



### Citizens' Water Advisory Committee (CWAC) Agenda

July 13, 2021, 6:00 p.m.

AMC 15151 E Alameda Pkwy – Aspen Conference Room 2<sup>nd</sup> Floor

WebEx Link:

<https://auroragov.webex.com/auroragov/j.php?MTID=m8ab81ecdb995f6f3ec185516480d2f1a>

Public Participation through call in number (listen only)

720-650-7664

Access code: 146 245 5086

Members: Janet Marlow - Chair, Angie Binder -Vice Chair, Jay Campbell, Tom Coker, Brandy DeLange, Richard Eason, William Gondrez, David Patterson, Mike Spatter

1.	Approval of Minutes – June 8, 2021	Chair	6:00 p.m.
2.	Introductions/Public Invited to be Heard	Chair	6:05 p.m.
3.	New/Old Business	Chair	6:10 p.m.
4.	Communications Update	Greg Baker	6:15 p.m.
5.	2021 State Legislative Update	Kathy Kitzmann	6:20 p.m.
6.	Aurora Water Virtual Water Tour demonstration	Joshua Godwin	6:40 p.m.
7.	2022 Proposed Operating and Capital Improvement Program Budget	Jo Ann Giddings	6:55 p.m.
8.	2022 Proposed Rate and Fee Changes	Fernando Aranda Perozo	7:15 p.m.
9.	Water Tour participation discussion	Chair	7:40 p.m.
10.	Water Policy Committee Quarterly Report discussion	Chair	7:45 p.m.
11.	Review Follow-Up Questions Generated at this Meeting	Chair	7:50 p.m.
12.	Confirm Next Meeting – Tuesday, August 10, 2021	Chair	7:55 p.m.
13.	Adjourn	Chair	8:00 p.m.

**Aurora Water was ranked #1 in Customer Satisfaction with Midsize Water Utilities in the West of the J.D. Power 2021 Water Utility Residential Customer Satisfaction Study.**

For J.D. Power 2021 award information, visit [jdpower.com/awards](http://jdpower.com/awards) for more details.



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CITIZENS’ WATER ADVISORY COMMITTEE (CWAC) MINUTES

June 8, 2021, 6:00 p.m.

Water-wise Garden, AMC 15151 E Alameda Pkwy

*In the event of inclement weather:*

Webex

Public Participation through call in number (listen only)

1-720-650-7664

Access code: 187 416-6886

Members Present: Janet Marlow (Chair), Angie Binder (Vice-Chair), Richard Eason, William Gondrez, Mike Spatter

Absent: Jay Campbell, Tom Coker, David Patterson, Brandy DeLange

Staff Present: Marshall Brown, Rory Franklin, Tim York, Adam Waters, Sarah Young, Kelly Bish, Carol Zsako, Jessica Roode

Visitors Present: None

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The meeting was called to order at 6:01 p.m.

**1. Tour – Water-wise Garden**

A. Waters provided a walking tour of the Aurora Water-wise Garden which is located on the northwest corner of E. Alameda Parkway and S. Chambers Road. Begun in 2002, the garden covers six acres of land and serves as an example of low-water landscaping, plants, and techniques for the public. From the use of reclaimed water for irrigation and clearly labeled signage discussing the seven principles of water-wise landscaping and the plants utilized in the garden, audiences are afforded the opportunity to actively participate and learn about xeriscaping. In addition, the Aurora Water-wise garden is also host to free water-wise classes which are held annually by Water Conservation staff.

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**2. Approval of Minutes – May 11, 2021**

The May 11, 2021 minutes were approved.

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**3. Introductions/Public Invited to be Heard**

There were no members of the public present for the meeting.

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**4. New/Old Business**

There was none.

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## 5. Communications Update

R. Franklin advised that the federally mandated water quality report from mid-May has been posted. The report provides important information about water quality, as well as outlining the sources of Aurora's water supply. The report details any chemicals, minerals and other byproducts that may be found in the City's water resources.

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## 6. Proposed Aurora Water Course

Per R. Franklin, in 2015 the State of Colorado launched the Colorado Water plan as a framework for solutions for the state's water challenges. The plan was then adopted by the Colorado Water Conservation Board. One of the main components of this plan is the State Water Education and Action Plan (SWEAP), which aims to achieve a sustainable water future by engaging and promoting well-informed community discussions about water solutions. To this end a new Aurora Water Course, conducted by Water Resources and Public Affairs staff members, has been proposed to introduce Aurora residents to the city's water system and key concepts about water conservation.

