

Economic Feasibility Statement

Prepared for

Tumalo Basin Sewer District

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CITATION

Economic Feasibility Statement.
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1. SERVICES AND FUNCTIONS OF THE PROPOSED DISTRICT

1.1 Background

The unincorporated community of Tumalo, Oregon, does not currently have a public sewer system, leaving all businesses and residents dependent upon onsite systems (septic tanks with drainfields, drill holes, or sand filters) for wastewater treatment and disposal. The increasing age of septic systems is resulting in onsite system failures and exorbitant repair/replacement costs. The high permeability of soils in Tumalo also poses environmental hazards to groundwater and the nearby Deschutes River. The area has a relatively shallow groundwater table and is within close proximity to the Deschutes River.

To further complicate matters, the area is platted with small lot sizes lacking adequate drainfield reserve area. Many lots have been denied Septic System approval by ODEQ and Deschutes County due to inadequate lot areas which limits the ability of new and existing businesses and residents to subsist in Tumalo. The downtown core area of Tumalo, which includes both commercial and residential zoned land, is not well suited for onsite wastewater disposal. Both Deschutes County and Oregon DEQ agree that for Tumalo, a community sewer is the only sound, long-term solution for wastewater collection, treatment, and disposal.

In 2022, Deschutes County commissioned the “Tumalo Wastewater System Feasibility Study”, which was completed by CONSOR. Based on the existing conditions at the time and analysis of projected future flows, CONSOR evaluated three alternatives for providing sewer to Tumalo as follows:

1. Developing a new collection system and expanding the existing Tumalo Property Owners Association (TPOA) Orenco Advantex treatment technology system.
2. Developing a new collection system and separate Orenco Advantex treatment system within the Tumalo unincorporated area.
3. Installing a new collection and pumping system which would send raw sewage from Tumalo to the future North Interceptor pipeline within the City of Bend.

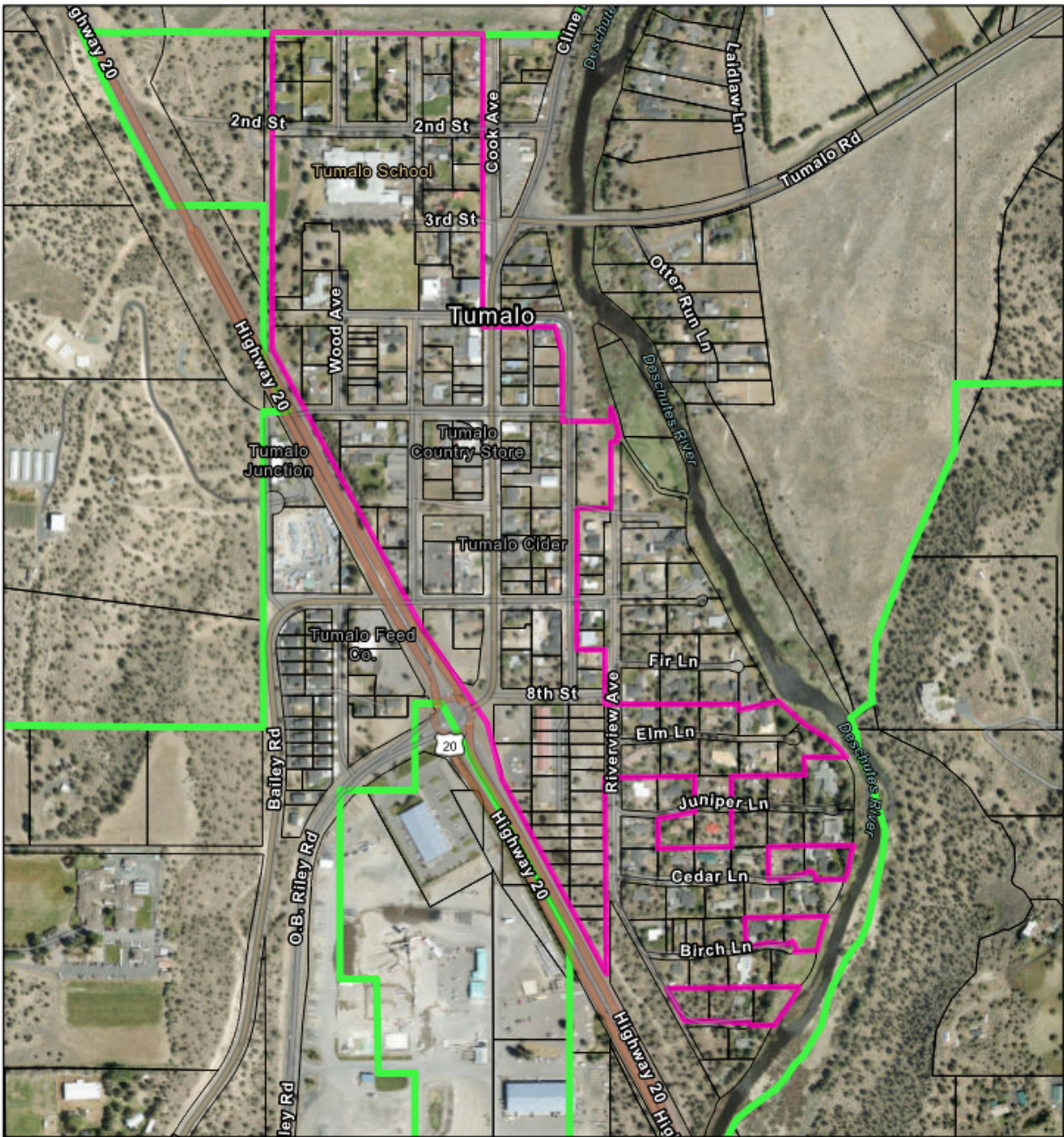
Ultimately, CONSOR recommended Alternative 3 although it is worth mentioning here that other options are available and further evaluation is warranted to ensure the most efficient and cost-effective solution for the Tumalo community. Once the District is formed, it can apply for technical assistance grants to fund planning and design of a sewer system for Tumalo.

Currently, the formation of a new special sewer district is being proposed as defined by Oregon Revised Statutes (ORS) Chapter 450 and will be referred to as the Tumalo Basin Sewer District (TBSD). If approved, the District will have authority to manage and operate the system in whatever form it takes. The purpose of this Economic Feasibility Statement is to meet the requirements of ORS 198.749.

1.2 Service Area and Phasing

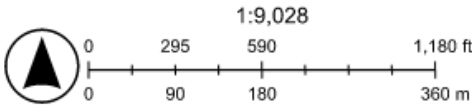
The TBSD formation committee has identified an initial service area as shown on Figure 1, which features a mixture of residential and commercially zoned properties. This initial district boundary was delineated as it is to first include the areas where there is strong support for establishment of a sewer district and system, based on feedback from community members and the understanding of the sewer committee and consultant team. Once the District is formed, additional properties can be added to the District at any time in the future through an annexation process.

