

# Central Arizona Project Preliminary 2021 – 2026 Rates

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Stakeholder Rate  
Briefing  
April 9, 2020

# Agenda – Stakeholder Rate Briefing

## April 9, 2020

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- CAWCD Assumptions
- Taxes, Federal Repayment & Capital Charges
- CAWCD Water Delivery Preliminary Rates
- CAWCD Shortage Case Rates
- Strategic & Working Capital Reserves
- Recharge O&M Rates
- CAGRD Revised Methodology & Assumptions
- CAGRD Results & Rates
- CAGRD Shortage Case Rates

# CAP's Two-Year Financial Planning Cycle

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## Even years

- Long-range financial plan
- Set water rates
- Strategic plan
- Reserve strategy review
- Budget update (if required)

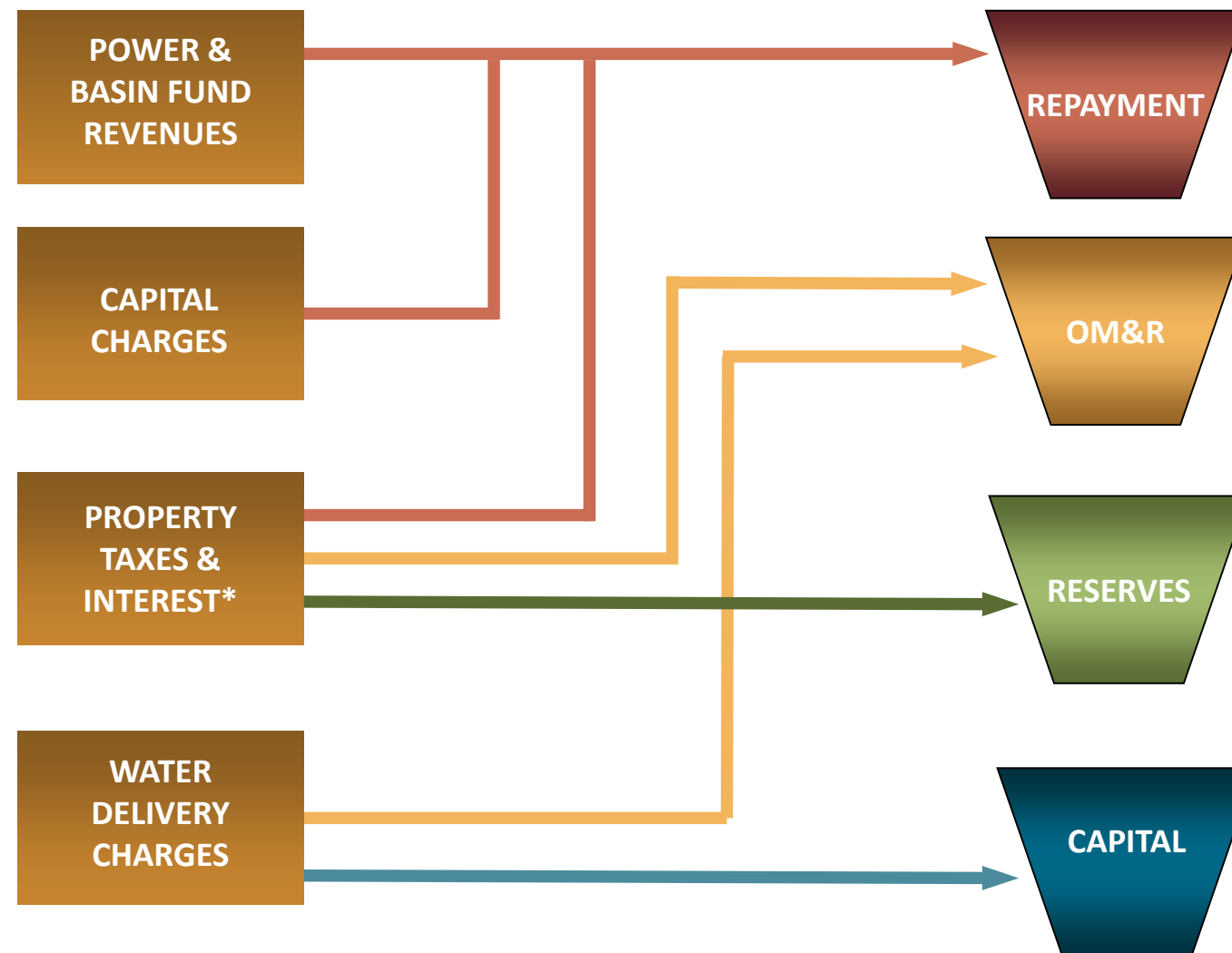
## Odd years

- 2-year Budget and Business Plan (e.g. 2020-2021)
- Water rate update (if required)

## Every year

- Quarterly financial reviews
- Set tax rates

# General Fund Sources and Uses of Revenue



# Key Assumptions

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## General

- ✓ Water rates are set to recover costs, on a long term basis, net of other revenue
- ✓ Rates set at Tier Zero
- ✓ Fixed OM&R rate provided for all other Tiers for 2022-2026 provided for planning purposes
- ✓ Energy rate for all Tiers remains same

## Non-Indian Ag

- ✓ NIA reallocation occurs in 2021 for 2022 deliveries
- ✓ 9(d) debt @ \$665/acre-foot
- ✓ Back capital charges @ \$1339/acre-foot
- ✓ based on capital charge proposal and includes 2021 capital charge
- ✓ Payments spread over 5 years at 2.5% interest rate

## Wheeling

- ✓ Starts in 2023 at 4,000 acre-foot and remains at that level
- ✓ Included in rate calculations resulting in lower Fixed OM&R rate

