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City of Goleta, California
March 26, 2004

BACKGROUND REPORT NO. 13

WATER

INTRODUCTION

This report describes the availability of water to meet the needs of the City of Goleta and surrounding neighborhoods. Since this service is provided by the Goleta Water District, the report describes the District's services and plans for serving the area.

GENERAL PLANNING IMPLICATIONS

Since all existing and new residential and economic development requires adequate water, the availability of such water is a major determinate of new growth; either water must be available, or service needs to be capable of being developed.

Water not only needs to be available for human consumption, but also for various other commercial, industrial and agricultural uses. Since different uses may have different water demands, the relationship between the types of uses planned and the supply of water is also important. A particularly important use of water is to suppress fires, and the adequacy of fire flows is an important factor in planning water systems to adequately serve an area.

Water must not only be available to particular sites, but the overall supply of water needs to be sufficient for the total growth planned for the area. Both Senate Bill 610 and Senate Bill 221 of 2001 require all water purveyors to provide information to cities and counties for purposes of land use planning. Detailed data on water sources and availability must be made available to decision-makers before an approval for certain types of development projects can go forward.

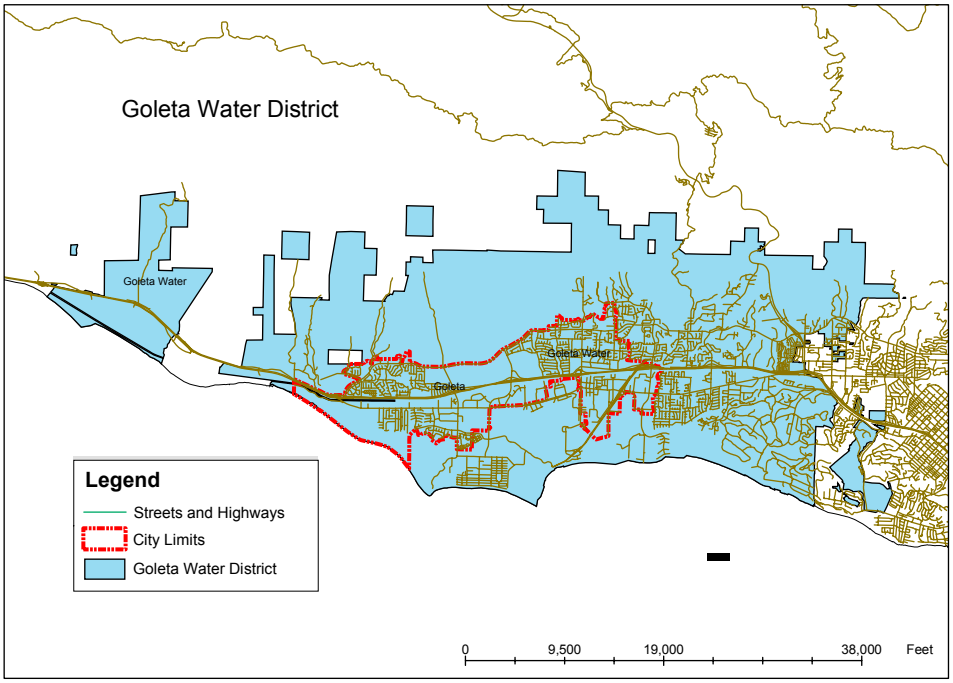
ORGANIZATION

The Goleta Water District (GWD) is the water purveyor for the City of Goleta. It was established in 1944 as an independent special district. The publicly elected Board of Directors serve staggered four year terms, with elections every two years. The five member Board meets once a month in public meetings and directs the work of a General Manager who, in turn, oversees a staff of about 60.

The District's boundaries encompass the entire Goleta area, stretching over approximately 32,000 acres from the western edge of the city of Santa Barbara to El Capitan on the Gaviota Coast and northward to the Los Padres National Forest. About 4,000 acres are agricultural (12%), 5,760 acres is residential (18%), 640 acres is commercial (2%) and 21,600 acres is open space (68%). 230 miles of GWD pipelines serve a population of 75,000 in about 16,000 urban and agricultural accounts.

Map 1 identifies the service area of the district. As noted the district serves all of the City of Goleta and the neighborhoods between the City and the City of Santa Barbara, and the Gaviota area to the west of the city.

Map 1



City of Goleat, California; August 2003

RATES

Goleta water bills are a total of fixed and commodity charges. There is a fixed charge based on meter size and a commodity charge based on water consumption. Water usage is measured in hundred cubic feet (HCF). One HCF equals 748 gallons. Monthly service charges are based on meter size, with $16.40 per month charged for the standard ¾ inch meter all the way up to $466.34 per month for a 10" meter. For residential, multi-residential and commercial accounts, the commodity rate of $3.29 per HCF is charged. Agricultural customers are charged $.95 per HCF. Irrigation for recreation costs $2.38/HCF and reclaimed water for irrigation is $2.01/HCF. A comparison of average monthly residential bills for 10 hundred cubic feet of water would show Goleta users paying $41.10, Montecito at $52.19 and Santa Barbara at $36.98.[1]

Historical Water Rate Structure History

Service Charge and Effective Date

Meter Size (inches)	9/01/95	9/01/97	% chng	11/01/01	% chng	8/01/02	% chng	7/01/03	% chng
3/4	$1.80	$5.90	227.8%	$6.20	5.1%	$8.20	32.3%	$16.40	100.0%
1	4.52	8.00	77.0%	8.40	5.0%	11.11	32.3%	22.22	100.0%
1-1/2	8.14	13.10	60.9%	13.76	5.0%	18.20	32.3%	36.40	100.0%
2	10.85	18.62	71.6%	19.55	5.0%	25.86	32.3%	51.72	100.0%
3	15.38	31.10	102.2%	32.66	5.0%	43.20	32.3%	86.40	100.0%
4	22.61	47.30	109.2%	49.67	5.0%	65.69	32.3%	131.38	100.0%
6	31.66	86.30	172.6%	90.62	5.0%	119.85	32.3%	239.70	100.0%
8	40.70	127.10	212.3%	133.46	5.0%	176.51	32.3%	353.02	100.0%
10	49.75	167.90	237.5%	176.30	5.0%	233.17	32.3%	466.34	100.0%

Commodity Charge per Ccf and Effective Date

Type of Service	9/01/95	1/01/98	% chng	11/01/01	% chng
Urban	$3.02	$3.13	3.6%	$3.29	5.1%
Agricultural	0.90	0.90	72.3%	0.95	5.6%
Recreation	1.01	1.74	0.0%	2.38	36.8%
Recycled	0.675	1.74	157.8%	2.01	15.5%

Source: Goleta Water District

In the past four years the number of accounts has increased from 15,066 in 1999 to 15,787 in 2003. Customers with the highest water usage as of June 30, 2002 were UCSB (773 AFY), George Cavaletto (428 AFY), Por La Mar Nursery (167 AFY), the Bacara Resort (148 AFY), Santa Barbara Airport (109 AFY), the Goleta Union School District (91 AFY), the Towbes Group (90 AFY) and Raytheon (73 AFY).[2] The biggest users of recycled water are UCSB, the Glen Annie Golf Course, the Sandpiper Golf Course and the Camino Real Marketplace. The

[1] Stone & Youngberg LLC. Goleta Water District Refunding Revenue Certificates of Participation Series 2003, pages 32 and 33.

[2] Central Coast Water Authority Fiscal Year 2001/02 Annual Report, page 11.

following table reflects water sales for both potable and recycled water for the year ending June 30, 2003.[3]

Ten Largest Customers
Fiscal Year 2002-03

Customers	Land Use	Primary Business Activity	Total Water Sales	Percent of Total Sales
University of California Santa Barbara	Institutional	Education	$950,035	5.66%
County of Santa Barbara	Institutional	Government	326,846	1.95
Glen Annie Golf Club	Commercial	Golf	316,220	1.88
Bacara Resort Services	Commercial	Hospitality	217,269	1.29
Cavalletto, George A, Inc.	Agriculture	Agriculture	168,051	1.00
Sandpiper Golf Trust	Commercial	Golf	105,964	0.63
Ag-Land Services	Agriculture	Agriculture	68,175	0.41
Rancho Tres Canadas	Agriculture	Agriculture	66,350	0.40
Por La Mar Nursery	Agriculture	Agriculture	64,831	0.39
Devereaux Creek Properties	Commercial	Recreation	55,601	0.33
Total:			$2,339,342	13.94%

Source: Goleta Water District

Summary of Water Accounts and Usage by User Type
Fiscal Year 2002-03

User Type	Billings ($000s)	Consumption (in acre-feet)	Consumption as Percent of Total
Urban [1]	$14,814.0	9,172	71.7%
Agricultural	1,060.4	2,349	18.4
Recreation / Irrigation	378.0	285	2.2
Recycled Water [2]	530.3	980	7.7
Total	$16,782.7	12,785	100.0%

[1] Represents domestic, industrial and municipal water deliveries.
[2] Represents treated wastewater purchased from the Sanitary District, which is distributed through a separate system to specific customers for landscaping and irrigation uses.
Source: Goleta Water District

NEW SERVICE

An applicant requiring one or more new service connections must go through a multi-step application process and pay a number of different fees. Those fees include charges for the new water supply, meter service and for the costs and expenses incurred by the District during the application, processing, design and construction phases of the project. The fees vary depending upon the size and type of project. The water district determines the required minimum service size for each project based on type of use, area of use, lot size, zoning and project plans.

