



CITY OF COTTONWOOD, ARIZONA

CAPACITY FEE STUDY

MAY 15, 2018

Presented by Kevin Burnett & Pat Walker



PRESENTATION CONTENTS

- Introduction
- Review purpose of study
- Overview of capacity fees
- Fee calculation components
- Proposed capacity fees
- Next steps

PURPOSE OF THE CAPACITY FEE STUDY

- Update City's water and sewer capacity fees to:
 - Recognize the impact new development places on the system
 - Ensure growth is paying it's proportionate share of costs
 - Provide funding for ongoing growth-related costs

Capacity Fees

- One-time payments
- Reflect the demands and costs created by new development for additional utility capacity
- Will be used to fund outstanding debt service and applicable infrastructure capacity that will benefit new development as well as make system overall more robust
- Must be a rational nexus between the amount of the fee and the cost to serve new development
- Policy; Growth pays for Growth

Capacity Fee Methodologies

Each component of each utility system is evaluated

What is the best measure of the demand created by new development for additional infrastructure capacity? 3 methodologies considered:

Buy-in

- Existing infrastructure which has capacity available for new development

Incremental

- Projects which add capacity to serve new development

Hybrid

- Combination of buy-in and plan based methodologies

Planned projects which are for routine maintenance and replacement or are to serve only existing development are not eligible for capacity fee funding and are included in the rates.

Capacity (gallons)

Buy-in: Capacity of completed project

Incremental: additional capacity or years of capacity to be provided

Cost

Buy-in: Original cost

Incremental: Planned costs

Minus credit for "double payment"

Cost/capacity (gallons) = cost per gallon

• Gallons consumed per residential connection multiplied by

• Total cost per gallon for capacity multiplied by

• Capacity ratio for different size and type of water meter equals

• Capacity fee by size and type of water meter

FEE CALCULATION - WATER

- Incremental Approach:
 - Additional capacity is needed to serve new development
 - Fee is based on the cost of capital projects providing additional capacity (only “growth” related costs are considered)

SYSTEM VALUATION - WATER

- Identified growth-related capital costs over the next 10-years
- Growth-related portion of interest charges used to finance growth-related capital projects

SYSTEM VALUATION - WATER

Component	Value
Capital Projects – Growth Related	\$2,397,263
Financing Costs on Growth-Related Debt	<u>0</u>
Total System Value	\$2,397,263

UNITS TO BE SERVED - WATER

- Based on use per equivalent dwelling unit (EDU)
 - Total peak day demand capacity is 576,000 gallons per day (gpd)
 - Peak flows per average residential customer is 270 gpd
 - 270 gpd = 1 EDU

UNITS TO BE SERVED - WATER

Metric	Capacity
Capacity	576,000
Use per EDU	<u>270</u>
EDUs to be Served	2,132

FEE CALCULATION - WATER

Component	Metric
System Value	\$2,397,263
Units to be Served	<u>2,132</u>
Fee per EDU	\$1,124

WATER CAPACITY FEES

Meter Size	Proposed
3/4-inch	\$1,124
1-inch	1,878
1.5-inch	3,744
2 -inch	5,992
3-inch	11,243
4-inch	18,741
6-inch	37,472
8-inch	59,957
10-inch	86,197

FEE CALCULATION - SEWER

- Buy-In Approach:
 - Treatment plant was recently expanded providing additional capacity to serve new development
 - Fee is based on cost of value of existing sewer system and the system's capacity

SYSTEM VALUATION - SEWER

- Identified original cost of fixed assets and determined their replacement cost
 - Subtracted accumulated depreciation from replacement cost
- Included growth related fund balances that have been accrued over time
- Subtracted debt principal to be paid through rate revenue in the future

SYSTEM VALUATION - SEWER

Component	Value
Asset Valuation	\$64,408,063
Less: Accumulated Depreciation	11,640,229
Less: Rate Related Debt Service (principal)	<u>2,316,105</u>
Current System Value	\$51,236,105

UNITS TO BE SERVED - SEWER

- Based on use per equivalent dwelling unit (EDU)
 - Peak flows per average residential customer is 158 gpd
 - 158 gpd = 1 EDU

UNITS TO BE SERVED - SEWER

Metric	Capacity
Capacity (gpd)	1,800,000
Use per EDU (gpd)	<u>158</u>
EDUs to be Served	11,381

FEE CALCULATION - SEWER

Component	Metric
System Value	\$51,236,105
Units to be Served	<u>11,381</u>
Fee per EDU	\$4,502

