

Central Arizona Groundwater Replenishment District (CAGRD) – An Overview and Introduction to the Amount Paid by Our Utility Customers

Paul Gardner, Utilities Director

Scott McCarty, Finance Director

PURPOSE OF PRESENTATION

- Review History of Arizona Water Resource Management
- Discuss CAGRDR
 - History and Purpose
 - Amount Paid by the Town's Utility Customers
 - \$35.2M Credits Available



AZ WATER RESOURCE MGMT



- 1980 – AZ Enacted the Ground Water Management Act
- 1995 – AZ Assured Water Supply Rules Became Effective
- Why?

AZ WATER RESOURCE MGMT



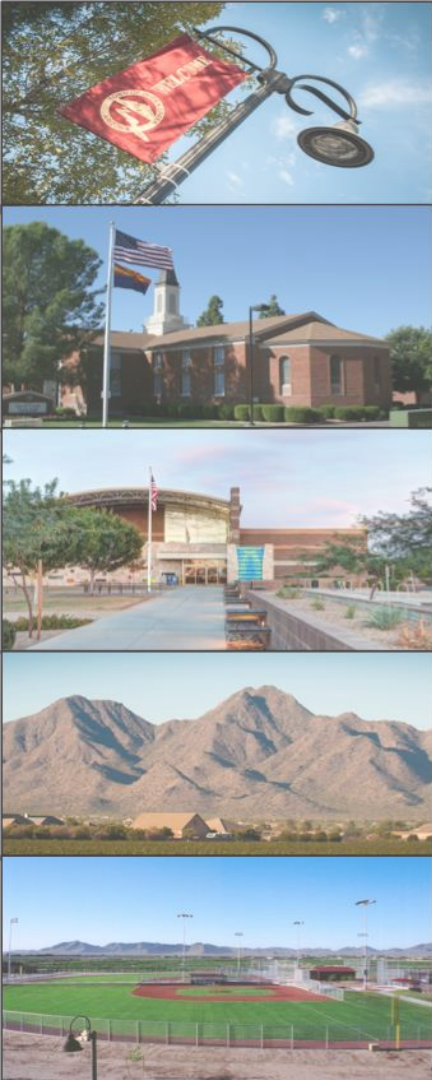
AZ WATER RESOURCE MGMT





AZ WATER RESOURCE MGMT

- Beginning in 1996 All Developed Property in AZ Must Have a 100 Year Renewable Assured Water Supply
- Cannot Exclusively Rely on Groundwater (GW)
- Must Have Renewable Elements



AZ WATER RESOURCE MGMT

- Options Available - Any Combination
 - Acquire 100 Year Rights to Surface Water
 - Acquire GW Credits that Resulted From “New” Water Recharge
 - Utilize the Central Arizona Groundwater Replenishment District (CAGRDR)*
 - * Because Both Water Systems Acquired by QC Did Not Include Significant Surface Water Allocations – This is QC’s Main Option at the Current Time

AZ WATER RESOURCE MGMT

- Central Arizona Water Conservation District (CAWCD) 1971
- Central Arizona Project (CAP) Construction 1973-1993
- Central AZ GW Replenishment District (CAGRD) Established 1993