Currently, the new meter supply charge for single family residential units varies from $6,841 to $17,527 depending upon the size of the property and the meter

[3]Stone & Youngberg LLC. Goleta Water District Refunding Revenue Certificates of Participation , page 31.

needed. Second units, duplexes and multifamily units are charged $4,741 per unit. Home remodeling projects are not charged extra for the first added bedroom, but each additional bedroom is charged $1,415 per bedroom.

New service connections for other types of uses are detailed in the following table:

New Water Service Charge by Service Connection Size	¾ inch	1 inch	1 ½ inch	2 inch
Commercial and other Non Residential	$ 7,457	$11,370	$39,958	$ 89,569
Landscape and Recreation	$16,254	$19,298	$33,945	$134,248
Agricultural Irrigation	----------	$45,623	$120,142	$304,493

Services greater than 2 inches are based on the unit cost for the new water supply charge times the estimated annual water demand for the entire parcel. Each year the District determines the charge for one-acre foot of water and this charge is then applied to both potable and reclaimed water applications. As of January 2002 the new water supply charge was $23,588 per acre foot per year.

The City of Goleta Planning Department requires that a "Preliminary Conditions" letter be obtained prior to the issuance of a Land Use Permit for ministerial projects or prior to the approval by the Planning Agency for discretionary projects. Such a letter is good for one year after issuance and may only be extended for up to one additional year. Prior to building permit issuance by the City, a "Can and Will Serve" letter from the District must be obtained.

New customer allocations are limited to 1% per year of the available water supply, per the voter-mandated SAFE Initiative. Unused allocations can be "rolled over" and added to the following year's allotment. As of January 1, 2003 the water district estimated the total unused allotment to be about 879 AFY.[4]

[4] Letter from Kevin D. Walsh to Patrick Dugan, December 21, 2003.

20 YEAR CAPITAL IMPROVEMENT PLAN

In 1999, the District engaged in a comprehensive study of current and future infrastructure needs. The study concluded that important parts of the water system needed to be replaced and/or upgraded. Although the GWD had been investing about $1 million annually in improvements, approximately $30 million of additional money was needed for major projects.

Goleta Water District Capital Improvement Projects – 20 Year Plan		
Project	Cost	Timeline
Rehabilitate 6 Wells (Phase I)	$3,600,000	FY 03-05
Replace/Enlarge Major Reservoir (Patterson)	3,600,000	FY 03-04
New Hi Tech Geographic Information System	550,000	FY 03-05
Expand/Upgrade Engineering Building	890,000	FY 03-04
Improved Operations Yard Safety Upgrades	175,000	FY 03-04
Replace Deteriorated Service Lines	200,000	FY 03-07
Replace/Upgrade Treatment Plant Facilities	17,000,000	FY 03-08
Install Security Upgrades	None given	
Develop Computer Groundwater Model	200,000	FY 04-06
Replace Old/Undersized Pipelines	3,000,000	FY 03-23
Repair Goleta West Conduit	1,000,000	FY 04-06
Replace 2000 feet Undersized Pipeline (Kellogg I)	150,000	FY 05-06
Replace 2000 feet Undersized Pipeline (Kellogg II)	250,000	FY 06-07
Replace 1600 feet Undersized Pipeline (Covington)	350,000	FY 07-08
Upsize Cathedral Oaks Pipeline (Brandon)	350,000	FY 09-10
Rehabilitate 6 ASR Wells (Phase II)	3,000,000	FY 08-10
Additional 2MG Ellwood Reservoir Storage	4,000,000	FY 10-14
Additional 3 MG Atascadero Reservoir & New 5600 Pipe	5,000,000	FY 13-17
Add Reservoir Downstream Water Meters	400,000	FY 16-17
Construct Fairview/Hollister Reclaimed Pipeline	800,000	FY 17-19
Expand Hollister Pump Station	350,000	FY 19-20
New Cath. Oaks Pipeline (Glen Annie to Los Carneros)	3,000,000	FY 20-22
Extend Los Carneros Pipeline (Cremona to Hollister)	1,000,000	FY 22-23
Replace Pipeline on State Highway	50,000	FY 03-04
Replace Pipeline on County Bridge	50,000	FY 04-05
Replace Pipeline on Highway Overpass	250,000	FY 08-09
Source: Goleta Water District		

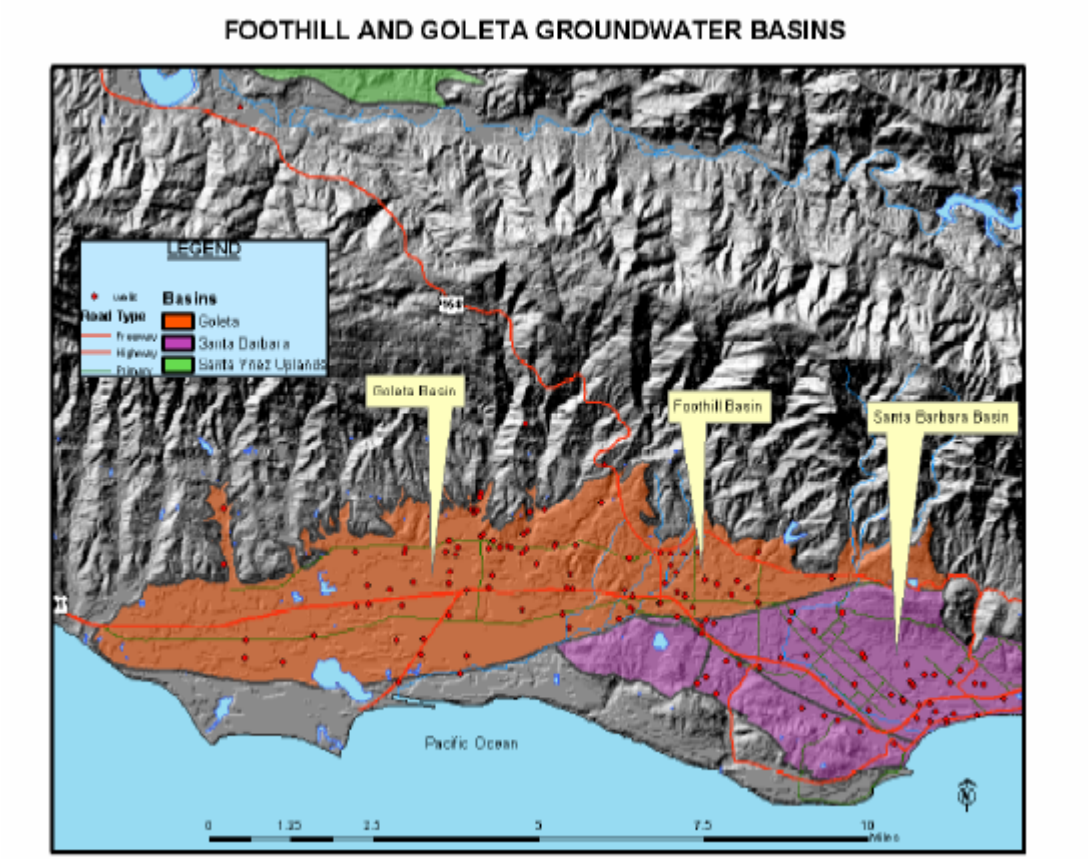
A citizen advisory group was appointed in the Spring of 2003. After meeting for several months, the group concurred with the District's suggested 20 year Capital Improvement Plan and recommended Certificates of Participation (COP's) as the best financing mechanism. They also directed that the service charge be

increased and that water rates for agricultural users be kept as low as possible.[5] Subsequently, the Water District Board authorized the general manager to double the monthly meter charge for a standard ¾ inch meter from $8.20 to $16.40 and issue $47 million in certificates of participation - $27 million for the additional improvements and $20 million to refinance a previous set of COP's.

