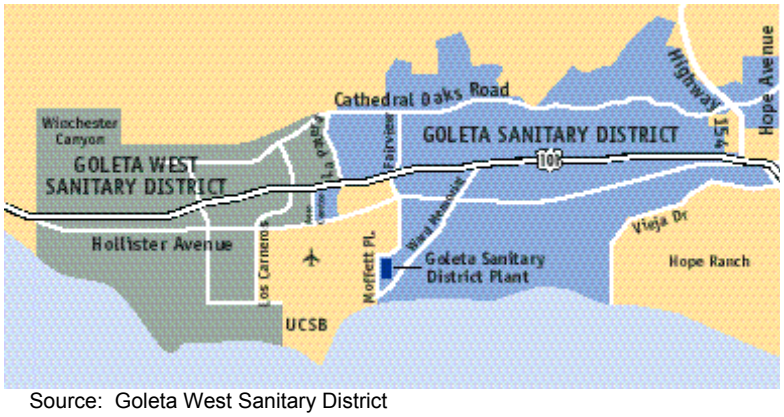
***DRAFT 3***
March 3, 2004
**BACKGROUND REPORT NO. 12**

# WASTEWATER

## City of Goleta, California

### INTRODUCTION

The disposal of wastewater for the City of Goleta is handled by two different agencies. The Goleta Sanitary District (GSD) collects, treats and disposes of wastewater for the eastern half of the city up to La Patera Lane. The Goleta West Sanitary District (GWSD) handles collection in the western half of the City and for Isla Vista and the Embarcadero Municipal Improvement District (EMID).




Source: Goleta West Sanitary District

The Goleta Sanitary District also manages the only wastewater treatment plant for the entire Goleta area. Goleta West Sanitary has purchased capacity rights to the treatment plant, as have other jurisdictions. The Goleta Sanitary District has 47.87% of the capacity, Goleta West Sanitary District has 40.78%, the University of California Santa Barbara has 7.09%, the City of Santa Barbara Airport has 2.84% and Santa Barbara County has 1.42%. Each of these jurisdictions operates their own sewer pipeline collection system and pumps their wastewater to the treatment plant, except for the County which uses the Goleta Sanitary District system.

### GENERAL PLANNING IMPLICATIONS

The provision of wastewater service is critical for any development in an urban setting. Ascertaining the availability of adequate capacity of such service and the capability of the infrastructure to handle increased demand is an important requirement before proceeding with any intensification or changes in existing zoning.

## GOLETA SANITARY DISTRICT

*Organization*

The Goleta Sanitary District is an independent local public agency formed in 1942 for a population of 1,500. The District is governed by a five member board of elected trustees who serve staggered four year terms. The board makes policy decisions and directs the general manager who oversees the staff and day-to-day management of the facilities. The sewer system and treatment plant were completed in 1951. Over the years the plant has been enlarged and improved. In 1965 a mile long ocean outfall at Goleta Beach was constructed and the plant was expanded. In 1989 the plant was expanded again to its current size.

The District's collection boundaries extend from the City of Santa Barbara's western boundary to La Patera Road in the City of Goleta, and from the ocean to the residential areas north of Cathedral Oaks Road. This area covers approximately 9,282 acres and serves a population of approximately 64,500 at the present time. There are some small areas or "islands" that are not served by the District.

*Rates*

GSD rates are $190 per year for a single family residence and $154 per year for a multi-family dwelling. Commercial rates vary for different types of businesses depending upon the amount and type of wastewater generation expected. Most businesses are charged per increment of 74,095 gallons of water. Certain industrial and commercial customers are also required to treat and remove hazardous substances from their wastewater before allowing it to flow into District pipes.

