



Briefing and Information on CAWCD and CAGRD rates, Capital Charges and Shortage Rate Cases

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Chris Hall

Assistant General Manager, Finance & Administration

Doug Dunlap

Finance and Accounting Manager

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Key Assumptions

General

- ✓ Water rates are set to recover costs, on a long-term basis, net of other revenue
- ✓ Tier 1 shortage for base case
 - DCP mitigation not included
 - DCP mitigation increases water volumes and O&M costs and is rate neutral
- ✓ 500+ Plan for 2023 estimated at 93,000 acre-feet
 - Increases rate ~\$11/acre-foot
- ✓ Wheeling included at 4,000 acre-foot starting in 2026 and remains at that level
- ✓ No additional NIA reallocation included in rate period
- ✓ Tiers Zero, 2a, 2b and 3 rates to be provided for planning purposes

Key Assumptions – cont'd

General cont'd

- ✓ General ad valorem property tax rate held at 10¢
- ✓ Water storage tax held at maximum to be retained for federal repayment and CAWCD operational costs
 - 4¢ through 2024 and drops to 3¢ in 2025-2030
 - Following reserve funding guidelines utilizing proposed reserve targets
 - No Ag Settlement pool, therefore, no taxes needed for Ag Consideration
 - No set aside for Arizona Water Bank Authority LTSC purchases
- ✓ No tax contribution reduction on water delivery rates or federal repayment incorporated into proposed rates beyond previous action of 1.5¢ of 2021/22 General ad valorem taxes for repayment

Key Assumptions – cont'd

Power

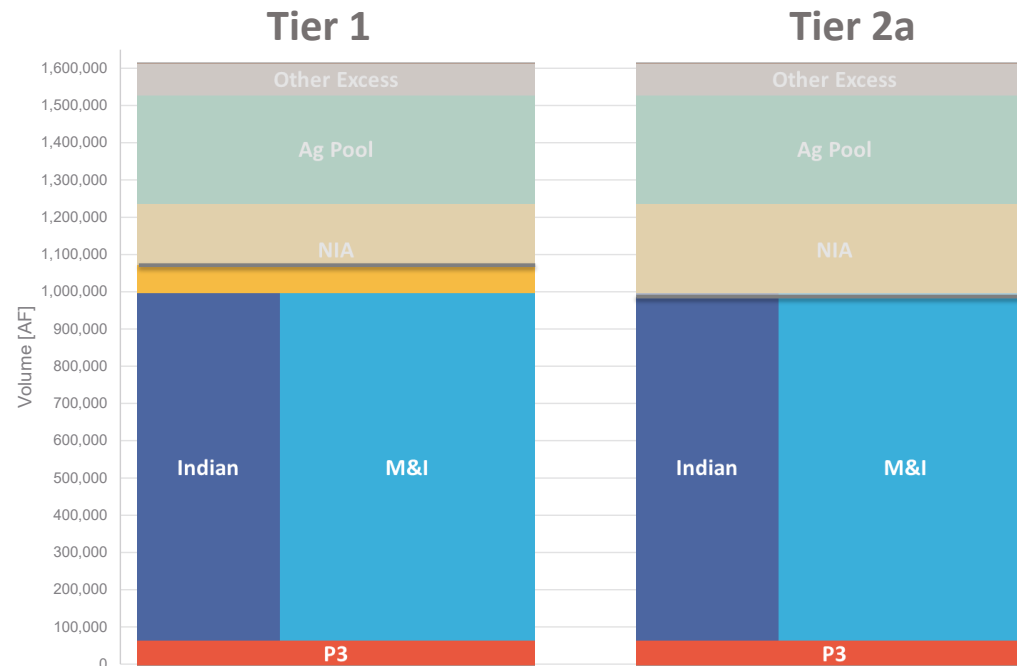
- ✓ Long-term contracts
 - Fully utilized during period
 - 2nd solar resources not available until the end of 2023
 - SRP Option expiring at the end of 2024
- ✓ Market purchases are currently unfavorable for uncontracted power needs, driving significant increases
- ✓ At lower levels of water deliveries, more significant shaping of energy may be possible, which could result in lower energy rates

Transmission

- ✓ Based on basic characteristics, variable costs are included in energy & fixed costs are included in O&M
- ✓ El Paso proposed increase included at a lower, more probable level

