

# **Appendix E – Proposed Water Loss Standards**



### **Proposed Water Loss Performance Standards**

**Note:** The State Water Board has proposed combined standards for water districts that generally report per other water use efficiency requirements in a combined manner for certain water systems.

#### Sample combination of standards for water systems reporting in different metrics:

Suppliers with all water systems reporting in gallons per connection per day: Standard in in gallons per connection per day

 $Standard \ for \ system \ 1 \times Number \ of \ connection \ s \ for \ system \ 1 + Standard \ for \ system \ 2 \times Number \ of \ connections \ for \ system \ 2 \times Number \ system \ 3 \times Number \ system \$ 

Sum total of number of connections for system 1 and system 2

Suppliers with all water systems reporting in gallons per mile per day: Standard in gallons per mile per day

Standard for system  $1 \times \text{Length}$  of mains for system 1 + Standard for system  $2 \times \text{Length}$  of mains for system 2

Sum total of length of mains for system 1 and system 2

Suppliers with water systems reporting in a combination of gallons per mile per day and gallons per connection per day:

Standard in gallons per connection per day

 Standard for system 1 × Number of connections for system 1 + Standard for system 2 × Length of mains for system 2

 Sum total of number of connections for system 1 and system 2

#### Calculated baseline and proposed water loss performance standards

Note: The standards that are combined for certain water districts are in orange text, while the individual system data informing the respective combined standard is in *italics* and grey text in the rows above the standard.

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Adelanto City Of	49.1	N/A	18.5	N/A
Alameda County Water District	21.5	N/A	17.7	N/A
Alco Water Service	15.1	N/A	15.1	N/A
Alhambra City Of	8.6	N/A	8.6	N/A
Amador Water Agency	66.3	N/A	21.0	N/A
American Canyon City Of	30.8	N/A	17.7	N/A
Anaheim City Of	23.5	N/A	19.5	N/A
Anderson City Of	53.4	N/A	16.5	N/A
Antioch City Of	11.9	N/A	11.9	N/A
Apple Valley Ranchos Water Company	23.3	N/A	23.3	N/A
Arcadia City Of	32.1	N/A	18.2	N/A
Arcata City Of	48.7	N/A	20.1	N/A
Arroyo Grande City Of	7.7	N/A	7.7	N/A
Arvin Community Service District	67.9	N/A	14.4	N/A
Atascadero Mutual Water Company	35.9	N/A	35.9	N/A
Atwater City Of	308.8	N/A	11.4	N/A
Azusa Lightand Water	78.5	N/A	13.8	N/A
Bakersfield City Of	19.3	N/A	19.3	N/A
Bakman Water Company	85.3	N/A	15.1	N/A
Banning City Of	63.1	N/A	31.4	N/A
Bear Valley Community Services District	N/A	191.7	N/A	191.7
Beaumont-Cherry Valley Water District	41.0	N/A	20.9	N/A
Bella Vista Water District	N/A	1710.6	N/A	670.4
Bellflower-Somerset Mutual Water Company	12.4	N/A	12.4	N/A
Benicia City Of	46.1	N/A	19.4	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Beverly Hills City Of	30.0	N/A	16.9	N/A
Big Bear Community Services District	12.8	N/A	12.8	N/A
Big Bear Lake City Of	9.5	N/A	9.5	N/A
Blythe City Of	80.3	N/A	15.0	N/A
Brawley City Of	54.8	N/A	12.7	N/A
Brea City Of	15.2	N/A	15.2	N/A
Brentwood City Of	30.5	N/A	14.7	N/A
Buena Park City Of	35.8	N/A	16.4	N/A
Burbank City Of	13.4	N/A	13.4	N/A
Burlingame City Of	19.5	N/A	19.5	N/A
Calaveras County Water District-Ebbetts Pass	84.8	N/A	20.9	N/A
Calaveras County Water District-Jenny Lind	155.9	N/A	21.3	N/A
Calaveras County Water District	112.6	N/A	21.1	N/A
Calexico City Of	4.2	N/A	4.2	N/A
California American Water Company-Los Angeles Division-Baldwin Hills	24.6	N/A	17.5	N/A
California American Water Company-Los Angeles Division-Duarte	85.9	N/A	18.5	N/A
California American Water Company-Los Angeles Division-San Marino	27.4	N/A	18.1	N/A
California American Water Company-Los Angeles Division	42.3		18.1	
California American Water Company-Monterey District	6.4	N/A	6.4	N/A
California American Water Company-Sacramento District-Antelope	19.4	N/A	14.9	N/A
California American Water Company-Sacramento District-Lincoln Oaks	5.6	N/A	5.6	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
California American Water Company-Sacramento District-Parkway	25.3	N/A	14.2	N/A
California American Water Company-Sacramento District-Rosemont	29.4	N/A	17.8	N/A
California American Water Company-Sacramento District	20.4		13.2	
California American Water Company-San Diego District	25.6	N/A	15.6	N/A
California American Water Company-Ventura District	33.5	N/A	24.5	N/A
California City	N/A	1641.2	N/A	460.4
California Water Service Company Bakersfield- Bakersfield	74.6	N/A	17.2	N/A
California Water Service Company Bakersfield-North Garden	65.7	N/A	18.5	N/A
California Water Service Company Bakersfield	73.7		17.3	
California Water Service Company Bear Gulch	13.9	N/A	13.9	N/A
California Water Service Company Chico District	28.6	N/A	18.7	N/A
California Water Service Company Dominguez	23.8	N/A	18.4	N/A
California Water Service Company East Los Angeles	4.0	N/A	4.0	N/A
California Water Service Company Hermosa- Redondo	12.4	N/A	12.4	N/A
California Water Service Company Livermore	17.2	N/A	17.2	N/A
California Water Service Company Los Altos- Suburban	24.5	N/A	17.8	N/A
California Water Service Company Marysville	40.6	N/A	15.2	N/A
California Water Service Company Mid Peninsula- San Carlos	6.2	N/A	6.2	N/A
California Water Service Company Mid Peninsula- San Mateo	20.6	N/A	16.1	N/A
California Water Service Company Mid Peninsula	16.6		13.4	

