

MEMORANDUM

TO: Board of Trustees

THROUGH: Indra Winquest
District General Manager

FROM: Brad Underwood, P.E.
Director of Public Works

SUBJECT: Review, discuss and provide direction and comment to staff on the draft IVGID Utility Rate Study. Direct staff to prepare documents and Utility Rate Schedules for a Fiscal Year 2022/23 Water utility rate increase, a Sewer utility rate increase, and increase charges on the Public Works Fee Schedule.

Set the date/time of April 27, 2022 at 6:00 p.m. for the public hearing on the proposed amendments to the Sewer and Water Schedule of Service Charges, Fee Schedule, and to publish the notice in accordance with the NRS 318.199.

STRATEGIC

PLAN: Long Range Principle #3 - Finance

DATE: March 9, 2022

I. RECOMMENDATION

1. Review, discuss and provide direction and comment to staff on the draft IVGID Utility Rate Study.
2. Direct Staff to prepare documents and updated Utility Rate Schedules, as proposed, to increase annualized Water Utility revenues by up to twenty percent (20%),
3. Direct Staff to prepare documents and updated Utility Rate Schedules, as proposed, to increase annualized Sewer Utility rate revenues by up to fifteen percent (15%), and,

4. Direct staff to prepare documents and updated Utility Rate Schedules to implement proposed increases to charges on the Public Works Fee Schedule by up to twelve percent (12%).
5. Set the date/time of April 27, 2022 at 6:00 p.m. for the public hearing on the proposed amendments to the Sewer and Water Schedule of Service Charges, Fee Schedule, and to publish the notice in accordance with the NRS 318.199.

II. DISTRICT STRATEGIC PLAN

The Utility Rate Study supports Long Range Principle #3 – Finance: The District will ensure fiscal responsibility and sustainability of service capacities through prudent fiscal management and maintaining effective financial policies for internal controls, operating budgets, fund balances, capital improvement and debt management.

III. BACKGROUND

The District provides water and sewer utility services through its Utility Fund (Fund 200). These utility operations are supported through annual revenues (\$12.3 million for FY 2021/22) collected from utility customers based on Board-approved rate schedules for each utility.

The current budget assumed an 8% rate increase to begin in the second quarter of the fiscal year; however, actual revenues will be lagging the budgeted amount, since increases have not been implemented, pending completion of the Utility Rate Study and formal Board action.

The last approved rate increase was passed by the Board of Trustees on April 10, 2019 in the amount of 4%. At their meeting of February 26, 2020, the Board of Trustees reviewed and discussed the District's 2020 Utility Rate Study and further approved a motion to set the required public hearing for April 14, 2020. At the conclusion of the public hearing, the Board considered public testimony, as well as the impacts of the emerging COVID-19 pandemic, and the Board collectively decided to defer the proposed 2020/21 utility rate increase to a future date.

At the January 13, 2021 Board of Trustees meeting, the Board considered options relative to implementing utility rate increases to support ongoing operations and capital program requirements. The options included resuming the process for implementing the originally proposed 2020/21 utility rates or deferring action, pending completion of a utility rate study. The Board did not select to

resume the process of the originally proposed 2020/21 utility rate increase, which was recommended to be increases of 4.2% for water and 6.4% for sewer. At that time projections for the next five years were for the rate increases to average 4.2% per year. The Board's preference was to proceed with a third party rate analysis, and funding was included in the sewer and water operating budgets for FY 2021/22 to hire a consultant to perform a rate analysis for utility operations and capital program requirements.

Deferring recommended rate increases in FY 2020/21 and FY 2021/22 have resulted in revenues lagging beyond the levels needed to support the District's utility operations and, additionally, have negatively impacted the opportunity for the compounding of revenue over the last two fiscal years and into the future. The District is now subjected to higher inflationary costs, which include impacts to wages, materials, supplies, services and capital improvement projects. Therefore, it is anticipated that a substantial rate increase would be necessary to make up for these influences.

On September 2, 2021 the Board of Trustees awarded a Professional Services Contract to HDR Engineering, Inc. to conduct the Utility Rate Study for Provision of Water and Sewer Services (Rate Study). The Rate Study is intended to establish 5-year water and sewer utility rates for all customer types. On November 10, 2021, HDR presented their preliminary findings to the Board.

The Rate Study sets forth the appropriate rates for water and sewer service to meet revenue and expense requirements and to achieve the appropriate Fund Balance and Working Capital. Rate increases are necessary to fund current and future operating and capital expenses. The Summary of the Present and Proposed Water Rates are in Table 3-9 (page 38) and the Sewer Rates are in Table 4-8 (page 55) of the Preliminary Draft Water and Sewer Rate Study prepared by HDR which is attached.