# Key Assumptions (cont'd)

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## Agriculture

- ✓ Ag Consideration is contractual agreement to cover Fixed OM&R for Ag Settlement Pool and in accordance with Arizona Implementation Plan
- ✓ No Ag incentives are proposed in the preliminary rates

## Power

- ✓ Purchase Power costs for 2021 forward are based on:
  - current contract volumes & rates (~25%)
  - Market purchases (~75%), which remain favorable

## Transmission

- ✓ Based on basic characteristics, variable costs are included in energy & fixed costs are included in O&M

## “Big R”

- ✓ Capital expenditures increasing due to increased cost of materials and outside services
- ✓ Increased Extraordinary Maintenance projects for this period were included then previous advisory rates

## Key Assumptions (cont'd)

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General Ad Valorem Tax held @ 10¢ throughout period

### 2020/2021 tax year

- ✓ Ag Consideration @ 4.5¢
- ✓ 2022 Federal Repayment @ 3¢
- ✓ System Use Agreement @ 1.0¢
- ✓ Extraordinary Cost Reserve @ 1.0¢
- ✓ NGS Decommissioning @ 0.5¢

### Remaining tax years

- ✓ Extraordinary Cost Reserve remains @ 1.0¢
- ✓ Ag Consideration funded as needed
- ✓ Balance goes into working capital reserves (which causes the reserve to increase significantly)

## Key Assumptions (cont'd)

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Water Storage Tax held @ 4¢ through 2024 and 3¢ through 2026

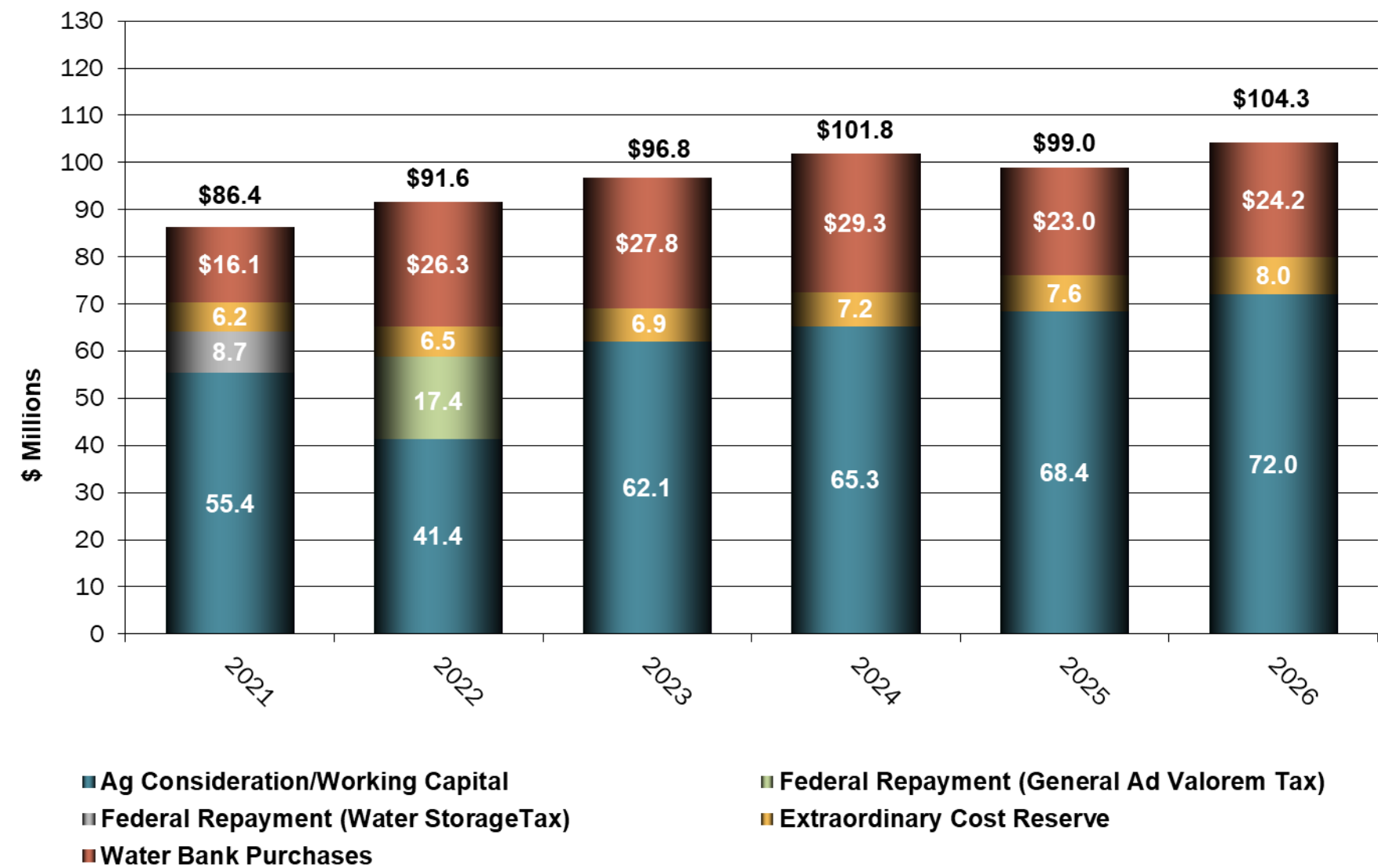
### 2020/2021 tax year

- ✓ Water Bank LTSC Purchases @ 2.5¢
- ✓ 2021 Federal Repayment @ 1.5¢

### Remaining tax years

- ✓ All is available for Water Bank LTSC Purchases

# Property Tax Usage



# Federal Repayment & Capital Charges

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## Federal Repayment

- ✓ Basin Development Fund net revenues are applied toward repayment first (Transmission sales, mill levy, land sales, etc.)
- ✓ Balance must be made up as a cash makeup payment
- ✓ Annually CAWCD Board determines if any taxes are to applied towards repayment
- ✓ Balance of cash makeup payment are made from capital charges
- ✓ Repayment increases \$6 million in 2021 from 2020 to \$59.5 million and then decreases ~\$1-\$1.5 million through 2026
- ✓ No future taxes beyond the current recommendation are included

