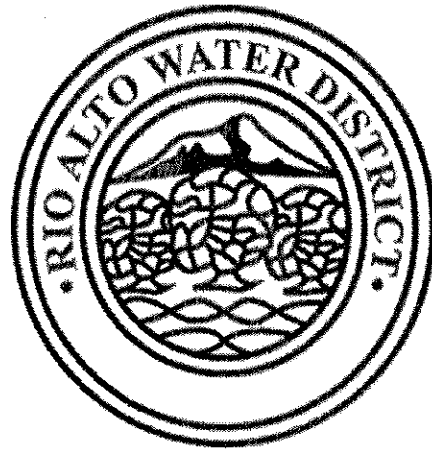


Rio Alto Water District



Water and Sewer Connection Fee Study October 1, 2023



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS



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April 29, 2024

Martha Slack, General Manager
Rio Alto Water District
22099 River View Drive
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Re: Water & Sewer Connection Fee Study

Bartle Wells Associates is pleased to submit the attached Water and Sewer Connection Fee Study to the Rio Alto Water District (District). The study develops connection fees designed to equitably recover the costs of water and sewer system infrastructure benefitting new development.

Key objectives of the study included developing connection fees that recover the costs of connection in water and sewer system infrastructure, are fair and equitable to both existing customers and new connections, are based on industry-standard methodology, and comply with all legal requirements. The study recommends a set of charges that would apply uniformly to the District's service area.

We enjoyed working with the District on this assignment and appreciate the ongoing input and assistance received from the District's project team. Please contact us anytime if you have questions about the recommendations presented in this report or other related issues.

Yours truly,

Doug Dove, CIPFA
Principal/ President

Erik Helgeson, MBA
Vice President/ Project Manager

TABLE OF CONTENTS

1. Background, Objectives, & Government Code.....	5
Background	5
Government Code	5
Proposed Water & Sewer Connection Fees.....	6
2. Connection Fee Methodology	7
3. Water Connection Fee Calculation	8
Current Water Connection Fees.....	8
Meter Equivalent Units (MEUs).....	8
Value of Water System Existing Assets.....	8
Water Connection Charge Calculation	9
Proposed Water Connection Charges	10
4. Sewer Connection Fee Calculation	11
Current Sewer Connection Fees.....	11
Equivalent Dwelling Unit (EDU) Flow	11
Sewer System Fixed Assets.....	11
Sewer Connection Charge Calculations	12
Proposed Sewer Connection Charges.....	13
5. Connection Fee Application	14
Capacity (Connection) Charge Ordinance: Purpose of Charge.....	14
Use of Capacity (Connection) Fee Revenues	14
Capacity (Connection) Fee Credits for Redevelopment.....	14
Changes in Property Use	14
Limited Term of Application for an Adopted Connection Fee	15
Future Fee Adjustments	15

Appendices

Appendix A – Government Code Pertaining to Water & Wastewater Capacity (Connection) Charges

Appendix B –Water & Sewer Connection Fee Tables

1. Background, Objectives, & Government Code

Background

The Rio Alto Water District (District) is located east of I-5 about 20 miles south of the City of Redding in a community known as Lake California. The District provides water and wastewater services to over 1,400 customers in an area that encompasses more than 9 square miles.

The District levies water and sewer connection fees on new or expanded connections to the water and sewer systems. These charges are levied as a condition of development or change in use and are designed to recover the cost of connection in infrastructure and assets benefitting new development.

Connection charges are one-time fees, paid up-front as a condition of new development or expansion. Connection charges are separate from the District's rates for water and wastewater service. New connections begin paying the District's water and wastewater rates after they have paid their connection charge and become ongoing customers.

The District retained Bartle Wells Associates to update the District's water and wastewater connection fees with the goals of developing new charges that:

- Recover the full costs of water and wastewater system infrastructure and assets that benefit new or expanded development to help ensure that growth pays its own way;
- Equitably recover costs based on the new or increased connection needs of new development or redevelopment;
- Are consistent with industry-standard practices and methodologies;
- Comply with government code.

Government Code

Fees for development projects are governed by California Government Code Section 66000 et. seq. This section of the Code was initially established by Assembly Bill 1600 (AB 1600) and is commonly referred to as the Mitigation Fee Act. Pursuant to the Code, a fee for a development project is not a tax or special assessment but is instead a voluntary charge levied to defray the cost of public facilities needed to serve a new development.



Section 66013 of the Code specifically governs water and wastewater capacity charges. This section of the Code defines a “capacity charge” to mean “*a charge for public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged.*” The Code distinguishes “capacity charges” from “connection fees” which are defined as fees for the physical facilities necessary to make a water or sewer connection, such as costs related to installation of meters and pipelines from a new building to a water or sewer main.

According to the Section 66013, a water or wastewater capacity charge “shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed” unless approved by a two-thirds vote. As such, the capacity charges calculated in this report represent the maximum charges that the District can levy. Section 66013 does not detail any specific methodology for calculating capacity charges.

Section 66016 of the Code identifies the procedural requirements for adopting or increasing water and wastewater capacity charges and Section 66022 summarizes the general process by which the charges can be legally challenged. The full text of Sections 66013, 66016 and 66022 are attached in Appendix A.

Proposed Water & Sewer Connection Fees

This report develops updated water and sewer connection fees designed to equitably recover the costs of facilities and assets benefitting new development. The recommended fees are based on a *Buy-in Approach* under which new or expanded connections would fund their proportionate share of costs (in current dollars) for capacity needed in the existing water and wastewater system facilities and assets.

2. Connection Fee Methodology

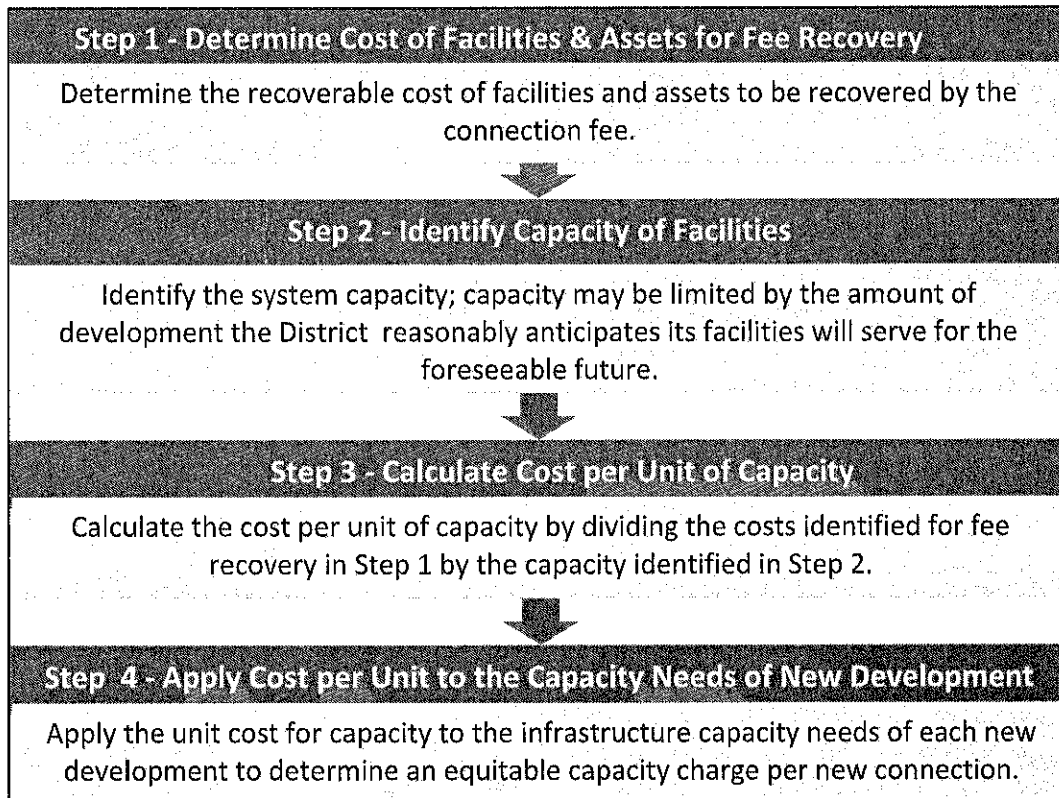
BWA recommends use of a *Buy-in Method* to calculate updated water and sewer connection fees. Under this method, new connections buy in for a proportionate share of capacity in existing facilities.