IV. DISCUSSION

The draft Utility Rate Study reflects the need to significantly increase the District's water and sewer rates over the next five years in order to provide sufficient revenues to support the District's utility operations, capital improvements, and reserve requirements as well as provide for anticipated debt financing. As a point of reference, these are overall system adjustments and may not reflect the individual bill impacts given the cost of service and rate design recommendations.

Five-Year Utility Revenue Increase Plan

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Water Revenue Adjustment	20.0%	12.0%	9.5%	9.0%	3.5%
Sewer Revenue Adjustment	15.0%	12.5%	8.0%	8.0%	3.5%

The recommended utility rate increases for year one, as proposed, would increase Water Utility revenues by 20% and Sewer Utility revenues by 15%. If approved, the average residential customer would see an increase in their monthly water bill of 19.3% and average monthly sewer bill of 14.9% (based upon an average customer using 10,000 gallons per month for water and 3,000 gallons per month for sewer).

The need for the proposed increases has been compounded by continued annual inflationary increases in costs, increased costs of necessary capital improvements, and deferral of rate increases over the previous two years. Taking into effect the loss of compounding revenue and current unanticipated high inflation, these increases are generally consistent with what was proposed in FY 2020/21. Within the Rate Study, a fund balance amount of approximately \$590,000 for water and approximately \$680,000 for sewer was used, reducing the rate increase to the proposed level in FY 2022/23.

As noted above, inflationary impacts have been significant on District Capital Improvement and maintenance projects in both labor and materials. Therefore, built into year 1 of the rate model are a 6.5% increase in staff labor and 10% increases for materials and supplies, equipment, chemicals, and utilities.

The rate study informs the District that long-term borrowing is needed to provide the funding necessary for the updated 5-year Capital Plan. This includes \$7.1 million for water projects and \$36.0 million for sewer projects occurring during FY2023-26. As the Trustees are aware, the majority of the projected sewer borrowing will be needed for the Effluent Pipeline Project.

The following tables show the current versus proposed 2022/23 rate comparisons for water and sewer for the average customer when maintaining the current rate structure and adjusting rates to meet the revenue requirements.

Residential Water Rate Comparison

Rate Component	Current Rate	Proposed Rate	Change
Base Rate	\$11.97	\$15.88	\$3.91
Capital Improvements	\$15.10	\$15.10	\$0.00
Customer Admin Fee	\$3.97	\$4.23	\$0.26
Defensible Space	\$1.05	\$1.05	\$0.00
Total Monthly Base Water Bill	\$32.09	\$36.26	\$4.17
Water Use	\$1.55	\$2.02	\$0.47
1 st Tier	\$0.93	\$1.21	\$0.28
2 nd Tier	\$1.34	\$1.75	\$0.41

Residential Sewer Rate Comparison

Rate Component	Current Rate	Proposed Rate	Change
Base Rate	\$19.54	\$25.90	\$6.36
Capital Improvements	\$31.45	\$31.45	\$0.00
Customer Admin Fee	\$3.97	\$4.23	\$0.26
Total Monthly Base Sewer Bill	\$54.96	\$61.58	\$6.62
Sewer Use	\$3.20	\$4.00	\$0.80

As part of the Rate Study, the consultant analyzed the cost of service for each rate class to determine if rates were equitable between the various user types. The consultant discovered the following:

- For water rates, the irrigation revenue could be increased greater than the system average to reflect the cost of service results. This is due to the significant peak demand that irrigation puts on the capacity needs of the water system and the resulting costs associated with providing this level of service if irrigation is viewed separately. There are currently 62 irrigation customers and 20 IVGID Public Service Recreation irrigation accounts. As the Board of Trustees is aware, there are Public Service Recreation irrigation accounts that do not pay excess water charges for the Tier 1 and Tier 2 water rates, per Ordinance No. 4, Water Ordinance, Section 2.40 Public Service Recreation. The proposed rates include the creation of separate rates for the irrigation customer accounts, which would be phased in over the five-year period. This would result in a savings of approximately \$0.30 per month to the average residential customer for the FY 2023 proposed rates. These separate irrigation rates will be charged to all irrigation customers, including the Public Service Recreation irrigation

accounts. The Public Service Recreation account billing will continue to follow Ordinance No. 4 as outlined above.