PROPOSED TUMALO BASIN SEWER DISTRICT BOUNDARY



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- District Boundary
- Tumalo Unincorporated Community Boundary
- Taxlots (Deschutes Co)



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Figure 1. Initial Sewer District Service Area

1.3 Services and Functions Performed

The District will perform the following functions and provide the following services within its boundary:

1. Provide a long-term, sustainable sanitary sewer collection, treatment, and disposal system as an alternative to the historic use of on-site wastewater systems which will improve the public and environmental health in the community. In particular, the District will:
 - a. Apply for public technical assistance grants to fund sewer planning and design.
 - b. Retain a civil engineer to prepare construction plans, specifications, and cost estimates for construction.
 - c. Apply for public infrastructure grants and loans to fund construction of a sewer system.
 - d. Retain an owner's representative/project manager to solicit contractor bids, manage construction schedules, inspect construction, and review contractor invoices.
 - e. Obtain required construction and facility permits.
 - f. Hire contractor to construct sewer system.
 - g. Inform Tumalo customers of the schedule, costs, and technical requirements for connection to the public sewer system.
2. Manage, operate, and maintain the Tumalo community sewer system in accordance with the rules and regulations of ORS Chapter 450. In particular, the District will:
 - a. Hold District board meetings to review and discuss system revenues, expenses, issues, capital improvement plans, etc. and make formal decisions regarding the sewer system.
 - b. Bill customers for hookup fees and monthly sewer service charges, with contracted assistance from utility billing service contractors.
 - c. Operate and maintain the sewer system through proactive and reactive activities, with contracted assistance from a qualified maintenance contractor.
 - d. Maintain regulatory compliance for all infrastructure and required facility permits.

2. RELATIONSHIP TO OTHER GOVERNMENT SERVICES

There is the potential for TBSD services to overlap with existing districts and government agencies in the area. The existing entities that have potential to provide services and functions that relate to the TBSD are the City of Bend, Laidlaw Water District, and Tumalo Property Owners Association (TPOA).

2.1 City of Bend

As noted above, pumping raw sewage to the City of Bend collection system, which in-turn flows to the City's central wastewater treatment plant, is one alternative to be considered. This would require coordination between TBSD and the City of Bend to enable a viable community sewer system for Tumalo.

Additional coordination / permitting with Oregon Department of Transportation is required for this alternative. Further, an intergovernmental agreement (IGA) between the City of Bend and the proposed TBSD will be necessary to describe the terms, conditions, and costs for the City of Bend to provide wastewater treatment and disposal. A portion of District revenues from monthly sewer rates and connection fees will need to cover the expenses for wastewater treatment and disposal provided by the City of Bend under this scenario.

2.2 Laidlaw Water District

The Laidlaw Water District provides clean drinking water and fire protection to its customers in Tumalo. While there are no other overlapping services at the outset of the new sewer system operation, there is potential for administrative and billing cooperation between the two districts. At the time of this Economic Feasibility Statement, however, no coordination or agreement between the two districts is planned. The operating budget assumes that no administrative, operational, managerial, or financial services will be shared by the two districts. In accordance with ORS 450, there is a legal pathway for the Laidlaw Water District and Tumalo Basin Sewer District to form a joint water and sanitary authority via district consolidation - if both districts desire to do so and required votes and approvals are obtained.

2.3 Deschutes County

Deschutes County Environmental Health has jurisdiction over all existing on-site sewage systems and will play a part in approval for decommissioning existing systems as homes and businesses connect to a future community sewer system. In addition, Deschutes County Road Department has jurisdiction of public right of way and will need to approve any construction activities therein.

3. ECONOMIC FEASIBILITY STATEMENT

This section evaluates the economic feasibility of the proposed Tumalo Basin Sanitary District and presents a financial framework for the delivery of the services and functions described above. It is beyond the scope of this Economic Feasibility Statement to evaluate and select a preferred sewer system design alternative for the proposed Tumalo Basin Sewer District. Rather, this analysis estimates the funding capacity of the initial District at start up as well as estimated potential development within the initial District over the course of the ensuing 10-years.

3.1 Annual Operating Budget

For the proposed wastewater system to be economically feasible, it must be able to cover operating expenses and debt service with revenues from connection fees and monthly sewer rates. The main components of the annual operating budget include revenues, operational expenses, capital project costs, debt repayment, reserves, and grant funding. Each of these six components are described further in the sections that follow.

An annual operating budget (Budget) was prepared to illustrate 10-year cash flow projections based on different levels of grant funding, sewer rates, and SDCs. This operating budget assumes a combination of loan and grant funding for an assumed \$5 million sewer system project. By securing more grant funding, the District can minimize its debt burden and the reimbursement fee component of SDC charges, which would translate to more affordable monthly rates and SDCs for its customers, respectively.

In this 10-year operating budget, it is assumed that project funding would occur in 2026, construction would occur in 2027, and customer connections would begin upon system startup in 2028. Figure 2 below illustrates how debt service and O&M expenses could be covered by operating revenues within the Budget. The initial years are the most financially critical for new Districts when debt payments are due and revenues sources are being established. Over the years, revenues and operating costs are expected to increase as more equivalent dwelling units (EDUs) connect to the system, while annual debt service decreases slightly year-over-year as loan principal and related annual loan fees are reduced.

