

Water Supply and Conservation



San Jose Water Company

- Established 1866
- 345 employees
- 1 million people
- Production:
 - 128 MGD Average in 2013
 - Approximately 139 gallons per person per day in 2013



San Jose Water Company

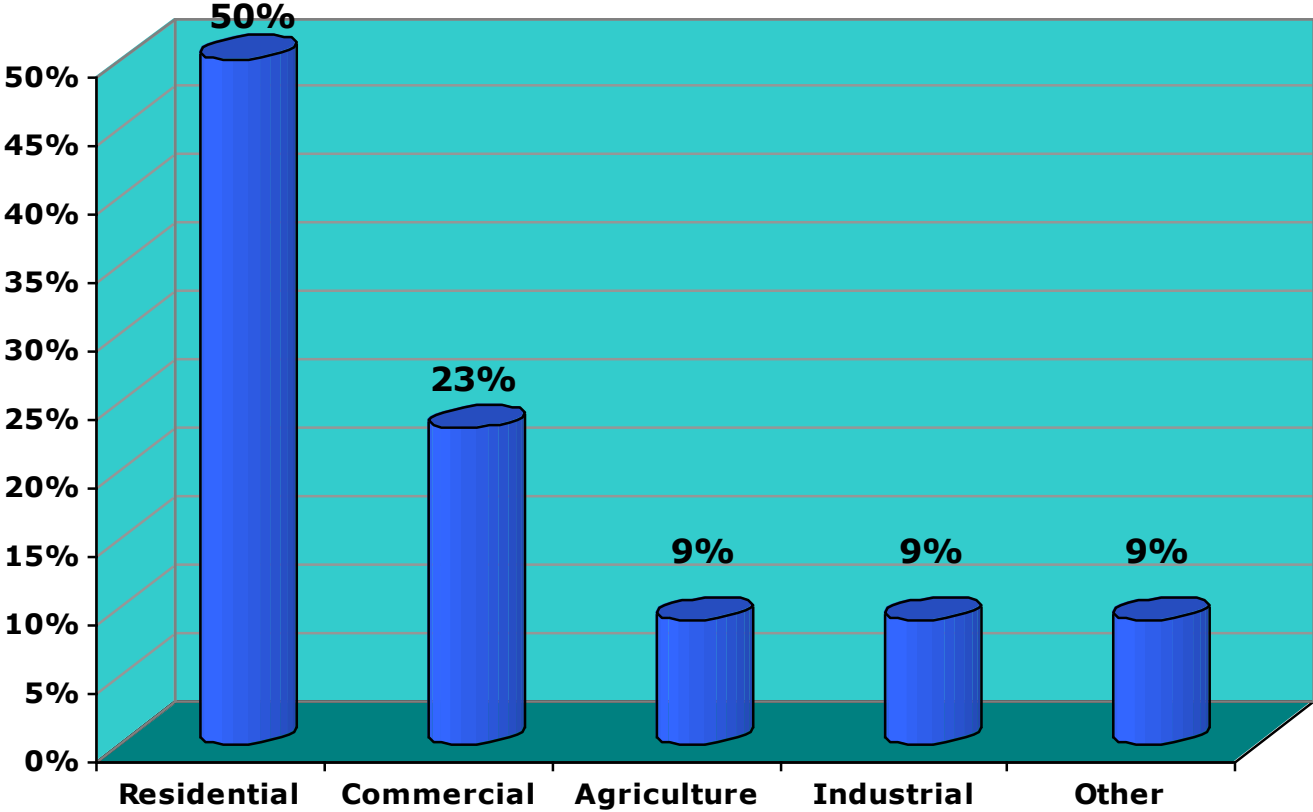
- Over 225,000 service connections
- Service area of 139 square miles that includes the following cities:
 - 80% of San Jose
 - 50% of Cupertino
 - Campbell
 - Los Gatos
 - Saratoga
 - Monte Sereno
- Wholesaler is Santa Clara Valley Water District

San Jose Water Company

Infrastructure:

