

MEMORANDUM

To:	Andrew Ching, Town Manager
From:	Kevin Burnett
Date:	December 15, 2023
Client:	Paradise Valley, Arizona
Project:	Impact Fee Review
Subject:	Final – Impact Fee Review and Findings

The Town of Paradise Valley (Town) contracted with Willdan Financial Services (Willdan) to complete a review of the sewer impact fees adopted based on the “Impact Fee Land Use Assumptions, Infrastructure Improvement Plan and Fee Study” dated February 6, 2017 (2017 Study) to confirm the appropriateness of the fees for continued assessment. The review consisted of three main components:

1. The current value of the Town’s sewer system compared to the value at the time of the 2017 Study;
2. The actual development that occurred as compared to projected development in the 2017 Study; and
3. The current sewer flow per equivalent dwelling unit as compared to the sewer flow per equivalent dwelling unit used in the 2017 Study.

Each of the components will be discussed separately in the balance of this memorandum.

Sewer System Value

The 2017 Study utilized the buy-in approach as the basis for calculating the Town’s sewer impact fee. Under the buy-in method, new development “buys into” facilities at the same standard currently serving existing development. The ratio of existing facilities to demand from existing development is as follows:

$$\text{Current Value of Existing Facilities} \div \text{Existing Demand}$$

The existing facilities valuation in the 2017 Study, was comprised of two main components: treatment capacity rights and sewer lines. The treatment capacity value was assumed to be the same today as in the 2017 Study. The Town’s sewer lines were escalated from the cost at date of installation to current day dollars using the Engineering News Record (ENR) Construction Cost Index (CCI). This approach seeks to reflect the cost of the sewer lines if they were purchased in the present day. The fixed asset value from the 2017 Study is summarized in Table 1 below.

Table 1
Fixed Asset Valuation

Asset	Value
Treatment Capacity	\$14,349,766
Sewer Lines	<u>23,165,685</u>
Total Asset Value	\$37,515,451

As noted in Table 1, the fixed asset value of the Town’s sewer system in the 2017 Study was \$37,515,451.

In addition to the fixed assets of the sewer system, the Town had outstanding debt that was used to purchase the sewer assets. The financing costs were added to the system value (the principle is already reflected in the assets themselves) to identify the total system valuation. Table 2 summarizes the total value of the sewer system as identified in the 2017 Study.

Table 2
System Valuation

Asset	Value
Treatment Capacity	\$14,349,766
Sewer Lines	23,165,685
Growth Related Borrowing Costs	696,884
Total System Value	\$38,212,335

A similar approach was undertaken in the current analysis to determine the value of the sewer system in 2023. As previously stated, the value of the treatment capacity remained unchanged from the 2017 Study (no new capacity was purchased). The sewer lines value from the 2017 Study was escalated using the ENR CCI to identify the replacement cost value in 2023. Table 3 summarizes the 2023 fixed asset system valuation.

Table 3
2023 Fixed Asset Valuation

Asset	Value
Treatment Capacity	\$14,349,766
Sewer Lines	<u>31,159,912</u>
Total Asset Value	\$45,509,678

Several adjustments were required to be made to the 2023 fixed asset valuation to more accurately reflect the value of the sewer system. Adjustments reflected the disposal of fixed assets and annual asset depreciation as well as the addition of new assets since the 2017 Study. The adjustments and revised system value is illustrated in Table 4. It should be noted that the debt issuance included in the 2017 Study has been retired and therefore no financing costs are currently included in the system valuation.

Table 4
2023 System Valuation

<u>Asset</u>	<u>Value</u>
Treatment Capacity	\$14,349,766
Sewer Lines	31,159,912
Less: Asset Deletions	(30,900)
Less: Depreciation (2016 – 2022)	(1,751,775)
Add: New Assets	<u>1,178,534</u>
Total System Value - 2023	\$44,905,537

A comparison of Tables 2 and 4 indicate that the Town’s sewer system value has increased from \$38,212,335 in the 2017 Study to \$44,905,537 in the current analysis, an increase in value of \$6,693,202.

Development

The 2017 Study projected 1,029 single family residential properties and 258 residential hotel property developments for a total of 1,287 total residential units. The 2017 Study also projected 10 commercial units with dining. The development was anticipated to occur during the 2016 through 2026 period. The actual development that occurred since the 2017 Study was 189 single family residential units. This represents 1,078 fewer residential development units and 10 fewer non-residential developments than projected. It is worth noting that the full projection period has not yet transpired. From a development standpoint, the anticipated units from the 2017 Study have not yet fully materialized and additional treatment capacity does not need to be acquired.

