



TECHNICAL MEMORANDUM

Date: April 2, 2026

To: State Water Resources Control Board, Conservation Program

From: Ryan Gross, General Manager

Subject: LACSD FY 2025-26 Seasonal Population Variance Resubmission

The Lake Arrowhead Community Services District (LACSD or District) is requesting a variance for Seasonal Populations related to the Urban Water Use Efficiency Objectives (UWUEO) for Fiscal Year (FY) 2025-26.

FY 2024-25 Submission

LACSD submitted a similar request for FY 2024-25 and provided additional information upon request from the State Water Resources Control Board (SWRCB). The District was notified that the request was denied due to a lack of substantial information related to population estimations. A follow up phone call gave the District further instruction on additional information the District could supply to demonstrate that the requirements were met for the next fiscal year.

Water System Population

The population for the LACSD water system has long been difficult to estimate due to the seasonal nature of its population. Additionally, the boundaries of the Lake Arrowhead Census Designated Place (CDP) are coterminous with the District's sewer service area but the District's water service area is smaller. To be consistent with state data, the residential service area population of 7,038 people, as stated in the State Drinking Water Information System (SDWIS), is used in the variance request to calculate the Residential Indoor Water Use Budget. Several methods were referred to, as described below, which indicate a range in population of 5,518 – 7,515. The purpose of measuring the full-time population is to demonstrate the high percentage of seasonally utilized residential units and to calculate the District's Indoor Residential Water Use Budget.

American Community Survey

All of the residential areas in the Lake Arrowhead CDP are generally similar in nature whether they are in LACSD's water service area or without. Although the outer areas tend to be more affordable and therefore have a higher full-time population, for the purposes of this analysis, occupancy and number of people per household from the American Community Survey (ACS) were utilized for the water service area. The 5-Year 2024 ACS states that 38.4% of the housing units were occupied full-time in the Lake Arrowhead CDP and have 2.36 people per home.

2024 5-Year ACS Data for the Lake Arrowhead CDP

Metric	Count	%
Population	10,639	
People Per Housing Unit	2.36	
Owner-Occupied Units	3,762	32%
Renter-Occupied Units	739	6%
Seasonally Occupied Units	7,235	62%
Housing Units	11,736	

Applying the ACS's 2.36 people per housing unit, and a 38.4% full-time population, to the number of residential connections in the water service area (7,790), results in a population of 7,060 compared to 7,038 in SDWIS.

Data Points Using Service Connections

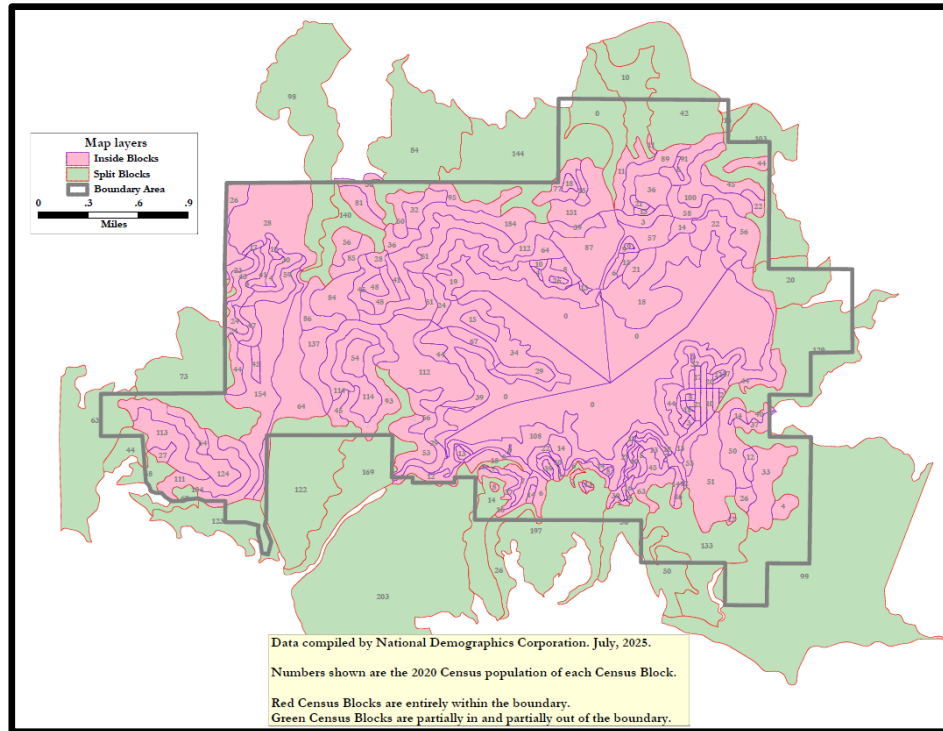
Metric	Count	%
Population	7,060	
People Per Housing Unit	2.36	
Owner-Occupied Units	2,497	32%
Renter-Occupied Units	491	6%
Seasonally Occupied Units	4,802	62%
Housing Units	7,790	

DWR Population Tool

For the 2020 Urban Water Management Plan, the California Department of Water Resources (DWR) provided a tool to help water agencies estimate their population for the purpose of calculating compliance with SB X7-7. This tool overlaid the District's service area over census data and, similar to the method above, used the number of connections to estimate the population. In 2021, this tool estimated the full-time population of the water service area to be 7,008 compared to 7,038 in SDWIS.