## Capital Charges

- ✓ Paid on M&I allocations, regardless of water delivery
- ✓ Charged on all excess deliveries
- ✓ 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

(\$K) Capital Charge Sensitivity Analysis – Levels	2021	2022	2023	2024	2025	2026
Federal Repayment	\$59,477	\$58,145	\$56,813	\$57,833	\$56,417	\$55,002
Total Basin Development Fund Credit	(8,218)	(8,285)	(8,352)	(8,369)	(8,386)	(8,404)
Net Cash Payment	\$51,259	\$49,860	\$48,461	\$49,464	\$48,031	\$46,598
<u>Taxes Applied:</u>						
2019/20 – General Ad Valorem @ 1¢	(5,300)					
2020/21 – General Ad Valorem @ 3¢		(17,400)				
2020/21 – Water Storage @ 1.5¢	(8,700)					
Cash Needed from Capital Charges	\$37,259	\$32,460	\$48,461	\$49,464	\$48,031	\$46,598
Allocation* (acre feet) (Includes CAGRD Credits & Wheeled Water)	647,267	697,267	702,317	703,420	704,577	705,793
Capital Charge (\$ acre foot)	\$57	\$46	\$69	\$70	\$68	\$66

# Preliminary Capital Charges Compared to Previous Rate Case

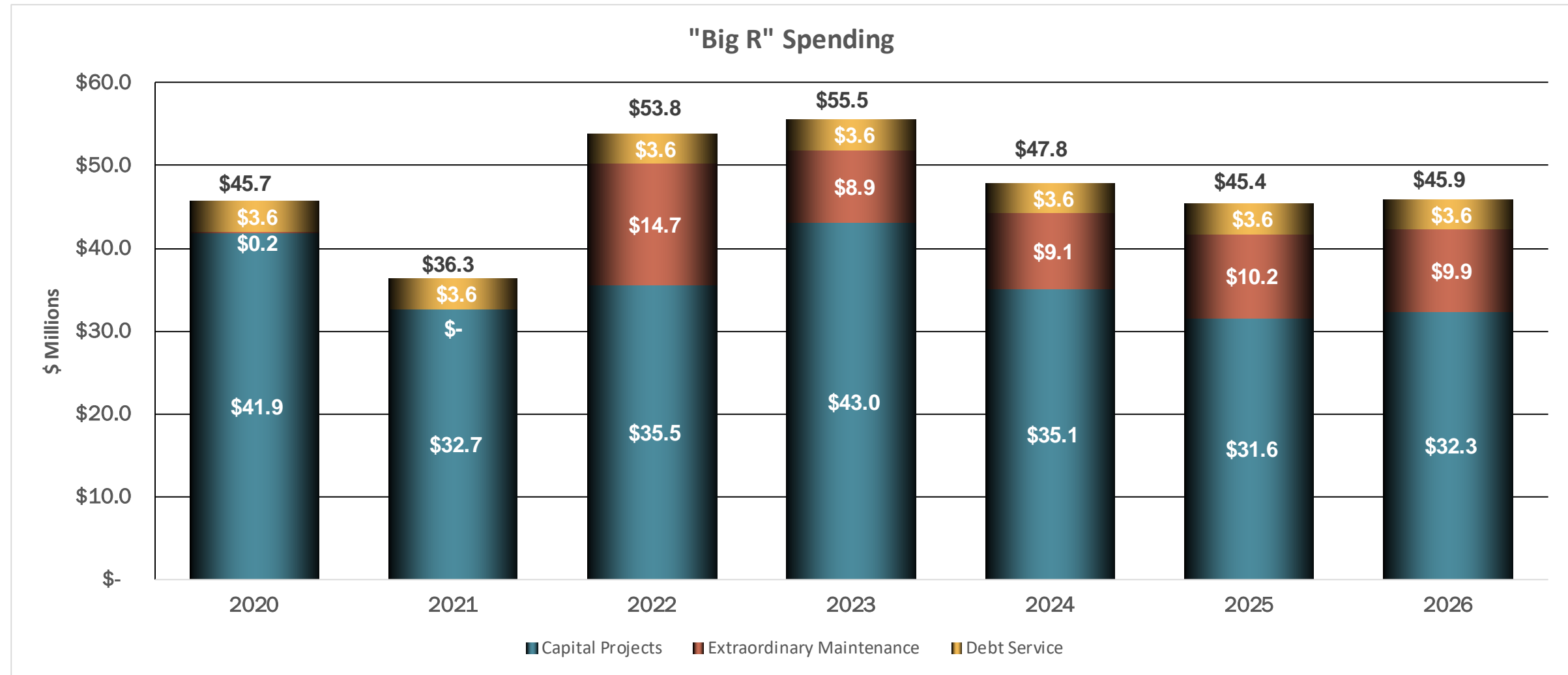
Capital Charge \$/AF	2021	2022	2023	2024	2025	2026
Without Taxes Applied to Repayment	\$79	\$71	\$69	\$70	\$68	\$66
2019/20 Taxes Already Applied to Repayment	(\$8)	-	-	-	-	-
2020 Rate Case Without 2020/21 Taxes Applied Toward Repayment	\$71	\$71	\$69	\$70	\$68	\$66
Recommended Rate With Proposed 2020/21 Taxes Applied Toward Repayment	\$57	\$46	\$69	\$70	\$68	\$66
Advisory Rate (2019)	66	71	68	70		
Change	(9)	(25)	1	-		

# Water Volumes

(KAF)	2021	2022	2023	2024	2025	2026
DCP Tier	Zero	Zero	Zero	Zero	Zero	Zero
M&I Subcontract	626	675	672	706	716	716
Federal Contract	582	582	582	606	606	606
Ag Settlement Pool	245	196	196	91	81	81
CAWCD Project Deliveries	1,453	1,453	1,450	1,403	1,403	1,403
Wheeled Water			4	4	4	4
CAGR credit transfers & Take or Pay	27	28	29	30	32	33
Billed Water Volumes	1,480	1,481	1,483	1,437	1,439	1,440

***No excess water anticipated in this period.***

# "Big R"



Increases in "Big R" from prior estimates are due to increased construction costs and increased extraordinary projects, mostly related to coatings and siphon repairs comprise the majority of extraordinary maintenance projects.