AZ WATER RESOURCE MGMT

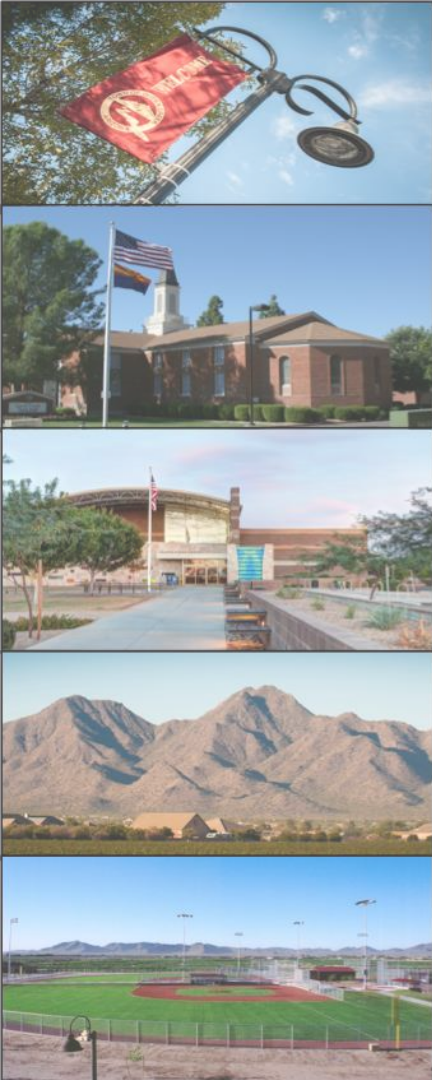
- CAGRD

- Mechanism for Landowners to Meet 100 year Assured Water Supply

- Membership Transfers the GW Replenishment Obligation from the Landowner to CAGRD

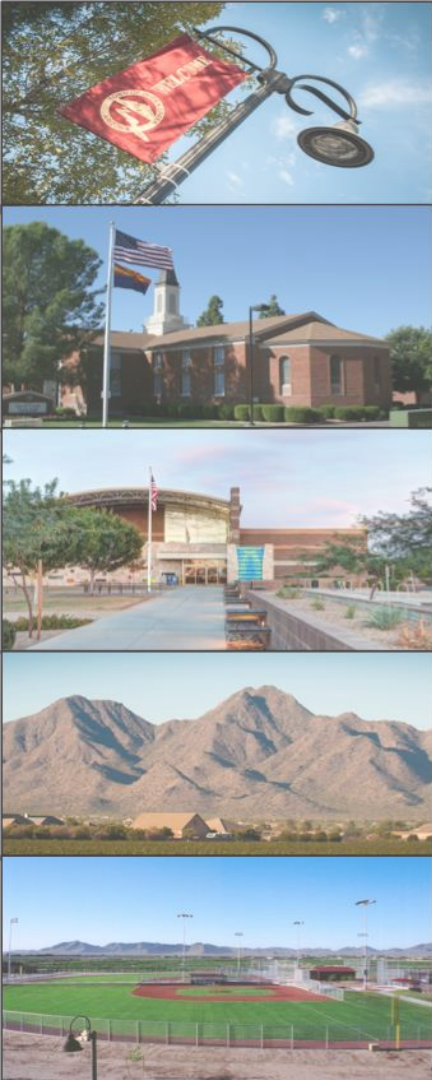
- CAGRD Now Obligated to “Find” Water for its Members