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
California Water Service Company Oroville	27.4	N/A	18.4	N/A
California Water Service Company Palos Verdes	32.6	N/A	24.0	N/A
California Water Service Company Salinas District	9.2	N/A	9.2	N/A
California Water Service Company Selma	35.1	N/A	14.0	N/A
California Water Service Company South San Francisco	0.6	N/A	0.6	N/A
California Water Service Company Stockton	20.6	N/A	13.5	N/A
California Water Service Company Visalia	10.1	N/A	10.1	N/A
California Water Service Company Westlake	31.7	N/A	24.6	N/A
Camarillo City Of	3.4	N/A	3.4	N/A
Cambria Community Service District	15.5	N/A	15.5	N/A
Camrosa Water District	35.9	N/A	18.8	N/A
Carlsbad Municipal Water District	21.5	N/A	21.5	N/A
Carmichael Water District	36.3	N/A	15.5	N/A
Carpinteria Valley Water District	23.0	N/A	23.0	N/A
Castaic Lake Water Agency Santa Clarita Water Division	47.0	N/A	25.5	N/A
Ceres City Of	14.6	N/A	11.3	N/A
Cerritos City Of	19.9	N/A	19.9	N/A
Chino City Of	37.3	N/A	17.8	N/A
Chino Hills City Of	6.2	N/A	6.2	N/A
Citrus Heights Water District	15.3	N/A	15.3	N/A
Cloverdale City of	30.9	N/A	12.6	N/A
Clovis City Of	7.4	N/A	7.4	N/A
Coachella City Of	31.9	N/A	18.7	N/A
Coachella Valley Water District	43.3	N/A	24.1	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Coalinga City Of	41.0	N/A	20.6	N/A
Coastside County Water District	18.5	N/A	18.5	N/A
Colton City Of	65.5	N/A	16.7	N/A
Contra Costa Water District	21.8	N/A	18.5	N/A
Corcoran City Of	N/A	2415.1	N/A	444.7
Corona City Of	16.1	N/A	16.1	N/A
Covina City Of	30.2	N/A	22.3	N/A
Covina Irrigating Company	37.7	N/A	22.2	N/A
Crescent City	80.2	N/A	21.6	N/A
Crescenta Valley Community Water District	22.4	N/A	22.4	N/A
Crestline Village Water District	4.3	N/A	4.3	N/A
Cucamonga Valley Water District	28.6	N/A	21.2	N/A
Cupertino City Of	25.6	N/A	25.6	N/A
Daly City	12.3	N/A	12.3	N/A
Davis City Of	37.3	N/A	11.1	N/A
Del Oro Water Company	22.0	N/A	22.0	N/A
Delano City Of	56.6	N/A	14.1	N/A
Desert Water Agency	87.1	N/A	21.2	N/A
Diablo Water District	15.5	N/A	15.5	N/A
Dinuba City Of	32.9	N/A	11.6	N/A
Discovery Bay Community Services District	14.0	N/A	14.0	N/A
Downey City Of	27.4	N/A	14.9	N/A
Dublin San Ramon Services District	7.3	N/A	7.3	N/A
East Bay Municipal Utility District	45.6	N/A	21.7	N/A
East Niles Community Services District	47.1	N/A	14.6	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
East Orange County Water District	25.8	N/A	25.8	N/A
East Palo Alto City Of	25.1	N/A	14.2	N/A
East Valley Water District	37.3	N/A	19.8	N/A
Eastern Municipal Water District	28.1	N/A	20.7	N/A
El Centro City Of	128.0	N/A	13.7	N/A
El Dorado Irrigation District	83.2	N/A	42.2	N/A
El Monte City Of	49.9	N/A	13.5	N/A
El Segundo City Of	37.6	N/A	15.4	N/A
El Toro Water District	24.2	N/A	24.2	N/A
Elk Grove Water District	15.9	N/A	15.9	N/A
Elsinore Valley Municipal Water District	20.1	N/A	20.1	N/A
Escondido City Of	22.2	N/A	22.2	N/A
Estero Municipal Improvement District	31.4	N/A	14.1	N/A
Eureka City Of	23.2	N/A	15.0	N/A
Exeter City Of	41.0	N/A	12.6	N/A
Fair Oaks Water District	23.3	N/A	19.6	N/A
Fairfield City Of	73.7	N/A	15.0	N/A
Fallbrook Public Utilities District	62.5	N/A	44.8	N/A
Folsom City Of	133.3	N/A	16.9	N/A
Fortuna City Of	45.4	N/A	26.1	N/A
Fountain Valley City Of	11.9	N/A	11.9	N/A
Fresno City Of	47.7	N/A	13.6	N/A
Fruitridge Vista Water Company	71.4	N/A	10.8	N/A
Fullerton City Of	18.4	N/A	18.4	N/A
Galt City Of	24.4	N/A	11.5	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Garden Grove City Of	22.9	N/A	11.9	N/A
Georgetown Divide Public Utility District	N/A	787.5	N/A	787.5
Gilroy City Of	33.4	N/A	17.0	N/A
Glendale City Of	18.2	N/A	18.2	N/A
Glendora City Of	68.5	N/A	19.8	N/A
Golden State Water Company-Artesia	23.3	N/A	13.3	N/A
Golden State Water Company-Barstow	51.0	N/A	26.0	N/A
Golden State Water Company-Bay Point	24.2	N/A	17.8	N/A
Golden State Water Company-Bell-Bell Gardens	21.7	N/A	13.5	N/A
Golden State Water Company-Claremont	46.9	N/A	23.5	N/A
Golden State Water Company-Cordova	67.3	N/A	12.1	N/A
Golden State Water Company-Culver City	15.2	N/A	15.2	N/A
Golden State Water Company-Florence Graham	25.2	N/A	13.1	N/A
Golden State Water Company-Norwalk	16.3	N/A	13.7	N/A
Golden State Water Company-Orcutt	49.5	N/A	16.7	N/A
Golden State Water Company-Placentia	27.3	N/A	22.5	N/A
Golden State Water Company-San Dimas	16.7	N/A	16.7	N/A
Golden State Water Company-Simi Valley	12.2	N/A	12.2	N/A
Golden State Water Company-South Arcadia	15.2	N/A	15.2	N/A
Golden State Water Company-South San Gabriel	41.7	N/A	13.3	N/A
Golden State Water Company-Southwest	14.7	N/A	14.7	N/A
Golden State Water Company-West Orange	19.5	N/A	19.5	N/A
Goleta Water District	24.3	N/A	24.3	N/A
Great Oaks Water Company Incorporated	22.5	N/A	14.4	N/A
Greenfield City Of	37.3	N/A	13.8	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Groveland Community Services District	14.5	N/A	14.5	N/A
Hawthorne City Of	14.1	N/A	14.1	N/A
Hayward City Of	20.5	N/A	20.5	N/A
Healdsburg City Of	10.4	N/A	10.4	N/A
Helix Water District	18.4	N/A	18.4	N/A
Hemet City Of	5.8	N/A	5.8	N/A
Hesperia Water District	19.2	N/A	19.2	N/A
Hi Desert Water District	23.5	N/A	23.5	N/A
Hillsborough Town Of	26.6	N/A	26.6	N/A
Hollister City Of	30.4	N/A	15.6	N/A
Humboldt Community Services District	59.1	N/A	14.0	N/A
Huntington Beach City Of	14.8	N/A	14.8	N/A
Huntington Park City Of	18.8	N/A	12.4	N/A
Imperial City Of	45.6	N/A	14.8	N/A
Indian Wells Valley Water District	38.7	N/A	16.5	N/A
Indio City Of	30.5	N/A	17.6	N/A
Inglewood City Of	12.6	N/A	12.6	N/A
Irvine Ranch Water District	14.9	N/A	14.9	N/A
Joshua Basin Water District	N/A	507.0	N/A	507.0
Jurupa Community Service District	33.0	N/A	24.8	N/A
Kerman City Of	32.4	N/A	11.2	N/A
Kingsburg City Of	505.3	N/A	12.1	N/A
La Habra City Of	28.0	N/A	20.1	N/A
La Palma City Of	37.2	N/A	15.0	N/A
La Verne City Of	34.2	N/A	18.9	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Laguna Beach County Water District	24.4	N/A	17.5	N/A
Lake Arrowhead Community Services District	20.7	N/A	20.7	N/A
Lake Hemet Municipal Water District	32.2	N/A	19.9	N/A
Lakeside Water District	19.8	N/A	19.8	N/A
Lakewood City Of	12.9	N/A	12.9	N/A
Lamont Public Utility District	79.7	N/A	12.9	N/A
Las Virgenes Municipal Water District	25.1	N/A	25.1	N/A
Lathrop City Of	18.6	N/A	13.3	N/A
Liberty Utilities(Park Water)Corp-Bell Norwalk	5.8	N/A	5.8	N/A
Liberty Utilities(Park Water)Corp-Compton Willow	11.2	N/A	11.2	N/A
Liberty Utilities(Park Water)Corp-Lynwood	N/A	50.2	N/A	50.2
Liberty Utilities (Park Water) Corp			6.5	
Lincoln Avenue Water Company	21.4	N/A	21.4	N/A
Lincoln City Of	35.2	N/A	23.6	N/A
Linda County Water District	88.1	N/A	14.0	N/A
Livermore City Of	27.8	N/A	16.8	N/A
Livingston City Of	67.4	N/A	11.4	N/A
Lodi City Of	10.6	N/A	10.6	N/A
Loma Linda City Of	62.3	N/A	16.8	N/A
Lomita City Of	17.7	N/A	12.8	N/A
Lompoc City Of	15.9	N/A	15.9	N/A
Long Beach City Of	7.0	N/A	7.0	N/A
Los Angeles City Department Of Water And Power	36.9	N/A	33.0	N/A
Los Angeles County Waterworks District29- Malibu&Marina Del Rey	26.7	N/A	26.7	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Los Angeles County Waterworks District40-Antelope Valley	23.3	N/A	20.5	N/A
Los Banos City Of	83.6	N/A	11.5	N/A
Lynwood City Of	22.3	N/A	12.3	N/A
Madera City Of	3.5	N/A	3.5	N/A
Mammoth Community Water District	26.6	N/A	26.6	N/A
Manhattan Beach City Of	3.6	N/A	3.6	N/A
Manteca City Of	22.3	N/A	12.6	N/A
Marin Municipal Water District	24.5	N/A	24.5	N/A
Marina Coast Water District	30.6	N/A	17.4	N/A
Martinez City Of	57.5	N/A	20.3	N/A
Mc Kinleyville Community Services District	19.5	N/A	15.5	N/A
Menlo Park City Of	59.2	N/A	19.3	N/A
Merced City Of	41.9	N/A	11.4	N/A
Mesa Water District	18.0	N/A	18.0	N/A
Mid-Peninsula Water District	14.8	N/A	14.8	N/A
Millbrae City Of	28.4	N/A	17.8	N/A
Milpitas City Of	35.0	N/A	23.5	N/A
Mission Springs Water District	48.1	N/A	19.2	N/A
Modesto City Of	80.9	N/A	14.7	N/A
Monrovia City Of	17.9	N/A	17.9	N/A
Monte Vista Water District	67.3	N/A	21.1	N/A
Montebello Land And Water Company	38.9	N/A	15.3	N/A
Montecito Water District	33.7	N/A	33.7	N/A
Monterey Park City Of	23.6	N/A	18.4	N/A
