

All Private Domestic Well Locations version 1.0
Created by the Water Equity Science Shop (WESS)
Updated – February 3, 2020

Metadata: AllPrivateDomesticWellLocations_v1.shp

Data Type:	Shapefile Feature Class
Shapefile:	AllPrivateDomesticWellLocations_v1.shp
Geometry Type:	Point
Coordinates have Z values:	No
Coordinates have measures:	No
Geographic Coordinate System:	GCS_North_American_1983
Datum:	D_North_American_1983
Prime Meridian:	Greenwich
Angular Unit:	Degree

If downloading or using for analysis or reporting, please attribute and cite this dataset as:

UC Berkeley Water Equity Science Shop Domestic well locations version 1.0, 2019.

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Summary

The Water Equity Science Shop (WESS) used the Online System for Well Completion Reports (OSWCR) to create a summary of domestic well locations in California for the Drinking Water Tool, a collaborative project between WESS and the Community Water Center (CWC).

OSWCR is a publically available dataset containing records for over 900,000 wells drilled in California since 1927. Known issues with this dataset include: Missing and duplicate records - Missing values (either missing on original Well Completion Report (WCR), or not key entered into database) - Incorrect values (e.g. incorrect Latitude, Longitude, Record Type, Planned Use, Total Completed Depth) - Limited spatial resolution: The majority of well

completion reports have been spatially registered to the center of the 1x1 mile Public Land Survey System (PLSS) section that the well is located in.

Methodology

This shapefile contains a feature class, a file that contains point data for 327,252 domestic wells with spatial reference. Well completion report .csv file was downloaded from (<https://data.ca.gov/dataset/well-completion-reports>). Unique WCRs referencing domestic wells were included. Latitude and longitude supplied in the .csv file were used to plot WCRs as points. If latitude/longitude were not available, these values were calculated by joining WCRs to PLSS sections and calculating the PLSS section centroids in decimal degrees. PLSS file was downloaded from <https://catalog.data.gov/dataset/blm-national-public-land-survey-system-polygons>.

Attribute table

Column heading	Type	Description
FID	Numeric/Long Integer/Precision 10	Field ID: GIS system generated field
Shape	Geometry	Stored geometry type: Point
OBJECTID	Numeric/Long Integer/Precision 10	Object ID: GIS generated field
WCRNumber	String/Length 254	Well Completion Report Number
LegacyLogN	String/Length 254	Legacy log number
CountyName	String/Length 254	County in which well is located
LocalPermi	String/Length 254	Local permit agency
PermitDate	Date MM/DD/YYYY	Date permit was issued
PermitNumb	String/Length 254	Well permit number
PlannedUse	String/Length 254	Planned use, former use:
		Water Supply Domestic
		Other Agriculture & Domestic
		Other Irrigation & Domestic
RecordType	String/Length 254	Record type: (New, modification, destruction)
MethodofDe	String/Length 254	

		Method used to determine horizontal coordinates
		NULL
		Derived from Address
		Derived from TRS
		Digital Elevation Model
		GPS
		GPS with WAAS
		Other
		Unknown
		USGS Quad
LLAccuracy	String/Length 254	Accuracy of horizontal coordinates:
		NULL
		0.1 Ft
		2.5 Ft
		5 Ft
		10 Ft
		20 Ft
		50 Ft
		>50 Ft
		Centroid of Section
		Unknown
APN	String/Length 254	Assessor's parcel number on which well is located
DateWorkEn	Date MM/DD/YYYY	Date drilling was completed
TotalDrill	Long Integer/Precision 10	Total drill depth (ft.)
TotalCompl	Long Integer/Precision 10	Total completed depth (ft.)
TopOfPerfo	Long Integer/Precision 10	Top of perforated interval (depth-ft.)

BottomofPe	Long Integer/Precision 10	Bottom of perforated interval (depth-ft.)
MTRS	String/Length 254	Meridian (M), Township (T), Range (R), Section (S).
DDLONG	Double/ Precision 0/Scale 0	Longitude in decimal degrees
DDLAT	Double/ Precision 0/Scale 0	Latitude in decimal degrees

Data Sources

1. OSWCR: <https://data.ca.gov/dataset/well-completion-reports>. Accessed September 19, 2018
2. PLSS Section Grid: <https://catalog.data.gov/dataset/blm-national-public-land-survey-system-polygons>. Accessed October 12, 2018.

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