Buy-In (Average Cost Approach):

- Cost Recovery: Cost of existing assets (in current, inflation-adjusted dollars)
- Capacity Denominator: The projected capacity of the system at build out.

The *Buy-in Method* is a widely used and accepted method for calculating connection fees. The general methodology used to calculate updated water and sewer connection fees is summarized below.

Capacity Charge Methodology



3. Water Connection Fee Calculation

Current Water Connection Fees

The current connection fee for a 1" meter is \$4,716.21 and a 2" meter is \$5,141.56.

Meter Equivalent Units (MEUs)

The District's projects will serve 2,360 MEUs at build out. MEUs are based meter size and described in the District's 2023 Water Rate Study.

Value of Water System Existing Assets

Under the methodology used in this report, water connection fees are designed to recover a proportionate share of the replacement value of existing water system facilities and assets (in current dollars). The value of existing assets is determined as follows:

- **Water Pipe and Hydrants:** Applying the estimated current replacement cost of assets. This approach was used because it better reflects actual replacement cost for these types of assets.
- **All Other Assets:** Inflating the original cost of assets into current dollars based on the change in the Engineering News-Record (ENR) Construction Cost Index (20-Cities Average Index) from the acquisition date of each asset to 2023. This approach is the most widely used for determining asset replacement cost.
- **Cash and Investments:** Based on current face value.

At the same time, the updated fees exclude a number of costs which are backed out of the fee calculation to ensure the updated fees are reasonable and equitable, including:

- **Outstanding Principal** on debt previously issued to help finance some of the District's facilities.
- **Accumulated Depreciation** to reflect the wear on existing facilities.

Water Connection Charge Calculation

The following table shows the maximum connection fee calculation using the *Buy-in Method*. The current connection fee for a 1" meter is \$4,716.21 and a 2" meter is \$5,141.56.

Table 1 – Water Connection Charge Calculation

Replacement Cost	Amount	
System Assets		
Tanks	\$1,642,368	
Hydrants	\$858,000	
Pipe	\$20,934,370	
Wells	\$2,445,791	
Transmission and Distribution	\$164,741	
General Plant & Equipment	\$1,094,898	
Intangible	\$16,631	
Land	\$2,062	
Solar	\$1,277,357	
Cash	<u>\$2,090,756</u>	
Total Replacement Cost	\$25,514,432	
Less Outstanding Principal		
CEC	<u>\$734,132</u>	
Total Outstanding Principal	\$734,132	
Less Accumulated Depreciation		
Total Accumulated Depreciation	\$2,855,476	
Total System Value	\$21,924,824	
1" Meter Equivalent Units (MEUs)	<u>2,360</u>	
Connection Fee per MEU	\$9,290	
Meter Size	1" Meter Equivalent	Connection Fee
1"	1	\$9,290
2"	3.2	\$29,728

Proposed Water Connection Charges

The District is proposing to phase-in connection fee increases over the next five years. The proposed fees will not exceed the maximum fee shown in the table above adjusted for annual inflation.

Table 2 – Proposed Water Connection Charge Phase-In

EXHIBIT B TO RESOLUTION 03-24
PROPOSED WATER CONNECTION FEES

METER SIZE	CURRENT FEES	PROPOSED 7/1/2024	PROPOSED 1/1/2025	PROPOSED 1/1/2026	PROPOSED 1/1/2027	PROPOSED 1/1/2028
		20%	20%	20%	20%	20%
1" METER	\$4,716.21	\$5,659.45	\$6,791.34	\$8,149.61	\$9,779.53	\$11,735.44
DUPLEX 1" SINGLE METER	\$7,074.32	\$8,489.18	\$10,187.02	\$12,224.42	\$14,669.31	\$17,603.17
DUPLEX 1" TWO METERS	\$9,432.42	\$11,318.90	\$13,582.68	\$16,299.22	\$19,559.06	\$23,470.87
2" METER	\$5,141.56	\$10,283.12	15,424.68	19,280.85	24,101.06	30,126.33

Maximum charge of \$9,290.00 and \$12,279 respectively as calculated in year 2023 is to be adjusted annually January 1st by the ENR Construction Cost Index. In any given year, the amount charged for connection fees cannot exceed the compounded 2023 maximum as adjusted on January 1st of every year by the ENR. Maximum is compounded annually.

4. Sewer Connection Fee Calculation

Current Sewer Connection Fees

The current connection fee per equivalent dwelling unit is \$4,537.96.

Equivalent Dwelling Unit (EDU) Flow

Based on the sewer rate study the estimated sewer flow per EDU is 7 CCF per month. This assumption will be the basis of the charge per EDU. Total EDUs are based on the remaining parcels available for development.

Sewer System Fixed Assets

Under the methodology used in this report, updated sewer connection fees are designed to recover the proportionate share of the value of the existing sewer system facilities and assets (in current dollars).

The value of existing assets is determined as follows:

- **Sewer Pipe:** Applying the estimated current replacement cost of assets. This approach was used because it better reflects actual replacement cost for this type of asset.
- **All Other Assets:** Inflating the original cost of assets into current dollars based on the change in the Engineering News-Record (ENR) Construction Cost Index (20-Cities Average Index) from the acquisition date of each asset to 2023. This approach is the most widely used for determining asset replacement cost.
- **Cash and Investments:** Based on current face value.

The updated fees exclude a number of costs which are backed out of the fee calculation to ensure the updated fees are reasonable and equitable, including:

- **Outstanding Principal** on debt previously issued to help finance some of the District's facilities.
- **Accumulated Depreciation** to reflect the wear on existing facilities.

Sewer Connection Charge Calculations

The following table shows the maximum connection fee calculation using the *Buy-in Method*. The current connection fee per equivalent dwelling unit is \$4,537.96.