Ag Settlement

- There will be no Ag Consideration in 2023 due to Shortage on the Colorado River.
- Current projections indicate the likelihood of either Tier 1 or Tier 2a in 2023
 - 1075' <= Tier 1 > 1050'
 - 1050' <= Tier 2a > 1045'
- Shortage volume increases by 80 KAF from Tier 1 to 2a
 - 512 KAF vs. 592 KAF



Water Volumes

(KAF) Tier 1	2023	2024	2025	2026	2027	2028
Municipal & Industrial Subcontract	656	661	661	663	665	668
Federal Contract	427	422	422	420	418	415
Ag Settlement Pool	0	0	0	0	0	0
Excess	0	0	0	0	0	0
Wheeled Water	0	0	0	4	4	4
CAGRD credit transfers	14	14	14	14	14	15
500+ Plan reduction	(93)	-	-	-	-	-
	1,004	1,097	1,097	1,101	1,101	1,101

Federal Repayment & Capital Charges

Federal Repayment

- ✓ Basin Development Fund net revenues are applied toward repayment first
- ✓ Balance must be made up as a cash makeup payment
- ✓ Annually CAWCD Board determines if taxes are to be applied
- ✓ Balance of cash makeup payment are made from capital charges
- ✓ No taxes beyond previous commitments are incorporated into proposed rates

Capital Charges

- ✓ Paid on M&I allocations, regardless of water delivery
 - Hohokam CDR contract holders only pay if order any of this class of water – previously excluded but current indications are is that it will be ordered (~47,000 acre-feet) which decreases the rate by \$3 per acre-foot each year from current advisory rates
- ✓ Not paid by federal and Ag Settlement Pool
- ✓ Must be used toward federal debt repayment on a cumulative basis
- ✓ Calculated after current tax considerations for repayment

Federal Repayment & Capital Charges

	2023	2024	2025	2026	2027	2028
Federal Repayment	\$56,813	\$57,833	\$56,417	\$55,002	\$53,586	\$53,426
Total Basin Development Fund Credit	(8,994)	(9,060)	(9,127)	(9,196)	(9,265)	(9,337)
Net Cash Payment	\$47,819	\$48,773	\$47,290	\$45,806	\$44,321	\$44,089
<u>Taxes Applied:</u>						
2021/22 – General Ad Valorem @ 1.5¢	(9,000)	-	-	-	-	-
Cash Needed from Capital Charges	\$38,819	\$48,773	\$47,290	\$45,806	\$44,321	\$44,089
Allocation* (acre feet) (Incl. CAGRD Credits & Wheeled Water)	726,208	726,208	726,365	730,398	730,414	730,441
Capital Charge (\$ acre foot)	\$53	\$67	\$65	\$62	\$60	\$60

Preliminary 2022-2028 Rate Components

Units = \$/acre-foot Tier	Firm 2022	Firm 2023	Provisional 2024	2025	Advisory		
	1	1	1	1	2026 1	2027 1	2028 1
Capital Charges							
(A) M&I – Long Term Subcontract	\$50	\$53	\$67	\$65	\$62	\$60	\$60
Delivery Charges							
Fixed O&M	\$103	\$127	\$118	\$125	\$133	\$142	\$146
Big “R”	<u>\$33</u>	<u>\$37</u>	<u>\$41</u>	<u>\$41</u>	<u>\$43</u>	<u>\$47</u>	<u>\$47</u>
(B) Fixed OM&R	\$136	\$164	\$159	\$166	\$176	\$189	\$193
(C) Pumping Energy Rate	\$56	\$76	\$76	\$79	\$82	\$85	\$88
(D) Full Rate Stabilization	\$(13)	\$(12)	\$ -	\$ -	\$ -	\$ -	\$ -
(E) 2020 Voluntary Rate Stabilization	\$ -	\$ -	\$(11)	\$ -	\$ -	\$ -	\$ -

Preliminary 2022-2028 Rate Schedule

Units = \$/acre-foot The letter designations in the formulas refer to the Rates Components above	Advisory						
	Firm 2022	Firm 2023	Provisional 2024	2025	2026	2027	2028
Tier	1	1	1	1	1	1	1
M&I Subcontract (B + C)	\$192	\$240	\$235	\$245	\$258	\$274	\$281
Federal Contract (B + C)	\$192	\$240	\$235	\$245	\$258	\$274	\$281
Ag Settlement Pool (C)	\$56	\$76	\$76	\$79	\$82	\$85	\$88
Excess (A + B + C)	\$242	\$293	\$302	\$310	\$320	\$334	\$341

