

HANSFORD

ECONOMIC CONSULTING

Georgetown Divide Public Utility District

Cost of Service and Rate Design for Auburn Lake Trails Wastewater Management Zone

FINAL REPORT

May 8, 2019

HEC No. 180281

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Section 1: INTRODUCTION

1.1 FEES STUDY BACKGROUND AND BEST PRACTICES

Background

The Georgetown Divide Public Utility District (District) provides water and wastewater services to the properties within the Auburn Lake Trails (ALT) subdivision. The District contracted with Hansford Economic Consulting (HEC) to perform a Wastewater Fees Study (Study) for the ALT service area. The purpose of this Study is to determine the level of funding required over the next five years to sufficiently fund the ALT wastewater utility services in fulfillment of the State Water Resources Control Board (State Water Board) Wastewater Discharge Requirement (WDR) Order R5-2002-0031.

The ALT wastewater service area comprises several types of wastewater disposal solutions. Customers are grouped into community disposal system (CDS) customers and non-CDS customers. The CDS system is a community septic system that collects wastewater from individual septic tanks on each lot which is pumped to a community leach field for disposal. The non-CDS system comprises individual septic systems on each lot. The individual septic system is designed as appropriate for each lot dependent on soil conditions encountered at the specific lot. Examples of individual septic systems include conventional systems, mound systems, sand systems, and pressure dosed systems.

The ALT wastewater service area is funded from the following revenue sources (and minor miscellaneous other revenues such as interest income):

- Bi-monthly property-related fees
- Inspection fees
- CDS Connection fee

This Study updates all three types of fees.

Bi-Monthly Property-Related Fees

The bi-monthly property-related fees (sometimes called “rates” in the Study) are exempt from Proposition 26 but are subject to California Constitution Article XIII D (commonly referred to as Proposition 218) requirements for water, wastewater, and solid waste property-related fees.

This Study provides an explanation of, and justification for, calculated bi-monthly wastewater fees by customer type through June 30, 2024 (a five-year period), and documents adherence to the law regarding the setting of property-related fees by a special district. Specifically, the California Constitution requires that the fees for wastewater service shall not be extended, imposed, or increased by any agency unless they meet all of the following requirements:

- (1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.

- (2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- (3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
- (4) No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted.
- (5) No fee or charge may be imposed for general governmental services including, but not limited to, police, fire, ambulance or library services, where the service is available to the public at large in substantially the same manner as it is to property owners.

The wastewater financial model projects revenues and expenses, demonstrates adjustments necessary to achieve cost of service, and calculates bi-monthly property-related fees for the next five years.

Inspection Fees and CDS Connection Fee

In addition, the wastewater financial model accounts for inspection fees and CDS connection fees which are one-time, non-recurring, fees. Inspection fees are adopted pursuant to Proposition 26 Section 1(e)(3) for issuing licenses and permits, performing investigations, inspections, and audits.

The CDS connection fee is only collected from lots that are developing and connecting to the CDS system (note, there are only 2 undeveloped lots remaining to connect to the CDS system). The CDS connection fee is charged to collect for costs already expended by the District for the benefit of the CDS system customers. The fee is adopted and collected pursuant to the Mitigation Fee Act (California Code 66013).

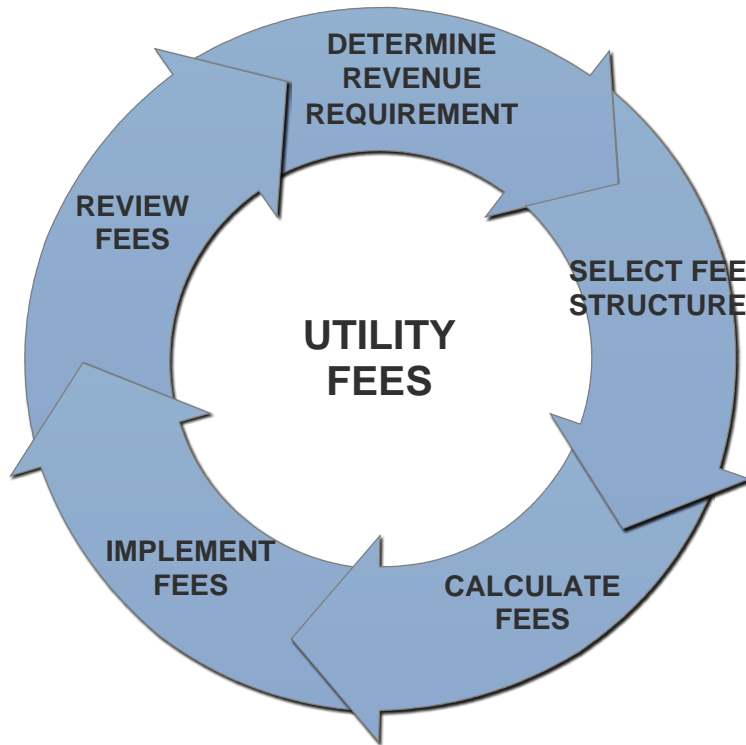
Best Practices

Fee studies are typically conducted every three to five years to ensure revenue sufficiency. A cost of service analysis, which not only allows for revenue sufficiency, but also examines whether customers are paying for their share of system costs and adjusts rates and customer classifications to achieve equity to the maximum extent practicable, is advisable every five to ten years, whenever there has been a shift in the economic base of the community, and whenever proportional cost of service is in question.

This Study incorporates all the major elements of cost-based rate making using the principles established by the Water Environment Federation Manual of Practice No. 27 and guidelines prepared by the California State Water Resources Control Board for State Revolving Fund financing.

Figure 1 illustrates the fee-setting process.

Figure 1
Fee-Setting Process



As part of the regular periodic reviews of the utility fees, best practices include maintaining financially self-sustaining utilities, setting policies on reserve levels for utility funds, including setting an amount aside every year into a special reserve account (or “sinking fund”) to pay for system rehabilitation, and conducting regular customer outreach/communications to educate the community on their utility system(s) and value of the service(s) provided.

Table 1 on the next page shows utility best practices and the District’s current practices for the ALT wastewater service area. The table demonstrates that although total fees collected are sufficient to service the ALT service area, cost-of-service (proportionality) and total revenues collected to fund the service are in need of review.

Table 1
Water Utility Best Practices

Best Practice	ALT Zone
Rate study every 3 to 5 years	No rate study within last 10 years (last documented was in 2008)
Collect for system rehabilitation (for upkeep of existing infrastructure) in rates	Yes, rehabilitation is included
Regular customer communications to educate on the utility system and value of service	The District is taking steps to improve communications; started with hiring a Water Resources Manager in 2018
Meet bond covenants	Not applicable (no ALT wastewater debt)
Self-sufficient enterprise fund	Yes
Meet target cash balance	Currently greater than industry guidelines

1.2 FEE SETTING PRINCIPLES

Draft fee study analyses were presented at a public meeting on January 16, 2019 to solicit feedback and input. Comments at and subsequent to the meeting, as well as input from the Finance Committee and staff, that have guided this report include:

- 1. Any drawdown of cash reserves should be gradual, particularly until the engineering study for the CDS leach field has been completed and potential capital costs associated with that facility identified.**

By gradually drawing down on reserves, the District can better measure actual revenues and expenditures with those projected in this Study. One potentially large unknown capital cost is associated with improvements to the CDS leach field. When the engineering study has been completed (within the next year), the District will be better informed regarding potential leach field costs and timing of necessary improvements, and will be able to better evaluate its ability to fund any associated projects.

- 2. Drawdown of cash reserves should be provided by way of reduced rates; checks cannot be distributed to ratepayers.**

If the District provided a lump sum to each property owner then people who just moved into the ALT subdivision would gain from something they did not pay into. This could constitute an impermissible gift of public funds. A drawdown of cash provides the most equitable and feasible method to reduce cash reserves.

3. The appropriate amount to keep as cash on hand has not been set formally by the Board; the best guidelines should be used for purposes of the fee calculations.

Currently, the District has about 37 months of operating expenses in undesignated cash reserves in the ALT Wastewater Zone fund. This amount is comprised of both CDS and non-CDS fee collections. The undesignated cash balance is reduced in the fee calculations to six months of operating expenses over the next five years. Six months of operating expenses was determined as a prudent reserve using Government Finance Officers Association (GFOA) guidelines.

4. A new sub-fund or account should be created that is held specifically for any kind of permit compliance activities.

In the rate model, undesignated cash is reduced from 37 months to six months; of this, three months is for cash flow purposes, irregularities in routine operating costs from one year to the next, and to allow for rate stabilization. The remaining cash is held for State permit compliance activities that apply to the whole ALT subdivision (CDS and non-CDS lots) in a new sub-fund or account. This money could be expended on any activity that enables the entire subdivision to stay in compliance with State and Federal water quality regulations.

5. Proposition 218 requires that each customer type pay their proportional share of costs of the wastewater utility.

One of the key reasons for performing the fee study is to demonstrate cost of service for each customer type. There are four customer types in the ALT Wastewater system (CDS developed, CDS undeveloped, non-CDS developed, and non-CDS undeveloped). Activities performed solely on the CDS system should only be paid for by CDS customers. For example, electricity costs and system rehabilitation costs for the CDS system are only allocated to CDS customers in the rate model. Capital and operating costs of benefit to both types of customers are allocated proportionately to each customer type.

1.3 KEY FINDINGS AND CALCULATED FEES

Key Findings

This Study makes the following key findings:

Bi-Monthly Fees

- Current reserves are greater than necessary, given today's best estimates of operating and capital costs over the next five years.
- Reserves can be drawn in the amount of \$155,000 per year over the next five years; this draw is estimated to result in undesignated cash reserves of about six months of

operating expenses by the end of fiscal year 2024, which is within the prudent cash reserve guidelines set forth by GFOA.

- The cost-of-service analysis demonstrates that there should be a shift in cost recovery from non-CDS to CDS lots.
- Bi-monthly rates can be reduced for all customer types except CDS Undeveloped lots, which should be paying higher bi-monthly rates based on the cost-of-service analysis performed in this Study.
- At the end of the five-year period, rates for developed CDS lots are calculated to be less than seven dollars more every two months than current rates; rates for non-CDS lots will still be lower than current rates.
- Except for the CDS undeveloped lots (there are two lots), the calculated bi-monthly fees for the next four fiscal years are at, or lower than, the current fees. The District can therefore adopt fees for up to the next four years without the public noticing period required for Proposition 218, as long as the bi-monthly fees for the remaining two CDS undeveloped lots are held at the current fees. Adopting a bi-monthly fee schedule for the next four fiscal years that follows the schedule of fees calculated in this Study would adjust the rates for cost of service, and begin drawdown of cash reserves pursuant to the requirements of the California Constitution, but it should not expose the District from potential currently unknown costs associated with the CDS leach field.