# Preliminary 2021-2026 Rate Components

Units = \$/acre-foot	Historic 2020	Firm 2021	Provisional 2022	Advisory			
				2023	2024	2025	2026
DCP Tier	Zero	Zero	Zero	Zero	Zero	Zero	Zero

## Capital Charges

(A) M&I – Long Term Subcontract	\$56	\$57	\$46	\$69	\$70	\$68	\$66
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## Delivery Charges

Fixed O&M	\$75	\$78	\$80	\$82	\$89	\$95	\$96
“Big R”	\$24	\$26	\$29	\$32	\$32	\$32	\$32
(B) Fixed OM&R	\$99	\$104	\$109	\$114	\$121	\$127	\$128
(C) Pumping Energy Rate	\$56	\$56	\$56	\$57	\$61	\$61	\$63
(D) Property Tax Equivalency	TBD	TBD	TBD	TBD	TBD	TBD	TBD

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# Preliminary 2021-2026 Rate Schedule

Units = \$/acre-foot The Letter Designations in the Formulas Refer to the Rate Components above	Historic 2020	Firm 2021	Provi- sional 2022	Advisory			
				2023	2024	2025	2026
<b>DCP Tier</b>	<b>Zero</b>	<b>Zero</b>	<b>Zero</b>	<b>Zero</b>	<b>Zero</b>	<b>Zero</b>	<b>Zero</b>
M&I Subcontract (B + C)	\$155	\$160	\$165	\$171	\$182	\$188	\$191
Federal Contract (B + C)	\$155	\$160	\$165	\$171	\$182	\$188	\$191
Ag Settlement Pool (C)	\$56	\$56	\$56	\$57	\$61	\$61	\$63
Excess (A + B + C)	\$211	\$217	\$211	\$240	\$252	\$256	\$257

# Preliminary Rates Compared to Previous Rate Case

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(\$/acre-foot) Tier 0	2021	2022
<b>Fixed O&amp;M:</b>		
Recommended	78	80
Advisory (2019)	79	80
Change	(1)	0
<b>“Big R”:</b>		
Recommended	26	29
Advisory (2019)	24	24
	2	5
<b>Energy:</b>		
Recommended	56	56
Advisory (2019)	57	57
	(1)	(1)

## Shortage Case Assumptions

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DCP Tier	Lake Mead Elevation	Reduction (AF)
Normal	>1090	-
Tier Zero	1090-1075	192,000
Tier 1	1075-1050	512,000
Tier 2a	1050-1045	592,000
Tier 2b	1045-1025	640,000
Tier 3	<1025	720,000

