Central Water District

Background

Central Water District, formed in 1950, serves the unincorporated areas of Aptos. The district lies in the foothills of the Santa Cruz Mountains east of Aptos between the Soquel Creek Water District and Watsonville Water District. Central Water covers a service area of approximately five square miles with an elevation range of 150 feet to over 1,100 feet above sea level. The water supply source is drawn exclusively from five wells provided by two aquifers: the Purisima and the Aromas Red Sand.

The population within the service area is estimated at 2,700, and there are 831 domestic, fire and commercial service connections. Most customers are residential users located on rural sites of one or more acres with septic hook-up. The district also supplies water to two mobile home parks containing a total of 225 units (the largest consumers) and Aptos High School.

The Local Agency Formation Commission reduced the sphere of influence of the water district in December 1986. However, the present service area does provide for possible infilling with new residential customers. The "North Santa Cruz County Water Master Plan Study: Final Report, June 1985," estimated that, based upon the Santa Cruz County General Plan densities, the district could expect 918 customers by the year 2000 and 944 customers at buildout. These figures project 18 new customers annually, a growth rate substantially higher than the district has experienced in the past 15 years.

The district lies within a recharge area with low-density housing. That, and the unique filtering ability of the sandy soil, allows septic systems to recycle water economically. These conditions preserve the balance of quality and quantity in the groundwater.

Existing drought procedures were created in 1989. During the last major drought, 1988-1993, the district had a shortfall in supply but achieved complete recovery soon after. During this drought period, Central Water District was the last water district in the county to register declining groundwater levels and the first to recover.

Sources

Documents:

Central Water District Annual Report, July 1, 2002-June 30, 2003. Central Water District 2004 Newsletter and Consumer Confidence Report. Santa Cruz County Civil Grand Jury Final Report, 1999-2000.

Interviewed:

Central Water District official.

Findings

- 1. The Central Water District:
 - manages groundwater resources within its boundaries;
 - conducts a water quality monitoring program (since 1959); and
 - runs a backflow prevention program to ensure water quality within the system.
- 2. As of June 30, 2003, Central Water added one new customer and three fire services, bringing the total number of active service connections to 831. This figure includes 48 fire and 12 irrigation services.
- 3. Due to the low population density in the district, there has not been a need to provide sewer service to the area. All residences use septic systems, and there is no export of wastewater to Monterey Bay.
- 4. The average daily amount of residential water use in California is 138 gallons per day.
- 5. According to the 2002-2003 Central Water District Annual Report, average annual residential usage in the district is 53,465 gallons per acre (unaccounted water is lost through leaks before it is measured). Daily residential usage is 173.6 gallons per day. However, due to septic system recharge, a substantial portion of this water is recycled to the aquifer.¹
- 6. Irrigation consumption records show that consumption is not excessive and is comparable to the annual usage of homes with extensive landscaping.²
- 7. A large portion of the Pleasant Valley area is irrigated to support apple and grape crops.
- 8. Central Water District has five water production wells currently in service. The vast majority of the water supplies comes from the Rob Roy Junction area and pulls from the Aromas Red Sands Aquifer. There are two other wells in the area but they are used minimally because of high iron and manganese content of the water. Well water is also drawn from the Purisima Aquifer.
- 9. Water quality meets state and federal health requirements.³
- 10. The Rob Roy Well Field reflected declines in the Aromas Red Sands Aquifer during periods of drought. The years of heavy rainfall that followed have increased water levels to within a few feet of the highest initial recordings.
- 11. The district is "upstream" in the aquifers so it is the last to feel the influence of a drought and the first to recover.
- 12. The district has seven storage tanks with a total capacity of 1.217 million gallons. According to State Health Department standards, the total storage capacity is adequate, not only for current needs, but also for the storage demand at buildout.
- 13. The district has not experienced any seawater intrusion into its wells.⁴

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¹ Central Water District Annual Report, July 1, 2002-June 30, 2003.