Table 3 – Sewer Connection Charge Calculations

Replacement Cost	Amount
System Assets	
Lift Stations	\$1,383,431
Pipe	\$14,798,500
WWTP	\$10,074,228
Collection	\$109,522
General Plant & Equipment	\$925,637
Intangible	\$11,088
Land	\$461,121
Solar	\$560,298
Cash	<u>\$1,266,993</u>
Total Replacement Cost	\$27,302,406
Less Outstanding Principal	
WWTP	\$4,295,000
CEC	<u>\$489,421</u>
Total Outstanding Principal	\$4,784,421
Less Outstanding Principal	
Total Accumulated Depreciation	\$3,154,508
Total System Value	\$19,363,477
Build Out Equivalent Dwelling Units (EDUs)	<u>1,577</u>
Connection Charge per EDU	<u>\$12,279</u>

Proposed Sewer Connection Charges

The District is proposing to phase-in connection fee increases over the next five years. The proposed fees will not exceed the maximum fee shown in the table above adjusted for annual inflation.

Table 4 – Proposed Sewer Connection Charge Phase-In

EXHIBIT B TO RESOLUTION 04-24						
PROPOSED SEWER CONNECTION FEES						
	CURRENT FEES	PROPOSED 8/1/2024	PROPOSED 1/1/2025	PROPOSED 1/1/2026	PROPOSED 1/1/2027	PROPOSED 1/1/2028
Percent Increase		50%	25%	25%	25%	25%
RESIDENTIAL SEWER CONNECTION FEE *	\$4,537.96	\$5,672.45	\$7,090.56	\$8,863.20	\$11,079.00	\$13,848.75
COMMERCIAL CONNECTION IS CALCULATED BY MULTIPLYING THE ADJUSTED YEAR CONNECTION FEE BY THE NUMBER OF HOUSEHOLD EQUIVALENTS (HE):						
COMMERCIAL SEWER	\$4,537.96	\$5,672.45	\$7,090.56	\$8,863.20	\$11,079.00	\$13,848.75
	x HE	x HE	x HE	x HE	x HE	x HE
Equals the Household equivalent (HE)						
HOUSEHOLD EQUIVALENT CHART:						
Professional Office	.8/1000 sq ft					
Medical/Dental Office	1.0/1000sq ft					
Small Convenience Market	.5/1000 sq ft					
Service Station	.5/pump					
Car Wash	1.0/bay					
Beauty Shop	.5/chair					
Laundromat	.5/washer					
Restaurant	4.6/1000 sq ft					
School	.08 /student					
Fast Food Establishment	4.6/1000 sqft					
Coffee Shop/Bar	2					
Convalescent Home	.5/bed					
Industry	case by case					
Adjusted Maximum charge of 12,279, as calculated in 2023 to be adjusted annually March 1st by the ENR Construction Cost Index. In any given year, the amount charged for connection fees cannot exceed the 2023 inflation adjusted charge to the current year connection fee multiplied by the HE.						



5. Connection Fee Application

This section highlights some key issues regarding the application and implementation of the updated connection fees.

Capacity (Connection) Charge Ordinance: Purpose of Charge

Pursuant to Government Code, revenue derived from the District's capacity fees can only be used for the purpose for which the charges are collected. In order to maximize the District's flexibility for use of capacity charge revenues, BWA recommends that the ordinances/resolutions adopting new charges broadly define the purpose of each capacity charge, such as to recover a proportionate share of costs for existing and future water/wastewater system facilities and assets from new or expanded connections to the water/wastewater systems.

Use of Capacity (Connection) Fee Revenues

BWA recommends that the District apply all connection fee revenues to fund capital improvements.

Capacity (Connection) Fee Credits for Redevelopment

Capacity fees for redevelopment projects and/or expansions should be based on the incremental demand generated from each project. Under this approach, future redevelopment projects would get credited for the capacity purchased by the prior development. For example, a warehouse that is being redeveloped as a mixed-use development would only have to pay capacity fees for the additional demand generated by the new project.

Changes in Property Use

In cases where a property experiences a change in use, such as if an office is converted into a restaurant, the District is entitled to collect capacity fees for any change in water or sewer demand, similar to a redevelopment project. Even in cases in which there is no change in water demand, additional sewer connection fees may apply for changes in wastewater strength classification.

Limited Term of Application for an Adopted Connection Fee

Other California agencies have experienced problems with developers purchasing connection many years in advance of anticipated development in order to lock in lower fees. To avoid these problems, the District should require that connection fees be paid up front as a condition of development and should allow the charges to be effective for a limited period of time (typically one year) after which the developer or property owner would be responsible for paying any increase to the charges.

Future Fee Adjustments

In future years, BWA recommends that the District update its connection fees annually by adjusting the charges by the change in the Engineering News-Record Construction Cost Index (20-Cities Average) to account for future construction cost inflation. The fee adjustment should be based on the change in the ENR index from the most recent preceding fee update, which allows for a multi-year adjustment if the District ever opted to temporarily defer any fee adjustments. The District's connection charge ordinances can allow for automatic annual adjustments.

Additionally, the District should review and consider updating its connection fees when substantial revisions are made to anticipated capital improvement costs or to substantial changes in projected demand. In general, BWA recommends that connection fees be independently reviewed and/or updated approximately once every five years.

APPENDIX A

California Government Code: Key Sections Pertaining to Water & Sewer Capacity Charges



California Government Code
Key Sections Pertaining to Water & Wastewater Capacity Charges
Sections 66013, 66016, & 66022

66013

(a) Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount of the fee or charge imposed in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue.

(b) As used in this section:

(1) “Sewer connection” means the connection of a structure or project to a public sewer system.

(2) “Water connection” means the connection of a structure or project to a public water system, as defined in subdivision (f) of Section 116275 of the Health and Safety Code.

(3) “Capacity charge” means a charge for public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interests, and entitlements and other rights of the local agency involving capital expense relating to its use of existing or new public facilities. A “capacity charge” does not include a commodity charge.

(4) “Local agency” means a local agency as defined in Section 66000.

(5) “Fee” means a fee for the physical facilities necessary to make a water connection or sewer connection, including, but not limited to, meters, meter boxes, and pipelines from the structure or project to a water distribution line or sewer main, and that does not exceed the estimated reasonable cost of labor and materials for installation of those facilities.

(6) “Public facilities” means public facilities as defined in Section 66000.

(c) A local agency receiving payment of a charge as specified in paragraph (3) of subdivision (b) shall deposit it in a separate capital facilities fund with other charges received, and account for the charges in a manner to avoid any commingling with other moneys of the local agency, except for investments, and shall expend those charges solely for the purposes for which the charges were collected. Any interest income earned from the investment of moneys in the capital facilities fund shall be deposited in that fund.

(d) For a fund established pursuant to subdivision (c), a local agency shall make available to the public, within 180 days after the last day of each fiscal year, the following information for that fiscal year:

- (1) A description of the charges deposited in the fund.
- (2) The beginning and ending balance of the fund and the interest earned from investment of moneys in the fund.
- (3) The amount of charges collected in that fiscal year.
- (4) An identification of all of the following:
 - (A) Each public improvement on which charges were expended and the amount of the expenditure for each improvement, including the percentage of the total cost of the public improvement that was funded with those charges if more than one source of funding was used.
 - (B) Each public improvement on which charges were expended that was completed during that fiscal year.
 - (C) Each public improvement that is anticipated to be undertaken in the following fiscal year.
- (5) A description of each interfund transfer or loan made from the capital facilities fund. The information provided, in the case of an interfund transfer, shall identify the public improvements on which the transferred moneys are, or will be, expended. The information, in the case of an interfund loan, shall include the date on which the loan will be repaid, and the rate of interest that the fund will receive on the loan.

(e) The information required pursuant to subdivision (d) may be included in the local agency's annual financial report.