Inspection Fees

- Several inspection services currently listed on the fee schedule are no longer performed by the District; therefore, these need to be removed.
- Some inspection fees can be reduced; others need to be increased. An automatic inflator applied to the fees every twelve months would help keep the fees from falling behind over time as goods and services become more expensive.

CDS Connection Fee

- The CDS connection fee should be increased to pay for the remaining undeveloped lots' share of facilities constructed to service all CDS lots. Application of an automatic inflator every twelve months would help keep the fee in line with annual cost increases.

Calculated Fees

Table 2 on the next page provides current and calculated rates with drawdown of \$155,000 per year.

Table 3 on the next page presents the calculated updated inspection fees and the CDS connection fee. Fees that are no longer applicable have been removed.

Table 2
Calculated 5-Year Projection of ALT Wastewater Bi-Monthly Fees

Customer Type	Bi-Monthly Fee					
	Current	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Community Disposal System (CDS)		<i>Rates Paid every 2 Months (Bi-Monthly)</i>				
Developed Lot	\$101.74	\$75.42	\$83.24	\$91.38	\$99.77	\$108.58
Undeveloped Lot [1]	\$35.20	\$56.03	\$62.45	\$69.09	\$76.01	\$83.35
Non-CDS						
Developed Lot	\$40.72	\$15.40	\$17.54	\$19.79	\$22.19	\$24.76
Undeveloped Lot	\$32.26	\$13.10	\$15.05	\$17.13	\$19.35	\$21.75

Source: HEC.

[1] The remaining 2 undeveloped lots are anticipated to be developed by the end of fiscal year 2020.

Table 3
Calculated Inspection Fees and CDS Connection Fee

Fee Description	Current	July 1 2019
Escrow Inspections		
Escrow inspection, report, follow-up and final inspection	\$400	\$260
Each additional inspection (above the first two for the same lot)	\$200	\$100
Special Inspection Request		
Examples: construction of barns, garages, patio additions, fencing, swimming pools	\$125	\$100
Wastewater System Design and Inspection Fees		
Standard wastewater disposal system and design and inspections	\$1,175	[1] removed
Pressure Dosed or Pumped wastewater disposal systems	\$1,400	removed
Mound Wastewater Disposal Systems	\$1,600	removed
Sand Filter Wastewater Disposal Systems	\$1,600	removed
Design Review, Site Analysis, Testing Review, and Inspection Services	\$600	\$820
Community Disposal Systems		
Design and Inspections	\$900	\$740
Connection Fee [2]	\$1,500	\$2,470
Total Community Disposal Systems	\$2,400	\$3,210

Source: Georgetown Divide PUD current rate structure, and GDPUD Time Study completed between January 22 and March 8, 2019.

[1] Removed - these services are no longer provided by the District.

[2] Connection fee calculated in Table 12.

Section 2: ALT WASTEWATER SYSTEM

2.1 ALT WASTEWATER FACILITIES

The ALT wastewater service area comprises several types of wastewater disposal systems. Customers are grouped into CDS customers and non-CDS customers.

The CDS system is a community septic system that collects wastewater from individual septic tanks on each lot which is pumped to a community leach field for disposal. Sanitary sewer conveyance piping, pump station and disposal fields are the only District owned facilities associated with ALT wastewater disposal.

The non-CDS system comprises individual septic systems on each lot. The individual septic system is designed as appropriate for each lot dependent on soil conditions encountered at the specific lot. Examples of individual septic systems include conventional systems, mound systems, sand systems, and pressure dosed systems.

The District is responsible for inspecting all wastewater disposal systems annually. In addition, the District monitors groundwater monitoring well water quality and reports results to the State on a quarterly and annual basis.

2.2 CUSTOMER BASE

The ALT wastewater system comprises 139 residential lots that are or will be served by the CDS system, and 960 lots that are or will be served by the non-CDS system, as shown in **Table 4**. Of the total 1,099 lots, 77 remain undeveloped. Only two of the undeveloped lots are in the CDS system.

Table 4
Number of Lots by Customer Type

System Lot Type	Developed	Undeveloped	Total	Percent of Total
CDS Lots	137	2	139	13%
Non-CDS Lots	885	75	960	87%
Total Lots	1,022	77	1,099	100%
Percent of Lots	93%	7%	100%	

Source: Annual Auburn Lake Trails Wastewater Management Zone Report, 1/31/2019.

The ALT wastewater customer base is shown in **Figure 2** below. The majority (87%) of ALT subdivision lots are (or will be when fully developed) utilizing individual septic systems.

Figure 2
Customer Base

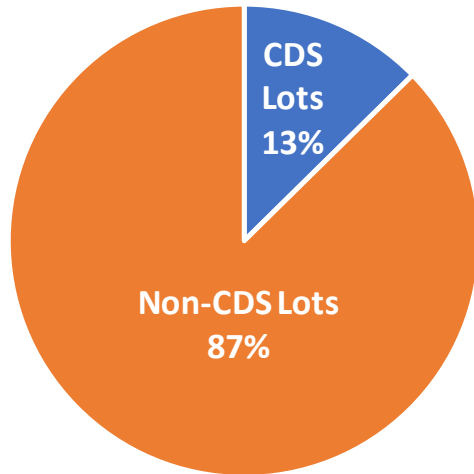


Table A-1 in Appendix A shows the projected development of lots based on the historical pace of development in the ALT subdivision. The fee study assumes that all CDS lots will be developed within the next two years, and that four non-CDS lots will be developed each year.

2.3 FINANCIAL HEALTH OF THE ALT WASTEWATER FUND

Historical financial audited statements for the wastewater disposal enterprise fund are summarized in **Table A-2 of Appendix A** for the last five years.

Three sub-funds currently comprise the ALT wastewater disposal enterprise fund.

1. **Fund 40** is an undesignated fund into which all revenues are deposited. Cash as of 6/30/18 was \$955,886.
2. **Fund 41** was established with Resolution No 2006-03 to provide a loan program for the CDS system. The loan program has been used to assist property owners make necessary modifications, repairs and replacements to septic facilities on their lots. Resolution No 2006-03 requires that the loan program will be funded solely by funds generated by the CDS.

The loan period is one year and it is interest-free. After one year the loan must be paid in full. If it is not fully repaid at that time, interest accrues at a rate of 7% per

year from the origination of the loan. In addition, penalties are assessed for delinquent payments on the same basis as for delinquent service charges. Cash as of 6/30/18 was \$39,450.

- 3. Fund 42** is a CDS reserve from which CDS capital improvement projects are funded. Cash as of 6/30/18 was \$170,063.

The cash in funds 41 and 42 is designated, meaning that it is earmarked for specific funding purposes. The cash in fund 40 is undesignated, meaning it can be used for any purpose. The total undesignated cash represents 37 months of operating expenses. This is higher than would typically be recommended for a wastewater enterprise fund. Large reserves of cash can be strategic and deliberate; for example, cash may be accumulated over several years for a large capital improvement project so that less or no debt is necessary to pay for the improvements. When this financing strategy is employed, the money collected for the project is deposited into a separate “sinking fund” and designated for the project.

As a best management practice, service utilities need sufficient cash balance to:

- Serve cash flow needs
- Pay for emergency and unplanned necessary repairs
- Accumulate for system rehabilitation (planned improvements)
- Provide rate stabilization

While each utility needs to assess its risks on an individual basis using knowledge of the current status of infrastructure, regulatory requirements, cash flow “bumps” and so forth, there are some general guidelines to measure what a prudent reserve would be for the utility. The Government Finance Officers Association (GFOA) best practice is to start with a baseline of 90 days of operating expenses and adjust depending on local circumstance. For a small utility system, such as the ALT wastewater system, it is most typical to have an amount equal to between 3 and 6 months of operating expenses available in undesignated cash.

Considerations when establishing the reserve balance include:

- ALT has predictable, steady revenues – this lowers the cash flow concern.
- Improvement/replacement of the CDS leach field timing and cost has yet to be determined.
- ALT has a uniform customer base – it is not dependent on revenue from a few large customers.
- Unpredictable weather events – emergency work may be needed.
- Ever-increasing California environmental standards / requirements for treatment – may require new infrastructure and/or monitoring.
- Enterprise fund – all revenue is generated from fees, there is no general fund transfer potential. In addition, the water fund is allocated all the District’s property taxes.
- Rate stabilization – raising rates is unappealing; especially with a small customer base.

Given the above considerations, the fee Study reduces cash reserves to six months (180 days) of projected operating expenses gradually over five years. In addition, this Study recommends establishing a new fund for permit compliance activities. With the new fund in place the District would then:

- Keep three months of operating expenses in Fund 40. Temporary reductions in the reserve may be necessary, but the goal is to keep three months of operating expenses in the fund every year by fiscal year end.
- Deposit all remaining cash in the new Permit Compliance Reserve Fund.
- Deposit \$45,000 each year into Fund 42 and use available money in Fund 42 first to finance necessary CDS system improvements. If insufficient funds are available in any year to finance the improvements, the District can transfer money from the new Permit Compliance Reserve Fund. The District Board can decide whether the transfer will be repayable depending on the circumstances causing the need for the transfer.
- Leave Fund 41 as is, or dissolve the fund if the District dissolves the loan program. If more loan applications are received than there is available money for in Fund 41, the District can transfer money from the new Permit Compliance Reserve Fund, with the loan amount(s) repaid when the one-year loan(s) has matured. This would be appropriate because the Permit Compliance Reserve Fund will include fees paid by CDS customers, and the loan would fund activities that help keep the ALT wastewater service area in compliance with the State Water Board.