The prospective class would take place on a single evening during a currently unspecified date in July and would assist in encouraging participants' abilities to engage in well informed and water literate discourse. Prior to participating in the evening, attendees would be asked to watch the Virtual Water Tour and complete a quiz with a passing grade of 80%. Those who complete the course and achieve the passing grade, will have their names added to the top of the list for participating in the annual two-day water tour which is held by Aurora Water staff. Participants in this tour include, the Mayor, City Council and management, legislators and staff, important Aurora Water stakeholders and residents of the city of Aurora.

A. Binder asked, Is the course just one night?

R. Franklin a responded, Yes. It will be just one night, but we are still deciding when that will be, sometime in July. And probably just from 6-8 p.m. Depending upon how it goes, they will see about offering it later.

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## 7. Future Conservation Efforts Discussion

M. Brown provided an overview of Aurora Water's continuing efforts to establish and maintain the city's water supply, noting that water is going to continue to become increasingly more precious, expensive, and challenging for communities in the West. He advised that initially, the cost of building and maintaining the various pumps, reservoirs, and systems were offset by income sources such as tap fees that were based upon the size of the meter that was purchased by the customer. Since that time and with continued efforts to increase water conservation, steps have been taken to minimize the impact of the city's use of its water supply.

For example, tap fees were replaced with a volumetrically based tier system which minimizes the costs for small water users and increases as a customer's volumetric rate grows. K. Bish advised,

that new construction builder restrictions have been put into place that restrict the use of sod by requiring at least 400 contiguous square feet be laid for a developer to receive permission to use the turf. If the size falls below that requirement, sod is not allowed and builders can apply for rebate for the xeriscape that is installed in place of sod. Per M. Brown, Aurora Water is also working, in cooperation with Aurora Water Planning, and Parks, Recreation & Open Space (PROS), to implement zoning code changes for the city which restrict turf such as Kentucky bluegrass from being planted in areas such as medians. Per T. York, current projects that are in the works include a survey and analysis by PROS of areas of aesthetic turf in public spaces that may be replaced with water efficient plants and landscaping. From those projects, a five to ten-year development and implementation plan is being created. A. Waters advised that, so far, two locations that have been identified which include a site Airport Rd and I-70 and one at I-225 and Alameda Ave that are five to six acres a piece.

With these examples in mind, M. Brown requested the committee's assistance with generating additional methods to approaching water conservation for the City.

R. Eason asked, Are you looking to expand the reach of the reclaimed water system at all?

M. Brown responded, Good question, we are looking at a few options there. When we created the reclaimed system at Sand Creek, we did not have a Prairie Waters system, so we had no ability to use that water anywhere. With Sand Creek, we have two choices: we can expand it for irrigation or that same water supply could go to the Binney plant and we can turn it into a potable supply. However, if the Sand Creek facility is tied into the potable system, then that water would not be available for irrigation.

W. Gondrez asked, Two questions, why does the City allow businesses to sell Kentucky sod? If we allow customers to purchase the sod from retailers and it is on one the primary consumers of our water, it defeats the purpose of water conservation. And where does the idea of pumping in water from areas such as the Great Lakes, the Mississippi and Columbia rivers sit as a possible water solution?

M. Brown responded, The concept of moving water from the East to the West has been in circulation for about thirty years or more. A few attempts have been made over the years, but legal impediments, private sector lobbying and a withdrawal of federal funding and support has derailed the efforts. Then the other question, we probably would not have to prohibit its sale if we prohibit its installation. More realistically, we are approaching the issue incrementally by not allowing the sod to be installed it in medians, most tree lawn applications, and then identifying situations where the sod makes the least sense and restricting it use in those instances.

R. Eason asked, The City of Aurora already requires a permit for installation, correct?

M. Brown advised, Yes.

W. Gondrez commented, That does not necessarily mean they obtain a permit before installing the sod because its available at retailers. If our municipality moved on the issue, other surrounding municipalities would follow suit.

J. Marlow stated, We would have to get a consensus, we would have to get them all to agree.

**8. Review Follow-Up Questions Generated at this Meeting**

There were none.