(f) The provisions of subdivisions (c) and (d) shall not apply to any of the following:

- (1) Moneys received to construct public facilities pursuant to a contract between a local agency and a person or entity, including, but not limited to, a reimbursement agreement pursuant to Section 66003.
- (2) Charges that are used to pay existing debt service or which are subject to a contract with a trustee for bondholders that requires a different accounting of the charges, or charges that are used to reimburse the local agency or to reimburse a person or entity who

advanced funds under a reimbursement agreement or contract for facilities in existence at the time the charges are collected.

(3) Charges collected on or before December 31, 1998.

(g) Any judicial action or proceeding to attack, review, set aside, void, or annul the ordinance, resolution, or motion imposing a fee or capacity charge subject to this section shall be brought pursuant to Section 66022.

(h) Fees and charges subject to this section are not subject to the provisions of Chapter 5 (commencing with Section 66000), but are subject to the provisions of Sections 66016, 66022, and 66023.

(i) The provisions of subdivisions (c) and (d) shall only apply to capacity charges levied pursuant to this section.

(Amended by Stats. 2007, Ch. 94, Sec. 1. Effective January 1, 2008.)

66016

(a) Prior to levying a new fee or service charge, or prior to approving an increase in an existing fee or service charge, a local agency shall hold at least one open and public meeting, at which oral or written presentations can be made, as part of a regularly scheduled meeting. Notice of the time and place of the meeting, including a general explanation of the matter to be considered, and a statement that the data required by this section is available, shall be mailed at least 14 days prior to the meeting to any interested party who files a written request with the local agency for mailed notice of the meeting on new or increased fees or service charges. Any written request for mailed notices shall be valid for one year from the date on which it is filed unless a renewal request is filed. Renewal requests for mailed notices shall be filed on or before April 1 of each year. The legislative body may establish a reasonable annual charge for sending notices based on the estimated cost of providing the service. At least 10 days prior to the meeting, the local agency shall make available to the public data indicating the amount of cost, or estimated cost, required to provide the service for which the fee or service charge is levied and the revenue sources anticipated to provide the service, including General Fund revenues. Unless there has been voter approval, as prescribed by Section 66013 or 66014, no local agency shall levy a new fee or service charge or increase an existing fee or service charge to an amount which exceeds the estimated amount required to provide the service for which the fee or service charge is levied. If, however, the fees or service charges create revenues in excess of actual cost, those revenues shall be used to reduce the fee or service charge creating the excess.

(b) Any action by a local agency to levy a new fee or service charge or to approve an increase in an existing fee or service charge shall be taken only by ordinance or resolution. The legislative body of a local agency shall not delegate the authority to adopt a new fee or service charge, or to increase a fee or service charge.

(c) Any costs incurred by a local agency in conducting the meeting or meetings required pursuant to subdivision (a) may be recovered from fees charged for the services which were the subject of the meeting.

(d) This section shall apply only to fees and charges as described in Sections 51287, 56383, 65104, 65456, 65584.1, 65863.7, 65909.5, 66013, 66014, and 66451.2 of this code, Sections 17951, 19132.3, and 19852 of the Health and Safety Code, Section 41901 of the Public Resources Code, and Section 21671.5 of the Public Utilities Code.

(e) Any judicial action or proceeding to attack, review, set aside, void, or annul the ordinance, resolution, or motion levying a fee or service charge subject to this section shall be brought pursuant to Section 66022.

(Amended by Stats. 2006, Ch. 643, Sec. 19. Effective January 1, 2007.)

66022

(a) Any judicial action or proceeding to attack, review, set aside, void, or annul an ordinance, resolution, or motion adopting a new fee or service charge, or modifying or amending an existing fee or service charge, adopted by a local agency, as defined in Section 66000, shall be commenced within 120 days of the effective date of the ordinance, resolution, or motion.

If an ordinance, resolution, or motion provides for an automatic adjustment in a fee or service charge, and the automatic adjustment results in an increase in the amount of a fee or service charge, any action or proceeding to attack, review, set aside, void, or annul the increase shall be commenced within 120 days of the effective date of the increase.

(b) Any action by a local agency or interested person under this section shall be brought pursuant to Chapter 9 (commencing with Section 860) of Title 10 of Part 2 of the Code of Civil Procedure.

(c) This section shall apply only to fees, capacity charges, and service charges described in and subject to Sections 66013, 66014, and 66016.

(Amended by Stats. 2006, Ch. 643, Sec. 20. Effective January 1, 2007.)

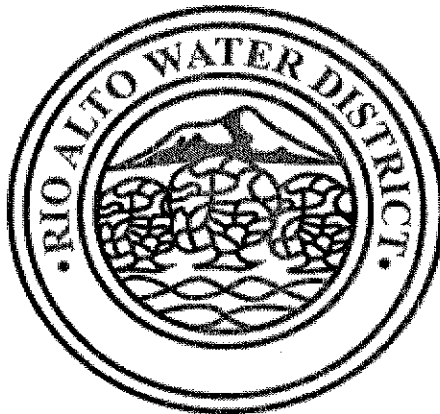


APPENDIX B

Water and Sewer Connection Fee Calculation Tables



Rio Alto Water District Draft Connection Fee Study Tables



September 29, 2023



BARTLE WELLS ASSOCIATES
Independent Public Finance Advisors

Table 1
Rio Alto WD
Connection Fee Study
Water Connection Fee Derivation

Replacement Cost	Amount	
System Assets		
Tanks	\$1,642,368	
Hydrants	\$858,000	
Pipe	\$20,934,370	
Wells	\$2,445,791	
Transmission and Distribution	\$164,741	
General Plant & Equipment	\$1,094,898	
Intangible	\$16,631	
Land	\$2,062	
Solar	\$1,277,357	
Cash	<u>\$2,090,756</u>	
Total Replacement Cost	\$25,514,432	
Less Outstanding Principal		
CEC	<u>\$734,132</u>	
Total Outstanding Principal	\$734,132	
Less Accumulated Depreciation		
Total Accumulated Depreciation	\$2,855,476	
Total System Value	\$21,924,824	
1" Meter Equivalent Units (MEUs)	<u>2,360</u>	
Connection Fee per MEU	<u>\$9,290</u>	
Meter Size	1" Meter Equivalent	Connection Fee
1"	1	\$9,290
2"	3.2	\$29,728

9290.179511

Table 2
Rio Alto WD
Connection Fee Study
Sewer Connection Fee Derivation

Replacement Cost	Amount
System Assets	
Lift Stations	\$1,383,431
Pipe	\$14,798,500
WWTP	\$10,074,228
Collection	\$109,522
General Plant & Equipment	\$925,637
Intangible	\$11,088
Land	\$461,121
Solar	\$560,298
Cash	<u>\$1,266,993</u>
Total Replacement Cost	\$27,302,406
Less Outstanding Principal	
WWTP	\$4,295,000
CEC	<u>\$489,421</u>
Total Outstanding Principal	\$4,784,421
Less Outstanding Principal	
Total Accumulated Depreciation	\$3,154,508
Total System Value	\$19,363,477
Build Out Equivalent Dwelling Units (EDUs)	<u>1,577</u>
Connection Fee per EDU	<u>\$12,279</u>