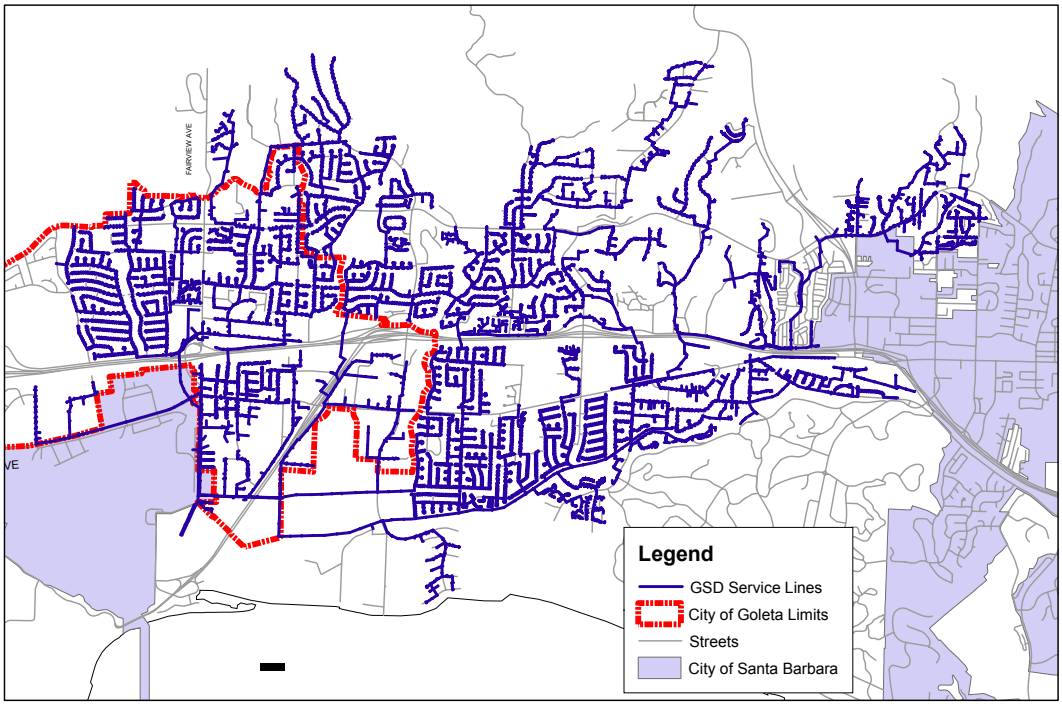
A "Sewer Service Availability" letter for new sewer service is a requirement prior to a decision on a discretionary project by the City of Goleta. Issuance of building permits by the City does not occur until the sanitary district issues a "capacity" permit which is the commitment to serve the project. Applicants must purchase these permits at a cost of $2,058 per equivalent residential unit (ERU). These permits allocating new service do expire after two years if not acted upon or renewed.

*Facilities*

The GSD is responsible for the sewer collection system in their service area which consists of about 127 miles of gravity pipelines, ranging in size from 4 to 36 inches in diameter. Two thirds of the system was built prior to 1965. All pipes

are cleaned at least once every two years. Some pipes require more frequent maintenance. There are also two lift stations which boost flow for short distances.

Goleta Sanitary District Service Lines
City of Goleta, California
March, 2004




Other jurisdictions which have purchased capacity rights to the treatment plant operate and service their own pipeline collection systems which end at the plant. However, it is the Goleta Sanitary District which owns and operates the plant, the ocean outfall pipe and the water reclamation plant which service the entire Goleta area.


The wastewater treatment plant is the largest in the

County and is located between the airport and Goleta Beach. It has a capacity of 9.7 million gallons per day (mgd), but is currently permitted to process up to 7.64 mgd.[1] The capacity figure is based on an average daily flow. This totals the flow for each day of the year and divides it by 365. A peak daily flow rate can be higher than an average daily flow. Both the built capacity and permitted capacity amounts are based on computed average daily flows.

Indoor uses generate almost all of the wastewater treated. Rainstorm runoff is directed to creeks which flow to the ocean and bypass the treatment plant. However, a certain amount of rainfall does infiltrate into the pipeline system causing annual flow averages to vary depending upon the amount of rainfall that year. [2]

*Treatment Process*

The treatment of wastewater goes through several steps. First, wastewater is transported via pipeline to the treatment plant. The primary treatment involves filtering the water. The secondary step removes additional material and then chemicals are added to disinfect the water. The GSD uses a process whereby 60% of the water is treated at the secondary level and the rest at a primary level, and then blended back together, chlorinated and de-chlorinated before it travels through the outfall pipe to the ocean. This pipe is 36 inches in diameter and extends out from Goleta Beach a little over a mile, discharging treated effluent in water about 90 feet deep.

A portion of the water is treated at a third, or tertiary level. When treated to this level, the water can be recycled and reused for outdoor uses. Currently, approximately 1,050 acre feet a year of water is treated to the tertiary level, allowing it to be recycled for landscape watering. The GSD partnered with the Goleta Water District in building the water reclamation facility. The water district also built a recycled water line from the treatment plant for this use. The recycled water allows potable water to be used for other needs. However, it is considered an “interruptible” source because the flow can be halted if extra water is needed to comply with the ocean discharge requirements. The treatment process also has a byproduct called biosolids which are given away free as a soil amendment.

[1] The figure 7.9 mgd was used in the 1993 Goleta Community Plan EIR. However, the 7.64 mgd number is the current number according to Kamil Azoury of the Goleta Sanitary District. This same figure was also used in the 1998 Dudek and Associates report on projections for future wastewater demand.

[2] According to the “Sewer Collection System Master Plan 2000”, in that year the peak dry weather flow was 6.8 mgd. Influent flow in 2001 peaked in March at over 7 mgd, with an average daily flow of 5.72. In 2002, the average was slightly less at 5.20, probably because there was only 12 inches of rain that year, compared to the 25 inches in 2001. These figures for 2001 and 2002 were obtained from the Goleta Sanitary District NPDES Monitoring Program Annual Report 2002.