Preliminary Rates Compared to Advisory Rates

Tier 1	2023
Fixed OM&R:	
Proposed	\$164
Advisory	\$143
Change	\$21

Fixed O&M Rate

- 500+ Plan adds \$11/AF in 2023
- El Paso Electric Rate issue adds \$3/AF for transmission costs
- 2023 budget was approved at \$7/AF higher than published rates, largely due to changes in water volumes, inflation, and staffing costs.

Tier 1	2023
Energy:	
Proposed	\$76
Advisory	\$57
Change	\$19

Energy Rate

- SOLAR Phase II will come online at the end of 2023, rather than at beginning of 2023 (still “on time” under contract)
- Additional market purchases may be required
- Energy prices are projected to rise considerably
- Tier 2a may reduce energy rate by a couple of dollars (more shaping)

Fixed OM&R Rate at DCP Tiers

(For Planning Purposes Only)

Units = \$/acre-foot	2023	2024	2025	2026	2027	2028
Tier Zero		\$ 124	\$ 131	\$ 136	\$ 146	\$ 148
Tier 1	\$ 164	\$ 159	\$ 166	\$ 176	\$ 189	\$ 193
Tier 2a	\$ 174	\$ 169	\$ 180	\$ 192	\$ 206	\$ 209
Tier 2b		\$ 177	\$ 189	\$ 202	\$ 214	\$ 218
Tier 3		\$ 192	\$ 210	\$ 221	\$ 238	\$ 242

Authorization to Levy Taxes

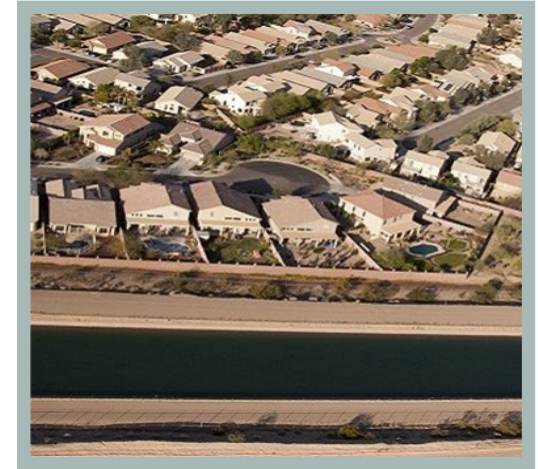
Arizona Revised Statutes § 48-3715 and § 48-3715.02 authorize CAWCD to levy two distinct taxes in its service territory.

General *Ad Valorem* Tax

- Up to \$0.10 per \$100 of assessed valuation in the District

Water Storage Tax

- Up to \$0.04 per \$100 of assessed valuation



Taxes equate to approximately 20% of CAP's total revenues in a given fiscal year.

CAWCD Tax Rate History

Tax Years	General <i>Ad Valorem</i> Tax	Water Storage Tax
1974-1983	\$0.03	N/A
1983-1984	\$0.05	N/A
1984-1988	\$0.07	N/A
1988-1995	\$0.10	N/A
1995-2000	\$0.10	\$0.04
2000-2003	\$0.09	\$0.04
2003-2007	\$0.08	\$0.04
2007-2013	\$0.06	\$0.04
2013-2022	\$0.10	\$0.04

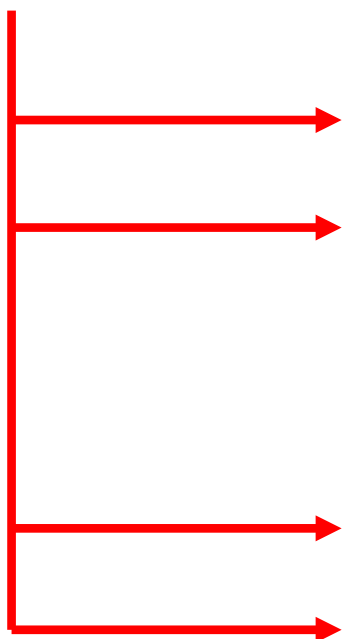
General Tax Assumptions

1¢ of Tax

- Costs the owner of a \$250,000 LPV property home \$2.50 per year
- Generates approximately \$6.8 million in revenue
- Reduces Capital Charges by approximately \$9-10per acre-foot (AF)
- Reduces Fixed O&M or Energy Rates by ~\$5 per acre-foot (AF)

