# 2014-2023 Impact Fee Development

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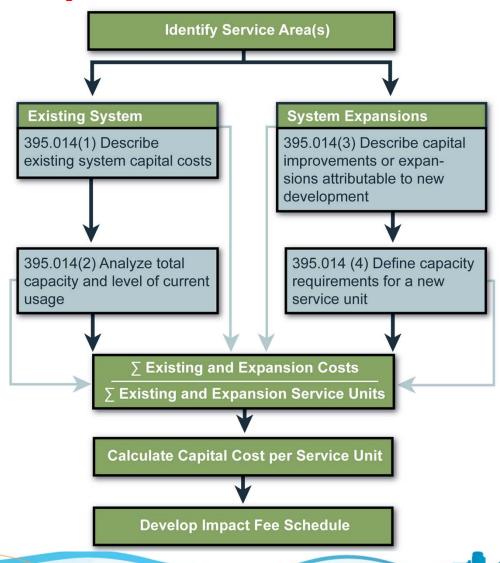
Red Oak ARCADIS

December 19, 2013

**Capital Improvements Advisory Committee Meeting** 



### **Impact Fee Formula**



# Capital Improvements Plan (CIP) Financial Assumptions

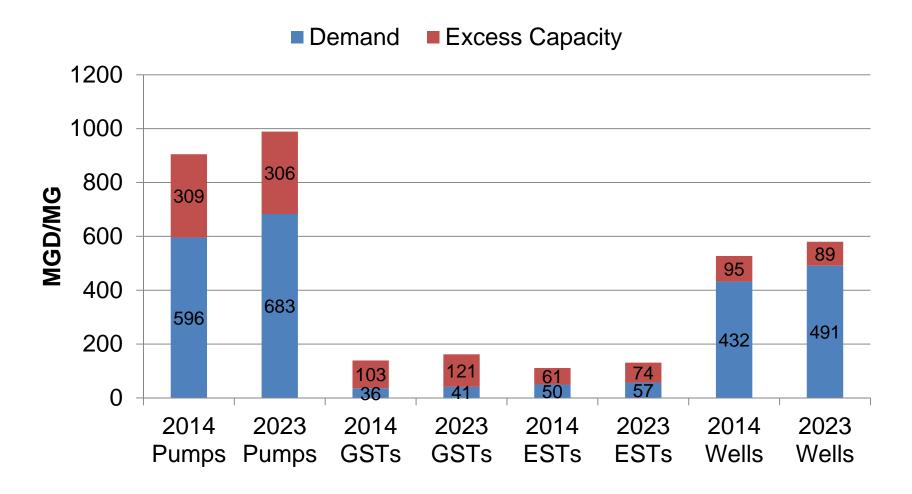
- Existing Infrastructure
  - 35% cash funded
  - 65% debt funded
  - Interest expense is included in impact fee
- Water Delivery Future CIP 80% cash funded, 20% debt funded
- Water Supply Future CIP 100% debt funded (interest not included)
- Wastewater Future CIP
  - MRSO 100% debt funded (interest not included)
  - All other projects 80% cash funded, 20% debt funded



# WATER DELIVERY – SYSTEM DEVELOPMENT



# **Water System Development Capacities**







# **Capacity Criteria**

### **High Elevation Service Area – High Service and Booster Pumps**

Line	Description	Value
1	Average Daily Demand (gpcd)	166
2	Maximum Hour Peaking Factor	3.38
3	2013 Population	44,747
4	2013 MHD (mgd) ([1] * [2] * [3] / 1 million)	25.1
5	2023 Population	65,826
6	2023 MHD (mgd) ([1] * [2] * [5] / 1 million)	36.9
7	Study Period Increase in MHD (mgd) ([6] - [4])	11.8





# **Available Capacity**

### **High Elevation Service Area – High Service and Booster Pumps**

Line	Description	Value
1	2013 MHD (mgd)	25.1
2	2013 Capacity (mgd)	88.3
3	2023 MHD (mgd)	36.9
4	2023 Capacity (mgd)	106.2
5	Study Period Increase in Capacity (mgd) ([4] – [2])	17.9
6	Available Existing Capacity (mgd) ([2] – [1])	63.2
7	Available Existing Capacity ([6] / [2])	71.6%





**High Elevation Service Area – High Service and Booster Pumps** 

Line	Description	Value
1	Available Existing Capacity (mgd)	63.2
2	Study Period Increase in Capacity (mgd)	17.9
3	Total Available Capacity (mgd)	81.1
4	Study Period Increase in MHD (mgd)	11.8
5	Eligible Available Capacity Allocation ([4] / [3])	14.6%





**High Elevation Service Area – High Service and Booster Pumps** 

Line	Description	Value
1	Eligible Available Capacity Allocation	14.6%
2	Available Existing Capacity	71.6%
3	Value of Existing Assets	\$ 9,605,165
4	Eligible Existing Asset Value ([1] * [2] * [3]))	\$ 1,002,181
5	Value of Future CIP	\$ 6,847,602
6	Eligible Future CIP Value ([1] * [5])	\$ 998,266





### **Financing Costs**

#### **High Elevation Service Area – High Service and Booster Pumps**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 1,002,181
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 651,418
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 27,333

• Sum of Eligible Interest 2014-2043 = \$398,239



# **Capacity Criteria**

### Middle Elevation Service Area – High Service and Booster Pumps

Line	Description	Value
1	Average Daily Demand (gpcd)	133
2	Maximum Hour Peaking Factor	2.89
3	2013 Population	538,582
4	2013 MHD (mgd) ([1] * [2] * [3] / 1 million)	207.0
5	2023 Population	647,218
6	2023 MHD (mgd) ([1] * [2] * [5] / 1 million)	248.8
7	Study Period Increase in MHD (mgd) ([6] - [4])	41.8



# **Available Capacity**

### Middle Elevation Service Area – High Service and Booster Pumps

Line	Description	Value
1	2013 MHD (mgd)	207.0
2	2013 Capacity (mgd)	366.6
3	2023 MHD (mgd)	248.8
4	2023 Capacity (mgd)	413.7
5	Study Period Increase in Capacity (mgd) ([4] – [2])	47.1
6	Available Existing Capacity (mgd) ([2] – [1])	159.6
7	Available Existing Capacity ([6] / [2])	43.5%

Middle Elevation Service Area – High Service and Booster Pumps

Line	Description	Value
1	Available Existing Capacity (mgd)	159.6
2	Study Period Increase in Capacity (mgd)	47.1
3	Total Available Capacity (mgd)	206.7
4	Study Period Increase in MHD (mgd)	41.8
5	Eligible Available Capacity Allocation ([4] / [3])	20.2%



Middle Elevation Service Area – High Service and Booster Pumps

Line	Description	Value
1	Eligible Available Capacity Allocation	20.2%
2	Available Existing Capacity	43.5%
3	Value of Existing Assets	\$ 39,874,523
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 3,507,457
5	Value of Future CIP	\$ 20,021,505
6	Eligible Future CIP Value ([1] * [5])	\$ 4,045,508