*Permit Status*

The GSD treatment plant is the only one in the County which uses this "blended" process. The plant currently operates under a National Pollution Discharge Elimination (NPDES) permit issued by the Environmental Protection Agency (EPA) with concurrence by the Regional Water Quality Control Board (RWQCB). The permit currently limits discharge to 7.64 million gallons per day based on an average daily flow rate. These permits are reviewed every five years. Although the NPDES permit calls for all wastewater to undergo at least secondary treatment, the GSD has been successful in obtaining a waiver from full secondary treatment under Section 301(h) of the federal Clean Water Act. All other wastewater treatment plants in the County use a full secondary treatment.

In 2001, a local clean water advocacy group, Heal the Ocean, challenged the request for another waiver at a hearing before the Regional Water Quality Control Board. The appellants asserted that the increase in wastewater expected from the growth in the Goleta area would mean that more sewage would only be treated at the primary level and would result in future degradation of the marine environment and ocean water quality.

GSD officials stated that their blended process was more than adequate and repeatedly exceeded all standards under numerous tests. They also said that the cost of upgrading the plant to meet the new requirements would be approximately $42 million, resulting in a significant rate increase for the Goleta area. In addition, all other entities who held capacity in the plant would be expected to proportionately meet their share of the additional costs.

The regional board declined to concur with issuance of the NPDES permit from the EPA. The GSD appealed the regional board's denial to the State Water Quality Control Board. Both the Goleta West Sanitary District and the Embarcadero Municipal Improvement District also indicated their support for an additional waiver. However, at their hearing in January 2004, the State Board voted 3-2 to uphold the Regional Board's denial of the waiver. As of February 2004, the Goleta Sanitary District was considering various options, including preparing a new application to continue the waiver and discussing possible legal action against the state or regional water boards.[3]

*Maintenance*

Maintenance and improvement projects are ongoing. Sewer lines are monitored by a computerized database and GIS mapping system. The GIS contains data on the location, age, size and construction of the pipelines and assists in creating

[3] "Wastewater fight back in regional board's hands", January 2004, and "Activists call for cleaner treatment", February 3, 2004, Santa Barbara News Press.

detailed maintenance plans. Within the Goleta city limits, no pipelines are approaching capacity except for one that connects between Ward Memorial and South Fairview.

The Goleta Sanitary District conducts regular updates to its long range master plan. The most recent was completed in 2000. The "Sewer Collection System Master Plan 2000" (Master Plan 2000) identified and prioritized over 35 projects to maintain and upgrade the system at a cost of about $16 million. Several of these projects are within the Goleta city limits and involve repairing or replacing sewer lines. The projects are to be completed in phases between 2001 and 2020.

| GSD Capital Improvement Projects within the City of Goleta | | | | | | |
|---|---|---|---|---|---|---|
| Priority | Project Name | Project Location | Method | Diameter in Inches | Length, Feet | Cost |
| 1 | Lift Station #3 | Robin Hill Rd and Hollister | Relief | 8 | 1,766 | $324,900 |
| 2 | Ward Blvd | Ward Blvd | Replace | 30 | 2,603 | $918,700 |
| 2 | Vega Dr. North | Vega Drive near Cathedral Oaks | Sliplining | 8-10 | 2,809 | $267,100 |
| 3 | Calle Real West | Calle Real between Los Carneros and Fairview | Sliplining | 8-10 | 1,154 | $136,200 |
| 4 | Vega Drive South | Vega Drive between Covington/Caleta | Relief | 8 | 2,062 | $379,400 |
| 4 | Moreton Bay | Moreton Bay between Berkeley/Encina | Relief | 10 | 956 | $197,800 |

Source: Goleta Sanitary District

*Future Demand*

In 1998 the Goleta Sanitary District and the Goleta West Sanitary District commissioned a land use survey by Dudek and Associates. The County, the airport and the University chose not to participate, indicating they would do their own studies. The Dudek study was entitled "Joint Goleta Sanitary District and Goleta West Sanitary District Land Use Survey/Wastewater Generation Projections Study" (Joint Study).[4] After doing a detailed analysis of the parcels within the GSD service area, the study estimated a "build out" scenario for the Goleta Sanitary District of an additional 2,123 residential units and 2,371,798 square feet of commercial and industrial development. These numbers would generate an increase in wastewater flow of 0.62 (2,800 equivalent residential

[4] Sewer Collection System Master Plan 2000, page 7-2.

units) to 0.96 mgd (4,353 ERU's), depending upon the intensity of development allowed per parcel.[5]