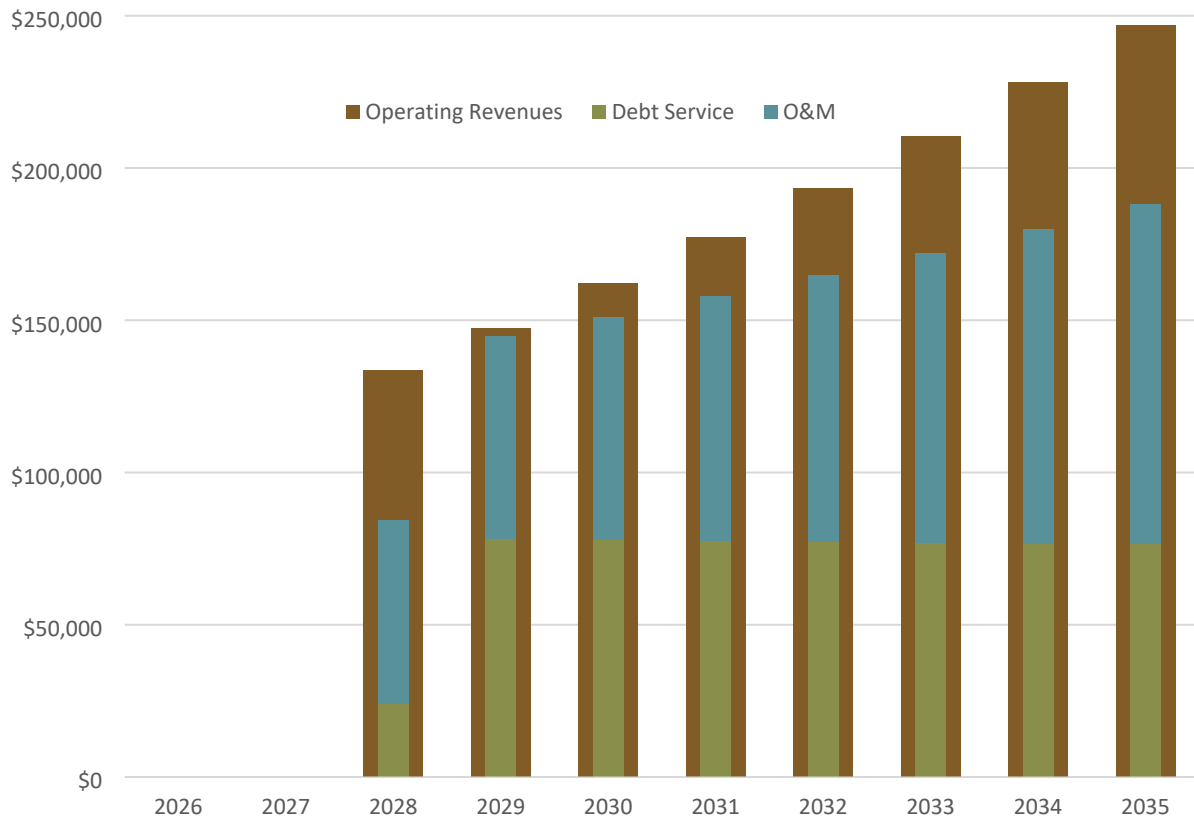


Figure 2. Annual Operating Budget Graph

At startup, 139 EDUs are anticipated to connect to the collection system. EDUs are assumed to increase by approximately 10 each year within the initial district boundary for the next 10-years. Sewer rates are projected to increase 3% per year to adjust for the inflation of the cost to provide services. Anticipated operating revenue is based on the monthly rates and number of EDUs connected to the sewer system.

As a new wastewater system there are no existing revenue streams and customer participation in the system will start small and increase over time. Consequently, a relatively high level of grant funding will likely be necessary to establish this new system with rates and fees that are affordable to Tumalo customers. Please see Section 3.7 for a summary of public infrastructure funding programs that Tumalo may be eligible for.

Table 1. Annual Operating Budget

Year	(funding) (construction) (startup)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Cost index (3% cost inflation annual average)											
EDUs											
Monthly Rate per EDU ¹											
Beginning Balance		\$ -	\$ 5,100,000	\$ 100,000	\$ 141,137	\$ 146,173	\$ 161,933	\$ 188,900	\$ 227,581	\$ 278,498	\$ 342,199
Operating Revenues											
Charges for Services		-	-	133,440	147,331	161,936	177,284	193,407	210,339	228,112	246,762
Total Operating Revenues		\$ -	\$ -	\$ 133,440	\$ 147,331	\$ 161,936	\$ 177,284	\$ 193,407	\$ 210,339	\$ 228,112	\$ 246,762
Operation, Maintenance & Replacement Expenses											
Personal Services ²		-	-	11,676	12,891	14,169	15,512	16,923	18,405	19,960	21,592
Materials & Services ³		-	-	48,650	53,715	59,039	64,635	70,513	76,686	83,166	89,965
Total OM&R		\$ -	\$ -	\$ 60,326	\$ 66,606	\$ 73,208	\$ 80,147	\$ 87,436	\$ 95,091	\$ 103,126	\$ 111,557
(Average Annual OM&R Expense per EDU)				\$434	\$447	\$460	\$474	\$488	\$503	\$518	\$534
Debt Service											
Net Revenue Avail. For Debt Service		-	-	73,114	80,725	88,727	97,137	105,971	115,248	124,986	135,205
Debt Service (CWSRF Loan) ⁴		-	-	23,978	78,088	77,840	77,587	77,332	77,073	76,810	76,543
Total Debt Service		\$ -	\$ -	\$ 23,978	\$ 78,088	\$ 77,840	\$ 77,587	\$ 77,332	\$ 77,073	\$ 76,810	\$ 76,543
Other Activities											
Cash Available After Debt Service		\$ -	\$ -	\$ 49,137	\$ 2,637	\$ 10,888	\$ 19,549	\$ 28,639	\$ 38,176	\$ 48,177	\$ 58,662
Loan Proceeds/Drawdowns		1,800,000	-	0	0	0	0	0	0	0	0
Capital Outlay		0	(5,000,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
Loan Payoff ⁵		0	0	(1,100,000)	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)
Grant ⁶		3,300,000	0	0	0	0	0	0	0	0	0
SDC revenue	66% Tot. Cost \$ 8,000 /EDU	0	0	1,112,000	82,400	84,872	87,418	90,041	92,742	95,524	98,390
Net Other Activity		\$5,100,000	\$ (5,000,000)	\$ (8,000)	\$ 2,400	\$ 4,872	\$ 7,418	\$ 10,041	\$ 12,742	\$ 15,524	\$ 18,390
Ending Fund Balance		\$5,100,000	\$ 100,000	\$ 141,137	\$ 146,173	\$ 161,933	\$ 188,900	\$ 227,581	\$ 278,498	\$ 342,199	\$ 419,251
Debt Service Coverage				3.05	1.03	1.14	1.25	1.37	1.50	1.63	1.77

Notes:

- Monthly rate as % of median household income: 1.54%
- Assuming annual cost of \$84 per EDU for District personal services such as billing, accounting, administration, etc.
- Assuming annual cost of \$350 per EDU for sewer system maintenance by licensed contractor, adjusted annually with cost index to account for inflation.
- Based on 30 year loan term and 1.39% interest rate and including 0.50% annual fee (DEQ rates effective 4/1/2024 through 6/30/2024, Small Communities Below Statewide MHI)
- SDC revenues are applied to CWSRF loan principal to minimize annual debt service and monthly rates - \$1.1 Million in 2028 and \$60,000 per year thereafter.
- Assumed grant funding includes CWSRF principal forgiveness (up to \$2M) and other grant sources such as congressional funding.

3.2 Revenues

Equivalent Dwelling Unit (EDU) estimates were prepared to approximate the existing sewer customer base within the proposed District Boundary. Properties were categorized as Residential, Vacant Residential, Commercial, and Institutional, based on their zoning and development status.