SEWER CAPACITY FEES

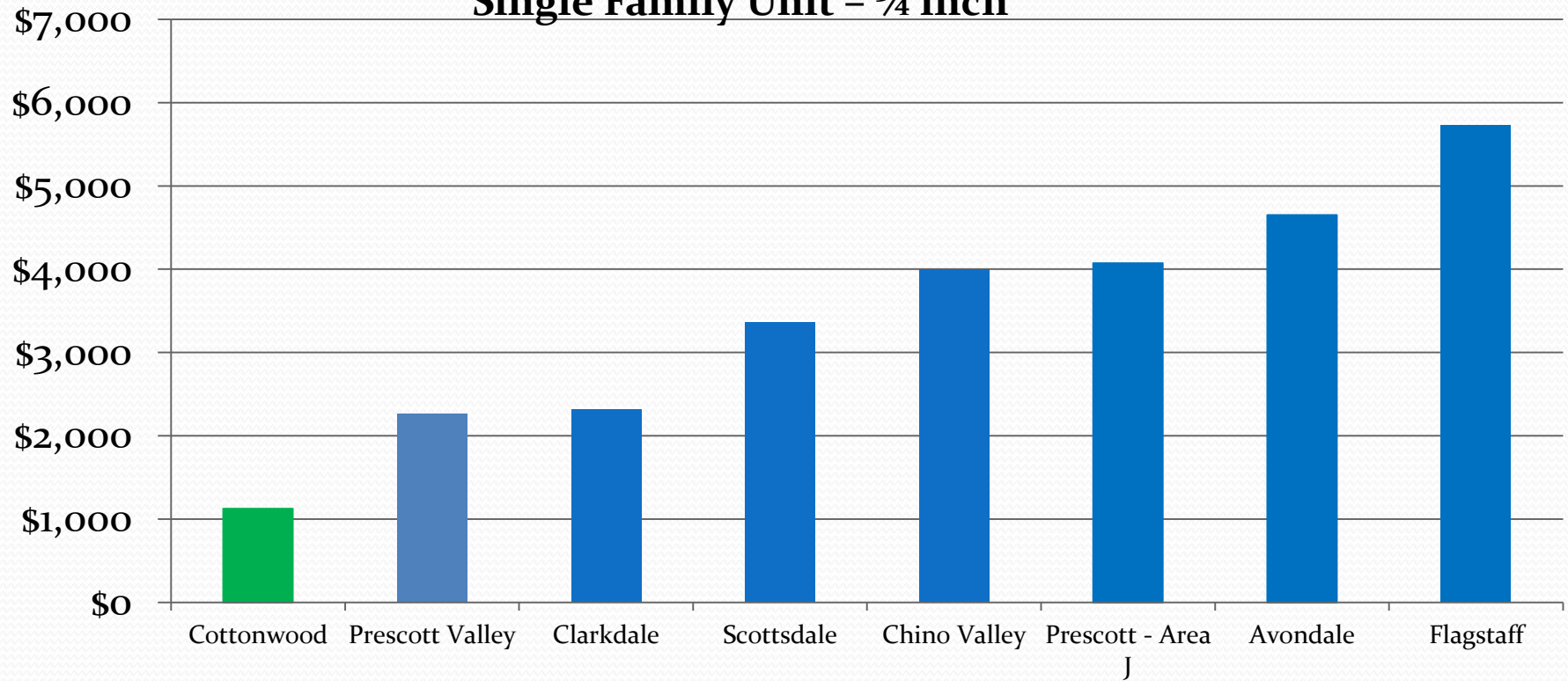
Meter Size	Proposed
3/4-inch	\$4,502
1-inch	7,518
1.5-inch	14,992
2 -inch	23,995
3-inch	45,020
4-inch	75,048
6-inch	150,050
8-inch	240,089
10-inch	345,165