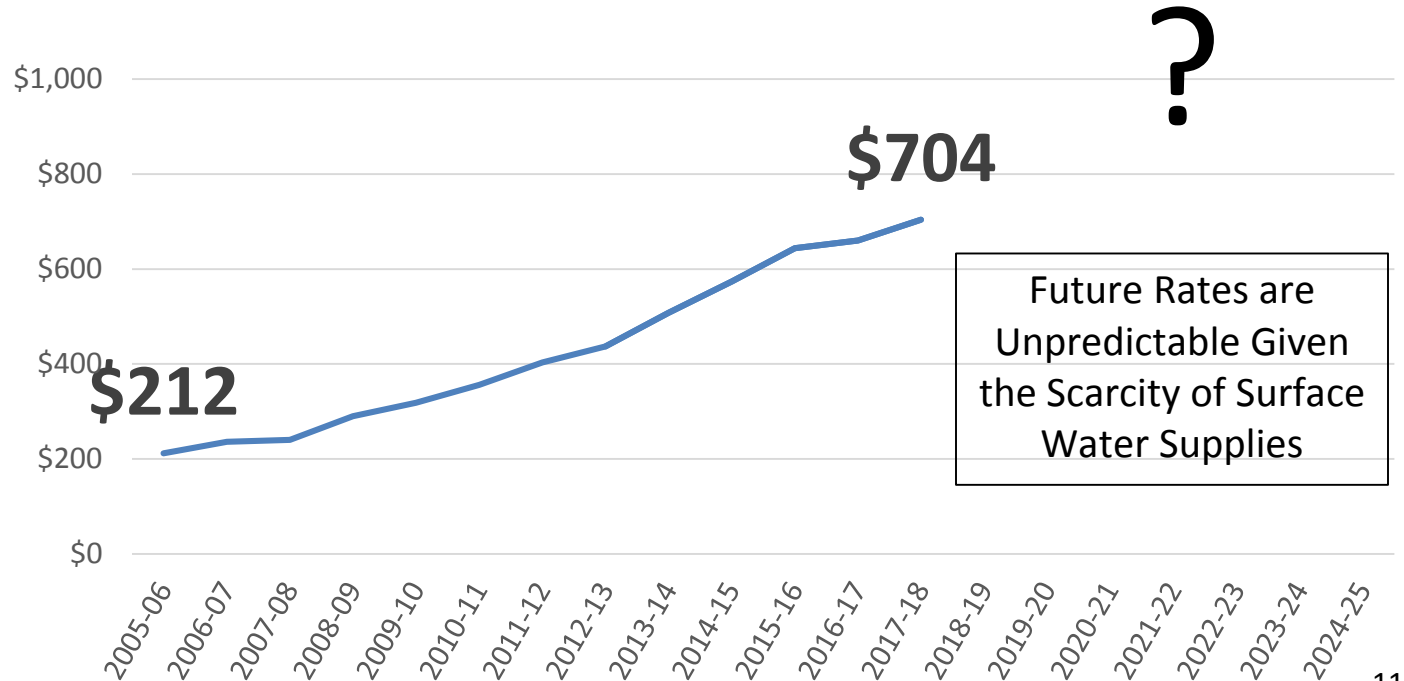
AZ WATER RESOURCE MGMT

- Issues Related to Options Available
 - Surface Water Rights Are Not Readily Available and Are Expensive
 - GW Credits Are Becoming More Available But Are Also Expensive
 - Initially the Most Affordable Option but CAGR D's Costs Have Been Dramatically Increasing



CAGRD

CAGRD HISTORIC PER ACRE FOOT ASSESSMENT



CAGRD

- CAGRD Finance Mechanism
 - CAGRD Water Costs are Passed Through to Members on a Per Parcel Basis
 - Two Types of Membership in CAGRD
 - Member Lands (ML)
 - Member Service Area (MSA)
 - ML Has Been QC's Approach Since Before the Acquisition of Both Water Systems



CAGRD

- Member Lands
 - Commercial/Small Subdivision Exemption (Less than 5 Parcels)
 - Each Parcel is Assessed its Replenishment Costs Annually Based on Last Year's Consumption – 1 Year Lag
 - Collected on the Property Tax Bill – as an Assessment Not as an AV Based Tax



CAGRD

- Member Lands (continued)
 - Each Enrolled Subdivision is Allotted a One-time GW Credit to be Used to Offset GW Use
 - All Parcels Are Not the Same
 - When Property Was Enrolled in CAGRD
 - Historical GW Use



CAGR

- Member Lands (concluded)
 - No Town Council Action: Fixed GW Credit
 1. Pre 1996 Property: CAGR Exempt
 2. 2003-Present Property: Fixed at 33%
 3. Post 1996 Property: Credits Exhausted
 - Town Council Authority: Variable GW Credit
 4. 1996-2002 Property: 0%-100% Annually



CAGRD MEMBER LAND SUMMARY

PARCEL TYPE	PARCEL COUNT	CREDIT AMOUNT*
CAGRD EXEMPT	4,726	
NO CREDIT REMAINING	602	
CREDIT VARIABLE UP TO 100% (Council Determined)	12,820	\$35.2M
CREDIT FIXED – CURRENT	14,291	\$39.0M
CREDIT FIXED – FUTURE**	1,138	?
TOTAL	33,577	\$74.2M