### **Financing Costs**

#### Middle Elevation Service Area – High Service and Booster Pumps

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 3,507,457
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 2,279,847
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 95,659

• Sum of Eligible Interest 2014-2043 = \$1,393,768



# **Capacity Criteria**

### **Low Elevation Service Area – High Service and Booster Pumps**

Line	Description	Value
1	Average Daily Demand (gpcd)	122
2	Maximum Hour Peaking Factor	2.73
3	2013 Population	1,091,176
4	2013 MHD (mgd) ([1] * [2] * [3] / 1 million)	363.4
5	2023 Population	1,191,422
6	2023 MHD (mgd) ([1] * [2] * [5] / 1 million)	396.8
7	Study Period Increase in MHD (mgd) ([6] - [4])	33.4



# **Available Capacity**

### **Low Elevation Service Area – High Service and Booster Pumps**

Line	Description	Value
1	2013 MHD (mgd)	363.4
2	2013 Capacity (mgd)	449.6
3	2023 MHD (mgd)	396.8
4	2023 Capacity (mgd)	468.9
5	Study Period Increase in Capacity (mgd) ([4] – [2])	19.3
6	Available Existing Capacity (mgd) ([2] – [1])	86.2
7	Available Existing Capacity ([6] / [2])	19.2%

**Low Elevation Service Area – High Service and Booster Pumps** 

Line	Description	Value
1	Available Existing Capacity (mgd)	86.2
2	Study Period Increase in Capacity (mgd)	19.3
3	Total Available Capacity (mgd)	105.5
4	Study Period Increase in MHD (mgd)	33.4
5	Eligible Available Capacity Allocation ([4] / [3])	31.7%



**Low Elevation Service Area – High Service and Booster Pumps** 

Line	Description	Value
1	Eligible Available Capacity Allocation	31.7%
2	Available Existing Capacity	19.2%
3	Value of Existing Assets	\$ 48,899,880
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 2,966,872
5	Value of Future CIP	\$ 9,539,735
6	Eligible Future CIP Value ([1] * [5])	\$ 3,020,006



### **Financing Costs**

#### **Low Elevation Service Area – High Service and Booster Pumps**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 2,966,872
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 1,928,467
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 80,916

• Sum of Eligible Interest 2014-2043 = \$1,178,955



# 2014 – 2023 Eligible CIP Costs

### **High Service and Booster Pumps**

	Existing	Capacity		New	CIP Capa	acity	Total Ca	pacity
Service Area	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of All Capacity	Total Value of 2014- 2023 Capacity
	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)
High	9.6	1.0	0.4	6.9	1.0	0.0	16.5	2.4
Middle	39.9	3.5	1.4	20.0	4.0	0.0	59.9	8.9
Low	48.9	3.0	1.2	9.5	3.0	0.0	58.4	7.2
Total	98.4	7.5	3.0	36.4	8.0	0.0	134.8	18.5



# **Capacity Criteria**

### **High Elevation Service Area – Ground Storage Tanks**

Line	Description	Value
1	Minimum Storage Requirements (gal/conn)	14
2	2013 Connections	11,369
3	2013 MHD (MG) ([1] * [2] / 1 million)	0.159
4	2023 Connections	16,724
5	2023 MHD (MG) ([1] * [4] / 1 million)	0.234
6	Study Period Increase in MHD (MG) ([5] - [3])	0.075



# **Available Capacity**

### **High Elevation Service Area – Ground Storage Tanks**

Line	Description	Value
1	2013 MHD (MG)	0.159
2	2013 Capacity (MG)	3.06
3	2023 MHD (MG)	0.234
4	2023 Capacity (MG)	3.06
5	Study Period Increase in Capacity (MG) ([4] – [2])	0.00
6	Available Existing Capacity (MG) ([2] - [1])	2.901
7	Available Existing Capacity ([6] / [2])	94.8%



#### **High Elevation Service Area – Ground Storage Tanks**

Line	Description	Value
1	Available Existing Capacity (MG)	2.901
2	Study Period Increase in Capacity (MG)	0.00
3	Total Available Capacity (MG)	2.901
4	Study Period Increase in MHD (MG)	0.075
5	Eligible Available Capacity Allocation ([4] / [3])	2.6%



#### **High Elevation Service Area – Ground Storage Tanks**

Line	Description	Value
1	Eligible Available Capacity Allocation	2.6%
2	Available Existing Capacity	94.8%
3	Value of Existing Assets	\$ 880,239
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 21,599
5	Value of Future CIP	\$ 0
6	Eligible Future CIP Value ([1] * [5])	\$ 0



# **Financing Costs**

#### **High Elevation Service Area – Ground Storage Tanks**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 21,599
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 14,039
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 589

• Sum of Eligible Interest 2014-2043 = \$8,583



# **Capacity Criteria**

### Middle Elevation Service Area – Ground Storage Tanks

Line	Description	Value
1	Minimum Storage Requirements (gal/conn)	67
2	2013 Connections	136,835
3	2013 MHD (MG) ([1] * [2] / 1 million)	9.2
4	2023 Connections	164,435
5	2023 MHD (MG) ([1] * [4] / 1 million)	11.0
6	Study Period Increase in MHD (MG) ([5] - [3])	1.8

# **Available Capacity**

### Middle Elevation Service Area – Ground Storage Tanks

Line	Description	Value
1	2013 MHD (MG)	9.2
2	2013 Capacity (MG)	46.0
3	2023 MHD (MG)	11.0
4	2023 Capacity (MG)	62.5
5	Study Period Increase in Capacity (MG) ([4] – [2])	16.5
6	Available Existing Capacity (MG) ([2] - [1])	36.8
7	Available Existing Capacity ([6] / [2])	80.0%



#### Middle Elevation Service Area – Ground Storage Tanks

Line	Description	Value
1	Available Existing Capacity (MG)	36.8
2	Study Period Increase in Capacity (MG)	16.5
3	Total Available Capacity (MG)	53.3
4	Study Period Increase in MHD (MG)	1.8
5	Eligible Available Capacity Allocation ([4] / [3])	3.5%



#### Middle Elevation Service Area – Ground Storage Tanks

Line	Description	Value
1	Eligible Available Capacity Allocation	3.5%
2	Available Existing Capacity	80.0%
3	Value of Existing Assets	\$ 13,248,217
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 367,873
5	Value of Future CIP	\$ 16,131,250
6	Eligible Future CIP Value ([1] * [5])	\$ 559,457



### **Financing Costs**

#### Middle Elevation Service Area – Ground Storage Tanks

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 367,873
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 239,117
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 10,033