Table 3
Rio Alto WD
Connection Fee Study
ENR Index

Year	Index*	Current Day Factor
1962	872	15.11
1963	901	14.62
1964	936	14.08
1965	971	13.57
1966	1019	12.93
1967	1074	12.27
1968	1155	11.41
1969	1269	10.38
1970	1381	9.54
1971	1581	8.33
1972	1753	7.52
1973	1895	6.95
1974	2020	6.52
1975	2212	5.96
1976	2401	5.49
1977	2576	5.11
1978	2776	4.75
1979	3003	4.39
1980	3237	4.07
1981	3535	3.73
1982	3825	3.44
1983	4066	3.24
1984	4146	3.18
1985	4195	3.14
1986	4295	3.07
1987	4406	2.99
1988	4519	2.92
1989	4615	2.85
1990	4732	2.78
1991	4835	2.72
1992	4985	2.64
1993	5210	2.53
1994	5408	2.44
1995	5471	2.41
1996	5620	2.34
1997	5826	2.26
1998	5920	2.23
1999	6059	2.17
2000	6221	2.12
2001	6343	2.08

Table 3
Rio Alto WD
Connection Fee Study
ENR Index

Year	Index*	Current Day Factor
2002	6538	2.02
2003	6694	1.97
2004	7115	1.85
2005	7446	1.77
2006	7751	1.70
2007	7966	1.65
2008	8310	1.59
2009	8570	1.54
2010	8799	1.50
2011	9070	1.45
2012	9308	1.42
2013	9547	1.38
2014	9806	1.34
2015	10035	1.31
2016	10338	1.27
2017	10737	1.23
2018	11062	1.19
2019	11281	1.17
2020	11466	1.15
2021	12133	1.09
2022	13007	1.01
2023	13175	1.00

*Engineering News Record Construction Cost Index

Table 4
Rio Alto WD
Connection Fee Study
Existing Asset Depreciation Schedule

Asset	Acquisition Year	Total	Original Cost		Escalation Factor	Replacement Cost	
			Water	Sewer		Water	Sewer
Collection							
Telemetry Lift Station #1	2001	\$6,387.50	\$0.00	\$6,387.50	2.077	\$0.00	\$13,267.46
Telemetry Sewer Radio	2004	\$16,164.24	\$0.00	\$16,164.24	1.852	\$0.00	\$29,931.74
Telemetry Lift Stations	2005	\$9,788.16	\$0.00	\$9,788.16	1.769	\$0.00	\$17,319.27
Telemetry WWTP	2008	\$11,970.05	\$0.00	\$11,970.05	1.585	\$0.00	\$18,977.83
Telemetry Sewer	2017	\$18,196.58	\$0.00	\$18,196.58	1.227	\$0.00	\$22,328.44
Telemetry Sewer Radio	2017	\$1,926.41	\$0.00	\$1,926.41	1.227	\$0.00	\$2,363.84
Sewage Pump	2022	\$5,265.36	\$0.00	\$5,265.36	1.013	\$0.00	\$5,333.45
Subtotal Collection		\$69,698.30	\$0.00	\$69,698.30		\$0.00	\$109,522.03
General Plant & Equipment							
Table/Chairs Boardroom	1989	\$2,595.24	\$1,306.56	\$1,288.68	2.855	\$3,730.00	\$3,678.96
Board room furnishings	2008	\$9,500.73	\$5,670.17	\$3,830.56	1.585	\$8,989.73	\$6,073.13
Boardroom	2008	\$188,391.50	\$112,278.84	\$76,112.66	1.585	\$178,011.68	\$120,672.27
Copier 4035 Copystar	2011	\$4,046.50	\$2,570.23	\$1,476.27	1.453	\$3,733.50	\$2,144.42
Fence Lift Station #1	2020	\$2,758.40	\$0.00	\$2,758.40	1.149	\$0.00	\$3,169.64
Fence Lift Station #2	1989	\$3,300.00	\$0.00	\$3,300.00	2.855	\$0.00	\$9,420.93
Kubota Tractor	1987	\$27,775.79	\$27,775.79	\$0.00	2.990	\$83,056.48	\$0.00
Sewer Line Camera	1992	\$7,636.20	\$0.00	\$7,636.20	2.643	\$0.00	\$20,181.98
Sewer Line Cleaner	1992	\$5,018.39	\$0.00	\$5,018.39	2.643	\$0.00	\$13,263.28
Generator 60 Kw	1997	\$8,037.44	\$0.00	\$8,037.44	2.261	\$0.00	\$18,176.02
Sewer Cleaner Trailer mounted	1997	\$26,415.68	\$0.00	\$26,415.68	2.261	\$0.00	\$59,736.93
Kubota	2001	\$36,567.24	\$18,283.62	\$18,283.62	2.077	\$37,976.86	\$37,976.86
Sewer Camera	2003	\$6,466.45	\$0.00	\$6,466.45	1.968	\$0.00	\$12,727.17
Generator 100kw - Lift Station #1	2005	\$35,760.00	\$21,456.00	\$14,304.00	1.769	\$37,964.47	\$25,309.65
Sewer Camera	2007	\$47,184.64	\$0.00	\$47,184.64	1.654	\$0.00	\$78,039.05
2013 Subaru Trail Wagon {UTV}	2018	\$4,806.68	\$2,403.34	\$2,403.34	1.191	\$2,862.42	\$2,862.42
Generator 45kw Trailer Mounted	2019	\$41,404.94	\$0.00	\$41,404.94	1.168	\$0.00	\$48,356.65
Generator 125kw Trailer Mounted	2020	\$69,244.97	\$0.00	\$69,244.97	1.149	\$0.00	\$79,568.36