Please see Exhibit A for a map of the proposed District and references to each property included in the EDU estimate tables shown in Exhibit B (Residential & Vacant EDUs) and Exhibit C (Commercial & Institutional EDUs).

Table 2 below summarizes the existing, additional, and full-buildout EDUs for each category. In the initial service area, there are approximately 50 existing residential dwellings and 22 existing commercial / institutional users. Based on various design standards (primarily City of Bend), there are 50 existing residential EDUs and approximately 89 existing commercial / institutional EDUs. The total of existing residential and commercial / institutional EDUs is estimated to be approximately 139 EDU in the initial service area. At build-out within the initial District area, it is estimated that there will be a total of approximately 174 residential and 116 commercial / institutional EDU for a total of 290 EDU.

Table 2. EDU Estimate Summary Table

Category	Existing EDUs	Additional EDUs	Full Buildout EDUs
Residential	50	124	174
Commercial	56	25	81
Institutional	33	2	35
Subtotals	139	151	290

By definition, each residential dwelling is counted as one EDU. The quantity of EDUs associated with commercial and other users is estimated using City of Bend, Oregon DEQ, and other pertinent flow estimation standards, based on the current use at each property/establishment. Additional Residential EDU estimates assume that 1 EDU could be added to each 2,500 square-foot vacant lot or vacant portion of residential lots. Additional Commercial and Institutional EDU estimates assume that each acre of undeveloped commercial land that is developed in the future would produce 427 gal/day and that 1 EDU is represented by 130 gal/day of sewer flow (per City of Bend Stds & Specs Table 4-1).

For the purposes of this study, it was assumed that small businesses under common ownership with average flows equal to or less than that of an average residence would be charged system development charges (SDCs) and monthly rates rounded up to one EDU. Larger businesses under common ownership with average flows greater than that of an average residence will be charged SDCs and monthly rates accordingly, rounded up to the nearest whole number and ranging from 2 EDUs or more, depending on the use classification and size of facility. The District may consider alternate methods for calculating commercial EDUs, such as water meter size (for simplicity) or septic system design flows (for more direct correlation to wastewater generation). However, it is important that any alternate EDU calculation method result in sufficient annual operating revenues and SDC revenues to cover operating expenses and capital costs, respectively.

According to the U.S. Environmental Protection Agency, if the annual sewer service cost per household is less than 1.0 percent of the median household income (MHI), it is assumed that the project is not

expected to impose a substantial economic hardship on households. If the average annual sewer service cost per household exceeds 2.0 percent of median household income, then the project may place an unreasonable financial burden on many of the households within the community. When the ratio falls between these values, communities are expected to incur mid-range impacts and a secondary test is often performed that includes debt indicators, socioeconomic indicators, and financial management indicators. Various state and national funding agencies have adopted an affordability threshold that falls within this range.

According to the 2020 American Community Survey (U.S. Census Bureau Table S1901), the MHI for the Tumalo Census-Designated Place is \$62,379, although the boundary roughly matches the unincorporated community boundary, the proposed district is focused in the core area of commercial and residential properties. Even so, it is considered a reasonable representation of demographics for the purposes of this study. See Figure 3 below.

Based on the affordability thresholds described above, a 1 to 2 percent annual sewer service cost as a percentage of Tumalo MHI would correlate to a monthly sewer service cost between \$52 and \$104 (per residential service, or one EDU). Therefore, sewer rates should be set within this range to be affordable to ratepayers while also being sufficient to result in a DSCR greater than one for debt repayment.



Figure 3. Summary of 2020 Census Data for the Tumalo CDP

Source: US Census Data Website (Source Tables in Blue), https://data.census.gov/profile/Tumalo_CDP,_Oregon?g=160XX00US4175050

A monthly rate of \$80/EDU was assumed for the purposes of this Economic Feasibility Statement. This monthly rate is comparable to other regional communities and translates to an annual cost per household of \$960, which represents 1.54 percent of the median household income in Tumalo (\$62,379 per 2020 U.S. Census Data). Estimated annual revenues with 139 EDUs each paying \$80/month are calculated as follows:

$$139 \text{ EDU} \times \$80/\text{EDU}/\text{month} = \$11,120 / \text{month} = \$133,440 / \text{year}$$

When the District is formed and moves forward with the design and construction of an initial wastewater collection and treatment system project, an SDC will need to be established to help cover costs for this project and allocate funding for past and future capital projects. A detailed SDC analysis is beyond the scope of this preliminary engineering report. An official SDC study will be performed in the future when actual costs, funding sources, full buildout EDUs, etc. are better understood. An SDC fee of \$8,000/EDU was assumed for the purposes of this Economic Feasibility Statement. Initial revenues from SDC fees is calculated as follows:

$$139 \text{ EDU} \times \$8,000/\text{EDU} = \$1,112,000$$

The Budget models 10 new EDUs being connected to the sewer system per year, as well as 3% annual increases to sewer rates and SDC fees to keep up with the inflation of costs for district operations, system maintenance, and future system expansion.

3.3 Operational Expenses

Operational expenses shown in the Budget are broken up into two categories:

- **Personal Services** – This includes utility billing services, personnel costs, administrative costs, accounting, legal fees, interest, utilities, office supplies, printing, and professional services among other tasks. An estimate of \$84/EDU/year was used to budget funds for these personal services, with 3% annual increases to account for inflation. Because of the small scale of the district area at startup, contracting with the Laidlaw Water District or a third-party billing and customer call center service may be cost-effective option for the District to provide these services. This results in a budgeted annual personal services expense of \$11,676 assuming 139 EDUs at startup in 2028.

Materials and Services – This includes sewer system preventative maintenance and reactive maintenance of the sewer collection and treatment system. An annual cost of \$350 per EDU is assumed for sewer system maintenance by licensed contractor, with 3% annual increases to account for inflation. This results in a budgeted annual materials/services expense of \$48,650 assuming 139 EDUs at startup in 2028.

3.4 Capital Project Costs

For the purposes of financial modeling for this Economic Feasibility Statement, a sewer system construction project cost of \$5 million has been assumed in the Budget. Table 3 below provides a hypothetical breakdown of this assumed \$5 million project cost.

Table 3. Project Cost Breakdown

Construction	Estimated Cost
Sewer Collection System	\$1,800,000
Service Connections	\$347,500
Treatment System	\$1,423,929
Construction Subtotal:	\$3,571,429
Contingency (20%):	\$714,286
Survey & Engineering (10%):	\$357,143
Construction & Funding Administration (5%):	\$178,571
Legal & Permitting (5%):	\$178,571
Estimated Project Total:	\$5,000,000

This discrete dollar figure for capital costs was used for the purposes of this economic feasibility statement. However, the actual project costs are likely to range from \$3.5 million to \$7.5 million, based on Class IV cost estimating standards (-30% to +50%). It must be recognized that opinions of probable cost are preliminary and based on the level of planning presented in this study. Due to the nature of fluctuating economic conditions, the competitive bidding process, the preliminary nature of this planning document, and other unpredictable conditions, actual total project costs may vary from

estimate presented here. As the project moves forward with design and detailed cost estimates, it will be necessary to update the costs and operating budget accordingly.