* Calculated at \$704 per Acre Foot

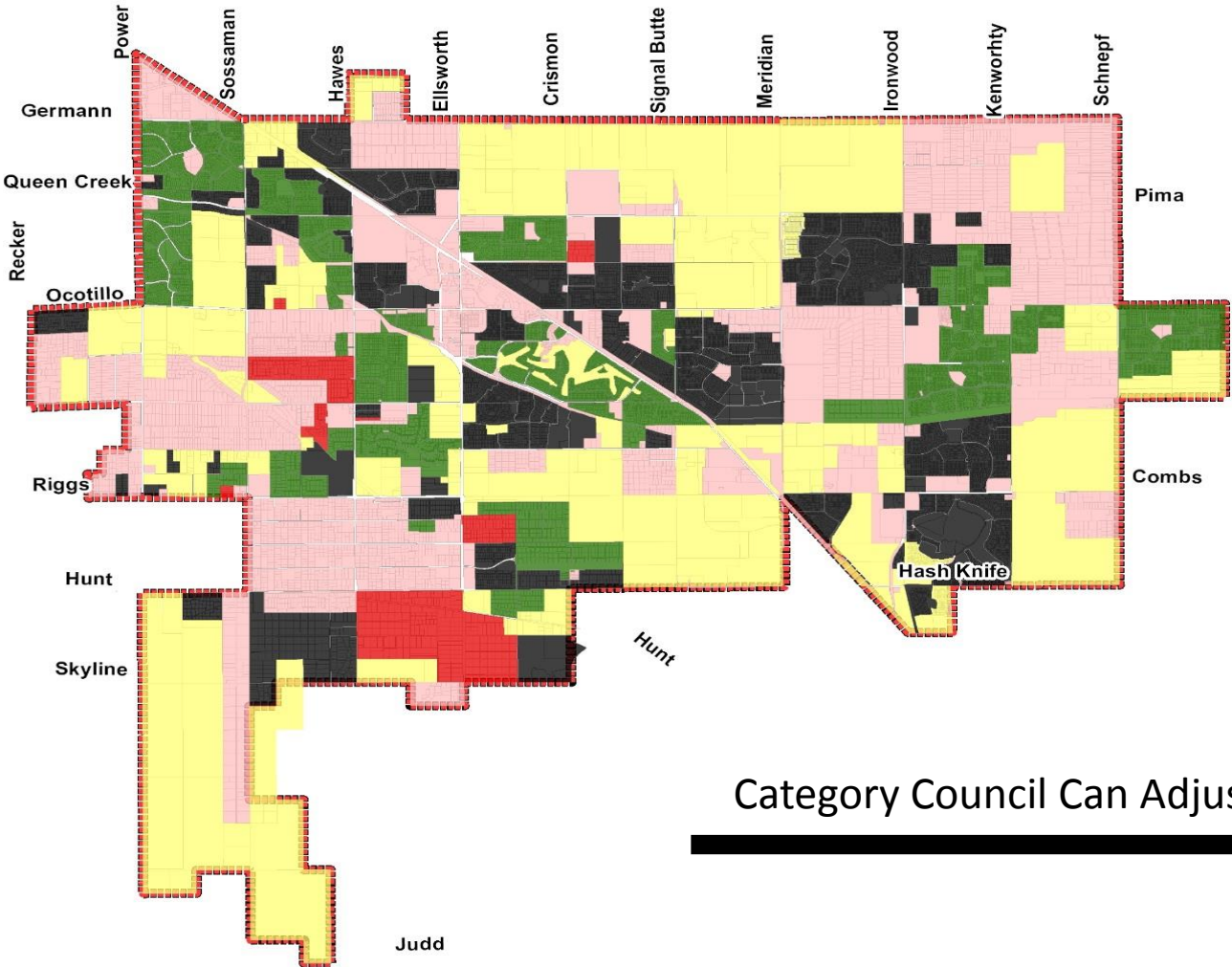
** Large Lots – Presubdivision



MEMBER LAND GW CREDIT VALUE

- Differs By Subdivision Based On:
 - Enrollment Date
 - Historic GW Use
 - Historic Applied GW Credit

CAGRD STATUS



Category Council Can Adjust

Legend

CAGRD Subdivisions

- CAGRD Exempt
- No Credit Remaining
- Credit Variable up to 100%
- Credit Fixed 33.3%
- CAGRD Future
- Water Boundary