• Sum of Eligible Interest 2014-2043 = \$146,183



# **Capacity Criteria**

### **Low Elevation Service Area – Ground Storage Tanks**

Line	Description	Value
1	Minimum Storage Requirements (gal/conn)	97
2	2013 Connections	277,230
3	2013 MHD (MG) ([1] * [2] / 1 million)	26.9
4	2023 Connections	302,699
5	2023 MHD (MG) ([1] * [4] / 1 million)	29.4
6	Study Period Increase in MHD (MG) ([5] - [3])	2.5



# **Available Capacity**

### **Low Elevation Service Area – Ground Storage Tanks**

Line	Description	Value
1	2013 MHD (MG)	26.9
2	2013 Capacity (MG)	89.9
3	2023 MHD (MG)	29.4
4	2023 Capacity (MG)	96.3
5	Study Period Increase in Capacity (MG) ([4] – [2])	6.4
6	Available Existing Capacity (MG) ([2] – [1])	63.0
7	Available Existing Capacity ([6] / [2])	70.1%



#### **Low Elevation Service Area – Ground Storage Tanks**

Line	Description	Value
1	Available Existing Capacity (MG)	63.0
2	Study Period Increase in Capacity (MG)	6.4
3	Total Available Capacity (MG)	69.4
4	Study Period Increase in MHD (MG)	2.5
5	Eligible Available Capacity Allocation ([4] / [3])	3.6%



#### **Low Elevation Service Area – Ground Storage Tanks**

Line	Description	Value
1	Eligible Available Capacity Allocation	3.6%
2	Available Existing Capacity	70.1%
3	Value of Existing Assets	\$ 25,906,798
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 646,469
5	Value of Future CIP	\$ 8,563,750
6	Eligible Future CIP Value ([1] * [5])	\$ 304,856



### **Financing Costs**

#### **Low Elevation Service Area – Ground Storage Tanks**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 646,469
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 420,205
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 17,631

• Sum of Eligible Interest 2014-2043 = \$256,889



# 2014 – 2023 Eligible CIP Costs

### **Ground Storage Tanks**

Existing Capacity			New CIP Capacity		Total Capacity			
Service Area	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of All Capacity	Total Value of 2014- 2023 Capacity
	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)
High	0.9	0.02	0.01	0.0	0.0	0.0	0.9	0.03
Middle	13.2	0.4	0.1	16.1	0.6	0.0	29.3	1.1
Low	25.9	0.6	0.3	8.6	0.3	0.0	34.5	1.2
Total	40.0	1.0	0.4	24.7	0.9	0.0	64.7	2.3

# **Capacity Criteria**

### **High Elevation Service Area – Elevated Storage Tanks**

Line	Description	Value
1	Minimum Storage Requirements (gal/conn)	238
2	2013 Connections	11,369
3	2013 MHD (MG) ([1] * [2] / 1 million)	2.7
4	2023 Connections	16,724
5	2023 MHD (MG) ([1] * [4] / 1 million)	4.0
6	Study Period Increase in MHD (MG) ([5] - [3])	1.3



# **Available Capacity**

### **High Elevation Service Area – Elevated Storage Tanks**

Line	Description	Value
1	2013 MHD (MG)	2.7
2	2013 Capacity (MG)	6.9
3	2023 MHD (MG)	4.0
4	2023 Capacity (MG)	9.4
5	Study Period Increase in Capacity (MG) ([4] – [2])	2.5
6	Available Existing Capacity (MG) ([2] - [1])	4.2
7	Available Existing Capacity ([6] / [2])	60.9%



#### **High Elevation Service Area – Elevated Storage Tanks**

Line	Description	Value
1	Available Existing Capacity (MG)	4.2
2	Study Period Increase in Capacity (MG)	2.5
3	Total Available Capacity (MG)	6.7
4	Study Period Increase in MHD (MG)	1.3
5	Eligible Available Capacity Allocation ([4] / [3])	19.1%



#### **High Elevation Service Area – Elevated Storage Tanks**

Line	Description	Value
1	Eligible Available Capacity Allocation	19.1%
2	Available Existing Capacity	60.9%
3	Value of Existing Assets	\$ 3,285,485
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 380,350
5	Value of Future CIP	\$ 6,338,000
6	Eligible Future CIP Value ([1] * [5])	\$ 1,207,564



## **Financing Costs**

#### **High Elevation Service Area – Elevated Storage Tanks**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 380,350
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 247,228
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 10,373

• Sum of Eligible Interest 2014-2043 = \$151,141



# **Capacity Criteria**

### Middle Elevation Service Area – Elevated Storage Tanks

Line	Description	Value
1	Minimum Storage Requirements (gal/conn)	133
2	2013 Connections	136,835
3	2013 MHD (MG) ([1] * [2] / 1 million)	18.2
4	2023 Connections	164,435
5	2023 MHD (MG) ([1] * [4] / 1 million)	21.9
6	Study Period Increase in MHD (MG) ([5] - [3])	3.7



# **Available Capacity**

### Middle Elevation Service Area – Elevated Storage Tanks

Line	Description	Value
1	2013 MHD (MG)	18.2
2	2013 Capacity (MG)	43.9
3	2023 MHD (MG)	21.9
4	2023 Capacity (MG)	52.7
5	Study Period Increase in Capacity (MG) ([4] – [2])	8.8
6	Available Existing Capacity (MG) ([2] - [1])	25.7
7	Available Existing Capacity ([6] / [2])	58.5%



### Middle Elevation Service Area – Elevated Storage Tanks

Line	Description	Value
1	Available Existing Capacity (MG)	25.7
2	Study Period Increase in Capacity (MG)	8.8
3	Total Available Capacity (MG)	34.5
4	Study Period Increase in MHD (MG)	3.7
5	Eligible Available Capacity Allocation ([4] / [3])	10.6%



### Middle Elevation Service Area – Elevated Storage Tanks

Line	Description	Value
1	Eligible Available Capacity Allocation	10.6%
2	Available Existing Capacity	58.5%
3	Value of Existing Assets	\$ 20,935,950
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 1,305,333
5	Value of Future CIP	\$ 24,927,000
6	Eligible Future CIP Value ([1] * [5])	\$ 2,652,971



## **Financing Costs**

#### Middle Elevation Service Area – Elevated Storage Tanks

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 1,305,333
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 848,466
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 35,600

• Sum of Eligible Interest 2014-2043 = \$518,704



# **Capacity Criteria**

### **Low Elevation Service Area – Elevated Storage Tanks**

Line	Description	Value
1	Minimum Storage Requirements (gal/conn)	103
2	2013 Connections	277,230
3	2013 MHD (MG) ([1] * [2] / 1 million)	28.6
4	2023 Connections	302,699
5	2023 MHD (MG) ([1] * [4] / 1 million)	31.2
6	Study Period Increase in MHD (MG) ([5] - [3])	2.6



# **Available Capacity**

### **Low Elevation Service Area – Elevated Storage Tanks**

Line	Description	Value
1	2013 MHD (MG)	28.6
2	2013 Capacity (MG)	60.2
3	2023 MHD (MG)	31.2
4	2023 Capacity (MG)	69.2
5	Study Period Increase in Capacity (MG) ([4] – [2])	9.0
6	Available Existing Capacity (MG) ([2] – [1])	31.6
7	Available Existing Capacity ([6] / [2])	52.5%



