Electric, Water, and Wastewater Rate Study
for
Shelter Cove Resort Improvement District #1

DRAFT AS OF JUNE 21, 2019

ALL RESULTS AND RECOMMENDATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE BASED ON FURTHER REVIEW, INPUT FROM THE PROPERTY OWNERS, AND UNTIL APPROVED BY THE BOARD

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Attached following the end of the report:

Report on Wholesale Electric Contracts

Report on Replacement of the Surface Water Plant

Purpose

The purpose of this cost of service rate study is to evaluate each utility enterprise to reset rates such that revenue is adequate for safe and reliable operation into the future, and each customer class provides a revenue contribution proportional to the cost to serve them. The approach to setting rates is outlined below.

The authority for Resort Improvement District #1 (RID) is its resident, publicly elected Board of Directors, whereas investor-owned and privately-owned utilities are regulated by the California Public Utility Commission (CPUC). RID benefits from local governance. Even so, RID must comply with the requirements of California's Proposition 218 when raising water and sewer rates. In general, this means:

- A rate study is conducted to support the revenue needed for operation of the utility.
- Each customer group pays its proportionate share of costs.
- Revenue from rates from each utility is used only for that utility's purposes.
- Customers are notified in writing of the rate increases, the reasons why, that a rate hearing will be held after 45 days, and that they may protest in writing.
- If more than 50 percent of customers (parcel owners) protest, the increase may not happen.

Though electric rates are not subject to the requirements of Proposition 218, they are subject to Proposition 26 requiring customers to be charged fairly for services provided.

Executive Summary

This is the first comprehensive cost of service analysis for RID's electric, water, and sewer utility operations. The result is the organization of large amounts of data associated with the utilities' financial activities, development of revenue and rate models to create equitable rates to customers, and modeling platforms to track costs into the future. Rates are set to favor residential customers using lower to moderate amounts of water and electricity, consistent with principles of resource conservation. Rates for commercial customers are flat to accommodate varied levels of usage with varied levels of business activity.

The electric enterprise received the most attention in this work because the largest amount of revenue is associated with electricity, and because of the relatively high $1.26 rate for usage over 2,000 kWh per month. The result is that electricity tiers are restructured and the highest tier is now proposed by IGS to be much lower at $0.52 per kWh. Electric charges for typical residential usage are essentially flat in the first year, then increase by three percent per year for the next four years.

The existing water tiers and rates are also restructured to more appropriately match residential usage patterns. The commercial water tiers are eliminated to provide a single volumetric rate for commercial water usage. Costs for electricity usage for the water treatment plant was previously absorbed by electric ratepayers and are now assigned to water rates. The most significant expense anticipated by the water enterprise is the replacement or major repair of the surface water treatment plant. As with electricity, water charges for typical residential usage are essentially flat in the first year, then increase by three percent per year for the next four years.

The existing sewer rate structure is retained; however, sewer rates are proposed to increase ten percent per year for the next five years to cover anticipated expenses. Costs for treated water and electricity usage associated with the sewer plant, previously absorbed by electric and water ratepayers, are now incorporated with sewer rates.

The water and sewer enterprise funds receive approximately 50 percent of needed revenue from property-tax related funds. This is very significant because without the property tax revenue, rates would need to double.

Capital Improvement Plans (CIP) over the next five years are developed for all three utilities. These were done working closely with staff members. An outside specialist was used regarding input on the water treatment plant, and his report is included. CIP costs are estimates for rate setting only.

A comprehensive rate table is given in Attachment A including all existing rates and all IGS-proposed rates over the five-year planning period. The resultant monthly utility bill is shown in Attachment B for a median[1] residential electric and water customer during each year, and for a customer that is three times the median. As stated above, combined charges are flat the first year, but then increase. For a median customer, total costs increase at five percent per year after the first year for a total of 22 percent over five years. For a median customer receiving electricity and water only, the proposed increase is three percent per year after the first year for a nine percent total over five years. For a customer at three times the median, the result is 18 percent over five years for combined services, and 12 percent for electricity and water only.

Approach to Setting Rates

This is essentially three rate studies in one report. The process is separate for each enterprise fund and is conducted in the following sequential steps.

1. Audited financials are reviewed to observe history of revenues, expenses, and changing fund balances.

2. Accounting reports are reviewed to bridge between the end of the last audit into the current fiscal year. The budget is reviewed for the current fiscal year and next fiscal year, when available.

3. Capital Improvement Projects (CIP) lists are developed for each enterprise for the next five years, including estimated costs and timing.

4. Operating expense projections are developed for the next five years.

5. Billing data is downloaded for all billing cycles and all customers for the most recent complete fiscal year. Billing data is reconciled to audited financial values accounting reports, as appropriate.

6. Billing data is divided into appropriate customer classes to determine revenue collected from each customer class.

7. Cost of service modeling is done for electricity to assign overall costs to between residential and commercial customer classes. Basic rate models are developed for water and sewer, which have simpler rate structures.

8. Rate models are constructed for each enterprise to achieve the revenues needed for FY19/20 based on the revenue and expense workbooks, including the average CIP amount for each year.

[1] The median value is at the midpoint of the distribution of all billing cycles. Median is used instead of average to eliminate the upward effect caused by a small number of customers using very large amounts water or power.

9. Several rate alternatives are shown for electricity because of the proposed change to the existing $1.26, third-tier rate.

10. Comparisons are shown to other utilities.

11. A comprehensive rate table is developed, showing existing rates compared to future rates over the next five years.

12. All Excel workbooks containing data and modeling are provided to RID for reference and future use by RID.

ELECTRIC RATE STUDY

Existing Electricity Rates

RID's existing electric rate structure has evolved over many years. A cost of service rate study has not been done for electricity, water, or sewer, so this work is timely. The existing electric rate structure consists of the following components:

1. Monthly service charge for residential customers
2. Monthly capital facility charge for all customers
3. Monthly transformer charge for commercial customers
4. Three-tier kWh charge for residential customers
5. Single kWh charge for commercial customers

RID has increased all rates evenly over the years based on an annual consumer price index.[2] Authorized rate increases continue through September 2019; however, the 2019 increase is capped at three percent.[3] The result of ongoing rate increases over the past four years has been that revenue has generally kept up with expenses.

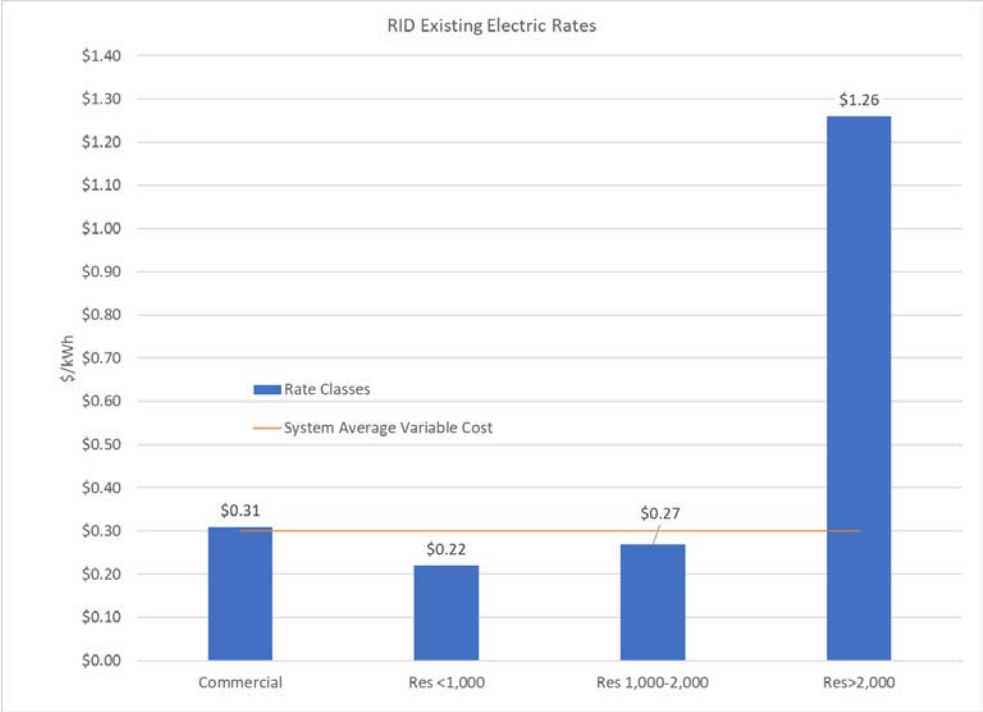
The existing three-tier structure for residential customers includes a relatively high, third-tier cost of $1.26 per kWh. This is illustrated in the bar chart below showing the tiers comparatively. The third-tier rate was reset at $0.60 per kWh in 2004 (increased from $0.29) to cover the cost of a third standby generator rated at 500 kW, and for potential costs of upgrading the PG&E intertie line.[4] The third-tier rate has increased over the years with ongoing electric rate increases.

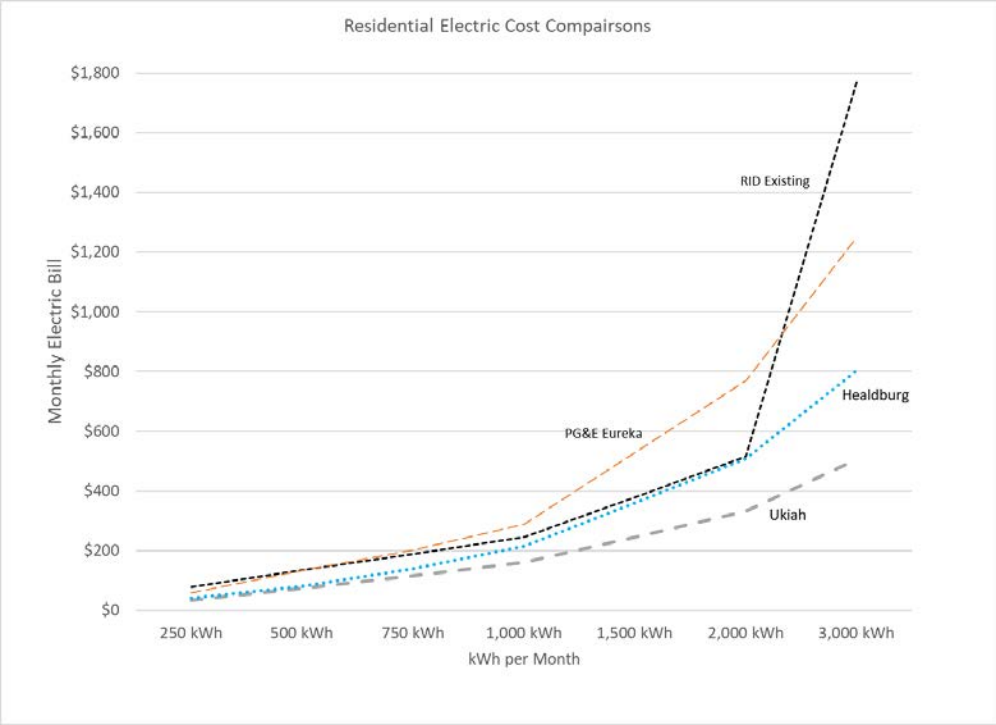
RID's existing commercial rates are higher than PG&E[5] and other municipalities, primarily because RID has less economy of scale. RID has a relatively small customer base compared to infrastructure and skilled personnel needed. For example, RID owns and operates dedicated standby generation facilities to provide continuous service during PG&E power outages. Upon analysis, RID's commercial rates are closely aligned to RID's actual costs to serve its commercial customers. To lower commercial rates would be to shift costs to residential customers. RID's existing residential rates are close to PG&E's up to

[2] Minutes, Resort Improvement District No.1, Regular Board Meeting and Public Hearing, August 20, 2015
[3] ibid. Page 4
[4] Public Hearing Report regarding change of Ordinance #68. Hearing July 15, 2004.
[5] RID's existing commercial rate is $0.3100 per kWh. PG&E's General Service A-1 rate is $0.26693 per kWh (non-time-of- use, summer, effective May 1, 2019)

approximately 1,000 kWh per month usage, but tend to be higher than other municipalities. See the comparison chart for residential electric customers.

RID's historical practice had been not to charge itself for power, so there is no set rate. This means power provided to water, wastewater, and public facilities is billed at zero and absorbed by electric ratepayers. This rate study allocates power costs to the water and wastewater enterprises, which is the majority of RID's internal usage.





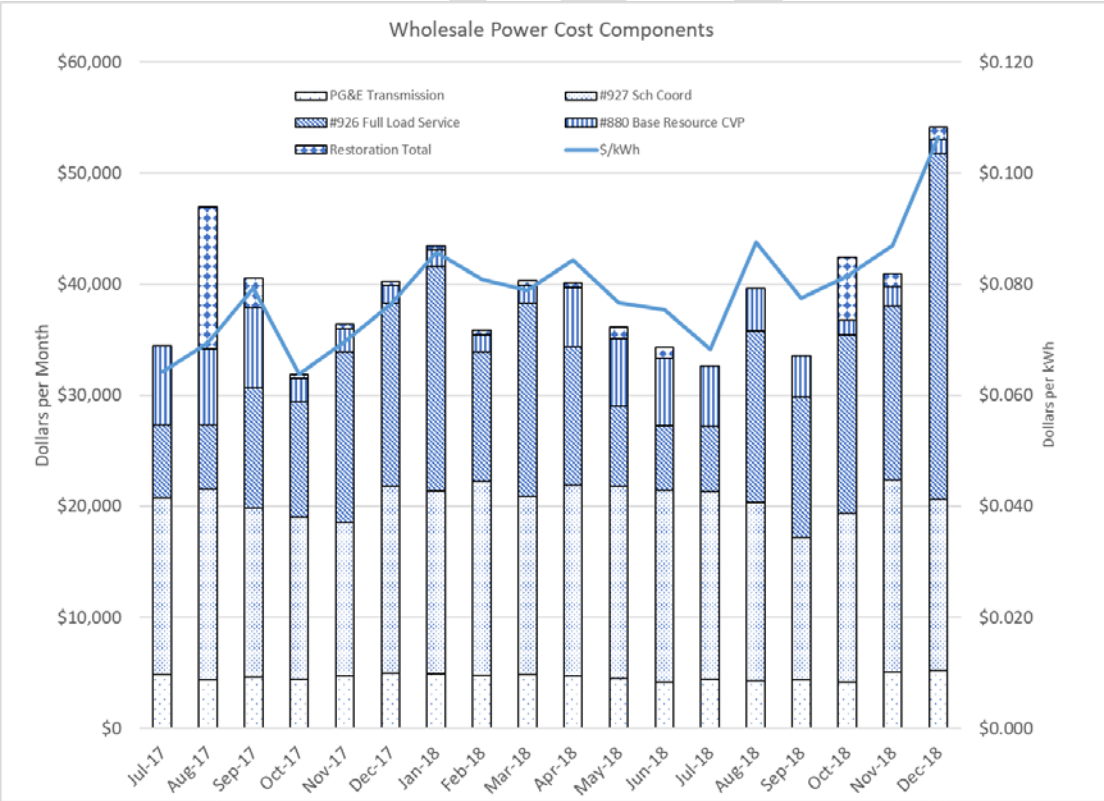
Wholesale Electricity Supply

RID purchases all wholesale power and scheduling services from the Western Area Power Administration (WAPA). In conjunction with this rate study, the existing and past wholesale agreements were catalogued, scanned, placed in a virtual folder that was distributed to RID staff. The agreements presently in effect are:

Contract	Purpose	Term	Comments
05-SNR-00880	Base Resource Power	2005 - 2024	Low cost hydro power
06-SNR-00926	Portfolio Management Services	Amendment 3 ends 12/31/24	For supplemental power
06-SNR-00927	Scheduling Coordinator Services	Amendment 2 ends 9/30/20	For scheduling power

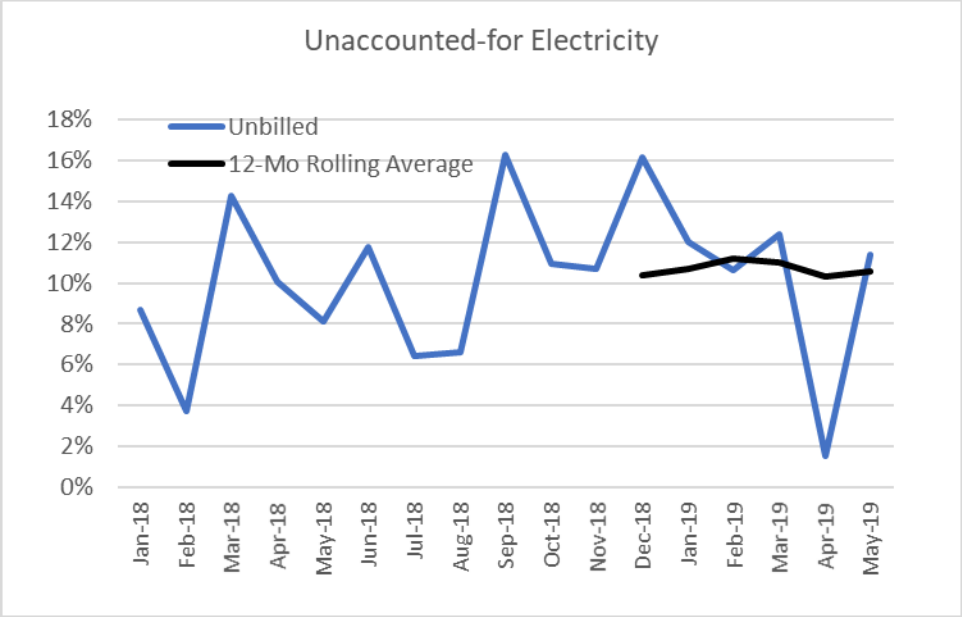
RID also has a contract with PG&E to transmit wholesale power to RID's interconnection with PG&E at Whitethorn Junction. This is needed because RID-purchased wholesale power must travel on PG&E's lines to get to Whitethorn. The existing PG&E contract ends December 1, 2020. The monthly charge is based on the peak kW. The PG&E rate increases annually.