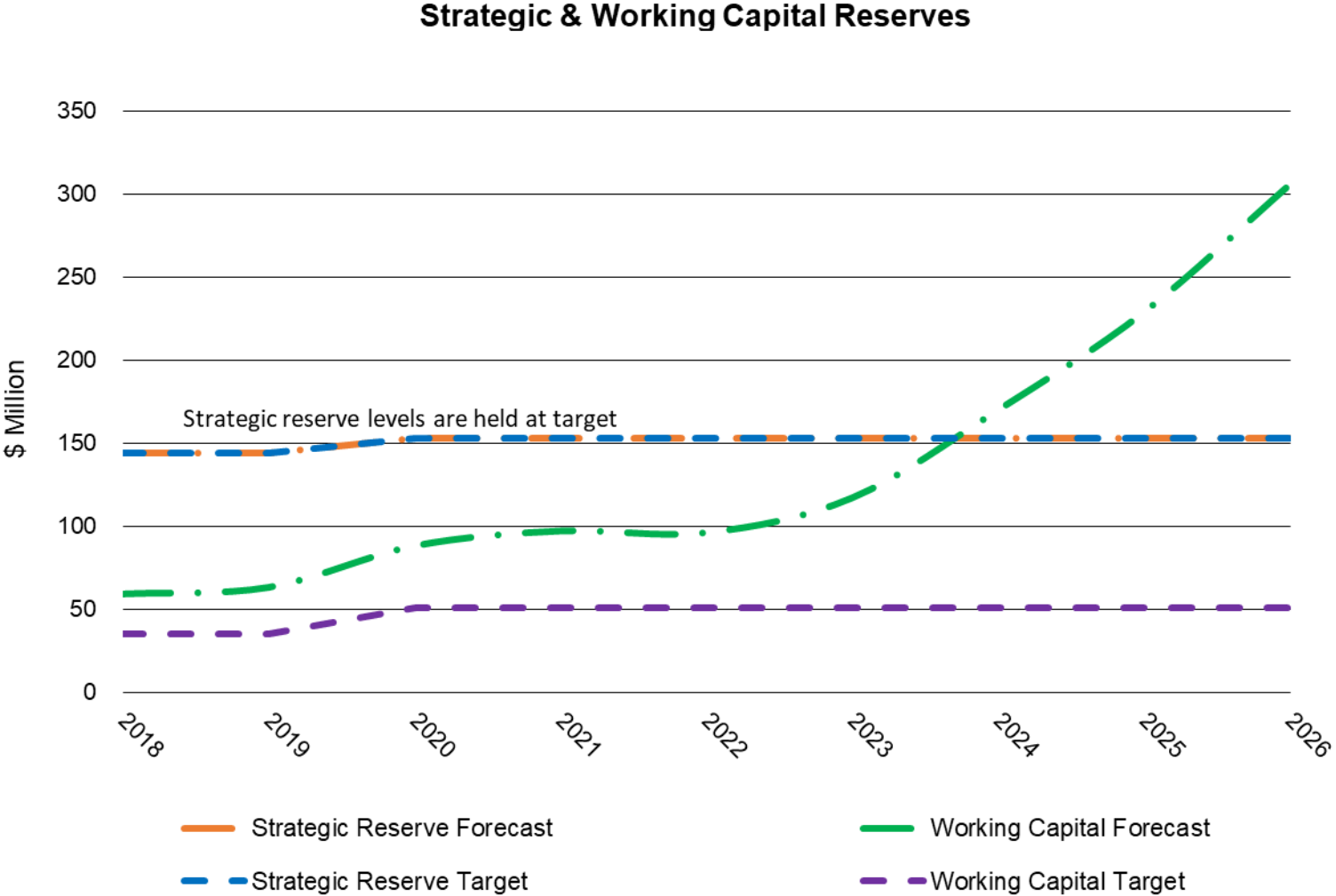
## Fixed OM&R Rate at DCP Tiers

- ✓ Excludes the impact of applying rate stabilization funds
- ✓ Following are the fixed OM&R Rate at the DCP tiers.
- ✓ The energy costs are assumed to be variable and therefore the Energy Rate remains unchanged

DCP Tier	2022	2023	2024	2025	2026
Normal	\$102	\$107	\$113	\$119	\$120
 Tier Zero	\$109	\$114	\$121	\$127	\$128
Tier 1	\$136	\$143	\$153	\$161	\$162
Tier 2a	\$146	\$152	\$165	\$173	\$174
Tier 2b	\$152	\$159	\$172	\$181	\$182
Tier 3	\$164	\$172	\$186	\$196	\$197


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# Strategic & Working Capital Reserves