Morgan Hill City Of	30.4	N/A	17.7	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Morro Bay City Of	2.1	N/A	2.1	N/A
Moulton Niguel Water District	24.7	N/A	24.7	N/A
Mountain House Community Services District	44.9	N/A	14.8	N/A
Mountain View City Of	18.9	N/A	16.4	N/A
Myoma Dunes Mutual Water Company	47.6	N/A	19.8	N/A
Napa City Of	24.9	N/A	16.2	N/A
Nevada Irrigation District-E George	58.7	N/A	28.4	N/A
Nevada Irrigation District-Lake Wildwood	13.5	N/A	13.5	N/A
Nevada Irrigation District-Loma Rica	28.1	N/A	28.1	N/A
Nevada Irrigation District	37.8	N/A	24.9	N/A
Newhall County Water District	36.2	N/A	27.5	N/A
Newman Cityof	61.7	N/A	11.0	N/A
Newport Beach City Of	26.2	N/A	18.4	N/A
Nipomo Community Service District	N/A	755.7	N/A	755.7
Norco City Of	29.3	N/A	24.9	N/A
North Coast County Water District	13.0	N/A	13.0	N/A
North Marin Water District	8.5	N/A	8.5	N/A
North Tahoe Public Utilities District	64.5	N/A	26.9	N/A
Norwalk City Of	0.4	N/A	0.4	N/A
Oakdale City Of	34.6	N/A	11.0	N/A
Oceanside City Of	15.8	N/A	15.8	N/A
Oildale Mutual Water Company	12.2	N/A	12.2	N/A
Olivehurst Public Utilities District	48.2	N/A	13.8	N/A
Olivehurst Public Utilities District-Plumas Lake	51.7	N/A	13.5	N/A
Olivehurst Public Utilities District	49.4	N/A	13.7	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Olivenhain Municipal Water District	36.2	N/A	36.2	N/A
Ontario City Of	23.0	N/A	23.0	N/A
Orange City Of	31.1	N/A	21.6	N/A
Orangevale Water Company	29.6	N/A	16.4	N/A
Orchard Dale Water District	32.3	N/A	13.7	N/A
Otay Water District	15.9	N/A	15.9	N/A
Oxnard City Of	31.3	N/A	17.0	N/A
Padre Dam Municipal Water District	6.6	N/A	6.6	N/A
Palmdale Water District	44.7	N/A	19.8	N/A
Palo Alto City Of	13.4	N/A	13.4	N/A
Paradise Irrigation District	20.9	N/A	20.9	N/A
Paramount City Of	68.5	N/A	18.9	N/A
Pasadena City Of	31.8	N/A	19.0	N/A
Paso Robles City Of	11.0	N/A	11.0	N/A
Patterson City Of	69.4	N/A	12.6	N/A
Petaluma City Of	23.7	N/A	13.4	N/A
Phelan Pinon Hills Community Services District	N/A	819.7	N/A	819.7
Pico Rivera City Of	10.0	N/A	10.0	N/A
Pico Water District	10.3	N/A	10.3	N/A
Pismo Beach City Of	11.8	N/A	11.8	N/A
Pittsburg City Of	24.9	N/A	15.4	N/A
Placer County Water Agency-Auburn Bowman	56.9	N/A	19.9	N/A
Placer County Water Agency-Foothill	47.0	N/A	20.2	N/A
Placer County Water Agency	49.5	N/A	20.1	N/A
Pleasanton City Of	49.2	N/A	18.9	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Pomona City Of	25.6	N/A	21.2	N/A
Port Hueneme City Of	8.6	N/A	8.6	N/A
Porterville City Of	47.2	N/A	14.6	N/A
Poway City Of	37.4	N/A	31.8	N/A
Quartz Hill Water District	19.3	N/A	19.3	N/A
Rainbow Municipal Water District	N/A	718.5	N/A	718.5
Ramona Municipal Water District	18.4	N/A	18.4	N/A
Rancho California Water District	41.1	N/A	36.6	N/A
Red Bluff City Of	14.3	N/A	14.3	N/A
Redding City Of	57.1	N/A	23.0	N/A
Redlands City Of	46.8	N/A	24.7	N/A
Redwood City	23.6	N/A	14.5	N/A
Reedley City Of	155.1	N/A	11.9	N/A
Rialto City Of	21.2	N/A	21.2	N/A
Rincon Del Diablo Municipal Water District	31.7	N/A	31.7	N/A
Rio Linda-Elverta Community Water District	37.6	N/A	12.3	N/A
Rio Vista City Of	22.3	N/A	15.0	N/A
Riverbank City Of	19.3	N/A	12.9	N/A
Riverside City Of	54.8	N/A	24.0	N/A
Riverside Highland Water Company	10.5	N/A	10.5	N/A
Rohnert Park City Of	27.0	N/A	13.3	N/A
Rosamond Community Service District	27.2	N/A	22.1	N/A
Roseville City Of	41.0	N/A	22.3	N/A
Rowland Water District	18.6	N/A	18.6	N/A
Rubidoux Community Service District	55.8	N/A	20.5	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Rubio Canyon Land And Water Association	22.4	N/A	18.6	N/A
Sacramento City Of	38.2	N/A	12.0	N/A
Sacramento County Water Agency	54.2	N/A	15.6	N/A
Sacramento Suburban Water District	22.1	N/A	15.1	N/A
San Bernardino City Of	47.6	N/A	21.8	N/A
San Bernardino County Service Area64Spring Valley Lake	69.9	N/A	17.1	N/A
San Bernardino County Service Area70J Oak Hills	N/A	1040.5	N/A	767.2
San Bruno City Of	17.7	N/A	17.7	N/A
San Buenaventura City Of(Ventura)	19.9	N/A	19.9	N/A
San Clemente City Of	36.4	N/A	17.9	N/A
San Diego City Of	31.7	N/A	25.1	N/A
San Dieguito Water District	23.5	N/A	21.0	N/A
San Fernando City Of	28.7	N/A	17.2	N/A
San Francisco Public Utilities Commision	24.9	N/A	18.3	N/A
San Gabriel County Water District	24.5	N/A	18.0	N/A
San Gabriel Valley Water Company	21.2	N/A	18.5	N/A
San Gabriel Valley Water Company Fontana Division	40.4	N/A	21.1	N/A
San Jacinto City Of	39.7	N/A	20.1	N/A
San Jose City Of	38.0	N/A	23.0	N/A
San Jose Water Company	24.0	N/A	18.8	N/A
San Juan Capistrano City Of	13.1	N/A	13.1	N/A
San Juan Water District	77.1	N/A	19.4	N/A
San Lorenzo Valley Water District	49.2	N/A	23.6	N/A
San Luis Obispo City Of	27.3	N/A	17.6	N/A
Santa Ana City Of	13.8	N/A	13.8	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Santa Barbara City Of	27.4	N/A	27.4	N/A
Santa Clara City Of	25.6	N/A	15.4	N/A
Santa Cruz City Of	18.5	N/A	18.5	N/A
Santa Fe Irrigation District	53.2	N/A	22.9	N/A
Santa Fe Springs City Of	31.0	N/A	17.8	N/A
Santa Margarita Water District	16.2	N/A	16.2	N/A
Santa Maria City Of	11.2	N/A	11.2	N/A
Santa Monica City Of	2.2	N/A	2.2	N/A
Santa Paula City Of	10.8	N/A	10.8	N/A
Santa Rosa City Of	16.3	N/A	16.3	N/A
Scotts Valley Water District	19.9	N/A	19.9	N/A
Seal Beach City Of	26.3	N/A	15.4	N/A
Shafter City Of	62.2	N/A	14.8	N/A
Shasta Lake City Of	24.0	N/A	24.0	N/A
Sierra Madre City Of	76.3	N/A	27.2	N/A
Signal Hill City Of	18.6	N/A	18.6	N/A
Soledad City Of	17.6	N/A	10.7	N/A
Sonoma City Of	22.8	N/A	16.6	N/A
Soquel Creek Water District	13.3	N/A	13.3	N/A
South Coast Water District	8.1	N/A	8.1	N/A
South Feather Waterand Power	57.0	N/A	30.4	N/A
South Gate City Of	11.2	N/A	11.2	N/A
South Pasadena City Of	30.1	N/A	18.6	N/A
South Tahoe Public Utility District	71.5	N/A	23.0	N/A
Stockton City Of	35.5	N/A	14.7	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Suburban Water Systems-San Jose Hills	16.8	N/A	16.8	N/A
Suburban Water Systems-Whittier-La Mirada	22.7	N/A	18.4	N/A
Suisun-Solano Water Authority	47.1	N/A	12.3	N/A
Sunny Slope Water Company	27.2	N/A	16.2	N/A
Sunnyslope Community Water District	14.8	N/A	14.8	N/A
Sunnyvale City Of	20.6	N/A	17.1	N/A
Susanville City Of	59.5	N/A	19.5	N/A
Sweetwater Authority	15.4	N/A	15.4	N/A
Sweetwater Springs Water District	29.4	N/A	19.6	N/A
Tehachapi City Of	46.1	N/A	19.5	N/A
Thousand Oaks City Of	14.1	N/A	14.1	N/A
Torrance City Of	6.7	N/A	6.7	N/A
Trabuco Canyon Water District	20.2	N/A	20.2	N/A
Tracy City Of	39.3	N/A	15.4	N/A
Triunfo Sanitation District-Oak Park Water Service	1.6	N/A	1.6	N/A
Truckee-Donner Public Utilities District	63.1	N/A	23.1	N/A
Tulare City Of	18.8	N/A	11.2	N/A
Tuolumne Utilities District-Sonora Jamestown	75.7	N/A	25.6	N/A
Tuolumne Utilities District-Upper Basin	31.6	N/A	21.7	N/A
Tuolumne Utilties District	56.1	N/A	23.8	N/A
Turlock City Of	58.0	N/A	13.2	N/A
Tustin City Of	37.4	N/A	11.3	N/A
Twentynine Palms Water District	31.3	N/A	27.0	N/A
Ukiah City Of	38.3	N/A	21.2	N/A
Upland City Of	25.2	N/A	25.2	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Vacaville City Of	28.3	N/A	19.5	N/A
Valencia Water Company	30.2	N/A	26.6	N/A
Vallecitos Water District	35.1	N/A	35.1	N/A
Vallejo City Of	57.9	N/A	14.9	N/A
Valley Center Municipal Water District	N/A	834.6	N/A	834.6
Valley County Water District	12.8	N/A	12.8	N/A
Valley Of The Moon Water District	29.0	N/A	15.2	N/A
Valley Water Company	13.4	N/A	13.4	N/A
Vaughn Water Company	31.2	N/A	12.8	N/A
Ventura County Waterworks District No01-Moorpark	35.5	N/A	21.7	N/A
Ventura County Waterworks District No08-Simi Valley	13.4	N/A	13.4	N/A
Vernon City Of	N/A	5234.6	N/A	630.2
Victorville Water District	53.6	N/A	26.5	N/A
Vista Irrigation District	23.8	N/A	23.8	N/A
Walnut Valley Water District	28.3	N/A	28.3	N/A
Wasco City Of	15.3	N/A	12.4	N/A
Watsonville City Of	20.2	N/A	15.0	N/A
West Kern Water District	N/A	5110.3	N/A	506.2
West Sacramento City Of	236.0	N/A	12.8	N/A
West Valley Water District	62.5	N/A	18.1	N/A
Westborough Water District	8.1	N/A	8.1	N/A
Western Municipal Water District Of Riverside	64.6	N/A	32.5	N/A
Westminster City Of	14.5	N/A	14.5	N/A
Whittier City Of	20.0	N/A	15.1	N/A
Windsor Town Of	28.2	N/A	23.9	N/A