MEMBER LAND GW CREDIT VARIES

- **EXAMPLES**

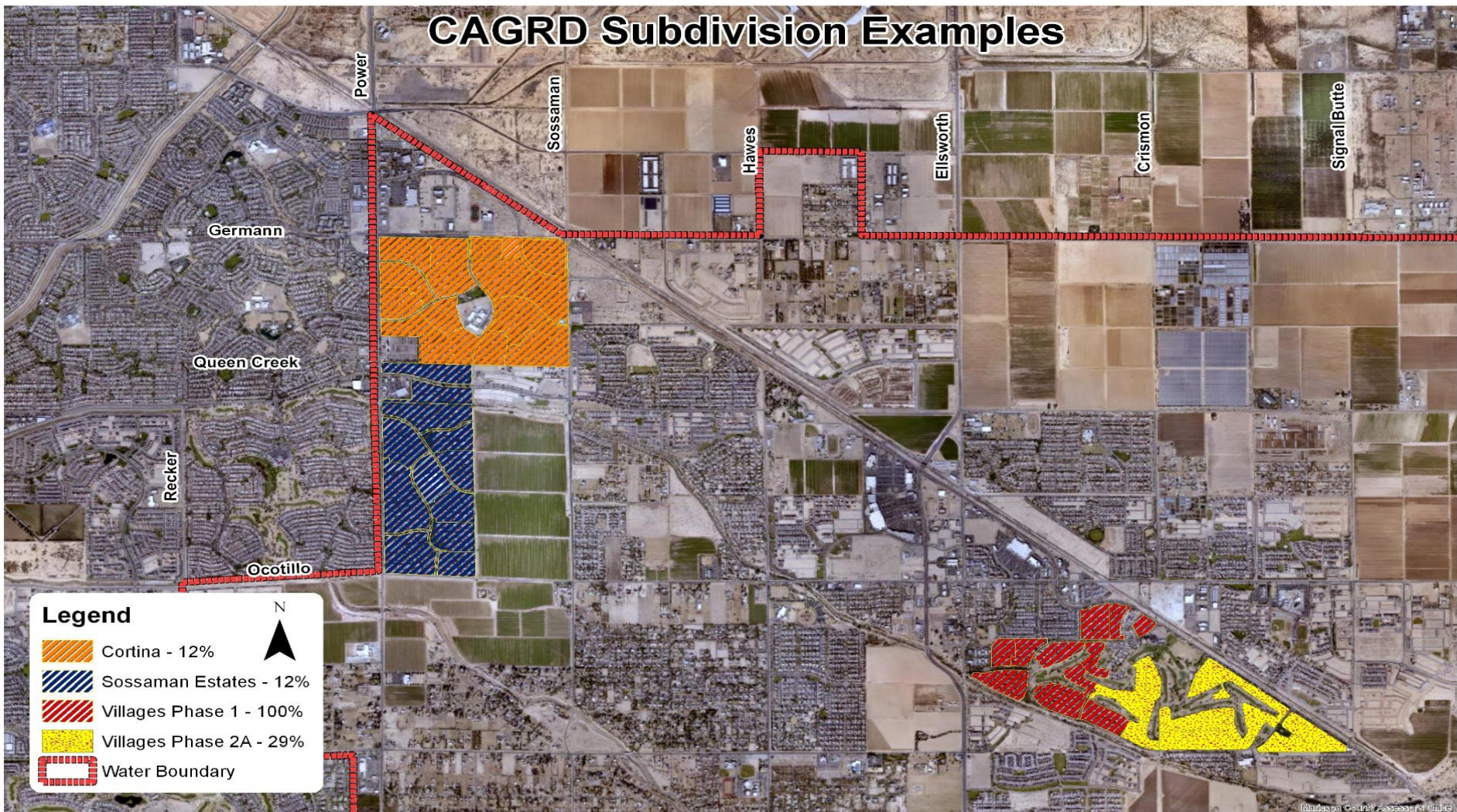
- Sub 1: Cortina (1,295 Lots)

- Sub 2: Sossaman Estates (782 Lots)






- Sub 3: Villages 1 (862 Lots)