- For sewer rates, the commercial class revenue could be increased to better reflect the cost of service results. The concentration of wastewater for a commercial property versus a residential property causes additional demand on the sewer system and the increase in the cost to provide service. The proposed rates include an increase to the commercial class as a phased adjustment over five years. This shifts revenue of approximately \$34,000 in year 1 and approximately \$55,000 by year 5 to the commercial class. In year one, this would result in a savings of approximately \$0.60 per month to the average residential customer. There are approximately 233 commercial customers that will be impacted by this proposed change to the rates.

It is also important to understand that this is a cost of service study that reflects the current operating and customer characteristics. Over time, these change and the cost of service will show different results from year to year. Given this is the first comprehensive cost of service study completed for the District, further studies should confirm the results prior to the Board making full cost of service adjustments.

Connection Fees, Retroactive Capital Improvement Fees, and Public Works Fee Schedule

To keep pace with the increases seen for the Utility fund, the Connection Fees, Retroactive Capital Improvement Fees, and the items on the Public Works Fee Schedule are recommended to be increased by approximately twelve percent (12%), which reflects the Construction Cost Index increase from January 2019 to January 2022. These are one-time fees imposed on new development to cover retroactive capital costs.

Proposed 12% Increase to Sewer Connection and CIP Fees

Sewer CAF	Connection – Current	Connection – Proposed	CIP – Current	CIP – Proposed
3/4	\$3,230	\$3,540	\$1,940	\$2,130
1	\$5,400	\$5,920	\$3,240	\$3,550
1 1/2	\$10,770	\$11,790	\$6,470	\$7,080
2	\$17,240	\$18,880	\$10,350	\$11,340
3	\$32,340	\$35,420	\$19,430	\$21,280
4	\$53,910	\$59,050	\$32,380	\$35,470
6	\$107,790	\$118,050	\$64,740	\$70,910
8	\$172,470	\$188,890	\$103,590	\$113,460
10	\$247,890	\$271,490	\$148,890	\$163,070

Proposed 12% Increase to Water Connection and CIP Fees

Water CAF	Connection - Current	Connection - Proposed	CIP – Current	CIP – Proposed
3/4	\$1,610	\$1,800	\$1,840	\$2,060
1	\$2,680	\$3,010	\$3,070	\$3,440
1 1/2	\$5,350	\$6,000	\$6,120	\$6,860
2	\$8,560	\$9,610	\$9,790	\$10,980
3	\$16,070	\$18,030	\$18,380	\$20,610
4	\$26,780	\$30,060	\$30,630	\$34,350
6	\$53,540	\$60,100	\$61,240	\$68,690
8	\$85,670	\$96,160	\$97,990	\$109,900
10	\$123,140	\$138,220	\$140,840	\$157,960

Proposed 12% Increase to Public Works Fee Schedule

Miscellaneous Fees	Current	Proposed
Sewage Drop-off	\$75.00	\$85.00
Backflow	\$65.00	\$75.00
Plan Check	\$90.00	\$100.00
Inspection	\$90.00	\$100.00
Service Call	\$40.00	\$45.00
Hydrant Deposit	\$1,000.00	\$1,120.00
Hydrant Rental	\$40.00	\$45.00
1" Deposit	\$100.00	\$110.00
1" Rental	\$20.00	\$20.00
3/4" Deposit	\$100.00	\$110.00
3/4" Rental	\$15.00	\$15.00
Posting	\$20.00	\$20.00

Alternative Rate Modeling Scenarios

A significant factor contributing to the recommended rate adjustments over the five-year planning horizon is the financing required to support major sewer utility capital improvement projects. The rate model, base case scenario, assumes the issuance of approximately \$43 million in bonds, amortized over 20 years at an annual interest rate of 4.5%.

Five-Year Utility Revenue Adjustments – Base Scenario

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Water Revenue Adjustment	20.0%	12.0%	9.5%	9.0%	3.5%
Sewer Revenue Adjustment	15.0%	12.5%	8.0%	8.0%	3.5%

Acknowledging that the District is actively pursuing outside funding support anticipated to be available through Federal and State grants and low-interest loan programs, alternative modeling scenarios are provided to inform how alternative financing scenarios may impact future rate adjustments. As a point of reference, these percentages are overall system adjustments and may not reflect the individual bill impacts given the cost of service and rate design recommendations. The following alternatives were developed:

Low-Interest Loan (2.5%)

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Sewer Revenue Adjustment	15.0%	10%	8.0%	5.0%	4%
Water Revenue Adjustment	20%	12%	9.5%	7.0%	3.0%

Grant Awards - \$5.0 million

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Sewer Revenue Adjustment	15.0%	9.5%	6.5%	6.5%	4.5%

Grant Award - \$10 million:

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Sewer Revenue Adjustment	15%	9.5%	5.0%	5.0%	5.0%

Utility Reserve Levels

These recommended revenue increases take into account a gradual approach over a five-year period to achieve operating and capital reserve fund targets, per

Board policy. Doing so gradually lessens the immediate impact to customers, as opposed to an even greater rate increase to meet these policies in the short-term. The following table shows the likely annual reserves each year for the Utility Fund based upon the proposed rate increases.