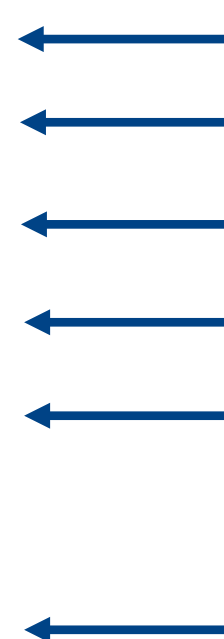
Tax Use Prioritization

Water Storage Tax (4-cent)



1. Ag Settlement
2. Federal Repayment
3. Board-Specified Uses
4. Strategic Reserve Replenishment
5. Working Capital Replenishment
6. Arizona Water Banking Authority
7. Extraordinary Cost Reserve Replenishment

General Ad Valorem Tax (10-cent)

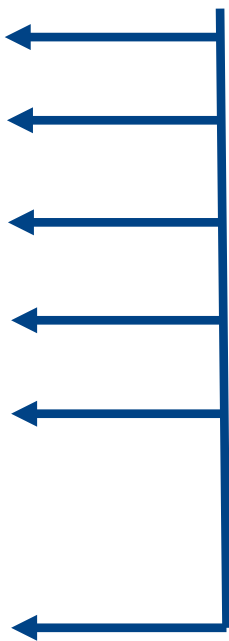


2022 Tax Use Decision Points

Water Storage Tax (4-cent)

-
- 1. Ag Settlement
 - 2. Federal Repayment
 - 3. Board-Specified Uses
 - 4. Strategic Reserve Replenishment
 - 5. Working Capital Replenishment
 - 6. Arizona Water Banking Authority
 - 7. Extraordinary Cost Reserve Replenishment

General Ad Valorem Tax (10-cent)