² Central Water District Annual Report, July 1, 2002-June 30, 2003.

³ Central Water District 2004 Newsletter and Consumer Confidence Report.

- 14. Central Water District is one of the only two districts in Northern Santa Cruz County capable of meeting the demand for water at buildout (projected at 944 service connections) with the facilities presently in place.
- 15. The district's conservation/drought plans consist of:
 - three-tier pricing based on usage;
 - voluntary water conservation; and
 - restricted irrigation.
- 16. Central Water does not offer incentives for water conservation appliances such as low-flow toilets.
- 17. The Santa Cruz County Planning Department has designated the majority of land within district boundaries as Primary Groundwater Recharge, a designation that dictates a minimum parcel size of 10 acres for new land division.
- 18. Through the permit process, the County Planning Department controls the district's service area.
- 19. There is limited space for future growth, with the possible exception of restricted agricultural land being annexed to the district.
- 20. If the Board of Supervisors decides to increase housing density in the service area, water capacity could reach buildout level.
- 21. In 2002-2003, the county zoning ordinance restricting development in a primary groundwater recharge area was "ignored in favor of the wishes of a popular community service organization." District concerns were presented to the Planning Commission. Local public pressure and the threat of litigation persuaded the organization to relocate its facility.
- 22. Presently there are no plans to increase density in the district.
- 23. "Senate Bill 1938 addresses modification to groundwater Assembly Bill 3030 plans, which are necessary to qualify for future groundwater project funding." ⁶
- 24. A rate committee, which included the District Manager and Directors of the district, met to calculate current operating cost and estimate future operating and capital improvement cost. They concluded that the current financial condition of the water district was sound.
- 25. Pacific Gas and Electric electrical surcharges increased by 50 percent over the previous year, causing the total budgetary expense for power to exceed \$100,000.
- 26. Workers' compensation insurance for district employees tripled this year.
- 27. Rates and fees for customers have remained the same for the past nine years. Due to the power surcharge, the after-hour service fees have risen to \$65, and a \$25 return-check fee has been established.

⁵ Central Water District Annual Report, July 1, 2002-June 30, 2003.

⁴ Central Water District personnel.

⁶ Central Water District Annual Report, July 1, 2002-June 30, 2003.

- 28. Operational budget comes from rates and fees; the district also receives \$60,000 in property tax revenue. With the current state budget shortfall, special districts may lose some or all of their property tax revenue.⁶
- 29. The water-rate structure may increase to offset the loss of the property tax revenue.⁷

Conclusions

- 1. The district is well managed and financially sound.
- 2. The land use regulations and policies of Santa Cruz County dictate the growth of the service area of the district.
- 3. Water use is primarily residential.
- 4. Current water supply is sufficient for an estimated buildout level of up to 944 service connections.
- 5. Consumption in the service area is high, but due to the unique soil and percolation system, the loss of groundwater is minimal.
- 6. Central Water District is self-sufficient and does not rely on water sources outside district boundaries. This will limit growth in the area.
- 7. Water shortage in a drought has been and is expected to be minimal.

Recommendations

- 1. The Central Water District management and board should be commended for its operation of the service area and resources that fall within the districts boundaries.
- 2. The Santa Cruz County Board of Supervisors should keep the Central Water District Board informed of any future proposal to increase the density of the district.
- 3. In order to manage growth with the available water supply, the county should adhere to its current zoning ordinances.
- 4. Water customers within the district should be made aware of the potential increase in rates due to the loss of property tax monies.

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⁶ Central Water District 2004 Newsletter and Consumer Confidence Report.

⁷ Central Water District 2004 Newsletter and Consumer Confidence Report.

Responses required

Agency	Findings	Recommendation	Response Within
Santa Cruz Board	20, 23, 24	2	60 Days
of Supervisors			(August 30, 2005)
Santa Cruz County	20, 21, 22, 24,	3	90 Days
Planning	25, 26		(September 30,
Department			2005)
Central Water	32	4	90 Days
District			(August 30, 2005)

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