The bar chart below shows the various wholesale cost components up to December 2018. PG&E transmission costs (on the bottom) are relatively small. December was high because of a jump in cost for balancing power. The chart is useful because it illustrates the total cost of wholesale power.



RID's wholesale agreements were reviewed by Dan Griffiths of Cameron-Daniel, P.C. Mr. Griffiths is an attorney specializing in wholesale power agreements. His seven-page report dated March 4, 2019, is attached to the back of this report. Most importantly, as described in his report, is to need to pursue opportunities beginning later this year to renegotiate favorable terms with PG&E and WAPA, and to investigate other sources of wholesale power.

A comparison analysis was conducted in this study to measure the monthly difference between wholesale purchases as measured by PG&E, plus an estimate of generator operation, and the amounts metered by RID to all customers. The result is illustrated below and the data is in Attachment C. The 12-month-rolling average up to May 2019 is 10.6 percent. The monthly value varies because the meter-read cycles are different than the PG&E calendar-month cycles. RID staff are aware of the amounts unbilled and are taking steps to toward billing more power delivered.



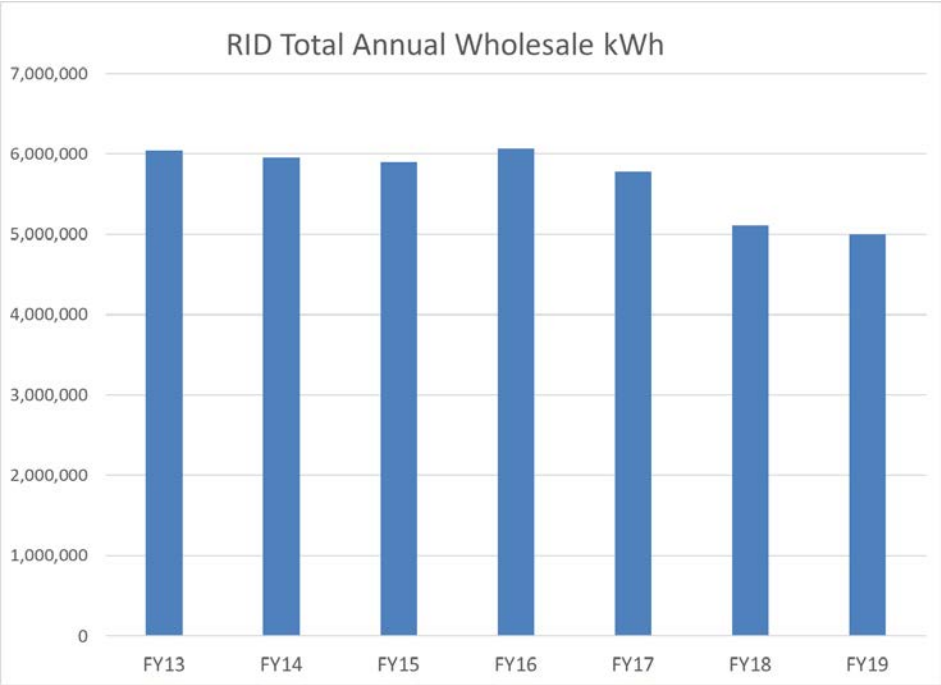
Electric Sales History and Customer Allocation

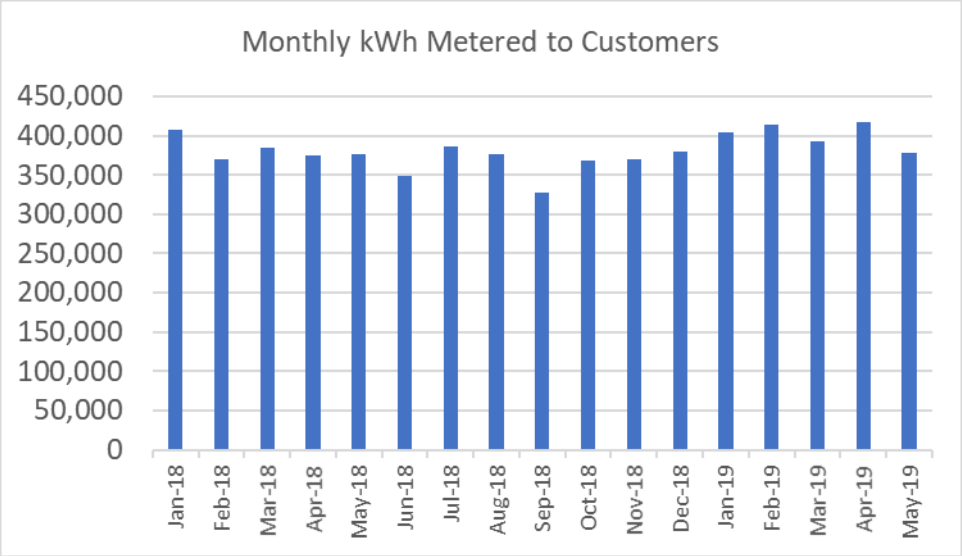
Electricity sales have been falling since 2016; however, sales show an upward tendency since January 2019. This is illustrated in the two bar charts below. Shelter Cove has experienced very little growth over the past few years and commercial activity has been slow. The pie chart shows that 76 percent of electric sales are residential and only 16 percent commercial. The eight percent for RID is primarily for the pumping potable water and wastewater.

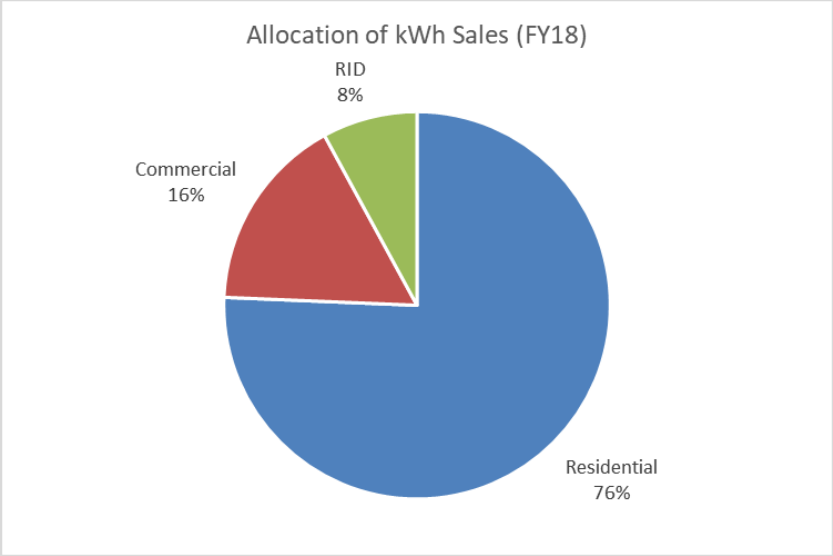
The consumption data was analyzed for trends of peak usage. The peak day each month is dependent on residential activity, such as New Year's Day, and other holidays. Essentially, the monthly peak occurs depending on the extent to which activity is occurring, not weather. Peak usage can be in the morning, evening, or mid-day, again depending on activity. This is important for cost of service purposes. If one customer group was driving the monthly peak, then that customer group could be assigned more of the peaking costs for wholesale power. In the case of Shelter Cove, there is no peak influence from any group.

The balance of kWh sales and kWh revenue was also analyzed for residential versus commercial customers. Commercial customers are presently paying close to the system average variable cost, as already explained under existing rates. This is preserved for the reset rates.

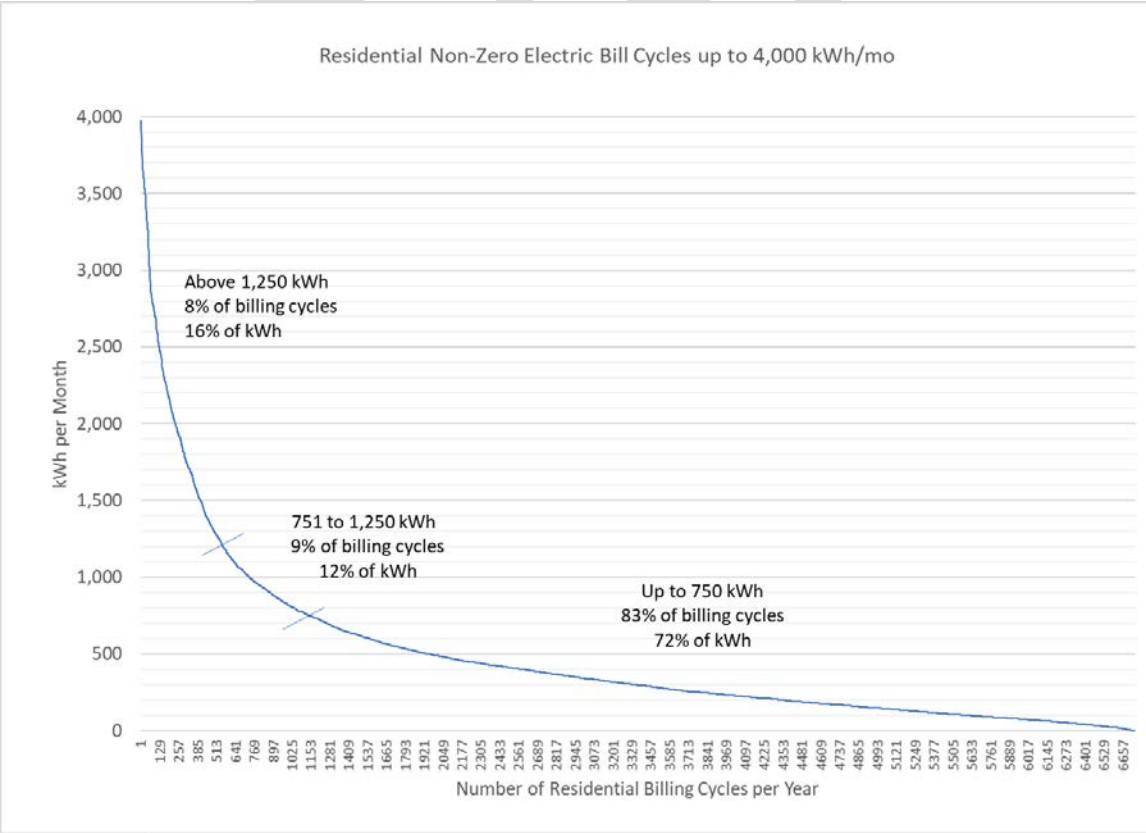
As there is no revenue from RID's internal usage for water and sewer, proposed internal rates are added in this study.







For this study, all billing cycles were evaluated in detail to determine the distribution of monthly usage for the purpose of reasonably resetting rates. Using FY17/18 as a base year, IGS analyzed all billing cycles to determine the distribution of both kWh and dollars billed. The results show a sharp turn upward near the 1,250-kWh mark in the chart below. This chart illustrates that 92 percent of the bills issued are for less than 1,250 kWh, not including bills with zero usage. (The slash marks in the graph show the proposed, new tiers, to be discussed in this report.) Over 700 billing cycles are zero, representing that many residences are vacation homes not using power during many billing cycles.



Regarding the existing 2,000 kWh per month threshold, statistically for FY17/18, there were just four percent of billing cycles and 7.5 percent of kWh billed above 2,000 kWh. However, at $1.26 per kWh, this accounts for approximately $326,000 or about 22 percent of revenue. This data can be seen in the top of Attachment F.

Electric Enterprise Capital Improvement Projects (CIP)

The need for CIP projects was evaluated for each of the enterprise funds. CIP projects include long-term infrastructure repair or new infrastructure. From an accounting standpoint, these projects are depreciated over their life, typically ten years or more, rather than expensed operationally in one year. Meetings were conducted with staff members and field visits made to see facilities. Costs shown for projects are estimates for rate setting purposes only; however, the intent is that identified projects must be completed within the next five years. Identified projects contribute to system safety and reliability. Rates are set to cover costs for projects without depleting fund balances to below the collective minimum six-month reserve requirement of approximately $1.5 million.

For the electric CIP list shown in Attachment D, spending for FY18/19 is included to show significant expenditures totaling over $500,000 compared to planned spending over the next five years. One exception is that costs for replacement of 15 poles per year at $50,000 per year are included in Materials, Supplies and Services, as this is a recurring requirement that must be covered with ongoing revenue. The resulting five-year average for electric CIP is $107,000 per year. This is shown at the bottom of the revenue and expense table.

Electricity Revenue, Expense, Fund Balance History and Projections

A table showing revenue, expense and fund balances is provided for each enterprise fund. For electricity, see Attachment E. Historical numbers are linked to audited financial statements. Accounting reports are used for past periods not yet audited. The FY19/20 values are aligned with RID's FY19/20 budget. Projected expenses are based on historical spending rates and significant input from RID staff. Projected expenses are increased in future years based on varying inflation factors shown on the right side of each table.

Regarding accounting for fund cash balances, tax revenue is held with the county and revenue from utility billing is held in other RID bank accounts. Essentially all RID cash is accounted in the Electric, Water, and Sewer Enterprise accounts. RID has a policy to maintain reserves adequate to cover six months of operation, estimated at $1.5 million. The result of fund cash balance projections in the study is that the combined cash fund balance of the three enterprise funds always exceeds $1.5 million, and therefore meets the requirement. Fund balances should be revisited following FY18/19 audit. Spending of tax revenue should be monitored closely to assure funds are used as intended based on tax category.

Specific to the electric enterprise, here are highlights from the revenue and expense table.

1. Revenue has declined from decreasing kWh sales, even with the annual inflation increases.
2. Water and Sewer revenue is added beginning FY19/20 and is allocated as a new expense in those enterprise funds. This is a new contribution of $113,000 in FY19/20.
3. Operating expenses generally follow past trends, except $50,000 per year for pole replacement is added to Materials, Supplies and Services beginning FY18/19. Allocated Administrative Costs are reset beginning FY19/20.

4. Future operating expenses are forecasted to increase according to the inflation factors on the right.
5. The property tax contribution of $8,000 per year is small compared to Water and Sewer.
6. Annual CIP is shown at the $132,000 average.
7. The cash balance decreases significantly by over $500,000 in FY18/19 from extensive CIP.
8. The cash balance decreases an additional $290,000 over five years.
9. Revenue is increased three percent per year over the five-year planning period.