Utility Reserve Funds

Operating Fund	FY 2023	FY 2024	FY2025	FY 2026	FY 2027
Ending Balance	\$1,026,042	\$1,097,999	\$1,771,147	\$2,678,148	\$3,283,271
Target	\$2,661,855	\$2,681,860	\$2,807,222	\$2,939,222	\$3,077,774
Capital Fund					
Capital Fund	FY 2023	FY 2024	FY2025	FY 2026	FY 2027
Ending Balance	\$2,095,876	\$3,542,344	\$4,775,987	\$4,516,986	\$4,030,467
Target	\$3,782,338	\$3,884,461	\$3,989,342	\$4,097,054	\$4,207,675

The above table illustrates that the Fund Reserve target is met for both Operating Funds in FY2027 and Capital Funds in FY2025. The Capital Reserve does drop slightly below the target in FY 2027, which is indicative of Capital Fund reserve balances depending on what spending is planned in any particular year.

Area Water and Sewer Rates

The table below demonstrates that, even with these significant rate increases, IVGD's combined monthly water and sewer rates are one of the lowest in the area for the average customer (10,000 gallons of water and 3,000 gallons of sewer per month). It is important to note when reviewing the table that the rates for the other agencies does not include any potential increases for FY 2023.

Agency	Monthly Water and Sewer Rate
Incline Village GID (FY 2023 Proposed)	\$130.12
Alpine Springs CWD (FY 2022) *	\$186.36
North Tahoe PUD (FY 2022)	\$162.88
Northstar CSD (FY 2022)	\$219.79
OVCSD (2021-22) *	\$227.00
Round Hill GID (2019)	\$126.19
Skyland (FY 2023)	\$128.32
South Tahoe PUD (2021-22)	\$118.65
Tahoe City PUD (2021) *	\$192.61
Truckee Sanitary * / TDPUD	\$139.88

* Rates include TTSA charge for treatment services

Schedule

The schedule for the proposed rate adoption is as follows:

Utility Rate Study Schedule	Date
Preliminary Results of the Public Utility Rate Study	November 10, 2021
Rate Study Presentation	February 9, 2022
Revised Rate Study Presentation	March 9, 2022
Set Date of Public Hearing to Adopt New Utility Rates	March 9, 2022
Publish Notice of Public Hearing in Newspaper	March 18, 2022
Conduct Public Hearing and Adopt New Utility Rates	April 27, 2022
New Utility Rates Become Effective – Pending Approval	May 19, 2022

V. BID RESULTS

There are no bid results associated with this Memorandum.

VI. FINANCIAL IMPACT AND BUDGET

The water and sewer utility rates are recommended to increase to provide a combined revenue requirement of approximately \$14.29 million (FY2022/23) which is collected from the District's water and sewer customer via monthly utility bills. The proposed 2022/23 rate adjustments would result in additional revenues of approximately \$1.0 million for the water utility and approximately \$980,000 for the sewer utility.

The update to the District's utility rate model is intended to evaluate the revenue required to support current and future operating and capital expenses, and contemplates increases over the next five years, pending Board direction and final approval of water and sewer rates at a future meeting.

VII. ALTERNATIVES

Not set a date for the public hearing, keep Ordinance 2 and Ordinance 4 the same, and not increase water and sewer rates. This will have a long-term negative impact on the assets, including not meeting the District reserve balance policies and financial health of the District's Utility Fund. Water and sewer

systems have regulatory oversight, so the District must meet operation and infrastructure standards, which requires applicable funding levels.

VIII. BUSINESS IMPACT

This item is not a "rule" within the meaning of Nevada Revised Statutes, Chapter 237, and does not require a Business Impact Statement.

Attachment:

- Preliminary Draft Report Water and Sewer Rate Study (HDR)
- Water and Sewer Rate Study Questions & Answers
- Water and Sewer Rate Study Presentation (HDR)