Table 4
Rio Alto WD
Connection Fee Study
Existing Asset Depreciation Schedule

Asset	Acquisition Year	Total	Original Cost		CFD (Sewer)	Escalation Factor	Replacement Cost	
			Water	Sewer			Water	Sewer
Kubota M62 Backhoe	2021	\$65,487.47	\$41,544.73	\$23,942.74	\$0.00	1.086	\$45,112.76	\$25,999.04
Kubota M62 Bucket	2021	\$3,753.75	\$2,252.25	\$1,501.50	\$0.00	1.086	\$2,445.68	\$1,630.45
Kubota Tractor Old Engine Rebuild	2021	\$11,586.69	\$6,952.01	\$4,634.68	\$0.00	1.086	\$7,549.08	\$5,032.72
Walk-Behind Sweeper	2022	\$1,286.95	\$772.17	\$514.78	\$0.00	1.013	\$782.15	\$521.44
Desks	1973	\$1,250.00	\$937.50	\$312.50	\$0.00	6.953	\$6,517.99	\$2,172.66
Building Office	1982	\$137,990.87	\$103,273.22	\$34,717.65	\$0.00	3.444	\$355,719.68	\$119,583.29
Fence Office building	1990	\$2,380.37	\$1,428.27	\$952.10	\$0.00	2.784	\$3,976.65	\$2,650.88
1000 Gallon Gas Tank	1992	\$6,886.92	\$3,443.46	\$3,443.46	\$0.00	2.643	\$9,100.84	\$9,100.84
Storage Rack - Maps	1999	\$2,079.81	\$1,039.91	\$1,039.90	\$0.00	2.174	\$2,261.24	\$2,261.22
Carport	2000	\$5,001.60	\$3,004.46	\$1,997.14	\$0.00	2.118	\$6,362.94	\$4,229.61
Asphalt Office Parking Lots	2016	\$20,048.00	\$12,086.08	\$7,961.92	\$0.00	1.274	\$15,402.83	\$10,146.89
Sign and Reader Board Office	2017	\$2,469.50	\$1,359.60	\$1,109.90	\$0.00	1.227	\$1,668.32	\$1,361.92
Storage Container for Records	2018	\$4,108.39	\$4,108.39	\$0.00	\$0.00	1.191	\$4,893.16	\$0.00
Computer Towers 2 Mini	2019	\$2,466.75	\$1,480.05	\$986.70	\$0.00	1.168	\$1,728.54	\$1,152.36
Generator Office	2019	\$20,115.00	\$12,069.00	\$8,046.00	\$0.00	1.168	\$14,095.33	\$9,396.89
Server PowerEdge T340	2020	\$7,486.56	\$4,491.94	\$2,994.62	\$0.00	1.149	\$5,161.62	\$3,441.07
TV 70" w/Computer Setup	2021	\$1,141.09	\$684.65	\$456.44	\$0.00	1.086	\$743.45	\$495.64
Alarm System Office	2023	\$2,043.68	\$1,226.21	\$817.47	\$0.00	1.000	\$1,226.21	\$817.47
Electrical Equipment	1980	\$1,812.60	\$1,812.60	\$0.00	\$0.00	4.070	\$7,377.53	\$0.00
Building Storage	1989	\$8,347.00	\$4,173.50	\$4,173.50	\$0.00	2.855	\$11,914.62	\$11,914.62
Storage Facility w/Shade Roof	1993	\$3,646.85	\$2,242.08	\$1,404.77	\$0.00	2.529	\$5,669.76	\$3,552.38
Microscope for STP	2004	\$1,053.33	\$0.00	\$1,053.33	\$0.00	1.852	\$0.00	\$1,950.48
Asphalt Storage Building	2005	\$8,000.00	\$4,000.00	\$4,000.00	\$0.00	1.769	\$7,077.64	\$7,077.64
Chlorine Feed Pump	2021	\$3,024.36	\$0.00	\$3,024.36	\$0.00	1.086	\$0.00	\$3,284.10
Leak Detector	2022	\$1,968.00	\$1,968.00	\$0.00	\$0.00	1.013	\$1,993.45	\$0.00
Chlorine Feed Pump	2022	\$3,476.56	\$0.00	\$3,476.56	\$0.00	1.013	\$0.00	\$3,521.52
Equipment	1982	\$1,165.85	\$1,165.85	\$0.00	\$0.00	3.444	\$4,015.71	\$0.00
Generator Weider	1989	\$3,049.09	\$1,500.55	\$1,548.54	\$0.00	2.855	\$4,283.81	\$4,420.81
Saw/Rammer/VIB Plates	1989	\$4,508.28	\$2,254.67	\$2,253.61	\$0.00	2.855	\$6,436.69	\$6,433.67

Table 4
Rio Alto WD
Connection Fee Study
Existing Asset Depreciation Schedule

Asset	Acquisition Year	Total	Original Cost		CFD (Sewer)	Escalation Factor	Replacement Cost	
			Water	Sewer			Water	Sewer
Hammer Hydraulic	1989	\$1,959.61	\$1,077.46	\$882.15	\$0.00	2.855	\$3,075.96	\$2,518.39
Shoring	1990	\$1,068.79	\$0.00	\$1,068.79	\$0.00	2.784	\$0.00	\$2,975.77
Shop Wiring	1992	\$1,150.00	\$575.00	\$575.00	\$0.00	2.643	\$1,519.69	\$1,519.69
Valve Exerciser	2005	\$10,249.13	\$10,249.13	\$0.00	\$0.00	1.769	\$18,134.92	\$0.00
Gas Rammer/compactor	2006	\$2,980.48	\$1,788.28	\$1,192.20	\$0.00	1.700	\$3,039.69	\$2,026.48
Climbing Gear	2007	\$10,328.38	\$0.00	\$10,328.38	\$0.00	1.654	\$0.00	\$17,082.19
Sewer Pipe Patch Repair Kit	2010	\$4,800.45	\$0.00	\$4,800.45	\$0.00	1.497	\$0.00	\$7,187.87
Gas Detector w/Accessories	2013	\$1,345.63	\$0.00	\$1,345.63	\$0.00	1.380	\$0.00	\$1,856.99
Hydraulic Dump Trailer	2016	\$7,565.00	\$4,539.00	\$3,026.00	\$0.00	1.274	\$5,784.63	\$3,856.42
Eradicator for RAS Pump	2017	\$1,364.31	\$0.00	\$1,364.31	\$0.00	1.227	\$0.00	\$1,674.10
Mower Rotary	2018	\$2,026.88	\$1,013.44	\$1,013.44	\$0.00	1.191	\$1,207.02	\$1,207.02
Sewer Pipe Patch Repairs	2019	\$4,151.00	\$0.00	\$4,151.00	\$0.00	1.168	\$0.00	\$4,847.93
Window AC	2021	\$1,179.97	\$0.00	\$1,179.97	\$0.00	1.086	\$0.00	\$1,281.31
Service Line Puller Kit	2021	\$1,116.73	\$1,116.73	\$0.00	\$0.00	1.086	\$1,212.64	\$0.00
Fence Large Tank	1990	\$1,484.89	\$1,484.89	\$0.00	\$0.00	2.784	\$4,134.29	\$0.00
1985 GMC Truck Dump	1989	\$6,021.69	\$3,239.15	\$2,782.54	\$0.00	2.855	\$9,247.22	\$7,943.67
1990 Nissan Hardbody	1990	\$9,601.63	\$5,760.98	\$3,840.65	\$0.00	2.784	\$16,039.96	\$10,693.30
1997 Ford Ranger Pickup	1997	\$9,986.69	\$5,992.01	\$3,994.68	\$0.00	2.261	\$13,550.45	\$9,033.65
1992 Ford Utility Truck	2004	\$9,116.25	\$5,469.75	\$3,646.50	\$0.00	1.852	\$10,128.48	\$6,752.32
2005 Ford F150 w/Rack Truck #5	2005	\$15,861.18	\$9,516.71	\$6,344.47	\$0.00	1.769	\$16,838.97	\$11,225.97
2015 F150 Lic # 1455539 Truck #1	2015	\$21,714.18	\$11,942.80	\$9,771.38	\$0.00	1.313	\$15,679.80	\$12,828.92
2015 F150 Lic # 1455538 Truck #2	2015	\$21,714.17	\$11,942.80	\$9,771.37	\$0.00	1.313	\$15,679.80	\$12,828.91
Toolbox w/Diesel Transfer on Truck #1	2020	\$1,300.00	\$780.00	\$520.00	\$0.00	1.149	\$896.29	\$597.52
2015 Chevy Silverado Service Truck #8	2022	\$32,183.00	\$20,179.80	\$12,003.20	\$0.00	1.013	\$20,440.74	\$12,158.41
20016 Nissan Frontier Truck #0	2022	\$21,494.43	\$12,923.86	\$8,570.57	\$0.00	1.013	\$13,090.98	\$8,681.40
Well #5 Fencing	2020	\$10,636.23	\$10,636.23	\$0.00	\$0.00	1.149	\$12,221.93	\$0.00
Well #6 Fencing	2020	\$18,844.52	\$18,844.52	\$0.00	\$0.00	1.149	\$21,653.96	\$0.00
Computer/desk/chair/stp	2003	\$1,437.42	\$750.82	\$686.60	\$0.00	1.968	\$1,477.75	\$1,351.36
Subtotal General Plant & Equipment		\$1,097,228.75	\$552,839.06	\$544,389.69	\$0.00		\$1,094,898.00	\$925,656.92