3.5 Debt Repayment

The Budget assumes that a \$1.8 million infrastructure loan would be taken with a 30-year term, 1.39% interest rate, and a 0.5% annual fee based on the principal balance. These loan terms and rates are typical of Clean Water State Revolving Fund loans for design or construction in small communities below the statewide MHI, as published on the DEQ website for the period of April 1 through June 30, 2024. According to the 2020 American Community Survey (U.S. Census Bureau Table S1901), the MHI for the Tumalo Census-Designated Place is \$62,379 and the statewide Oregon MHI was reported to be \$76,632.

Based on these loan assumptions the maximum annual debt service is calculated to be \$78,088 in 2029. Debt service in 2028 is much lower, because only interest payments are typically due within the first 12 months following project completion (for CWSRF loans). For this program, borrowers begin repayment six months to one year after project completion, based on an amortization schedule provided by DEQ. The annual debt service can be reduced by applying SDC revenues toward loan principal paydown. The Budget assumes that SDC revenues are applied the CWSRF loan principal balance in the amount of \$1.1 million in 2028, followed by \$60,000 per year thereafter.

Public infrastructure lending agencies, such as Business Oregon, generally require utilities to set user rates sufficient to generate net revenues (operating revenues minus operating expenses) in excess of annual debt service to provide some level of funding contingency. This is referred to as “debt service coverage”. The debt service coverage ratio (DSCR) is the ratio of net revenue available (after covering operating expenses) to the debt service. Lending agencies require the DSCR to be at least 1.00 in all years budgeted.

The proposed Budget maintains a DSCR ratio of 1.03 or better for all years. In 2029, DSCR is at its lowest (1.03) when full amortized loan payments begin (including principal, interest, fees) and the system is only in the second year of being operational and connecting customers. However, in the following years, the DSCR ratio increases each year as additional connections increase revenues and debt service decreases as principal is paid down.

3.6 Reserves

An additional \$100,000 is allocated in the long-term loan amount for the purpose of establishing a debt service reserve. A debt service reserve is an amount specifically set aside to cover debt payments in the event of a disruption of cashflows to the extent that debt cannot be serviced. This debt service reserve is a key component of a project finance model and is usually required by lenders.

This \$100,000 reserve is 5.56% of the \$1.8 million assumed loan principal and roughly 1.28 times greater than the \$78,088 (maximum) annual debt service obligation. With this initial debt service reserve allocation, the end fund balance is kept at or above \$100,000 for all years.

Additionally, \$20,000 is set aside per year as capital outlay toward the future replacement of short-lived infrastructure assets, such as manholes, valves, and wastewater treatment components.

3.7 Public Infrastructure Funding Programs

To establish a financially viable sewer district and sewer system in Tumalo with affordable sewer rates and SDC fees, it will be critical to secure low-interest loans and a high percentage of grant funding.

Business Oregon facilitates One-Stop meetings to quickly and efficiently identify infrastructure funding solutions for communities. Funding partners such as USDA-RD and DEQ are also included in One-Stop meetings. Once the District is formed, it can schedule a One-Stop meeting with the IFA and attend with the board members, consultants, partner agency staff, and this document.

After the One-Stop meeting, the District will be invited to submit funding applications to the funding programs identified by agencies as most suitable for the proposed project. Most likely, financing will come from a combination of sources. The Budget assumes \$3.3 million in grant funding can be obtained for the sewer system project, including a combination of principal forgiveness (up to \$2M) and other grant sources. Below is a summary of potential grant and loan funding resources available for wastewater infrastructure projects.

Oregon Department of Environmental Quality (DEQ)

DEQ provides water/wastewater funding options through the Clean Water State Revolving Fund. This program has seen an influx of federal funding resulting from passage of the \$1.2 trillion Infrastructure Investment and Jobs Act in 2021, which included \$55 billion for water and wastewater infrastructure projects across the country. The program provides low-cost loans to public agencies for the planning, design, or construction of various projects that prevent or mitigate water pollution. DEQ partners with Oregon communities to implement projects that attain and maintain water quality standards and are necessary to protect recreation, fish habitat, drinking water, and other beneficial uses. A wastewater treatment facility is an eligible project under this program. These loans are offered with 5- to 30-year terms and annual interest rates ranging from 0.60 percent to 2.31 percent. As with the other funding agencies, reduced interest rates may be available depending on the income levels in the project area. Projects that meet affordability and green/sustainability criteria are eligible for up to \$2 million in principal forgiveness.

Oregon Business Development Department – Infrastructure Finance Authority (OBDD-IFA)

Community Development Block Grant (CDBG) funding is administered through OBDD-IFA. Federal CDBG program rules limit program assistance to activities that are necessary to benefit current residents in a primarily permanent-resident area. The program also requires meeting the federal objective of serving low- and moderate-income persons. This means that the service area of the system must serve an area where more than 51 percent of the permanent residents are low- and moderate-income persons now and into the future. With the available census data, it is uncertain whether incomes in the Tumalo service area will meet this requirement. “Low income” means income equal to or less than 50 percent of the area median (adjusted by family size). “Moderate income” means income equal to or less than 80 percent of the area median (adjusted by family size).

Applicable income limits are determined by the U.S. Department of Housing and Urban Development on an annual basis for all Oregon counties and metropolitan statistical areas. Because the Tumalo area is unincorporated, there is limited data available to determine the median income in the area. For the District to be able to apply for CDBG funding, an income study will be required by the funding agencies to determine the community’s income level. The maximum grant available through the program is \$2,500,000 (for the category, Public Works Water and Wastewater Improvements).

OBDD-IFA is also responsible for administering the Special Public Works Fund Program, which is funded by capital from the Oregon Lottery. Loan funds are normally available through this program to be used by cities and counties for public utility improvements, and the program also offers grant funds once loan capacity limits are met. The maximum grant is typically \$500,000, and the maximum loan is typically \$10 million. Grants cannot be more than 85 percent of the total project cost. Funds can be made

available for the purpose of improving public facilities so the service provider can serve additional commercial and industrial businesses.

Eligibility for these funds is tied very closely to the need for economic growth and the creation of new jobs or retention of jobs. Grant funds are typically limited to \$5,000 per job that is retained or created. Depending on the capability of the District to demonstrate the creation of new family-wage jobs or the retention of existing jobs, this funding program may be a possible option for the District.