The District did another land use survey two years later as part of its" Sewer Collection System Master Plan 2000" to update wastewater flow projections and ascertain future needs. At that time the Plan identified 45% of the developed land as single or multi-family residential and 13% as commercial/industrial. About 42% was considered undeveloped, with "23% percent of this land classified as open space, agricultural or other types of land use that will not be available for development in the future."[6]

The remaining 1,767 vacant acres was considered available for future development. The majority of this development was assumed to be low-density residential in the areas south of Shoreline Drive and northeast of Foothill Road and Highway 154 and estimated to not generate a large amount of additional wastewater flow. The remaining acres were assumed to be an infilling of various sites throughout the service area with a combination of residential, commercial and industrial parcels, as well as the conversion of some areas to parks and recreational uses. Numbers totaled an additional 1,216 acres for single family residential, 61 acres for multifamily residential, 87 acres of commercial, 55 acres for industrial uses and 45 acres for community facilities. 227 acres was projected to be used for recreation. The Master Plan stated that the increase in flow rate from these land use assumptions was consistent with the earlier estimate given in the Dudek and Associates report. There was no projection given for the number of residential second units which might be constructed, possible rezones, or other intensification of existing uses. These projections were not made because the County did not indicate to the sanitary districts that those were potential future issues needing to be studied. Projected "build out" figures for the Airport, University and Goleta West Sanitary service areas were also not included in the Master Plan 2000 study because those jurisdictions indicated they would perform their own analyses for future demand.

GSD's 47.87% ownership of the treatment facility would allow a maximum average flow capacity of 3.66 mgd based on the current permitted maximum of 7.64 mgd. However, as average daily flow rates vary from year to year, depending upon the amount of rainfall, the amount of remaining capacity also varies.

[5] Joint Goleta Sanitary District And Goleta West Sanitary District Land Use Survey/Wastewater Generation Projections Study, Dudek and Associates, November 1998, pages 8 and 11. Generation factors used were 220 gallons per day per 1 equivalent residential unit (ERU). The .62 increase was calculated using an FAR for commercial/industrial development. The .96 figure was arrived at by making a straight calculation based on parcel size.

[6] Sewer Collection System Master Plan 2000, Page 6-1.

## GOLETA WEST SANITARY DISTRICT

*Organization*

The Goleta West Sanitary District (GWSD) is an independent, special purpose, public agency like the Goleta Sanitary District. They also have a five member board of directors, elected to staggered, four year terms which oversees a total staff of six employees. Their offices are located on property leased from the Santa Barbara airport and immediately adjacent to the UCSB campus.

The Goleta West Sanitary District was initially organized as the Isla Vista Sanitary District in 1954 and installed over five miles of sewer lines, as well as a force main, pump station and trunk lines by the late 1950's. They signed a joint use agreement with the Goleta Sanitary District for treatment and disposal for 5% of the treatment plant's capacity. By 1990, the District was responsible for over 59 miles of wastewater collection for over 4,500 customers and changed their name to the Goleta West Sanitary District. Over time, they gradually increased the amount of their share in the GSD treatment plant to just over 40%. Currently, they handle wastewater disposal for about 33,000 people living in the western half of the City of Goleta, Isla Vista and, by contract, the Embarcadero Municipal Improvement District (EMID). In addition, Goleta West also provides street sweeping on a regular basis throughout their service area.

*Rates*

GWSD charges $168 annually for both a single family and multiple family dwelling units. Commercial and industrial rates are based on every increment of 80,300 gallons of water, with increment rates varying depending upon the type of business and wastewater generated.

New customers must also pay a "capacity charge" of $1,702 per dwelling unit for both single and multiple family residences. Commercial, industrial and institutional accounts pay $1,702 per 25 unit count per the Uniform Building Code. If the property needs to be annexed to the District there is an additional "annexation charge" of $2,000 per acre, as well. Besides the above charges, there are additional fees for plan check, permit processing and inspections.

Similar to the Goleta Sanitary District, new developments must obtain a letter of "Sewer Availability" from the Goleta West district and then a "capacity" permit prior to issuance of building permits by the City of Goleta. However, the GWSD will only guarantee availability for one year from the date of the permit, instead of two years as the Goleta Sanitary District does.