- 2,400 miles of main
- 105 wells
- 96 distribution reservoirs
- 2 surface water treatment plants
 - Montevina (Los Gatos Creek Watershed)
 - Saratoga (Saratoga Creek Watershed)

Uses of Water



Per Capita Consumption

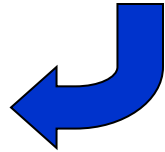
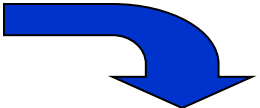
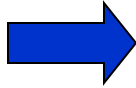
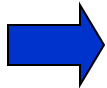
Usage	139	gpcd*
-Indoor	50	percent
-Outdoor	50	percent

Indoor Uses		
-Toilets	27	percent
-Washer	22	percent
-Shower	16	percent
-Faucet	16	percent
-Leaks	14	percent
-Other	2	percent
-Bath	2	percent
-Dishwasher	1	percent

California Urban Water
Conservation Council

* Gallons per capita per day

From Snow to Tap

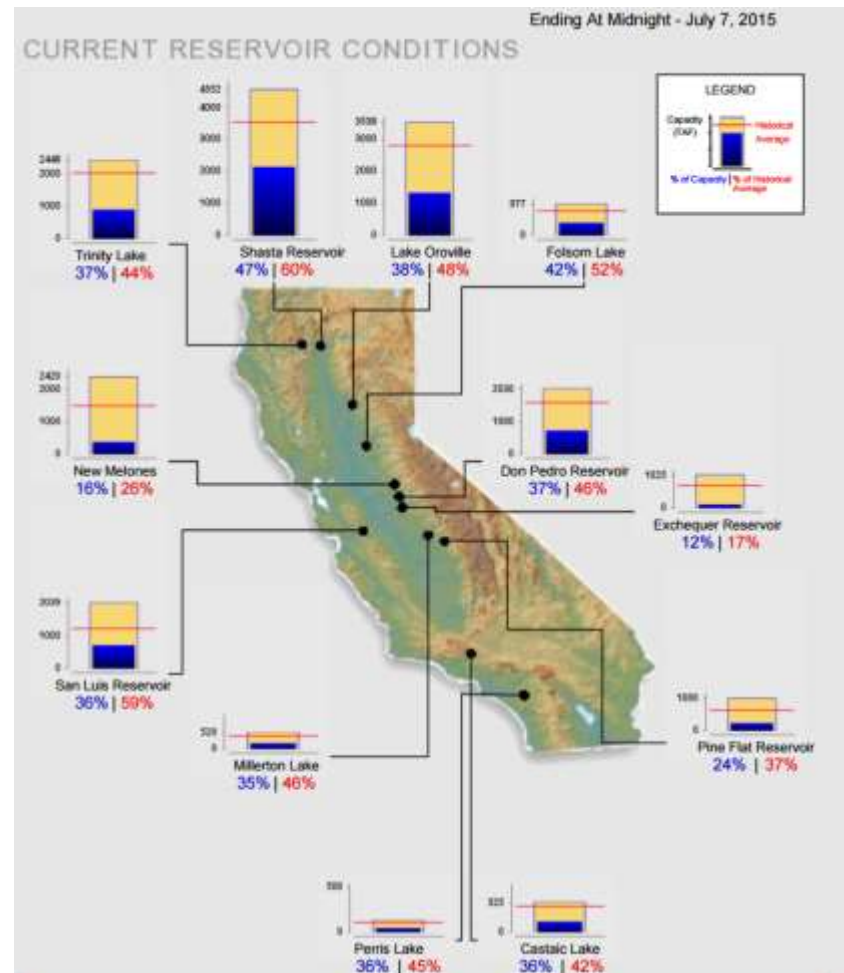


California Water Supply Systems

- State
- Federal
- Local



Current Reservoir Storage

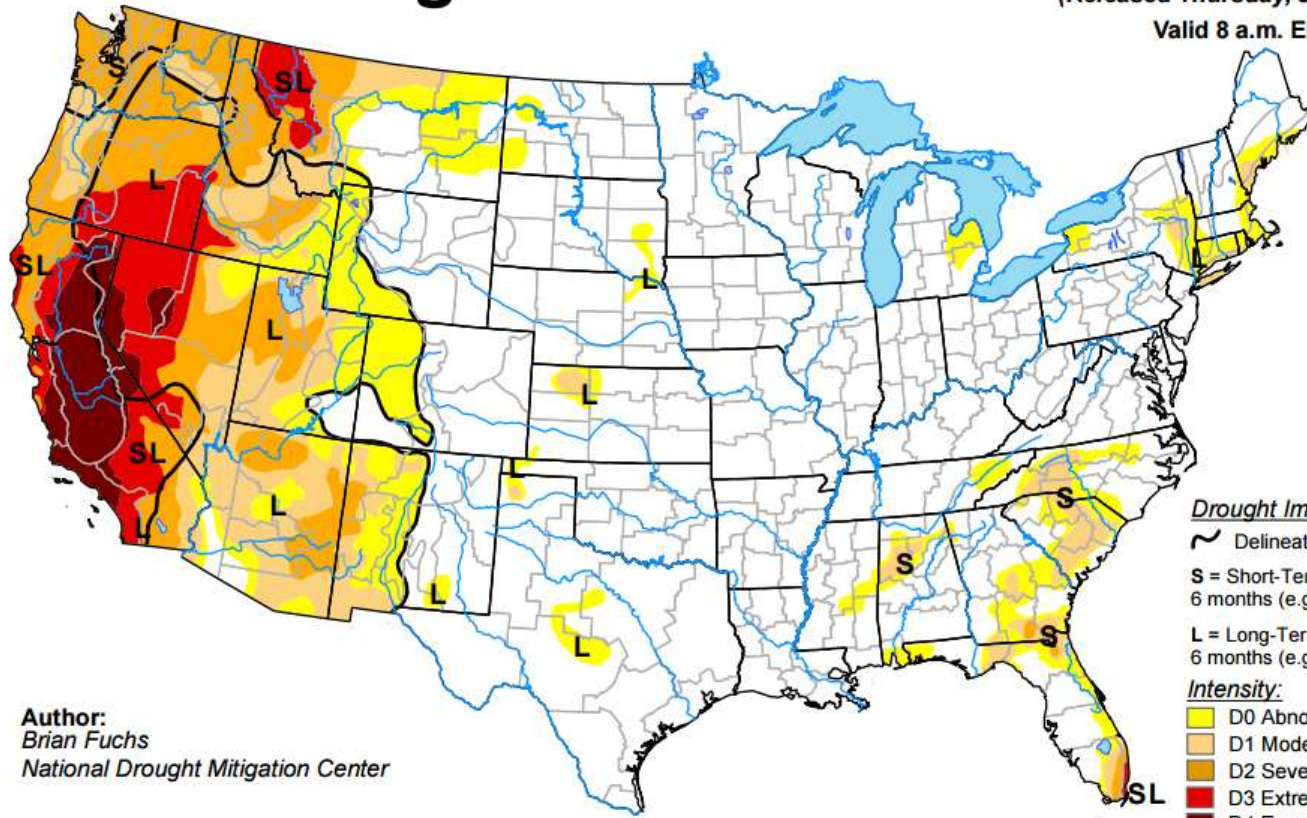


U.S. Drought Monitor

July 7, 2015

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Valid 8 a.m. EDT



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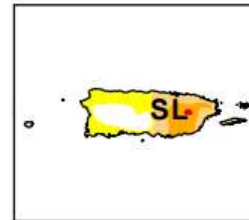
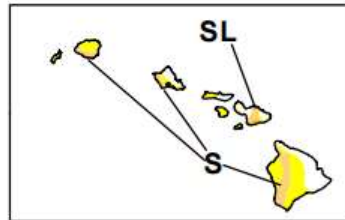
Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu/>

Current Drought Situation

- Driest year on record (2013)
- Four consecutive years of below average precipitation
- January 17, 2014 – Governor Brown declares drought emergency and calls on all Californians to conserve 20%
- January 28, 2014 – Santa Clara Valley Water District sets initial conservation target of 10%
- February 25, 2014 – SCVWD increases conservation target to 20%
- March 30, 2014 – SJWC institutes Rule 14.1 mandating conservation measures in an effort to reach 20% reduction goal

Current Drought Situation (cont.)