OBDD-IFA offers low-interest loan options through the Water/Wastewater Financing Program. The loan program funds the design and construction of public infrastructure needed to ensure compliance with the Safe Drinking Water Act or the Clean Water Act. In order to be eligible for funding, a system must have received, or be likely to receive, a Notice of Non-Compliance by the appropriate regulatory agency. The maximum loan term is 25 years, and the maximum loan is \$10 million. Grants of up to \$750,000 may be awarded based upon a financial review and must be matched 1:1 with a loan from the program. A median household income survey is required for this program to determine what the required affordability rate is and any potential for grant assistance.

U.S. Department of Agriculture – Rural Development (USDA-RD)

USDA-RD offers affordable funding to develop essential community facilities in rural areas. It offers direct loan options with terms up to 40 years at annual interest rates at and below market rates. Grant assistance is also provided on a graduated scale with smaller communities with the lowest median household income being eligible for projects with a higher proportion of grant funds. An income study of the project area would determine how much of the project would be eligible for grant assistance.

Congressional Funding Requests

In the realm of infrastructure funding, Senators and House Representatives play important roles in securing grants for sewer projects. Each year, members of congress review requests for financial assistance with projects that benefit the communities they represent. The Senate Appropriations Committee accepts requests from Senators for community-initiated projects (CIPs). In the House of Representatives, the equivalent process is known as Community Project Funding (CPF). Local governments and nonprofit entities can seek one-time grant funding for specific community projects.

Oregon's senators currently are Jeff Merkley and Ron Wyden. Tumalo is represented by Oregon's 5th House District, which is currently held by Rep. Lori Chavez-DeRemer. These members of congress have secured millions of dollars in CIP & CPF funding for sewer projects in Oregon, including the North Santiam Sewer Project, Redmond Wetland Complex Plant Interceptor, and many others. The recently formed Terrebonne Sanitary District has requested and is hopeful to receive \$2.5 million in CIP and CPF funding for construction of a new wastewater collection system.

In summary, Senators and House Representatives actively engage in securing funding for essential sewer projects, fostering cleaner water, healthier communities, and sustainable development.

3.8 Summary

The need for a public wastewater system in the commercial and residential core of the Tumalo area is well established. The economic, public safety, and environmental health risks with continued use of onsite wastewater disposal systems are serious. Installation of a public sewer system would help businesses operate reliably and would facilitate development of new housing, jobs, and commerce in the community.

The key to selecting and implementing wastewater system improvements is the District's ability to acquire low-interest loan funding and grant funds. This will be critically important to keep SDCs and

monthly user rates affordable. After years of determination and collaboration, recently formed Districts such as the Crescent Sanitary District and Terrebonne Sanitary District, have successfully secured public infrastructure funding for their projects. Given the risks of onsite wastewater systems polluting the Deschutes River and the relatively low median household income in Tumalo (compared to Oregon statewide average), the District should be well-positioned to receive public infrastructure funding.

In addition, the District will need to secure a high level of customer participation in the initial service area in order to secure loan funding, generate sufficient operating revenues, and cover operating expenses including debt service. Expanding the District Boundary via annexation could enable more customers to connect to the system. This would increase District revenues but may also require additional capital to extend sewer mains to serve additional customers.

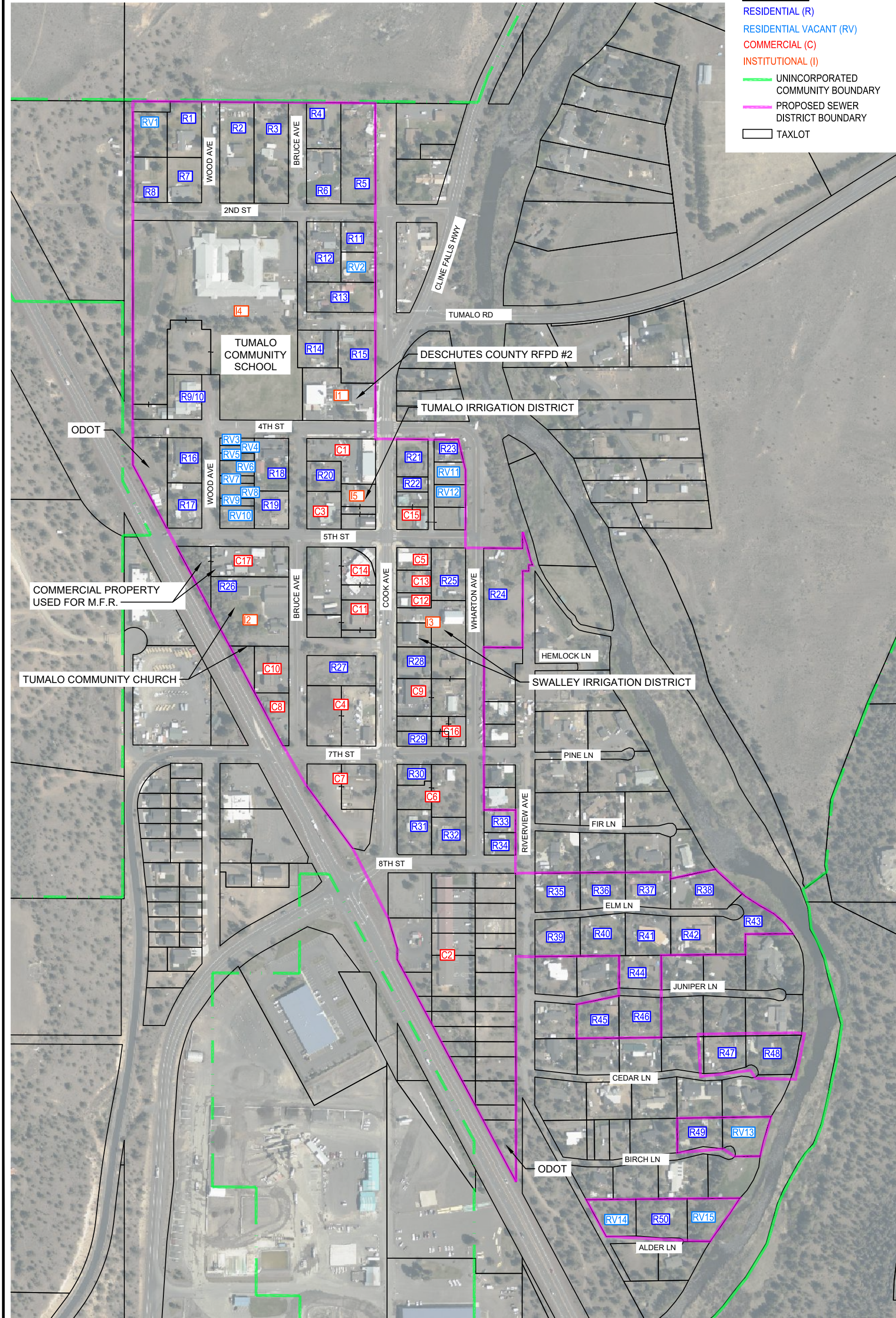
While there are many details to refine further in the future, forming a District is the first step. Once the District is formed, it can pursue technical assistance grants to fund sewer planning and design. With a sewer system design and cost estimate, the District could then apply for public infrastructure funding to fund construction. With each of these steps, the financial details of the District will come into focus.

