

Cachuma Water Rights Hearing

Comments on the Draft EIR

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Research for People and the Planet

Report prepared for CalTrout
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Major Conclusions

- ◆ Conservation and efficiency improvements in just four end-uses can cost-effectively yield 5,000 to 7,000 AFY of water savings.
- ◆ Conservation can reduce or eliminate the impacts of steelhead protection on agencies dependent on Santa Ynez River supplies.
- ◆ Many other efficiency options not considered here can also reduce water use.

Data For this Analysis Come from Agencies Themselves

Sources:

- ◆ California Urban Water Conservation Council Best Management Practices Reports
- ◆ Department of Water Resources Urban Water Management Plans
- ◆ Bureau of Reclamation Water Conservation Plans
- ◆ Direct contact with agencies

What Do We Mean By “Conservation” and “Efficiency?”

- ◆ Reducing water required to satisfy needs for goods and services (e.g., flushing toilets, washing clothes).
- ◆ NOT: brown lawns, loss of services, or reduced production.

Existing Conservation Efforts and Programs?

- ◆ Every agency has conservation programs but they vary in commitment, scope, and effectiveness.
- ◆ No agency comes close to capturing all the cost-effective conservation potential.
- ◆ Our analysis evaluates only a portion of this potential.

Residential Water Use of Cachuma Contractors

	Actual use 2000 (gpcd)
Goleta	82
Santa Barbara	85
Carpinteria	87
Montecito	201
Santa Ynez	231

Water Use: Actual and Potential

- ◆ Actual residential use of the Cachuma contractors ranges widely from 82 to 231 gpcd.
- ◆ Average residential use could be 65 gpcd with cost-effective conservation programs and available technology.
- ◆ During the last drought, residential use in Santa Barbara was reduced to 71 gpcd.

Conservation Potential: Methods

We analyzed the potential of the following end uses:

- ◆ Residential toilets
- ◆ Residential washing machines
- ◆ CII toilets
- ◆ Landscape irrigation (ET controllers)

Far More Conservation Potential Exists.

We Did Not Evaluate Savings From:

- ◆ Leaks
- ◆ Dual flush toilets
- ◆ Dishwashers (residential and commercial)
- ◆ Residential washing machines
- ◆ Landscape design / xeriscape
- ◆ CII process improvements
- ◆ Agricultural uses
- ◆ And more...

Conservation Potential: Results

Conservation Potential: Summary

Avoided Cost of Cachuma Contractors' Supply

	Variable Cost (\$/AF)
Groundwater	198
Cachuma (purchased)	288
Cachuma (spill)	188
State Water (exchanged)	288
State Water (purchased)	398
Desalination	1,100

Cost of Conservation

Conservation Is Cost-Effective

- ◆ Supply options range from \$188 to \$1,100 per AF (variable cost).
- ◆ Conservation options range from -\$74 to \$325 per AF.

[A “negative” cost-effectiveness number means the measure saves the consumer money over its lifetime.]

Supply and Demand Conditions for Cachuma Contractors (AFY)

	Total Supply	Average Demand (2000)	Average Demand (2020)
Carpinteria	6,813	4,672	5,423
Goleta	16,971 – 20,171	14,000	16,000
Montecito	7,715	6,073	6,835
Santa Barbara	18,306	15,140	15,570 – 17,760
Santa Ynez	11,951	5,300	9,050

Residential Water Use Per Capita is *Projected to Rise*

	2000	2005	2010	2015	2020
Water use (gpcd)	98	100	102	105	107
Change in use from 2000	0	5.7%	11.4%	17.3%	23.3%
Population Growth from 2000	0	4%	8%	11%	15%

There is Sufficient Supply to Meet Demand

- ◆ Supply is adequate during all but a very critical drought year.
- ◆ During drought years emergency measures are implemented.
- ◆ Emergency measures have effectively reduced demand by about 25% during the last drought.

There is Sufficient Supply to Meet Demand

- ◆ Shortage projections in the EIR are based on unrealistic demand forecasts (which show rising per capita demand) given natural replacement and existing and emerging conservation tools.
- ◆ The EIR needs to include a more rigorous and realistic analysis of demand.

Conclusions

- ◆ Our estimate is that existing technologies and policies for just four end-uses could reduce current urban water use by 5 to 7 thousand acre-feet **cost-effectively**.
- ◆ This water can help mitigate the impacts to water supplies caused by EIR alternatives.
- ◆ The EIR must incorporate future conservation and alternative demand scenarios into the planning process.



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