

M E M O R A N D U M

TO: Board of Trustees

THROUGH: Indra Winqest
Interim General Manager

FROM: Joseph J. Pomroy, P.E.
Director of Public Works

SUBJECT: Review, discuss and take action to establish, the Fiscal Year 2020 IVGID Utility Rate Study, a one year average percent utility rate increase in the range of zero percent (0%) to fifteen percent (15%) of which the percentage in excess of five point five percent (5.5%) would go to the Unrestricted Net Position in the Utility Fund.

Review, discuss and possibly set the date/time for April 14, 2020 at 6:00 p.m. for the public hearing on the proposed amendments to Sewer Ordinance #2 "An Ordinance Establishing Rates, Rules and Regulations for Sewer Service by the Incline Village General Improvement District" and Water Ordinance #4 "An Ordinance Establishing Rates, Rules and Regulations for Water Service by the Incline Village General Improvement District" that Includes the Utility Rate Increase and to publish the notice in accordance with the NRS 318.199.

STRATEGIC PLAN: Long Range Principle #2 – Finance

DATE: February 13, 2020

I. RECOMMENDATION

1. Review, discuss and take action to establish, the Fiscal Year 2020 IVGID Utility Rate Study, a one year average percent utility rate increase in the range of zero percent (0%) to fifteen percent (15%) of which the percentage in excess of five point five percent (5.5%) would go to the Unrestricted Net Position in the Utility Fund.

2. That the Board of Trustees makes a motion to set the date/time of April 14, 2020 at 6:00 p.m. for a public hearing for the proposed amendments to IVGID Sewer Ordinance No. 2, entitled "An Ordinance Establishing Rates, Rules and Regulations for Sewer Service by the Incline Village General Improvement District" and IVGID Water Ordinance No. 4, entitled "An Ordinance Establishing Rates, Rules and Regulations for Water Service by the Incline Village General Improvement District" that Includes the Utility Rate Increase and to publish the notice in accordance with the NRS 318.199.

II. DISTRICT STRATEGIC PLAN

The Utility Rate Study supports Long Range Principle #2, Finance; The District will ensure fiscal responsibility and sustainability of service capacities by maintaining effective financial policies for operating budgets, fund balances, capital improvement and debt management. Under Objectives for 2018-20, it specifically states Prepare a five-year projection of financial results for each audited fund for operations, capital improvement and debt service as a part of budget deliberations.

III. FINANCIAL IMPACT AND BUDGET

2020 Five Year Rate Study

The Public Works Department conducts an annual rate study to calculate the appropriate rates for water and sewer service to meet revenue and expense demands while maintaining an appropriate Level of Fund balance and Working Capital. The rate study includes a five-year projection for revenues and expenses with an eye out for large capital projects outside of the five-year window. This annual effort insures rates are meeting the needs of the District and that adjustments can be made efficiently and effectively. The rate study is based on utility management strategies, industry best practices and District historical rates.

The 2020 Utility Rate study recommendation is to increase water rates by 4.2% and sewer rates by 6.4% for a total utility rate increase of 5.5% for the average residential customer. The utility rates are scheduled for an average 4.2% increase for the next five years to meet the projections presented in this memo.

In 2019-20, total water and sewer revenues for Public Works are budgeted to be \$12.29 million and are proposed to be \$13.03 million in 2020-21 under this rate study. The total revenue increases by 6.0% which is greater than the 5.5% rate increase. The average 5.5% rate increase is contributing total new revenues of \$595,000, \$315,000 in new operating revenue and \$280,000 in new capital

revenue. The utility fund has other revenue sources that are increasing including TWSA revenue, backflow revenue and work order and snow removal work order charges that totals \$145,000. There is a total increase in revenues of \$740,000 from all resources flow.