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*Facilities*

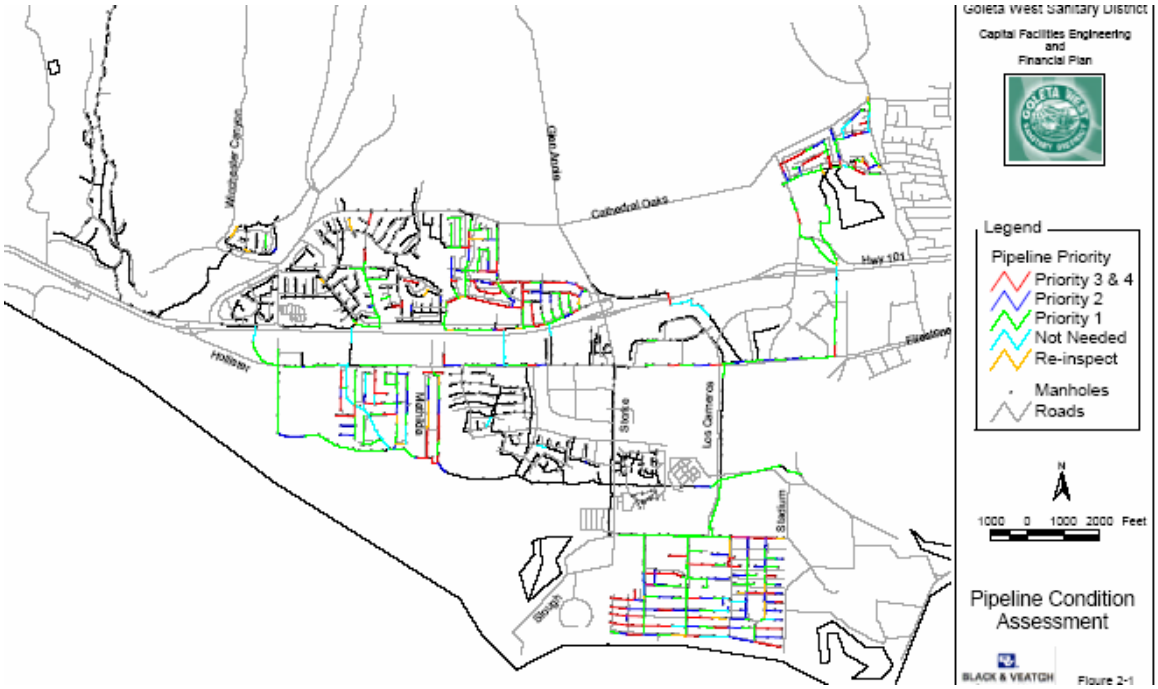
The District maintains about 62 miles of wastewater collection system pipelines, including gravity mains, manholes, pump and lift stations and force mains. Pipe sizes vary from 6 to 33 inches, the majority of which are 6 and 8 inches in diameter. The collection system also contains two pump stations (Pump Station #1 and #2) at the main facility located at Road 32 accessed through the UCSB campus, and one field lift station at Highway 101 to serve the Embarcadero Municipal Improvement District (EMID) and the San Miguel tract off of Winchester Canyon within the Goleta city limits. Pump station #1 pumps all the collected wastewater to the Goleta Sanitary District treatment plant and pump station #2 is a back-up station.

The District recently released an initial study/mitigated negative declaration for the Devereux Creek/Hollister Avenue Trunkline Repair Project. The purpose of this proposed project is to improve and repair the trunklines to support existing and future needs, improve accessibility and reduce flow in existing pipelines. A new trunkline segment will be tied to the Hollister line along a portion of Phelps, Whitman, Whittier and Storke Roads to alleviate stress on existing infrastructure. The project is planned to begin in the summer of 2004 and will rehabilitate, replace, and construct sewer pipeline segments in several locations along Devereux Creek and Hollister Avenue.

The City of Goleta Planning and Environmental Services department sent a comment letter on the project reminding the District that they needed to obtain permits from both the City and the Coastal Commission prior to project commencement. The letter also stated that the City would like to see the project reconfigured to allow an existing pipeline segment through the eucalyptus grove, which acts as Monarch butterfly habitat, to be abandoned in place. The project is still in the planning process.

*Capital Facilities and Financial Management Plan*

In April of 2003 the District completed a Capital Facilities and Financial Management Plan. Field inspections were performed as were CCTV inspections in all accessible areas. According to the report, the District's collection system is in fairly good condition, but does have some pipelines and manholes with problems that need to be repaired. In the service area within the Goleta city limits, sewer lines that need work were mapped in the residential areas between La Patera Lane and Los Carneros, north of the Stow House property, Del Norte Drive and some adjacent streets, the Mathilda Road area and some streets in the Santa Barbara Shores area. Most of the manholes needing repair were along Phelps Road. The total cost of the project was estimated at $12,714,000.




Source: Goleta West Sanitary District

The facilities report also inspected and evaluated the rest of the District's assets, including the structural, mechanical and electrical systems of their five buildings located on the UCSB campus, Lot 32. The buildings consist of the old pump house, the control building and pump station #1, the maintenance building, pump station #2 with generator and storage rooms and the vehicle maintenance shop and garage. Structural and electrical repairs totaling $1,250,000 were estimated. Other District assets consisting of vehicles and office equipment were evaluated as well, with an additional expenditure of about $800,000 projected for these areas.