- State Water Resources Control Board adopts emergency water use regulations (July 16, 2014)
- Santa Clara Valley Water District calls for 30% conservation (March 25, 2015)
- Governor's Executive Order requires 25% mandatory statewide reduction (April 1, 2015)
- CPUC orders water companies to implement water allocation plan (April 9, 2015)
- City of San Jose sets 30% conservation target (April 22, 2015)
- State Water Resources Control Board adopts 25% statewide Mandatory Water Conservation Regulation (May 5, 2015)

Water Allocation Program

- Required by the CPUC
- Establishes monthly allocation using system wide residential average and 30% conservation target
- Base rate applies to all units consumed
- Surcharge(s) applies to all units consumed in excess of allocation
 - Drought Surcharge 1 @ 3.56/unit up to 2013 average
 - Drought Surcharge 2 @ 7.13/unit greater than 2013 average

Indoor Conservation Tips...

Indoor Tips for Residents

No cost & easy to do:

- Take shorter showers—2.5 gallons/minute*
- Turn off water when shaving and brushing teeth—2 gallons/minute*
- Wait for full loads to wash clothes—20 gallons/load
- Fill your dishwasher instead of washing each dish by hand and only run the dishwasher when full—2 to 4 gallons/load
- Don't let the water run when rinsing dishes if washing by hand—2.5 gallons/minute

No cost & easy to do:

- Fix leaky toilets—30 to 50 gallons/day/toilet
- Fix leaky faucets—15 to 20 gallons/day/faucet
- Install aerators on all faucets—15 gallons/day
- Install efficient showerheads – 10 gallons/day

Higher cost, most effort required:

- Replace inefficient washer with High Efficiency Washing Machine—25 to 35 gallons/day
- Replace older toilets with Ultra High Efficiency Toilets (UHETs)— 45 gallons/day

High Efficiency Clothes Washers

- Save 6,450 gallons of water
- Save \$80-\$100 in electricity
- Save around \$54 in detergent costs



Ultra High Efficiency Toilets

- 0.8 gallons per flush
- Rebates likely available
- Example Niagara Stealth



Outdoor Conservation Tips...

Outdoor Tips for Residents

No cost & easy to do:

- Water before 5am instead of midday—20 gallons/day
- Adjust your irrigation schedule throughout the year, cut your irrigation to 1/3 in the fall and turn off during (most) winters— 20 gallons/day
- Use a broom instead of a hose to clean sidewalks—10 to 15 gallons/minute

No cost & easy to do:

- Apply 2" to 3" of mulch around trees and plants to reduce moisture loss—20 gallons/day
- Adjust sprinklers to prevent overspray and runoff—20 to 25 gallons/day
- Repair leaks and broken sprinkler heads

Higher cost, most effort required:

- Replace lawn with water-wise garden—50 to 60 gallons/day/1,000 sq. ft.
- Install drip irrigation for trees, shrubs, and plants—20 gallons/day
- Install high efficient sprinkler heads and bodies – 50 gallons/day
- Update to a weather-based irrigation controller that automatically adjusts watering times based on local weathering conditions—30 to 40 gallons per day
- Install a graywater laundry to landscape system—17 gallons per day
- Install pool covers on pools and spas to reduce evaporation— 30 gallons per day

Adjust the Irrigation Schedule Seasonally



Repair Broken Sprinklers



Install High Efficient Sprinklers



Replace turf with Low Water Use Plants



Upgrade to a Weather Based Irrigation Controller

Three Major Types:

- ET Sensor
- ET Service
- Soil Moisture Sensors

Additional Options May Include:

- *Flow Sensing*
- *Remote Monitoring*
- *Central Control*



Install Pool Covers



Thank You

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