POSSIBLE REASONS FOR DIFFERENCES IN DEVELOPMENT/CAPACITY FEES

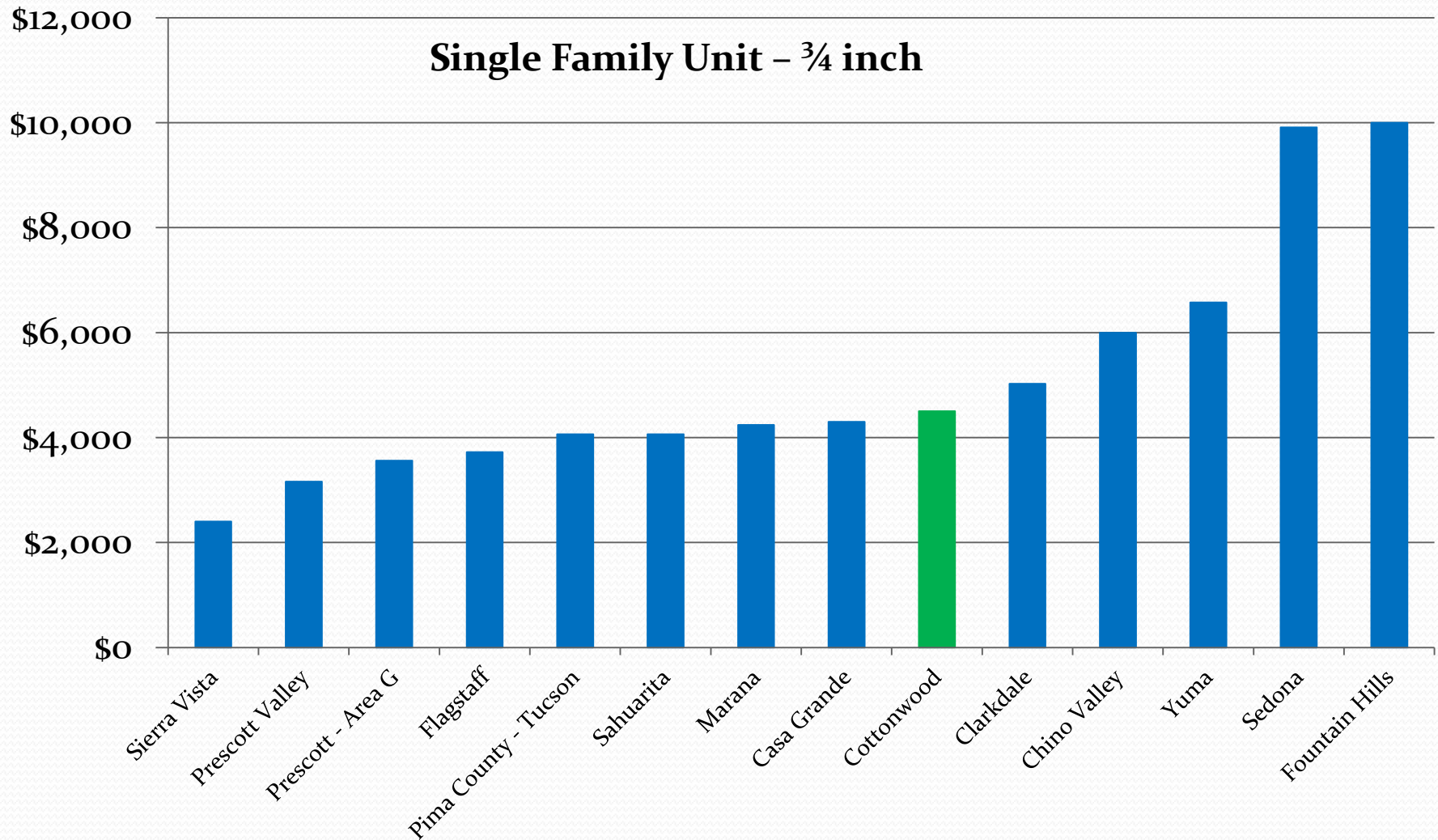
- Persons per household and water use
- Lot size
- Age of system
- Changes in elevation
- Surface water versus ground water
- Depth of wells
- Treatment standards/methods
- Area (acres) covered by the system
- Subsidization through rates or other revenue sources

Comparison of Water Development/Capacity Fees - AZ

Single Family Unit – ¾ inch



Comparison of Sewer Development/Capacity Fees - AZ



NEXT STEPS

- Approve Notice of Intention by Council and set public hearing date (60 days before public hearing)
- Post capacity fee calculations on City's website at 30 days before public hearing
- Publish Notice of Intent in newspaper 1 time at least 20 days before public hearing
- Hold public hearing and adopt an ordinance or resolution approving fees
- Fees become effective 30 days after adoption

Task #	Water & Sewer Capacity Study	Date
1	Adopt by motion a Notice of Intention to increase Water & Wastewater Capacity Fees and set the date, time and place of a public hearing on the proposed increase. (At least 60 days before the public hearing)	May 15 , 2018
2	Capacity study with details must be available for review in Clerk's office and posted to the City's website at least 30 days before the Public Hearing.	Before June 16, 2018
3	Publish a copy of the Notice of Intention in the local newspaper 1 time at least 20 days before Public Hearing.	Before June 27, 2018
4	Public Hearing on the proposed water & wastewater capacity fee increase. After public hearing Council may adopt by resolution or ordinance the increase to the capacity fees.	July 17, 2018
5	Effective date of capacity fee increase (30 days after the adoption which is actually August 16, 2018)	August 16, 2018



CITY OF COTTONWOOD, ARIZONA

QUESTIONS & DISCUSSION