Electric Rate Alternatives

Several rate alternatives are shown in this study in comparison to the existing rate structure, all based on the projected need for $1,535,000 of revenue from rates in FY19/20.[6]

Overall assumptions and determinations are:

1. Baseline modeling used FY17/18 kWh sales of 4,461,000 kWh.
2. The monthly Service Charge and Capital Facility Charge are combined.
3. Monthly fixed charges are increased in proportion to the kWh components after the first year.
4. The third-tier residential rate that is presently $1.26 per kWh is reduced.
5. The result of reducing the $1.26 rate below $1.00 is that an additional 175,000 kWh per year will be sold. This is a five percent increase in sales to the residential sector.
6. The electric rate for RID internal use (water/sewer) is the same as the commercial rate.
7. Residential customers receive the full benefit of lesser-cost WAPA base-resource power.
8. The commercial rate is essentially the average cost of power, after subtracting monthly fixed revenue.

Calculations for rate alternatives and expected revenue results are shown in Attachment F. The top shows the distribution of kWh's sold and the count of billing cycles based on FY17/18 billing data, followed by eight different alternatives. The following table provides a summary description of each alternative.

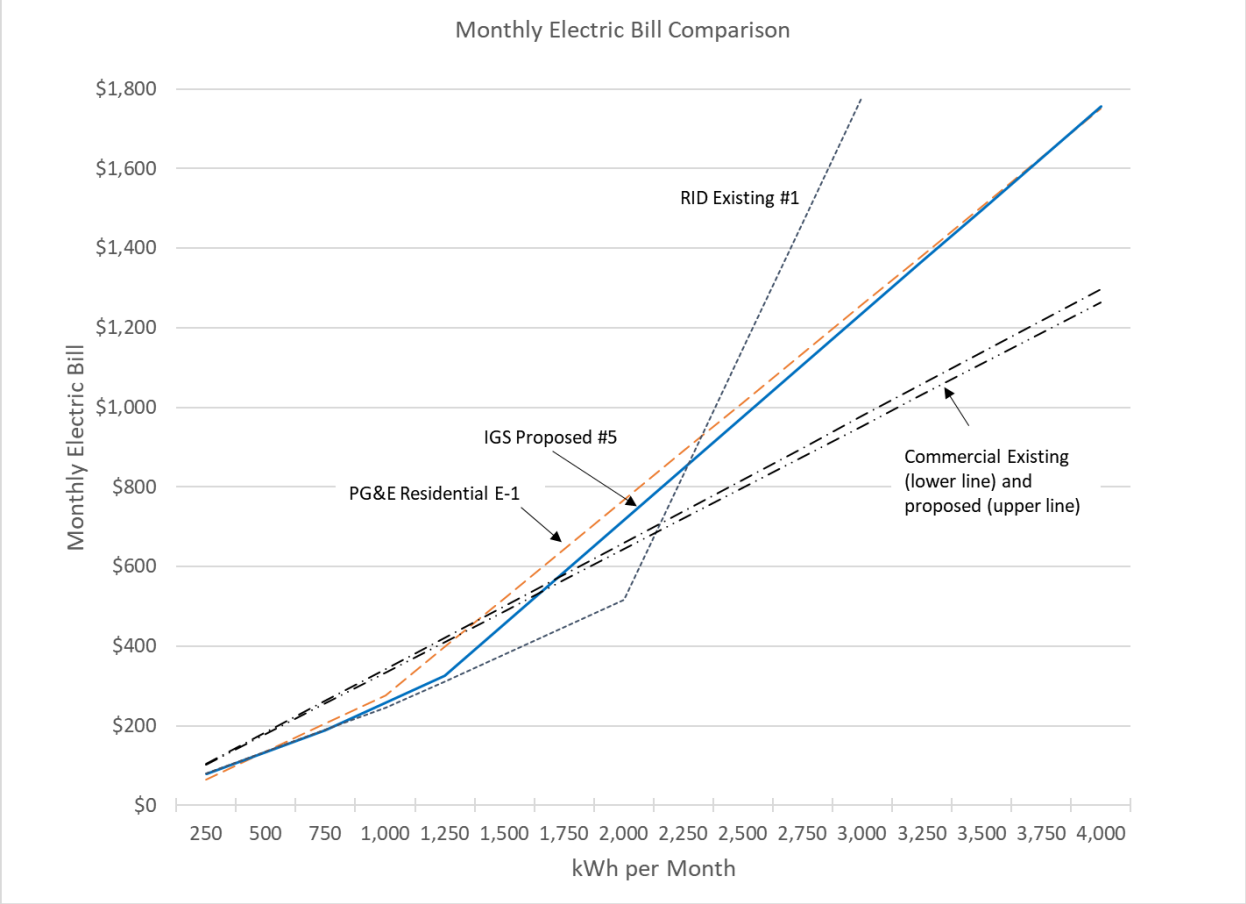
Rate Alternatives	Pros	Cons
#1) Existing Rate Structure	• Ratepayers are familiar with existing rate structure • Other ratepayers benefit from 1.26 per kWh rate • Results agree with projected revenue from accounting reports	• Cost of Service does not support $1.26 per kWh • Electric customers are paying for water and sewer plant electricity • Existing tiers do not match typical customer consumption profiles • Without 9/1/19 CPI increase, revenue is estimated to be $80,000 short of expenses
#2) Existing Rate Structure with assumed 2.5% CPI increase September 1, 2019 pursuant to 9/20/15 Board Meeting	• Items above, and • Rate increase has already been approved by Board in 2015 • Rate increase is needed	• Items above, except CPI revenue increase is still projected to be $43,000 short of expenses

[6] Revenue from rates equal to $1,350,000 + $72,000 + $113,000 = $1,535,000. See Operating Revenues for FY19/20.

Rate Alternatives	Pros	Cons
#3) Existing Rates with CPI and shift $113.000 rate burden to Water/Sewer	• Items above, and • Exceeds projected expenses by $70,000	• Items above • Shifts cost to Sewer and Water Enterprises not recovered in rates
#4) Presented by IGS at April 24th Community Workshop	• Lowers $1.26 toward reasonable cost of service of $0.48 per kWh • Resets tiers toward customer consumption profiles • Preserves lower-cost power for low usage residential • Anticipates increased usage of 175,000 kWh per year from lowering $1.26 rate • Commercial rate increased from $0.3100 to $0.3177 per kWh	• Three percent of customer bills issued - those using more than 1,500 kWh per month and less than 2,000 kWh per month will see a cost increase • Revenue shortfall of $79,000 per year (after further analysis following meeting)
#5) Revised recommendation by IGS based on feedback following community workshop and further analysis	• **Favors year-around residents** • **Rewards residential conservation** • **Roughly follows residential rate curve of PG&E** • **Exceeds revenue requirement by $15,000 per year**	• **Tier 3 increased from $0.48 (Workshop) to $0.52 per kWh** • **Tier 3 lowered from 1,500 (Workshop) to 1,250 kWh** • **Tier 2 lowered from 1,000 (Workshop) to 750 kWh**
#6) Keep existing tiers and rates, except set Tier 3 rate at $0.75 per kWh. Includes five percent increase in sales and revenue from Water/Sewer.	• Ratepayers are familiar with existing rate structure • $0.75 per kWh is a rate that has been discussed generally • Exceeds revenue requirement by $26,000 per year	• Existing tiers do not match typical customer consumption profiles • $0.75 rate is arbitrary
#7) Keep existing tiers and rates, except set Tier 3 at a value that meets revenue requirement. Does NOT include five percent increase, but does include revenue from Water/Sewer.	• Ratepayers are familiar with existing rate structure • Resultant rate is $1.09 per kWh • Meets revenue requirement	• Existing tiers do not match typical customer consumption profiles
#8) Adjustment to IGS-recommended #5	• **Freezes commercial rate first year at $0.31 per kWh** • **Lowers T1 residential to $0.20** • **Lowers T2 residential to $0.26 and extends to 750 kWh**	• **Tier 3 increased to $0.65 per kWh**

The following graph shows a comparison of the existing monthly charges compared to proposed charges (IGS #5) for both residential and commercial. The chart illustrates the higher costs associated with the $1.26 per kWh rate above 2,000 kWh. In the proposed rates, residential charges stay close to existing RID charges but then increase at 1,250 kWh. Beyond 1,250 kWh, residential rates roughly follow PG&E. Residential charges drop below existing RID charges near 2,250 kWh because of the lowered RID Tier 3 rate. Data for the graph is shown in Attachment G.

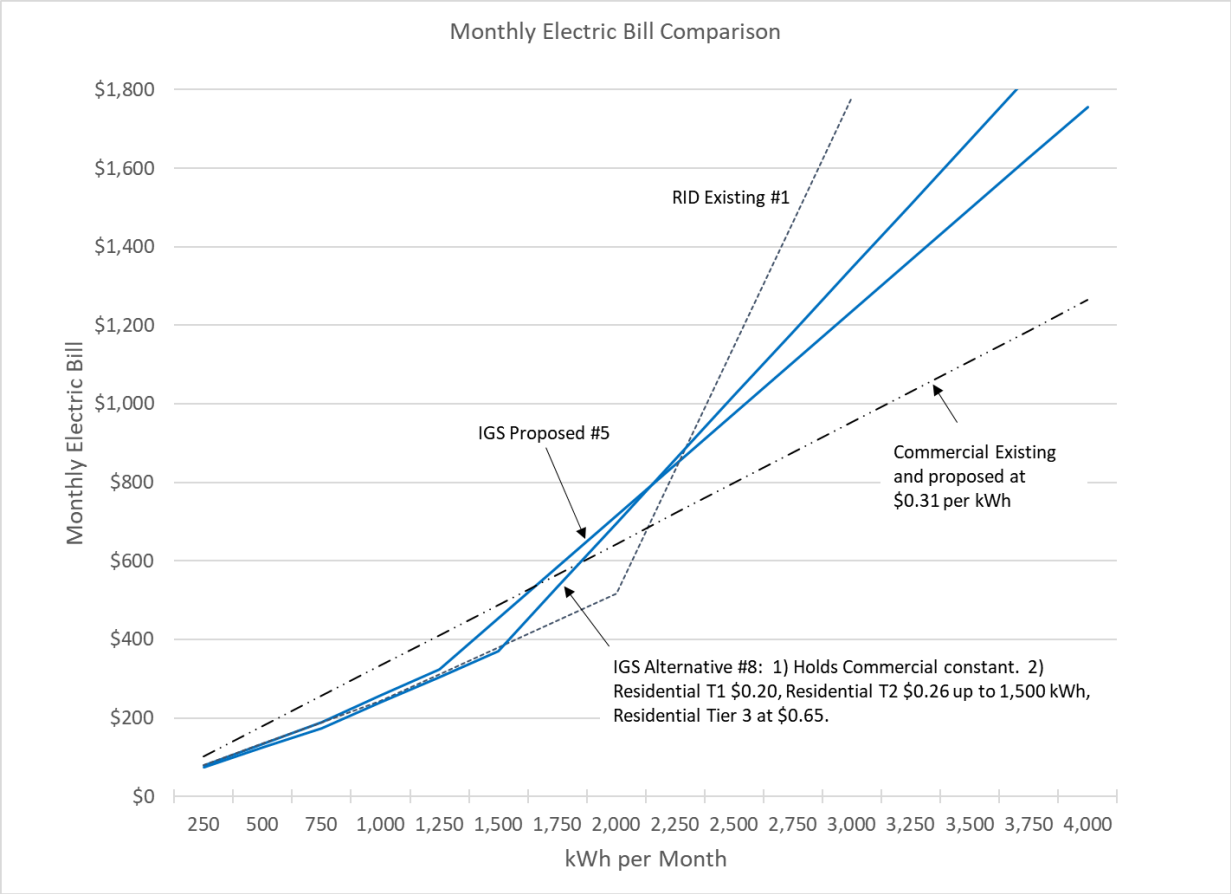
In the usage range of 1,250 to 2,000 kWh, residential customers will pay charges up to 38 percent higher than existing, peaking at $199 per month additional for 2,000 kWh. These customers are already using relatively high levels of power. Statistically, this is 4.4 percent of total billing cycles and 8.8 percent of kWh's billed. From the FY18/19 billing data, this is 255 billing cycles for 96 customers; however, to the extent these same customers use higher amounts of power in other billing cycles, they will save money compared to the existing rate structure, specifically, customers using 2,250 kWh and above will pay lower charges than existing.[7]



The commercial rate structure stays the same with a single rate, increasing only incrementally the first year. Commercial charges drop below the proposed residential charges at 1,750 kWh. The proposed rates recognize that energy usage for commercial customers varies based on the size and type of the business operation. Therefore, one uniform rate is used for commercial.

[7] Revenue is lost by reducing the existing $1.26 rate to $0.52. The amount lost for sales above 2,000 kwh is $116,000, calculated from the data Attachment F. The amount gained by lowering the third tier to 1,250 is $75,000, offsetting 65 percent of the loss.

Alternative #8 is a modification of #5, and illustrated below. Alternative #8 leaves more rate burden with high use residential, reducing the third-tier rate to only $0.65, rather than $0.52 in Alternative #5. The resultant first-year benefit is allocated as follows compared to Alternative #5. The commercial rate is held constant at $0.31 per kWh. The residential first tier is lowered from $0.22 to $0.20. The residential second tier is lowered from $0.27 to $0.26, and expanded from 500 to 750 kWh. This is illustrated in the graph below.



Attachment A shows existing and proposed electric rates (with other rates) over the five-year planning period.

Electric Rate Study Conclusions

The result of this electric rate study is to reset the residential tiers and rates to more closely match electric consumption patterns. The third-tier rate of $1.26 is reduced substantially to $0.52 and the third tier is expanded to include lower consumption levels to 1,250 kWh. The reset rates honor cost of service while benefiting residential customers that use moderate amounts of power. Cost allocation is balanced between residential, commercial, and now include RID sewer and water accounts. Alternatives are provided enabling the board of directors to observe different rate scenarios. Capital Improvement Projects are identified over the next five years to contribute to system safety and reliability. Planned three percent revenue increases provide adequate revenue over the five-year planning period. Finally, the systematic approach provides a foundation to update rates in the future

WATER RATE STUDY

Existing Water Rates

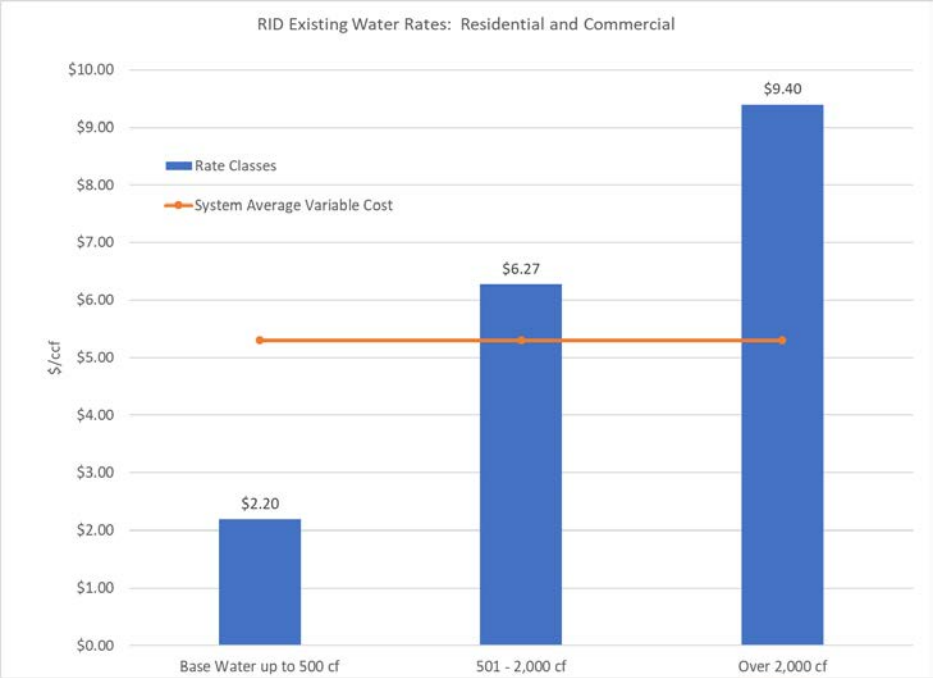
RID's existing water rate structure is the same for residential and commercial, as follows.