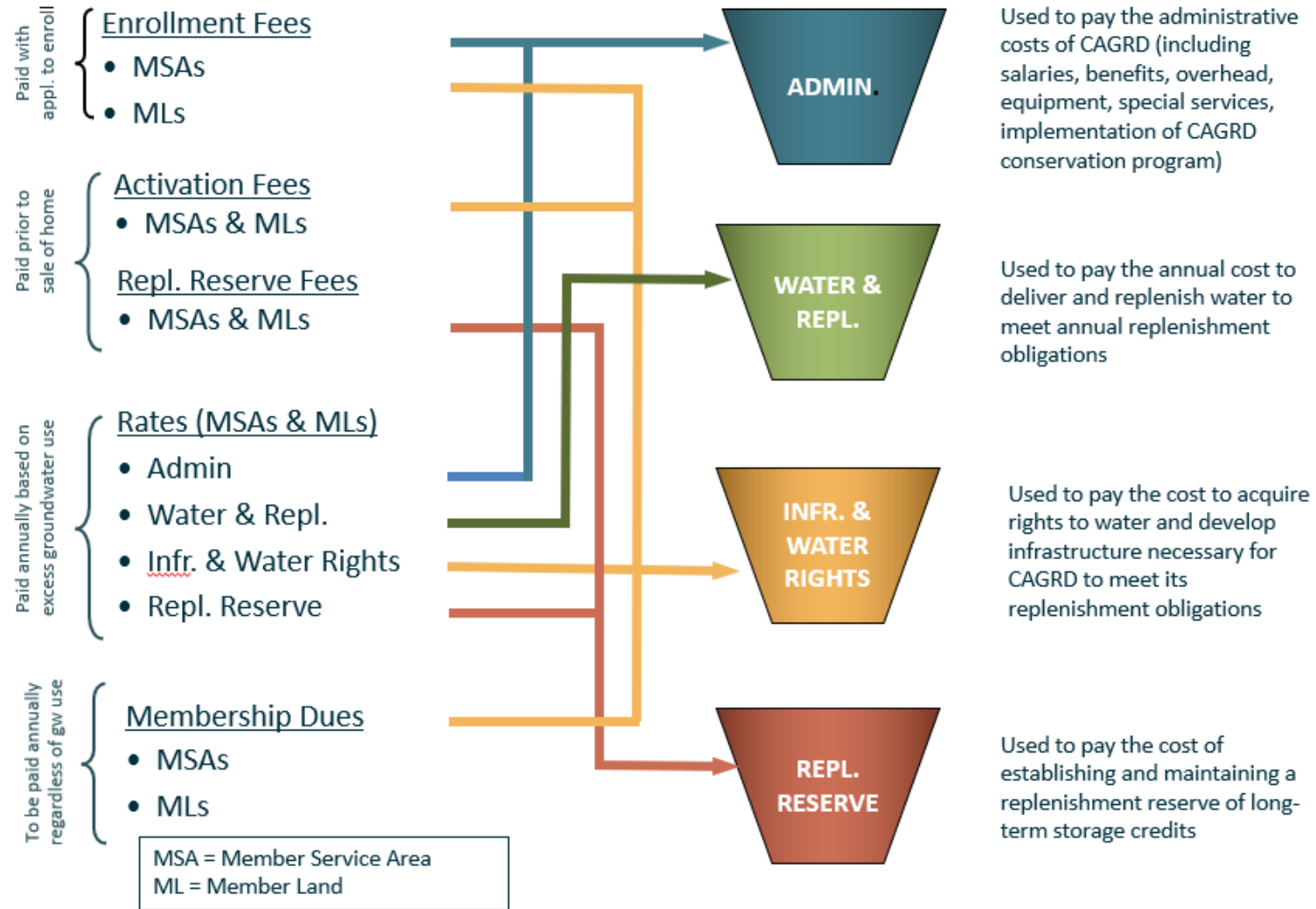




CAGR Rates, Fees and Dues

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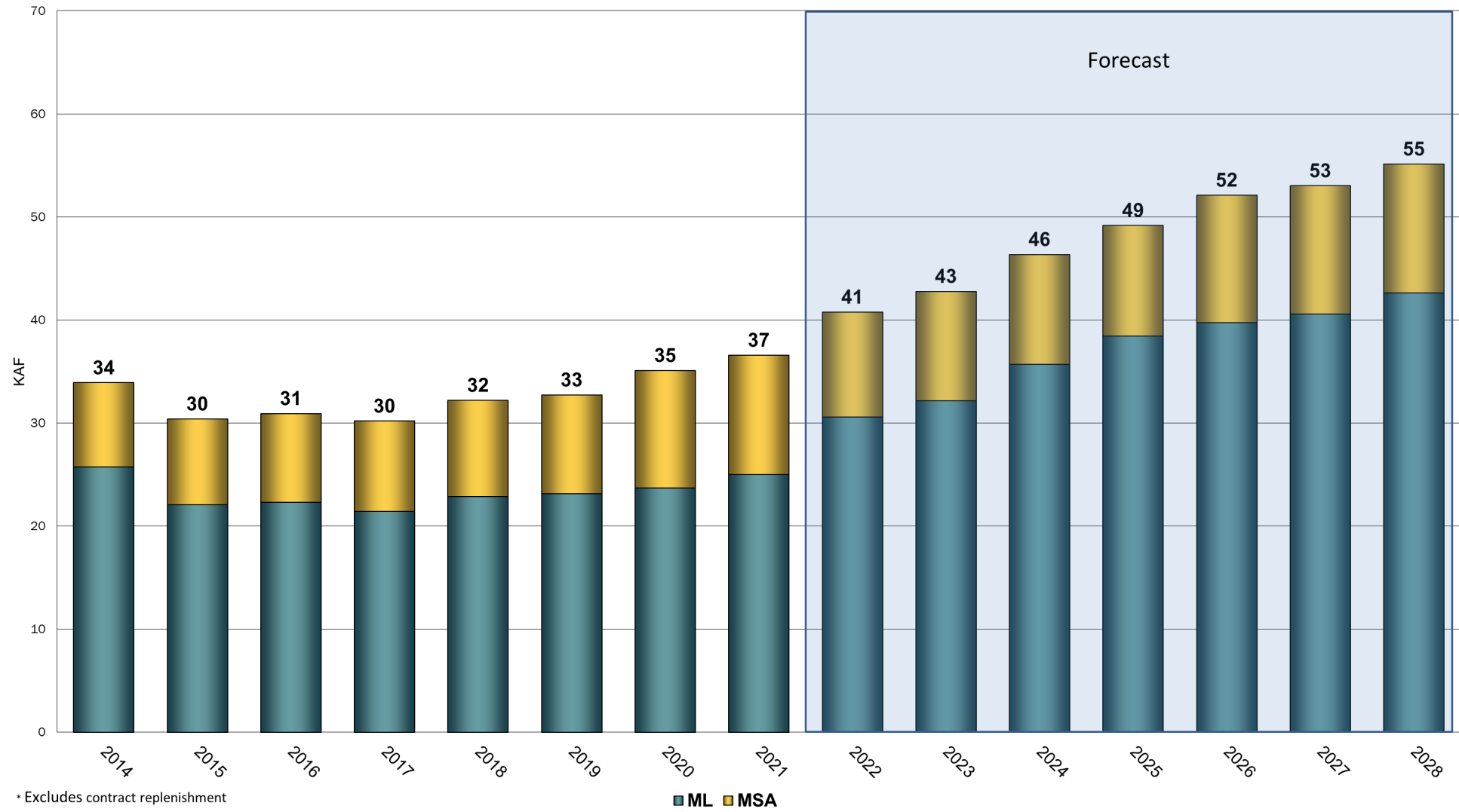
CAGRD Revenue Stream



