.ıl^ı Emsi

Occupation Overview

Water and Wastewater Treatment Plant and System Operators in San Diego-Chula Vista-Carlsbad, CA

Water and Wastewater Treatment Plant and System Operators (SOC 51-8031):

Operate or control an entire process or system of machines, often through the use of control boards, to transfer or treat water or wastewater.

Sample of Reported Job Titles:

Wastewater Treatment Operator Water Treatment Plant Operator Wastewater Treatment Plant Operator Water Plant Operator Wastewater Operator (WW Operator) Plant Operator Water Treatment Operator Water Operator Wastewater Plant Operator Water System Operator

Related O*NET Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031.00)

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What is Emsi Data?

Emsi data is a hybrid dataset derived from official government sources such as the US Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics. Leveraging the unique strengths of each source, our data modeling team creates an authoritative dataset that captures more than 99% of all workers in the United States. This core offering is then enriched with data from online social profiles, resumés, and job postings to give you a complete view of the workforce.

Emsi data is frequently cited in major publications such as The Atlantic, Forbes, Harvard Business Review, The New York Times, The Wall Street Journal, and USA Today.

"Atlantic **Forbes**

Harvard **Business** Ehe New Hork Eimes





Report Parameters

1 Occupation

51-8031 Water and Wastewater Treatment Plant and System ...

1 MSA

41740 9	San Diego-Chula Vista-Carlsbad, CA
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Class of Worker

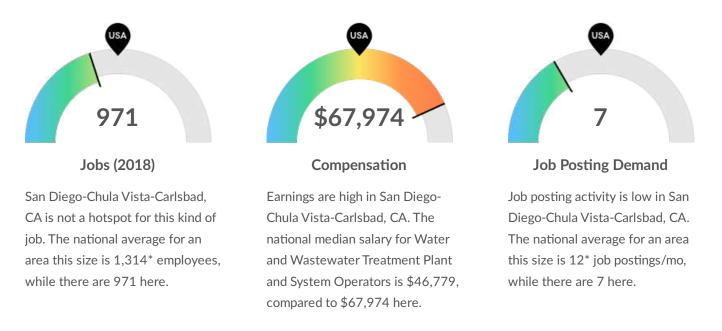
QCEW Employees, Non-QCEW Employees, and Self-Employed

The information in this report pertains to the chosen occupation and geographical area.

.IPEmsi Occupation Overview

Executive Summary

Light Job Posting Demand Over a Thin Supply of Regional Jobs



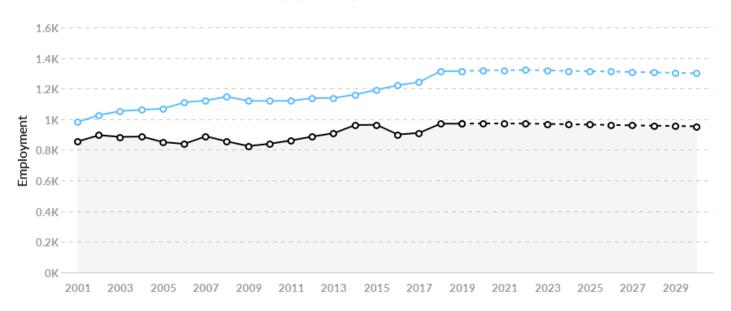
*National average values are derived by taking the national value for Water and Wastewater Treatment Plant and System Operators and scaling it down to account for the difference in overall workforce size between the nation and San Diego-Chula Vista-Carlsbad, CA. In other words, the values represent the national average adjusted for region size.

.II Emsi Occupation Overview

Jobs

Regional Employment Is Lower Than the National Average

An average area of this size typically has 1,314^{*} jobs, while there are 971 here. This lower than average supply of jobs may make it more difficult for workers in this field to find employment in your area.



	Region	2018 Jobs	2028 Jobs	Change	% Change
•	San Diego-Chula Vista-Carlsbad, CA	971	958	-12	-1.3%
	National Average	1,314	1,306	-8	-0.6%

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Regional Breakdown



County	2018 Jobs
San Diego County, CA	971

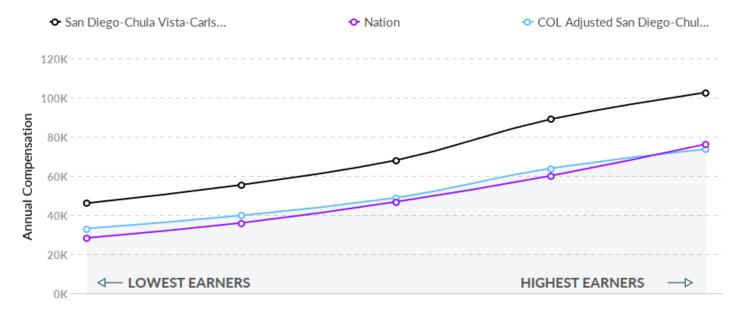
Most Jobs are Found in the Local Government, Excluding Education and Hospitals Industry Sector

