feet of water is simply shipped abroad.[21] This so-called virtual water trading is prolific across the West, but in times of water crisis, we must ask ourselves why we are shipping something as valuable as water across the oceans just to turn a dollar.

Mega-Dairies Threaten Utah's Water Security

Utah's mega-dairies[a] are another huge water suck, with the state housing 74,000 dairy cows on mega-dairies. Food & Water Watch estimates that the annual water use of these cows for hydration and washing is 2.3 billion gallons. This could supply around 59,200 households with their indoor water needs for an entire year.[22]

Utah's average dairy herd size grew nearly 60 percent from 2012 to 2022, as operations plummeted by 35 percent.[23] The shift from family-scale dairy farms to mega-dairies poses major concerns not only for the Colorado River, but also for the safety of drinking water supplies across the state. Manure runoff from mega-dairies poses can leach into groundwater and aquifers. Dairy

a In this piece, mega-dairies refer to operations with 500 or more cows, as this corresponds with data categories in the 2017 U.S. Department of Agriculture Census of Agriculture, which does not provide information on confinement and waste management.

manufacturing also threatens water quality; in 2022, a creamery owned by Dairy Farmers of America was caught dumping milk in a rural county, creating a man-made basin filled with rotten milk and covered in toxic algal blooms. Nitrogen contamination was a major concern; if it leaches through soil into groundwater, it can threaten human life.[24]

Conclusion

Utah cannot prop up the mega-dairy or alfalfa industries for much longer. Clutching to a system that abuses and wastes water while the Colorado River dries is too dangerous to blindly accept. It is past time for state leaders to stand up to corporate agricultural interests and rethink Utah's Colorado River water allocations. One way to achieve this goal is to strip alfalfa of its protected beneficial use status, thereby removing much of its water allocations.[25] Utah is beyond easy solutions and must be willing to take bold action to secure a safe and livable future.

Endnotes

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