National Demographics Corporation

The District reached out to a demographics consultant, National Demographics Corporation (NDC), to help estimate the population of LACSD's water service area. NDC provided the figure below showing LACSD's water service area overlain on the Lake Arrowhead CDP utilizing 2020 census data. This resulted in a full-time population of 7,515. There has not been much growth in the area in the last six years since the 2020 census. In fact, District billing data suggests that the full-time population has actually decreased.



2020 Census Data	Census Block in Water Service Area	Split Census Blocks	Total Using 50% of population in Split Blocks
Population	6,372	2,286	7,515
Housing Units	6,916	2,291	8,062

Meter Data

LACSD utilized the DWR Seasonal Population Water Use Calculation tool using monthly meter data. This data indicates 5,186 dwelling units are seasonally occupied compared to 4,802 using ACS metrics. This is the number used in the variance template. The tool also indicated that seasonal populations use an average of 3.1 CCF per month and occupy these homes 128 days per year. The data for the seasonal population calculator calibrated closest to a 33% full-time population and estimated that 2,551 homes are occupied full-time. Assuming 2.36 people per home, the population using this data is 6,020. 53 homes were unoccupied. This tool estimated 3.1 people per home but the ACS 2.36 continues to be used to avoid inflating the total variance calculation.

Data Points Utilizing Monthly Meter Data

Metric	Count	%
Population	6,020	
People Per Housing Unit	2.36	
Owner-Occupied Units	2,032	26%
Renter-Occupied Units	519	7%
Seasonally Occupied Units	5,186	67%
Housing Units	7,737	

Classification Results					
Classification	Count	Percent	Census Percent	Error	Error Target
Seasonal	5186	67%	71%	-3%	5%
Permanent Homeowner	2032	26%	25%	2%	5%
Permanent Renter	519	7%	5%	2%	5%
Total	7737	100%	100%		

Occupancy Results			
Classification	Avg. Cons.	Est Occupancy	Ann. Occ. Days
Permanent Homeowner	6.1	90%	328.7
Permanent Renter	7.9	90%	328.7
Seasonal	3.1	35%	127.5

Annual Efficient Water Use Calculation		
Metric	Unit	Value
Seasonal Dwelling Units	W _{so}	5,492
Population per Unit	capita/W _{so}	3.1
Average Seasonal Days	days/W _{so}	127.5
Occupancy Rate	capita-days/W _{so}	390.5
Indoor Standard (gpcd)*	gal/capita-day	47
Variance	gallons	100,799,680
	CCF	134,750

Address Processor

LACSD also utilized DWR's Address Processor which compares billing addresses to local zip codes. This analysis indicated a 30% full-time residency. Applying the ACS 2.36 people per housing unit results in a population of 5,518. This is the lowest occupancy of all the methods. It is probable that some full-time residents have their water bills mailed to a company or other service.

Data Points Utilizing Billing Addresses

Metric	Count	%
Population	5,518	
People Per Housing Unit	2.36	
Owner-Occupied Units	1,948	25%
Renter-Occupied Units	390	5%
Seasonally Occupied Units	5,452	70%
Housing Units	7,790	

Variance Threshold

To support a variance for the UWUEO utilizing monthly meter data, a threshold of 5% of the UWUEO Indoor Residential Water Use Budget must be demonstrated to be used by seasonal populations. As shown in the attached variance request, the District's FY 2025-26 residential indoor water budget is 120,736,890 gallons using 47 residential gallons per capita per day (R-GPCD). The 5% threshold for the seasonal population variance is 6,036,845 gallons.

Population	7,038
x R-GPCD	47
x Days in the FY	365
= Residential Indoor Budget	120,736,890
x 5% = SP Threshold	6,036,845

Sensitivity Analysis

The population calculations as described above demonstrate that there is a high percentage of seasonal population usage in LACSD's service area. There are 7,790 residential connections. Dividing the estimated population by the ACS number of 2.36 people per household approximates the number of full-time occupied units. Removing this number from the total service connections gives a range of 59% - 70% of residential units that are utilized seasonally.

	Billing Data	Meter Data	DWR Pop Tool	SDWIS	ACS Metrics	NDC
FT Population	5,518	6,020	7,008	7,038	7,060	7,515
/People per Unit	2.36	2.36	2.36	2.36	2.36	2.36
=FT Residences	2,338	2,551	2,969	2,982	2,992	3,184
Total Connections	7,790	7,737	7,790	7,790	7,790	7,790
Seasonal Residences	5,452	5,186	4,821	4,808	4,802	4,606
% Seasonal Residences	70%	67%	62%	62%	62%	59%

A sensitivity analysis was prepared to assess the impact of various population assumptions to determine if water usage from seasonal populations is high enough to qualify for the Seasonal Population Variance. The threshold is 5% of the Residential Indoor Water Use Budget. Utilizing any of the population calculations demonstrated above would qualify LACSD for the Seasonal Population Variance at about 54% - 64% of the FY 2025-26 Indoor Residential Water Use Budget.

Comparison of Variance Calculations

	Billing Data	Meter Data	DWR Pop Tool	SDWIS	ACS Metrics	NDC
R-GPCD	47	47	47	47	47	47
Seasonal Units	5,452	5,186	4,821	4,808	4,802	4,606
People per Unit	2.36	2.36	2.36	2.36	2.36	2.36
Days per Year	128	128	128	128	128	128
Gallons	77,406,188	74,384,230	68,440,422	68,259,942	68,127,590	65,390,310
% of Residential Indoor Budget	64.1%	61.0%	56.7%	56.5%	56.4%	54.2%