#### **Low Elevation Service Area – Elevated Storage Tanks**

Line	Description	Value
1	Available Existing Capacity (MG)	31.6
2	Study Period Increase in Capacity (MG)	9.0
3	Total Available Capacity (MG)	40.6
4	Study Period Increase in MHD (MG)	2.6
5	Eligible Available Capacity Allocation ([4] / [3])	6.5%



#### **Low Elevation Service Area – Elevated Storage Tanks**

Line	Description	Value
1	Eligible Available Capacity Allocation	6.5%
2	Available Existing Capacity	52.5%
3	Value of Existing Assets	\$ 28,694,928
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 973,316
5	Value of Future CIP	\$ 30,059,940
6	Eligible Future CIP Value ([1] * [5])	\$ 1,938,933



## **Financing Costs**

#### **Low Elevation Service Area – Elevated Storage Tanks**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 973,316
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 632,655
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 26,545

• Sum of Eligible Interest 2014-2043 = \$386,769



# 2014 – 2023 Eligible CIP Costs

### **Elevated Storage Tanks**

Existing Capacity			New CIP Capacity		Total Capacity			
Service Area	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of All Capacity	Total Value of 2014- 2023 Capacity
	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)
High	3.3	0.4	0.1	6.3	1.2	0.0	9.6	1.7
Middle	20.9	1.3	0.5	24.9	2.7	0.0	45.8	4.5
Low	28.7	1.0	0.4	30.1	1.9	0.0	58.8	3.3
Total	52.9	2.7	1.0	61.3	5.8	0.0	114.2	9.5



# **Capacity Criteria**

### **Systemwide – Well Pumps**

Line	Description	Value
1	Average Daily Demand (gpcd)	127
2	Maximum Day Peaking Factor	2.03
3	2013 Population	1,674,505
4	2013 MDD (mgd) ([1] * [2] * [3] / 1 million)	431.7
5	2023 Population	1,904,466
6	2023 MDD (mgd) ([1] * [2] * [5] / 1 million)	491.0
7	Study Period Increase in MDD (mgd) ([6] - [4])	59.3



# **Available Capacity**

### **Systemwide – Well Pumps**

Line	Description	Value
1	2013 MDD (mgd)	431.7
2	2013 Capacity (mgd)	527.2
3	2023 MDD (mgd)	491.0
4	2023 Capacity (mgd)	579.7
5	Study Period Increase in Capacity (mgd) ([4] – [2])	52.5
6	Available Existing Capacity (mgd) ([2] – [1])	95.5
7	Available Existing Capacity ([6] / [2])	18.1%



### **Systemwide – Well Pumps**

Line	Description	Value
1	Available Existing Capacity (mgd)	95.5
2	Study Period Increase in Capacity (mgd)	52.5
3	Total Available Capacity (mgd)	148.0
4	Study Period Increase in MDD (mgd)	59.3
5	Eligible Available Capacity Allocation ([4] / [3])	40.1%



### **Systemwide – Well Pumps**

Line	Description	Value
1	Eligible Available Capacity Allocation	40.1%
2	Available Existing Capacity	18.1%
3	Value of Existing Assets	\$ 84,892,370
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 6,159,638
5	Value of Future CIP	\$ 42,438,060
6	Eligible Future CIP Value ([1] * [5])	\$ 16,998,287



## **Financing Costs**

#### **Systemwide – Well Pumps**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 6,159,638
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 4,003,765
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 167,992

• Sum of Eligible Interest 2014-2043 = \$2,447,673



# 2014 – 2023 Eligible CIP Costs

### **Well Pumps**

Existing Capacity			New CIP Capacity		Total Capacity			
Service Area	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of All Capacity	Total Value of 2014- 2023 Capacity
	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)
ALL	84.9	6.2	2.4	42.4	17.0	0.0	127.3	25.6



# **Capacity Criteria**

### **High Elevation Service Area – Transmission Mains**

Line	Description	Value
1	Average Daily Demand (gpcd)	166
2	Maximum Hour Peaking Factor	3.38
3	2013 Population	44,747
4	2013 MHD (mgd) ([1] * [2] * [3] / 1 million)	25.1
5	2023 Population	65,826
6	2023 MHD (mgd) ([1] * [2] * [5] / 1 million)	36.9
7	Study Period Increase in MHD (mgd) ([6] - [4])	11.8



# **Available Capacity**

### **High Elevation Service Area – Transmission Mains**

Line	Description	Value
1	2013 MHD (mgd)	25.1
2	2013 Capacity (mgd)	88.3
3	2023 MHD (mgd)	36.9
4	2023 Capacity (mgd)	106.2
5	Study Period Increase in Capacity (mgd) ([4] – [2])	17.9
6	Available Existing Capacity (mgd) ([2] – [1])	63.2
7	Available Existing Capacity ([6] / [2])	71.6%



### **High Elevation Service Area – Transmission Mains**

Line	Description	Value
1	Available Existing Capacity (mgd)	63.2
2	Study Period Increase in Capacity (mgd)	17.9
3	Total Available Capacity (mgd)	81.1
4	Study Period Increase in MHD (mgd)	11.8
5	Eligible Available Capacity Allocation ([4] / [3])	14.6%



### **High Elevation Service Area – Transmission Mains**

Line	Description	Value
1	Eligible Available Capacity Allocation	14.6%
2	Available Existing Capacity	71.6%
3	Value of Existing Assets	\$ 5,161,102
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 538,497
5	Value of Future CIP	\$ 9,657,521
6	Eligible Future CIP Value ([1] * [5])	\$ 1,407,906



## **Financing Costs**

#### **High Elevation Service Area – Transmission Mains**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 538,497
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 350,023
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 14,686

• Sum of Eligible Interest 2014-2043 = \$213,984



# **Capacity Criteria**

#### **Middle Elevation Service Area – Transmission Mains**

Line	Description	Value
1	Average Daily Demand (gpcd)	133
2	Maximum Hour Peaking Factor	2.89
3	2013 Population	538,582
4	2013 MHD (mgd) ([1] * [2] * [3] / 1 million)	207.0
5	2023 Population	647,218
6	2023 MHD (mgd) ([1] * [2] * [5] / 1 million)	248.8
7	Study Period Increase in MHD (mgd) ([6] - [4])	41.8



# **Available Capacity**

#### **Middle Elevation Service Area – Transmission Mains**

Line	Description	Value
1	2013 MHD (mgd)	207.0
2	2013 Capacity (mgd)	366.6
3	2023 MHD (mgd)	248.8
4	2023 Capacity (mgd)	413.7
5	Study Period Increase in Capacity (mgd) ([4] – [2])	47.1
6	Available Existing Capacity (mgd) ([2] – [1])	159.6
7	Available Existing Capacity ([6] / [2])	43.5%