1. Monthly Service Charge
2. Fixed fee for water consumption up to 500 cubic feet (cf) per month
3. Two tiers for increasing usage

The bar chart below illustrates the existing rates, and they are shown in detail in Attachment A. The base tier includes 500 cf for $10.98.[8] Customers are charged the base tier if they use at least one cubic foot of water. If water consumption is zero, they are not charged the base tier. Rates increase for customers as consumption increases, the intent of which is to support water conservation by rewarding customers using water wisely.

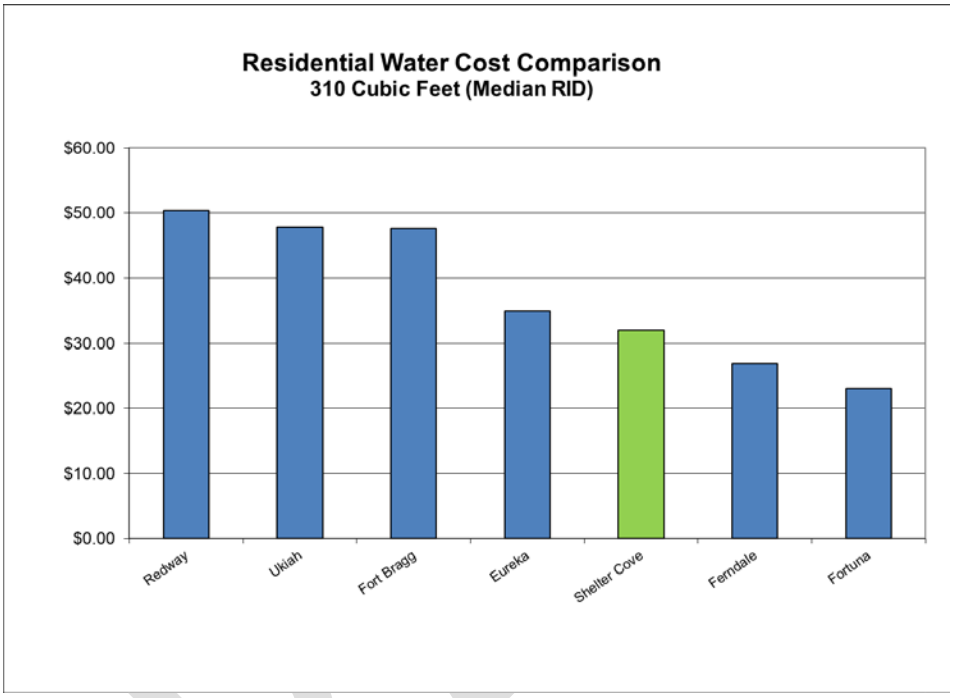
Commercial customers pay the same tiered rates as residential customers. This is unfavorable to larger commercial customers using water wisely for their businesses because they are paying the highest tiered rate to encourage conservation when they are already doing it.

As with electricity, RID's historical practice had been not to charge itself for water, so there is no set rate. This means water provided to the wastewater plant and public facilities is billed at zero and absorbed by water ratepayers. This rate study allocates water costs to the wastewater plant, which is the majority of RID's internal usage.



[8] For comparison purposes in the bar chart, the rate of $2.20 per cf is: $10.98 / 500 cf x 100 cf/ccf = $2.20 per ccf.

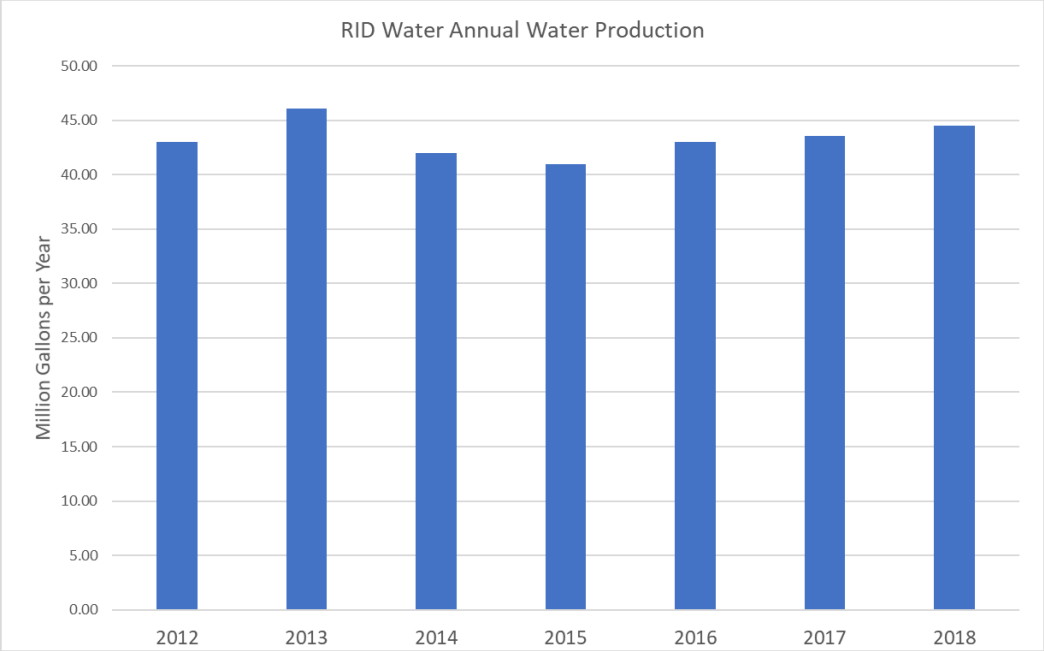
RID's residential water charges are on the low end compared to neighboring communities. The comparison below uses 310 cf per month for comparison, based on the median non-zero RID customer. RID customers pay for 500 cf in the base charge even though many customers use less than 500 cf each billing cycle.[9] RID's rates are supported approximately fifty percent by property tax revenue. Without that contribution, RID's rates would be the highest of neighboring communities.

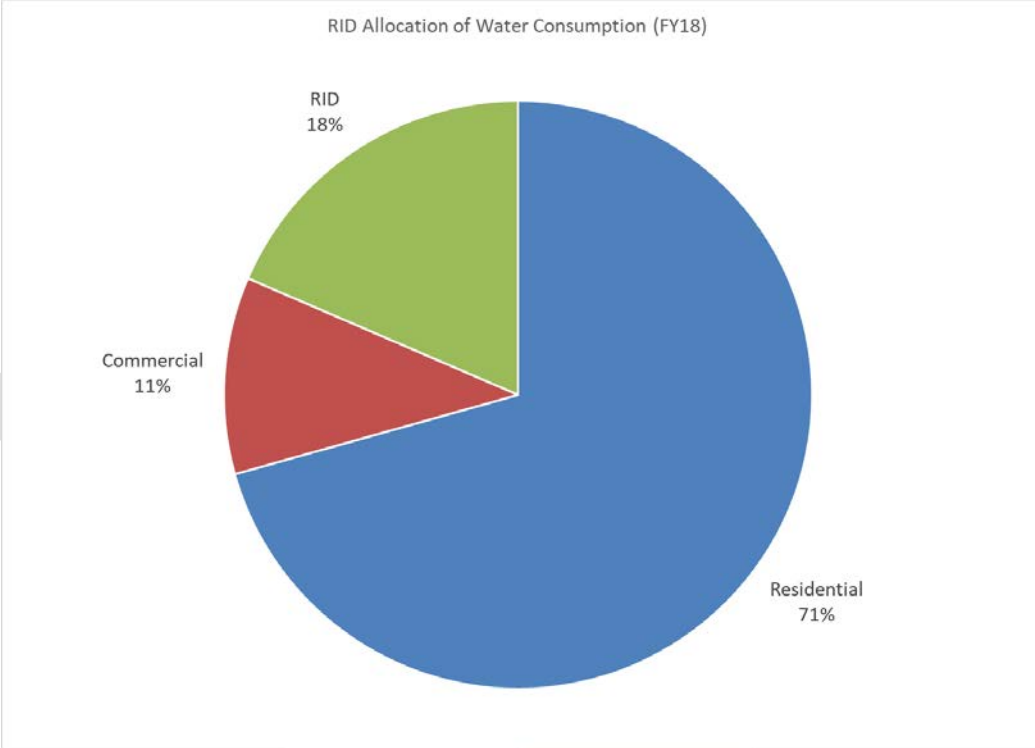


Water Sales History and Customer Allocation

Water production and sales have been increasing slightly over the past few years, unlike electricity sales that have been dropping. Water production data is illustrated in the bar chart below. The pie chart shows that 71 percent of water sales are residential and only 11 percent commercial. Of the 18 percent for RID internal use, 14 percent is to the wastewater plant, three percent is for the water plant, and just one percent is for other. Treated wastewater is used to irrigate the golf course, not potable water.

[9] The proposed base amount is lowered to 250 cf per month. That combined with rate restructuring lowers the cost of water for 250 cf. The result in the comparison chart is that RID moves between Ferndale and Fortuna.

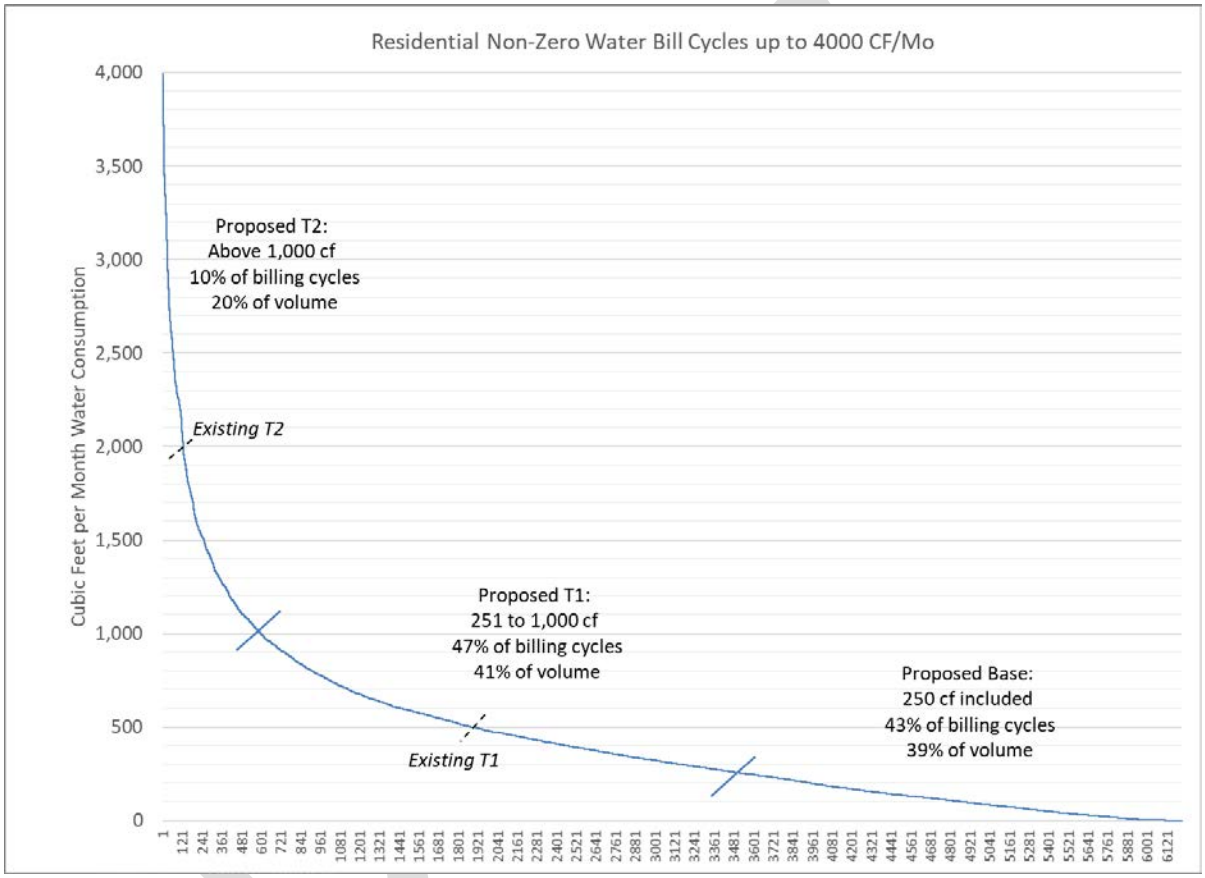




See the top of Attachment H for analysis of billing data from FY17/18. This reveals that residential customers paid an average of $4.76 per ccf and commercial customers paid an average of $6.50 per ccf, both calculated after paying the monthly service charge. These values are the average variable rate for each. The system average variable rate is $4.99 per ccf. This result shows that commercial customers are paying a higher proportional amount for the variable cost for water. However, this may be somewhat skewed because all customers pay for a full 500 cf even if they do not use that much water each month. Residential and commercial rates are realigned in the proposed rates.

As there is no revenue from RID's internal sales or water to the wastewater enterprise, proposed internal rates are added in this study. Though potable water is also used at the water treatment plant, no cost will be assigned because it is the same enterprise.

The graph below shows the distribution of billing cycles for all residential customers. Proposed tiers are indicated on the graph. Regarding the existing tiers, the base amount up to 500 cf per month includes many billing cycles that do not reach that volume of water. The result is that customers pay for water not used. The next existing tier up to 2,000 cf per month includes many billing cycles with excess usage. The graph does not show 43 billing cycles with usage over 4,000 cf up to 33,000 cf. These are excluded to preserve the scaling in the graph.



Water Enterprise Capital Improvement Projects (CIP)

The need for CIP projects was evaluated for each of the enterprise funds. CIP projects include long-term infrastructure repair or new infrastructure. From an accounting standpoint, these projects are depreciated over their life, typically ten years or more, rather than expensed operationally in one year. Meetings were conducted with staff members and field visits made to see facilities. Costs shown for projects are estimates for rate setting purposes only; however, the intent is that identified projects must be completed within the next five years. Identified projects contribute to system safety and reliability. Rates are set to cover costs for projects without depleting fund balances below the collective minimum six-month reserve requirement of approximately $1.5 million.

The water CIP list shown in Attachment I. The most significant item for water is the replacement or major rebuild of the surface water treatment plant. The cost used for rate planning is $1,500,000; however, the cost estimated by AM Consulting Engineers for complete replacement is much higher exceeding $4,000,000. The lower number is used for rate planning because grant money may be available, and the engineering estimate appears conservatively high and includes significant contingency. The 26-page report from AM Consulting Engineers, dated March 20, 2019, has been provided separately to RID, and is attached to the back of this report. Other CIP items focus on safety (replace chlorine gas), reliability (replace old equipment), and efficiency (better controls).

The resulting five-year average for electric CIP is $400,000 per year. This is shown at the bottom of the revenue and expense table for water.

Water Revenue, Expense, Fund Balance History and Projections

The table showing revenue, expense and fund balances for water is in Attachment J. Historical numbers are linked to audited financial statements. Accounting reports are used for past periods not yet audited. The FY19/20 values are aligned with RID's FY19/20 budget. Projected expenses are based on historical spending rates and significant input from RID staff. Projected expenses are increased in future years based on varying inflation factors shown on the right side of each table.

Specific to the water enterprise, here are highlights from the revenue and expense table.

1. Revenue has increased gradually with increasing rates and increasing sales.
2. The water enterprise receives significant property tax-related revenue covering approximately 50 percent of operating costs. See Special Assessments and Property Taxes.
3. Operating expenses generally follow past trends except in FY19/20 costs for electricity are introduced, and allocated Administrative Costs are reset.
4. New water revenue from the sewer enterprise allows the overall reduction to commercial and residential in the first year.
5. Added electricity costs to the water enterprise for water treatment and pumping requirements more equitably allocate utility costs to RID water customers.
6. Future operating expenses are forecasted to increase according to the inflation factors on the right.
7. The revenue is set to provide a net income each year of approximately $200,000 before CIP spending.
8. Annual CIP is shown at the $400,000 average.
9. The cash balance at the end of FY18/19 is projected to be large at approximately $1.8 million.

10. The cash balance at the end of FY18/19 has been adjusted downward from the apparent cash balance at the end of FY17/18 to reflect an estimate of operating funds available for use. The amount available will be reviewed again following the FY17/18 financial audit.
11. At the end of five years, the cash balance will be reduced approximately $900,000 from investments in CIP.
12. Revenue is increased three percent per year over the five-year planning period.

Proposed Water Rates

Attachment A shows existing and proposed water rates (with other rates) over the five-year planning period.