- Sub 4: Villages 2A (1,095 Lots)

CAGR Subdivision Examples



Legend

-  Cortina - 12%
-  Sossaman Estates - 12%
-  Villages Phase 1 - 100%
-  Villages Phase 2A - 29%
-  Water Boundary

2017-18 CAGRD FINANCIAL SUMMARY

- Total Annual Costs: \$7.2M
- How Were Total Costs Paid?
 - Parcel Bills: \$4.1M
 - Credits Used: \$3.1M (Fixed & Variable)
- Remaining Credits: \$74.2M
 - Fixed Credits: \$39.0M
 - Variable Credits (Town Council): \$35.2M



SUMMARY: FY 2017-18 VARIABLE CREDIT PARCELS

	Amount
Credits Used	\$2.2M
Billed	<u>\$2.0M</u>
Total	\$4.2M

NUMBER OF SUBDIVISIONS	% OF BILL PAID
20	0%
10	50% or less
15	51% to 75%
7	75% or more

\$35.2M VARIABLE CREDITS

Inside vs. Outside Town Limits

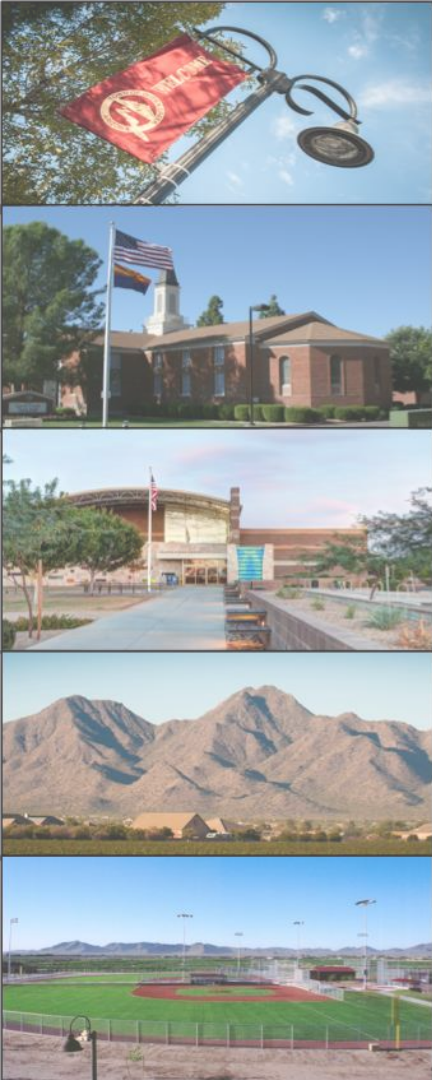
TOWN LIMITS	PARCELS	CREDIT REMAINING AF	CREDIT VALUE*
INSIDE	7,826	25,860	\$18.2M
OUTSIDE	<u>4,994</u>	<u>24,130</u>	<u>\$17.0M</u>
TOTAL	12,820	49,990	\$35.2M