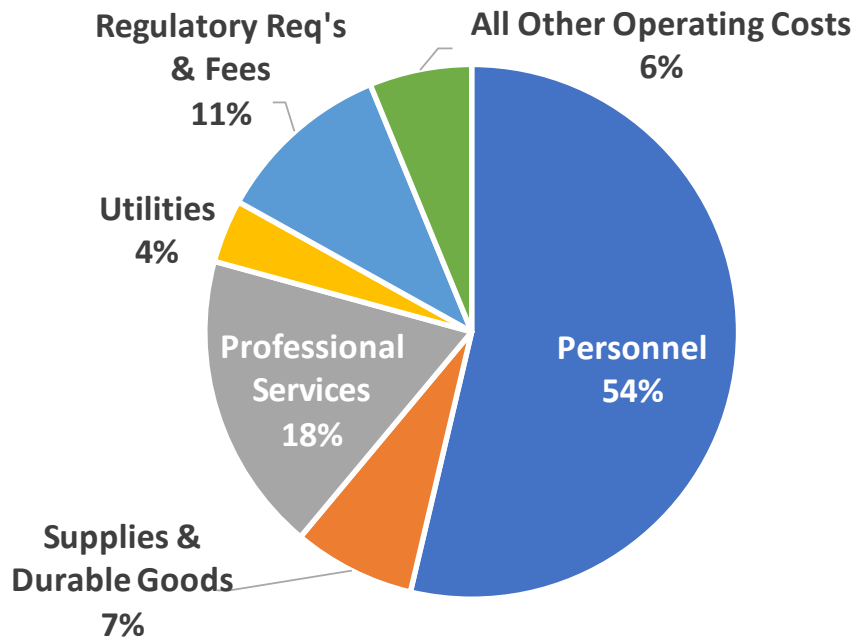
Section 3: PROJECTED COSTS AND REVENUES

3.1 OPERATING COSTS

Projected ALT operating costs are based on the fiscal year 2018/19 budget, with slight modifications for end of year estimates using actual costs expended to date. The fiscal year 2018/19 budget is shown in **Table A-3** in **Appendix A**. Budgeted expenses for the current fiscal year are \$377,671. With adjustments, the estimated actual expenses for the current fiscal year are \$317,795.

The largest operating costs are for personnel (salaries, wages and benefits) associated with ALT activities. Primarily, this includes time for the Water Resources Manager, who oversees ALT wastewater permit compliance, and the ALT Field Inspector. Professional services, which includes permit compliance activities performed by District consultants, financial services such as periodic fee study updates, and other outside expertise as necessary, comprise the next largest share of operating costs. Other activities that support wastewater service to ALT include utilities (electricity for the CDS lift station), costs associated with meeting State Water Board regulatory requirements and payment of fees, and supplies, tools, fleet, and other ancillary expense items. **Figure 3** below shows a breakdown of annual operating expenses.

Figure 3
Estimated Actual Fiscal Year 2018/19 Operating Expenses



3.2 CDS FACILITIES COSTS

The only District-owned wastewater assets in ALT belong to the CDS system. Customers of the CDS system are responsible for the upkeep of existing system facilities, as well as capital costs (and associated soft costs) of new facilities.

Table A-4 in Appendix A lists all of the major CDS system assets. Depreciation of the assets, calculated using the replacement cost method, is used as a proxy for the amount that should be collected each year to fund CDS system rehabilitation. The calculated annual system rehabilitation cost is \$44,628, which has been rounded to \$45,000 in the fee calculations. System rehabilitation costs collected in bi-monthly fees are transferred to Fund 42 to pay for capital improvement costs.

As part of 2018 District-wide five-year capital improvements planning, a capital improvement plan (CIP) for the ALT CDS system was prepared. Identified improvements include manhole sealing (to be completed this fiscal year) and an upgrade to the lift station in fiscal year 2020/21. In addition to these two projects identified in the 6/21/18 District-adopted CIP, staff identified the need for an engineering study in fiscal year 2019/20. The engineering study is specifically for the CDS infrastructure; therefore, this “soft” cost has been added to the CIP for purposes of the fee study.

Costs of CIP items are paid for from Fund 42 with available cash.

**Table 5
Estimated CDS System CIP Costs**

Capital Improvement Project	Fiscal Year Ending		
	2019 Current	2020 Year 1	2021 Year 2
District Cost Estimates (2018 \$s)	CDS SYSTEM COSTS		
Manhole Sealing	\$10,000		
Upgrade Lift Station			\$120,000
Engineering Study		\$48,500	
Estimated Cost - 2018 \$s	\$10,000	\$48,500	\$120,000
Estimated CDS Project Costs Inflated			
Manhole Sealing	\$10,000	\$0	\$0
Upgrade Lift Station	\$0	\$0	\$123,600
Engineering Study	\$0	\$50,000	\$0
Estimated Cost - Inflated \$s	\$10,000	\$50,000	\$123,600

Source: GDPUD adopted CIP 6/21/18, and staff estimate of engineering study cost.

3.3 PROJECTED REVENUE REQUIREMENT

The revenue requirement is the amount of money that must be raised through bi-monthly fees each year to achieve revenue sufficiency. The projected revenue requirement through the next five years is provided in **Table 6** on the next page.

Currently, bi-monthly wastewater fees collected from ALT customers totals approximately \$315,000 annually and the revenue requirement is approximately \$292,800. In the first year of fee adjustments, fiscal year 2019/20, the revenue requirement is projected to be approximately \$305,500. The removal of non-recurring costs included in the 2018/19 budget decreases operating expenses in the first year of the projection; however, a greater amount is included in the projection annually for CDS system rehabilitation costs. Additionally, in an effort to reduce cash reserves down from 37 months of operating expenses, \$155,000 is applied to reduce the revenue requirement. The resulting revenue requirement to be collected from bi-monthly fees in fiscal year 2019/20 is reduced to approximately \$150,500; this increases to \$232,200 by fiscal year 2023/24.

The revenue requirement increases each year for each type of operating expense. For personnel costs (which includes benefits), the range of minimum to maximum annual increases differs by type of employee. With negotiated employee contract provisions including cost of living increases and step increases each year, the average for all positions is estimated at 7.8% per year. Most of the other operating costs are increased 2.0% each year (the increase in the US urban consumer price index between 2017 and 2018). Utilities costs are increased 4.5% each year, which is the actual annual average increase experienced by the ALT wastewater disposal zone since 2013. Similarly, regulatory requirements and fees are increased 4.0% per year, the actual annual average increase since 2013.

Table 6
Projected Revenue Requirement

Item	inflater	Fiscal Year Ending					
		2019	2020	2021	2022	2023	2024
Operating Expenses		Est. Actuals					
Salaries & Wages	7.8%	\$105,169	\$113,372	\$122,215	\$131,748	\$142,024	\$153,102
Benefits	7.8%	\$65,459	\$70,565	\$76,069	\$82,002	\$88,398	\$95,293
Insurance	2.0%	\$9,412	\$9,600	\$9,792	\$9,988	\$10,188	\$10,392
Supplies & Durable Goods	2.0%	\$23,500	\$23,970	\$24,449	\$24,938	\$25,437	\$25,946
Professional/Outside Services [1]	2.0%	\$57,720	\$21,134	\$21,557	\$21,988	\$22,428	\$22,877
Utilities	4.5%	\$12,169	\$12,717	\$13,289	\$13,887	\$14,512	\$15,165
Fleet Operations & Maint.	2.0%	\$8,200	\$8,364	\$8,531	\$8,702	\$8,876	\$9,053
Regulatory Req's & Fees	4.0%	\$34,050	\$35,412	\$36,828	\$38,302	\$39,834	\$41,427
All Other	2.0%	\$2,116	\$2,158	\$2,201	\$2,246	\$2,290	\$2,336
Total Operating Expenses		\$317,795	\$297,293	\$314,933	\$333,801	\$353,988	\$375,591
Debt Service		\$0	\$0	\$0	\$0	\$0	\$0
System Rehabilitation and Improvements (CDS only)		\$10,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000
Total Costs	<i>a</i>	\$327,795	\$342,293	\$359,933	\$378,801	\$398,988	\$420,591
Credits							
Interest Income		\$7,200	\$5,800	\$4,500	\$3,600	\$3,000	\$2,400
Design and Escrow Fees		\$27,800	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000
Total Credits	<i>b</i>	\$35,000	\$36,800	\$35,500	\$34,600	\$34,000	\$33,400
Subtotal Costs less Credits	<i>c = a - b</i>	\$292,795	\$305,493	\$324,433	\$344,201	\$364,988	\$387,191
less Use of Reserves (Fund 40)	<i>d</i>		\$155,000	\$155,000	\$155,000	\$155,000	\$155,000
Revenue Requirement	<i>e = c - d</i>	\$292,795	\$150,493	\$169,433	\$189,201	\$209,988	\$232,191
Current Collections			\$314,793	\$314,793	\$314,793	\$314,793	\$314,793
Additional Fees Needed			(\$164,300)	(\$145,360)	(\$125,592)	(\$104,805)	(\$82,602)

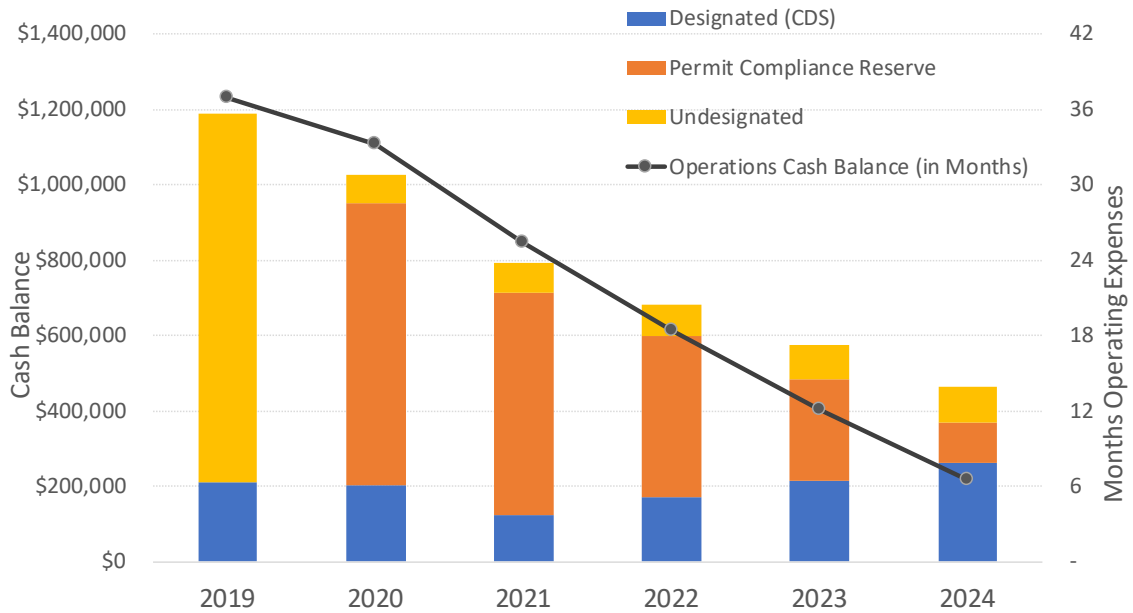
Source: GDPUD Fiscal Year 2018-2019 Budget, Adopted June 21, 2018, as modified.