Industry	% of Occupation in Industry (2018)
 Local Government, Excluding Education and Hospitals 	80.8%
Federal Government, Military	7.0%
Waste Treatment and Disposal	2.0%
• Water, Sewage and Other Systems	1.2%
 Architectural, Engineering, and Related Services 	1.1%
Federal Government, Civilian	0.8%
• Other	7.1%

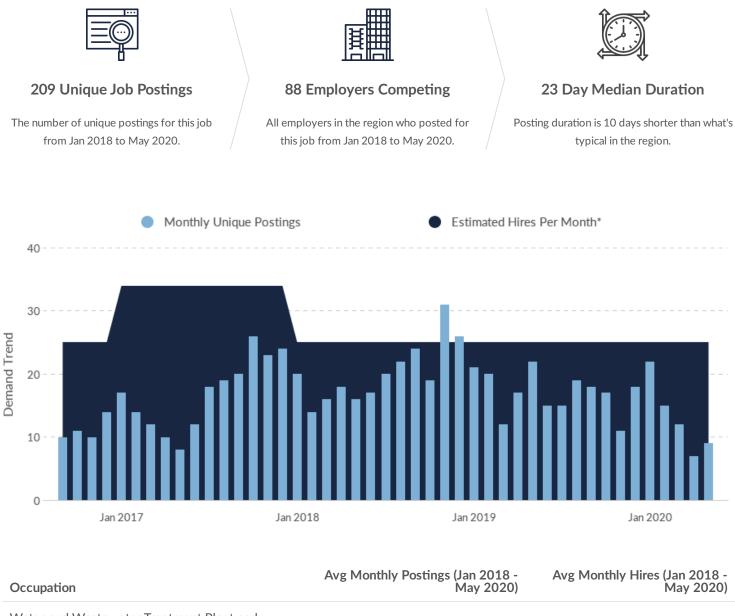
Compensation

Regional Compensation Is 45% Higher Than National Compensation

For Water and Wastewater Treatment Plant and System Operators, the 2018 median wage in San Diego-Chula Vista-Carlsbad, CA is \$67,974, while the national median wage is \$46,779.



Job Posting Activity



Water and Wastewater Treatment Plant and System Operators

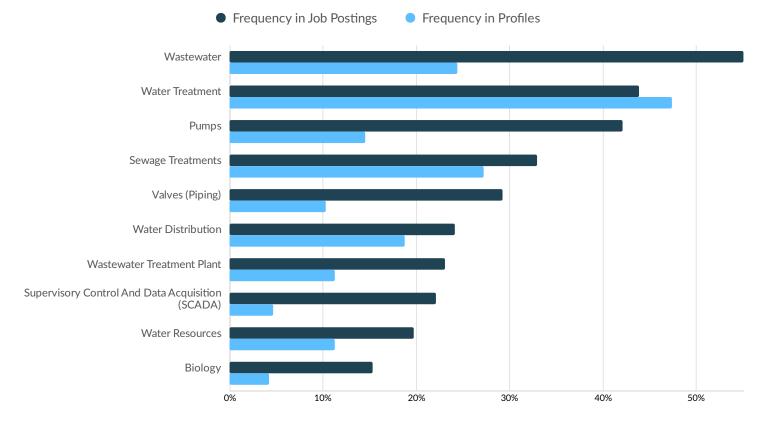
*A hire is reported by the Quarterly Workforce Indicators when an individual's Social Security Number appears on a company's payroll and was not there the quarter before. Emsi hires are calculated using a combination of Emsi jobs data, information on separation rates from the Bureau of Labor Statistics (BLS), and industry-based hires data from the Census Bureau.

18

25

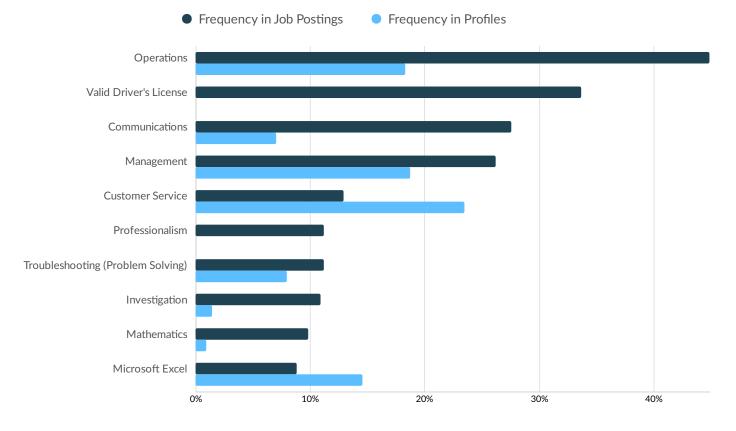
Top Companies	Unique Postings	Top Job Titles	Unique Postings
City of Escondido	19	Wastewater Operators	55
Aerotek, Inc.	18	Water Treatment Operators	51
City of San Diego	17	Plant Operators	23
Sycuan Casino	15	Area Supervisors (Production)	8
City of Oceanside	7	Plant Operations Technicians	8
University of California	7	Water Technicians	7
City of Poway	6	Field Service Technicians	5
County of San Diego	6	Systems Operators (Production)	5
Jacobs Engineering Group Inc.	5	Maintenance Workers	4
San Diego County Water Author	5 📩	Systems Technicians (Architectu	4