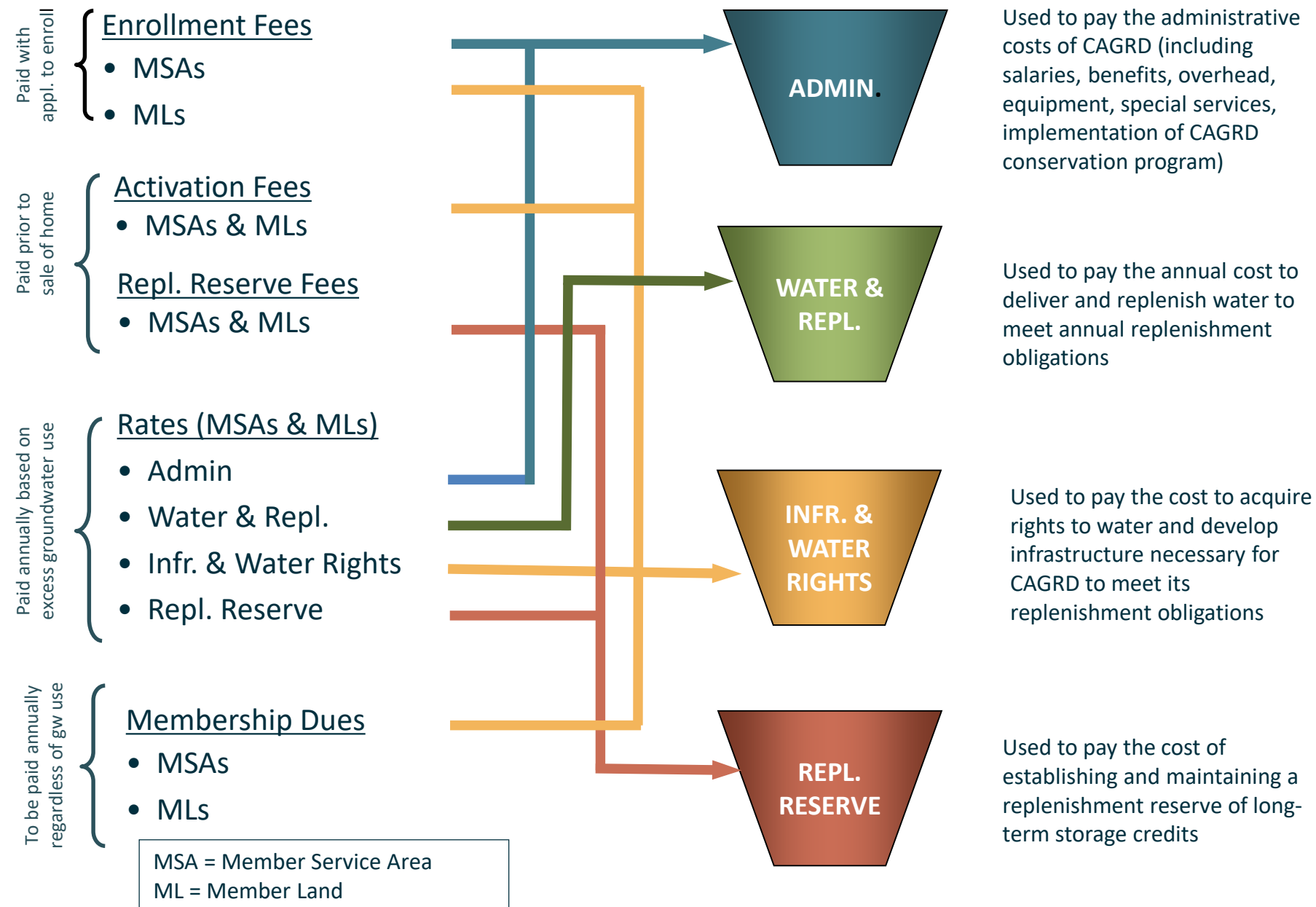
# Recharge Rates

	2021	2022	2023	2024	2025	2026
Rates (\$/af)	Firm	Prelim	Advisory	Advisory	Advisory	Advisory
<u>Recharge O&amp;M</u>						
Phoenix AMA	\$13	\$13	\$13	\$14	\$14	\$15
Tucson AMA	\$15	\$15	\$15	\$15	\$15	\$15
<u>Recharge Capital Charge</u>						
Phoenix AMA	\$15	\$15	\$15	\$15	\$15	\$15
Tucson AMA	\$9	\$9	\$9	\$9	\$9	\$9

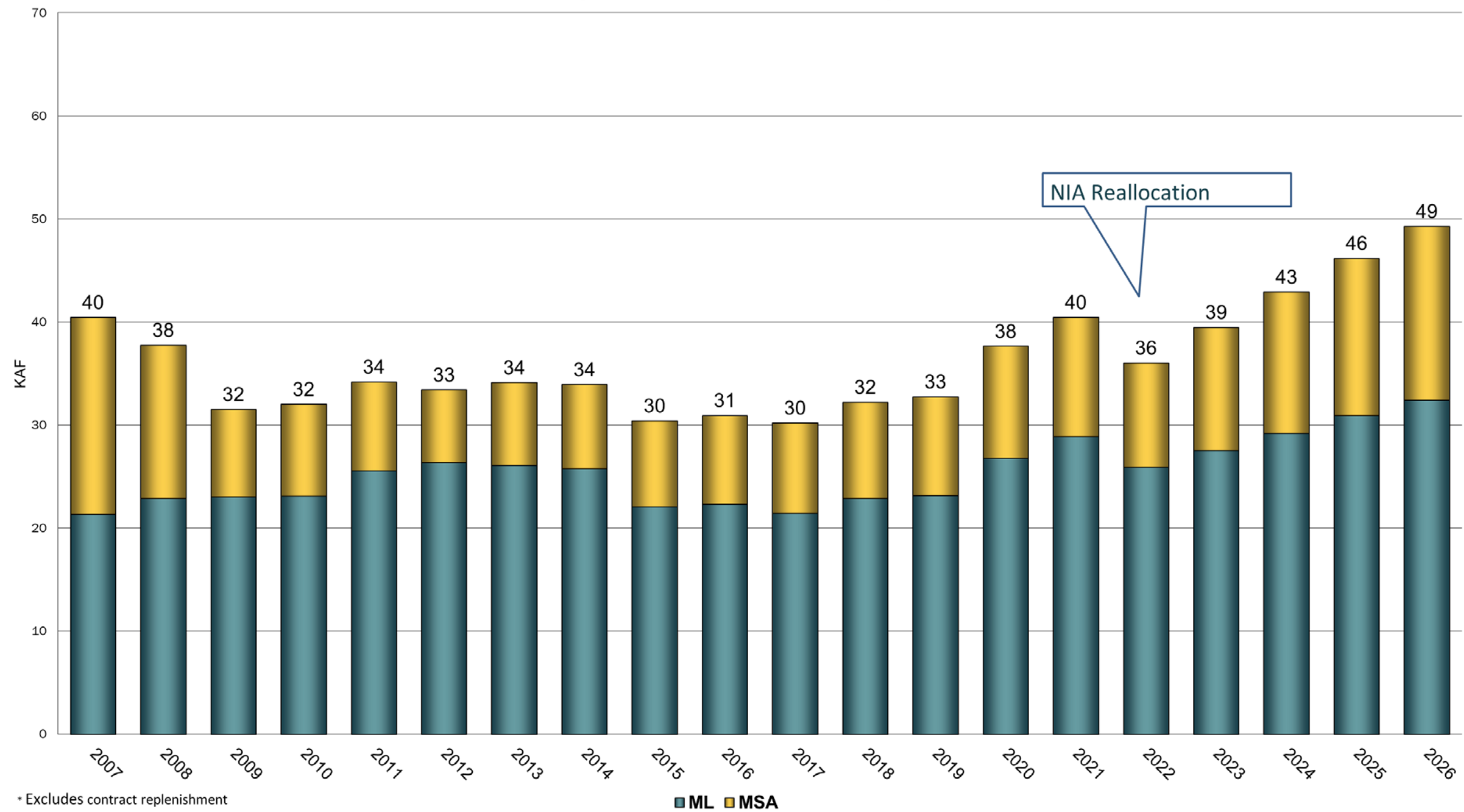


# Preliminary CAGR Assessment Rate Schedule 2020/21 thru 2025/26

# CAGRD Revenue Stream



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



# CAGRD Revised Methodology

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- ✓ All CAWCD M&I allocation water is purchased directly for replenishment from the Water & Replenishment (W&R) account (no change)
- ✓ All other W&R and Replenishment Reserve (RR) purchases are at a standard price
- ✓ The standard price is based on water delivery costs, capital charges, recharge O&M and Department of Water Resources losses/cut to the aquifer (no change)
- ✓ Water & Replenishment fulfills prior year's obligation in the current year
  - e.g. 2021 replenishment is obligation incurred from 2020
- ✓ Administrative rate component is based on the cost of administrative support to operate the CAGRD exclusive of any direct I&WR administrative costs and spread across the forecasted obligation less the contribution from enrollment fee (\$~300,000/year) (no change)