#### Middle Elevation Service Area – Transmission Mains

Line	Description	Value
1	Available Existing Capacity (mgd)	159.6
2	Study Period Increase in Capacity (mgd)	47.1
3	Total Available Capacity (mgd)	206.7
4	Study Period Increase in MHD (mgd)	41.8
5	Eligible Available Capacity Allocation ([4] / [3])	20.2%



#### Middle Elevation Service Area – Transmission Mains

Line	Description	Value
1	Eligible Available Capacity Allocation	20.2%
2	Available Existing Capacity	43.5%
3	Value of Existing Assets	\$ 21,425,603
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 1,884,647
5	Value of Future CIP	\$ 44,147,551
6	Eligible Future CIP Value ([1] * [5])	\$ 8,920,372



## **Financing Costs**

#### **Middle Elevation Service Area – Transmission Mains**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 1,884,647
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 1,225,021
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 51,400

• Sum of Eligible Interest 2014-2043 = \$748,907



# **Capacity Criteria**

#### **Low Elevation Service Area – Transmission Mains**

Line	Description	Value
1	Average Daily Demand (gpcd)	122
2	Maximum Hour Peaking Factor	2.73
3	2013 Population	1,091,176
4	2013 MHD (mgd) ([1] * [2] * [3] / 1 million)	363.4
5	2023 Population	1,191,422
6	2023 MHD (mgd) ([1] * [2] * [5] / 1 million)	396.8
7	Study Period Increase in MHD (mgd) ([6] - [4])	33.4



# **Available Capacity**

#### **Low Elevation Service Area – Transmission Mains**

Line	Description	Value
1	2013 MHD (mgd)	363.4
2	2013 Capacity (mgd)	449.6
3	2023 MHD (mgd)	396.8
4	2023 Capacity (mgd)	468.9
5	Study Period Increase in Capacity (mgd) ([4] – [2])	19.3
6	Available Existing Capacity (mgd) ([2] – [1])	86.2
7	Available Existing Capacity ([6] / [2])	19.2%



#### **Low Elevation Service Area – Transmission Mains**

Line	Description	Value
1	Available Existing Capacity (mgd)	86.2
2	Study Period Increase in Capacity (mgd)	19.3
3	Total Available Capacity (mgd)	105.5
4	Study Period Increase in MHD (mgd)	33.4
5	Eligible Available Capacity Allocation ([4] / [3])	31.7%

### **Eligible Existing Assets and Future CIP**

#### **Low Elevation Service Area – Transmission Mains**

Existing available and new capacity used by study period growth customers

Line	Description	Value
1	Eligible Available Capacity Allocation	31.7%
2	Available Existing Capacity	19.2%
3	Value of Existing Assets	\$ 26,275,159
4	Eligible Existing Asset Value ([1] * [2] * [3])	\$ 1,594,176
5	Value of Future CIP	\$ 7,523,006
6	Eligible Future CIP Value ([1] * [5])	\$ 2,381,567

### **Financing Costs**

#### **Low Elevation Service Area – Transmission Mains**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 1,594,176
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 1,036,214
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 43,478

• Sum of Eligible Interest 2014-2043 = \$633,483



#### **Transmission Mains**

	Existing	Capacity		New	CIP Capa	acity	Total Ca	pacity
Service Area	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of All Capacity	Total Value of 2014- 2023 Capacity
	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)
High	5.2	0.5	0.2	9.6	1.4	0.0	14.8	2.1
Middle	21.4	1.9	0.8	44.2	8.9	0.0	65.6	11.6
Low	26.3	1.6	0.6	7.5	2.4	0.0	33.8	4.6
Total	52.9	4.0	1.6	61.3	12.7	0.0	114.2	18.3

#### **System Development**

	Existing	Capacity	,	New	CIP Cap	acity	Total Ca	apacity
Service Area	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financin g Costs	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financin g Costs	Total Value of All Capacity	Total Value of 2014- 2023 Capacity
	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)
High	26.7	2.5	1.0	26.7	5.2	0.0	53.4	8.7
Middle	135.6	10.0	4.0	125.3	24.2	0.0	260.9	38.2
Low	166.8	8.9	3.5	74.2	15.0	0.0	241.0	27.4
Total	329.1	21.4	8.5	226.2	44.4	0.0	555.3	74.3



### **High Elevation Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 2,507,245
2	Eligible Future CIP Capacity	\$ 5,171,873
3	Eligible Financing Costs	\$ 996,311
4	Total Eligible CIP ([1] + [2] + [3])	\$ 8,675,429
5	Change in EDUs (2014 - 2023)	8,783
6	Calculated Impact Fee per EDU ([4] / [5])	\$ 988



#### **Middle Elevation Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 9,975,189
2	Eligible Future CIP Capacity	\$ 24,208,485
3	Eligible Financing Costs	\$ 3,963,870
4	Total Eligible CIP ([1] + [2] + [3])	\$ 38,147,544
5	Change in EDUs (2014 - 2023)	45,265
6	Calculated Impact Fee per EDU ([4] / [5])	\$ 843



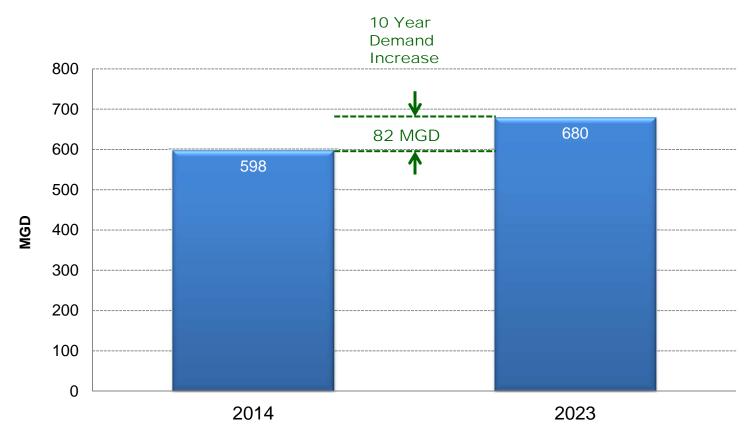
#### **Low Elevation Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 8,865,973
2	Eligible Future CIP Capacity	\$ 15,055,337
3	Eligible Financing Costs	\$ 3,523,097
4	Total Eligible CIP ([1] + [2] + [3])	\$ 27,444,407
5	Change in EDUs (2014 - 2023)	41,769
6	Calculated Impact Fee per EDU ([4] / [5])	\$ 657





### **Water Flow Distribution Mains Eligible Capacities**

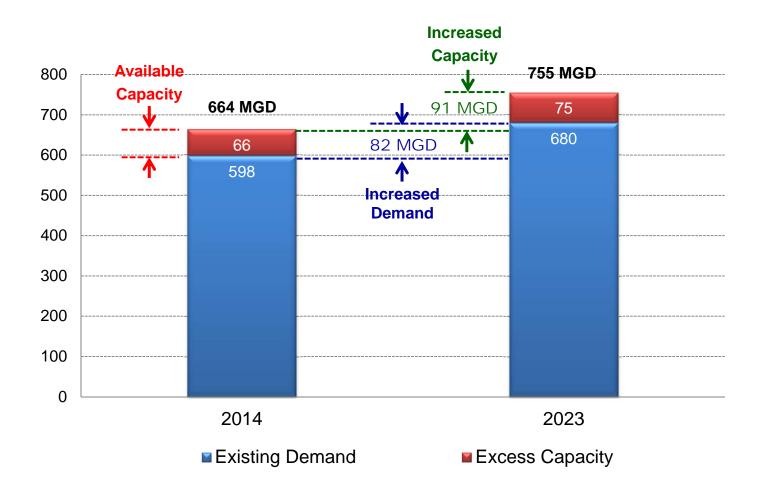


Average day demand is assumed to be 127 gpcd and peaking factor is 2.81.