[1] FY 2019 budget reduced by \$45,000 for estimated rate study cost; rate study costs of \$40,000 every 5 years annualized in projection.

3.4 CASH FLOW PROJECTION

If the bi-monthly fees are adjusted to generate the projected five-year revenue requirements, total undesignated cash is projected to decrease to six months of operating expenses as illustrated in **Figure 4**.

Figure 4
Projected ALT Wastewater Fund Cash



As discussed in Section 2 of this report, cash in funds 41 and 42 is designated for the CDS system. Undesignated cash for operating expenses equals three months of operating expenses, and all remaining cash is moved to the new Permit Compliance Reserve Fund. The undesignated cash and permit compliance reserves can be used for any ALT wastewater activity that supports compliance with the State Water Board. The detailed projected cash flow is provided in **Table 7** on the next page.

Table 7
Projected Cash Flow for ALT Wastewater Fund

Revenues and Expenses	Fiscal Year Ending					
	2019 Fee Increases ---->	2020 Year 1	2021 Year 2	2022 Year 3	2023 Year 4	2024 Year 5
Beginning Cash Balance [1]	\$1,165,399	\$1,187,397	\$1,027,397	\$793,797	\$683,797	\$573,797
Bi-Monthly Fees - Operating Expenses	\$304,793	\$105,493	\$124,433	\$144,201	\$164,988	\$187,191
Bi-Monthly Fees - System Rehabilitation (CDS Only)	\$10,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000
Interest Income	\$7,200	\$5,800	\$4,500	\$3,600	\$3,000	\$2,400
Design and Escrow Fees	\$27,800	\$31,000	\$31,000	\$31,000	\$31,000	\$31,000
less Operating Expenses	(\$317,795)	(\$297,293)	(\$314,933)	(\$333,801)	(\$353,988)	(\$375,591)
less Est. Cost of Capital Projects	(\$10,000)	(\$50,000)	(\$123,600)	\$0	\$0	\$0
Est. Ending Cash Balance ALT Zone Fund	\$1,187,397	\$1,027,397	\$793,797	\$683,797	\$573,797	\$463,797
Est. Undesignated Cash Balance - Fund 40 [2]	\$79,449	\$74,323	\$78,733	\$83,450	\$88,497	\$93,898
Est. Permit Compliance Reserve - NEW [3]	\$898,435	\$748,561	\$589,151	\$429,434	\$269,387	\$108,986
Subtotal Operations Cash Balance	\$977,884	\$822,884	\$667,884	\$512,884	\$357,884	\$202,884
Months operating expenses in Operations Cash Balance	37	33	25	18	12	6
Est. Designated Cash Balance - CDS Only	\$209,513	\$204,513	\$125,913	\$170,913	\$215,913	\$260,913
Designated Cash Balance (CDS Loan Program - Fund 41)						
Beginning	\$39,450	\$39,450	\$39,450	\$39,450	\$39,450	\$39,450
less loans	\$0	\$0	\$0	\$0	\$0	\$0
plus loan repayments	\$0	\$0	\$0	\$0	\$0	\$0
Est. Ending CDS Reserve Fund Balance	\$39,450	\$39,450	\$39,450	\$39,450	\$39,450	\$39,450
Designated Cash Balance (CDS Reserve - Fund 42)						
Beginning	\$170,063	\$170,063	\$165,063	\$86,463	\$131,463	\$176,463
System Rehabilitation Collection	\$10,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000
less Est. Cost of Capital Projects	(\$10,000)	(\$50,000)	(\$123,600)	\$0	\$0	\$0
Est. Ending CDS Reserve Fund Balance	\$170,063	\$165,063	\$86,463	\$131,463	\$176,463	\$221,463

Source: Georgetown Divide PUD Fiscal Year 2018/19 adopted budget and HEC.

[1] Beginning cash balance for fiscal year 2019 includes:	<u>Undesignated</u>	<u>Designated</u>	
Fund 40	\$955,886	\$170,063	Fund 42
		\$39,450	Fund 41
Total	\$955,886	\$209,513	

[2] Three months of operating expenses.

[3] All remaining undesignated funds can be used toward any permit compliance activities.

SECTION 4: BI-MONTHLY FEE CALCULATIONS

4.1 BI-MONTHLY FEE METHODOLOGY

The bi-monthly fee calculations for each fiscal year follow these steps:

Step 1: Allocate the operating expenses to CDS and non-CDS lots. Both systems pay for personnel, insurance, supplies and durable goods, fleet costs, other miscellaneous small costs, regulatory requirements and fees. CDS lots also pay for utilities (developed lots only) and system rehabilitation costs (all CDS lots).

Step 2: Allocate credits to CDS and non-CDS lots. Credits include interest income and inspection fees.

Step 3: Apply \$155,000 reserves to CDS and non-CDS lots.

Step 4: Divide the resulting allocated revenue requirement by the number of lots within the customer groupings.

Steps 1 and 2 are the cost of service portion of the fee analysis. **Table 8** below shows Step 1 allocation of operating expenses to CDS and non-CDS systems.

Table 8
Cost Allocation of Operating Expenses

Revenue Requirement Items	Budget 2019	Allocation Basis	Allocation to System		System	
			CDS	Non-CDS	CDS	Non-CDS
Operating Expenses						
Salaries & Wages	\$105,169	Payroll	33%	67%	\$35,139	\$70,030
Benefits	\$65,459	Payroll	33%	67%	\$21,871	\$43,588
Insurance	\$9,412	# Lots	13%	87%	\$1,190	\$8,222
Supplies & Durable Goods	\$23,500	Records [1]	40%	60%	\$9,400	\$14,100
Professional/Outside Services [2]	\$57,720	# Lots	13%	87%	\$7,300	\$50,420
Fleet Operations & Maint.	\$8,200	# Lots	13%	87%	\$1,037	\$7,163
Regulatory Req's & Fees	\$34,050	# Lots	13%	87%	\$4,307	\$29,743
All Other	\$2,116	Payroll	33%	67%	\$707	\$1,409
Total Operating Expenses	\$305,626				\$80,951	\$224,675
<i>Percentage Share of Operating Expenses</i>					26%	74%
Utilities	\$12,169	CDS Only	100%	0%	\$12,169	\$0
Total with Utilities	\$317,795				\$93,120	\$224,675

Source: GDPUD Fiscal Year 2018/19 Budget, Adopted June 21, 2018, and analysis of Trial Balance generated from

MOM Accounting Software on February 19, 2019, of Fund 40, Department 6700 and Account 5038 - (7/1/18 through 2/28/19).

[1] Accounting records of supplies and goods, and the purposes to which they were put. Source: District February 2019.

[2] Includes quarterly and annual reports monitoring conducted by outside consultant and estimated rate study cost.

The majority of costs are for personnel. **Table A-5** in **Appendix A** shows a summary of ALT activity payroll records for the past year. Approximately one-third of labor efforts are expended on CDS system lots, and two-thirds on non-CDS lots. Although CDS lots only comprise 13% of total lots, there is greater effort required to service the system because of its infrastructure and associated operating components. Supplies and durable goods costs were allocated based on District accounting records. All other costs were allocated based on the number of lots in each system because these costs are incurred regardless of the type of customer. Only CDS lots pay for utilities because these costs are for the CDS lift station.

Table 9 on the next page shows the cost allocation to each customer type for the first year of fee changes, fiscal year 2019/20, including steps 2, 3, and 4 of the fee calculation methodology. Operating expenses are allocated for the next five years using the total percentage share to CDS and non-CDS as calculated in **Table 8**, rather than the percentage shown for each expense item. Projections inherently have some level of uncertainty; therefore, the last known share of costs is used for the entire projection period. In addition, CDS developed lots pay for electricity to run the lift station (utilities cost), and system rehabilitation costs of \$45,000 are allocated to all of the CDS lots. Credits are applied for interest income and design and escrow fee revenues based on the allocation of operating expenses, and use of reserves (to draw down total cash on hand) are allocated to each customer type based on allocation of total costs. The result is cost allocation to each customer type that sums to the revenue requirement for the year.

Fee calculations for years two through five are presented in **Appendix A, Tables A-6** through **A-9**.

4.2 CALCULATED BI-MONTHLY FEES

The calculated bi-monthly fees are summarized in **Table 10** below.

Table 10
Calculated ALT Bi-Monthly Wastewater Rates

Customer Type	Bi-Monthly Fee					
	Current	FY 19/20 Yr 1	FY 20/21 Yr 2	FY 21/22 Yr 3	FY 22/23 Yr 4	FY 23/24 Yr 5
Community Disposal System (CDS)		<i>Rates Paid every 2 Months (Bi-Monthly)</i>				
Developed Lot	\$101.74	\$75.42	\$83.24	\$91.38	\$99.77	\$108.58
Undeveloped Lot [1]	\$35.20	\$56.03	\$62.45	\$69.09	\$76.01	\$83.35
Non-CDS						
Developed Lot	\$40.72	\$15.40	\$17.54	\$19.79	\$22.19	\$24.76
Undeveloped Lot	\$32.26	\$13.10	\$15.05	\$17.13	\$19.35	\$21.75

Source: HEC.

[1] The remaining 2 undeveloped lots are anticipated to be developed by the end of fiscal year 2020.