# CAGRD Assumptions

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- ✓ Obligations are lower than previous forecasts
- ✓ NIA reallocation occurring in 2021 will lower 2022 obligations
- ✓ No unusual administrative expenditures during rate period
- ✓ Will continue to contribute to the replenishment reserve at ~3% per year of the Plan of Operation target to stay at or above cumulative goal to demonstrate progress to the target
- ✓ 2022/2023 rates utilize full cost of capital charge without any assumption of tax application toward federal repayment; in the event taxes are applied in those future years, CAGRD rates would decrease proportionately
- ✓ Annual Membership Dues (AMDs) are set at the maximum allowed by state statute for all years
- ✓ Enrollment and activation fees are in alignment with the previous agreement in which Activation Fees increase at 9%/yr & Enrollment Fees and minimum Activation Fees increase at 7%/yr through 2023/2024

# CAGRD Results

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## Rates

- ✓ Administrative rate has increased due to decrease obligation projections
- ✓ Infrastructure & Water Right rate held level through period and meets current projected infrastructure and water right costs
- ✓ Replenishment Reserve rate increases based on standard price projections
- ✓ Water & Replenishment rate increases with standard price projections:
  - Phoenix AMA decreased from advisory rates
  - Pinal AMA increases in 2020/2021 from advisory rates based on needed revenue to meet replenishment needs
  - Tucson AMA decreased but fairly consistent with previous advisory rates

# CAGRD Results

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## Composite Rates

- ✓ All lower than previous advisory rate for 2020/21
- ✓ 2020/21 as compared to 2019/20
  - Phoenix AMA increases ~3%
  - Pinal AMA increases ~6%
  - Tucson AMA increases ~2%

## Fees

- ✓ No change from previous discussions

## Annual Membership Dues

- ✓ Lower than advisory rates based on lower obligation projections
- ✓ Lower projections decrease the total Infrastructure & Water Right collections and AMDs can be no more than 25% of total I&WR projected collection

# CAGRD Rates

	<u>2019/20</u>	<u>Firm</u> <u>2020/21</u>	<u>Prov</u> <u>2021/22</u>	<u>Advisory</u>			
				<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>
<b><u>Phoenix Active Management Area</u></b>							
Water & Replenishment Component <sup>1</sup>	\$ 238	\$ 243	\$ 229	\$ 257	\$ 270	\$ 275	\$ 277
Administrative Component <sup>2</sup>	41	47	50	49	48	46	44
Infrastructure & Water Rights Component <sup>3</sup>	353	353	353	353	353	353	353
Replenishment Reserve Charge <sup>4</sup>	95	104	101	114	120	121	122
Total Assessment Rate (\$/AF)	\$ 727	\$ 747	\$ 733	\$ 773	\$ 791	\$ 795	\$ 796
<b><u>Pinal Active Management Area</u></b>							
Water & Replenishment Component <sup>1</sup>	\$ 211	\$ 247	\$ 240	\$ 271	\$ 284	\$ 288	\$ 289
Administrative Component <sup>2</sup>	41	47	50	49	48	46	44
Infrastructure & Water Rights Component <sup>3</sup>	353	353	353	353	353	353	353
Replenishment Reserve Charge <sup>4</sup>	103	104	101	114	120	121	122
Total Assessment Rate (\$/AF)	\$ 708	\$ 751	\$ 744	\$ 787	\$ 805	\$ 808	\$ 808
<b><u>Tucson Active Management Area</u></b>							
Water & Replenishment Component <sup>1</sup>	\$ 242	\$ 247	\$ 240	\$ 271	\$ 284	\$ 288	\$ 289
Administrative Component <sup>2</sup>	41	47	50	49	48	46	44
Infrastructure & Water Rights Component <sup>3</sup>	353	353	353	353	353	353	353
Replenishment Reserve Charge <sup>4</sup>	102	104	101	114	120	121	122
Total Assessment Rate (\$/AF)	\$ 738	\$ 751	\$ 744	\$ 787	\$ 805	\$ 808	\$ 808

# CAGRD Rates (cont'd)

	<u>2019/20</u>	<u>Firm</u> <u>2020/21</u>	<u>Prov</u> <u>2021/22</u>	<u>Advisory</u>			
				<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>
<b><u>Contract Replenishment Tax - Scottsdale</u></b> <sup>5</sup>							
Cost of Water	\$ 199	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cost of Transportation	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cost of Replenishment	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Administrative Component <sup>2</sup>	41	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Tax Rate (\$/AF)	\$ 240	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Enrollment Fee - Commercial Subdivisions</b> <sup>6</sup>	\$ 1,094	<b>\$ 1,184</b>	<b>\$ 1,205</b>	\$ 1,307	\$ 1,422	TBD	TBD
<b>Enrollment Fee</b> <sup>7</sup>	\$ 284	<b>\$ 304</b>	<b>\$ 325</b>	\$ 347	\$ 372	TBD	TBD
<b>Activation Fee - Minimum</b> <sup>8</sup>	\$ 282	<b>\$ 302</b>	<b>\$ 323</b>	\$ 345	\$ 369	TBD	TBD
<b>Activation Fee - Phoenix AMA</b> <sup>8</sup>	\$ 1,080	<b>\$ 1,180</b>	<b>\$ 1,290</b>	\$ 1,400	\$ 1,520	TBD	TBD
<b>Activation Fee - Pinal Post-2007</b> <sup>8</sup>	\$ 1,080	<b>\$ 1,180</b>	<b>\$ 1,290</b>	\$ 1,400	\$ 1,520	TBD	TBD
<b>Activation Fee - Tucson AMA</b> <sup>8</sup>	\$ 810	<b>\$ 880</b>	<b>\$ 880</b>	\$ 960	\$ 1,050	TBD	TBD
<b><u>Member Land Annual Membership Dues (\$/Lot)</u></b> <sup>9</sup>							
Phoenix Active Management Area	\$ 28.59	<b>\$ 25.78</b>	<b>\$ 27.79</b>	\$ 27.61	\$ 30.00	\$ 31.50	\$ 32.71
Pinal Active Management Area	\$ 19.36	<b>\$ 18.65</b>	<b>\$ 20.62</b>	\$ 21.03	\$ 23.46	\$ 25.29	\$ 26.96
Tucson Active Management Area	\$ 31.04	<b>\$ 29.24</b>	<b>\$ 31.72</b>	\$ 31.72	\$ 34.69	\$ 34.69	\$ 38.31
<b><u>Member Service Area Annual Membership Dues (\$/AF)</u></b> <sup>9</sup>	\$ 97.22	<b>\$ 93.73</b>	<b>\$104.22</b>	\$ 106.91	\$ 120.03	\$ 130.27	\$ 139.80