Attachment "I" shows the model used to develop water rates. At the top, FY17/18 data is utilized to allocate water usage and payments into the tiers. The numbered sections in Attachment H are:

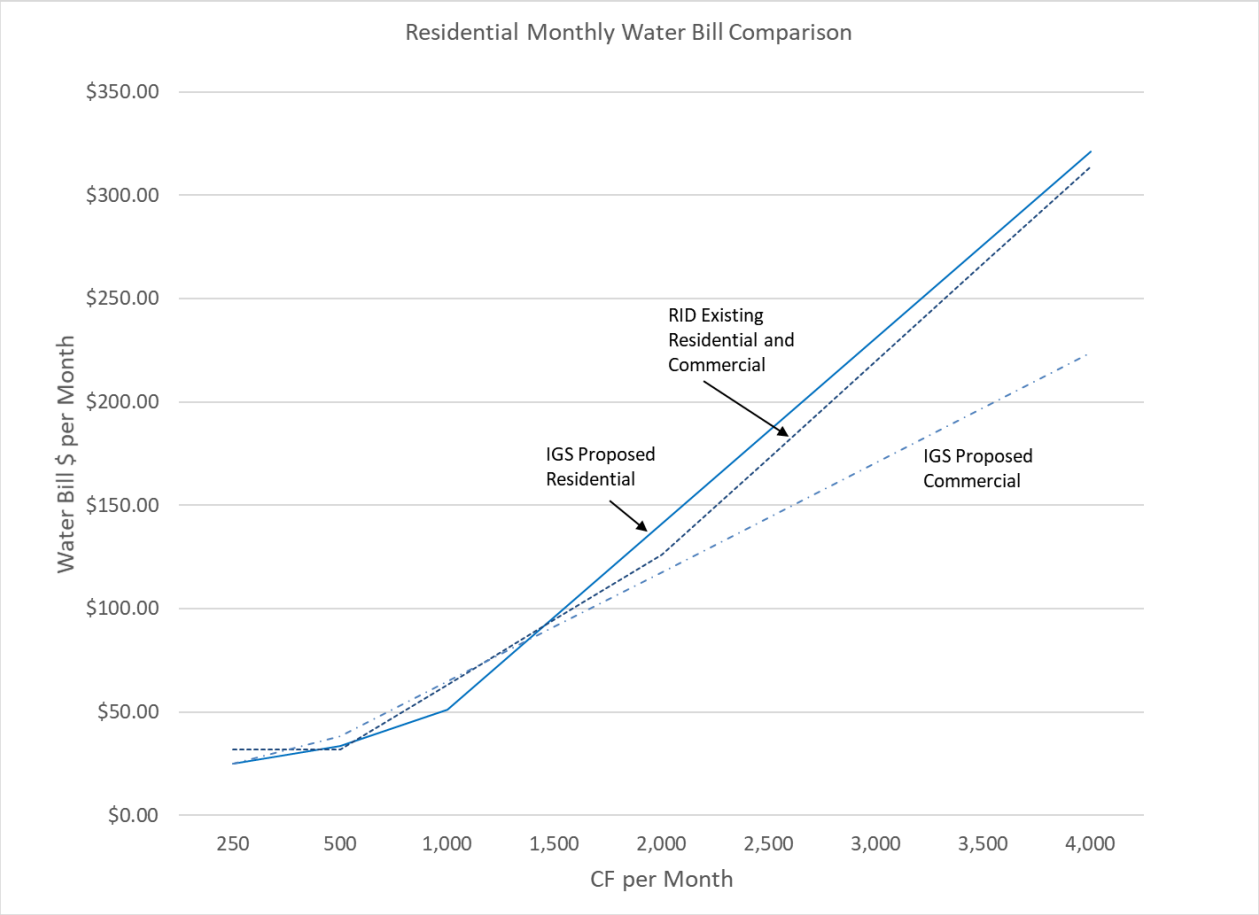
1) Actual FY17/18. This section recreates the FY17/18 revenue of approximately $324,000 to validate the model.[10]
2) Projected revenue for FY18/19, based on the rates presently in effect.
3) Projected revenue for FY19/20, assuming the CPI adjustment is made September 1, 2019.
4) IGS-recommended adjusted tiers and revised rates.

Overall assumptions and determinations are:

1. Baseline modeling used FY17/18 water sales of 4,121,851 cf, which includes water delivered to the wastewater treatment plant but not billed.
2. All cost components are increased by the same percentage after the first year.
3. Commercial and residential customers pay the same amount for the first 250 cf each month.
4. The tiered structure for commercial is replaced with a single rate.
5. The new, single rate for commercial customers is set to be the average of the variable rate paid by residential customers.
6. Cost reallocation results in the commercial customer class paying 24 percent less for water and the residential customer class paying seven percent less for water comparing the projected FY19/20 revenue to FY18/19.
7. Savings to commercial customers will be primarily for volumes above 1,500 cf per month.
8. The residential tiers are reset to more closely align with usage patterns.

The comparison chart that follows shows existing monthly charges from existing rates compared to projected monthly charges from new rates for both residential and commercial. Proposed residential rates cause monthly charges to be slightly less at lower consumption levels and slightly more at higher consumption levels. Proposed commercial rates cause commercial rates to be slightly less for minimum usage, then slightly more, than less above 1,500 cf per month. Data for the graph below, including monthly cost differences is provided in Attachment K.

[10] Revenue from rates for FY17/18 shown in the revenue and expense table is higher at approximately $337,000. The difference is raw billing data used for this analysis versus accounting reports that include adjustments.



Water Rate Study Conclusions

The biggest adjustment for water rates is to convert the commercial rate structure from multiple tiers to just one tier and rate. For residential customers, tiers and rates are adjusted to more closely follow usage patterns. Allocating cost burden to the sewer enterprise allows a decrease to cost recovery from the residential class, and a significant cost decrease to the commercial class as a result of commercial paying recalculated rates. Individual customers may pay more or pay less depending on monthly usage volumes. The biggest expense for the water enterprise during the five-year planning period will be repairing or replacing the surface water plant.

WASTEWATER (SEWER) RATE STUDY

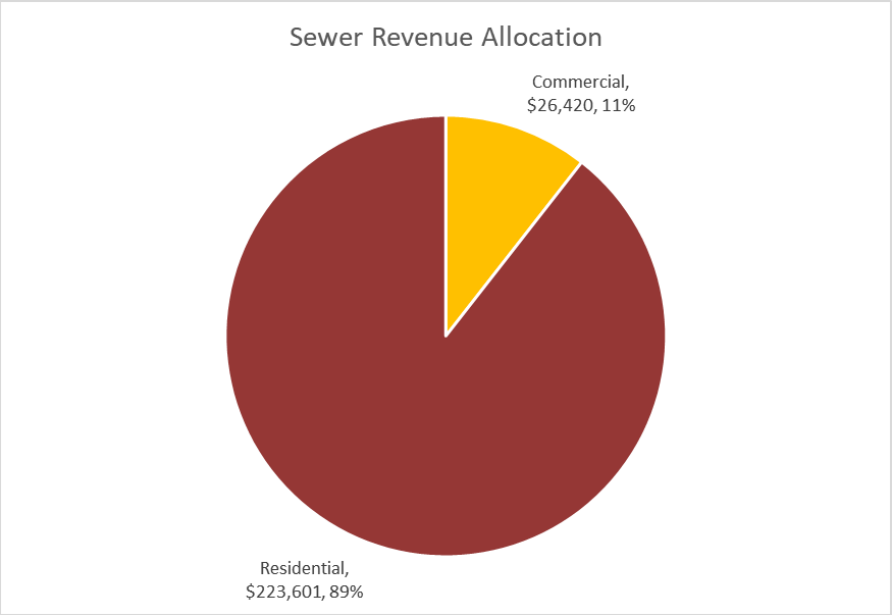
Existing Sewer Rates and Customer Allocation

RID's wastewater collection system is limited to customers in the lower area of the development. While there are approximately 632 water accounts, there are only 500 sewer accounts.[11] As a result, RID's sewer rate structure is simple. It includes a base rate for all customers, then an incremental rate leveraged on a typical household called "Residential Unit Equivalent" (RUE)[12]. The two existing monthly components are:

Base:	$40.79
RUE:	$18.20

The RUE is applied to businesses with discharge greater than a typical household. The range used in RID's existing rates is multiples of one RUE up to 21 RUEs. The RUE is less than the base unit because the base unit, in concept, includes billing and administrative charges that do not need to be charged twice to the same customer.[13] Cost allocation between the residential and the small commercial group appears to be fair based on commercial customers with larger discharge being assigned RUEs in proportion to discharge level.

As with electricity and water, a majority of sewer service is to residential customers. Regarding sewer revenue, 89 percent is from residential and 11 percent is from commercial.

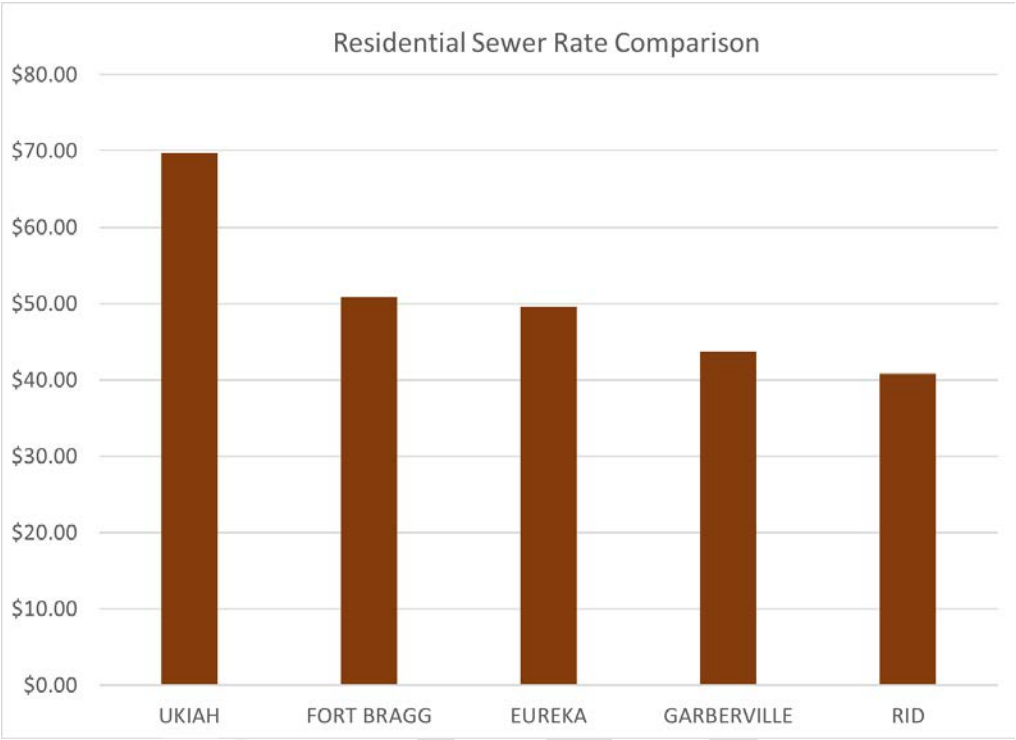


[11] Based on active accounts from the January 2019 billing data.

[12] Residential Unit Equivalent (RUE): The equivalent single-Family residential unit is defined in fixture units according to the Uniform Plumbing Code (UPC). The Uniform Plumbing Code establishes seventeen (17) total fixture units for a typical single-family residence. For purposes of the Administrative Rate Schedule, a single-family residence shall be presumed to be one RUE. (RID Ordinance No. 69, 10/19/17)

[13] The calculated value of the RUE was not evaluated in the study because the existing value appears reasonable and the application of the RUE is limited. A cursory review was conducting to observe the that application of the RUE appears equitable to the 15 customers for which they are used.

As shown in the following bar chart, from a comparative standpoint, RID's residential sewer rates are low in the area. As with water, if not for the property tax contribution, they would be amongst the highest.



Sewer Enterprise Capital Improvement Projects (CIP)

The need for CIP projects was evaluated for each of the enterprise funds. CIP projects include long-term infrastructure repair or new infrastructure. From an accounting standpoint, these projects are depreciated over their life, typically ten years or more, rather than expensed operationally in one year. Meetings were conducted with staff members and field visits made to see facilities. Costs shown for projects are estimates for rate setting purposes only; however, the intent is that identified projects must be completed within the next five years. Identified projects contribute to system safety and reliability. Rates are set to cover costs for projects without depleting fund balances below the collective minimum six-month reserve requirement of approximately $1.5 million.

The sewer CIP list is shown in Attachment L. The Chlorine system replacement for sewer is like the system replacement for water. Both systems presently use compressed gas, which is costly to ship and dangerous in the event of a leak. The list includes improvements in controls and monitoring. Upgrading these systems is critical to allow effective operation with a small staff. Costs for sewer line repair at $75,000 per year are included in Materials, Supplies and Services, as this is a recurring requirement that must be covered with ongoing revenue. As with water and electricity, CIP items focus on safety (replace chlorine gas), reliability (replace old equipment), and efficiency (better controls).

The resulting five-year average for electric CIP is $104,000 per year. This is shown at the bottom of the revenue and expense table for sewer.

Sewer Revenue, Expense, Fund Balance History and Projections

The table showing revenue, expense and fund balances for sewer is in Attachment M. Historical numbers are linked to audited financial statements. Accounting reports are used for past periods not yet audited. The FY19/20 values are aligned with RID's FY19/20 budget. Projected expenses are based on historical spending rates and significant input from RID staff. Projected expenses are increased in future years based on varying inflation factors shown on the right side of each table.

Specific to the sewer enterprise, here are highlights from the revenue and expense table.

1. Revenue from rates (Utility Service Charges) has increased with ongoing consumer price index rate increases.
2. Future revenue from rates is increased 10 percent per year for each of the five years to provide adequate income to cover increasing expenses.
3. The percentage increase in revenue from rates is significant because the contribution from rates is only 50 percent of the overall revenue that is also from, the fairly constant, property tax revenue.
4. The sewer enterprise (like water) receives significant property tax-related revenue covering approximately 50 percent of operating costs. See Special Assessments and Property Taxes.
5. The property tax contribution is increased by a shift of property tax previously allocated to electricity, and other adjustments in favor of sewer.
6. Operating expenses generally follow past trends, except in FY19/20 costs for electricity and water are introduced, and allocated Administrative Costs are reset.
7. Allocation of electricity and water costs to the sewer enterprise for sewer treatment operations more equitably allocates utility costs to all RID customers.
8. Future operating expenses are forecasted to increase according to the inflation factors on the right.
9. Net income each year ranges from $26,000 to $107,000, before CIP spending.
10. Annual CIP is shown at the $104,000 average.
11. The cash balance after CIP over the five-year period ranges from $544,000 to 423,000 at the end.

Proposed Sewer Rates and Conclusion

Attachment A shows existing and proposed sewer rates (with other rates) over the five-year planning period. Attachment M shows the model used to develop sewer rates. The numbered sections are:

1) Actual FY17/18. This section recreates the FY17/18 revenue of approximately $253,000 to validate the model.
2) Projected revenue for FY18/19, based on the rates presently in effect.
3) Projected revenue for FY19/20, assuming the final-approved CPI adjustment is made effective September 1, 2019.
4) IGS recommended rates, increased 10 percent from the existing rates.