Since Goleta West has purchased capacity rights of up to 40% of the regional treatment plant, the report also recommended allocating funds for that facility of $10,125,000.[7] This amount was expected to cover GWSD's proportionate share of upgrading the treatment plant for full secondary treatment if the State or Regional Water Quality Control Board ultimately denies Goleta Sanitary District's request for another waiver. The report noted that this amount could also cover the cost of building a separate treatment plant.

All of these Capital Facilities Plan upgrades were expected to be needed sometime over the next ten years at a total cost of $24,890,000. The Financial Plan which accompanied the Capital Facilities Plan indicated that the GWSD

[7] However, the May 6, 2003 minutes of the GWSD board meeting indicated that the GWSD share of the cost would be closer to $17.4 million of a possible $42.7 million plant upgrade to full secondary if required by the State Board for the GSD facility.

could pay for the improvements without increasing rates or assessments due to their large capital facilities fund.

Table 6-1
Estimated Costs and Approximate Expenditure Expectancy

| Type of Work | Estimated Cost | When Needed |
|---|---|---|
| Pipeline and Manholes | $ 12,714,000 | Next 5 to 10 Years |
| Structural/Architectural | $ 1,000,000 | Next 5 Years |
| Electrical | $ 250,000 | Next 5 Years |
| Wastewater Plant* | $ 10,125,000 | Next 5 Years |
| Vehicles | $ 694,000 | Next 10 Years |
| Office & Miscellaneous Equip. | $ 107,000 | Next 5 Years |
| TOTAL | $ 24,890,000 | |

*Either upgrading the Goleta Sanitary District's plant or building a new WWTP will be in this range.

Source: Goleta West Sanitary District

*Treatment Plant Study*

In January of 2003 the GWSD Board of Directors decided to explore the option of building their own treatment plant and opened discussions with the University of California, Santa Barbara (UCSB) about partnering in the facility. Goleta West commissioned a study by the engineering firm of Black & Veatch at a cost of $30,000 to ascertain the feasibility and treatment alternatives for such a plant. An initial draft of this study was completed in April 2003 and a later Phase II study amplified and refined the first report. The introduction states that "the Goleta West Sanitary District is considering the construction of a new wastewater treatment plant to allow treatment of their wastewater independent from the Goleta Sanitary District."[8]

The study looked at four different alternatives to treat wastewater to the tertiary level, with the plant sized to treat 4 million gallons of wastewater per day. Depending upon the type of technology used, costs could range from $15,374,400 to $23,626,800. Four possible sites for the plant are being analyzed, with the preferred option being one of two locations near the current operations on the UCSB campus. Treated effluent might be disposed of through the existing Goleta Sanitary District ocean outfall, or through a separate outfall located at a different location, discharging either to the ocean or to the Goleta Slough. The April draft stated that "Based upon preliminary discussions with the Regional Water Quality Control Board, it appears that a discharge permit will be obtainable especially given the advanced treatment the plant will offer."[9] However, there is no documented decision yet by the Board for this opinion.

[8] Black & Veatch, "Goleta West Sanitary District, Treatment Alternatives Technical Memorandum",April 2003, Page 1-1.
[9] Ibid. Page 5-1.

The Directors approved the Phase II study at a Board meeting in September. Representatives from GWSD and UCSB are still analyzing information and have not made a final decision yet on whether to construct the new facility.

*Future Demand*

In 1993, the GWSD had calculated they would have enough capacity to serve the growth levels anticipated over the ten year period outlined in the Goleta Community Plan. Five years later Dudek and Associates completed their land use survey and future wastewater projections analysis for both the Goleta Sanitary District and the Goleta West Sanitary District. The study only analyzed vacant parcels based on their current zoning and did not attempt to make projections for residential second units, rezones of agricultural and commercial/industrial property to residential uses, or any other intensification of existing zoning and land use. This did not occur because the County did not indicate to the sanitary districts that those possible changes needed to be analyzed.

The Dudek report projected the "buildout" potential of the GWSD service area as 2,232 residential units and 3,198,168 square feet of commercial/residential development. Estimated additional wastewater demand ranged from 0.73 mgd for 3,280 ERU's to 1.07 mgd for 4,871 ERU's, based on the same formulas mentioned previously for the Goleta Sanitary District buildout projections. GWSD's share of the treatment plant gives them a maximum daily average flow of 3.11 mgd, based on the plant's current limit of 7.64 mgd.