This Economic Feasibility Analysis presents a financial framework in which it may be feasible for the Tumalo Basin Sewer District to construct, operate, and maintain a public sewer system.

EXHIBIT A

LEGEND

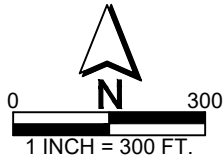
- RESIDENTIAL (R)
- RESIDENTIAL VACANT (RV)
- COMMERCIAL (C)
- INSTITUTIONAL (I)
- UNINCORPORATED
COMMUNITY BOUNDARY
- PROPOSED SEWER
DISTRICT BOUNDARY
- TAXLOT



Parametrix

DATE: April 3, 2024

FILE: 2972509012-EDU-INVENTORY



TUMALO BASIN
SEWER DISTRICT
EDU INVENTORY MAP

EXHIBIT B

Existing EDU Estimate - Residential			
Property ID	Address	Owner	Exist EDU Estimate
R1	64795 Wood Ave.	Brandon	1
R2	64786 Wood Ave.	Houser	1
R3	19838 2nd St.	Millard	1
R4	64970 Bruce Ave.	Fraley	1
R5	64785 Cook Ave.	Norris	1
R6	19850 2nd St.	Fish	1
R7	19816 2nd St.	Wilson	1
R8	19806 2nd St.	Gummus Family Trust	1
R9/10	64711 Wood Ave.	Peer Revocable Trust	2
R11	64767 Cook Ave.	Kelley	1
R12	19849 2nd St.	Turney	1
R13	64757 Cook Ave.	Lowrie & Sappington	1
R14	19849 3rd St.	Kelley Family Trust	1
R15	64741 Cook Ave.	Buck	1
R16	64699 Wood Ave.	Minkoff	1
R17	64695 Wood Ave.	Close	1
R18	19835 4th St.	Greenlee Holdings, LLC	1
R19	19830 5th St.	3Finger Jerry Holdings, LLC	1
R20	64704 Bruce Ave.	Kosman	1
R21	64712 Cook Ave.	Adams	1
R22	64706 Cook Ave.	Knowles	1
R23	64725 Wharton Ave.	Tuller	1
R24	64680 Wharton Ave.	Kelley Family Trust	1
R25	64685 Wharton Ave.	Knox	1
R26	64671 Bruce Ave.	Tumalo Community Church	1
R27	64659 Cook Ave.	Galveston Partners, LLC	1
R28	64660 Cook Ave.	CQC Ventures, LLC	1
R29	64644 Cook Ave.	Hittle & Jordan	1
R30	19877 7th St.	Heart of Tumalo, LLC	1
R31	19860 8th St.	BJ, LLC	1
R32	19882 8th St.	Toler	1
R33	64622 Wharton Ave.	Lichtenberg	1
R34	19894 8th Street	Jackson	1
R35	19910 Elm Ln.	Faddis	1
R36	19920 Elm Ln.	Smith	1
R37	19930 Elm Ln.	Brady, Et al	1
R38	19944 Elm Ln.	Hittle & Jordan	1
R39	19951 Elm Ln.	Varner	1
R40	19939 Elm Ln.	Varner	1
R41	19933 Elm Ln.	Gross	1
R42	19919 Elm Ln.	Wright	1
R43	19909 Elm Ln.	McNally	1
R44	19930 Juniper Ln.	Becker & McCloskey-Becker	1
R45	19915 Juniper Ln.	Lillis	1
R46	19925 Juniper Ln.	Coler	1
R47	19950 Cedar Ln.	Lillis	1
R48	19960 Cedar Ln.	Lillis	1
R49	19944 Birch	Davidson	1
R50	19934 Alder Ln.	Leis and Thesing	1
Existing Residential Total EDU Estimate			50

Potential Additional EDU Estimate - Residential			
Property ID	Address	Owner	Add'I EDU Estimate
R1	64795 Wood Ave.	Brandon	2
R2	64786 Wood Ave.	Houser	5
R3	19838 2nd St.	Millard	4
R4	64970 Bruce Ave.	Fraley	3
R5	64785 Cook Ave.	Norris	8
R6	19850 2nd St.	Fish	2
R7	19816 2nd St.	Wilson	2
R8	19806 2nd St.	Gummus Family Trust	-
R9/10	64711 Wood Ave.	Peer Revocable Trust	-
R11	64767 Cook Ave.	Kelley	2
R12	19849 2nd St.	Turney	3
R13	64757 Cook Ave.	Lowrie & Sappington	5
R14	19849 3rd St.	Kelley Family Trust	2
R15	64741 Cook Ave.	Buck	4
R16	64699 Wood Ave.	Minkoff	1
R17	64695 Wood Ave.	Close	1
R18	19835 4th St.	Greenlee Holdings, LLC	3
R19	19830 5th St.	3Finger Jerry Holdings, LLC	1
R20	64704 Bruce Ave.	Kosman	2
R21	64712 Cook Ave.	Adams	3
R22	64706 Cook Ave.	Knowles	-
R23	64725 Wharton Ave.	Tuller	1
R24	64680 Wharton Ave.	Kelley Family Trust	7
R25	64685 Wharton Ave.	Knox	3
R26	64671 Bruce Ave.	Tumalo Community Church	-
R27	64659 Cook Ave.	Galveston Partners, LLC	4
R28	64660 Cook Ave.	CQC Ventures, LLC	2
R29	64644 Cook Ave.	Hittle & Jordan	-
R30	19877 7th St.	Heart of Tumalo, LLC	-
R31	19860 8th St.	BJ, LLC	2
R32	19882 8th St.	Toler	1
R33	64622 Wharton Ave.	Lichtenberg	-
R34	19894 8th Street	Jackson	-
R35	19910 Elm Ln.	Faddis	2
R36	19920 Elm Ln.	Smith	1
R37	19930 Elm Ln.	Brady, Et al	1
R38	19944 Elm Ln.	Hittle & Jordan	1
R39	19951 Elm Ln.	Varner	1
R40	19939 Elm Ln.	Varner	1
R41	19933 Elm Ln.	Gross	1
R42	19919 Elm Ln.	Wright	1
R43	19909 Elm Ln.	McNally	1
R44	19930 Juniper Ln.	Becker & McCloskey-Becker	1
R45	19915 Juniper Ln.	Lillis	1
R46	19925 Juniper Ln.	Coler	1
R47	19950 Cedar Ln.	Lillis	3
R48	19960 Cedar Ln.	Lillis	-
R49	19944 Birch	Davidson	1
R50	19934 Alder Ln.	Leis and Thesing	1
Additional Residential Sub-Total EDU Estimate			91