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**9. Confirm Next Meeting – Tuesday, July 13, 2021**

J. Marlow confirmed the next committee meeting date with the CWAC members.

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**10. Adjourn**

The meeting was adjourned at 7:37 p.m.

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Janet Marlow, Chair  
Citizens' Water Advisory Committee

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Submitted by Jessica Roode  
Administrative Specialist, Aurora Water

Adopted: \_\_\_\_\_

# MEMORANDUM



City of Aurora

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**To:** Citizens' Water Advisory Committee

**Through:** Marshall P. Brown, General Manager, Aurora Water  
Alex Davis, Deputy Director of Water Resources

**From:** Kathy Kitzmann, Water Resources Principal

**Date:** July 13, 2021

**Subject:** State Legislative Update

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The purpose of this memo is to provide an update on 2021 State legislative efforts by Aurora Water. The first regular session of the 73rd Colorado General Assembly convened on January 13<sup>th</sup> for three days before temporarily adjourning due to the ongoing COVID-19 pandemic. The legislature reconvened on February 16<sup>th</sup>, introduced a total of 623 bills, and adjourned on June 8<sup>th</sup>. Aurora Water tracked 60 bills, two resolutions, and one draft bill of interest.

Aurora Water supported 22 bills and one joint resolution that were beneficial to protect, maintain, and develop Aurora's water, sewer, and storm water systems for today and the future. Of these 23 (bills & resolution), 19 have passed, one is awaiting the Governor's signature, and only 3 failed. Aurora Water opposed one introduced bill and opposed one draft bill with both bills failing. The remaining 37 bills and one resolution were monitored for potential amendments and passage. Following are a few highlighted bills:

[HB21-1046](#) *Water Share Right Mutual Ditch Corporation*. Aurora Water was in strong support HB21-1046 that was refined from last session and easily passed this session after numerous stakeholder discussions and revisions. The bill ends long standing disagreements and confirms that a mutual ditch may continue to operate using historical ditch operations. The bill specifically confirms that if a water court decree authorizing a change in use contains volumetric limits, those volumetric limits only count against the changed stockholder's volumetric limit. The bill also confirms that a mutual ditch company may deliver water to only water-requesting stockholders in rates of flow greater or less than a shareholders prorata share if consistent with requests and availability of supply. The bill was signed into law on May 20, 2021.

[SB21-034](#) *Water Resource Financing Enterprise*. Aurora Water was in strong opposition to SB21-034 which was revised from a similar bill last session. The bill would have created a Water Resources Financing Enterprise conditioned on voter approval. The Water Resources Financing Enterprise would have collected fees from public water supply systems, such as Aurora Water, to finance water projects across the state through grants and loans. The bill was postponed indefinitely early in the session on March 11, 2021.

[CDPHE](#) *draft Establish State Dredge & Fill Permit Program*. Along with a large coalition, Aurora Water opposed Colorado Department of Public Health and Environment's (CDPHE) continuing effort to authorize a new regulatory program related to federal Clean Water Act permitting. The federal definition of

“Waters of the United States” (WOTUS) is evolving and specifies which waters and wetlands would need federal permits for dredge & fill activities. The previous federal administration finalized the 2020 WOTUS rule to alter and clarify regulatory definitions. CDPHE is concerned about “gap waters” which are defined as waters that were federally covered under the previous 2008 WOTUS guidance but are not covered under the new 2020 WOTUS Rule. During the last few weeks of the 2020 legislative session, CDPHE proposed an *Establish State Dredge & Fill Permit Program* bill with the intention to permit activities in “gap waters”. The 2020 proposal was very controversial and failed. There was an attempt to refine the draft legislation for 2021 through a stakeholder process. Although CDPHE held stakeholder meetings, little progress was made on consensus before or during the 2021 session. CDPHE’s draft 2021 legislation still suffered from lack of clarity or certainty for the regulated community along with a large cost associated to implement the proposed gap waters dredge & fill permit program. Last month, the current federal administration announced their intent to revise the WOTUS definition which may reduce or eliminate state “gap waters”. However, the finalization of a new federal WOTUS rule may take several years. Aurora Water will continue to participate in post-session stakeholder groups for any draft legislation refinements for the 2022 session.

The second regular session of the 73<sup>rd</sup> Colorado General Assembly is scheduled to convene on January 12, 2022.