[5] Report of the Citizen Advisory Committee, May 20, 2003.

Sources of Water

Goleta Groundwater Basin



Source: Santa Barbara County 2002 Groundwater Report

History

The District has four different sources of water.[6] The first one is local groundwater from the Goleta Groundwater Basin (GGWB). Within this large basin are several sub-basins – the North, Central and West sub-basins. The North-Central basin is about 5,700 acres in size and the West basin is 3,500 acres. Groundwater from these basins remained the sole source of water for the area's inhabitants until after World War II. Even after water from Lake Cachuma

[6]At the present time, the Goleta Water District does not anticipate using desalinated water to meet future demand. The District receives negligible amounts of water from the El Capitan Mutual Water Company and the Sierra Madre Well. The District also "wheels" less than 80 AFY to the Camino Real Marketplace, less than 50 AFY to Raytheon and less than 75 AFY to Morehart. Letter from Kevin Walsh to Patrick Dugan, December 21, 2003.

began flowing to Goleta in 1957, local wells remained an important source of water. As the pace of urban development in the Goleta valley increased in the 1950's and 60's and agricultural use remained heavy, the North-Central Basin became increasingly overdrafted. That is, more water was being taken out of the basin than was being replenished through rainfall or artificial recharge over an extended period of time.[7]

By 1972 the overdrafting of water in the North/Central basin led to the board of directors enacting a moratorium on the issuance of new water meters. A ballot initiative then was approved by the voters which validated the Board's action. However, in 1973, a lawsuit was filed by several area landowners (Wright vs. GWD) to adjudicate who had rights to pump water from the basin. Final settlement of the lawsuit did not occur until 1989. The "Wright Judgment" stipulated the "safe yield" of the GGWB North/Central basin. The "safe yield" is now estimated at 3,410 acre feet per year (AFY), with the GWD allowed to take up to 2,350 AFY of that amount on a ten year average.[8] The rest is shared between the La Cumbre Mutual Water Company which serves Hope Ranch and various private property owners. A number of these private wells are within the City of Goleta and continue to be used.[9]

The Wright Judgment also stipulated that the Goleta Water District had to bring the North/Central basin into a state of "hydrologic balance". The District stopped using groundwater and began injecting surplus water from Lake Cachuma into the basin as available and started importing State Water in 1998. The results of those actions, as well as a series of very wet years, helped to refill the basins and allowed the District to successfully meet the 1998 deadline. Surplus water injected into the basin by the District totaled 2,171AF in 1998, 47AF in 2000 and 506AF in 2001.[10] The available water in storage in the north-central basin is currently estimated at 18,000 AF with the water quality considered sufficient for most agricultural uses.[11] Domestic use will require additional treatment for current water standards.

The West basin was considered and adjudicated separately. Water from this basin is not treated and is used only for agricultural properties. Available water in storage is deemed to be 10,000 AF, with a safe yield estimate of 500 AFY.[12] The District does not produce any water from the West Basin and does not intend to in the future.

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[7] A state of overdraft exists when 1) annual pumpage averaged over a long period (including wet and dry years) exceeds safe yield, and 2) the pumpage is due to long-term (permanent) demand. GCP EIR V.H-6

[8] One acre foot equals 325,851 gallons.

[9] Norman Fujimoto, Environmental Health Services, Santa Barbara County.

[10] Letter from Kevin Walsh to Patrick Dugan, December 21, 2003.

[11] The figure of 18,000 AF is the County's estimate. The Water District claims over 30,000 AF of stored water. Letter from Kevin Walsh to Patrick Dugan, February 17, 2004.

[12] Santa Barbara County Groundwater Report 2002, pages 19-20.

Current Status of Wells

Wells owned by the Goleta Water District are currently not being used, as the supply of water from Lake Cachuma and the State Water Project has been sufficient to meet existing demand. The District is planning to use groundwater to supplement other water supplies in the future to meet demand during emergencies, periods of peak use and drought, as well as to augment current supplies for future growth of the area. The District has 12 wells in the North-Central basin, including one on the airport property. The wells range in depth from 230 to 1,290 feet. Iron and manganese are found in high concentrations in nine of the wells, so those are fitted with pressure filters to reduce the mineral levels and meet drinking water standards. Individual wells are able to produce anywhere from 120 to 920 AFY, except for the Airport well which can produce about 1,130 AFY. Overall, maximum capacity is estimated at 5,600 AFY, with a ten year annual average of 2,300 AFY expected.[13] Costs for groundwater extraction are currently estimated to be $915/AF.

Source: Goleta Water District

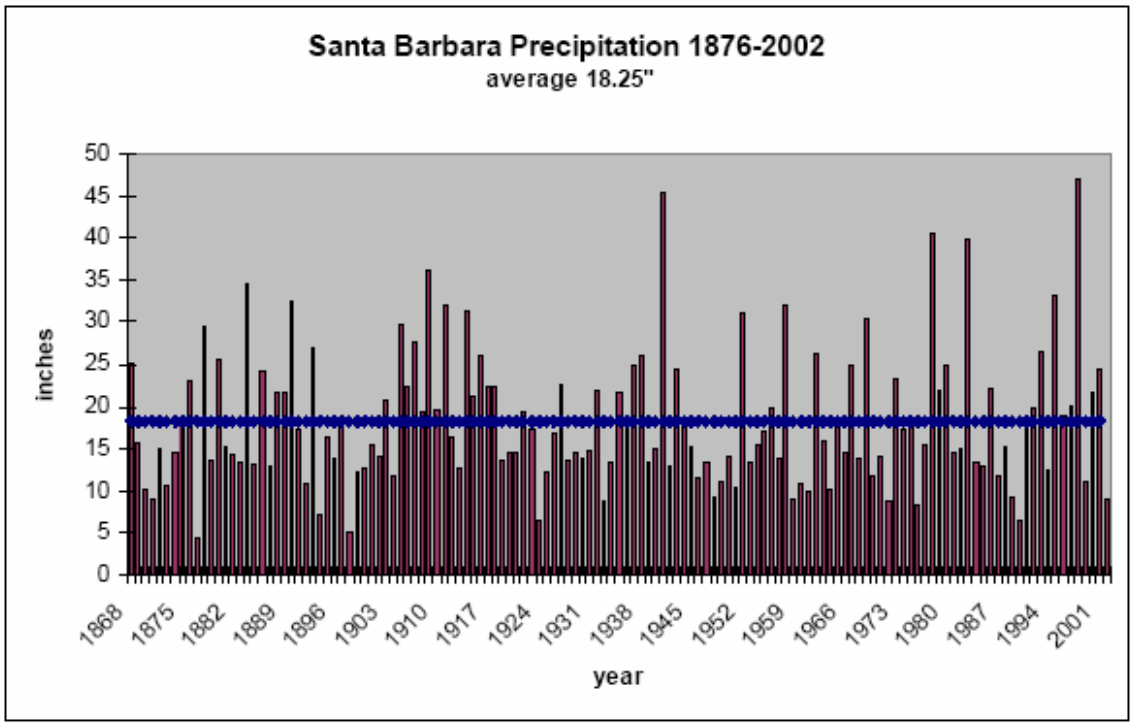
As part of the 20 year Capital Improvement Plan, the District has earmarked $6.6 million to rehabilitate the wells. New disinfection systems, motors, electrical and control systems are needed. Six wells would be brought up to current requirements by 2005. The remaining six wells would wait until 2010 for the necessary funds for improvement. The Goleta Water District does utilize some

[13] Goleta Water District, Urban Water Management Plan, 2-1, 2-2..

private wells for purposes of monitoring the levels in the groundwater basin, but cannot pump water from them to supply District customers.[14]

Reclaimed Water

The most recently acquired source of water which the GWD relies upon is reclaimed, or recycled, wastewater which makes up about 6% of the current water supply. In 1993 the Goleta Water District partnered with the Goleta Sanitary District to build a reclaimed wastewater facility. The Sanitary District is responsible for the facility and the Water District is responsible for the distribution system. A separate agreement between the GWD and UCSB allowed easements for pipelines on University property in exchange for usage of up to 280 AFY of reclaimed water.



The facility has the capacity to produce approximately 1,500 AFY of water. It currently produces about 1,000 AFY. Most of the supply now available is being utilized for landscape watering by golf courses, the County, the Goleta Union School District and the Camino Real Marketplace, in addition to UCSB. This source of water can be interrupted, depending upon the needs of the wastewater treatment plant.[15] Cost is currently estimated at $1,982/AF.