The utility rates are calculated from a rate model that determines the revenue needs to meet operating and capital expenses while maintaining the Fund Balance and Appropriate Level of Working Capital in accordance with District Policies and Practices. Once the revenue target is established, the water and sewer rates are adjusted to generate that revenue in the most equitable way possible. The revenue is also balanced among the various rate components to pay for fixed, variable and capital components.

The Appropriate Level of Fund Balance is set by Board Policy 7.1.0 and Board Practice 7.2.0 and is currently a projected minimum value of \$1.96 million. The net position for the utility fund on June 30, 2019 from page 30 of the Comprehensive Annual Financial Report is \$12,442,309. The Utility Fund meets the projected minimum value of Level of Fund Balance per the Board Policy and Practice.

The District also has Budgeting and Fiscal Management Appropriate Level of Working Capital Policy 19.1.0 and Practice 19.2.0. The definition of amounts for Working Capital is measured as follows:

- Operations – 45 to 90 days of operating expenses. Operating expense excludes depreciation and interest
- Utilities Debt Service – up to one year's payments of interest expense, since current maturities of long term debt are already considered in determining working capital, when classified as a current liability.
- Capital Expenditure – up to 1 year of a 3 year average depreciation

Table 1 presents two scenarios for working capital based on the budget year end 2019-20. All numbers have been rounded to \$1,000 for clarity.

Table 1 – Working Capital Worksheet

Item	Budget YE 2019-20	Working Capital with 45 Days of Operating Expenses	Working Capital with 90 Days of Operating Expenses
Operational Expense 2019-20	\$7,402,000	\$913,000	\$1,826,000
Utilities Debt Service 1 Year	\$120,000	\$120,000	\$120,000
1 year average depreciation	\$3,055,000	\$3,055,000	\$3,055,000
Sum		\$4,088,000	\$5,001,000

The Utility Fund working capital on June 30, 2019 is \$6,391,000 from page 30 of the Comprehensive Annual Financial Report, (calculated as total current assets minus total current liabilities) and is greater than the value set by the Working Capital Policy and Practice.

Proposed Utility Rates

The following table compares the current and the proposed residential water rate. The rates below include a \$1.05 total defensible space charge to each user. The base rate for water is increasing by \$1.31 per month. The water consumption and tier rates have been thoroughly analyzed in previous years to confirm the cost basis for those rate components per thousand gallons of usage. Water consumption is the variable rate component. Public Service Recreation accounts are not subject to the excess water charges, tier rates 1 & 2, as defined in the Water Ordinance section 2.40.

Residential Water Rate Comparison

Current 2019 Rate Component	2019 Rate	Proposed 2020 Rate Component	2020 Rate	Change
Base Rate	\$ 11.97	Base Rate	\$ 12.45	\$0.48
Capital Improvements	\$ 15.10	Capital Improvements	\$ 15.75	\$0.65
Customer Account Fee	\$ 3.97	Customer Account Fee	\$ 4.15	\$0.18
Defensible Space	\$ 1.05	Defensible Space	\$ 1.05	-
Monthly Base Water Bill	\$ 32.09	Monthly Base Water Bill	\$ 33.40	\$1.31
Consumption	\$ 1.55	Consumption	\$ 1.62	\$0.07
1st Tier	\$ 0.93	1st Tier	\$ 1.00	\$0.07
2nd Tier	\$ 1.34	2nd Tier	\$ 1.40	\$0.06

The following table compares the current and the proposed residential sewer rate. The base rate for sewer is increasing by \$3.69 per month and the sewer use rate is increasing by \$0.15 per thousand gallons of water use. The sewer use is capped in the summer months for residential customers

Residential Sewer Rate Comparison

Current 2019 Rate Component	2019 Rate		Proposed 2020 Rate Component	2020 Rate	Change
Base Rate	\$ 19.54		Base Rate	\$ 21.00	\$ 1.46
Capital Improvements	\$ 31.45		Capital Improvements	\$ 33.50	\$ 2.05
Customer Account Fee	\$ 3.97		Customer Account Fee	\$ 4.15	\$ 0.18
Monthly Sewer Bill	\$ 54.96		Monthly Sewer Bill	\$ 58.65	\$ 3.69
Sewer Use Rate	\$ 3.20		Sewer Use Rate	\$ 3.35	\$ 0.15