### **Water Flow Distribution Mains Capacities**





# **Capacity Criteria**

Line	Description	Value
1	Average Daily Demand (gpcd)	127
2	Maximum Hour Peaking Factor	2.81
3	2013 Population	1,674,505
4	2013 MHD (mgd) ([1] * [2] * [3] / 1 million)	598
5	2023 Population	1,904,466
6	2023 MHD (mgd) ([1] * [2] * [5] / 1 million)	680
7	Study Period Increase in MHD (mgd) ([6] - [4])	82



### **Available Capacity**

- 10% excess capacity is assumed to be consistent
- Capacity = MHD / 90%

Line	Description	Value
1	2013 MHD (mgd)	598
2	2013 Capacity (mgd) ([1] / 90%)	664
3	2023 MHD (mgd)	680
4	2023 Capacity (mgd) ([3] / 90%)	755
5	Study Period Increase in Capacity (mgd) ([4] – [2])	91

### **Eligible Existing CIP**

- 2023 MHD > 2013 Capacity
- Insufficient existing capacity available
- Additional future CIP capacity required

Line	Description	Value
1	2013 Capacity (mgd)	664
2	2013 MHD (mgd)	598
3	Available Existing Capacity (mgd) ([1] – [2])	66
4	Eligible Existing Capacity Allocation ([3] / [1])	10%
5	Existing Assets	\$ 610,839,391
6	Eligible Existing Capacity ([4] * [5])	\$ 61,083,939



### **Eligible Future CIP**

- 2023 MHD > 2013 Capacity
- Insufficient existing capacity available
- Additional future CIP capacity required

Line	Description	Value
1	Study Period Increase in MHD (mgd)	82
2	Available Existing Capacity (mgd)	66
3	Remaining MHD (mgd) ([1] - [2])	16
4	Study Period Increase in Capacity (mgd)	91
5	Eligible Future CIP Capacity Allocation ([3] / [4])	17%
6	Future CIP	\$ 210,645,332
7	Eligible Future CIP Capacity ([5] * [6])	\$ 36,195,372



### **Financing Costs**

#### **Systemwide**

- Pro rata share of future interest payments on outstanding debt
- Assume 65% of existing asset value is included in outstanding debt

Line	Description	Value
1	Total Outstanding Debt – Water Delivery	\$ 846,243,056
2	2014 Total Interest Payment for Outstanding Water Delivery Debt	\$ 35,507,157
3	Eligible Existing Capacity	\$ 61,083,939
4	Debt-funded Eligible Existing Capacity ([3] * 65%)	\$ 39,704,560
5	2014 Eligible Interest ([2] * [4] / [1])	\$ 1,665,947

• Sum of Eligible Interest 2014-2043 = \$24,273,103



Existing Capacity				New CIP Capacity			Total Capacity	
Service Area	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of All Capacity	Total Value of 2014- 2023 Capacity
	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)
ALL	610.8	61.1	24.3	210.7	36.2	0.0	821.5	121.6



Line	Description	Value
1	Eligible Existing Capacity	\$ 61,083,939
2	Eligible Future CIP Capacity	\$ 36,195,372
3	Eligible Financing Costs	\$ 24,273,103
4	Total Eligible CIP ([1] + [2] + [3])	\$ 121,552,414
5	Change in EDUs (2014 - 2023)	95,817
6	Calculated Impact Fee per EDU ([4] / [5])	\$ 1,269





Existing Capacity			New CIP Capacity			Total Capacity		
Service Area	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of All Capacity	Total Value of 2014- 2023 Capacity
	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)
ALL	294.2	7.3	0.0	713.9	275.1	0.0	1008.1	282.4





Line	Description	Value
1	Eligible Existing Capacity	\$ 7,263,875
2	Eligible Future CIP Capacity	\$ 275,135,756
3	Eligible Financing Costs	\$ 0
4	Total Eligible CIP ([1] + [2] + [3])	\$ 282,399,631
5	Change in EDUs (2014 - 2023)	95,817
6	Calculated Impact Fee per EDU ([4] / [5])	\$ 2,947







Existing Capacity				New CIP Capacity			Total Capacity	
Service Area	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of All Capacity	Total Value of 2014- 2023 Capacity
	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)
Medio Creek	62.2	7.4	3.0	25.5	3.0	0.0	87.7	13.4
Leon/ Dos Rios	317.6	34.6	13.9	215.0	24.8	0.0	532.6	73.3
Total	379.8	42.0	16.9	240.5	27.8	0.0	620.3	86.7





#### **Medio Creek Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 7,391,911
2	Eligible Future CIP Capacity	\$ 3,033,424
3	Eligible Financing Costs	\$ 2,960,785
4	Total Eligible CIP ([1] + [2] + [3])	\$ 13,386,120
5	Change in EDUs (2014 - 2023)	9,184
6	Calculated Impact Fee per EDU ([4] / [5])	\$ 1,458



### **Leon Creek / Dos Rios Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 34,653,496
2	Eligible Future CIP Capacity	\$ 24,765,481
3	Eligible Financing Costs	\$ 13,880,246
4	Total Eligible CIP ([1] + [2] + [3])	\$ 73,299,223
5	Change in EDUs (2014 - 2023)	90,147
6	Calculated Impact Fee per EDU ([4] / [5])	\$ 813





E	Existing Capacity				CIP Capa	acity	Total Ca	pacity
Service Area	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of Capacity	Value of 2014- 2023 Capacity	Eligible Financing Costs	Total Value of All Capacity	Total Value of 2014- 2023 Capacity
	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)	(\$ mil)
Medio	17.4	2.2	0.9	29.7	5.1	0.0	47.1	8.2
U. Medina	34.6	9.7	3.9	32.4	8.4	0.0	67.0	22.0
L. Medina	28.5	6.5	2.6	25.5	2.7	0.0	54.0	11.8
U. Collect.	85.6	14.0	5.6	124.1	21.1	0.0	209.7	40.7
M. Collect.	153.1	14.3	5.7	292.5	18.7	0.0	445.6	38.7
L. Collect.	300.3	24.3	9.7	267.7	16.7	0.0	568.0	50.7
Total	619.5	71.0	28.4	771.9	72.7	0.0	1,391.4	172.1