One of the improvements outlined in the 20 year Capital Improvement Plan calls for the construction of a Fairview/Hollister reclaimed water pipeline at an

[14] Norman Fujimoto, Environmental Health Services, Santa Barbara County.
[15] Kamil Azoury, General Manager, Goleta Sanitary District.

estimated cost of $800,000. Total funds for this improvement are scheduled to be available by the year 2019. This additional pipeline would increase the opportunity for use of this water by new customers located in this area.

Lake Cachuma

The largest source of water which the GWD has access to is from Lake Cachuma which comprises about 67% of the District's current water supply. In 1944 the Goleta Water District was formed for the express purpose of providing a legal entity in the Goleta area to participate in the Master Contract with the federal Bureau of Reclamation to build a dam on the Santa Ynez River to provide additional water for the Santa Ynez Valley and the Southcoast. Other participants in this contract are the City of Santa Barbara, Montecito, Summerland, Carpinteria and the Santa Ynez River Conservation District. In 1996, the contract was renewed between all parties and the Santa Barbara County Water Agency and the Cachuma Project Authority for a term of twenty five years. Currently, the unit cost of the GWD's share is $245/AF, plus the cost of treatment at about $167/AF.

Facilities

Both Bradbury Dam and the Tecolote Tunnel were completed in 1957. The Tunnel is 6.4 miles long and 7 feet in diameter and was built through the Santa Ynez Mountains to carry Lake Cachuma water to Goleta. The terminus of the Tecolote Tunnel is located at the northern end of Glen Annie Road. This is also the location of the Corona Del Mar facility where water from Lake Cachuma is treated.

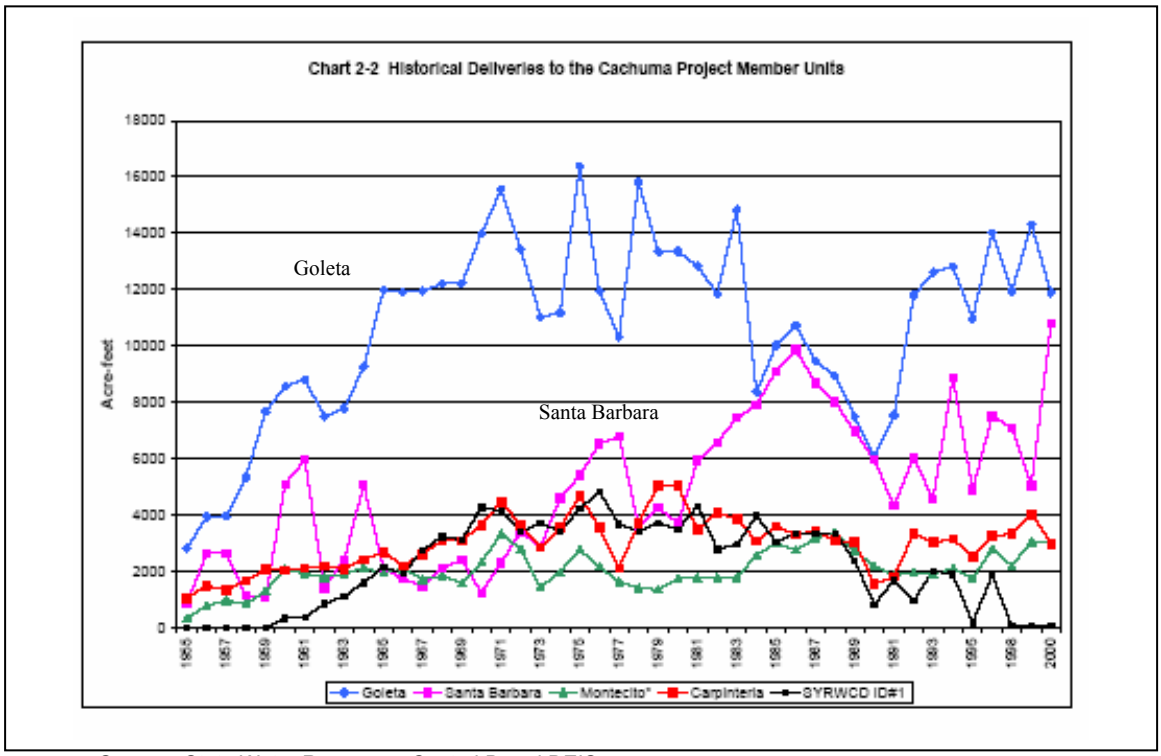
At times of peak demand, Corona Del Mar can handle as much as 24 million gallons a day, but a daily average is usually closer to 13 million gallons. The plant was built in 1964 and underwent a $5.5 million renovation project in 2000. $17 million in additional upgrades are also planned. This water filtration plant ensures that GWD supplies potable water that meets all standards imposed by the Safe Drinking Water Act. The plant sits at an elevation of 630 feet which allows water to move by gravity flow to eight reservoirs with a combined capacity of 20 million gallons for storage or delivery to most customers without the use of additional pumps.

Lake Cachuma water is delivered to the rest of the Southcoast water agencies via the 24.3 mile South Coast conduit, a high-pressure concrete pipeline which runs along the foothills from west to east. A 1999 study noted that the future increase in water demand would eventually exceed the space available in the South Coast conduit and recommended that additional storage be added. In response, the District has recently completed a new reservoir near the intersection of Cathedral Oaks and Los Carneros Roads and is enlarging an

existing reservoir off of North Patterson. Additional storage projects are also planned as part of the 20 year capital facilities program. Should there be an emergency, current storage capacity would be utilized in about three days without widespread conservation measures.

Capacity and Yield

Lake Cachuma's capacity is 188,030 acre feet before water begins spilling over the dam, and moves down the Santa Ynez River to the ocean. Currently, the "safe yield" of the Lake is determined to be 25,715 AFY. Each participating member in the water contract has a different share of this yield amount. The Goleta Water District's share is 36.25% or 9,322 AFY.[16] This is considered a "safe" amount, meaning not likely to be subject to shortages.



Source: State Water Resources Control Board DEIS

The amount of water delivered from Lake Cachuma varies from year to year, depending on rainfall runoff, lake storage, water demand and other water supply sources. Should the Lake fill to the point where water begins to spill over the dam, the GWD and the other members can take whatever amount of "spill water" they can utilize and it does not count against their annual allotment. Once the

[16] Santa Barbara has 32.188%, Montecito 10.311%, Carpinteria 10.938% and Santa Ynez River District 10.313%.

spill ceases, water taken from the lake begins to be subtracted from the annual allocation amount.

Because of the average to high rainfall totals during the last ten years, deliveries have exceeded the "safe yield" amount every year. For example, in the water year 1999-2000, the Goleta Water District received about 12,000 acre feet[17].

The lake level is constantly measured and every October the Cachuma Operations and Maintenance Board decides if the full allocation can be granted for the following year. Should the level of Lake Cachuma fall below 100,000 acre feet at the time of the October measurement, a 20% reduction in the allocation for each of the participating entities would be required. For the GWD, this would mean a 20% reduction of 9,322, or 7,426 acre feet for that year. If the Lake level remained below 100,000 acre feet the following year, the same 20% reduction would be required. This scenario would be repeated each year until the level of Lake Cachuma rose above the 100,000 acre feet mark again.

Since 1958 the lake level has always been above the 100,000 AF mark, except for the most recent drought years of 1988 - 1991 when the lake reached a low of 34,188 acre feet in 1990 and water delivery was reduced by 25%.[18] Pumps are required to divert water to the Tecolote Tunnel if the lake level drops to about 30,000 acre-feet. The minimum operating level for Lake Cachuma has not been officially established.[19]

Proposed Changes to Cachuma Operations

Besides supplying water to Southcoast and Santa Ynez water agencies, the operators of Cachuma reservoir are required to release water from Bradbury Dam to recharge the Santa Ynez River groundwater basin. Additional releases from the dam for habitat enhancement for downstream fish populations are also now being required. Two recently released draft environmental impact statements outline various proposed alternatives for these changes. In July of 2003 the Department of the Interior, Bureau of Reclamation, and the Cachuma Operation and Maintenance Board (COMB), both acting as lead agencies, released a draft program and project-specific environmental impact report/environmental impact statement entitled "The Lower Santa Ynez River Fish Management Plan and Cachuma Project Biological Opinion for Southern Steelhead Trout," (Cachuma FMP/BO Projects.) In August of 2003 the State

[17] State Department of Water Resources, DEIR, "Consideration of Modifications to the U.S. Bureau of Reclamation's Water Right Permits 11308 and 11310 To Protect Public Trust Values and Downstream Water Rights on the Santa Ynez River below Bradbury Dam (Cachuma Reservoir)", August 2003, Appendix B, page 2.
[18] Cachuma FMP/BO Projects Draft EIR/ EIS 3-4
[19] Ibid. 3-1, 5 -22

Water Resources Control Board, Division of Water Rights, released their draft environmental impact report entitled "Considerations of Modifications to the U.S. Bureau of Reclamation's Water Right Permits 11308 and 11310 to Protect Public Trust Values and Downstream Water Rights on the Santa Ynez River below Bradbury Dam (Cachuma Reservoir)" (Cachuma Project Water Rights). There is extensive overlap between the two documents. However, the State Department of Water Resources report, when ultimately certified, will be the controlling document.