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Woodland City Of	25.7	N/A	13.5	N/A
Yorba Linda Water District	40.5	N/A	20.9	N/A
Yreka City Of	68.6	N/A	28.3	N/A
Yuba City	35.8	N/A	13.6	N/A
Yucaipa Valley Water District	46.3	N/A	12.0	N/A

## Baseline inputs from water loss audits to draft economic model

**Note:** The data for water systems that are combined into one standard are identified in *italics*.

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Adelanto City Of	450.3	130.6	8194.3	903.9	73.0
Alameda County Water District	2046.7	920.8	85131.3	606.2	72.8
Alco Water Service	146.2	89.2	8638.3	219.8	67.4
Alhambra City Of	179.5	167.5	18588.0	478.9	60.0
Amador Water Agency	142.2	51.3	1914.0	108.7	70.0
American Canyon City Of	192.7	103.4	5584.0	705.7	68.0
Anaheim City Of	1677.7	799.1	63805.3	643.1	77.0
Anderson City Of	203.1	40.0	3396.0	66.1	70.9
Antioch City Of	431.5	370.7	32401.0	777.2	68.2
Apple Valley Ranchos Water Company	550.3	476.2	21051.0	112.9	93.4
Arcadia City Of	502.4	164.6	13978.7	104.3	77.0
Arcata City Of	349.6	90.6	6414.7	274.2	80.0