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#### **Medio Creek Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 2,200,862
2	Eligible Future CIP Capacity	\$ 5,152,499
3	Eligible Financing Costs	\$ 881,542
4	Total Eligible CIP ([1] + [2] + [3])	\$ 8,234,903
5	Change in EDUs (2014 - 2023)	9,184
6	Calculated Impact Fee per EDU ([4] / [5])	\$ 897



#### **Lower Medina Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 6,469,172
2	Eligible Future CIP Capacity	\$ 2,697,496
3	Eligible Financing Costs	\$ 2,591,187
4	Total Eligible CIP ([1] + [2] + [3])	\$ 11,757,855
5	Change in EDUs (2014 - 2023) <sup>1</sup>	23,387
6	Calculated Impact Fee per EDU ([4] / [5])	\$ 503

<sup>&</sup>lt;sup>1</sup> Upper Medina included



### **Upper Medina Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 9,732,434
2	Eligible Future CIP Capacity	\$ 8,368,236
3	Eligible Financing Costs	\$ 3,898,267
4	Total Eligible CIP ([1] + [2] + [3])	\$ 21,998,937
5	Change in EDUs (2014 - 2023)	19,478
6	Lower Medina Impact Fee	\$ 503
7	Calculated Impact Fee per EDU ([4] / [5] + [6])	\$ 1,632



#### **Lower Collection Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 24,270,798
2	Eligible Future CIP Capacity	\$ 16,679,076
3	Eligible Financing Costs	\$ 9,721,520
4	Total Eligible CIP ([1] + [2] + [3])	\$ 50,671,394
5	Change in EDUs (2014 - 2023) <sup>1</sup>	66,760
6	Calculated Impact Fee per EDU ([4] / [5])	\$ 759

<sup>&</sup>lt;sup>1</sup> Upper Collection and Middle Collection included



#### **Middle Collection Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 14,289,569
2	Eligible Future CIP Capacity	\$ 18,715,229
3	Eligible Financing Costs	\$ 5,723,600
4	Total Eligible CIP ([1] + [2] + [3])	\$ 38,728,397
5	Change in EDUs (2014 - 2023) <sup>1</sup>	49,605
6	Lower Collection Impact Fee	\$ 759
7	Calculated Impact Fee per EDU ([4] / [5] + [6])	\$ 1,540

<sup>&</sup>lt;sup>1</sup> Upper Collection included



### **Upper Collection Service Area**

Line	Description	Value
1	Eligible Existing Capacity	\$ 14,053,146
2	Eligible Future CIP Capacity	\$ 21,065,904
3	Eligible Financing Costs	\$ 5,628,902
4	Total Eligible CIP ([1] + [2] + [3])	\$ 40,747,952
5	Change in EDUs (2014 - 2023)	37,085
6	Middle Collection Impact Fee	\$ 1,540
7	Calculated Impact Fee per EDU ([4] / [5] + [6])	\$ 2,639







# **Water Impact Fees**

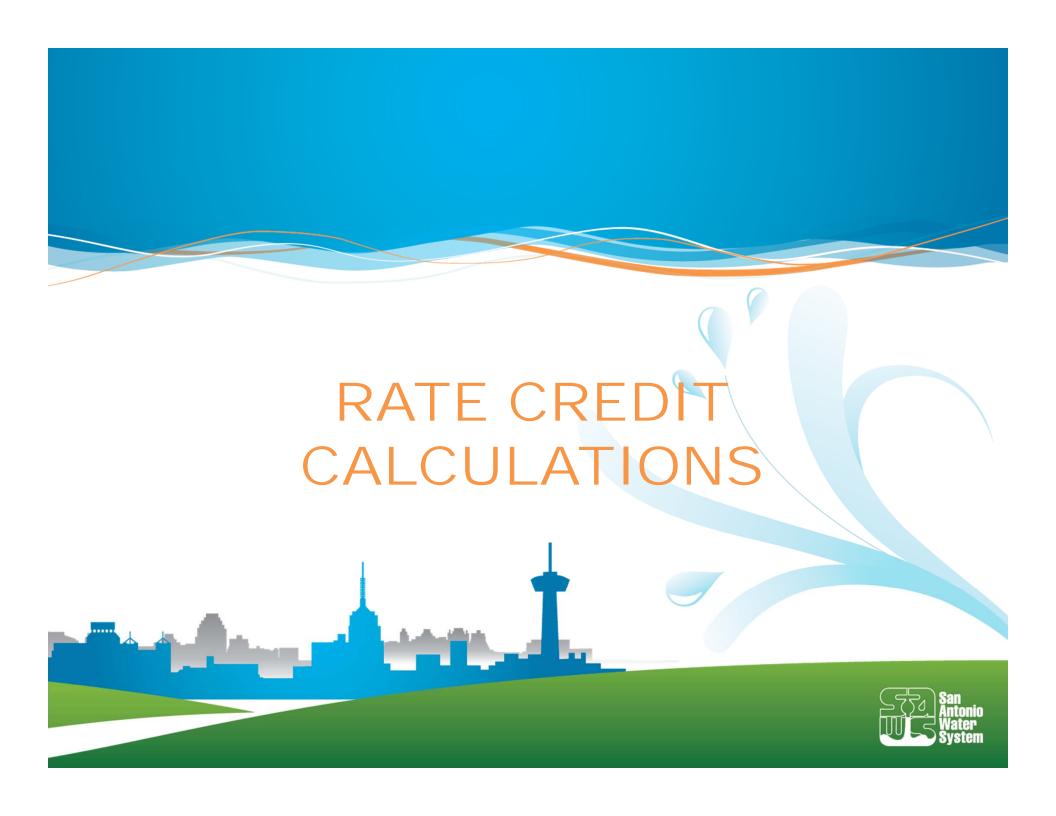
Impact Fee Category	Service Area	2013 Calculated Impact Fee per EDU	2010 Calculated Impact Fee per EDU	Change
Water Supply	All	\$ 2,947	\$ 1,440	\$ 1,507
Water Delivery  – Flow	All	1,269	1,333	(64)
Water Delivery	High Elevation	988	996	(8)
- System	Middle Elevation	843	803	40
Development	Low Elevation	657	609	48



# **Wastewater Impact Fees**

Impact Fee Category	Service Area	2013 Calculated Impact Fee per EDU	2010 Calculated Impact Fee per EDU	Change
Tractment	Medio Creek	\$ 1,458	\$ 1,482	(\$ 24)
Treatment	Leon / Dos Rios	813	581	232
	Medio Creek	897	597	300
	Upper Medina	1,632	1,073	559
Collection	Lower Medina	503	602	(99)
Collection	Upper Collection	2,639	1,880	759
	Middle Collection	1,540	1,203	337
	Lower Collection	759	579	180