The State Water Resources DEIR outlines several alternatives, but does not put forward a preferred choice. There are various alternatives outlined in both documents to "surcharge" the highest lake level from .75 to three additional feet. If successfully implemented, a three foot surcharge would add enough water capacity to offset the additional required water releases during years of adequate rainfall. However, an increase in the lake level to that extent will require relocating all Cachuma Park facilities at an estimated cost of over $12 million. The County and Member Units of the Cachuma Project have reached a Memorandum of Understanding on park funding issues.[20]

Hearings on the State Water Resources DEIR are in process, with a final decision not expected until 2004. Depending upon the alternative ultimately chosen, in the near term the releases may or may not affect the amount of water available in years of adequate rainfall to the water agencies which contract for Cachuma water. During drought years, however, both DEIRs state that the cumulative combined effect of water releases for recharge and habitat needs is still estimated to have a significant, unmitigable (Class 1) impact to the Southcoast water agencies supply.[21]

State Water

Description and Cost

The second largest source of water for Goleta is "State Water" which comprises 27% of the current water supply. In 1991, Goletans voted to participate in the State Water Project (SWP) and approved bond monies to purchase a share of the Central Coast Water Authority's (CCWA) entitlement and to pay for the construction of their proportionate share of the necessary facilities.[22] The cost for

[20] Letter from Kevin Walsh to Patrick Dugan, February 17, 2004.
[21] Fish Management Plan and Cachuma Water Rights DEIR/EIS, 5-26, and Cachuma Project Water Rights DEIR, ES-7.
[22] A similar ballot measure in 1977 had failed.

State Water is about $1,578 per acre foot, plus the cost of treatment in the Corona Del Mar facility at $167/AF.

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The Goleta Water District is one of eight members of the CCWA. All of the members are public water agencies in Santa Barbara County. In addition, there is one associate member and four additional participants. Each has a different entitlement amount of State Water.

Monterey Agreement and "Paper Water"

In 1994, the CCWA participated in an agreement with the State Department of Water Resources (DWR) and five other water contractors to amend the State Water contract. The revisions related to the division of water allocations between contractors and changes in the operation of some State Water Project facilities. One of the changes specifically deleted Article 18, subdivision (b) which stated in part that if the SWP were unable to build the rest of the facilities necessary to provide all contractors with their maximum entitlement, then everyone's entitlement would be reduced proportionately to match the maximum amount of "real" water, not "paper" water that was available.[23]

The participants decided to have CCWA serve as the lead agency under CEQA for the necessary environmental review. Since the meetings which culminated in the signing of this agreement were held in Monterey, these changes became known as the "Monterey Agreement".

The following year, concerned about the issue of reliance on "paper water" and it's implications for long range planning, several entities, including the Citizens Planning Association of Santa Barbara, brought a lawsuit against these amendments. The main points of the suit were whether the CCWA was the proper lead agency under CEQA and whether the EIR was legally sufficient, particularly in the evaluation and impacts from the changes to Article 18.

The trial court ruled that DWR, not CCWA, should have been the lead agency, but that the EIR was valid nonetheless. But the plaintiffs appealed that decision. The appellate court decided differently, finding that the EIR was deficient and

[23] "In the event that the State is unable to construct sufficient additional conservation facilities to prevent a reduction in the minimum project yield, or if for any other reason there is a reduction in the minimum project yield…threatens a permanent shortage in the supply of project water…the annual entitlements of all contractors shall be reduced proportionately by the State to the extent necessary so that the sum of the revised maximum annual entitlements of all contractors will then equal such reduced minimum project yield….". (2000 WL 1342138 Cal.App. 3 Dist. Third District. Court of Appeal. "Planning and Conservation League et. al. v. Department of Water Resources et. al.)

would need to be redone. Several passages from the appellate court's ruling are illustrative of the "paper" water vs "real" water issue:

> "There is then no question that the SWP cannot deliver all the water to which contractors are entitled under the original contracts. It does not appear that the SWP has ever had that ability….."The allocation is referred to as an "entitlement". Therefore, cumulatively, the contractors are "entitled" to 4.23 maf of water annually. The SWP, however, has never been completed and the state cannot deliver 4.23 maf of water annually. The entitlements represent nothing more than hopes, expectations, water futures or, as the parties refer to them, "paper water." Actual, reliable water supply from the SWP is more in the vicinity of 2 to 2.5 maf of water annually. Consequently, there is a huge gap between what is promised and what can be delivered."……."[24]

After several years of arbitration, a draft settlement agreement was written in February 2003 and is currently being reviewed by all parties.[25]

Entitlement and Delivery Statistics

All the facilities necessary to bring State Water to the Santa Barbara Southcoast were completed in 1997 and the first allocation arrived in Goleta in 1998. State Water travels from the Northern California Delta area to the Central Coast via the Coastal Branch of the state aqueduct and the 42 mile Santa Ynez Extension where it terminates at Lake Cachuma. State Water then mixes with Cachuma water and is stored in the lake until it is needed. The chart on the following page details the amount of entitlement for each CCWA member.

[24] 2000 WL 1342138 Cal.App. 3 Dist. Third District. Court of Appeal. "Planning and Conservation League et. al. v. Department of Water Resources et. al".)

[25] The Goleta Water District has stated that this discussion of the Monterey Agreement will be supersceded when the EIR is released. The EIR will not be available in time to include in this report, but should be available prior to completion of the city's EIR for the General Plan. Letter from Kevin Walsh to Patrick Dugan, February 17,2004.

CCWA MEMBERSHIP AND ENTITLEMENTS

California Cities Water Co. (Orcutt area)	AFY 500
Carpinteria Valley Water District (includes Summerland)	2,000
City of Buellton	578
City of Guadalupe	550
City of Santa Barbara	3,000
City of Santa Maria	16,200
Goleta Water District	**4,500**
La Cumbre Mutual Water Co. (Hope Ranch)	1,000
Montecito Water District	3,000
Morehart Land Company (Naples)	200
Raytheon Systems Company (Goleta)	50
Santa Ynez River WCD #1 (includes City of Solvang)	2,000
Vandenberg Air Force Base	5,500
Total Acre Feet Per Year (AFY)	**39,078**
drought buffer	3,908

The drought buffer is intended to increase the reliability of each entitlement by 10%. It can be included in an annual request during years of plentiful water and stored for future use. Or it can be requested in years when cutbacks in allocations are expected and used to supply current demand.

The Goleta Water District purchased an initial share of 4,500 AFY of the CCWA's total State Water entitlement of 39,078 AFY. The "drought buffer" of 3,908 AFY allows the GWD to request as much as 4,950 AFY if necessary. (4,500 plus 10% drought buffer of 450 equals 4,950 AFY.)

In addition to the original entitlement, Goleta voters later mandated an additional "drought buffer" that would not be counted as water available for new development. This requirement was part of the "Safe Initiative." In 1994, Goleta voters agreed to purchase an additional 2,500 AFY of State Water to use as this additional drought buffer. So, the GWD's total SWP entitlement is actually 7,450 AFY (4,500 + 2,500 + 450). However, GWD only owns pipeline capacity in the state water project to the 4,500 AFY level. The additional 2,950 AFY can only be used to improve reliability and allow a 50-61% reliance rate to be used for long-term planning.[26]

[26] Cachuma FMP/BO Projects Draft EIR/EIS 5-19, 20.