Staff has investigated the equity of the water rate structure for the various customer classes utilizing financial, flow data and demand factors from 2018. Equity is calculated by determining the proportion of fixed and variable demand on the water (size of water meter, water consumption) by each customer class compared to the fixed and variable water revenue collected from each customer class. The current rate structure exhibits equity amongst the major user classes. The two tables below show the statistics for this analysis. The first table, Variable Water Revenue versus Water Use compares how much water consumption, Tier 1 and Tier 2 revenue was received from each customer class as a percent of the total compared to the percent of water measured through the water meter for 2018.

Variable Water Revenue versus Water Use

Customer Class	Variable Water Revenue (Consumption, Tier 1 & 2)	Water Use
Commercial	15%	13%
Residential	71%	69%
IVGID Facilities	14%	18%

The second table, below, Fixed Water Revenue versus Fixed Water Demand, compares the fixed revenue received from each customer class as percent of the total compared to the demand that customer class places on the water system as determined by the meter size. This is called equivalent dwelling units. The two tables show that there is equity in the rate structure for variable and fixed rate components of the water rates.

Fixed Water Revenue versus Fixed Water Demand

Customer Class	Fixed Water Revenue (Revenue, Base, CIP, Admin, Def Space)	Fixed Water Demand (equivalent dwelling units)
Commercial	9.2%	9.5%
Residential	86.8%	86.2%
IVGID Facilities	4.0%	4.3%

Operating Revenues and Expenses

The operating revenue is the portion of revenue generated from the water and sewer rates that is not the CIP charge. The operating revenue is increasing by an average of 4.7% per year for five years and is a blend of rate increases and sales of water and sewer. The information below presents the net income for operating, excluding the capital revenue and the depreciation expense. The rate study goal is to keep a balance between operating expenses and revenues over the five-year period while overall contributing to fund balance. The rate model is revisited annually and recalibrated with actual financial results from the completed fiscal year. Any budget savings stay in the utility fund to offset future rate increases. The estimates are currently straight line based on current expenses and revenues for years 2 through 5.

The operating expenses are the staff costs, services and supplies, utilities, insurance, legal and audit fees, central services expense and the defensible space costs but it does not include depreciation. The 2020-21 values are the proposed Utility Fund budget which will be presented at a future Board Meeting. Final budget numbers are approved in May by the Board of Trustees. We are budgeting increases in wages and benefits at 4.7%, service and supplies at 9.1% and utility expenses at 0.3%. There is a \$31,000 service and supply expense item that is offset by a corresponding grant revenue for Microplastic outreach and education in TWSA, a \$25,000 line item for professional consultant has been added to the TWSA budget; (both offset by corresponding revenue), and \$25,000 has been added for effluent export repairs. If the \$81,000 items listed above are excluded, the service and supply increase is 4.6%. The overall operating expenses are

increasing 3.7%. The five-year rate study is presented below for operating revenues and expenses.

Operating Revenues and Expenses – Water and Sewer

5-Year Plan	2020-21	2021-22	2022-23	2023-24	2024-25	5-Yr Sum
Operating Revenue	7,825,000	8,168,000	8,526,000	8,900,000	9,291,000	\$42,710,000
Operating Expense	(7,794,000)	(8,039,000)	(8,312,000)	(8,594,000)	(8,867,000)	(\$41,606,000)
					Subtotal	\$1,104,000

Capital Revenues and Expenses

The capital revenue is the summation of monthly capital fees collected in the utility rates, connection fees, and interest income and increases by approximately 3.1% per year averaged over 5 years.