#### Rate Credit: Water Delivery - Flow

Line	Description	Value
1	2014 Eligible Existing Debt Service	\$ 2,893,645
2	2014 Beginning Water Delivery Service Units	697,710
3	2023 Year-end Water Delivery Service Units	793,528
4	Water Delivery Annual Growth Rate	1.30%
5	2014 Increase in Water Delivery Service Units ([2] * [4])	9,037
6	2014 Year-end Water Delivery Service Units ([2] + [5])	706,747
7	2014 Eligible Debt Service per Service Unit ([1] / [6])	\$ 5.53
8	2014 Eligible Rate Credit ([5] * [7])	\$ 37,000

• Sum of Eligible Existing Debt Service 2014-2043 = \$5,691,083



# Eligible Future Debt Service: Water Delivery – Flow

- Assume 10% of study period CIP is funded annually
- Assume 20% of CIP is funded with debt

Line	Description	Value
1	Eligible Future CIP	\$ 36,195,372
2	2014 Eligible Debt-funded Future CIP ([1] * 10% * 20%)	\$ 723,907
3	2014 Eligible Future CIP Principal Payment	\$ 11,063



#### Rate Credit: Water Delivery - Flow

Line	Description	Value
1	2014 Eligible Future CIP Principal Payment	\$ 11,063
2	2014 Beginning Service Units	697,710
3	2023 Year-end Service Units	793,528
4	Annual Growth Rate	1.30%
5	2014 Increase in Service Units ([2] * [4])	9,037
6	2014 Year-end Service Units ([2] + [5])	706,747
7	2014 Eligible Future CIP Principal Payment per Service Unit ([1] / [6])	\$ 0.02
8	2014 Eligible Rate Credit ([5] * [7])	\$ 141

• Sum of Eligible Future CIP Principal 2014-2043 = \$723,588



## Maximum Impact Fee: Water Delivery

#### - Flow

Line	Description	Value
1	Calculated Impact Fee per EDU	\$ 1,269
2	Eligible Existing Debt Service Rate Credit	\$ 5,691,083
3	Eligible Future CIP Principal Rate Credit	\$ 723,588
4	Change in EDUs (2014 - 2023)	95,817
5	Rate Credit per EDU (([2] + [3]) / [4])	\$ 67
6	Maximum Impact Fee per EDU ([1] - [5])	\$ 1,202





#### **Water Maximum Impact Fees**

Impact Fee Category	Service Area	Calculated Impact Fee per EDU	Rate Credit	Maximum Impact Fee per EDU
Water Supply	All	\$ 2,947	\$ 295	\$ 2,652
Water Delivery  – Flow	All	1,269	67	1,202
Water Delivery	High Elevation	988	31	957
- System	Middle Elevation	843	28	815
Development	Low Elevation	657	26	631



#### **Wastewater Maximum Impact Fees**

Impact Fee Category	Service Area	Calculated Impact Fee per EDU	Rate Credit	Maximum Impact Fee per EDU
Trantmont	Medio Creek	\$ 1,458	\$ 81	\$ 1,377
Treatment	Leon / Dos Rios	813	47	766
	Medio Creek	897	25	872
	Upper Medina	1,632	90	1,542
Collection	Lower Medina	503	34	469
Collection	Upper Collection	2,639	115	2,524
	Middle Collection	1,540	73	1,467
	Lower Collection	759	40	719



#### **Water Impact Fees Comparison**

Impact Fee Category	Service Area	2013 Maximum Impact Fee per EDU	Current Impact Fee per EDU	Cha	nge
Water Supply	All	\$ 2,652	\$ 1,297	\$ 1,355	104%
Water Delivery  – Flow	All	1,202	1,247	(45)	(4%)
Water Delivery	High	957	966	(9)	(1%)
- System	Middle	815	774	41	5%
Development	Low	631	579	52	9%





#### **Wastewater Impact Fees Comparison**

Impact Fee Category	Service Area	2013 Maximum Impact Fee per EDU	Current Impact Fee per EDU	Cha	nge
Tractment	Medio	\$ 1,377	\$ 1,379	(2)	0%
Treatment	Leon/Dos	766	552	214	39%
	Medio	872	582	290	50%
	U. Medina	1,542	1,053	489	46%
Callaction	L. Medina	469	594	(125)	(21%)
Collection	U. Coll.	2,524	1,795	729	41%
	M. Coll.	1,467	1,142	325	28%
	L. Coll.	719	552	167	30%



**December 19, 2013** 

### DRAFT - SAWS Proposed Total Impact Fees

Water Service Area	Wastewater Service Area	Proposed Impact Fee per EDU	Current Impact Fee per EDU	Increase / (Decrease)
High Elevation	Medio Creek	\$ 7,060	\$ 5,471	\$ 1,589
High Elevation	Upper Collection	8,101	5,857	2,244
Middle Elevation	Medio Creek	6,918	5,279	1,639
Middle Elevation	Upper Medina	6,977	4,923	2,054
Middle Elevation	Upper Collection	7,959	5,665	2,294
Middle Elevation	Middle Collection	6,902	5,012	1,890
Low Elevation	Medio Creek	6,734	5,084	1,650
Low Elevation	Upper Medina	6,793	4,728	2,065
Low Elevation	Lower Medina	5,720	4,269	1,451
Low Elevation	Upper Collection	7,775	5,470	2,305
Low Elevation	Middle Collection	6,718	4,817	1,901
Low Elevation	Lower Collection	5,970	4,227	1,743

## DRAFT - DSP Proposed Total

DSP Service Area	Water Service Area	Wastewater Service Area	Proposed Impact Fee per EDU	Current Impact Fee per EDU	Increase/ (Decrease)
Hill Country	Middle Elev.	Upper Coll.	\$ 7,959	\$ 7,835	\$ 124
Hill Country	Middle Elev.	Middle Coll.	6,902	7,182	(280)
Hill Country	Low Elevation	Middle Coll.	6,718	7,182	(464)
Northeast	Low Elevation	Middle Coll.	6,718	3,360	3,358
Southeast	Low Elevation	Lower Coll.	5,970	3,395	2,575
Southeast	Low Elevation	Lower Medina	5,720	3,437	2,283
Southside	Low Elevation	Lower Coll.	5,970	3,494	2,476
Southside	Low Elevation	Upper Medina	6,793	3,995	2,798
Southside	Low Elevation	Lower Medina	5,720	3,536	2,184
Northwest	High Elevation	Upper Coll.	8,101	6,959	1,142
Northwest	Middle Elev.	Medio Creek	6,918	6,573	345
Northwest	Middle Elev.	Upper Medina	6,977	6,217	760
Northwest	Low Elevation	Medio Creek	6,734	6,573	161
Northwest	Low Elevation	Upper Medina	6,793	6,217	576

## QUESTIONS?