GWD STATE WATER PROJECT HISTORY

YEAR	AMOUNTS AVAILABLE	RECEIVED
1999	4,500	133
2000	4,950	1,244
2001	4,950	308
2002	4,538	1,789
2003	4,734	3,548

According to Kevin Walsh, the Water District's General Manager, the State Water Project has supplied all of the water requested each year. It is the District's policy to request the full entitlement early in the year and then, as the year progresses, adjust the request downward to match demand and Cachuma supplies. If it is a particularly wet year and there is extra Cachuma water available over and above the "safe yield" amount, a lesser amount of State Water can be taken to balance the needed supply.

JOINT POWERS OVERLAP AGREEMENT WITH SANTA BARBARA

In 1970 the Goleta Water District and the City of Santa Barbara entered into a Joint Powers Overlap Agreement which has been amended a number of times since. This agreement allows the District and Santa Barbara to "trade" water services to properties within each other's service areas if such an arrangement makes service easier, less expensive and more efficient. The District has a number of interconnections with the City of Santa Barbara municipal water system. The District and the City do trade water back and forth for operational reasons, but the amounts always balance. Currently, the GWD General Manager is in discussions with Santa Barbara city staff to resolve certain issues regarding service to those customers on the border between the two jurisdictions.

The airport property is also a part of the agreement. Goleta Water agreed to provide up to 240 acre feet per year through a master meter on the property. Besides the master meter, there are six irrigation meters. The airport terminal and other airport tenants obtain their water through the master meter although the tenants are sub-metered by the City of Santa Barbara. Some businesses on airport property are not served through the master meter, but are metered directly by the water district as regular individual accounts.

The Airport Facilities Plan environmental document stated that the airport and other tenants are currently using approximately half of the 240 AFY allotment. The report also said that the airport expansion plan and the anticipated increase in numbers of passengers would not increase usage over the 240 AFY limit.

The Overlap Agreement also allows the Goleta Water District to pump water from a well on Airport property north of Hollister Avenue for supply purposes. The well is considered operational, but has not been in use.[27] Recently, contaminated groundwater was identified on a site 1,000-2,000 feet to the east of the well. Further investigations by the Fire Department appear to indicate that the plume has not affected the well site.[28]

WATER CONTRACT WITH UCSB

The water district also has a water contract with the University of California Santa Barbara which serves buildings on the main campus. Additional University owned buildings in other areas of Goleta and Isla Vista are served through separate water meters. The contract has been in effect for about twenty years and allots 944.5 AFY of potable water to the University. The contract was modified at the time the water reclamation plant was built to add the "first right of refusal" to 280 AFY of reclaimed water to the agreement. So total water amounts contracted to UCSB now total 1,224.5 AFY for both potable and reclaimed water. The University's usage was 605 AFY of potable water in 2001 plus an estimated average of 123 AFY of reclaimed water for all buildings on campus.[29]

URBAN WATER MANAGEMENT PLAN

Every public water agency with more than 3,000 customers, or that delivers more than 3,000 acre feet of water per year, is required by the California Department of Water Resources to submit an Urban Water Management Plan. The Plan must describe water supply sources, reliability planning, past, current and projected water use and a supply and demand comparison. Updates are

[27] Santa Barbara Airport Master Facilities Plan, Final EIS/EIR, 3-130.
[28] December 17, 2003 letter from Paul McCaw, Hazardous Materials Specialist to Lee Hanley, Exxon/Mobil Oil Corporation.
[29] UCSB. "San Clemente Graduate Student Housing Initial Study", November 2003..

required every five years. The Goleta Water District finished their Plan in August 2001 and submitted it to the State later that year.

Water System Reliability and Emergency/Drought Planning

The Plan outlined the same water resources as have previously been described in this report. In addition, the report discussed the types of emergencies that might occur and how that might affect the water delivery system. Potential disruption in service could occur from the loss of the State Water pipeline, the loss of the Tecolote tunnel, the loss of large lateral pipelines, the loss of the treatment plant and the loss of the groundwater wells. Each of these scenarios was analyzed. The report concluded that the loss of a large lateral pipeline could take up to two months to repair, while the failure of the State Water pipeline or Tecolote Tunnel could take up to four months to repair. Potential drought scenarios discussed included cutbacks in State Water, cutbacks in Cachuma water and cutbacks in both State water and Cachuma water at the same time.

The water delivery system was then studied to see what percent of the level of service would be affected by the various emergencies. The level of service was described as the ratio of the available water supply to the total water demand, with 100% indicating that all demands can be met with available supplies, and 0% meaning that the District could not meet any of the demands with available supplies. The results of this analysis are in the following table:

Goleta Water District System Reliability		
Scenario	Year 2000	Year 2020
Loss of SWP Water	95%	75%
Loss of Lake Cachuma and SWP Water	0%	15%
Loss of 42-inch Lateral	50%	70%
Loss of Glen Annie Lateral	60%	80%
Loss of Corona Del Mar WTP	15%	30%
Loss of Wells	100%	85%
This chart taken from the Goleta Water District Urban Water Management Plan, 3-3.		

As can be seen, the different scenarios have varying degrees of impacts. Least severe would be the loss of the wells, which have no impact currently because they are not being used, and cause only a 15% reduction in the water supply in 2020 because they would provide only a small percentage of the total water supply. The most severe impact would occur with the loss of both Lake Cachuma and State water at the same time which would leave no water available currently (except what was available in the storage reservoirs) and only 15% in

the future, (because it is assumed that all groundwater wells would be operational in 2020 and able to provide that amount.)

If there is a drought or any type of water supply disruption, the water board has the authority to declare a water shortage emergency and implement both voluntary and mandatory water rationing, depending upon the severity and duration of the problem. The following rationing stages and reduction goals have already been established by the District:

Water Rationing and Reduction Goals			
Supply Shortage Condition	Stage	Customer Reduction Demand Goal	Type of Rationing Program
Up to 15%	I	15%	Voluntary
15% - 25%	II	25%	Mandatory
25% - 35%	III	35%	Mandatory
35% - 50%	IV	50% or greater	Mandatory
Ibid. 7-2.			

The various types of events that might occur to trigger the various stages of water rationing are detailed in the following chart found in the Goleta Water District's Urban Water Management Plan:

Water Shortage Stages and Triggering Mechanisms				
	Stage I (Up to 15%)	Stage II (15% – 25%)	Stage III (25%-35%)	Stage IV (35%-50%)
Current Supply	Total supply is 85% - 90% of normal AND below normal year is declared OR	Total supply is 75% - 85% of normal AND below normal year is declared OR	Total supply is 65% - 75% of normal OR fifth consecutive below normal year is declared OR	Total supply is less than 65% of normal OR Sixth consecutive below normal year is declared OR
Future Supply	Projected supply is insufficient to provide 80% of normal deliveries for the next two years OR	Projected supply is insufficient to provide 75% of normal deliveries for the next two years OR	Projected supply is insufficient to provide 65% of normal deliveries for the next two years OR	Projected supply is insufficient to provide 50% of normal deliveries for the next two years OR
Ground water	No groundwater pumping	First year of excess groundwater taken,	Second year of excess	No excess groundwater

	undertaken OR	must be "replaced" consistent with the District's groundwater conjunctive use program OR	groundwater taken, must be "replaced" consistent with the District's groundwater conjunctive use program OR	pumping available, OR Reduced groundwater pumping due to replenishment of previously pumped groundwater
Water Quality	Contamination of 10% of water supply (exceeds primary drinking water standards)	Contamination of 20% of water supply (exceeds primary drinking water standards)	Contamination of 30% of water supply (exceeds primary drinking water standards)	OR
Disaster Loss				Disaster loss such as failure of the Tecolote Tunnel
Goleta Water District Urban Water Management Plan, 7-4.				

The District has established a ranking system for priority use of potable water supplies in a water shortage emergency, based on the district's experience during the 1986-1992 drought. The priorities established, from highest to lowest, are as follows:

1. Minimum health and safety allocations for interior residential needs. This includes single-family and multi-family residential, student housing, mobile homes, hospitals, convalescent and retirement communities, fire-fighting and public safety.[30]
2. Commercial, industrial, institutional/governmental operations where water is used for manufacturing and for minimum health and safety allocations for employees and visitors which maintain jobs and the economic base of the community. All landscape uses are excluded.
3. Permanent agriculture such as orchards, vineyards or any other commercial agriculture which would require at least five years to return to production.
4. Annual agriculture (floriculture, strawberries, other truck crops).
5. Existing landscaping.
6. New customers, proposed projects without permits when a shortage is declared.

The District also has various methods to reduce water consumption which take effect at various stages of water emergencies.

Examples of Consumption Reduction Methods[31]	Stage When Method Takes Effect
Demand reduction program	All Stages

[30]The water allotment established by the District to meet minimum health and safety requirements is about 68 gallons per capita per day (gpcd) or 33 hundred cubic feet (HCF) per person per year. This is considered sufficient for essential interior uses.

