2024 updated examination of CA carceral water systems

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Overview and background

California counts 2837 community water systems. Of these systems, NA are regulated by USA EPA Region 9 due to their location/service on Tribal lands. The remaining NA fall under California regulatory primacy for Safe Drinking Water Act compliance and are regulated by the State Water Resources Control Board and sometimes also their local county, depending on their size.

Of these systems, 44 specifically exist to serve carceral facilities including jails, prisons and camps. Given that California has approximately 185 such facilities (Not sure about this #!), this subset of water systems represents nearly a quarter of state carceral facilities and are likely among the most rural/isolated facilities. This analysis takes a look at this specific subset of water systems. At the end of the document I discuss other carceral water systems in the state not included in this analysis and the data gaps related to those systems.

Carceral water system basics

Cumulatively, these 44 water systems serve 1.23122×10^5 people. But on average each individual system serves 2798. 34 of these systems are State-run systems, most of which are conservation camps and another 10 are County-run systems, mostly County jails. The systems are located across the sate in 23 different counties.

	# of systems
FRESNO	2
IMPERIAL	2
INYO	1
KERN	5
LAKE	1
LASSEN	1
LOS ANGELES	2
MADERA	2
MARIPOSA	1
MERCED	1
MONTEREY	2
NEVADA	1
RIVERSIDE	3
SACRAMENTO	2
SAN BERNARDINO	6
SAN DIEGO	2
SAN JOAQUIN	1
SAN LUIS OBISPO	2
SANTA CRUZ	1
SOLANO	2
TULARE	1
TUOLUMNE	2
YOLO	1

Characteristic	Carceral N = 44[1]	Not Carceral N = 2,793[1]
FINAL_SAFER_STATUS		
At-Risk	11 (25%)	423 (15%)
Failing	3 (6.8%)	340 (12%)
Not Assessed	0 (0%)	142 (5.1%)
Not At-Risk	22 (50%)	1,577 (56%)
Potentially At-Risk	8 (18%)	310 (11%)

[1] n (%)

Most of the systems rely on groundwater.

	Primary water source
Self-produced groundwater	34
Purchased groundwater	1
Self-produced surface water	5
Purcashed surface water	4

Carceral system performance

According to 2024 California drinking water needs assessment conducted by the State Water Resources Control Board, 3 (6.82%) were found to be at risk and another 11 are potentially at risk. Just 22 of the 44 systems are considered not at-risk.

The following table compares the aggregated risk assessment scores for carceral water systems compared to all other water systems for water quality, accessibility and TMF capacity respectively.

This is an INCOMPLETE look at cerceral water systems

Carceral facilities connected to larger water systems

Many of the carceral facilities not addressed herein are connected to larger water systems, in other words, facilities that are receiving water from nearby municipalities or special districts. While there is reason to believe that this larger subset of systems, overall, may have better water access (considering quality but also quantity and future sustainability) to the systems explored herein due to their larger size, there are larger water systems that struggle with these things. Other efforts to identify the water sources for these facilities have used spatial methods, locating facility addresses within water system boundary records, or used planning/permitting records to locate public water system identification numbers.

Federal facilities

Based on Dobbin, Fencl and McBride 2023 data, none of the ten federal prisons in California have their own water system yet 6 of 10 are located outside of the public water system boundaries documented in SWRCB's map. Based on internet research, several of these appear to be served by nearby city systems or small state or county operated systems (and thus are included in the above excluded group) but for several we have been unable to identify water sources.

Immigration facilities

Various online sources provide different information about how many immigration and detention facilities there are in California, likely the number is in the neighborhood of six or seven. Likely these systems are either co-located with other carceral facilities or served by larger water systems but this should be confirmed.

Characteristic	Carceral N = 44[1]	Not Carceral N = 2,793[1]
WATER_QUALITY_RISK_LEVEL		
HIGH	11 (25%)	437 (16%)
LOW	10 (23%)	631 (23%)
MEDIUM	2 (4.5%)	220 (7.9%)
NONE	21 (48%)	1,359 (49%)
Not Assessed	0 (0%)	145 (5.2%)
ASSESSIBILITY_RISK_LEVEL		
HIGH	12 (27%)	930 (33%)
LOW	15 (34%)	900 (32%)
MEDIUM	12 (27%)	352 (13%)
NONE	5 (11%)	465 (17%)
Not Assessed	0 (0%)	145 (5.2%)
TMF_CAPACITY_RISK_LEVEL		
HIGH	2 (4.5%)	189 (6.8%)
LOW	0 (0%)	1 (<0.1%)
MEDIUM	0 (0%)	4 (0.1%)
NONE	42 (95%)	2,453 (88%)
Not Assessed	0 (0%)	145 (5.2%)

[1] n (%)

Characteristic	Carceral N = 44[1]	Not Carceral N = 2,793[1]
PRIMARY_MCL_VIOLATION	2 (4.5%)	243 (8.7%)
SECONDARY_MCL_VIOLATION	1 (2.3%)	55 (2.0%)
E_COLI_VIOLATION	0 (0%)	5 (0.2%)
TREATMENT_TECHNIQUE_VIOLATION	0 (0%)	33 (1.2%)
MONITORING_AND_REPORTING_VIOLATION	0 (0%)	44 (1.6%)

[1] n (%)

NTNC systems

Finally, in the course of other research efforts, we have identified seven Conservation Camps run by the California Department of Corrections and Cal-Fire are listed in Public Drinking Water Watch as Non-Transient Non-Community water systems. Because the starting point for this analsyis was a list of California Community Water Systems, these systems are currently not included here, nor in the SWRCB's Drinking Water Needs Assessment. Thus SAFER risk scores do not exist for these systems. Nonetheless, as Public Water Systems, there is some data on these systems maintained in the SDWIS database that could be employed in future iterations.