Attachment: 2021 Aurora Water Colorado Legislation Tracking Spreadsheet



# MEMORANDUM



City of Aurora

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**To:** Citizens' Water Advisory Committee

**Through:** Marshall P. Brown, General Manager of Aurora Water  
Alexandra Davis, Deputy Director of Water Resources  
Richard Vidmar, Water Resources Principal  
Kathleen Kitzmann, Water Resource Principal

**From:** Joshua Godwin, Geohydrologist

**Date:** June 29, 2021

**Subject:** Aurora Water Virtual Water Tour

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**Purpose:**

The extent of Aurora Water's water rights and infrastructure reaches far outside of the City's borders. The department operates in three river basins within the state. (Arkansas, Colorado, and South Platte). This large area provides Aurora with a very diversified water supply portfolio. At times, this can draw questions from legislators and other political leaders from these and other parts of the state on why Aurora may be interested in legislation and events hundreds of miles from its borders.

The idea of the Virtual Water Tour (VWT) was developed to better explain the size and scope of Aurora Water's system in more than words: to provide a visual explanation of how expansive our system is and how Aurora moves water, at a high-level scale. This VWT is the first of its kind and while the original intent of the VWT was to help educate state legislators, the tour was developed with all in mind.

To provide a narrative illustration that's as flexible and diverse as our system, the VWT team decided that ESRI's StoryMaps platform provided the adaptability needed to adequately tell our story. With StoryMaps, the team was able to include navigable maps, slideshows, and videos at any point in the tour.

The VWT Team consisted of Greg Baker, Rory Franklin, Kevin Brenninkmeijer, Erin Cortney, Lyle Whitney, and Joshua Godwin. Additional help and input were provided from many others across the department.

This presentation will take the CWAC members on the VWT.

Link to the VWT: <https://storymaps.arcgis.com/collections/245f2bb7556a408fb24fd02842415b73>

**Action Required:**

No action at this time is required. This presentation is purely informative in nature.

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## 2021 Aurora Water State Legislative Tracking Spreadsheet

BILL NUMBER	BILL TITLE	<a href="#">AURORA WATER</a>
<a href="#">Draft CDPHE</a>	Gap Waters Dredge & Fill Permit Program	Oppose
<a href="#">HB21-1008</a>	Forest Health Project Financing	Support if Asked
<a href="#">HB21-1025</a>	Nonsubstantive Emails and Open Meetings Law	Actively Support
<a href="#">HB21-1032</a>	Local Government Authority Statewide Disaster Declarations	Monitor
<a href="#">HB21-1037</a>	Limit Designated Lands Gray Wolf Reintroduction	Monitor
<a href="#">HB21-1040</a>	General Fund Money for Reintroduction of Wolves	Monitor
<a href="#">HB21-1042</a>	Water Storage Tanks Grant Program	Support if Asked
<a href="#">HB21-1043</a>	Study Underground Water Storage Max Beneficial Use	Support if Asked
<a href="#">HB21-1046</a>	Water Share Right Mutual Ditch Corporation	Actively Support
<a href="#">HB21-1052</a>	Define Pumped Hydroelectricity as Renewable Energy	Support if Asked
<a href="#">HB21-1095</a>	811 Locate Exemption for County Road Maintenance	Monitor
<a href="#">HB21-1100</a>	Electronic Filing of Documents with Governmental Entities	Monitor
<a href="#">HB21-1105</a>	Low Income Utility Payment Assistance Contributions	Monitor
<a href="#">HB21-1111</a>	Consent Collection Personal Information	Monitor
<a href="#">HB21-1118</a>	Backcountry Search and Rescue in Colorado	Monitor
<a href="#">HB21-1180</a>	Measures to Increase Biomass Utilization	Monitor
<a href="#">HB21-1181</a>	Agricultural Soil Health Program	Monitor
<a href="#">HB21-1189</a>	Regulate Air Toxics	Monitor
<a href="#">HB21-1208</a>	Natural Disaster Mitigation Enterprise	Monitor
<a href="#">HB21-1223</a>	Create Outdoor Recreation Industry Office	Monitor
<a href="#">HB21-1226</a>	ANS Check Stations	Support if Asked
<a href="#">HB21-1229</a>	HOA Governance (Section 3 artificial turf)	Support if Asked (Section 3 only)
<a href="#">HB21-1233</a>	Conservation Easement Tax Credit Modifications	Monitor
<a href="#">HB21-1242</a>	Create Ag Drought & Climate Resilience Office	Monitor
<a href="#">HB21-1243</a>	Wolf Reintroduction Funding with No License Fees	Monitor
<a href="#">HB21-1253</a>	Renewable & Clean Energy Project Grants	Support if Asked
<a href="#">HB21-1260</a>	General Fund transfer Implment State Water Plan	Support if Asked
<a href="#">HB21-1261</a>	Beetle Kill Wood Sales Tax Exemption	Support if Asked
<a href="#">HB21-1266</a>	Environmental Justice	Monitor
<a href="#">HB21-1268</a>	Study Emerging Technologies for Water Management	Support if Asked
<a href="#">HB21-1286</a>	Energy Performance for Buildings	Monitor
<a href="#">HB21-1303</a>	Global Warming Potential Public Project Materials	Monitor
<a href="#">HB21-1318</a>	Outdoor Equity Grant Program	Monitor
<a href="#">HB21-1326</a>	General Fund Transfer Support DNR Programs	Monitor
<a href="#">HJR21-1002</a>	Water Projects Eligibility List	Support if Asked
<a href="#">SB21-012</a>	Former Inmate with Fire Service Experience	Monitor
<a href="#">SB21-028</a>	Promulgation of Public Health Rules & Orders	Monitor
<a href="#">SB21-034</a>	Water Resource Financing Enterprise	Actively Oppose
<a href="#">SB21-054</a>	Transfers for Wildfire Mitigation	Support if Asked
<a href="#">SB21-087</a>	Agricultural Workers' Rights	Monitor
<a href="#">SB21-105</a>	Implement & Finance Gray Wolf Reintroduction	Monitor
<a href="#">SB21-113</a>	Firefighting Aircraft Wildfire Management & Response	Support if Asked
<a href="#">SB21-136</a>	Sunset Forest Health Adviosry Council	Support if Asked