Overall assumptions and determinations are:

1. The existing rate structure is fair.
2. Rates are increased the same 10 percent amount each year for five years.

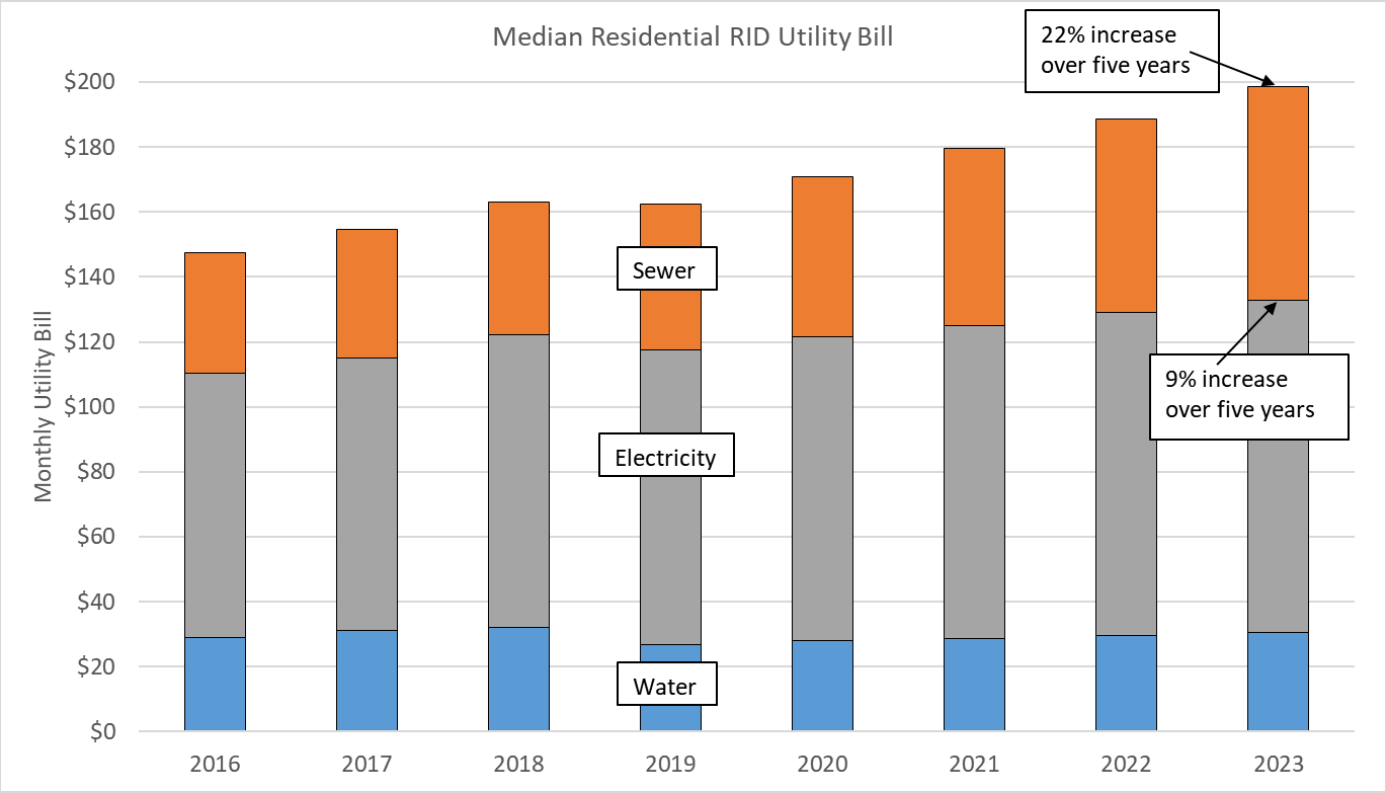
Resetting RID's sewer rates is straightforward, compared to water and power. Though the ten percent increases are substantial compared to the three percent increases in electricity and sewer, the rate at the end of five years will still be in the existing range of the comparison rates, but near the top. Even so, it is likely that the comparison rates will also increase over the next five years.

Attachment A – Existing and Proposed Rates: Electric, Water and Sewer

RID #1 Utility Rate Schedules (Proposed as of 6/7/19)								
Category of Service	Present Rates	Proposed 10/1/19			10/1/2020	10/1/2021	10/1/2022	10/1/2023
ELECTRICITY				**Change:**	**3.0%**	**3.0%**	**3.0%**	**3.0%**
Residential Existing		**Residential Proposed**						
Service Charge ($/Mo)	$14.43	Service Charge	$25.10	2.5%	$25.85	$26.63	$27.43	$28.25
Capital Facility Charge ($/Mo)	$10.06							
Tier 1: 1 - 1,000 kWh ($/kWh)	$0.2200	Tier 1: 1 - 750 kWh	$0.2200	Tiers and Rates	$0.2266	$0.2334	$0.2404	$0.2476
Tier 2: 1,001 - 2,000 kWh ($/kWh)	$0.2700	Tier 2: 751 - 1,250 kWh	$0.2700		$0.2781	$0.2864	$0.2950	$0.3039
Tier 3: Over 2,000 kWh ($/kWh)	$1.2600	Tier 3: Over 1,250 kWh	$0.5200		$0.5356	$0.5517	$0.5682	$0.5853
Commercial Existing		**Commercial Proposed**						
Energy Cost ($/kWh)	$0.3100	Energy Cost	$0.3177	2.5%	$0.3272	$0.3370	$0.3472	$0.3576
Capital Facility Charge ($/Mo)	$10.06	Service Charge	$10.92	8.5%	$11.25	$11.59	$11.94	$12.30
10 kVA Transformer ($/Mo)	$13.83	10 kVA Transformer	$14.18	2.5%	$14.61	$15.05	$15.50	$15.97
15 kVA Transformer ($/Mo)	$20.76	15 kVA Transformer	$21.27	2.5%	$21.91	$22.57	$23.25	$23.95
25 kVA Transformer ($/Mo)	$22.86	25 kVA Transformer	$35.45	55.1%	$36.51	$37.61	$38.74	$39.90
37 kVA Transformer ($/Mo)	$51.69	37 kVA Transformer	$52.47	1.5%	$54.04	$55.66	$57.33	$59.05
50 kVA Transformer ($/Mo)	$69.17	50 kVA Transformer	$70.90	2.5%	$73.03	$75.22	$77.48	$79.80
75 kVA Transformer ($/Mo)	$103.76	75 kVA Transformer	$106.35	2.5%	$109.54	$112.83	$116.21	$119.70
100 kVA Transformer ($/Mo)	$138.33	100 kVA Transformer	$141.80	2.5%	$146.05	$150.43	$154.94	$159.59
150 kVA Transformer ($/Mo)	$207.50	150 kVA Transformer	$212.70	2.5%	$219.08	$225.65	$232.42	$239.39
225 kVA Transformer ($/Mo)	$311.29	225 kVA Transformer	$319.05	2.5%	$328.62	$338.48	$348.63	$359.09
WATER				**Change:**	**3.0%**	**3.0%**	**3.0%**	**3.0%**
Residential Existing		**Residential Proposed**						
Service Charge ($/Mo)	$21.01	Service Charge	$25.00	Tiers and Rates	$25.75	$26.52	$27.32	$28.14
Up to 500 cf ($/Mo)	$10.98	Up to 250 cf						
Tier 1: 501 - 2,000 cf ($/ccf)	$6.27	Tier 1: 251 - 1,000 cf	$3.50		$3.61	$3.72	$3.83	$3.94
Tier 2: Over 2,000 cf ($/ccf)	$9.40	Tier 2: Over 1,000 cf	$9.00		$9.27	$9.55	$9.84	$10.14
Commercial Existing		**Commercial Proposed**						
Service Charge ($/Mo)	$21.01	Service Charge	$25.00	Tiers and Rates	$25.75	$26.52	$26.52	$26.52
Up to 500 cf ($/Mo)	$10.98	Up to 250 cf						
Tier 1: 501 - 2,000 cf ($/ccf)	$6.27	Over 250 cf	$5.30		$5.46	$5.62	$5.79	$5.97
Tier 2: Over 2,000 cf ($/ccf)	$9.40							
SEWER				**Change:**	**10.0%**	**10.0%**	**10.0%**	**10.0%**
Residential Existing		**Residential Proposed**						
Single-Family (per home)	$40.79	Single-Family (per home)	$44.87	10.0%	$49.36	$54.30	$59.73	$65.70
Multi-Family (per unit)	$40.79	Multi-Family (per unit)	$44.87	10.0%	$49.36	$54.30	$59.73	$65.70
Residential Unit Equivalent (RUE)	$18.20	RUE	$20.02	10.0%	$22.02	$24.22	$26.64	$29.30
Commercial Existing		**Commercial Proposed**						
Commercial "A" and "B"	$40.79	All Commercial	$44.87	10.0%	$49.36	$54.30	$59.73	$65.70
Residential Unit Equivalent (RUE)	$18.20	RUE	$20.02	10.0%	$22.02	$24.22	$26.64	$29.30

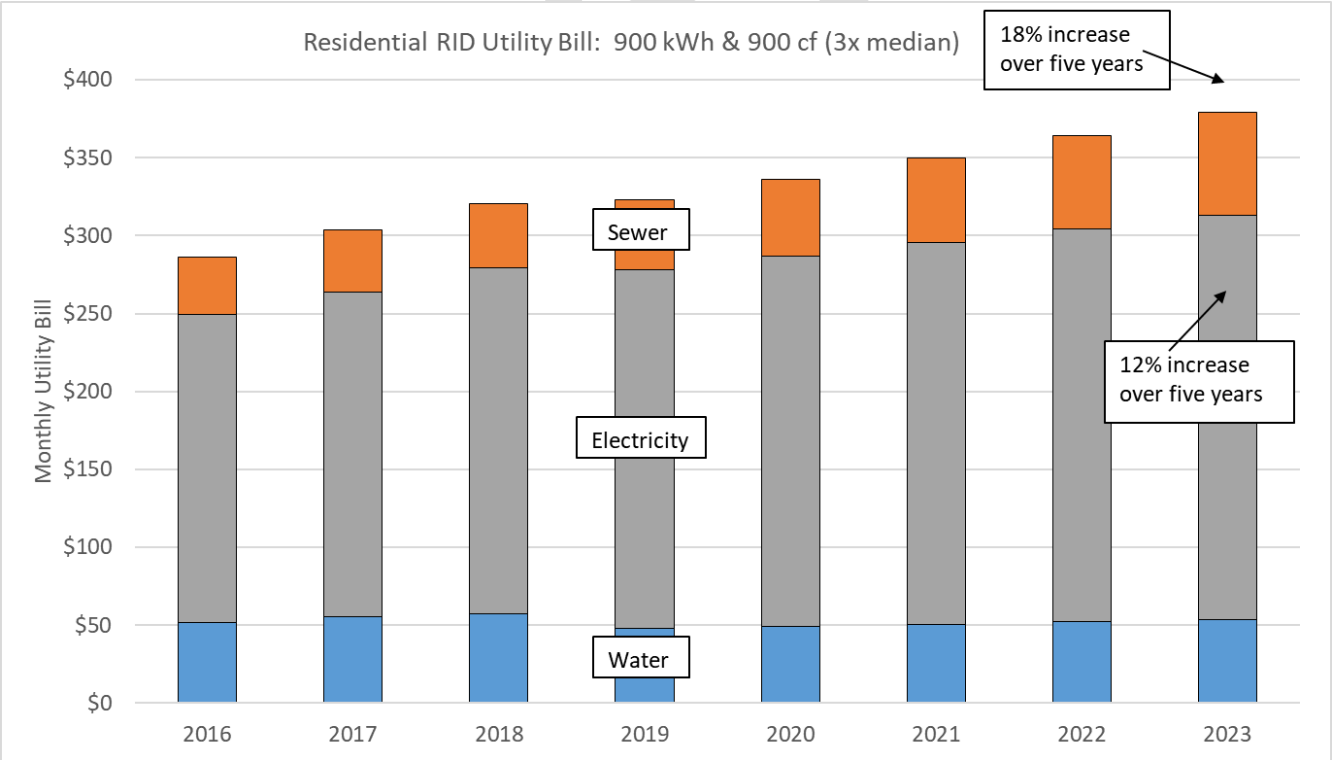
Attachment B – Proposed Median and 3x Median Residential Utility Bill

Projected Median Residential RID Utility Bill								
				1	*2*	*3*	*4*	*5*
	2016	2017	2018	2019	2020	2021	2022	2023
Water	$28.97	$31.06	$31.99	$26.80	$27.92	$28.75	$29.62	$30.50
Sewer	$36.94	$39.60	$40.79	$44.87	$49.36	$54.30	$59.73	$65.70
Electricity	$81.55	$84.10	$90.27	$90.88	$93.60	$96.42	$99.31	$102.29
Total	$147	$155	$163	$163	$171	$179	$189	$198
		5%	5%	0%	5%	5%	5%	5%
						Five-year increase:		22%
Water	$28.97	$31.06	$31.99	$26.80	$27.92	$28.75	$29.62	$30.50
Electricity	$81.55	$84.10	$90.27	$90.88	$93.60	$96.42	$99.31	$102.29
Total	$111	$115	$122	$118	$122	$125	$129	$133
		4%	6%	-4%	3%	3%	3%	3%
						Five-year increase:		9%
Median non-zero Res Water:			310	cf	2,319	gallons		
Median non-zero Res Electricity:			299	kWh				



Attachment B - (continued)

Projected Residential RID Utility Bill: 900 kWh & 900 cf								
				1	*2*	*3*	*4*	*5*
	2016	2017	2018	2019	2020	2021	2022	2023
Water	$52	$55	$57	$48	$49	$51	$52	$54
Sewer	$37	$40	$41	$45	$49	$54	$60	$66
Electricity	$198	$209	$222	$231	$238	$245	$252	$260
Total	$286	$304	$320	$323	$336	$350	$364	$379
		6%	6%	1%	4%	4%	4%	4%
							Five-year increase:	18%
Water	$52	$55	$57	$48	$49	$51	$52	$54
Electricity	$198	$209	$222	$231	$238	$245	$252	$260
Total	$249	$264	$280	$278	$287	$295	$304	$313
		6%	6%	0%	3%	3%	3%	3%
							Five-year increase:	12%
		Water	**900**	cf	6,732	gallons		
		Electricity	**900**	kWh				



Attachment C – Data and Calculations for Unbilled Power

Shelter Cove RID Electricity Imbalance Tracking							
	PG&E Metered	Self Generation	Total kWh	RID Metered	Accounted-For		12-Mo Rolling Average
	kWh			kWh	kWh	%	%
Jan-18	445,568	0	445,568	406,821	38,747	9%	
Feb-18	379,184	5,531	384,715	370,657	14,058	4%	
Mar-18	444,231	3,556	447,787	384,488	63,299	14%	
Apr-18	415,345	677	416,022	374,124	41,898	10%	
May-18	398,907	9,933	408,840	376,547	32,293	8%	
Jun-18	387,069	7,619	394,688	349,071	45,617	12%	
Jul-18	412,671	0	412,671	386,164	26,507	6%	
Aug-18	403,381	0	403,381	376,754	26,627	7%	
Sep-18	376,641	11,401	388,042	326,788	61,254	16%	
Oct-18	400,828	11,401	412,229	368,368	43,861	11%	
Nov-18	399,193	13,658	412,851	370,093	42,758	11%	
Dec-18	449,433	2,596	452,029	379,527	72,502	16%	10.4%
Jan-19	444,301	13,545	457,846	404,388	53,458	12%	10.7%
Feb-19	399,540	56,721	456,261	413,653	42,608	11%	11.2%
Mar-19	444,861	3,556	448,417	393,410	55,007	12%	11.0%
Apr-19	423,302	0	423,302	416,930	6,372	2%	10.3%
May-19	427,093	0	427,093	378,375	48,718	11%	10.6%

Notes:

PG&E Metered from monthly PG&E detail

Self Generations based on 412,000 kWh/mo / 730 hrs/mo x hrs generator time

RID Billed from sum total of "E-Use" column in monthly billing workbook

RID Electric Enterprise Fund

Major Expense and Project Planning

		Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*	
Project or Purpose	**FY18/19**	**FY19/20**	**FY20/21**	**FY21/22**	**FY22/23**	**FY23/24**	**Comments**
Underground Cable Design and Construction	$340,000	-	-	-	-	-	Lower Pacific area
Replace underground tie-line Paradise Ridge	-	-	$150,000	-	-	-	Based on RID staff doing the work using the existing conduit
Fuse Coordination Study	-	-	$100,000	-	-	-	To determine where District can install new fuses with spark arresters to isolate sections of RID Grid
Underground replacement phase #4 S/E side runway	-	-	-	$25,000	-	-	Based on RID staff doing the work
Underground replacement phase #7 Marina area	-	-	-	$50,000	-	-	Based on RID staff doing the work
Hillside Road Reroute and Upgrade	-	-	$35,000	-	-	-	Based on RID staff adding six wood poles to reroute
Alternate underground feed for deli and brewery	-	-	-	$25,000	-	-	To increase service reliability
Pavement Resurfacing	$28,000	-	-	-	-	-	Generator yard
Equipment Storage Building	-	-	-	$33,000			One-third of $100,000 shared between Water/Sewer/Electric
Bucket Truck Replacement	$153,000	-	-	-	-	-	100 percent electric enterprise
Truck replacement (passenger and line)	$13,000	$40,000	$40,000	$40,000	$40,000	$40,000	Based on 10-year life except 20 for line trucks. Covers a portion of 11 vehicles used for electric.
Back-hoe replacement (shared)	-	-	-	-	$40,000	-	One-third of $120,000 shared between Water/Sewer/Electric
Totals	$534,000	$40,000	$325,000	$173,000	$80,000	$40,000	
Five-Year Average, rounded				$132,000			
Note: This CIP schedule assumes $50,000 per year ongoing pole replacement included as an operating expense.							