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Arroyo Grande City Of	55.8	88.7	6453.3	1501.9	65.0
Arvin Community Service District	307.9	61.3	4046.3	393.5	60.0
Atascadero Mutual Water Company	430.8	246.0	10700.0	175.0	103.0
Atwater City Of	2592.7	97.6	7495.0	112.4	50.0
Azusa Lightand Water	2068.7	305.2	23526.0	301.8	59.7
Bakersfield City Of	1005.4	569.3	46460.7	176.6	70.0
Bakman Water Company	246.5	73.2	2578.5	318.2	52.5
Banning City Of	760.6	168.2	10756.0	190.8	109.3
Bear Valley Community Services District	38.6	180.0	3602.0	524.0	90.0
Beaumont-Cherry Valley Water District	828.9	376.7	18042.0	462.3	75.0
Bella Vista Water District	463.7	242.0	6328.7	176.3	72.0
Bellflower-Somerset Mutual Water Company	98.4	66.0	7053.0	56.1	56.7
Benicia City Of	504.6	114.6	9763.0	230.9	81.0
Beverly Hills City Of	374.5	171.0	11141.0	1205.8	68.2
Big Bear Community Services District	87.5	82.1	6102.0	377.4	85.0
Big Bear Lake City Of	160.7	165.4	15029.7	257.4	86.3
Blythe City Of	305.8	51.4	3400.0	91.6	62.0
Brawley City Of	459.7	100.0	7487.0	50.9	55.0
Brea City Of	231.7	222.1	13573.0	937.8	75.0
Brentwood City Of	810.2	326.7	23700.7	1130.7	62.2
Buena Park City Of	765.6	236.2	19107.0	619.8	70.0
Burbank City Of	401.2	286.0	26661.0	738.5	115.0
Burlingame City Of	201.0	115.8	9200.7	1745.8	85.0
Calaveras County Water District-Ebbetts Pass	557.4	155.6	5869.0	238.8	70.0
Calaveras County Water District-Jenny Lind	656.6	103.6	3759.0	209.4	70.0
Calexico City Of	39.9	55.2	8550.0	244.4	50.0

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
California American Water Company-Los Angeles Division-Baldwin Hills	180.3	69.8	6556.3	806.3	75.8
California American Water Company-Los Angeles Division-Duarte	753.7	98.8	7832.0	315.6	76.8
California American Water Company-Los Angeles Division-San Marino	462.3	181.0	15085.3	366.8	76.2
California American Water Company-Monterey District	279.8	561.4	39097.7	435.1	89.3
California American Water Company-Sacramento District-Antelope	228.5	95.8	10496.5	277.0	68.0
California American Water Company-Sacramento District-Lincoln Oaks	91.3	143.5	14606.0	240.2	64.5
California American Water Company-Sacramento District-Parkway	423.3	167.3	14912.0	167.0	63.0
California American Water Company-Sacramento District-Rosemont	550.4	187.9	16725.0	169.9	76.3
California American Water Company-San Diego District	629.0	180.8	21939.7	1810.3	71.8
California American Water Company-Ventura District	776.7	256.5	20706.3	1491.7	95.9
California City	576.9	313.8	4858.0	1387.4	65.0
California Water Service Company Bakersfield- Bakersfield	5510.4	856.8	65962.7	288.6	68.3
California Water Service Company Bakersfield-North Garden	505.2	122.2	6859.7	288.6	71.0
California Water Service Company Bear Gulch	300.7	347.2	19263.3	1683.7	81.0
California Water Service Company Chico District	934.9	406.0	29204.3	98.9	76.0
California Water Service Company Dominguez	918.6	389.6	34439.7	1380.6	78.0
California Water Service Company East Los Angeles	121.6	277.8	27131.0	574.2	79.0
California Water Service Company Hermosa- Redondo	377.1	217.7	27242.7	1234.7	68.0
California Water Service Company Livermore	365.2	230.4	18935.7	963.9	66.3

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
California Water Service Company Los Altos- Suburban	527.7	300.8	19236.3	1142.6	71.0
California Water Service Company Marysville	178.7	55.9	3929.3	77.2	63.7
California Water Service Company Mid Peninsula- San Carlos	70.7	115.5	10139.0	1961.3	80.0
California Water Service Company Mid Peninsula- San Mateo	611.6	259.1	26497.7	1961.3	72.0
California Water Service Company Oroville	117.6	62.4	3834.7	193.6	72.3
California Water Service Company Palos Verdes	887.3	347.3	24292.3	1404.7	91.7
California Water Service Company Salinas District	257.8	279.2	25083.7	138.2	76.0
California Water Service Company Selma	258.8	91.8	6591.3	115.4	59.4
California Water Service Company South San Francisco	11.0	169.0	17224.3	1608.5	76.0
California Water Service Company Stockton	1043.7	562.1	45194.3	684.0	55.0
California Water Service Company Visalia	500.9	588.9	44466.7	66.9	62.7
California Water Service Company Westlake	253.5	118.3	7141.0	1488.2	90.0
Camarillo City Of	51.8	203.0	13706.0	915.8	76.0
Cambria Community Service District	70.1	66.7	4032.0	583.8	85.0
Camrosa Water District	329.7	211.1	8204.7	898.0	65.0
Carlsbad Municipal Water District	777.3	453.7	32204.7	1214.4	81.0
Carmichael Water District	479.5	154.0	11789.7	257.1	66.0
Carpinteria Valley Water District	116.3	88.4	4504.7	386.7	89.0
Castaic Lake Water Agency Santa Clarita Water Division	1633.9	355.0	31054.3	553.3	100.6
Ceres City Of	202.0	154.0	12360.0	66.3	50.0
Cerritos City Of	349.2	186.4	15638.0	439.5	82.5
Chino City Of	843.9	267.0	20204.7	623.0	73.8
Chino Hills City Of	151.4	280.5	21946.3	913.9	80.0

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Citrus Heights Water District	346.0	271.0	20232.3	250.4	88.3
Cloverdale Cityof	114.6	32.3	3314.3	218.0	57.8
Clovis City Of	289.5	518.0	34901.7	313.4	63.5
Coachella City Of	297.0	121.6	8319.0	117.4	75.0
Coachella Valley Water District	5049.6	1716.7	104047.7	234.8	83.3
Coalinga City Of	177.5	98.5	3861.7	416.0	70.0
Coastside County Water District	158.2	88.9	7624.7	1486.6	78.1
Colton City Of	748.2	165.9	10202.0	160.6	66.7
Contra Costa Water District	1526.0	818.1	62501.3	215.7	73.0
Corcoran City Of	351.7	130.0	3772.0	198.6	50.0
Corona City Of	795.4	802.6	44012.0	609.8	93.6
Covina City Of	292.7	112.7	8650.3	786.0	88.5
Covina Irrigating Company	365.6	111.0	8647.0	794.0	88.4
Crescent City	397.1	104.2	4420.3	89.3	74.2
Crescenta Valley Community Water District	210.7	170.9	8386.3	687.7	93.4
Crestline Village Water District	24.5	72.8	5076.0	1150.0	99.8
Cucamonga Valley Water District	1562.0	710.0	48694.7	487.7	80.0
Cupertino City Of	122.6	59.9	4279.3	1357.8	104.1
Daly City	319.8	198.0	23122.7	1675.7	70.7
Davis City Of	714.0	192.0	17101.7	248.4	50.0
Del Oro Water Company	118.7	64.8	4820.7	470.5	84.2
Delano City Of	595.0	131.0	9390.0	159.9	59.7
Desert Water Agency	2388.3	416.6	24469.0	235.9	79.9
Diablo Water District	207.2	190.0	11903.3	657.4	70.0
Dinuba City Of	221.5	72.5	6016.3	145.9	51.7
Discovery Bay Community Services District	93.4	48.0	5944.3	150.4	60.0