## 2021 Aurora Water State Legislative Tracking Spreadsheet

<a href="#">SB21-163</a>	Cost Benefit Analysis Rules Addnl Requiremnts	Support if Asked
<a href="#">SB21-164</a>	Uniform Easement Relocation Act	Monitor
<a href="#">SB21-166</a>	CO Fire Commn Recommendations	Support if Asked
<a href="#">SB21-170</a>	Wildland Fire Mitigation Cooperative Elec Assn	Monitor
<a href="#">SB21-189</a>	CWCB Construction Fund Project	Support if Asked
<a href="#">SB21-190</a>	Personal Data Privacy	Monitor
<a href="#">SB21-200</a>	Reduce Greenhouse Gas Emissions	Monitor
<a href="#">SB21-220</a>	Reverse Transfers from Sev Tax Operation Fund	Support if Asked
<a href="#">SB21-221</a>	Wildfire Risk Mitigation Grant Program	Monitor
<a href="#">SB21-225</a>	Repay Cash Funds for 2020 Transfers	Monitor
<a href="#">SB21-237</a>	Create Forest Health Council in DNR	Support if Asked
<a href="#">SB21-240</a>	Watershed Restoration Grant Program Stimulus	Support if Asked
<a href="#">SB21-243</a>	CDPHE Appropriation Public Health Infrastructure	Monitor
<a href="#">SB21-245</a>	Back Country Search & Rescue	Monitor
<a href="#">SB21-248</a>	Loan Program for Colorado Agriculture	Monitor
<a href="#">SB21-258</a>	Wildfire Risk Mitigation	Support if Asked
<a href="#">SB21-261</a>	Encourage Renewable Energy Generation	Monitor
<a href="#">SB21-262</a>	Special District Transparency	Monitor
<a href="#">SB21-281</a>	State Severane Tax Trust Fund Allocation	Monitor
<a href="#">SJR21-021</a>	Wildlife Habitat Connectivity Interim Committee	Monitor
	Passed, Governor Signed	
	Passed, Awaiting Signature	
	Failed, Postponed Indefinetly	

# Memorandum



City of Aurora

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**To: Citizens' Water Advisory Committee**

**From: Marshall P. Brown, General Manager, Aurora Water**  
**Jo Ann Giddings, Deputy Director Water Financial Administration**

**Date: July 13, 2021**

**Subject: 2022 Proposed Budget**

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## Summary

This memorandum reflects Aurora Water's 2022 proposed operating and 2022-2026 capital improvement budgets. The budget is a planning tool used to project what activities will be performed and what capital projects will be completed during the year, and their impact on the financial status of the enterprise funds. The 2022 revenue assumptions, 2022 service fees, 2022 proposed operating costs, 2022-2026 Capital Improvement Program, and changes in funds available for the Water and Wastewater Funds are presented for discussion. All figures are preliminary pending final budget recommendations from City Management.