Attachment E – Electric Revenue, Expense and Cash Balance

RID Electric Enterprise Fund: Revenues, Expenses and Cash Balances

Total of $1,535,000 used for rate setting in Attachment F

	FY15/16 Audited	FY16/17 Audited	FY17/18 Preliminary	FY18/19 Projected	FY19/20 Forecast	FY20/21 Forecast	FY21/22 Forecast	FY22/23 Forecast	FY23/24 Forecast	
Operating Revenues				*Revenue Increases:*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	
Utility Service Charges	$1,585,706	$1,550,350	$1,397,000	*$1,311,000*	*1,350,000*	*1,391,000*	*1,433,000*	*1,476,000*	*1,520,000*	
Capital Facility Charges	18,000	45,000	68,000	*70,000*	*72,000*	*74,000*	*76,000*	*78,000*	*80,000*	
Water and Sewer Ent. Charges	-	-	-	-	*113,000*	*116,000*	*119,000*	*123,000*	*127,000*	
Connection, Extension and Other Fees	80,119	74,006	45,230	*45,000*	*45,000*	*45,000*	*45,000*	*45,000*	*45,000*	
Total Operating Revenue	**1,683,825**	**1,669,356**	**1,510,230**	***1,426,000***	***1,580,000***	***1,626,000***	***1,673,000***	***1,722,000***	***1,772,000***	*Inflation Factor*
Operating Expenses										
Human Resources	571,395	821,534	563,759	*650,000*	*676,000*	*703,000*	*731,100*	*760,300*	*790,700*	*4%*
Materials, Supplies and Services	202,453	165,244	154,201	*235,000*	*240,000*	*244,800*	*249,700*	*254,700*	*259,800*	*2%*
Power	515,670	444,294	465,780	*480,000*	*494,000*	*508,800*	*524,100*	*539,800*	*556,000*	*3%*
Insurance	11,338	11,327	13,580	*14,000*	*14,000*	*14,300*	*14,600*	*14,900*	*15,200*	*2%*
Allocated Administrative Costs	72,157	76,243	75,000	*75,000*	*84,000*	*85,700*	*87,400*	*89,100*	*90,900*	*2%*
Total Operating Expenses	1,373,013	1,518,642	1,272,320	*1,454,000*	*1,508,000*	*1,556,600*	*1,606,900*	*1,658,800*	*1,712,600*	
Net Operating Income	**310,812**	**150,714**	**237,910**	***(28,000)***	***72,000***	***69,400***	***66,100***	***63,200***	***59,400***	
Non-Operating Income (Expense)										
Property Taxes	7,786	37,660	31,871	*8,000*	*8,000*	*8,000*	*8,000*	*8,000*	*8,000*	
Transfers / Grants	184,666	(19,978)	201,890	-	-	-	-	-	-	
Total Non-Operating	192,452	17,682	233,761	*8,000*	*8,000*	*8,000*	*8,000*	*8,000*	*8,000*	
Net Income (Loss)	**503,264**	**168,396**	**471,671**	***(20,000)***	***80,000***	***77,400***	***74,100***	***71,200***	***67,400***	
Capital Improvement Projects	(165,000)	(633,000)	(82,000)	*(534,000)*	*(132,000)*	*(132,000)*	*(132,000)*	*(132,000)*	*(132,000)*	
Cash and Cash Equivalents Year End	1,147,162	839,136	*1,228,807*	*674,807*	*622,807*	*568,207*	*510,307*	*449,507*	*384,907*	

Notes:

Projected Capital Facility Charges based on historical trend

Depreciation is excluded from operating costs

Values in italics are projections

Attachment F – Electric Rate Alternatives and Revenue Results

FY17/18 kWh Distribution	Residential													Commercial	Wtr/Swr	Fixed Revenue	Total	FY19/20 Goal	
From	**0**	**251**	**501**	**751**	**1,001**	**1,251**	**1,501**	**2,001**	**3,001**	**4,001**	**5,001**						**(rounded)**		Over
To	**250**	**500**	**750**	**1,000**	**1,250**	**1,500**	**2,000**	**3,000**	**4,000**	**5,000**	**6,000**	**Above**							**(Under)**
% nonzero cycles	43.7%	27.1%	11.8%	5.9%	3.0%	1.8%	2.5%	2.6%	0.9%	0.4%	0.1%	0.0%	100.0%						
% kWh	39.5%	20.9%	11.3%	7.1%	4.9%	3.7%	5.2%	4.9%	1.9%	0.5%	0.1%	0.0%	100.0%						
kWh	1,332,000	705,000	381,000	239,000	164,000	124,000	176,000	167,000	65,000	18,000	3,000	1,000	3,375,000	731,000	355,000		4,461,000		
1) Existing Rates before changes																			
Rate	$0.2200	$0.2200	$0.2200	$0.2200	$0.2700	$0.2700	$0.2700	$1.2600	$1.2600	$1.2600	$1.2600	$1.2600		$0.3100					
Revenue	$293,040	$155,100	$83,820	$52,580	$44,280	$33,480	$47,520	$210,420	$81,900	$22,680	$3,780	$1,260	$1,029,860	$226,610		$199,000	$1,455,000	**$1,535,000**	($80,000)
2) 9/1/19 Assumed 2.5% CPI Increase from August 2015 Minutes					1.025														
Rate	$0.2255	$0.2255	$0.2255	$0.2255	$0.2768	$0.2768	$0.2768	$1.2915	$1.2915	$1.2915	$1.2915	$1.2915		$0.3177					
Revenue	$300,366	$158,978	$85,916	$53,895	$45,387	$34,317	$48,708	$215,681	$83,948	$23,247	$3,875	$1,292	$1,055,607	$232,239		$203,975	$1,492,000	**$1,535,000**	($43,000)
3) Alternative 2) above, but with shift of cost to Water and Sewer															$0.3177				
													$1,055,607	$232,239	$112,784	$203,975	$1,605,000	**$1,535,000**	$70,000
Increased kWh based on Lowering of the Tier 3, $1.26 rate																			
kWh (from above)	1,332,000	705,000	381,000	239,000	164,000	124,000	176,000	167,000	65,000	18,000	3,000	1,000	3,375,000				Increased Total kWh		
Added kWh	0	0	0	0	0	0		35,000	35,000	35,000	35,000	35,000	175,000	5%					
New Total kWh	1,332,000	705,000	381,000	239,000	164,000	124,000	176,000	202,000	100,000	53,000	38,000	36,000	3,550,000	731,000	355,000		4,636,000		
Rate for Wholesale Power								$0.11	$0.11	$0.11	$0.11	$0.11							
Cost of added Wholesale Power								$3,850	$3,850	$3,850	$3,850	$3,850	$19,250						
4) Recommended by IGS at April 24th Community Workshop, INCLUDES INCREASED USAGE ESTIMATE																			
Rate	$0.20	$0.22	$0.22	$0.22	$0.27	$0.27	$0.48	$0.48	$0.48	$0.48	$0.48	$0.48	$0.2554	$0.3177	$0.3177				
Revenue	$266,400	$155,100	$83,820	$52,580	$44,280	$33,480	$84,480	$93,110	$44,150	$21,590	$14,390	$13,430	$906,810	$232,239	$112,784	$203,975	$1,456,000	**$1,535,000**	($79,000)
5) Revised Recommendation by IGS, shift to Sewer and Water, INCLUDES INCREASED USAGE ESTIMATE																			
Rate	$0.22	$0.22	$0.22	$0.27	$0.27	$0.52	$0.52	$0.52	$0.52	$0.52	$0.52	$0.52	$0.2819	$0.3177	$0.3177				
Revenue	$293,040	$155,100	$83,820	$64,530	$44,280	$64,480	$91,520	$101,190	$48,150	$23,710	$15,910	$14,870	$1,000,600	$232,239	$112,784	$203,975	$1,550,000	**$1,535,000**	$15,000
6) Reset Tier 3 to $0.75, shift to Sewer/Water, INCLUDES INCREASED USAGE ESTIMATE																			
Rate	$0.22	$0.22	$0.22	$0.22	$0.27	$0.27	$0.27	$0.75	$0.75	$0.75	$0.75	$0.75	$0.2852	$0.3177	$0.3177				
Revenue	$293,040	$155,100	$83,820	$52,580	$44,280	$33,480	$47,520	$147,650	$71,150	$35,900	$24,650	$23,150	$1,012,320	$232,239	$112,784	$203,975	$1,561,000	**$1,535,000**	$26,000
7) Hold existing Tiers, shift to Sewer/Water, reset $1.26 to lower number that works. NO INCREASED USAGE ESTIMATE INCLUDED																			
Rate	$0.22	$0.22	$0.22	$0.22	$0.27	$0.27	$0.27	$1.09	$1.09	$1.09	$1.09	$1.09	$0.2923	$0.3177	$0.3177				
Revenue	$293,040	$155,100	$83,820	$52,580	$44,280	$33,480	$47,520	$182,030	$70,850	$19,620	$3,270	$1,090	$986,680	$232,239	$112,784	$203,975	$1,536,000	**$1,535,000**	$1,000
8) Hold existing Tiers, shift to Sewer/Water, leave third tier higher than IGS #5, INCLUDES INCREASED USAGE ESTIMATE																			
Rate	$0.20	$0.20	$0.20	$0.26	$0.26	$0.26	$0.65	$0.65	$0.65	$0.65	$0.65	$0.65	$0.2802	$0.3100	$0.3100				
Revenue	$266,400	$141,000	$76,200	$62,140	$42,640	$32,240	$114,400	$127,450	$61,150	$30,600	$20,850	$19,550	$994,620	$226,610	$110,050	$203,975	$1,535,000	**$1,535,000**	$0

Attachment G – Comparison Data for Monthly Electric Bills

Comparison of Monthly Electric Bills

Tiers		PG&E Residential E-1 (5/1/19)				IGS #5 Recommeded Residential				RID Existing Residential				IGS #5 vs Existing		Existing RID Commercial 10 kVA	GS #5 Proposed	IGS Alternative #8 Residential				Com
Up To	**Tier**	**Rate**	**$ kWh**	**$ Fixed**	**$ Total**	**Rate**	**$ kWh**	**$ Fixed**	**$ Total**	**Rate**	**$ kWh**	**$ Fixed**	**$ Total**				**$0.3177**	**Rate**	**$ kWh**	**$ Fixed**	**$ Total**	**$0.3100**
250		0.22281	$55.70	$10.00	$66	$0.2200	$55.00	$25.10	$80	$0.2200	$55.00	$24.49	$79	$1	1%	$101.39	$104.53	$0.2000	$50.00	$25.10	$75	$102.60
500	250	0.28039	$125.80	$10.00	$136	$0.2200	$110.00	$25.10	$135	$0.2200	$110.00	$24.49	$134	$1	0%	$178.89	$183.95	$0.2000	$100.00	$25.10	$125	$180.10
750	250	0.28039	$195.90	$10.00	$206	$0.2200	$165.00	$25.10	$190	$0.2200	$165.00	$24.49	$189	$1	0%	$256.39	$263.38	$0.2000	$150.00	$25.10	$175	$257.60
1,000	250	0.28039	$266.00	$10.00	$276	$0.2700	$232.50	$25.10	$258	$0.2200	$220.00	$24.49	$244	$13	5%	$333.89	$342.80	$0.2600	$215.00	$25.10	$240	$335.10
1,250	250	0.49124	$388.81	$10.00	$399	$0.2700	$300.00	$25.10	$325	$0.2700	$287.50	$24.49	$312	$13	4%	$411.39	$422.23	$0.2600	$280.00	$25.10	$305	$412.60
1,500	250	0.49124	$511.62	$10.00	$522	$0.5200	$430.00	$25.10	$455	$0.2700	$355.00	$24.49	$379	$76	20%	$488.89	$501.65	$0.2600	$345.00	$25.10	$370	$490.10
1,750	250	0.49124	$634.43	$10.00	$644	$0.5200	$560.00	$25.10	**$585**	$0.2700	$422.50	$25.49	$448	$137	31%	$566.39	**$581.08**	$0.6500	$507.50	$25.10	$533	$567.60
2,000	250	0.49124	$757.24	$10.00	$767	$0.5200	$690.00	$25.10	$715	$0.2700	$490.00	$26.49	$516	**$199**	**38%**	$643.89	$660.50	$0.6500	$670.00	$25.10	$695	$645.10
2,250	250	0.49124	$880.05	$10.00	$890	$0.5200	$820.00	$25.10	$845	$1.2600	$805.00	$27.49	$832	$13	2%	$721.39	$739.93	$0.6500	$832.50	$25.10	$858	$722.60
2,500	250	0.49124	$1,002.86	$10.00	$1,013	$0.5200	$950.00	$25.10	$975	$1.2600	$1,120.00	$28.49	$1,148	-$173	-15%	$798.89	$819.35	$0.6500	$995.00	$25.10	$1,020	$800.10
2,750	250	0.49124	$1,125.67	$10.00	$1,136	$0.5200	$1,080.00	$25.10	$1,105	$1.2600	$1,435.00	$29.49	$1,464	-$359	-25%	$876.39	$898.78	$0.6500	$1,157.50	$25.10	$1,183	$877.60
3,000	250	0.49124	$1,248.48	$10.00	$1,258	$0.5200	$1,210.00	$25.10	$1,235	$1.2600	$1,750.00	$30.49	$1,780	-$545	-31%	$953.89	$978.20	$0.6500	$1,320.00	$25.10	$1,345	$955.10
3,250	250	0.49124	$1,371.29	$10.00	$1,381	$0.5200	$1,340.00	$25.10	$1,365	$1.2600	$2,065.00	$31.49	$2,096	-$731	-35%	$1,031.39	$1,057.63	$0.6500	$1,482.50	$25.10	$1,508	$1,032.60
3,500	250	0.49124	$1,494.10	$10.00	$1,504	$0.5200	$1,470.00	$25.10	$1,495	$1.2600	$2,380.00	$32.49	$2,412	-$917	-38%	$1,108.89	$1,137.05	$0.6500	$1,645.00	$25.10	$1,670	$1,110.10
3,750	250	0.49124	$1,616.91	$10.00	$1,627	$0.5200	$1,600.00	$25.10	$1,625	$1.2600	$2,695.00	$33.49	$2,728	######	-40%	$1,186.39	$1,216.48	$0.6500	$1,807.50	$25.10	$1,833	$1,187.60
4,000	1,000	0.49124	$1,739.72	$10.00	$1,750	$0.5200	$1,730.00	$25.10	$1,755	$1.2600	$3,010.00	$24.49	$3,034	######	-42%	$1,263.89	$1,295.90	$0.6500	$2,457.50	$25.10	$2,483	$1,265.10