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Downey City Of	717.1	276.0	23325.0	366.6	65.0
Dublin San Ramon Services District	195.3	319.0	23724.0	1420.3	80.9
East Bay Municipal Utility District	19584.5	4205.9	383229.0	78.2	82.6
East Niles Community Services District	423.5	127.6	8020.3	475.7	60.0
East Orange County Water District	35.2	23.7	1215.0	620.5	101.0
East Palo Alto City Of	115.3	38.6	4102.0	1786.1	65.0
East Valley Water District	974.7	316.6	23319.7	145.9	80.0
Eastern Municipal Water District	5037.5	2390.4	160146.7	871.1	74.7
El Centro City Of	1419.3	120.0	9899.0	76.5	60.0
El Dorado Irrigation District	3863.1	1185.2	41445.3	92.1	109.3
El Monte City Of	209.1	43.0	3738.3	168.9	60.0
El Segundo City Of	217.0	57.5	5152.0	1318.0	67.5
El Toro Water District	272.5	180.2	10044.3	946.0	86.9
Elk Grove Water District	141.9	102.9	7957.0	186.2	61.3
Elsinore Valley Municipal Water District	1019.4	722.7	45313.3	1048.0	84.0
Escondido City Of	665.1	430.7	26710.3	1288.3	96.1
Estero Municipal Improvement District	263.9	120.6	7512.7	1860.5	58.0
Eureka City Of	261.1	160.9	10028.7	1072.5	61.2
Exeter City Of	153.1	43.0	3331.0	537.6	55.0
Fair Oaks Water District	363.1	181.0	13938.7	234.4	80.0
Fairfield City Of	2549.9	370.7	30901.3	113.4	65.0
Fallbrook Public Utilities District	648.0	271.8	9251.3	1139.7	116.6
Folsom City Of	3155.1	335.2	21138.5	112.1	68.0
Fortuna City Of	231.2	65.4	4544.7	216.8	97.3
Fountain Valley City Of	228.0	217.0	17178.0	605.7	70.0
Fresno City Of	7775.7	1839.8	145578.7	168.5	51.1

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Fruitridge Vista Water Company	386.4	52.0	4830.0	100.6	49.0
Fullerton City Of	656.5	431.3	31894.0	791.6	76.9
Galt City Of	206.6	100.7	7565.0	116.8	50.0
Garden Grove City Of	863.0	440.0	33702.0	656.3	52.0
Georgetown Divide Public Utility District	145.7	165.2	3883.7	93.3	93.0
Gilroy City Of	552.7	209.3	14768.7	626.8	70.0
Glendale City Of	696.4	400.0	34101.0	1212.2	94.3
Glendora City Of	1034.0	225.7	13485.0	383.6	76.0
Golden State Water Company-Artesia	282.4	101.2	10824.7	486.9	61.4
Golden State Water Company-Barstow	527.4	187.3	9232.3	124.0	89.0
Golden State Water Company-Bay Point	138.1	52.1	5105.7	1217.7	77.7
Golden State Water Company-Bell-Bell Gardens	181.3	75.0	7449.7	490.1	61.5
Golden State Water Company-Claremont	595.0	162.8	11328.7	868.6	89.9
Golden State Water Company-Cordova	1144.9	202.7	15185.7	98.4	52.4
Golden State Water Company-Culver City	165.0	109.9	9719.7	1363.8	76.1
Golden State Water Company-Florence Graham	275.7	94.1	9774.7	462.3	60.0
Golden State Water Company-Norwalk	174.0	91.0	9507.3	642.0	62.8
Golden State Water Company-Orcutt	639.7	145.3	11544.0	211.0	70.7
Golden State Water Company-Placentia	400.3	144.3	13075.7	689.2	92.0
Golden State Water Company-San Dimas	302.8	204.7	16219.7	866.5	82.0
Golden State Water Company-Simi Valley	184.7	146.1	13543.0	1289.8	74.6
Golden State Water Company-South Arcadia	127.7	66.3	7493.0	457.8	65.4
Golden State Water Company-South San Gabriel	232.8	40.0	4979.7	364.7	62.8
Golden State Water Company-Southwest	874.7	519.0	52959.0	1119.7	74.3
Golden State Water Company-West Orange	611.0	260.4	27917.3	585.1	79.0
Goleta Water District	457.9	254.7	16842.0	1078.3	83.1

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Great Oaks Water Company Incorporated	537.1	211.4	21345.7	851.5	65.0
Greenfield City Of	155.8	35.3	3729.7	136.0	63.0
Groveland Community Services District	52.9	71.0	3262.0	887.3	110.0
Hawthorne City Of	102.2	60.8	6477.0	1046.2	58.3
Hayward City Of	838.8	387.0	36459.7	1823.2	94.1
Healdsburg City Of	54.6	59.5	4706.0	152.3	65.0
Helix Water District	1208.9	744.5	58661.3	1046.5	90.0
Hemet City Of	60.5	132.3	9304.0	240.9	80.0
Hesperia Water District	576.8	589.0	26813.0	645.6	85.0
Hi Desert Water District	280.1	308.9	10635.7	172.3	82.0
Hillsborough Town Of	127.8	100.1	4294.0	3069.4	85.0
Hollister City Of	223.8	93.5	6572.5	363.5	65.0
Humboldt Community Services District	525.5	105.6	7932.0	684.3	60.0
Huntington Beach City Of	902.1	607.2	54440.0	665.2	63.3
Huntington Park City Of	118.7	59.8	5649.7	791.1	56.0
Imperial City Of	282.5	63.0	5532.0	388.7	65.0
Indian Wells Valley Water District	534.8	263.9	12351.3	85.8	61.7
Indio City Of	790.0	344.7	23130.0	175.4	71.3
Inglewood City Of	223.9	156.0	15869.3	1441.9	85.0
Irvine Ranch Water District	1976.2	1886.1	118025.0	1330.3	84.1
Joshua Basin Water District	148.7	261.8	5831.0	1039.7	84.0
Jurupa Community Service District	1164.4	481.6	31509.3	838.5	92.5
Kerman City Of	134.8	59.6	3711.0	104.0	47.0
Kingsburg City Of	2082.3	61.0	3679.0	63.5	50.0
La Habra City Of	411.3	165.0	13121.0	676.1	82.0
La Palma City Of	183.6	39.4	4408.0	506.9	68.7

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
La Verne City Of	339.2	178.0	8854.5	1021.2	70.0
Laguna Beach County Water District	237.3	135.0	8670.0	984.7	70.0
Lake Arrowhead Community Services District	194.2	127.7	8356.7	501.5	88.0
Lake Hemet Municipal Water District	516.2	250.0	14332.0	991.5	75.7
Lakeside Water District	157.0	127.0	7080.7	1461.0	90.0
Lakewood City Of	290.1	180.0	20137.0	291.3	57.0
Lamont Public Utility District	281.3	28.5	3152.0	81.5	60.0
Las Virgenes Municipal Water District	599.0	402.9	21318.3	1001.2	121.8
Lathrop City Of	136.1	112.6	6524.0	95.0	54.0
Liberty Utilities(Park Water)Corp-Bell Norwalk	109.8	205.2	16895.0	785.8	75.8
Liberty Utilities(Park Water)Corp-Compton Willow	87.6	148.8	6959.0	785.8	87.5
Liberty Utilities(Park Water)Corp-Lynwood	9.1	162.3	4520.0	785.8	68.4
Lincoln Avenue Water Company	107.6	58.0	4483.3	439.3	92.0
Lincoln City Of	724.9	244.3	18384.0	904.3	92.0
Linda County Water District	454.2	61.3	4603.7	93.8	60.0
Livermore City Of	320.1	160.3	10285.3	1166.0	67.9
Livingston City Of	248.6	36.0	3293.3	128.2	51.7
Lodi City Of	277.5	243.0	23262.7	179.8	57.5
Loma Linda City Of	379.1	77.4	5435.3	642.3	69.3
Lomita City Of	85.5	43.2	4323.0	1129.8	58.3
Lompoc City Of	178.8	140.0	10016.7	369.6	110.0
Long Beach City Of	737.3	923.0	93928.3	1014.7	67.0
Los Angeles City Department Of Water And Power	30602.8	7384.8	740490.7	936.3	109.0
Los Angeles County Waterworks District29- Malibu&Marina Del Rey	229.0	218.1	7646.0	1401.8	79.3
Los Angeles County Waterworks District40-Antelope Valley	1498.7	1008.0	57449.4	385.5	71.3

