Data Center Water Use in Santa Clara County
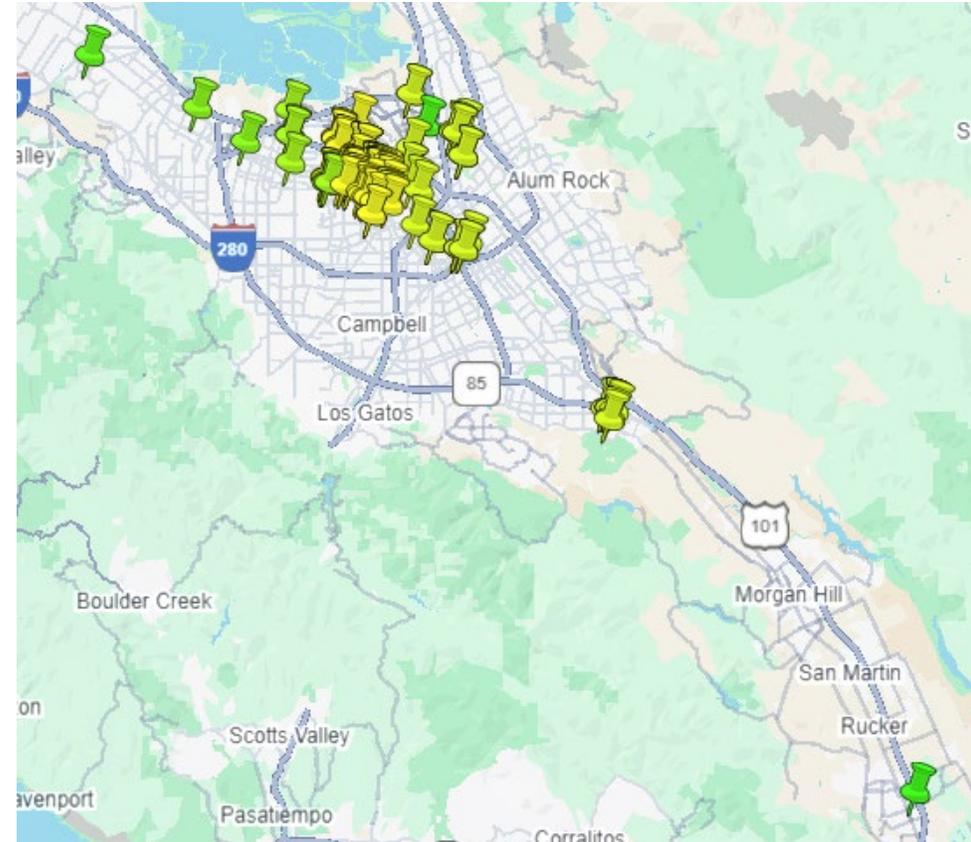## Recycled Water and Cooling Technology Trends

Data Centers in Santa Clara County

In total, Santa Clara County hosts 110 data centers.

- **Santa Clara: 57** data centers

- **San Jose:** 42 data centers

- **Sunnyvale:** 6 data centers

- **Gilroy:** 1 data center

- **Mountain View:** 2 data centers

- **Milpitas:** 1 data center

- **Palo Alto:** 1 data center

Includes existing and proposed data centers. There are a total of 102 unique addresses and a total of 125 that were found. The duplicate address may represent colocations, the listing of both an old and new data center, etc.

Source: Recycled and Purified Water Unit
https://www.datacentermap.com/usa/california/ & https://www.datacenters.com/

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Recycled Water Use for Cooling

- San José and Santa Clara co-own the Regional Wastewater Facility

- Partnership with Valley Water: Silicon Valley Advanced Water Purification Center

- Recycled water blended and delivered via South Bay Water Recycling Program to customers in San José, Santa Clara and Milpitas

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Local Ordinances Supporting Reuse

- **Santa Clara:** Mandates recycled water use at data centers *(Municipal Code 13.15)*
  - → Most Santa Clara's data centers use recycled water

- **San José**: Energy and Water Building Performance Ordinance *(BPO)*
  - Part of Climate Smart San José
  - Requires nonresidential buildings to track water and energy use
  - CSJ does not have a local ordinance for internal/ cooling RW use. However, the city code does specify RW for irrigation

Advanced Cooling and New Facilities

- Data centers are adopting low water use cooling systems:
  - Chip-level cooling
  - Closed-loop liquid systems

- 10 new data centers proposed in the county

- **Expected to have low potable water demand** due to recycled water use and new technology

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Summary

- Santa Clara County is home to a growing and water-conscious data center industry

- Recycled water mandates and partnerships are helping reduce potable water use

- Emerging technology and planning policies support sustainable water use in development

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QUESTIONS

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