Table 4
Rio Alto WD
Connection Fee Study
Existing Asset Depreciation Schedule

Asset	Acquisition Year	Total	Original Cost		CFD (sewer)	Escalation Factor	Replacement Cost	
			Water	Sewer			Water	Sewer
Intangible								
UMS - Utility Software Program (CUI)	2016	\$21,750.00	\$13,050.00	\$8,700.00	\$0.00	1.274	\$16,631.28	\$11,087.52
Subtotal Intangible		\$21,750.00	\$13,050.00	\$8,700.00	\$0.00		\$16,631.28	\$11,087.52
Land								
Land Acq of 1018-20 Lot	1997	\$825.00	\$825.00	\$0.00	\$0.00	1	\$825.00	\$0.00
Land Purchased 20 Acres WWTP	1998	\$25,535.02	\$0.00	\$25,535.02	\$0.00	1	\$0.00	\$25,535.02
Land RAWD	1999	\$721.59	\$721.59	\$0.00	\$0.00	1	\$721.59	\$0.00
Land Purchase Lot 1001-945A	2001	\$415.00	\$415.00	\$0.00	\$0.00	1	\$415.00	\$0.00
Land RAWD	2002	\$100.00	\$100.00	\$0.00	\$0.00	1	\$100.00	\$0.00
Land 78 +/- Acres (Leviathan) Hard Cost	2016	\$435,586.45	\$0.00	\$0.00	\$435,586.45	1	\$0.00	\$435,586.45
Subtotal Land		\$463,183.06	\$2,061.59	\$25,535.02	\$435,586.45		\$2,061.59	\$461,121.47
Treatment Plant								
Building Sewage Treatment Plant	1977	\$450,000.00	\$0.00	\$450,000.00	\$0.00	5.115	\$0.00	\$2,301,538.63
Wetlands	2016	\$3,099,204.68	\$0.00	\$0.00	\$3,099,204.68	1.274	\$0.00	\$3,949,711.22
Sewer Treatment Plant Road	1983	\$14,324.00	\$0.00	\$14,324.00	\$0.00	3.240	\$0.00	\$46,413.95
Sewer Treatment Plant Master Plan	1984	\$10,066.75	\$0.00	\$10,066.75	\$0.00	3.178	\$0.00	\$31,989.81
Filter Rehab	1992	\$16,226.93	\$0.00	\$16,226.93	\$0.00	2.643	\$0.00	\$42,886.72
Filter	1992	\$32,834.59	\$0.00	\$32,834.59	\$0.00	2.643	\$0.00	\$86,779.68
Filter Electrical	1994	\$5,605.39	\$0.00	\$5,605.39	\$0.00	2.436	\$0.00	\$13,655.91
Clarifier Rehab #1	1995	\$30,706.35	\$0.00	\$30,706.35	\$0.00	2.408	\$0.00	\$73,945.73
Pump Grinder Muffin Monster	1997	\$21,920.83	\$0.00	\$21,920.83	\$0.00	2.261	\$0.00	\$49,572.19
Drying Beds	2001	\$164,865.03	\$0.00	\$164,865.03	\$0.00	2.077	\$0.00	\$942,440.76
Meter Hydro Ranger Flow	2005	\$6,116.69	\$0.00	\$6,116.69	\$0.00	1.769	\$0.00	\$10,822.94
Building Storage Metal	2005	\$44,995.65	\$0.00	\$44,995.65	\$0.00	1.769	\$0.00	\$79,615.77
Sludge Drying Beds	2015	\$233,005.35	\$0.00	\$0.00	\$233,005.35	1.313	\$0.00	\$305,914.55
Chlorination System	2015	\$64,647.16	\$0.00	\$0.00	\$64,647.16	1.313	\$0.00	\$84,875.76
Clarifier #2	2015	\$997,670.56	\$0.00	\$0.00	\$997,670.56	1.313	\$0.00	\$1,309,849.48

Table 4
Rio Alto WD
Connection Fee Study
Existing Asset Depreciation Schedule

Asset	Acquisition Year	Total	Original Cost		CFD (Sewer)	Escalation Factor	Replacement Cost	
			Water	Sewer			Water	Sewer
RAS Pump Station	2015	\$111,262.88	\$0.00	\$0.00	\$111,262.88	1.313	\$0.00	\$146,077.91
WWTP - Effluent Pump Station	2015	\$163,231.70	\$0.00	\$0.00	\$163,231.70	1.313	\$0.00	\$214,308.18
Electrical	2016	\$520,735.19	\$0.00	\$0.00	\$520,735.19	1.274	\$0.00	\$663,639.17
Generator 150kw Stationary	2016	\$105,560.70	\$0.00	\$0.00	\$105,560.70	1.274	\$0.00	\$134,529.44
Bacti Lab	2016	\$29,388.02	\$0.00	\$0.00	\$29,388.02	1.274	\$0.00	\$37,452.90
Pump Trash 4" Portable	2005	\$3,969.57	\$0.00	\$3,969.57	\$0.00	1.769	\$0.00	\$7,023.80
Pump Trash 6" Portable	2005	\$17,460.56	\$0.00	\$17,460.56	\$0.00	1.769	\$0.00	\$30,894.90
Asphalt at STP	2005	\$18,060.42	\$0.00	\$18,060.42	\$0.00	1.769	\$0.00	\$31,956.30
Pump Sludge	2006	\$9,658.06	\$0.00	\$9,658.06	\$0.00	1.700	\$0.00	\$16,416.62
Meter New DR700 Spectrophoto	2008	\$2,791.25	\$0.00	\$2,791.25	\$0.00	1.585	\$0.00	\$4,425.37
Drying Bed	2009	\$20,000.07	\$0.00	\$20,000.07	\$0.00	1.537	\$0.00	\$30,746.97
Meter Turbidity	2010	\$1,224.11	\$0.00	\$1,224.11	\$0.00	1.497	\$0.00	\$1,832.90
Meter PH	2020	\$1,008.77	\$0.00	\$1,008.77	\$0.00	1.149	\$0.00	\$1,159.16
Coupling, Torsion Mam Rotar for Aerator	2021	\$21,873.16	\$0.00	\$21,873.16	\$0.00	1.086	\$0.00	\$23,751.71
Subtotal Treatment Plant		\$6,218,414.42	\$0.00	\$893,708.18	\$5,324,706.24		\$0.00	\$10,074,228.41
Solar								
Office Solar	2019	\$59,000.00	\$35,400.00	\$23,600.00	\$0.00	1.168	\$41,343.50	\$27,562.34
WWTP Solar	2019	\$456,150.00	\$0.00	\$456,150.00	\$0.00	1.168	\$0.00	\$532,735.57
Well #6 Solar	2020	\$619,500.00	\$649,500.00	\$0.00	\$0.00	1.149	\$711,858.19	\$0.00
Well #5 Solar	2020	\$456,150.00	\$456,150.00	\$0.00	\$0.00	1.149	\$524,155.15	\$0.00
Subtotal Solar		\$1,590,800.00	\$1,111,050.00	\$479,750.00	\$0.00		\$1,277,356.84	\$560,297.90
Transmission and Distribution			1117.W.006					
Booster Station	1982	\$26,456.58	\$26,456.58	\$0.00	\$0.00	3.444	\$91,128.43	\$0.00
Telemetry Radio	2004	\$11,287.50	\$11,287.50	\$0.00	\$0.00	1.852	\$20,901.36	\$0.00
Telemetry Wells	2005	\$7,913.67	\$7,913.67	\$0.00	\$0.00	1.769	\$14,002.53	\$0.00
Telemetry Well #6	2008	\$6,743.51	\$6,743.51	\$0.00	\$0.00	1.585	\$10,691.45	\$0.00
Telemetry Water	2017	\$20,478.42	\$20,478.42	\$0.00	\$0.00	1.227	\$25,128.42	\$0.00
Telemetry Radio	2017	\$2,354.52	\$2,354.52	\$0.00	\$0.00	1.227	\$2,889.16	\$0.00