Table 9
Year One ALT Bi-Monthly Wastewater Fees Calculation

Item	Total Cost	Allocation	CDS Disposal System			Non-CDS System		
			All Lots	Developed Lots	Total	All Lots	Developed Lots	Total
Operating Expenses		To All Lots			Table 8 26%			Table 8 74%
Salaries & Part-time	\$113,372	100%	\$30,029	\$0	\$30,029	\$83,343	\$0	\$83,343
Benefits	\$70,565	100%	\$18,691	\$0	\$18,691	\$51,874	\$0	\$51,874
Insurance	\$9,600	100%	\$2,543	\$0	\$2,543	\$7,057	\$0	\$7,057
Supplies & Durable Goods	\$23,970	0%	\$0	\$6,349	\$6,349	\$0	\$17,621	\$17,621
Professional/Outside Services	\$21,134	100%	\$5,598	\$0	\$5,598	\$15,537	\$0	\$15,537
Fleet Operations & Maint.	\$8,364	0%	\$0	\$2,215	\$2,215	\$0	\$6,149	\$6,149
Regulatory Req's & Fees	\$35,412	100%	\$9,380	\$0	\$9,380	\$26,032	\$0	\$26,032
All Other	\$2,158	0%	\$0	\$572	\$572	\$0	\$1,587	\$1,587
Utilities (CDS only)	\$12,717	0%	\$0	\$12,717	\$12,717	\$0	\$0	\$0
Total Operating Expenses	\$297,293		\$66,240	\$21,853	\$88,092	\$183,844	\$25,356	\$209,200
<i>Percentage of Operating Costs</i>			22%	7%	30%	62%	9%	70%
System Rehab. & Impr. (CDS only)	\$45,000	By % of op. exp.	\$33,837	\$11,163	\$45,000	\$0	\$0	\$0
Total Allocated Costs	\$342,293		\$100,077	\$33,016	\$133,092	\$183,844	\$25,356	\$209,200
Credits								
Interest Income	(\$5,800)	By % of op. exp.	(\$1,292)	(\$426)	(\$1,719)	(\$3,587)	(\$495)	(\$4,081)
Design and Escrow Fees	(\$31,000)	By % of total lots	(\$3,921)	\$0	(\$3,921)	(\$27,079)	\$0	(\$27,079)
Total Costs	\$305,493		\$94,864	\$32,589	\$127,453	\$153,178	\$24,862	\$178,040
<i>Percentage of Total Costs</i>			31%	11%	42%	50%	8%	58%
Use of Reserves	(\$155,000)	By % of total costs	(\$48,132)	(\$16,535)	(\$64,667)	(\$77,719)	(\$12,614)	(\$90,333)
Revenue Requirement	\$150,493		\$46,732	\$16,054	\$62,786	\$75,459	\$12,247	\$87,706
Number of Lots			139	138		960	889	
Revenue Requirement per Lot			\$336.20	\$116.33		\$78.60	\$13.78	
Bi-Monthly Charge per Developed Lot			\$56.03	\$19.39	\$75.42	\$13.10	\$2.30	\$15.40
Bi-Monthly Charge per Undeveloped Lot			\$56.03		\$56.03	\$13.10		\$13.10
<i>Undeveloped Charge as % of Developed Lot Charge</i>					74%			85%

Source: GDPUD Fiscal Year 2018-2019 Budget, Adopted June 21, 2018, as modified, available at www.gd-pud.org/district-budget.

4.3 ALT WASTEWATER BILL IMPACTS

Impacts on bi-monthly fees are illustrated in **Figure 5**. By the end of the five-year period, CDS developed lots fees are calculated to be less than seven dollars more every two months than they currently are. In the four in-between years, fees are calculated to be lower than they currently are. CDS undeveloped lots bi-monthly fees are not calculated to decrease because the cost of service analysis increases the ratio of costs between an undeveloped and developed CDS lot.

All non-CDS lots are calculated to have lower bi-monthly fees throughout the five-year period. The fees stay lower due to the shift in cost allocation between CDS and non-CDS lots.

Figure 5
Projected Bi-Monthly Fees

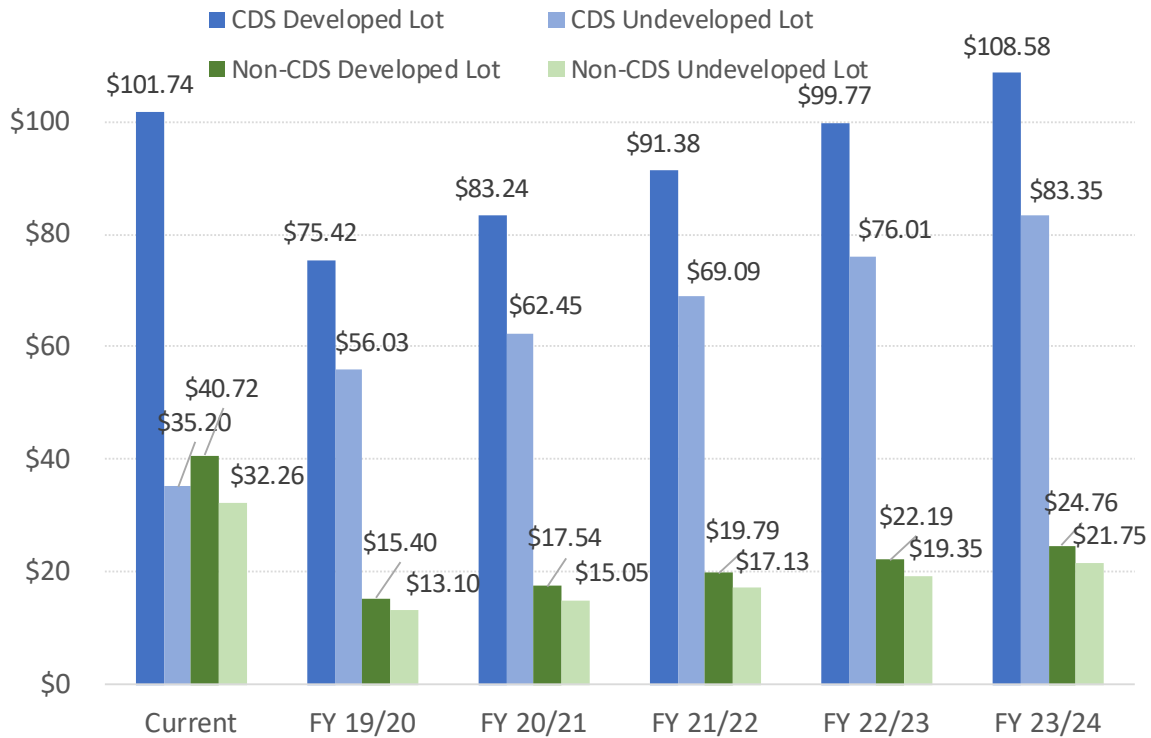


Figure 6 on the next page shows the components of the bi-monthly fees (what they are paying for). The figure illustrates components of developed lot fees. The non-CDS lots only pay for operating expenses (excluding utilities). The CDS lots pay for operating expenses, utilities, and rehabilitation. The percentage component of costs for CDS lots is displayed in **Figure 7** on the next page.

Figure 6
Comparison of FY 2019/20 Calculated Fees by Developed Lot

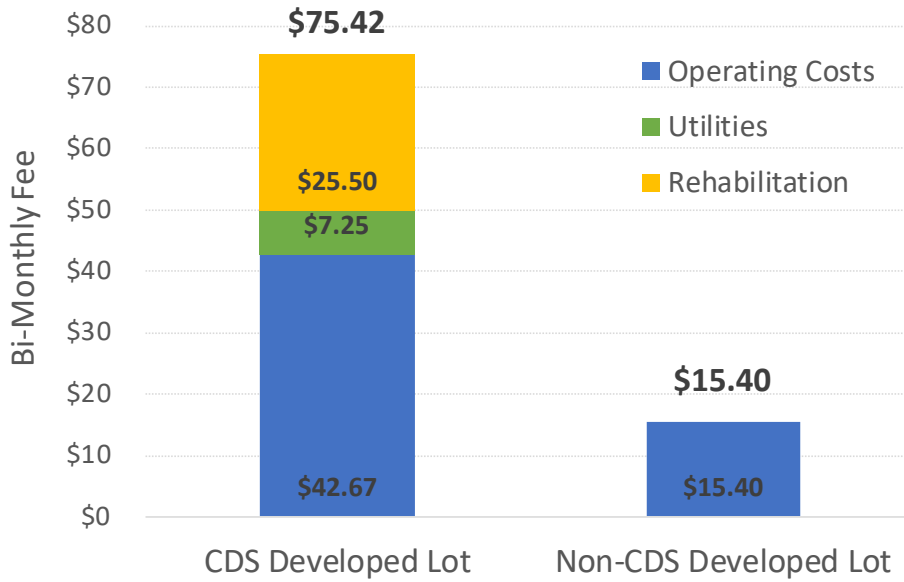
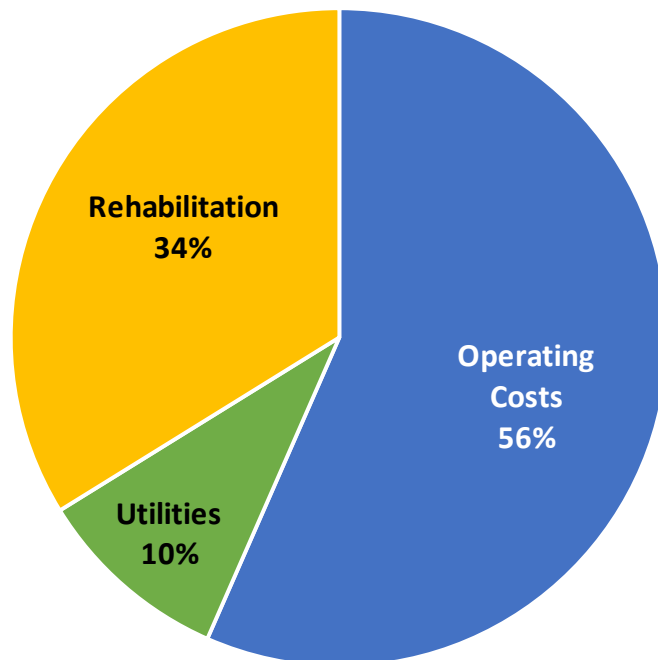


Figure 7
Components of CDS Bi-Monthly Fee



SECTION 5: INSPECTION AND CONNECTION FEES CALCULATIONS

5.1 INSPECTION FEES UPDATE

The District requires and provides inspections of newly constructed septic systems as well as inspections of existing septic systems at escrow. Lot owners are required to hire their own consultants to design septic systems. The inspection fees are one-time, non-recurring fees, payable whenever one of the inspection services is performed.

The current and calculated July 1, 2019 inspection fees schedule is shown in **Table 11** below. Fees that are no longer applicable have been removed.