Attachment H – Water Rate Modeling and Revenue Results

	RESIDENTIAL							COMMERCIAL				RID Sewer	Totals
Tiers:	**1 - 250**	**251-500**	**501 -1000**	**1001 - 1500**	**1501 - 2000**	**Above**	**Totals**						
Bill Cycles	**2,668**	**1,662**	**1,286**	**345**	**126**	**168**	**6,255**						
% of Cycles	**43%**	**27%**	**21%**	**6%**	**2%**	**3%**	**100%**	**(First 250)**					
CF	**1,178,553**	**674,874**	**566,294**	**217,037**	**108,099**	**286,964**	**3,031,821**	**65,125**			**399,905**	**625,000**	**4,121,851**
% of CF	**39%**	**22%**	**19%**	**7%**	**4%**	**9%**	**100%**						
	# of Cycles Billed												
1) Actual FY17/18	*7,050*	*6,000*						*288*	*288*	*Volume*			
FY18 Actual	**$20.40**	**$10.66**	**$6.09**	**$6.09**	**$6.09**	**$9.13**	**$4.76**	**$20.40**	**$10.66**	**$6.50**			**$4.99**
	$143,820	$63,960	$34,487	$13,218	$6,583	$26,200	$288,268	$5,875	$3,070	$27,148	$36,093		$324,361
2) Projected FY18/19	*7,050*	*6,000*					$4.91	*288*	*288*				
FY19 Projected	**$21.01**	**$10.98**	**$6.27**	**$6.27**	**$6.27**	**$9.40**	*1.030*	**$21.01**	**$10.98**	**$6.69**	*1.03*		
	$148,121	$65,880	$35,507	$13,608	$6,778	$26,975	$296,868	$6,051	$3,162	$27,962	$37,176		$334,044
3) Projected FY19/20	*7,050*	*6,000*					$5.05	*288*	*288*				
FY20 Projected	**$21.64**	**$11.31**	**$6.46**	**$6.46**	**$6.46**	**$9.68**	*1.030*	**$21.64**	**$11.31**	**$6.89**	*1.03*		
	$152,564	$67,856	$36,572	$14,016	$6,981	$27,784	$305,774	$6,232	$3,257	$28,801	$38,291		$344,065
4) IGS Recommended	*7,050*	*volume*					$3.25	*288*					
IGS Recommended FY20	**$25.00**	**$3.50**	**$3.50**	**$9.00**	**$9.00**	**$9.00**		**$25.00**		**$5.30**		$5.30	
	$176,250	$23,621	$19,820	$19,533	$9,729	$25,827	$274,780	$7,200		$21,195	$28,395	$33,125	$336,300
Total cf:	3,031,821	FY20 total $:	$274,780			Residential Reduction:	7%		Commercial Reduction:		24%		
Less up to 250 cf:	-1,178,553	Less 250 $:	-$176,250										
cf and $ above base	1,853,268		$98,530										
Average		$5.32											
NOW:	Res includes 500 CF for $20.40 + $10.66 = $31.06. Tiers 500 / 2000 / above							Same as residential					
PROPOSED:	Residential includes 250 cf for $25, then goes to Tiers 250-500, 500-1,000, and above							250 cf for $25, then fixed rate					

Attachment I – Water CIP

RID Water Enterprise Fund

Major Expense and Project Planning

	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*	
Project or Purpose	**FY19/20**	**FY20/21**	**FY21/22**	**FY22/23**	**FY23/24**	**Comments**
Water Plant Upgrade / Replacement	-	$500,000	$500,000	$500,000	-	Based on $1,500,000
Repair/upgrade telemetry for 25 wells and tanks	$75,000	-	-	-	-	Less labor driving to tanks and wells. More reliable operations.
Install Chlorine analyzers at 16 well sites	$44,000	$44,000	$44,000	$44,000	-	More efficient use of Chlorine. Less labor driving. Better quality control. Based on four installed per year.
Install variable speed drives on 10 booster pumps	$12,000	$12,000	$12,000	$12,000	$12,000	More efficient pumping. Less water hammer. Less labor driving. Based on two installed per year.
Replace hydrants and risers with added valve	$10,000	$10,000	$10,000	$10,000	$10,000	To upgrade approximately five hydrants and replace for corrosion damage
Equipment Storage Building	-	-	$33,000	-	-	One-third of $100,000 shared between Water/Sewer/Electric
Vehicle replacement program	$13,000	$13,000	$13,000	$13,000	$13,000	Based on 10-year life for a portion of eight vehicles used partially for water.
Back-hoe replacement (shared)	-	-	-	$40,000	-	One-third of $120,000 shared between Water/Sewer/Electric
Totals	$154,000	$579,000	$612,000	$619,000	$35,000	
Five-Year Average, rounded			$400,000			

Attachment J – Water Revenue, Expense and Cash Balance

RID Water Enterprise Fund: Revenues, Expenses and Cash Balances

	FY15/16 Audited	FY16/17 Audited	FY17/18 Preliminary	FY18/19 Budget	FY19/20 Forecast	FY20/21 Forecast	FY21/22 Forecast	FY22/23 Forecast	FY23/24 Forecast	
Operating Revenues				*Revenue Increases:*	*3%*	*3%*	*3%*	*3%*	*3%*	
Utility Service Charges	$215,733	$302,817	$337,000	*$325,000*	*$302,000*	*$311,000*	*$320,000*	*$330,000*	*$340,000*	
Sewer Enterprise Charges	-	-	-	-	*$33,000*	*$34,000*	*$35,000*	*$36,000*	*$37,000*	
Capital Facility Charges	54,000	45,207	52,695	*50,000*	*50,000*	*50,000*	*50,000*	*50,000*	*50,000*	
Special Assessments	$0	224,168	225,000	*225,000*	*225,000*	*225,000*	*225,000*	*225,000*	*225,000*	
Connection, Extension and Other Fees	23,694	8,995	15,771	*20,000*	*20,000*	*20,000*	*20,000*	*20,000*	*20,000*	
Total Operating Revenue	**293,427**	**581,187**	**630,466**	***620,000***	***630,000***	***640,000***	***650,000***	***661,000***	***672,000***	Inflation Factor
Operating Expenses										
Human Resources	202,376	236,146	213,620	*228,000*	*237,100*	*246,600*	*256,500*	*266,800*	*277,500*	4%
Materials, Supplies and Services	81,423	94,590	83,350	*95,000*	*96,900*	*98,800*	*100,800*	*102,800*	*104,900*	2%
Power	-	-	-	-	*56,000*	*57,700*	*59,400*	*61,200*	*63,000*	3%
Insurance	8,246	8,238	9,876	*9,500*	*9,700*	*9,900*	*10,100*	*10,300*	*10,500*	2%
Allocated Administrative Costs	15,228	11,238	12,000	*12,000*	*84,000*	*85,700*	*87,400*	*89,100*	*90,900*	2%
Total Operating Expenses	307,273	350,212	318,846	*344,500*	*483,700*	*498,700*	*514,200*	*530,200*	*546,800*	
Net Operating Income	**(13,846)**	**230,975**	**311,620**	***275,500***	***146,300***	***141,300***	***135,800***	***130,800***	***125,200***	
Non-Operating Income (Expense)										
Property Taxes	81,845	79,336	66,584	*80,000*	*80,000*	*80,000*	*80,000*	*80,000*	*80,000*	
Grant Revenue / Interest	123,436	126,292	-	-	-	-	-	-	-	
Transfers	25,123	(3,867)	-	-	-	-	-	-	-	
Total Non-Operating	230,404	201,761	66,584	*80,000*	*80,000*	*80,000*	*80,000*	*80,000*	*80,000*	
Net Income (Loss)	**216,558**	**432,736**	**378,204**	***355,500***	***226,300***	***221,300***	***215,800***	***210,800***	***205,200***	
Capital Improvement Projects	**(268,000)**	**(27,000)**	**(20,000)**	***(105,000)***	***(400,000)***	***(400,000)***	***(400,000)***	***(400,000)***	***(400,000)***	
Cash and Cash Equivalents Year End	1,768,685	2,200,614	*2,558,818*	*1,800,000*	*1,626,300*	*1,447,600*	*1,263,400*	*1,074,200*	*879,400*	

Notes:

Projected Capital Facility Charges based on historical trend
Depreciation is excluded from operating costs
Values in italics are projections

Comparison of Residential Monthly Water Bills

		IGS Recommeded Residential				RID Existing Residential				Change
Up To	**Tier**	**Rate**	**Vol $**	**$ Fixed**	**$ Total**	**Rate**	**Vol $**	**$ Fixed**	**$ Total**	(Savings)
250				$25.00	$25.00			$31.98	$31.98	($6.98)
500	250	$3.50	$8.75	$25.00	$33.75			$31.98	$31.98	$1.77
1,000	500	$3.50	$26.25	$25.00	$51.25	$6.27	$31.35	$31.98	$63.33	($12.08)
1,500	500	$9.00	$71.25	$25.00	$96.25	$6.27	$62.70	$31.98	$94.68	$1.57
2,000	500	$9.00	$116.25	$25.00	$141.25	$6.27	$94.05	$31.98	$126.03	$15.22
2,500	500	$9.00	$161.25	$25.00	$186.25	$9.40	$141.05	$31.98	$173.03	$13.22
3,000	500	$9.00	$206.25	$25.00	$231.25	$9.40	$188.05	$31.98	$220.03	$11.22
3,500	500	$9.00	$251.25	$25.00	$276.25	$9.40	$235.05	$31.98	$267.03	$9.22
4,000	500	$9.00	$296.25	$25.00	$321.25	$9.40	$282.05	$31.98	$314.03	$7.22
		IGS Recommended Commercial				**RID Existing Commercial**				
Up To	**Tier**	**Rate**	**Vol $**	**$ Fixed**	**$ Total**					
250				$25.00	$25.00				$31.98	($6.98)
500	250	$5.30	$13.25	$25.00	$38.25				$31.98	$6.27
1,000	500	$5.30	$39.75	$25.00	$64.75				$63.33	$1.42
1,500	500	$5.30	$66.25	$25.00	$91.25	*(From above)*			$94.68	($3.43)
2,000	500	$5.30	$92.75	$25.00	$117.75				$126.03	($8.28)
2,500	500	$5.30	$119.25	$25.00	$144.25				$173.03	($28.78)
3,000	500	$5.30	$145.75	$25.00	$170.75				$220.03	($49.28)
3,500	500	$5.30	$172.25	$25.00	$197.25				$267.03	($69.78)
4,000	500	$5.30	$198.75	$25.00	$223.75				$314.03	($90.28)

RID Wastewater Enterprise Fund

Major Expense and Project Planning

	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*	
Project or Purpose	**FY19/20**	**FY20/21**	**FY21/22**	**FY22/23**	**FY23/24**	**Comments**
Replace telemetry with 10 lift stations	$25,000	-	-	-	-	Increase reliability. Avoid fines from overflow events. Improve pumping efficiency.
New Chlorine and Dechlorine systems	-	$90,000	-	-	-	Increase safety by eliminating toxic Chlorine gas. Decreased cost from shipping gas bottles.
Update instrumentation at wastewater plant	-	$74,000	-	-	-	To replace or install: Chlorine analyzers (2). Flow meters (6). Dissolved Oxygen probes (2). pH meter (1).
Remove nitrogen from influent by installing four underwater propellers	-	-	$100,000	-	-	Necessary to meet state requirements
Install variable speed pump drives and upgrade controls at four lift stations	-	$25,000	$25,000	$25,000	$25,000	To be added to stations 5, 6, 7, and 9. Better control and efficiency.
Equipment Storage Building	-	-	$33,000	-	-	One-third of $100,000 shared between Water/Sewer/Electric
Vehicle replacement	$12,000	$12,000	$12,000	$12,000	$12,000	Based on 10-year life cost of a portion of seven vehicles used for sewer.
Back-hoe replacement (shared)	-	-	-	$40,000	-	One-third of $120,000 shared between Water/Sewer/Electric
Totals	$37,000	$201,000	$170,000	$77,000	$37,000	
Five-Year Average, rounded			$104,000			
Note: This CIP schedule assumes $75,000 per year of Inflow and Infiltration (INI) work shown as an operating expense.						

Attachment M – Sewer Revenue, Expense and Cash Balance

RID Wastewater Enterprise Fund: Revenues, Expenses and Cash Balances

	FY15/16 Audited	FY16/17 Audited	FY17/18 Preliminary	FY18/19 Budget	FY19/20 Forecast	FY20/21 Forecast	FY21/22 Forecast	FY22/23 Forecast	FY23/24 Forecast	
Operating Revenues			*Revenue Increases:*		*10%*	*10%*	*10%*	*10%*	*10%*	
Utility Service Charges	$207,202	$234,840	$250,000	*$260,000*	*286,000*	*315,000*	*347,000*	*382,000*	*420,000*	
Capital Facility Charges	27,000	9,207	7,694	*9,000*	*9,000*	*9,000*	*9,000*	*9,000*	*9,000*	
Special Assessments / Other Income	216,271	-	-	-	-	-	-	-	-	
Connection, Extension and Other Fee	6,150	13	2,050	*2,050*	*2,050*	*2,050*	*2,050*	*2,050*	*2,050*	
Total Operating Revenue	**456,623**	**244,060**	**259,744**	***271,050***	***297,050***	***326,050***	***358,050***	***393,050***	***431,050***	*Inflation Factor:*
Operating Expenses										
Human Resources	104,969	144,441	138,843	*127,000*	*132,100*	*137,400*	*142,900*	*148,600*	*154,500*	*4%*
Materials, Supplies and Services	144,301	160,891	124,223	*200,000*	*204,000*	*208,100*	*212,300*	*216,500*	*220,800*	*2%*
Electricity	-	-	-	-	*68,000*	*70,000*	*72,100*	*74,300*	*76,500*	*3%*
Water	-	-	-	-	*33,000*	*33,700*	*34,400*	*35,100*	*35,800*	*2%*
Insurance	12,368	12,357	14,814	*15,000*	*15,300*	*15,600*	*15,900*	*16,200*	*16,500*	*2%*
Allocated Administrative Costs	8,779	7,039	7,000	*7,000*	*20,000*	*20,400*	*20,800*	*21,200*	*21,600*	*2%*
Total Operating Expenses	270,417	324,728	284,880	*349,000*	*472,400*	*485,200*	*498,400*	*511,900*	*525,700*	
Net Operating Income	186,206	(80,668)	(25,136)	*(77,950)*	*(175,350)*	*(159,150)*	*(140,350)*	*(118,850)*	*(94,650)*	
Non-Operating Income (Expense)										
Net Interest	164	0	0	*0*	*0*	*0*	*0*	*0*	*0*	
Property Taxes	197,776	174,813	202,000	*202,000*	*202,000*	*202,000*	*202,000*	*202,000*	*202,000*	
Transfers / Grants	24,130	(712)	-	-	-	-	-	-	-	
Total Non-Operating	222,070	174,101	202,000	*202,000*	*202,000*	*202,000*	*202,000*	*202,000*	*202,000*	
Net Income (Loss)	**408,276**	**93,433**	**176,864**	***124,050***	***26,650***	***42,850***	***61,650***	***83,150***	***107,350***	
Capital Improvement Projects	(7,000)	(2,200)	(100,000)	*(100,000)*	*(104,000)*	*(104,000)*	*(104,000)*	*(104,000)*	*(104,000)*	
Cash and Cash Equivalents Year End	662,663	520,776	597,640	*621,690*	*544,340*	*483,190*	*440,840*	*419,990*	*423,340*	

Notes:

Projected Capital Facility Charges assume one new home per year

Depreciation is excluded from operating costs

Values in italics are projections

RID Sewer Enterprise Rates and Projected Revenues

1	**FY18 Revenue**								
			Cust Count	**RUE**	**Rate**	**Monthly $**	**Annual $**	**Annual $**	
		Com Fixed	30		$39.60	$1,188	$14,256		
		Com RUE		74	$17.67	$1,308	$15,691	$29,947	
		Residential	470		$39.60	$18,612	$223,344	$223,344	
			500				$253,291	$253,291	
2	**FY19 Projected Revenue**								
			Cust Count	**RUE**	**Rate**	**Monthly $**	**Annual $**	**Annual $**	
		Com Fixed	30		$40.79	$1,224	$14,684		
		Com RUE		74	$18.20	$1,347	$16,162	$30,846	
		Residential	470		$40.79	$19,171	$230,056	$230,056	
			500				$260,902	$260,902	3.00%
3	**FY20 Projected Revenue with CPI inc**				3.00%				
			Cust Count	**RUE**	**Rate**	**Monthly $**	**Annual $**	**Annual $**	
		Com Fixed	30		$42.01	$1,260	$15,125		
		Com RUE		74	$18.75	$1,387	$16,646	$31,771	
		Residential	470		$42.01	$19,746	$236,957	$236,957	
			500				$268,729	$268,729	3.00%
4	**IGS Recommended FY19/20 Rates**				10.00%				
			Cust Count	**RUE**	**Rate**	**Monthly $**	**Annual $**	**Annual $**	
		Com Fixed	30		$44.87	$1,346	$16,153		
		Com RUE		74	$20.02	$1,481	$17,778	$33,931	
		Residential	470		$44.87	$21,088	$253,061	$253,061	
			500				$286,992	$286,992	10.00%