A farm town importing water through a crumbling pipe — Avenal, Kings County

Avenal is unusual among the towns in this record: its water problem isn't contamination, it's fragility. Unlike its neighbors, which pump groundwater, Avenal imports surface water through aging transmission lines that have twice failed outright — and its economy is tied to farm labor as directly as any town in this project.

12

Days Avenal went without potable water after its 18-inch transmission main broke in 1995 — it broke again in 1998.

25%

Share of Avenal families living below the poverty level, in a local economy the city's own hazard-mitigation plan says depends directly or indirectly on farming.

What happened

Avenal relies on imported surface water from the California Aqueduct and the Central Valley Project, carried roughly 16 miles through aging transmission lines that run mostly outside city limits, through the Kettleman Hills — terrain prone to slope failure and erosion. The city's 18-inch main broke in 1995, cutting off potable water for 12 days, and broke again in 1998. Its other primary line, a roughly 38-year-old 12-inch main, would cost an estimated $1 million per mile to replace across the roughly seven miles that need it. Drought-driven federal water-delivery rules compound the risk: when deliveries are cut, agricultural users are restricted before municipal users, but the same drought pressure that strains the aqueduct system strains the whole region at once. Avenal's 2012 population was estimated at 15,505 — nearly half of that figure made up of the state prison population, which skews the town's census data — with roughly a quarter of families below the poverty line and 25% unemployment. The city's own hazard-mitigation plan is direct about the cause: agriculture is the primary industry within five miles of Avenal, and most of the local economy, including construction, manufacturing, transportation, and retail, depends directly or indirectly on farming, with the Hispanic population carrying strong ties to farm labor specifically.

Impact — what we know, and what we don't

- **Current pipeline condition:** Not established past the 2012 community profile that's our primary source here — we don't have a more recent assessment of whether the transmission lines have since been replaced or reinforced.
- **Population without the prison count:** Not isolated in the source; the ~15,505 figure includes a prison population "nearly half" the city's total, meaning Avenal's non-incarcerated population is substantially smaller than the headline number suggests.
- **Earthquake risk, separately:** The same hazard-mitigation plan documents Avenal as facing more severe earthquake exposure than other Kings County cities, with roughly $128 million in structures exposed — a compounding risk for the same infrastructure, not something this project treats as a water story on its own.

Part of a larger pattern

Avenal reframes what "water insecurity" means in this project's record: not every town's crisis is a contaminant in the ground. Some, like Avenal, are entirely dependent on infrastructure that can and has failed outright — a different failure mode than **Stratford's** well problems or **Kettleman City's** legacy contamination, but tied to the same underlying pattern of farm-labor communities carrying infrastructure risk that wealthier, better-resourced places don't.

Sources

- Avenal Community Profile, Kings County Local Hazard Mitigation Plan (December 2012), hosted by the City of Hanford. Access: not-captured — a public URL exists for this source and this project has not recorded it.

Full citation detail and source archive: **Data**. Back to **water insecurity in the Central Valley**.