Table 11
Summary of Updated Inspection Fees Schedule

Fee Description	Current	July 1 2019
Escrow Inspections		
Escrow inspection, report, follow-up and final inspection	\$400	\$260
Each additional inspection (above the first two for the same lot)	\$200	\$100
Special Inspection Request		
Examples: construction of barns, garages, patio additions, fencing, swimming pools	\$125	\$100
Wastewater System Design and Inspection Fees		
Standard wastewater disposal system and design and inspections	\$1,175	[1] removed
Pressure Dosed or Pumped wastewater disposal systems	\$1,400	removed
Mound Wastewater Disposal Systems	\$1,600	removed
Sand Filter Wastewater Disposal Systems	\$1,600	removed
Design Review, Site Analysis, Testing Review, and Inspection Services	\$600	\$820
Community Disposal Systems		
Design and Inspections	\$900	\$740
Connection Fee [2]	\$1,500	\$2,470
Total Community Disposal Systems	\$2,400	\$3,210

Source: Georgetown Divide PUD current rate structure, and GDPUD Time Study completed between January 22 and March 8, 2019.

[1] Removed - these services are no longer provided by the District.

[2] Connection fee calculated in Table 12.

The cost of the updated inspection fees is based on the time and hourly rate of District employees who perform the services. Employees working on inspections include the field inspector, wastewater treatment staff, management staff, and office staff. The number of

hours spent on each type of inspection by each staff person is based on completed inspections.

Tables B-1 and B-2 in Appendix B provide the calculations for each fee. The hourly staff rates, which include benefits for all the staff positions included in the fee calculations, are summarized in **Table B-3**. In addition to the fee calculation based on time and hourly rates, a markup factor of 15% is added. The markup factor captures the indirect (administrative) costs of the inspections. The markup factor is calculated in **Table B-4** using an average of the past five years of ALT-related administrative costs.

5.2 UPDATED CDS CONNECTION FEE

The CDS connection fee should be increased to pay for the remaining undeveloped lots' share of facilities that have already been constructed to service all CDS lots. This fee is sometimes referred to as the "buy-in" to existing facilities. The estimated net book value of existing CDS facilities, which uses the replacement cost method and deducts accumulated depreciation, (detailed in **Appendix A, Table A-4**) is \$343,897. All of the CDS developed lots have already paid for their share of the cost in connection fees. The remaining two lots (1.4% of total CDS lots) have a cost responsibility of \$4,948. Divided by two, this results in an updated CDS connection fee of \$2,470 per lot.

Table 12
Calculation of CDS Connection Fee

Item	Estimated Net Book Value	Future Customer Share	Estimated Future Customers Cost
		[1]	
Buy-In Existing Facilities	\$343,897	1.4%	\$4,948
Number of Customers			2
CDS System Connection Fee (rounded)			\$2,470

Source: GDPUD CDS asset list and HEC.

[1] Percentage of CDS lots remaining undeveloped.

The District may wish to consider inclusion of an automatic inflator that is applied to both the user fees and the CDS connection fee in the ordinance or resolution adopting the revised fee schedules. Automatic inflators (such as the Engineering News Record or Western Region Consumer Price Index) help keep fees from falling behind over time as goods and services become more expensive.

APPENDIX A

BI-MONTHLY FEES SUPPORT TABLES

Table A-1
Georgetown Divide PUD - ALT Wastewater Rates Study
Projection of Lot by Development Status by System Type

System Lot Type	Fiscal Year Ending					
	2019	2020	2021	2022	2023	2024
CDS Lots						
<i>Developed each Year</i>		1	1	0	0	0
Developed	137	138	139	139	139	139
Undeveloped	2	1	0	0	0	0
Total CDS Lots	139	139	139	139	139	139
Percent Built	99%	99%	100%	100%	100%	100%
Non-CDS Lots						
<i>Developed each Year</i>		4	4	4	4	4
Developed	885	889	893	897	901	905
Undeveloped	75	71	67	63	59	55
Total Non-CDS Lots	960	960	960	960	960	960
Percent Built	92%	93%	93%	93%	94%	94%
Total ALT Lots	1,099	1,099	1,099	1,099	1,099	1,099
Percent Built	93%	93%	94%	94%	95%	95%
Percent CDS	13%	13%	13%	13%	13%	13%
Percent non-CDS	87%	87%	87%	87%	87%	87%

Source: Annual Auburn Lake Trails Wastewater Management Zone Report, 1/31/19 and HEC.

lot proj

Table A-2

**Georgetown Divide PUD - ALT Wastewater Rates Study
Audited Financials for the Wastewater Disposal Enterprise Fund**

Revenues and Expenses	Fiscal Year Ending				
	2013	2014	2015	2016	2017
Revenues					
Zone Charges	\$321,270	\$310,840	\$310,661	\$311,629	\$311,477
Design Fees	\$600	\$900	\$1,200	\$1,200	\$6,600
Escrow Fees	\$30,550	\$28,600	\$32,996	\$33,600	\$29,505
Total Revenues	\$352,420	\$340,340	\$344,857	\$346,429	\$347,582
Operating Expenses	\$223,313	\$201,009	\$162,372	\$183,796	\$272,233
Net Operating Revenues	\$129,107	\$139,331	\$182,485	\$162,633	\$75,349
Non-Operating Revenues					
Interest Income	\$1,287	\$1,177	\$1,907	\$4,056	\$8,506
Transfers In	\$0	\$0	\$0	\$9,358	\$32,000
Transfers Out	\$0	\$0	\$0	\$0	(\$41,359)
Total Net Revenues	\$130,394	\$140,508	\$184,392	\$176,047	\$74,496
Undesignated Cash	\$433,856	\$578,294	\$433,856	\$879,974	\$892,404
Designated Cash [1]	\$175,949	\$176,026	\$175,949	\$225,158	\$253,328

Source: GDPUD Financial Audits (12/13 - 17/18) www.gd-pud.org/financial-audits

audits

[1] All CDS monies.

Table A-3
Georgetown Divide PUD - ALT Wastewater Rates Study
Fiscal Year 2018/19 Budgeted Expenses

Revenues and Expenses	Actual FY 2017	Estimated FY 2018	Budget FY 2019
Expenses			
Salaries & Wages	\$75,918	\$90,654	\$137,129
Benefits	\$84,915	\$41,337	\$93,375
Insurance	\$5,750	\$5,953	\$9,412
Supplies & Durable Goods	\$10,342	\$10,499	\$23,500
Professional/Outside Services	\$25,863	\$107,144	\$57,720
Utilities	\$12,186	\$9,311	\$12,169
Fleet Operations & Maint.	\$5,183	\$2,951	\$8,200
Regulatory Req's & Fees	\$33,393	\$38,373	\$34,050
All Other	\$316		\$2,116
Total Expenses	\$253,866	\$306,222	\$377,671

Source: GDPUD Fiscal Year 2018/19 Budget, adopted 6/21/18, www.gd-pud.org/district-budget

[1] The estimated actual salaries and wages expense for fiscal year 2019 is \$31,960 less (\$105,169).

The estimated actual benefits expense for fiscal year 2019 is \$27,916 less (\$65,459).

Table A-4

Georgetown Divide Public Utility District
 Estimated Depreciation of ALT Assets: Replacement Cost Method

Asset Description	Year Acquired	Original Cost	Inflator	Replacement Cost	Life	Annual Depreciation	Age	Remaining Life	Accumulated Depreciation	Net Book Value
CDS Plant										
CDS Collection System	1985	\$49,000	2.67	\$130,889	25	\$5,236	34	0	\$130,889	\$0
CDS Collection System	1985	\$90,000	2.67	\$240,409	35	\$6,869	34	1	\$233,540	\$6,869
CDS Pump Station	1985	\$13,500	2.67	\$36,061	35	\$1,030	34	1	\$35,031	\$1,030
CDS Disposal Field	1985	\$20,250	2.67	\$54,092	35	\$1,545	34	1	\$52,547	\$1,545
CDS Collection System	1985	\$235,000	2.67	\$627,735	40	\$15,693	34	6	\$533,575	\$94,160
Pump Station Generator & Switch	1990	\$19,740	2.37	\$46,747	20	\$2,337	29	0	\$46,747	\$0
CDS Pump Control Panel	1995	\$6,190	2.05	\$12,678	5	\$2,536	24	0	\$12,678	\$0
CDS Pump Expansion & Rehab	1999	\$207,528	1.85	\$383,810	40	\$9,595	20	20	\$191,905	\$191,905
CDS Flowmeter	2002	\$7,319	1.71	\$12,544	10	\$1,254	17	0	\$12,544	\$0
CDS Upgrade Serial Distribution	2003	\$12,999	1.67	\$21,760	20	\$1,088	16	4	\$17,408	\$4,352
Monitoring Wells	2004	\$48,300	1.57	\$76,070	20	\$3,804	15	5	\$57,053	\$19,018
CDS Line Expansion	2006	\$20,147	1.45	\$29,127	10	\$2,913	13	0	\$29,127	\$0
Tuff Shed Building	2006	\$7,639	1.45	\$11,044	10	\$1,104	13	0	\$11,044	\$0
Total Septic Collection Plant		\$737,612		\$1,682,967		\$55,005			\$1,364,087	\$318,879
Transportation Equipment and Other										
2019 Dodge Ram 1500 4WD	2019	\$23,826	1.00	\$23,826	5	\$4,765	0	5	\$0	\$23,826
Myron L Ultrameter II 6PFCE	2019	\$1,192	1.00	\$1,192	5	\$238	0	5	\$0	\$1,192
Total Transportation Equipment and Other		\$25,018		\$25,018		\$5,004			\$0	\$25,018
Total CDS Septic Collection System		\$762,630		\$1,707,985		\$60,008			\$1,364,087	\$343,897
Total for Assets Not Fully Depreciated		\$652,595		\$1,464,956		\$44,628			\$1,121,059	\$343,897

Source: GDPUD Detail of Fixed Assets and Depreciation, ENR CCI History, and HEC.

rep depr

Table A-5
Georgetown Divide PUD - ALT Wastewater Rates Study
ALT Zone Payroll Records

Time Period	All Zone	CDS	Non-CDS		Total
			Conventional	Non Conventional [1]	
2018 to date	\$47,775	\$8,303	\$8,437	\$8,110	
Percent Payroll Costs by System		33%	34%	33%	100%

Source: Analysis of Payroll Summary generated from MOM Accounting Software on October 22, 2018. pay

[1] Mound, sand filter, pressure dose system, or alternative technology.

