

Public Supply Wells

Municipal Wells Dataset (2023). California State Water Resources Control Board, Groundwater Ambient Monitoring and Assessment (GAMA), Groundwater Information System¹

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File name: Public_Supply_Wells_2023.shp

Spatial Reference

Geographic Coordinate System	NAD 1983	Projected Coordinate System	NAD 1983 (Teale) Albers (Meters)
WKID	4269	Projection	3310
Authority	EPSG	Authority	EPSG
Angular Unit	Degree (0.0174532925199433)	Linear Unit	Meters (1.0)
Prime Meridian	Greenwich (0.0)	False Easting	0.00
Datum	D North American 1983	False Northing	-4000000.0
Spheroid	GRS 1980	Central Meridian	-120.0
Semimajor Axis	6378137.0	Standard Parallel 1	34.0
Semiminor Axis	6356752.314140356	Standard Parallel 2	40.5
Inverse Flattening	298.257222101	Latitude of Origin	0.0

Description

This shapefile contains points corresponding to 20,484 public supply wells in California.

Methods

We downloaded point locations from [GAMA](#)¹ for all municipal wells on September 27, 2023 (n=30,568). We sub-selected wells monitored by the Department of Drinking Water (DDW) (n=24,515). Next, we assigned additional water system characteristics based on water system ID using information from [SDWIS](#)² downloaded on September 27, 2023. (Note, many water systems are served by multiple public supply wells). We excluded 4,034 public supply wells that do not serve active systems and retained the final dataset of 20,484 public supply wells.

Attribute Table

Field Heading	Field Description
FID	ESRI generated field
Shape	Point – ESRI generated field
DATASET	DDW (Department of Drinking Water)
WELL_ID	Public water system ID (characters 1-9) followed by well code (characters 10-17) in the form of CAXXXXXXX_XXX_XXX
LATITUDE	Latitude in decimal degrees
LONGITUDE	Longitude in decimal degrees
PWSID	Public water system ID in the form of CAXXXXXXX
PWS_Name	Public water system name

PWS_Type	Public water system type (community water system, non-transient non-community system, or transient non-community system)
Population	Population served according to SDWIS. Note: this field refers to the entire system, not the specific public supply well.
Cities_Ser	Name of cities served by the water system
Counties	Name of County served by the water system
Primary_So	Indicates primary water source of water system: surface water, groundwater, groundwater under influence of surface water, surface water purchased
SC	Number of service connections served by water system

Acknowledgements

Research conducted by the Community Engagement Core - Water Equity Science Shop of the UC Berkeley Superfund Research Program was supported by the National Institute of Environmental Health Sciences of the National Institutes of Health under Award Number P42ES004705. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

References

1. Municipal Wells Dataset (2023). California State Water Resources Control Board, Groundwater Ambient Monitoring and Assessment (GAMA), Groundwater Information System, available from <https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/> accessed online September 27, 2023.
2. All Water System Characteristics (2023). US Environmental Protection Agency, Safe Drinking Water Information System (SDWIS), available from https://sdwis.epa.gov/ords/sfdw_pub/r/sfdw/sdwis_fed_reports_public accessed online September 27, 2023.