# CAGRD Rates (cont'd)

## Shortage Rates - for planning purposes

*All other rates remain the same*

*Excludes any rate stabilization*

### **Water & Replenishment Component**

		Provisional	Advisory			
		<u>2021/22</u>	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>
Phoenix AMA	Normal	\$ 222	\$ 250	\$ 262	\$ 267	\$ 269
Phoenix AMA	Tier Zero	\$ 229	\$ 257	\$ 270	\$ 275	\$ 277
Phoenix AMA	Tier 1	\$ 256	\$ 286	\$ 302	\$ 309	\$ 311
Phoenix AMA	Tier 2a	\$ 266	\$ 295	\$ 314	\$ 321	\$ 322
Phoenix AMA	Tier 2b	\$ 272	\$ 302	\$ 321	\$ 329	\$ 331
Phoenix AMA	Tier 3	\$ 284	\$ 315	\$ 335	\$ 344	\$ 346

### **Replenishment Reserve Charge**

Phoenix AMA	Normal	\$ 98	\$ 111	\$ 117	\$ 118	\$ 119
Phoenix AMA	Tier Zero	\$ 101	\$ 114	\$ 120	\$ 121	\$ 122
Phoenix AMA	Tier 1	\$ 112	\$ 126	\$ 133	\$ 135	\$ 136
Phoenix AMA	Tier 2a	\$ 117	\$ 130	\$ 138	\$ 140	\$ 141
Phoenix AMA	Tier 2b	\$ 119	\$ 133	\$ 141	\$ 144	\$ 145
Phoenix AMA	Tier 3	\$ 124	\$ 138	\$ 147	\$ 150	\$ 151

For planning purposes only

# CAGRD Rates (cont'd)

## Shortage Rates - for planning purposes

<b>Water &amp; Replenishment Component</b>		Provisional	Advisory				
		<u>2021/22</u>	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	
Pinal AMA	Normal	\$ 233	\$ 264	\$ 276	\$ 280	\$ 281	
Pinal AMA	Tier Zero	\$ 240	\$ 271	\$ 284	\$ 288	\$ 289	
Pinal AMA	Tier 1	\$ 267	\$ 300	\$ 316	\$ 322	\$ 323	
Pinal AMA	Tier 2a	\$ 277	\$ 309	\$ 328	\$ 334	\$ 334	
Pinal AMA	Tier 2b	\$ 283	\$ 316	\$ 335	\$ 342	\$ 343	
Pinal AMA	Tier 3	\$ 295	\$ 329	\$ 349	\$ 357	\$ 358	
<b>Replenishment Reserve Charge</b>							
Pinal AMA	Normal	\$ 98	\$ 111	\$ 117	\$ 118	\$ 119	
Pinal AMA	Tier Zero	\$ 101	\$ 114	\$ 120	\$ 121	\$ 122	
Pinal AMA	Tier 1	\$ 112	\$ 126	\$ 133	\$ 135	\$ 136	
Pinal AMA	Tier 2a	\$ 117	\$ 130	\$ 138	\$ 140	\$ 141	
Pinal AMA	Tier 2b	\$ 119	\$ 133	\$ 141	\$ 144	\$ 145	
Pinal AMA	Tier 3	\$ 124	\$ 138	\$ 147	\$ 150	\$ 151	

For planning purposes only

# CAGRD Rates (cont'd)

## Shortage Rates - for planning purposes

Water & Replenishment Component		Provisional	Advisory				
		2021/22	2022/23	2023/24	2024/25	2025/26	
Tucson AMA	Normal	\$ 233	\$ 264	\$ 276	\$ 280	\$ 281	
Tucson AMA	Tier Zero	\$ 240	\$ 271	\$ 284	\$ 288	\$ 289	
Tucson AMA	Tier 1	\$ 267	\$ 300	\$ 316	\$ 322	\$ 323	
Tucson AMA	Tier 2a	\$ 277	\$ 309	\$ 328	\$ 334	\$ 334	
Tucson AMA	Tier 2b	\$ 283	\$ 316	\$ 335	\$ 342	\$ 343	
Tucson AMA	Tier 3	\$ 295	\$ 329	\$ 349	\$ 357	\$ 358	
Replenishment Reserve Charge							
Tucson AMA	Normal	\$ 98	\$ 111	\$ 117	\$ 118	\$ 119	
Tucson AMA	Tier Zero	\$ 101	\$ 114	\$ 120	\$ 121	\$ 122	
Tucson AMA	Tier 1	\$ 112	\$ 126	\$ 133	\$ 135	\$ 136	
Tucson AMA	Tier 2a	\$ 117	\$ 130	\$ 138	\$ 140	\$ 141	
Tucson AMA	Tier 2b	\$ 119	\$ 133	\$ 141	\$ 144	\$ 145	
Tucson AMA	Tier 3	\$ 124	\$ 138	\$ 147	\$ 150	\$ 151	

For planning purposes only