In May of 2000, Goleta West Sanitary District officials expressed concern at the prospect of a possible rezone of manufacturing property on Los Carneros Road to high density residential – a project which had not been anticipated in either the Goleta Community Plan or the 1998 Joint Study. GWSD requested that the County Planning and Development Department keep the District informed of any possible changes to current zoning, specifically zoning changes that would allow more housing than previously anticipated. Incremental rezones to intensify development potential would require the District to purchase more capacity in the treatment plant sooner, which was expected to cost up to $10 million.[10]

Goleta West has not commissioned another complete and more recent land use/wastewater generation study since the 1998 report. However, in 2001 a 10 year history of various parcels was analyzed which demonstrated that a lower wastewater generation factor might be more accurate. The Goleta West Sanitary District Board of Directors then took action to reduce the generation factor used for planning and capacity projections from 220 gallons per equivalent residential

[10] "Growth backs up Goleta's sewage," Santa Barbara News Press, 5/12/00.

unit (ERU) to 170 gallons. They now estimate their remaining capacity at 5,600 equivalent residential units. [11]

### CAPACITY AND GROWTH PROJECTIONS

The 1993 Goleta Community Plan estimated that there would be no lack of wastewater capacity to serve new development, both in a "ten year" and a "buildout" scenario.

| 1993 Goleta Community Plan EIR Wastewater Assumptions | | |
|---|---|---|
| | *10 Year* | *Build Out* |
| Average Flow in 1993 | 4.22 mgd | 4.22 mgd |
| Projected Additional Demand GSD/GWSD | 0.40[12] | 1.34[13] |
| UCSB per LRDP | 0.23 | 0.23[14] |
| S.B Airport | 0.01 | 0.07[15] |
| **Total** | **4.86 (in 2002)** | **5.86[16]** |
| Permitted Capacity | 7.90 | 7.90 |
| Remaining Capacity | 3.04 mgd | 2.04 mgd[17] |

Source: Goleta Community Plan EIR

However, actual figures for later years proved these assumptions to be inaccurate as can be seen in the next table detailing average flows for 2001 and 2002. Since average flows in 2001 were 5.6 and in 2002 they were 5.1, the actual use of these facilities since the Goleta Community Plan was completed has exceeded the forecasted levels for the ten year period (4.86)[18] The flow average for 2001 (5.64) is close to the GCP EIR buildout estimate (5.86).

[11] Mark Nation, GWSD General Manager.
[12] This assumed 2,000 units and 800,000 s.f. of commercial/industrial development based on the Goleta Growth Management Ordinance in place at that time
[13] This assumed 6,230 units and 3.6 million s.f. of C/I.
[14] Based on 1991 Long Range Development Plan. The Goleta Community Plan measured UCSB's wastewater flow at 0.403 at that time, with the rights to 0.560 permitted capacity. It noted that the increase in flow from buildout of their Long Range Development Plan would put them over their permitted limit and that the University would have to negotiate for increased capacity.
[15] This assumed 700,000 s.f. of additional development on all airport property.
[16] It is interesting to note that this buildout number is very close to the total wastewater flow generated for the year 1998 – 5.78 mgd. - in the Dudek and Associates "Joint Study" report.
[17] If the current 7.64 mgd capacity number is used, the remaining capacity at buildout drops to 1.78 mgd.
[18] This occured even taking into account the variation in flow rates between a wet year like 2001 with 25 inches of rain and a dry year like 2002 with 12 inches of rain.

| Treatment Plant Permitted Capacity and Average Daily Flows for 2001 and 2002 | | | | |
|---|---|---|---|---|
| Jurisdiction | Permitted ADF Capacity | Percent of ADF Capacity | Average Daily Flows / **Remaining Capacity** | |
| | | | 2001 | 2002 |
| GSD & SBCO | 3.77 | 47.87% & 1.42% | 3.24 / **0.53** | 2.83 / **0.94** |
| GWSD | 3.11 | 40.78% | 2.07 / **1.04** | 1.97 / **1.14** |
| UCSB[19] | 0.54 | 7.09% | 0.27 **/ 0.27** | 0.29 **/ 0.25** |
| SBMA | 0.22 | 2.84% | 0.06 **/ 0.16** | 0.05 **/ 0.17** |
| **TOTAL** | **7.64 mgd** | **100%** | **5.64 / 2.00** | **5.13 / 2.51 mgd** |

These levels have been reached even though the estimated amounts of residential and commercial development anticipated to be built in the Goleta area have not yet occurred. The Santa Barbara Airport expansion plan and "Gateway" project have also not commenced construction, so there have been no increased flows yet from those projects. And UCSB has not built out the total square footage allowed under their current Long Range Development Plan. In addition, the University is also planning to amend/update their LRDP to allow for increased development.