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Los Banos City Of	1137.8	175.0	12149.0	93.8	49.4
Lynwood City Of	227.7	95.0	9097.3	1222.2	56.0
Madera City Of	55.8	204.0	14232.0		54.0
Mammoth Community Water District	111.0	66.0	3730.0	129.2	110.0
Manhattan Beach City Of	55.4	106.1	13631.0	1432.6	65.0
Manteca City Of	553.5	285.5	22156.3	156.2	55.0
Marin Municipal Water District	1726.2	869.9	62958.3	335.5	109.3
Marina Coast Water District	255.9	203.0	7474.3	158.1	60.0
Martinez City Of	653.4	139.1	10139.7	195.8	81.2
Mc Kinleyville Community Services District	137.3	87.8	6300.3	710.4	65.0
Menlo Park City Of	299.7	57.7	4520.3	2069.3	79.3
Merced City Of	1011.8	280.0	21545.0	90.6	50.0
Mesa Water District	501.5	328.4	24919.0	728.2	80.0
Mid-Peninsula Water District	132.6	102.3	7988.3	1583.5	102.0
Millbrae City Of	208.8	76.0	6552.7	1970.6	75.8
Milpitas City Of	646.6	194.7	16511.3	695.3	93.8
Mission Springs Water District	708.1	354.1	13138.0	488.3	65.0
Modesto City Of	6525.6	868.0	72015.0	280.4	60.0
Monrovia City Of	194.2	108.6	9678.7	214.9	99.3
Monte Vista Water District	939.9	201.9	12476.3	878.6	80.8
Montebello Land And Water Company	173.8	46.0	3988.3	558.7	66.9
Montecito Water District	175.2	116.5	4643.7	814.9	111.2
Monterey Park City Of	357.2	134.0	13491.0	50.2	80.0
Morgan Hill City Of	478.9	197.2	14060.7	531.5	72.4
Morro Bay City Of	12.7	73.7	5486.0	2573.6	65.0
Moulton Niguel Water District	1483.5	676.3	53674.0	929.5	98.0

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Mountain House Community Services District	256.2	57.2	5094.0	228.7	65.3
Mountain View City Of	390.3	185.3	18390.0	641.8	72.7
Myoma Dunes Mutual Water Company	134.8	33.8	2525.5	111.4	80.0
Napa City Of	717.4	360.2	25723.0	488.8	67.3
Nevada Irrigation District-E George	411.8	150.7	6261.3	74.7	90.4
Nevada Irrigation District-Lake Wildwood	50.3	44.8	3327.7	79.5	84.9
Nevada Irrigation District-Loma Rica	164.6	118.8	5224.7	87.6	88.3
Newhall County Water District	156.7	65.9	3866.0	273.7	97.1
Newman Cityof	242.6	28.0	3513.0	124.9	52.3
Newport Beach City Of	782.2	302.2	26638.7	1176.7	78.0
Nipomo Community Service District	156.6	185.0	4685.7	173.0	68.0
Norco City Of	249.4	104.7	7586.0	787.7	95.0
North Coast County Water District	175.5	132.6	12091.0	1739.3	83.0
North Marin Water District	196.9	316.6	20768.7	878.5	62.5
North Tahoe Public Utilities District	236.3	46.0	3270.3	157.6	100.0
Norwalk City Of	2.5	57.6	5371.5	955.0	67.5
Oakdale City Of	314.9	75.0	8114.3	123.4	51.0
Oceanside City Of	787.6	591.0	44425.0	1543.7	72.3
Oildale Mutual Water Company	154.3	148.4	11308.3	132.5	60.0
Olivehurst Public Utilities District	242.8	56.5	4498.0	214.1	60.0
Olivehurst Public Utilities District-Plumas Lake	129.7	25.1	2238.5	164.9	60.0
Olivenhain Municipal Water District	916.4	466.2	22617.3	1128.4	115.0
Ontario City Of	912.6	595.3	35480.7	346.3	85.0
Orange City Of	1266.2	462.0	36402.0	780.8	86.8
Orangevale Water Company	188.9	82.5	5705.0	167.5	67.5
Orchard Dale Water District	153.8	43.0	4257.0	603.4	62.0

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Otay Water District	893.5	733.0	50287.7	1756.0	116.6
Oxnard City Of	1481.3	581.4	42312.0	1112.5	67.0
Padre Dam Municipal Water District	177.1	410.0	24072.7	1871.4	107.7
Palmdale Water District	1373.7	433.0	27439.0	278.6	77.2
Palo Alto City Of	395.3	238.5	26404.0	1810.8	71.0
Paradise Irrigation District	201.9	177.9	8640.5	53.1	91.0
Paramount City Of	567.1	161.7	7391.3	441.0	68.3
Pasadena City Of	1357.3	531.5	38048.3	1041.0	73.4
Paso Robles City Of	137.8	228.8	11174.0	569.4	74.2
Patterson City Of	506.2	49.0	6507.7	78.3	60.0
Petaluma City Of	536.6	245.5	20172.7	1056.9	59.0
Phelan Pinon Hills Community Services District	317.7	346.0	7010.0	647.6	100.4
Pico Rivera City Of	107.6	98.0	9562.5	292.7	70.0
Pico Water District	62.5	68.0	5428.7	339.9	66.0
Pismo Beach City Of	62.9	50.0	4759.7	1550.0	72.9
Pittsburg City Of	527.9	254.3	18891.0	806.3	65.0
Placer County Water Agency-Auburn Bowman	598.1	156.1	9390.0	265.0	76.7
Placer County Water Agency-Foothill	1481.7	413.4	28147.0	265.0	79.7
Pleasanton City Of	1220.4	329.0	22126.3	858.9	75.3
Pomona City Of	919.8	488.0	32110.0	986.7	82.2
Port Hueneme City Of	56.6	47.3	5838.7	783.2	45.0
Porterville City Of	862.9	260.8	16326.0	182.0	60.0
Poway City Of	584.1	285.5	13949.0	1482.0	102.7
Quartz Hill Water District	126.2	96.9	5824.3	410.3	73.8
Rainbow Municipal Water District	257.5	320.0	8040.0	1312.7	158.0
Ramona Municipal Water District	198.4	226.3	9612.3	1300.0	155.0

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Rancho California Water District	2057.3	940.8	44734.7	1271.7	110.5
Red Bluff City Of	77.9	81.0	4865.0		63.0
Redding City Of	1872.8	558.5	29263.5	261.7	80.0
Redlands City Of	1100.8	406.2	21017.0	235.3	87.0
Redwood City	650.1	264.6	24605.7	1948.9	64.7
Reedley City Of	1099.4	92.2	6329.0	132.1	50.7
Rialto City Of	280.7	197.3	11833.3	141.1	71.7
Rincon Del Diablo Municipal Water District	255.9	119.0	7218.0	1870.9	106.7
Rio Linda-Elverta Community Water District	195.0	61.9	4631.7	122.7	53.3
Rio Vista City Of	117.6	46.0	4706.0	161.7	67.5
Riverbank City Of	158.6	66.0	7323.3	82.8	60.0
Riverside City Of	4327.2	985.9	70478.3	98.7	89.0
Riverside Highland Water Company	54.1	77.7	4584.3	112.2	72.0
Rohnert Park City Of	280.3	116.1	9283.7	458.2	58.0
Rosamond Community Service District	153.0	97.3	5030.0	958.2	80.0
Roseville City Of	2002.2	614.2	43580.0	133.7	84.0
Rowland Water District	287.6	207.0	13771.7	1037.3	85.5
Rubidoux Community Service District	393.1	71.6	6284.0	91.9	85.0
Rubio Canyon Land And Water Association	78.6	60.0	3129.3	378.1	70.0
Sacramento City Of	6465.0	1708.3	150898.0	100.7	45.0
Sacramento County Water Agency	2202.3	544.7	36264.3	176.5	60.7
Sacramento Suburban Water District	1168.4	706.9	47238.7	156.7	58.9
San Bernardino City Of	2556.1	755.8	47915.3	158.5	80.3
San Bernardino County Service Area64Spring Valley Lake	305.5	40.4	3901.3	156.7	75.0
San Bernardino County Service Area70J Oak Hills	181.8	156.0	3285.3	637.1	85.0