Table A-6

Georgetown Divide PUD - ALT Wastewater Rates Study
Year 2 Bi-Monthly Rates Calculation

Fiscal Year
2021

Item	Total Cost	Allocation	CDS Disposal System			Non-CDS System		
			All Lots	Developed Lots	Total	All Lots	Developed Lots	Total
Operating Expenses		To All Lots			Table 8 26%			Table 8 74%
Salaries & Part-time	\$122,215	100%	\$32,371	\$0	\$32,371	\$89,844	\$0	\$89,844
Benefits	\$76,069	100%	\$20,148	\$0	\$20,148	\$55,920	\$0	\$55,920
Insurance	\$9,792	100%	\$2,594	\$0	\$2,594	\$7,199	\$0	\$7,199
Supplies & Durable Goods	\$24,449	0%	\$0	\$6,476	\$6,476	\$0	\$17,973	\$17,973
Professional/Outside Services	\$21,557	100%	\$5,710	\$0	\$5,710	\$15,847	\$0	\$15,847
Fleet Operations & Maint.	\$8,531	0%	\$0	\$2,260	\$2,260	\$0	\$6,272	\$6,272
Regulatory Req's & Fees	\$36,828	100%	\$9,755	\$0	\$9,755	\$27,074	\$0	\$27,074
All Other	\$2,201	0%	\$0	\$583	\$583	\$0	\$1,618	\$1,618
Utilities (CDS only)	\$13,289	0%	\$0	\$13,289	\$13,289	\$0	\$0	\$0
Total Operating Expenses	\$314,933		\$70,578	\$22,608	\$93,186	\$195,884	\$25,863	\$221,747
<i>Percentage of Operating Costs</i>			22%	7%	30%	62%	8%	70%
System Rehab. & Impr. (CDS only)	\$45,000	By % of op. exp.	\$34,083	\$10,917	\$45,000	\$0	\$0	\$0
Total Allocated Costs	\$359,933		\$104,661	\$33,525	\$138,186	\$195,884	\$25,863	\$221,747
Credits								
Interest Income	(\$4,500)	By % of op. exp.	(\$1,008)	(\$323)	(\$1,332)	(\$2,799)	(\$370)	(\$3,168)
Design and Escrow Fees	(\$31,000)	By % of total lots	(\$3,921)	\$0	(\$3,921)	(\$27,079)	\$0	(\$27,079)
Total Costs	\$324,433		\$99,731	\$33,202	\$132,933	\$166,006	\$25,494	\$191,500
<i>Percentage of Total Costs</i>			31%	10%	41%	51%	8%	59%
Use of Reserves	(\$155,000)	By % of total costs	(\$47,647)	(\$15,862)	(\$63,510)	(\$79,310)	(\$12,180)	(\$91,490)
Revenue Requirement	\$169,433		\$52,084	\$17,339	\$69,423	\$86,695	\$13,314	\$100,009
Number of Lots			139	139		960	893	
Revenue Requirement per Lot			\$374.70	\$124.74		\$90.31	\$14.91	
Bi-Monthly Charge per Developed Lot			\$62.45	\$20.79	\$83.24	\$15.05	\$2.48	\$17.54
Bi-Monthly Charge per Undeveloped Lot			\$62.45		\$62.45	\$15.05		\$15.05
<i>Undeveloped Charge as % of Developed Lot Charge</i>					75%			86%

Source: GDPUD Fiscal Year 2018-2019 Budget, Adopted June 21, 2018, as modified, available at www.gd-pud.org/district-budget.

yr2 calc

Table A-7

Georgetown Divide PUD - ALT Wastewater Rates Study
Year 3 Bi-Monthly Rates Calculation

Fiscal Year
2022

Item	Total Cost	Allocation	CDS Disposal System			Non-CDS System		
			All Lots	Developed Lots	Total	All Lots	Developed Lots	Total
Operating Expenses		To All Lots			Table 8 26%			Table 8 74%
Salaries & Part-time	\$131,748	100%	\$34,896	\$0	\$34,896	\$96,852	\$0	\$96,852
Benefits	\$82,002	100%	\$21,720	\$0	\$21,720	\$60,282	\$0	\$60,282
Insurance	\$9,988	100%	\$2,646	\$0	\$2,646	\$7,343	\$0	\$7,343
Supplies & Durable Goods	\$24,938	0%	\$0	\$6,605	\$6,605	\$0	\$18,333	\$18,333
Professional/Outside Services	\$21,988	100%	\$5,824	\$0	\$5,824	\$16,164	\$0	\$16,164
Fleet Operations & Maint.	\$8,702	0%	\$0	\$2,305	\$2,305	\$0	\$6,397	\$6,397
Regulatory Req's & Fees	\$38,302	100%	\$10,145	\$0	\$10,145	\$28,157	\$0	\$28,157
All Other	\$2,246	0%	\$0	\$595	\$595	\$0	\$1,651	\$1,651
Utilities (CDS only)	\$13,887	0%	\$0	\$13,887	\$13,887	\$0	\$0	\$0
Total Operating Expenses	\$333,801		\$75,231	\$23,392	\$98,623	\$208,797	\$26,381	\$235,178
<i>Percentage of Operating Costs</i>			23%	7%	30%	63%	8%	70%
System Rehab. & Impr. (CDS only)	\$45,000	By % of op. exp.	\$34,327	\$10,673	\$45,000	\$0	\$0	\$0
Total Allocated Costs	\$378,801		\$109,557	\$34,065	\$143,623	\$208,797	\$26,381	\$235,178
Credits								
Interest Income	(\$3,600)	By % of op. exp.	(\$811)	(\$252)	(\$1,064)	(\$2,252)	(\$285)	(\$2,536)
Design and Escrow Fees	(\$31,000)	By % of total lots	(\$3,921)	\$0	(\$3,921)	(\$27,079)	\$0	(\$27,079)
Total Costs	\$344,201		\$104,825	\$33,813	\$138,638	\$179,466	\$26,096	\$205,563
<i>Percentage of Total Costs</i>			30%	10%	40%	52%	8%	60%
Use of Reserves	(\$155,000)	By % of total costs	(\$47,205)	(\$15,227)	(\$62,431)	(\$80,817)	(\$11,752)	(\$92,569)
Revenue Requirement	\$189,201		\$57,620	\$18,586	\$76,207	\$98,649	\$14,345	\$112,994
Number of Lots			139	139		960	897	
Revenue Requirement per Lot			\$414.54	\$133.72		\$102.76	\$15.99	
Bi-Monthly Charge per Developed Lot			\$69.09	\$22.29	\$91.38	\$17.13	\$2.67	\$19.79
Bi-Monthly Charge per Undeveloped Lot			\$69.09		\$69.09	\$17.13		\$17.13
<i>Undeveloped Charge as % of Developed Lot Charge</i>					76%			87%

Source: GDPUD Fiscal Year 2018-2019 Budget, Adopted June 21, 2018, as modified, available at www.gd-pud.org/district-budget.

yr3 calc

Table A-8

Georgetown Divide PUD - ALT Wastewater Rates Study
Year 4 Bi-Monthly Rates Calculation

Fiscal Year
2023

Item	Total Cost	Allocation	CDS Disposal System			Non-CDS System		
			All Lots	Developed Lots	Total	All Lots	Developed Lots	Total
Operating Expenses		To All Lots			Table 8 26%			Table 8 74%
Salaries & Part-time	\$142,024	100%	\$37,618	\$0	\$37,618	\$104,406	\$0	\$104,406
Benefits	\$88,398	100%	\$23,414	\$0	\$23,414	\$64,984	\$0	\$64,984
Insurance	\$10,188	100%	\$2,698	\$0	\$2,698	\$7,489	\$0	\$7,489
Supplies & Durable Goods	\$25,437	0%	\$0	\$6,738	\$6,738	\$0	\$18,700	\$18,700
Professional/Outside Services	\$22,428	100%	\$5,941	\$0	\$5,941	\$16,487	\$0	\$16,487
Fleet Operations & Maint.	\$8,876	0%	\$0	\$2,351	\$2,351	\$0	\$6,525	\$6,525
Regulatory Req's & Fees	\$39,834	100%	\$10,551	\$0	\$10,551	\$29,283	\$0	\$29,283
All Other	\$2,290	0%	\$0	\$607	\$607	\$0	\$1,684	\$1,684
Utilities (CDS only)	\$14,512	0%	\$0	\$14,512	\$14,512	\$0	\$0	\$0
Total Operating Expenses	\$353,988		\$80,222	\$24,207	\$104,429	\$222,650	\$26,908	\$249,559
<i>Percentage of Operating Costs</i>			23%	7%	30%	63%	8%	70%
System Rehab. & Impr. (CDS only)	\$45,000	By % of op. exp.	\$34,569	\$10,431	\$45,000	\$0	\$0	\$0
Total Allocated Costs	\$398,988		\$114,791	\$34,638	\$149,429	\$222,650	\$26,908	\$249,559
Credits								
Interest Income	(\$3,000)	By % of op. exp.	(\$680)	(\$205)	(\$885)	(\$1,887)	(\$228)	(\$2,115)
Design and Escrow Fees	(\$31,000)	By % of total lots	(\$3,921)	\$0	(\$3,921)	(\$27,079)	\$0	(\$27,079)
Total Costs	\$364,988		\$110,190	\$34,433	\$144,623	\$193,684	\$26,680	\$220,364
<i>Percentage of Total Costs</i>			30%	9%	40%	53%	7%	60%
Use of Reserves	(\$155,000)	By % of total costs	(\$46,795)	(\$14,623)	(\$61,417)	(\$82,252)	(\$11,330)	(\$93,583)
Revenue Requirement	\$209,988		\$63,395	\$19,810	\$83,206	\$111,432	\$15,350	\$126,782
Number of Lots			139	139		960	901	
Revenue Requirement per Lot			\$456.08	\$142.52		\$116.07	\$17.04	
Bi-Monthly Charge per Developed Lot			\$76.01	\$23.75	\$99.77	\$19.35	\$2.84	\$22.19
Bi-Monthly Charge per Undeveloped Lot			\$76.01		\$76.01	\$19.35		\$19.35
<i>Undeveloped Charge as % of Developed Lot Charge</i>					76%			87%

Source: GDPUD Fiscal Year 2018-2019 Budget, Adopted June 21, 2018, as modified, available at www.gd-pud.org/district-budget.

yr4 calc

Table A-9

Georgetown Divide PUD - ALT Wastewater Rates Study
Year 5 Bi-Monthly Rates Calculation