CAGRD Key Assumptions

- ✓ Forecasting higher level of enrollments, activations and obligations than previous rate case.
- ✓ Forecasts incorporate AMA-specific building projections
- ✓ Incorporating previous CAWCD rate reconciliation refunds
- ✓ Slowing down replenishment reserve progression
 - Current Replenishment Reserves ahead of where current 2015 Plan of Operation progress targets indicate (obligations also lagging behind)
 - Proposing to slow progress to more closely align progress with reliance
- ✓ Administrative rate covers all currently known expenses
- ✓ Activation & Enrollment Fees remain consistent with prior agreement for 2022/23 and 2023/24 and increase at 5% per year thereafter.
 - Met with several home builder and developer entities to share and discuss this methodology
- ✓ Ongoing need to build Infrastructure & Water Rights reserves
- ✓ Annual Membership Dues (AMDs) are set at the maximum allowable

CAGRD Obligation History and Forecast (Acre Feet -- Year Pumped)



Key Results

Composite Rates – 3% under previous advisory rate

- ✓ Administrative rate component remains fairly consistent with previous rate case
- ✓ Water Replenishment rate component is lower than prior rate schedule
- ✓ Replenishment Reserve rates are lower than prior rate schedule due to slowing progression towards target
- ✓ Infrastructure and Water Rights rate component held consistent with previous levels

Fees

- ✓ No change from previous discussions

Annual Membership Dues (AMDs)

- ✓ 11%-15% increase as a result of an increase in I&WR revenues from other sources
 - AMDs can only be up to 25% of total projected I&WR collections

CAGR Rates

Phoenix Active Management Area

Water & Replenishment Component ¹

Administrative Component ²

Infrastructure & Water Rights Component ³

Replenishment Reserve Charge ⁴

Total Assessment Rate (\$/AF)

Tier Zero Firm <u>2021/22</u>	Tier 1 Firm <u>2022/23</u>	Tier 1 Provisional <u>2023/24</u>	Tier 1 <u>2024/25</u>	Tier 1 Advisory <u>2025/26</u>	Tier 1 Advisory <u>2026/27</u>	Tier 1 Advisory <u>2027/28</u>	Tier 1 Advisory <u>2022/23</u>
\$ 251	\$ 260	\$ 293	\$ 302	\$ 310	\$ 320	\$ 334	\$ 266
50	49	48	48	48	47	47	49
353	353	353	353	353	353	353	353
114	103	98	101	103	107	111	120
\$ 768	\$ 765	\$ 792	\$ 804	\$ 814	\$ 827	\$ 845	\$ 788

Pinal Active Management Area

Water & Replenishment Component ¹

Administrative Component ²

Infrastructure & Water Rights Component ³

Replenishment Reserve Charge ⁴

Total Assessment Rate (\$/AF)

\$ 272	\$ 280	\$ 312	\$ 318	\$ 321	\$ 327	\$ 341	\$ 287
50	49	48	48	48	47	47	49
353	353	353	353	353	353	353	353
114	103	98	101	103	107	111	120
\$ 789	\$ 785	\$ 811	\$ 820	\$ 825	\$ 834	\$ 852	\$ 809