Key dates for review of the 2022 proposed budget are as follows:

- July 13 Citizens' Water Advisory Committee
- September 14 City Manager, Appointees and staff present to Council
- September 14 Boards & Commissions present to Council
- September 25 Council Fall Budget Workshop
- October 25 First reading of the 2022 budget by Council
- November 8 Second reading of the 2022 budget by Council

## Budget Overall

The 2022 budget is being proposed with a 3.5% average increase in water retail revenues, 4.0% increase in sewer rates and 3.5% in stormwater rates. Connection fees for water and sewer are proposed to increase 10.6% and 6.3% respectively. These increases are necessary to maintain and build Aurora Water's infrastructure and since there was no rate or fee increases in 2021 due to pandemic, the proposed budget was built knowing there is still uncertainty in the economy. However, the current local development has continued to be strong and Aurora Water is continuing operations as normal. Staff was able to continue all normal business functions through the pandemic stay at home order. During this time, late fees were waived on customer accounts. In addition, a 2% increase in salary-related costs is incorporated for 2022.

**Revenues**

The following table summarizes revenues for the Water Fund.

**WATER FUND  
REVENUE SUMMARY (\$ Millions)**

	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Projection</b>	<b>Proposed</b>
<b>Utility Sales</b>	\$132.1	\$127.9	\$137.5
<b>Development Fees</b>	53.8	40.2	53.2
<b>Charges for Services</b>	2.1	2.0	2.0
<b>Investment Income</b>	3.9	2.1	1.9
<b>Other Revenues</b>	6.4	17.9	2.3
<b>Proceeds from Borrowing</b>	0.0	120.5	0.0
<b>Total Revenue</b>	<b>\$198.3</b>	<b>\$310.6</b>	<b>\$196.9</b>

2020 – Water revenues were 15% higher than 2019 due to higher usage than previous years because of a very dry spring and start of the summer. Development fees in 2020 marked a record and were 42% higher than 2019. Overall, Aurora Water’s revenues and growth was not negatively impacted by the pandemic.

2021 – Utility sales are expected to be lower than 2020 and slightly lower than plan due to a cold and wet spring that resulted in lower usage in April and May. Development fees are expected to be 17% higher than plan as growth remains strong. Aurora Water issued \$122 million in revenue bonds in the spring that will help fund the SEAM facility and the acquisition of water rights. Other revenues in the 2021 projection include \$16 million to repay the Water Fund for the SEAM interfund loan from the Wastewater Fund.

2022 – Utility sales are expected to increase compared to 2021, driven by growth, increase in WISE deliveries and a proposed average increase of 3.5% in rates. The 2022 projections are based on average usage patterns, temperature and precipitation. The growth projection is based on the City’s population forecasts (1.7%) and increase in connection fees of 10.6%. The fee increase is partly driven by the increasing costs to acquire water rights and our planned phase-in increase based on the 2016 water master plan.

The following table summarizes revenues for the Wastewater Fund.

<b>WASTEWATER FUND</b>			
<b>REVENUE SUMMARY (\$ Millions)</b>			
	<b>2020</b>	<b>2021</b>	<b>2022</b>
	<b>Actual</b>	<b>Projection</b>	<b>Proposed</b>
<b>Utility Sales</b>	\$64.4	\$65.9	\$69.8
<b>Development Fees</b>	11.7	9.0	10.6
<b>Charges for Services</b>	7.0	7.1	7.3
<b>Investment Income</b>	1.5	0.8	0.8
<b>Other Revenues</b>	3.0	1.5	1.3
<b>Proceeds from Borrowing</b>	0.0	60.3	0.0
<b>Total Revenue</b>	<b>\$87.6</b>	<b>\$144.6</b>	<b>\$89.8</b>

2020 - Utility sales increased by 4% compared to 2019. A rate increase of 4% for sewer was adopted in 2020. Development fee revenues were 62% higher than 2019 which was a record year for development in the City.