The capital expense is the capital improvement projects net of grants and includes debt service. This is the draft five-year capital plan that is being developed as part of the budget process. The five-year capital expenses and revenues are presented in the following table.

Capital Revenues and Expenses – Water and Sewer

5-Year Plan	2020-21	2021-22	2022-23	2023-24	2024-25	5-Yr Sum
Capital Revenue	5,351,000	5,535,000	5,677,000	5,824,000	5,974,000	28,361,000
Capital Expense	(5,830,000)	(5,033,000)	(5,302,000)	(4,469,000)	(5,132,000)	(25,766,000)
					Subtotal	\$2,595,000

It is important to remember that the capital expenses are budget estimates with further refinement to occur in the CIP budgeting process. The goal of the rate study is to collect sufficient revenues to fund capital expenses over the following five years.

The Effluent Export System presentation to the Board of Trustees on January 29, 2019 showed the June 30, 2019, unrestricted net position minus Export System Project carry forward, minus capital carry forward and minus the Vac-Con truck purchase at \$870,455. It is projected that this number will increase to \$1,300,000 at the end of 2019-20 fiscal year. The five year rate study is projecting net contribution to fund balance in the amount of \$3,699,000. This would place the ending fund balance in 2025 at \$4,999,000.

2020 Five Year Rate Study	5-Year Total
Operating and Capital Revenues	\$71,071,000
Operating and Capital Expenses	67,372,000
Net increase in reserves	\$3,699,000

Schedule

The schedule for rate adoption is proposed as follows.

Utility Rate Study	Date
Set Date for Public Hearing to Adopt New Utility Rates	February 26, 2020
Notice of Public Hearing Published in Newspaper	March 13, 2020
Courtesy Ad for Public Hearing Published in Newspaper	April 10, 2020
Conduct Public Hearing and Adopt New Utility Rates	April 14, 2020
New Utility Rates become effective pending approval	May 19, 2020

IV. **BACKGROUND**

Residential Utility Rate Summary

The following table provides the average monthly water and sewer utility bill for our average residential user (72,000 gallons water use per year) in the District's service area from 2015 to the proposed 2020 rates.

Year	Monthly Water Charge	Monthly Sewer Charge	Total Monthly Water and Sewer Charge
2015	\$36.15	\$57.96	\$94.11
2016	\$37.15	\$60.24	\$97.39
2017	\$38.47	\$62.22	\$100.69
2018	\$39.79	\$63.88	\$103.67
2019	\$41.35	\$66.44	\$107.78
Proposed 2020	\$43.06	\$70.67	\$113.74

The average residential rate has increased \$19.63 per month from \$94.11 in 2015 to the proposed \$113.74 in 2020. There has been an increase of \$6.50 per month to pay for capital improvements and \$13.13 to pay for operating cost increases which equals the total rate increase of \$19.63 per month over the last five years. The following table presents the five year total and annual average rate increases for the median residential customer.

	Monthly Water Charge	Monthly Sewer Charge	Total Monthly Water & Sewer Charge
Total % Change 2015-2020	19.1%	21.9%	20.8%
Annual % Change over 5 yrs.	3.6%	4.0%	3.9%

Calculating from the proposed 2020 rates back to 2015, five years, the residential family median user would see an average rate increase of 3.6% per year. The capital rate has increased by 2.9% and the operating rate has increased by 4.7% per year for that 5 year period.

At the Board of Trustees meeting on February 12, 2020, the Board of Trustees requested two options on the rate increase; below is that requested information:

The statistics for the rate increase for 2020 compared to 2019 are as follows.

