

Mexico City 2024: Imminent Water "Day Zero" Crisis is Exaggerated

Levels in the Cutzamala Reservoir System are historically low but should rebound when the rainy season returns. However, without major overhauls to its distribution infrastructure, Mexico City's water system may eventually collapse.



Disjoined distribution infrastructure means the city functionally has two water systems, one for wells and one for reservoirs. Well water cannot be moved into the reservoir water distribution system.



Surface Water Reservoirs Are Low

- **Mexico City draws 20% of its water from distant reservoirs that are currently low.** The government has curtailed withdrawals to conserve remaining supplies until the rainy season returns. Current forecasts project the rainy season will be mild in May and June and become wetter than normal in July.
- **Wealthy neighborhoods serviced by these reservoirs use up to six times the city's daily average** and are unaccustomed to limitations, which the government has recommended. **Poor neighborhoods on the same water system but further from the source already face debilitating water scarcity.**



Well Water From Underground Aquifers is the Bigger Problem

- **Residents serviced by the city's thousand wells have endured intermittent supply of poor-quality water for decades.** Neighborhoods on well water have grown in the last 20 years while neighborhoods on reservoir water have not. Extraction is intensifying to meet demand.
- **More than a century of overextraction is causing catastrophic land subsidence.** Fractured pipes currently lose 40% of the system's treated water and introduce contamination between source and taps.



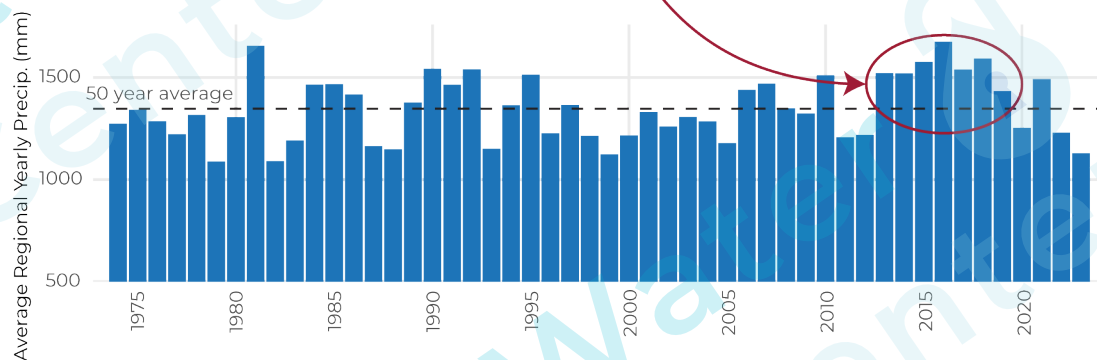
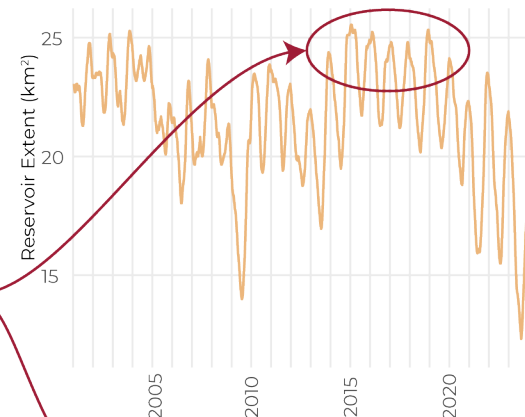
Persistent Water Supply Issues Will Worsen

- **Mexico City is as wet as the wettest US cities.** Because it is flood-prone, the city has **prioritized massive flood diversion infrastructure to drain water.** Although in theory this water could be used for water supply, the city has **limited capacity to store rainwater, recycle wastewater, or induce aquifer recharge.** Investments in these elements of water management could avert eventual system collapse.

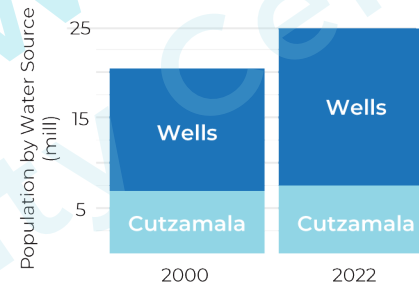
Though currently low, storage has always fluctuated in Cutzamala's largest reservoir: The reservoir peaked well below the historic average and will decline in the coming months. Officials used "soft power" to encourage limited water use during the drought of 2009; the reservoirs rebounded because of heavy rain in September of that year.

This year's rainfall over Mexico City and Cutzamala is low but not unusual: Seven consecutive years of above-average rainfall ('13-'19) were perceived as a new normal. This pattern is reflected in reservoir levels.

Though the past two years have been dry, particularly when compared to the recent seven-year wet period, they are still within the normal variability of the past 50 years.



Population growth: Districts served by well water have grown by roughly 5 million people as the city has expanded and densified over the last ~20 years. The population served by the Cutzamala Reservoir System has stayed relatively stable.



Pathway to Impact

Residents from poorer neighborhoods serviced by reservoir water are already protesting wealthier residents who use the same water source for aesthetic purposes while the poor neighborhoods run dry.

Presidential elections are in June. Elections are often a focal point for conflict and concerns about water scarcity could inflame existing protests.

English articles are conflating low reservoirs with a total lack of water while Mexican press is more nuanced. Mexican press is highlighting the debate over potential water privatization in the upcoming election.

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