One of the reasons why the Goleta Community Plan EIR was inaccurate in estimating future demand might be linked to a generation factor that was too low. The information found in the 1998 "Joint Study" used higher wastewater generation rates - 220 gallons per day per unit, rather than 157 gallons per day per unit in the GCP. The Districts chose the 220 gallon rate specifically, even though it was a more conservative number than the GCP EIR estimate, because "the GSD and GWSD calculated 220 gallons to be reasonable considering inflow and infiltration factors (i.e. leaks from pipes)."[20] Also, the numbers of individuals per household has been increasing and is predicted to continue to increase over the next thirty years which would indicate that a higher wastewater generation rate would be more appropriate.[21] Another reason might be because the EIR estimate was predicated on a strict adherence to the Goleta Growth Management Ordinance in place at the time. However, the Board of Supervisors made a number of exceptions to the Ordinance, including a very large one to

[19] Currently, UCSB estimates their average daily flow at .400 MGD, with .3 being sent directly to the Goleta Sanitary district and .1 being sent through Goleta West which leaves .142 MGD of additional capacity. After the San Clemente housing project is occupied, they estimate they will have .095 MGD of capacity remaining. The EIR for the San Clemente project states "Buildout of the reasonably foreseeable development projects on the UCSB campus could exceed the University's wastewater treatment allocation at the Goleta Sanitation treatment plant by approximately .088 MGD." UCSB, "San Clemente Housing Project DEIR", February 2004.

[20] Joint Study, page 7.

[21] SBCAG Regional Growth Forecast, 2000-2030, page 92.

allow the construction of the Camino Real Marketplace, which increased the amount and pace of development.

Since neither the 1998 GSD/GWSD "Joint Study" nor the GSD "Master Plan 2000" assumed any conversion of agriculturally zoned land to other uses, nor any other intensification of existing zoning, (other than a few properties in Old Town), projections for increased wastewater generation from those sources were not figured into capacity needs for "buildout" for both the Goleta Sanitary District and the Goleta West Sanitary District. The need to make these types of projections was not performed because the County did not advise the sanitary districts of the need to do so.

However, a new state law requiring ministerial permits for second units could double wastewater flows from many parcels currently zoned and built for single family homes. And the County repealed the Goleta Growth Management Ordinance in the unincorporated area of Goleta in 2002, so new projects, once approved, will not have to wait to start construction in that area. In addition, the County's current Housing Element Update relies heavily on the rezoning of large agricultural parcels to high density housing to address its Regional Housing Needs Assessment (RHNA) goal of 1,182 units over the next five to ten years. RHNA also requires the City of Goleta to plan for an additional 2,388 housing units. The Mercy Housing Project of 170 units, which is within the Santa Barbara city limits and the Goleta Sanitary District service area, is also moving forward. The total of these units, 3,740, is about 86% of the 4,355 total units planned for in the 1998 Goleta Sanitary and Goleta West "Joint Study" buildout scenario.

Currently, Goleta West is estimating remaining capacity at about 5,600 equivalent residential units (ERU's) based on the new generation rate of 170 gallons per day per ERU. Under the previous generation rate of 220 gallons used in the Dudek report, the remaining capacity would be about 4,545 ERU's. The Goleta Sanitary District is still using the 220 gallons per day per ERU measurement. Based on their remaining capacity in a dry year like 2002 of .94 mgd, they could serve an additional 4,272 ERU's. In a wet year like 2001 with only .53 of remaining permitted capacity, they could serve 2,409 ERU's. Any remaining capacity must also serve any additional development from Santa Barbara County projects.

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| Potential Development over the Next Ten Years | |
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| City of Goleta RHNA requirement | 2,388 housing units |
| Southcoast unincorporated RHNA | 1,181 housing units |
| County/City of SB Mercy Housing | 170 housing units |
| UCSB San Clemente Student housing | 321 housing units (976 beds) |
| City of Goleta/Current GGMO limits for ten | 800,000 s.f. C/I |

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|---|---|
| years | |
| County unbuilt approved/pending permits | 223,000+s.f. C/I<br>+/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<br>plus 800 beds and 387 units |
| City of SB Airport Expansion Plan | 300,000 s.f. C/I |
| | |

**PLANNING IMPLICATIONS FOR THE CITY OF GOLETA**

Although the Goleta Sanitary District treatment plant has a built capacity (9.7 mgd) that could accommodate a large increase in wastewater flows generated by future development, the plant's permitted limit of 7.64 mgd could be exceeded in a "buildout" scenario if the limit is not raised. The permitted capacity may even be exceeded sooner if all potential developments that are already proposed for the Goleta Valley are built in close succession. Increasing this limit in the near future is complicated by the fact that the District has been denied another waiver to continue to use their "blended" treatment process and their future plans – whether to fight the denial or accept it and institute full secondary treatment - are not clear at this time

Capacity in the treatment plant could increase if the Goleta West Sanitary District and UCSB decide to build their own treatment plant, which could leave additional space available for purchase by other entities. However, they have not yet decided whether to proceed with the project. And the public's concern regarding possible environmental impacts from the siting and disposal needs of another treatment facility could also cause delay, in addition to the time needed for permitting and construction.

Until the permitted capacity of the GSD plant is increased, the amount and pace of new development, both inside and outside of the Goleta City limits, could be constrained. The City of Goleta General Plan environmental document will do a careful analysis of this issue to see how it might affect the City's ability to plan for the amount and location of new development.