Top Hard Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Wastewater	162	55%	52	24%
Water Treatment	129	44%	101	47%
Pumps	124	42%	31	15%
Sewage Treatments	97	33%	58	27%
Valves (Piping)	86	29%	22	10%
Water Distribution	71	24%	40	19%
Wastewater Treatment Plant	68	23%	24	11%
Supervisory Control And Data Acquisition (SCADA)	65	22%	10	5%
Water Resources	58	20%	24	11%
Biology	45	15%	9	4%

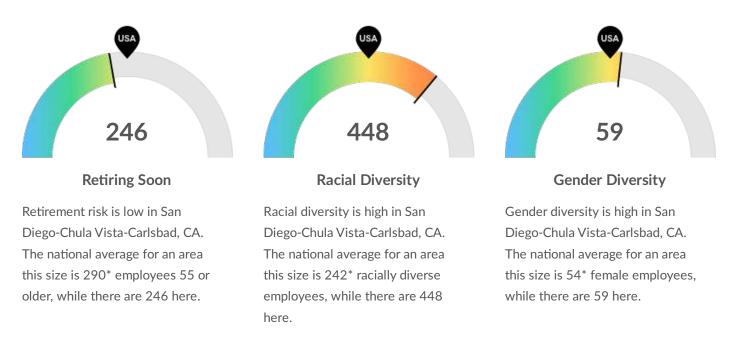
Top Common Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Operations	132	45%	39	18%
Valid Driver's License	99	34%	0	0%
Communications	81	28%	15	7%
Management	77	26%	40	19%
Customer Service	38	13%	50	23%
Professionalism	33	11%	0	0%
Troubleshooting (Problem Solving)	33	11%	17	8%
Investigation	32	11%	3	1%
Mathematics	29	10%	2	1%
Microsoft Excel	26	9%	31	15%

Demographics

Retirement Risk Is Low, While Overall Diversity Is High



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Occupation Age Breakdown

	% of Jobs	Jobs
• 14-18	0.1%	1
• 19-24	6.3%	61
• 25-34	17.0%	165
3 5-44	22.0%	213
45-54	29.2%	284
55-64	22.2%	216
65+	3.1%	30

.II Emsi Occupation Overview

Occupation Race/Ethnicity Breakdown

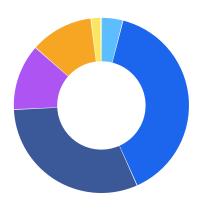
		% of Jobs	Jobs
	• White	53.9%	523
	Hispanic or Latino	27.9%	271
	Black or African American	8.4%	81
	 Asian 	5.5%	53
	Two or More Races	2.9%	28
	American Indian or Alaska Native	1.1%	10
	Native Hawaiian or Other Pacific Islander	0.4%	4

Occupation Gender Breakdown

	% of Jobs	Jobs
 Males 	93.9%	912
Females	6.1%	59



National Educational Attainment



	% of Jobs
 Less than high school diploma 	3.9%
 High school diploma or equivalent 	39.3%
• Some college, no degree	30.9%
• Associate's degree	12.2%
Bachelor's degree	11.6%
Master's degree	1.8%
Doctoral or professional degree	0.2%

.II Emsi Occupation Overview

Occupational Programs



1 Program

Of the programs that can train for this job, 1 has produced completions in the last 5 years.



52 Completions (2018)

The completions from all regional institutions for all degree types.



89 Openings (2018)

The average number of openings for an occupation in the region is 288.

CIP Code	Top Programs	Completions (2018)
15.0506	Water Quality and Wastewater Treatment Management and	52

Top Schools	Completions (2018)
Cuyamaca College	29
Palomar College	23

Appendix A - Data Sources and Calculations

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Occupation Data

Emsi occupation employment data are based on final Emsi industry data and final Emsi staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level Emsi earnings by industry.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

Cost of Living Data

Emsi cost of living data is based on the Cost of Living Index published quarterly by the Council for Community and Economic Research (C2ER).

Emsi Job Postings

Job postings are collected from various sources and processed/enriched to provide information such as standardized company name, occupation, skills, and geography.

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.