Fiscal Year
2024

Item	Total Cost	Allocation	CDS Disposal System			Non-CDS System		
			All Lots	Developed Lots	Total	All Lots	Developed Lots	Total
Operating Expenses		To All Lots			Table 8 26%			Table 8 74%
Salaries & Part-time	\$153,102	100%	\$40,552	\$0	\$40,552	\$112,550	\$0	\$112,550
Benefits	\$95,293	100%	\$25,240	\$0	\$25,240	\$70,053	\$0	\$70,053
Insurance	\$10,392	100%	\$2,752	\$0	\$2,752	\$7,639	\$0	\$7,639
Supplies & Durable Goods	\$25,946	0%	\$0	\$6,872	\$6,872	\$0	\$19,074	\$19,074
Professional/Outside Services	\$22,877	100%	\$6,059	\$0	\$6,059	\$16,817	\$0	\$16,817
Fleet Operations & Maint.	\$9,053	0%	\$0	\$2,398	\$2,398	\$0	\$6,655	\$6,655
Regulatory Req's & Fees	\$41,427	100%	\$10,973	\$0	\$10,973	\$30,454	\$0	\$30,454
All Other	\$2,336	0%	\$0	\$619	\$619	\$0	\$1,717	\$1,717
Utilities (CDS only)	\$15,165	0%	\$0	\$15,165	\$15,165	\$0	\$0	\$0
Total Operating Expenses	\$375,591		\$85,577	\$25,054	\$110,631	\$237,514	\$27,446	\$264,960
<i>Percentage of Operating Costs</i>			23%	7%	29%	63%	7%	71%
System Rehab. & Impr. (CDS only)	\$45,000	By % of op. exp.	\$34,809	\$10,191	\$45,000	\$0	\$0	\$0
Total Allocated Costs	\$420,591		\$120,386	\$35,245	\$155,631	\$237,514	\$27,446	\$264,960
Credits								
Interest Income	(\$2,400)	By % of op. exp.	(\$547)	(\$160)	(\$707)	(\$1,518)	(\$175)	(\$1,693)
Design and Escrow Fees	(\$31,000)	By % of total lots	(\$3,921)	\$0	(\$3,921)	(\$27,079)	\$0	(\$27,079)
Total Costs	\$387,191		\$115,919	\$35,085	\$151,003	\$208,917	\$27,271	\$236,188
<i>Percentage of Total Costs</i>			30%	9%	39%	54%	7%	61%
Use of Reserves	(\$155,000)	By % of total costs	(\$46,404)	(\$14,045)	(\$60,450)	(\$83,633)	(\$10,917)	(\$94,550)
Revenue Requirement	\$232,191		\$69,514	\$21,040	\$90,554	\$125,283	\$16,354	\$141,637
Number of Lots			139	139		960	905	
Revenue Requirement per Lot			\$500.10	\$151.36		\$130.50	\$18.07	
Bi-Monthly Charge per Developed Lot			\$83.35	\$25.23	\$108.58	\$21.75	\$3.01	\$24.76
Bi-Monthly Charge per Undeveloped Lot			\$83.35		\$83.35	\$21.75		\$21.75
<i>Undeveloped Charge as % of Developed Lot Charge</i>					77%			88%

Source: GDPUD Fiscal Year 2018-2019 Budget, Adopted June 21, 2018, as modified, available at www.gd-pud.org/district-budget.

yr5 calc

APPENDIX B
INSPECTION FEES SUPPORT TABLES

Table B-1

**Georgetown Divide PUD - ALT Wastewater Rates Study
User Fees Calculation for Escrow and Special Inspections**

User Charge	Minutes	Hours	Hourly Rate	Staff Cost	Markup	Total
	<i>a</i>	<i>b=a/60</i>	[1] <i>c</i>	<i>d=b*c</i>	[2] <i>e</i>	<i>f=d*(1+e)</i>
Escrow Inspections: Report, Follow-up, & Final						
Management	60	1.00	\$72.18	\$72.18		
Office Staff	120	2.00	\$30.36	\$60.72		
Field Inspector	150	2.50	\$36.07	\$90.18		
Initial Escrow Inspections				\$223.08	15%	\$260
Escrow Inspections: Each Additional						
Management	30	0.50	\$72.18	\$36.09		
Office Staff	30	0.50	\$30.36	\$15.18		
Field Inspector	60	1.00	\$36.07	\$36.07		
Each Additional Escrow Inspection				\$87.34	15%	\$100
Special Inspection Request						
Management	30	0.50	\$72.18	\$36.09		
Office Staff	30	0.50	\$30.36	\$15.18		
Field Inspector	60	1.00	\$36.07	\$36.07		
Special Inspection Request				\$87.34	15%	\$100

Source: GDPUD Time Study completed between January 22 and March 8, 2019, historical financial audits, and HEC.

user1

[1] Loaded hourly rate (includes benefits) based on payroll records. See Table B-3.

[2] Markup based on indirect (administrative) costs. See Table B-4.

Table B-2

**Georgetown Divide PUD - ALT Wastewater Rates Study
User Fees Calculation for Design and Inspection Fees**

User Charge	Minutes	Hours	Hourly Rate	Staff Cost	Markup	Total
	<i>a</i>	<i>b=a/60</i>	[1] <i>c</i>	<i>d=b*c</i>	[2] <i>e</i>	<i>f=d*(1+e)</i>
Design Review, Site Analysis, Testing Review, and Inspection Services Fee						
Management	240	4.00	\$72.18	\$288.72		
Office Staff	120	2.00	\$30.36	\$60.72		
Field Inspector	600	10.00	\$36.07	\$360.73		
Design and Inspection Fees: Design by Private Consultant				\$710.16	15%	\$820
Wastewater System Design and Inspection Fee: Community Disposal System						
Management	240	4.00	\$72.18	\$288.72		
Office Staff	120	2.00	\$30.36	\$60.72		
Field Inspector	480	8.00	\$36.07	\$288.58		
Design and Inspection Fees: CDS				\$638.01	15%	\$740

Source: GDPUD Payroll records October 2018, historical financial audits, and HEC.

user2

[1] Loaded hourly rate (includes benefits). See Table B-3.

[2] Markup based on indirect (administrative) costs. See Table B-4.

Table B-3
Georgetown Divide PUD - ALT Wastewater Rates Study
Calculated Loaded Cost per Staff Hour

Staff	Cost per Hour	Benefits [1]	Loaded Cost per Hour
		68%	
Management	\$42.94	\$29.24	\$72.18
Office Staff	\$18.06	\$12.30	\$30.36
Field Inspector	\$21.46	\$14.61	\$36.07

Source: GDPUD 2019 budget, and GDPUD 2018 payroll hourly

[1] From fiscal year 2019 budget.

Table B-4

Georgetown Divide PUD - ALT Wastewater Rates Study
Calculation of User Fees Markup Factor

Expense Category	Total Costs Fiscal Year					5-Year TOTAL	% of Total
	2013	2014	2015	2016	2017		
ALT-Related Administrative Costs (see below)	\$468,650	\$666,574	\$413,144	\$758,924	\$734,791	\$3,042,083	15%
Non-ALT Administrative Costs	\$242,485	\$76,024	\$322,135	\$225,620	\$238,663	\$1,104,927	6%
Customer Service	\$342,093	\$223,879	\$277,601	\$268,062	\$262,614	\$1,374,249	7%
ALT Zone	\$255,142	\$228,387	\$190,637	\$211,666	\$296,263	\$1,182,095	6%
Water System	\$2,514,398	\$2,578,362	\$2,504,008	\$2,972,445	\$2,586,673	\$13,155,886	66%
TOTAL	\$3,822,768	\$3,773,226	\$3,707,525	\$4,436,717	\$4,119,004	\$19,859,240	100%
ALT Related Administrative							
Salaries and Wages	\$198,424	\$205,974	\$189,105	\$258,323	\$271,641	\$1,123,467	37%
CAIPERS	\$52,942	\$23,301	\$33,960	\$123,862	\$83,005	\$317,070	10%
Payroll Taxes	\$18,368	\$21,446	\$15,890	\$19,329	\$20,501	\$95,534	3%
Insurance - H&L	\$2,510	\$8,976	\$17,501	\$26,581	\$25,765	\$81,333	3%
Insurance - Workers Comp	\$2,123	\$1,935	\$1,944	\$5,470	\$1,235	\$12,707	0%
Insurance - district plan				\$13,800		\$13,800	0%
Accounting and Audit	\$8,595	\$8,949	\$13,800			\$31,344	1%
Building Maint. & Repairs	\$21,030					\$21,030	1%
Director Stipends		\$22,181				\$22,181	1%
Insurance - Gen	\$5,727	\$4,709	\$5,096	\$7,935	\$4,882	\$28,349	1%
Legal - Gen	\$52,762	\$68,579		\$79,692	\$103,522	\$304,555	10%
Supplies, rentals & durable goods	\$2,919	\$2,476	\$6,616	\$6,176	\$7,222	\$25,409	1%
Office supplies	\$9,754	\$7,554	\$11,987	\$30,791	\$31,979	\$92,065	3%
Outside services	\$34,606	\$80,890	\$57,222	\$123,259	\$97,291	\$393,268	13%
Retiree benefits		\$154,884				\$154,884	5%
Development & travel	\$1,500	\$2,582			\$8,143	\$12,225	0%
Utilities	\$15,658	\$14,056	\$16,044		\$22,970	\$68,728	2%
Equipment & vehicle maint.		\$12,432	\$11,038	\$23,192	\$2,235	\$48,897	2%
Vehicle operations	\$4,484	\$5,499	\$2,805	\$9,009		\$21,797	1%
Regulatory Reqs and Fees	\$3,731	\$4,163	\$4,431	\$530	\$125	\$12,980	0%
County Election Admin				\$5,600	\$5,491	\$11,091	0%
Memberships	\$15,450					\$15,450	1%
Depreciation	\$18,067	\$15,988	\$13,465		\$17,038	\$64,558	2%
Amortization				\$18,039		\$18,039	1%
Other			\$12,240	\$7,336	\$31,746	\$51,322	2%
Total ALT related Administrative	\$468,650	\$666,574	\$413,144	\$758,924	\$734,791	\$3,042,083	100%
Non-ALT Admin. & Hydro.	\$242,485	\$76,024	\$322,135	\$225,620	\$238,663	\$1,104,927	
Total Administrative Costs	\$711,135	\$742,598	\$735,279	\$984,544	\$973,454	\$4,147,010	

Source: GDPUD financial audits, supplementary section.

markup