Potential Additional Units on Existing Vacant Lots			
RV1	No Situs	Gummus Family Trust	4
RV2	64761 Cook Ave.	Kelley	3
RV3	No Situs - Wood Ave.	Cronin Mgt Company	1
RV4	No Situs - Wood Ave.		1
RV5	No Situs - Wood Ave.		1
RV6	No Situs - Wood Ave.		2
RV7	No Situs - Wood Ave.		1
RV8	No Situs - Wood Ave.		2
RV9	No Situs - Wood Ave.	3Finger Jerry Holdings	1
RV10	No Situs - Wood Ave.		3
RV11	64707 Wharton Ave.	Overstreet	3
RV12	No Situs - Wharton Ave.	Galveston Partners, LLC	3
RV13	19952 Birch Ln.	Davidson	3
RV14	No Situs - Alder Ln.	Thesing & Leis	3
RV15	No Situs - Alder Ln.	Thesing & Leis	2
Additional Residential Sub-Total EDU Estimate			33
Additional Residential Total EDU Estimate			124
Residential Total EDU Estimate			174

EXHIBIT C

Property ID	Address	Owner	Business	Quantity	Units	Use	Existing EDU Estimate	Sum this Property	Sum this Property Rounded up	Quantity	Units	Use	Add'l EDU Estimate	Sum this Property Rounded up
C1	19855 4TH ST	THING 1 LLC	Existing Tumalo Coffee House/Retail/Office	2,000	SF	Restaurant	3.3	6.6	7					
				5,000	SF	Retail	1.8							
				3,000	SF	Office	1.5							
C2	19855 8TH ST	J'S 4 LLC ET AL	Existing Food carts and Beyond the Ranch Antiques	15,000	SF	Retail	4.3	5.9	6	4.50	Acre	General Commercial	14.8	15
				5	Each	Food Cart	1.7							
C3	19850 5th St	Warbington Family Trust	Tumalo Animal Hospital	2,200	SF	Veteranarian Clinic	2.2	2.2	3					
C4	19860 7TH ST	Tap Yard LLC	The Bite: Bar and 6 food carts	1,140	SF	Bar	1.9	4.2	5					
				6	Each	Food Cart	2.3							
C5	19879 5TH ST	CARSON, GRANT	Tumalo Wellness Physical Therapy	1,600	SF	Medical Clinic	1.6	1.6	2					
C6	19885 7TH ST	Heritage Brand Development, LLC	Heritage Brand Retail Clothing / Accessories	1,560	SF	Retail	1.0	4.8	5					
				4,100	SF	Office	2.1							
				3,700	SF	Manufacturing	1.7							
C7	64625 COOK AVE	Shari Cook Trust	Round Tree Lodge Pole Products - Fence posts	1	Each	Assume 1 EDU	1.0	1.0	1	1.10	Acre	General Commercial	3.6	4
C8	64653 BRUCE AVE	Murphy Bond LLC	Tumalo Perk Coffee Hut and Office	900	SF	Office	0.5	0.8	1	0.27	Acre	General Commercial	0.9	1
				1	Each	Cart	0.4							
C9	64654 COOK AVE	CIDER HOUSE RULES LLC	Tumalo Cider Company	480	SF	Bar	0.8	4.5	5					
				1,935	SF	Warehouse	0.9							
				1,935	SF	Manufacturing	0.9							
				1,829	SF	Office	0.9							
				480	SF	Retail	1.0							
C10	64661 BRUCE AVE	NIPPERT, CHRISTOPHER ET AL	Two Office Buildings	1,200	SF	Office	0.6	0.6	1	0.40	Acre	General Commercial	1.3	2
C11	64677 COOK AVE	James Huggins	Former El Caporal Restaurant	1,500	SF	Restaurant	2.5	2.5	3	0.26	Acre	General Commercial	0.9	1
C12	64678 COOK AVE	Sic Parvis Magna LLC	Farmer John's Produce	1,200	SF	Retail	1.0	1.0	1					
C13	64682 Cook Ave	Bruce Moon	Tumalo Outpost mailboxes and shipping	1,200	SF	Retail	1.0	1.0	1					
C14	64683 COOK AVE	Tumalo Enterprises	Tumalo Country Store	3,000	SF	Retail	1.3	4.8	5	0.57	Acre	General Commercial	1.9	2
				1	Each	Gas Station	2.0							
				3,000	SF	Office	1.5							
C15	64702 COOK AVE	KACHLEIN, BELINDA R	Office Building	1,000	SF	Office	0.5	0.5	1					
C16	64649 WHARTON AVE	Prime Property Management LLC	Bend Cider Company	1,500	SF	Bar	2.5	2.5	3					
C17	19825 5TH ST	Kathy Powell	Mobile Home Park	7	Each	Mobile Home	5.6	5.6	6					
				Commercial Sub-Total Estimated EDU's =		50.1		56		Commercial Sub-Total Estimated EDU's =		23.3		25

I1	19850 4TH ST	DESCHUTES CO RURAL FIRE DIST #2	Fire Station	3	Person	Fire Station	2.3	2.3	3					
I2	64671 BRUCE AVE	TUMALO COMMUNITY CHURCH	Church	90	Seat	Church	3.0	3.0	3					
I3	64672 COOK AVE	SWALLEY IRRIGATION DISTRICT	Swalley Irrigation District Office	2200	SF	Office	1.1	2.2	3	0.20	Acres	General Commercial	0.7	1
			Swalley Irrigation District Maintenances Shop	2200	SF	Shop	1.1							
I4	19835 2ND ST	Tumalo School	Tumalo Elementary School	280	Person	Elementary School	22.4	22.4	23					
I5	64697 COOK AVE	TUMALO IRRIGATION DISTRICT	Tumalo Irrigation District Office	1500	SF	Office	0.8	0.8	1	0.26	Acres	General Commercial	0.9	1
				Institutional Sub-Total Estimated EDU's =		30.7		33		Institutional Sub-Total Estimated EDU's =		1.5		2.0

Total Existing Estimated EDU's =	80.7
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Total Add'l Estimated EDU's =	24.8
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Combined Total Estimated EDU's =	105.6
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