Sewer Flows per Equivalent Unit

The 2017 Study projected use per equivalent dwelling unit (EDU) of 211 gallons of flow per day. The current analysis indicates that flows per equivalent dwelling unit has increased to 228 gallons of flow per EDU per day, an increase of 17 gallons per EDU per day of 8%. Table 5 provides a comparison of use per EDU between 2017 and 2023.

Table 5
Calculated Use per EDU

	<u>2017 Study</u>	<u>Current Analysis</u>
Annual Flows	165,717,000	195,356,000
Use per Day	454,019	535,222
Single Family Accounts	<u>2,154</u>	<u>2,343</u>
Average Use per Day per EDU	211	228

All other things being equal, assuming the same amount of treatment capacity as the 2017 Study, an increase in flows per EDU would mean fewer overall EDUs could be served by the same treatment capacity. Further the ability to serve fewer EDUs, would increase the cost per EDU. The numerator

(system cost) is static but the denominator (EDUS to be served) has decreased, so the cost per unit would increase.

Conclusions

Our analysis indicates that:

1. The value of the Town's sewer system has increased since the 2017 Study;
2. The number of EDUs that can be served by the existing capacity of the system has decreased;
and
3. Our analysis also indicates that the development that has occurred since the 2017 Study is within the range of anticipated development.

Based on conclusions 1 and 2 above, the Town's sewer impact fee could potentially be assessed at a higher rate than the current fee.

Based on these findings we believe the Town can continue to assess sewer impact fees as calculated in the 2017 Study.

Fixed Asset	Valuation Date	Original Cost	CCI Escalation Factor	Replacement Cost New Less Depreciation (RCNLD)
Equipment				
Flow Monitoring Stations	2015	\$0	1.35	\$0
Sewer Infrastructure				
Sewer Lines	2015	23,165,685	1.35	31,159,912
Wastewater Capacity				
Wastewater Capacity Rights	2015	14,349,766	1.35	14,349,766
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Subtotal Fixed Assets		\$37,515,451		\$45,509,678
Less:				
Asset Deletions		(30,900)		(30,900)
Depreciation 2016 - 2022		(1,751,775)		(1,751,775)
Add:				
Sewer Maintenance	2016	35,943	1.31	46,930
Sewer Maintenance	2017	21,923	1.26	27,560
Sewer Maintenance	2018	7,133	1.22	8,703
Sewer Maintenance	2019	5,502	1.20	6,584
Sewer Maintenance	2020	2,950	1.18	3,473
Sewer Maintenance	2021	2,360	1.11	2,626
Sewer Maintenance	2022	3,245	1.04	3,368
Sewer Maintenance	2023	3,540	1.00	3,540
Sewer System Repair and Improvements	2019	234,204	1.20	280,230
Sewer System Repair and Improvements	2020	234,204	1.18	275,718
Sewer System Repair and Improvements	2021	393,768	1.11	438,067
Sewer System Repair and Improvements	2023	81,736	1.00	81,736
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Revised Fixed Assets		\$36,759,283		\$44,905,537
Outstanding Growth-Related Debt		0		0
System Value - 2023		\$36,759,283		\$44,905,537
System Value - 2017 Study				38,212,335
Increase/(Decrease) in System Value				\$6,693,202

Development	2016 - 2026	2017 - 2024	2025 - 2026	Difference	
	Study Projected Development	Actual Development	Projected Development	#	%
Residential					
Single Family Residential	1,029	189	20	(860)	-84%
Residential - Hotel Property	<u>258</u>	<u>0</u>	<u>0</u>	<u>258</u>	100%
Total Residential	1,287	189	20	1,078	84%
Nonresidential					
Public/Institutional	0	0	0	0	n/a
Medical	0	0	0	0	n/a
Commercial w/ Dining	<u>10</u>	<u>0</u>	<u>0</u>	<u>(10)</u>	-100%
Total Nonresidential	10	0	0	(10)	-100%

	2017 Study	Current Analysis	Difference	
			#	%
Annual Flows	165,717,000	195,356,000	29,639,000	18%
Use per Day	454,019	535,222	81,203	18%
Single Family Accounts	<u>2,154</u>	<u>2,343</u>	<u>189</u>	9%
Average Use per Day per EDU	211	228	17	8%