[31] Goleta Water District, Urban Water Management Plan, 7-6.

Restrict for only priority uses	All Stages
Use prohibitions	All Stages
Water shortage pricing	All Stages
Incentives to reduce water consumption	All Stages
Education program	All Stages
Voluntary rationing	Stage I
Restrict new service connections	Stages II, III, IV
Plumbing fixture replacement	Stages II, III, IV
Mandatory rationing	Stages II, III, IV
Percentage reduction by customer type	Stages II, III, IV
Reduce pressure in water lines	Stages III, IV
Per capita allotment by customer type	Stage IV
Flow restriction	Stage IV

Water Supply and Demand

HISTORICAL WATER SUPPLY – PAST FIVE YEARS

The Water District's October 2003 prospectus for the sale of the certificates of participation contains the most up to date information on water supply and demand for the past five years. Total water deliveries differ from the historical water supply amounts because of water loss and the storage of water in reservoirs for delivery to customers in subsequent years. In addition, water deliveries from the Cachuma Project in a wet year, like 98-99, reflect additional "spill water" taken and injected into the groundwater basin for future use. [32]

Historical Water Supply By Source
(in acre-feet)
Fiscal Years 1998-99 through 2002-3

Source	1998-99	1999-00	2000-01	2001-02	2002-03
Federal Cachuma Project	15,058	12,017	13,316	11,529	8,889
CCWA	133	1,244	308	1,789	3,548
Recycled water [1]	869	990	925	928	910
Groundwater	2	-0-	3	3	3
Total Production	16,062	14,251	14,552	12,249	13,350

[1] Represents treated wastewater purchased from the Sanitary District.
Source: Goleta Water District.

Historical Water Deliveries to Customers
(in acre-feet per year)
Fiscal Years 1998-99 through 2002-03

Fiscal Year Ending June 30	Agricultural/ Irrigation	Urban [1]	Recreation	Recycled [2]	Total
1998-99	2,471	10,103	268	845	13,687
1999-00	2,599	9,615	295	988	13,497
2000-01	2,208	9,315	321	920	12,764
2001-02	2,529	9,411	352	927	13,219
2002-03	2,348	9,172	285	981	12,786

[1] Represents domestic, industrial and municipal water deliveries.
[2] Represents treated wastewater purchased from the Sanitary District, which is distributed through a separate system to specific customers for landscaping and irrigation uses.
Source: Goleta Water District

[32] It is not clear at this time why urban water use dropped from 10,103 AFY in 98/99 to 9,172 AFY in 02/03, particularly considering the growth of urban development during that same time period.

Historic Sources of Net Water Deliveries
(in acre-feet per year)
Fiscal Years 1998-99 through 2002-03

Fiscal Year Ending June 30	Federal Cachuma Project	CCWA Water	Recycled	Total
1998-99	12,685	133	869	13,687
1999-00	11,263	1,244	990	13,497
2000-01	11,531	308	925	12,764
2001-02	10,502	1,789	928	13,219
2002-03	8,328	3,548	910	12,786

Source: Goleta Water District

SHORT TERM SUPPLY AND DEMAND – NEXT FIVE YEARS

This same source also gives the most current information on estimates for short term supply and demand over the next five years.

Projected Water Deliveries to Customers
(in acre-feet per year)
Fiscal Years 2003-04 through 2007-08

Fiscal Year Ending June 30	Agricultural/ Irrigation	Urban [1]	Recreation	Recycled [2]	Total
2003-04	2,693	9,399	353	827	13,271
2004-05	2,714	9,474	355	850	13,393
2005-06	2,736	9,550	358	873	13,517
2006-07	2,758	9,626	361	896	13,641
2007-08	2,780	9,703	364	919	13,766

[1] Represents domestic, industrial and municipal water deliveries.
[2] Represents treated wastewater purchased from the Sanitary District, which is distributed through a separate system to specific customers for landscaping and irrigation uses.
Source: Goleta Water District

Projected Sources of Net Water Deliveries
(in acre-feet per year)
Fiscal Years 2003-04 through 2007-08

Fiscal Year Ending June 30	Federal Cachuma Project [1]	CCWA Water	Recycled	Ground-water	Shrinkage [2]	Net Production
2003-04	9,422	4,252	910	-0-	(1,313)	13,271
2004-05	9,422	4,361	935	-0-	(1,325)	13,393
2005-06	9,422	4,472	960	-0-	(1,337)	13,517
2006-07	9,422	4,500 [1]	985	83	(1,349)	13,641
2007-08	9,422	4,500 [1]	1,010	195	(1,361)	13,766

[1] Represents maximum projected water supply.
[2] Represents water losses due to evaporation, leaks and uncontrolled water use, which is projected to be 9% per year.
Source: Goleta Water District

By the year 2007, the water supply from Lake Cachuma is anticipated to be at the total safe yield amount, with an additional 100 AFY from the Camino Real

Marketplace added in and delivered, for a total of 9,422 AFY.[33] State Water is expected to be at the maximum capacity of the GWD's share of the pipeline at 4,500 AFY. The amount of groundwater and recycled water is expected to increase as needed to accommodate any additional demand. Usage is expected to increase at approximately the rate of 125 acre feet per year.

LONG TERM SUPPLY AND DEMAND – NEXT TWENTY YEARS[34]

COMPARISON OF SOUTHCOAST AGENCIES WATER SUPPLY & DEMAND				
Water District	Carpinteria	Montecito	Santa Barbara	**Goleta**
Cachuma	2,813	2,660	8,203	**9,321**
State Water	1,650 (assumes 75% average annual delivery	2,280 (assumes 76% average annual delivery)	2,200 (67% of entitlement)	**3,800-4,500 (assumes 51-60% average annual delivery)**
Local Groundwater	3,000 (District's portion of safe yield of basin of 6,000)	400 (District's portion of safe yield of basin of 1,650)	1,018 (City's portion of safe yield of basin of 1,850)	**2,350 (District's adjudicated portion of safe yield of basin of 3,410)**
Other Sources	None	2,000 (Jameson Lake, Fox and Alder Creek diversions) 375 (Doulton Tunnel)	4,310 (Gibraltar Reservoir) 1,109 (Mission Tunnel) 300 (Juncal Reservoir) 900 (Recycled) 141 (Desalination)	**1,500 (recycled – current capacity of existing project)**
Total (in AFY)	7,463	7,715	18,181	**16,971 – 17,671**
Current Demand & Year	4,300 (2001)	6,073 (2000)	14,300 (2000-2001)	**14,000 (2000)**
Build-out Demand & Year	5,700 (2020)	6,835 (2020)	18,200 (2009)	**16,000 (2020)**
In Acre Feet Per Year				
All data in this chart is taken from the Cachuma FMP/BO Projects Draft EIR/EIS, pages 5-17 to 5-20.				

The EIR/EIS released in July 2003 by the Cachuma Operations and Maintenance Board, included figures for long term supply and demand for the Goleta Water District which differ somewhat from those used in the certificates of participation document published a few months later. The demand figures for the years 2000

[33] The district does not control this 100 AFY of Camino Real water but only wheels it, according to GWD manager, Kevin Walsh.

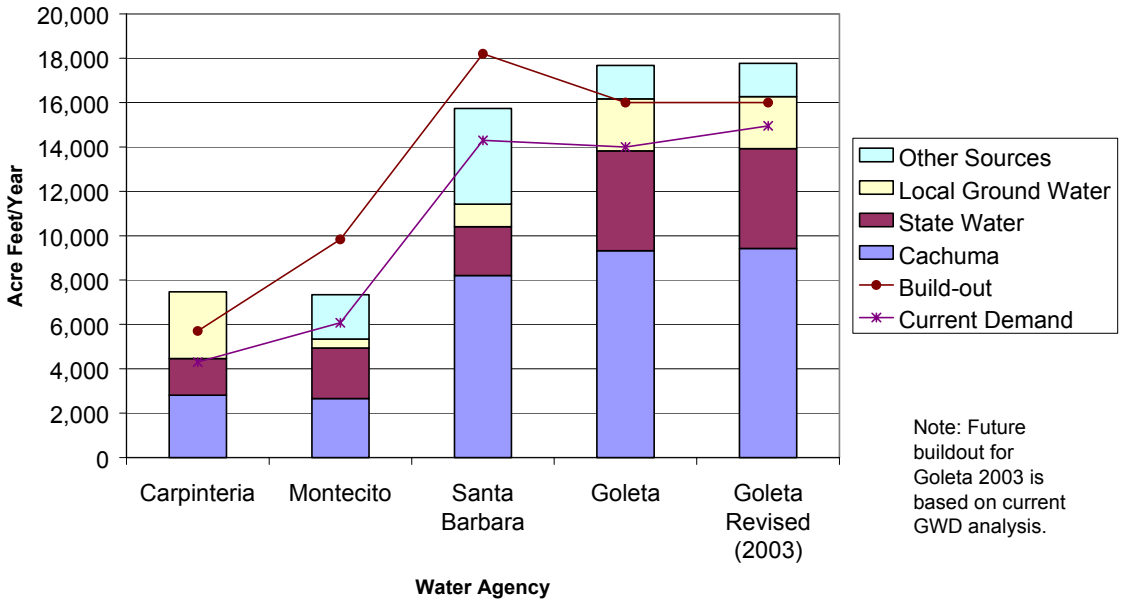
[34] This information is from the draft EIR for Lake Cachuma as referenced. The District notes that 3,800 AFY for State Water is overly conservative and that 4,500 AFY is the correct number to use. Also, they view the reliability for State Water and Cachuma water as the same. Letter from Kevin Walsh to Pat Dugan, February 17, 2004/

