

Community Water System Service Areas

Version 2.0

Data Dictionary

September 2025

U.S. Environmental Protection Agency | Office of Water |
Office of Groundwater Drinking Water



Data Elements for the Community Water System Service Area Dataset

For individual CWS service areas, the data elements identified in the table below is included with each spatial record. This data schema describes the feature dataset for US Community Water System Service Areas-Version 2.

Hosted Feature Layer:

https://services.arcgis.com/cJ9YHowT8TU7DUyn/arcgis/rest/services/Water_System_Boundaries/FeatureServer

Web app:

<https://gispub.epa.gov/serviceareas>

Table 1. Data dictionary for EPA's community water system service areas

Data Element	Description	Type (length)	Values
PWSID	The identifier for individual drinking water system recognized by and used in the Safe Drinking Water Information System (SDWIS). The first two characters of the PWSID typically consist of a two-letter state or EPA region code, followed by seven numeric digits.	Char (9)	Such as, OH3102612
PWS Name	The name of the Public Water System (PWS).	Char (100)	Such as, CINCINNATI PUBLIC WATER SYSTEM
Primacy Agency	Primacy agency code is the two-character state code or EPA Region number.	Char (2)	Such as, KS
Pop Cat 5	Values identifying the population size category	Char (100)	Such as, <=500
Population Served Count	Estimated average daily population served by a system.	Long	Such as, 125
Service Connections Count	Number of service connections to the water system.	Long	Such as, 1119

Data Element	Description	Type (length)	Values
Model Method	The modeling method used for EPA modeled service areas	Char (100)	• Random Forest • Decision Tree • Parcel • Parcel • OSM
Service Area Type	Indicates the type of primary service area served by the water system. Data element reported to the Safe Drinking Water Information System (SDWIS).	Char (20)	• Institution • Sanitary Improvement District • Service Station • Dispenser • Mobile Home Park • Other Area • Retail Employees • Restaurant • School • Secondary Residences • Highway Rest Area • Other Non-transient Area • Industrial/Agricultural • Mobile Home Park - Principal Residence • Other Residential • Subdivision • Wholesaler of Water • Interstate Carrier • Municipality • Residential Area • Hotel/Motel • Summer Camp • Medical Facility • Other Transient Area • Recreation Area • Homeowners Association • Water Bottler
Symbology Field	Field used to symbolize the service areas in the web map	Char (20)	System Sourced • Modeled
Original Data Provider	The name of the entity responsible for creating the boundary or the original provider of the boundary. Typical values include: the water system itself; the specific state agency/department/division that provided the data; federal agency/department; or other organization.	Char (100)	Examples: UT Division of Water Resources • Yakima County • Mountain View Special Service District • City of Grandview • Massachusetts Water Resource Authority • California Water Resources Control Board
Data Provider Type	The type of entity responsible for creating the boundary or the original source of the boundary (such as, water system itself, state agency, federal agency).	Char (20)	Federal agency • Tribal • State agency • Municipal agency • Water utility

Data Element	Description	Type (length)	Values
Modification Method	The method used to create the service areas. This is typically the method employed by the EPA to transform system sourced data that is not a service area into a service area. Examples include using water main data and buffering it by 150 meters or buffering lead service line inventories or georeferencing a service area map and drawing the boundary	Char (100)	Examples: Buffered lead service line inventory by 150 meters • Buffered water meters by 150 meters
Feature Type	The original type of data that was used to use or create a service area. Many of the feature types are simply a polygon feature of a service area. Other feature types could be water mains, lead service line inventories, PDF map of a service area	Char (100)	Examples: PDF map of service area • Polygon feature of service area • Water mains • Tax parcel
Method Details	Any other relevant details about the service area	Char (1000)	
Verification Status	Indicates whether the boundary has been verified.	Char (12)	• Verified • Not Verified • Unknown
Data Source	Link or URL to the data source for this boundary	Char (500)	Such as, https://opendata.gis.utah.gov/datasets/utahDNR::culinarywaterserviceareas/explore
Detailed Facility Report	URL to EPA ECHO's SDWA violation report for the CWS	Char (500)	Such as, https://echo.epa.gov/detailed-facility-report?fid=IA3003067&sys=SDWIS
Original Data Created Date	Date the boundary data was initially created or published.	Date (MM/DD/YYYY)	Such as, 11/22/2021