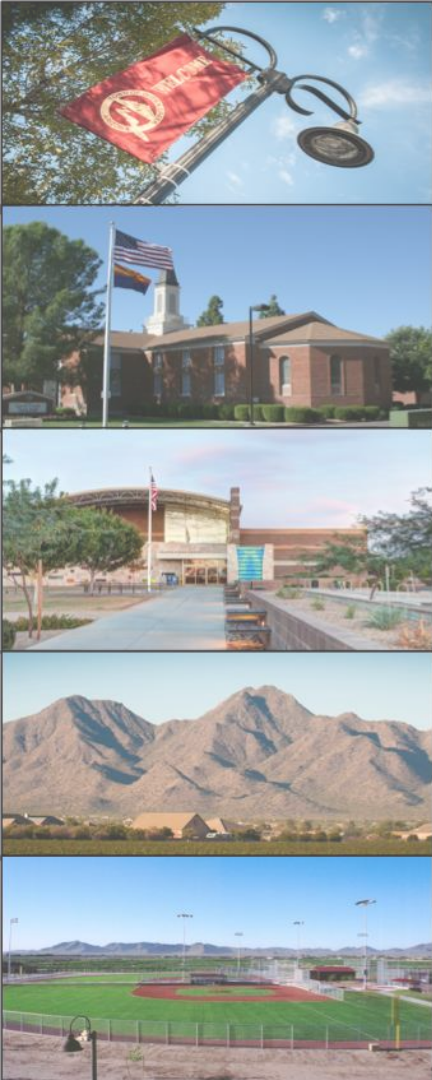
* Calculated at \$704 per Acre Foot

EXAMPLE #1

- 10,000 AVG MONTHLY USE $\frac{3}{4}$ Meter

ANNUAL	0% CREDIT	50% CREDIT	100% CREDIT
QC WATER BILL	\$411	\$411	\$411
CAGR D ASSMT	\$260	\$130	\$0
TOTAL COST	\$671	\$541	\$411





EXAMPLE #2

- 50,000 AVG MONTHLY USE $\frac{3}{4}$ Meter

ANNUAL	0% CREDIT	50% CREDIT	100% CREDIT
QC WATER BILL	\$1,761	\$1,761	\$1,761
CAGR D ASSMT	\$1,296	\$648	\$0
TOTAL COST	\$3,057	\$2,409	\$1,761

EXAMPLE #3 - HOA

STATUS QUO

- CAGR D Assessment of \$42,240
 - 60 AF of Groundwater Consumption

ALTERNATIVE

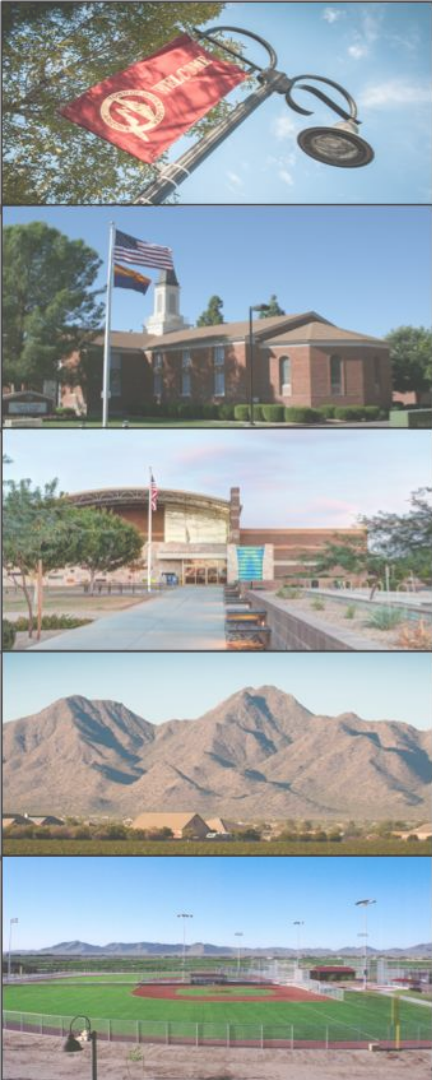
- HOA Acquires GW Credits at \$300/AF (\$18,000)
- QC Delivers GW via Recovery Well
- No CAGR D Assessment
- \$24,240 Savings



SUMMARY THOUGHTS

- The Town Council is Responsible for Determining the Rate at Which the \$35.2M Variable Credits are Used
- Not All Parcels Have the Same Credit Amount
- It is Possible the Amounts Paid by Some Parcels Could Change (Increase or Decrease)





TOWN COUNCIL DIRECTION

1. How Much of the Variable Credit to Use in FY 2018-19?
2. Develop a Long Term Water Resources Strategy Inclusive of:
 - Effluent Recharge / Recovery Program
 - Surface Water Allocation Portfolio
 - GW Credit/Exchange Agreements

CALENDAR

February Council
Planning Session

- Continued Discussion
- Staff Recommendation

March 21
Council Meeting

- Approval of FY 18-19 Credit Amount

March 31

- Town CAGR D Report Due Declaring Use of Variable Credits

August

- CAGR D Amounts Certified by Maricopa County



QUESTIONS AND COMMENTS