Tucson Active Management Area

Water & Replenishment Component ¹

Administrative Component ²

Infrastructure & Water Rights Component ³

Replenishment Reserve Charge ⁴

Total Assessment Rate (\$/AF)

\$ 272	\$ 280	\$ 312	\$ 318	\$ 321	\$ 327	\$ 341	\$ 287
50	49	48	48	48	47	47	49
353	353	353	353	353	353	353	353
114	103	98	101	103	107	111	120
\$ 789	\$ 785	\$ 811	\$ 820	\$ 825	\$ 834	\$ 852	\$ 809

Contract Replenishment Tax - Scottsdale ⁵

Cost of Water

Cost of Transportation

Cost of Replenishment

Administrative Component ²

Total Tax Rate (\$/AF)

\$ 213	\$ 247	\$ 293	\$ 302	\$ 310	\$ 320	\$ 334	\$ 242
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
50	49	48	48	48	47	47	49
\$ 263	\$ 296	\$ 341	\$ 350	\$ 358	\$ 367	\$ 381	\$ 291

CAGR Fees & Dues

	Firm <u>2021/22</u>	Firm <u>2022/23</u>	Provisional <u>2023/24</u>	<u>Advisory</u>				<u>Advisory</u> <u>2022/23</u>
				<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>	
<u>Units = \$/Unit</u>								
Enrollment Fee - Commercial Subdivisions ⁶	\$ 1,205	\$ 1,307	\$ 1,422	\$ 1,493	\$ 1,568	\$ 1,646	\$ 1,728	\$ 1,307
Enrollment Fee ⁶	\$ 325	\$ 347	\$ 372	\$ 391	\$ 410	\$ 431	\$ 452	\$ 347
Activation Fee - Minimum ⁷	\$ 323	\$ 345	\$ 370	\$ 389	\$ 408	\$ 429	\$ 450	\$ 345
Activation Fee - Phoenix AMA ⁷	\$ 1,290	\$ 1,400	\$ 1,520	\$ 1,596	\$ 1,676	\$ 1,760	\$ 1,848	\$ 1,400
Activation Fee - Pinal Post-2007 ⁷	\$ 1,290	\$ 1,400	\$ 1,520	\$ 1,596	\$ 1,676	\$ 1,760	\$ 1,848	\$ 1,400
Activation Fee - Tucson AMA ⁷	\$ 880	\$ 960	\$ 1,050	\$ 1,103	\$ 1,158	\$ 1,216	\$ 1,276	\$ 960
<u>Member Land Annual Membership Dues (\$/Lot) ⁸</u>								
Phoenix Active Management Area	\$ 25.46	\$ 30.00	\$ 32.36	\$ 34.06	\$ 34.64	\$ 35.25	\$ 35.36	\$ 27.09
Pinal Active Management Area	\$ 18.90	\$ 23.38	\$ 26.21	\$ 28.64	\$ 30.19	\$ 31.81	\$ 33.00	\$ 20.63
Tucson Active Management Area	\$ 29.07	\$ 35.73	\$ 38.88	\$ 41.26	\$ 42.28	\$ 43.34	\$ 43.77	\$ 31.13
<u>Member Service Area Annual Membership Dues (\$/AF) ⁸</u>	\$ 95.51	\$ 117.19	\$ 131.34	\$ 143.50	\$ 151.28	\$ 159.42	\$ 165.38	\$ 104.91



Underground Water Storage Rates

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Underground Water Storage Rates

	Firm	Firm	Provisional		Advisory		
Units = \$/acre-foot	2022	2023	2024	2025	2026	2027	2028
<u>Underground Water Storage O&M</u>							
Phoenix AMA	\$13	\$13	\$14	\$14	\$15	\$15	\$15
Tucson AMA	\$15	\$15	\$15	\$15	\$15	\$15	\$15
<u>Underground Water Storage Capital Charge</u>							
Phoenix AMA	\$15	\$15	\$15	\$15	\$15	\$15	\$15
Tucson AMA	\$9	\$9	\$9	\$9	\$9	\$9	\$9

- ✓ Underground Water Storage program reserves remain at adequate levels to support operations
- ✓ No change from advisory rates



Questions?

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