and 2020 were the same as those used in the Urban Water Management Plan – 14,000AFY and 16,000AFY, but some of the supply figures were different. Lake Cachuma supplies did not count the 100 AFY from the Camino Real Marketplace and a range of 3,800 to 4,500 AFY for State Water was given, rather than the total 4,500 AFY used previously. In addition, 1,500 AFY – the maximum currently possible from the reclamation plant - was counted.

In the Spring of 2003, the Goleta Water District brought together a group of citizens to form an advisory committee to review District plans to upgrade facilities and various financing mechanisms to fund the improvements. As a part of the information provided to that group, the District also listed current water supplies as the maximum amounts allowable from all sources. Future demand for the year 2023 was then estimated at 17,300 AFY.

City of Goleta, California

Source of Water Supply Compared to Demand
2000-2001



However, further analysis by GWD has restored the 16,000AFY figure for the year 2020 as their forecast of future demand. This future demand figure was calculated on the basis of every vacant lot being built on at its existing zoning, using water at the same amount as is typical for that zoning. The District is also assuming that the 16,000 AFY for water demand in the year 2020 is the same as the ultimate demand needed for "buildout".[35]

[35] Letter from Kevin Walsh to Patrick Dugan, February 17, 2004.

Increased usage over the next five years, at 125 acre feet per year on average, which is the latest projection given in the October Certificates of Participation prospectus, if extended over twenty years would total about a 2,500 net AFY increase over current demand. The water district currently has over 800 AFY in unused allocations from the "Safe Initiative". It is difficult to estimate how much demand for water will increase due to a steady increase in population and household size which cannot be directly tied to the needs of new development. But the water district believes that they can accommodate whatever pace of growth the area decides upon.[36]

The increased estimates for future water demand heighten the importance of receiving the maximum allotment of water from all sources every year. The percentage reliability factor for State Water also becomes more crucial.

Drought planning also becomes more difficult in the future. In the Urban Water Management Plan, the Goleta Water District stated reliance upon pumping additional groundwater to cover any shortfall in water supplies from both Lake Cachuma and the State Water Project.

Estimated Water Supplies for Various Drought Conditions
Based on Year 2020 Water Demands
Urban Water Management Plan

	Wet Year	Normal Year	Dry Year	Critical Dry Year
Percent Likelihood	25%	60%	12%	3%
Demand (AFY)	15,000	16,000	17,000	17,000
Supply (AFY)				
Groundwater	1,500	2,100	5,300	8,300
Lake Cachuma	9,421	9,421	9,200	7,000
State Water	4,500	4,500	2,500	1,700
Total	15,421	16,021	17,000	17,000

In a critical dry year, statistically estimated as occurring once every thirty-three years, the Water District is planning to pump as much as 8,300 AFY from the groundwater wells. However, the stated maximum production from the wells according to the County is 5,600 AFY at the current time. And the projected amount from Lake Cachuma in a critical drought year has recently been estimated to be 5,037 AFY, rather than 7,000, which would exacerbate any deficit.[37] Water transfers from other State Water project participants in other

[36] Ibid.
[37] Cachuma Project Water Rights Draft EIR, page 4-37.

parts of the state are always a possibility to cover any shortfall in any particular year. However, the ability to purchase such water is always subject to availability and cannot be relied upon for an extended drought covering a number of years, particularly if it affects other parts of the State simultaneously.

PLANNING IMPLICATIONS FOR GOLETA

Depending upon the estimates used, future demand for water may increase anywhere from approximately 2,500 to 3,300 AFY over the next twenty years according the GWD estimates.[38] However, this future growth would occur throughout the entire service area covered by the Goleta Water District, not just in the City of Goleta. A partial list to date of possible housing and commercial projects which could go forward in the next ten years within the boundaries of the GWD includes:

Potential Development over the Next Ten Years	
City of Goleta RHNA requirement	2,388 housing units X .20AFY/unit = 477.6 AFY
Southcoast unincorporated RHNA	1,181 housing units X .20AFY/unit= 236.2 AFY
County/City of SB Mercy Housing	170 housing units X .20AFY/unit = 34 AFY
UCSB San Clemente Student housing	321 housing units (976 beds) = 53 AFY
City of Goleta/Current GGMO limits for ten years	800,000 s.f. C/I X .175AFY/1,000 s.f. = 140 AFY
County unbuilt approved/pending permits	223,000+s.f. C/I X .175AFY/1,000 s.f= 39 AFY +/1.5 million s.f.greenhouse development
UCSB current LRDP buildout Classroom/Lab/Office projects, 800 bed dormitory and 387 units of housing on North Campus	748,115 s.f. C/I plus 800 beds and 387 units= 247.5 AFY[39]
City of SB Airport Expansion Plan	300,000 s.f. C/I = 52.5 AFY
Total Estimated AFY = 1,279 AFY+ 1,500,000 square feet greenhouse development (AFY unknown at this time)	

[38] In the cumulative scenario, UCSB could exceed their contracted potable water amount when all currently planned LRDP projects are built out.

[39] UCSB project AFY numbers were estimated by the University in the San Clemente project EIR.

As can be seen from the above, possible growth within the City of Goleta boundaries is only a portion of what might occur. Using UCSB's estimated AFY for their projects and the water district's water duty factor of .20 AFY for multi-family residential and the County's water duty factor of .175AFY per 1,000 square feet of commercial/industrial development for all other projects would give a total of about 1,279 AFY that would be needed if all approved and planned projects were built out over the next ten years. This is a very conservative estimate as some new housing would probably be single family residential which uses a higher duty factor of .29 to .53 AFY, depending upon the size of the lot and does not include the greenhouse development which can be a very "water intensive" use. It also assumes that the City of Goleta's current growth management ordinance would continue to link the amount of commercial and industrial square footage that could be built. It also does not estimate any additional growth at UCSB beyond the current limits of their long range development plan. However, a recent study concluded that UCSB could accommodate as much as 2.2 million more square feet of development on campus if needed in the future.[40]

The Goleta Water District currently receives about 93% of its total water supply (and 100% of its potable water supply) from sources outside the immediate area. Having sufficient supplies of water to meet both current and future water demands is highly dependent on adequate rainfall every year, both locally to replenish Lake Cachuma, and in Northern California for the State Water Project. If there should be a drought and Lake Cachuma and/or State Water allotments were reduced significantly, the District would have difficulty supplying current needs, as well as future demands.[41]

As the population of California grows statewide, water resources are being stretched to accommodate the increasing needs of urban users, while still maintaining enough supplies for agriculture and environmental concerns. Maintaining this delicate balance is becoming increasingly difficult. This challenge is exemplified locally by the need to balance competing demands on the Southcoast between urban and agricultural users, as well as the habitat and recharge requirements for the Santa Ynez River. How that balance is to be achieved is now the subject of the Cachuma Project Water Rights Hearings and should be decided sometime in 2004. The decision will be of critical importance to both Goleta farmers and city dwellers.

This picture requires caution in planning additional development which will increase the overall demand for water. A more detailed analysis of the water

[40] The Campus Plan for the University of California at Santa Barbara, Overview, page A-2.

[41] The Goleta Water District disagrees with this statement. They are confident that demand can be met in all years, except for a critical dry year which could occur only three times in a century.

supply/demand issue will be performed as part of the Environmental Impact Report for the General Plan.