Table 4
Rio Alto WD
Connection Fee Study
Existing Asset Depreciation Schedule

Asset	Acquisition Year	Total	Original Cost		CFD (Sewer)	Escalation Factor	Replacement Cost	
			Water	Sewer			Water	Sewer
Subtotal Transmission and Distribution								
		\$75,234.20	\$75,234.20	\$0.00	\$0.00		\$164,741.34	\$0.00
Wells, Pumps, Buildings								
Well #3 (test hole-drill-engineering)	1992	\$98,877.72	\$98,877.72	\$0.00	\$0.00	2.643	\$261,327.37	\$0.00
Well #3 Pump & Pump bldg	1992	\$62,561.00	\$62,561.00	\$0.00	\$0.00	2.643	\$165,344.64	\$0.00
Well #3 Downfeed	1992	\$14,967.89	\$14,967.89	\$0.00	\$0.00	2.643	\$39,559.16	\$0.00
Well #4 Actual costs	1999	\$148,423.47	\$148,423.47	\$0.00	\$0.00	2.174	\$322,740.33	\$0.00
Well #4 Pump	1999	\$30,000.00	\$30,000.00	\$0.00	\$0.00	2.174	\$65,233.69	\$0.00
Well #4 pump bldg	1999	\$55,610.09	\$55,610.09	\$0.00	\$0.00	2.174	\$120,921.70	\$0.00
Well #5 Testhole/line install	2004	\$212,899.28	\$212,899.28	\$0.00	\$0.00	1.852	\$394,231.12	\$0.00
Well #5 Pump	2004	\$73,000.00	\$73,000.00	\$0.00	\$0.00	1.852	\$135,175.99	\$0.00
Well #5 Building	2004	\$76,924.56	\$76,924.56	\$0.00	\$0.00	1.852	\$142,443.20	\$0.00
Well #5 Downfeed Line	2004	\$21,151.60	\$21,151.60	\$0.00	\$0.00	1.852	\$39,166.97	\$0.00
Well #5 Pipe Assembly	2006	\$7,753.76	\$7,753.76	\$0.00	\$0.00	1.700	\$13,179.72	\$0.00
Well #6	2008	\$245,093.32	\$245,093.32	\$0.00	\$0.00	1.585	\$388,581.45	\$0.00
Well #6 Pump (Retired 43,390.00)	2008	\$46,924.00	\$46,924.00	\$0.00	\$0.00	1.585	\$74,395.32	\$0.00
Well #6 Pump House	2008	\$44,500.00	\$44,500.00	\$0.00	\$0.00	1.585	\$70,552.21	\$0.00
Well #6 Motor	2019	\$43,567.66	\$43,567.66	\$0.00	\$0.00	1.168	\$50,882.48	\$0.00
Well #5 Generator 500kw Kohler	2020	\$141,030.31	\$141,030.31	\$0.00	\$0.00	1.149	\$162,055.82	\$0.00
Subtotal Wells, Pumps, Buildings								
		\$1,323,284.66	\$1,323,284.66	\$0.00	\$0.00		\$2,445,791.16	\$0.00
Total		\$10,859,593	\$3,077,520	\$2,021,781	\$5,760,293		\$5,001,480	\$12,141,894

Table 5
Rio Alto WD
Connection Fee Study
Estimated Hydrant Replacement Cost

Hydrants	Number	Replacement Cost*	Total Replacement Cost
Hydrants	156	\$5,500	\$858,000

*Replacement cost based on most recent hydrant purchase

Table 6
Rio Alto WD
Connection Fee Study
Estimated Water Pipe Replacement Cost

Size	Length	Replacement Cost*	Replacement Cost
<i>Inches</i>	<i>Linear Feet (LF)</i>	<i>\$ per LF</i>	<i>\$</i>
4	31,119	\$110	\$3,423,090
6	22,476	\$130	\$2,921,880
8	33,878	\$160	\$5,420,480
10	30,828	\$190	\$5,857,320
12	4,973	\$220	\$1,094,060
14	8,529	\$260	\$2,217,540
Total	131,803		\$20,934,370

*Replacement cost based on recent pricing obtained by District engineer

Table 7
Rio Alto WD
Connection Fee Study
Estimated Water Tank Replacement Cost

Tanks	Acquisition Year	Original Cost	Replacement Cost
Tank 2B 1.349 Mil gal storage	1992	\$282,279.28	\$746,046
Tank 1B .2 Mil gal storage	2006	\$175,771.73	\$298,774
Tank 2A .5 Mil gal storage*	1969	n/a	149,387.04
Tank 1A .1 Mil gal storage*	1969	n/a	\$448,161
Total			\$1,642,368

*Replacement cost estimates based on tank 1b

Table 8
Rio Alto WD
Connection Fee Study
Estimated Sewer Pipe Replacement Cost

Pipe Size	Length	Replacement Cost	Replacement Cost
<i>Inches</i>	<i>Linear Feet (LF)</i>	<i>\$ per LF</i>	<i>\$</i>
4"	2,400	\$100	\$240,000.00
6"	18,100	\$110	\$1,991,000.00
8"	58,700	\$135	\$7,924,500.00
10"	5,400	\$155	\$837,000.00
12"	10,000	\$170	\$1,700,000.00
15"	1,400	\$200	\$280,000.00
16"	400	\$250	\$100,000.00
21"	1,200	\$570	\$684,000.00
24"	600	\$670	\$402,000.00
30"	800	\$800	\$640,000.00
Total	99,000		\$14,798,500

*Replacement cost based on recent pricing obtained by District engineer

Table 9
Rio Alto WD
Connection Fee Study
Estimated Sewer Lift Station Replacement Cost

Lift Stations	Replacement Cost*
Lift Stn #1 (Rio Alto Dr. by Bridge)	\$276,204
Lift Stn #2 (Rio Alto Dr. cross Dinghy)	\$226,204
Lift Station #3 (North Marina Dr.)	\$176,204
Lift Station #4 (End of Edgewater)	\$176,204
Lift Station #5 (Antelope)	\$176,204
Lift Station #6 (End of Freshwater)	\$176,204
Lift Station #7 (End of Buckhorn)	\$176,204
Total	\$1,383,431

*Replacement cost based on Lift Station #4