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
San Bruno City Of	231.8	120.3	11699.0	622.7	81.3
San Buenaventura City Of(Ventura)	671.0	394.5	30104.0	465.8	93.0
San Clemente City Of	709.5	212.6	17403.3	1063.1	75.3
San Diego City Of	10519.5	3370.2	296100.3	1289.7	93.4
San Dieguito Water District	314.4	176.4	11966.0	1323.6	82.0
San Fernando City Of	165.0	67.1	5132.7	164.3	72.0
San Francisco Public Utilities Commision	4970.3	1257.6	178166.0	90.3	76.1
San Gabriel County Water District	253.2	82.0	9215.7	84.9	80.0
San Gabriel Valley Water Company	1169.1	566.2	49312.3	880.8	75.0
San Gabriel Valley Water Company Fontana Division	2189.7	692.1	48373.3	812.5	80.0
San Jacinto City Of	186.6	126.7	4197.3	518.0	65.0
San Jose City Of	1157.9	343.0	27182.0	1579.6	91.0
San Jose Water Company	6292.5	2477.7	234386.3	1226.1	73.6
San Juan Capistrano City Of	172.6	207.3	11734.3	884.7	60.0
San Juan Water District	922.4	209.9	10687.3	266.6	72.0
San Lorenzo Valley Water District	441.6	185.0	8014.0	224.1	80.0
San Luis Obispo City Of	338.2	177.6	11043.0	270.4	70.0
Santa Ana City Of	670.9	505.3	43250.0	617.5	73.9
Santa Barbara City Of	832.4	323.0	27121.0	482.5	120.8
Santa Clara City Of	755.9	312.9	26406.0	1301.4	66.9
Santa Cruz City Of	507.5	271.2	24524.0	183.8	91.1
Santa Fe Irrigation District	447.5	160.0	7509.0	1223.9	80.0
Santa Fe Springs City Of	218.4	108.0	6283.5	812.5	69.5
Santa Margarita Water District	1012.1	625.1	55648.3	952.1	90.0
Santa Maria City Of	284.2	337.5	22709.3	232.5	79.3
Santa Monica City Of	43.6	206.8	18109.3	994.1	74.5

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Santa Paula City Of	91.7	97.8	7572.3	216.4	66.4
Santa Rosa City Of	992.2	644.3	54388.3	851.6	69.0
Scotts Valley Water District	92.0	65.1	4132.0	426.2	100.0
Seal Beach City Of	162.4	74.8	5513.3	513.5	65.0
Shafter City Of	327.3	108.6	4699.3	136.9	55.0
Shasta Lake City Of	100.5	79.4	3740.3	158.8	83.0
Sierra Madre City Of	317.5	47.6	3715.5	160.0	103.0
Signal Hill City Of	69.6	50.0	3331.0	921.0	78.5
Soledad City Of	76.5	14.6	3884.0	155.5	55.3
Sonoma City Of	112.3	54.3	4404.7	866.6	70.7
Soquel Creek Water District	235.8	172.4	15863.7	176.6	76.4
South Coast Water District	119.4	163.3	13114.0	1012.9	87.5
South Feather Waterand Power	446.6	200.0	7000.0		90.0
South Gate City Of	180.9	169.0	14408.5	418.5	65.0
South Pasadena City Of	210.5	67.8	6239.0	1044.0	79.3
South Tahoe Public Utility District	1134.6	253.0	14173.7	164.2	84.0
Stockton City Of	1938.8	601.5	48791.3	564.5	60.0
Suburban Water Systems-San Jose Hills	805.4	483.9	42870.3	566.5	77.9
Suburban Water Systems-Whittier-La Mirada	861.9	376.7	33874.7	471.3	78.5
Suisun-Solano Water Authority	447.3	95.8	8475.0	108.2	55.0
Sunny Slope Water Company	192.1	60.2	6300.0	165.5	72.5
Sunnyslope Community Water District	98.2	80.2	5921.3	95.6	72.0
Sunnyvale City Of	667.0	347.7	28926.7	1560.4	72.7
Susanville City Of	253.8	43.5	3808.3	70.2	81.8
Sweetwater Authority	592.3	408.0	34363.0	1554.9	74.3
Sweetwater Springs Water District	125.2	65.0	3800.0	272.9	75.0

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Tehachapi City Of	170.8	55.5	3307.0	142.5	75.2
Thousand Oaks City Of	269.2	229.9	17050.3	1525.8	80.5
Torrance City Of	201.6	320.0	27041.7	993.3	75.0
Trabuco Canyon Water District	90.5	66.5	3989.7	885.1	90.0
Tracy City Of	1062.6	458.3	24121.7	485.0	60.0
Triunfo Sanitation District-Oak Park Water Service	8.5	46.0	4700.0	1646.8	80.0
Truckee-Donner Public Utilities District	909.6	231.7	12871.0	294.4	84.3
Tulare City Of	417.1	227.0	19839.0	87.0	50.0
Tuolumne Utilities District-Sonora Jamestown	422.7	102.4	4984.7	155.2	87.7
Tuolumne Utilities District-Upper Basin	141.4	105.6	3995.0	155.2	72.0
Turlock City Of	1241.8	305.0	19100.3	57.2	54.7
Tustin City Of	593.1	172.0	14165.0	633.9	50.0
Twentynine Palms Water District	283.6	211.0	8087.3	185.7	85.0
Ukiah City Of	205.2	62.0	4779.0	108.5	85.0
Upland City Of	584.8	255.6	20733.0	805.0	100.0
Vacaville City Of	896.7	359.4	28254.7	644.0	80.0
Valencia Water Company	1101.2	367.2	32598.7	535.2	103.9
Vallecitos Water District	882.2	376.6	22469.7	2030.6	117.4
Vallejo City Of	2638.3	483.3	40646.0	227.0	65.0
Valley Center Municipal Water District	320.4	342.7	10066.7	1444.2	120.0
Valley County Water District	180.8	126.0	12649.3	492.0	63.0
Valley Of The Moon Water District	230.9	92.5	7108.0	1609.6	65.0
Valley Water Company	54.9	55.0	3657.0	1578.0	70.0
Vaughn Water Company	375.0	220.4	10727.7	0.5	50.0
Ventura County Waterworks District No01-Moorpark	434.1	171.0	10912.7	1289.3	83.0

Urban water supplier (naming per water loss audit)	Average real loss (acre-feet per year)	Length of mains (miles)	Number of service connections	Variable production cost (dollars per acre-foot)	Average operational pressure (psi)
Ventura County Waterworks District No08-Simi Valley	387.4	350.3	25762.0	1081.0	100.0
Vernon City Of	295.6	50.4	1022.0	589.4	75.0
Victorville Water District	2135.2	752.0	35561.0	424.0	86.8
Vista Irrigation District	765.4	467.4	28706.7	994.2	97.7
Walnut Valley Water District	869.4	482.0	27471.0	1032.0	103.0
Wasco City Of	86.0	79.0	5009.3	208.0	51.8
Watsonville City Of	335.0	178.0	14806.3	116.6	65.0
West Kern Water District	1820.3	318.0	7733.3	156.1	60.0
West Sacramento City Of	3797.5	200.0	14367.3	89.5	55.0
West Valley Water District	1502.0	375.1	21441.3	291.9	70.0
Westborough Water District	35.7	24.5	3928.7	1904.1	77.7
Western Municipal Water District Of Riverside	1507.1	493.4	20839.3	1048.8	100.0
Westminster City Of	335.8	251.0	20638.0	317.0	63.7
Whittier City Of	258.2	143.0	11516.0	433.6	65.0
Windsor Town Of	174.6	139.1	5524.0	428.3	78.6
Woodland City Of	462.6	277.1	16049.7	820.4	55.0
Yorba Linda Water District	1134.0	366.3	25013.0	725.8	82.0
Yreka City Of	234.3	90.8	3047.3	137.6	84.3
Yuba City	754.4	299.3	18813.7	86.2	56.1
Yucaipa Valley Water District	668.2	209.0	12893.0	202.7	50.0