- Overall Water and Sewer Rate Increase – 5.5%
- Water Rate Increase 4.2%
 - Water Operations Rate Increase – 4.1%
 - Water Capital Rate Increase – 4.3%
- Sewer Rate Increase 6.4%
 - Sewer Operations Rate Increase – 6.2%
 - Sewer Capital Rate Increase – 6.5%
- Water and Sewer Operations Rate Increase – 5.3%
- Water and Sewer Capital Rate Increase – 5.8%

This rate study proposes the following: In 2019-20, total water and sewer revenues for Public Works are budgeted to be \$12.29 million and are proposed to be \$13.03 million in 2020-21 under this rate study. The total revenue increases by 6.0% which is greater than the 5.5% rate increase. The average 5.5% rate increase is contributing total new revenues of \$595,000, \$315,000 in new operating revenue and \$280,000 in new capital revenue. The Utility Fund has other revenue sources that are increasing including TWSA revenue, backflow revenue and work order and snow removal work order charges that totals \$145,000. There is a total increase in revenues of \$740,000 from all resources flow.

Therefore, if the Board keeps the rates at current rates, then there will be an increase in revenue of \$145,000 from other revenue sources and the total revenue projection for 2020-21 for the Utility Fund would \$12.44 million. The budgeted expenses would be adjusted downward to minimize impacts to current Utility Fund balance. This would involve delaying capital projects and looking for operational cost savings not already identified. We expect the labor costs and the majority of service and supply costs and the electrical and other utility costs to come in at budgeted levels.

As a note, an average of \$1.00 on the utility rates generates \$100,000 per year. If the Board desired to begin building on the District's unrestricted Utility Reserve net fund balance, the Board can direct Staff to add a new line item to the water bill, at

some increment. The following table provides **EXAMPLES** of, using the above formula, the dollar amount equivalent as it relates to a percentage increase.

Utility Rate Increase (above Staff's recommended 5.5%)	Dollars Generated (approximately)
6.5%	\$100,000
8.0%	\$250,000
10.25%	\$475,000
12.75%	\$725,000
15%	\$950,000

IV. **ALTERNATIVES**

The rate structure used by the District has been in place since the installation of water meters over 25 years ago.

V. **COMMENTS**

The applicable Nevada Revised Statute is as follows.

NRS 318.199 Rates, tolls and charges for sewerage or water services or products: Schedules; public hearings; adoption of resolution; action to set aside resolution.

1. The board of trustees of any district organized or reorganized under this chapter and authorized to furnish sanitary sewer facilities pursuant to NRS 318.140 or to furnish water facilities pursuant to NRS 318.144 shall establish schedules showing all rates, tolls or charges for services performed or products furnished.
2. Whenever the board of trustees proposes to change any individual or joint rate, toll, charge, service or product, or any individual or joint practice which will affect any rate, toll, charge, service or product, the board of trustees shall hold public hearings after 30 days' notice has been given to all users of the service or product within the district.
3. Notice shall be given by publication in a newspaper published in the county and if no such newspaper is published, then a newspaper published in this state which has a general circulation in the county. The notice shall not be placed in that portion of the newspaper where legal notices and classified advertisements appear and the type used in the headline of such notice shall not be smaller than 18 point.

4. All users of the service or product shall be afforded a reasonable opportunity to submit data, views or arguments orally or in writing at the place, date and time specified in the notice, or at any subsequent place or time to which the hearing may be adjourned.
5. If, after public hearing, the board of trustees determines that the proposed action is required, the board shall adopt a resolution establishing the new or changed rates, tolls, charges, services to be performed or products to be furnished.
6. Within 30 days immediately following the effective date of such resolution, any person who has protested it may commence an action in any court of competent jurisdiction to set aside the resolution.
7. Within 30 days after the effective date of the resolution, the secretary of the district shall file a copy of the new schedules in the office of the district. The schedules shall be made available to any user of the service or product.

(Added to NRS by 1977, 541)

VI. BUSINESS IMPACT

This item is a "rule" within the meaning of Nevada Revised Statutes, Chapter 237, but it does not impose a direct and significant economic burden on a business, or directly restrict the formation, operation or expansion of a business, and therefore does not require a Business Impact Statement.