2021 - Utility sales in the Wastewater Fund are projected to increase by 2% compared to 2020, mainly driven by growth since no rate increases were adopted in 2021. Development fees are projected to be 17% higher than plan but slightly lower than the 2020 record year. Aurora Water issued \$60.3M in revenue bonds to fund the Seam facility and the SENAC creek interceptor.

2022 – Utility sales are projected to increase in 2022 due to growth and a proposed rate increase of 4.0% in sewer and 3.5% in stormwater. The 2022 projections are based on average usage patterns and growth projection 1.7%. The 2022 budget includes a proposed increase in sewer connection fee of 6.3% as part of our planned phase-in increase based on the 2017 sewer master plan.

**Operating Expenses**

The table presented below summarizes changes in the 2022 proposed operating expenses (Water and Wastewater combined) compared to the 2021 adopted budget.

**WATER AND WASTEWATER (COMBINED)  
SUMMARY OF CHANGES IN 2022 PROPOSED OPERATING EXPENSES  
(\$ Millions)**

	<b>2021 Adopted Operating Budget</b>	<b>2022 Proposed Operating Budget</b>	<b>Increase / (Decrease)</b>	<b>Water Variance</b>	<b>Wastewater Variance</b>
<b>Personal Services</b>	\$45.9	\$49.1	\$3.2	\$2.2	\$1.0
<b>Allocated Expenses</b>	7.0	7.0	0.0	0.0	0.0
<b>Supplies and Services</b>	27.1	28.0	0.9	0.8	0.1
<b>Utilities</b>	37.6	41.0	3.4	(0.1)	3.5
<b>Interfund Charges</b>	3.4	3.8	0.4	0.3	0.1
<b>Debt Related</b>	28.1	37.8	9.7	5.8	3.9
<b>Capital Related</b>	4.3	4.5	0.2	0.1	0.1
<b>Transfers Out</b>	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>\$153.4</b>	<b>\$171.2</b>	<b>\$17.8</b>	<b>\$9.1</b>	<b>\$8.7</b>
<b>FTE - Water</b>	<b>469.0</b>	<b>481.0</b>	<b>12.0</b>	<b>6.8</b>	<b>5.2</b>
<b>FTE - City Attorney</b>	<b>1.0</b>	<b>2.0</b>	<b>1.0</b>	<b>1.0</b>	<b>0.0</b>

**Changes to the 2022 Adopted budget include the following:**

- **Personal Services** increased by \$3.2 million.
  - 2021 Furlough adjustments (\$725,519),
  - 2021 Spring Supplemental added 4.0 FTE (\$297,792),
  - Regular Salary and allowance increases (\$638,126),
  - 2% Salary adjustments, 2.5% CDL adjustments and \$500 retention bonus for CDL positions, and 2% overtime adjustments (\$364,090),
  - Add 13.0 FTE (\$1,162,846).
  
- **Supplies and Services** increased by \$0.9 million. SLAR Technical Adjustment for Rocky Ford II Revegetation Efforts & Land Management (\$300,000), Department Specific mandated cost increases (\$698,684), decrease to Efficiency Alignments and an adjustment to Eliminate Print Shop Chargebacks (\$-195,380).



- **Utilities** increased by \$3.4 million primarily for the Metro Wastewater. Projection based on the averages of flows and loadings of the previous years. A 2% increase in rates assumed for 2022.
- **Interfund Charges** increased by \$0.4 million due to fleet fuel and maintenance costs (\$241,819) and Risk Management internal fund charges (\$195,580).
- **Debt Related** increased by \$9.7 million in Water to account for the principal and interest in the original debt schedules in Water Fund (\$5.8 million) and Wastewater Fund (\$3.9 million).
- **Capital Related** increased by \$0.2 million due to new vehicle purchases for 3.0 FTE requested for 2022 SLARs.

**Capital Improvement Program**

The following table summarizes the 2022-2026 Capital Improvement Program by program.

<b>CAPITAL IMPROVEMENT PROGRAM</b>						
<b>2022 -2026</b>						
<b>(\$ millions)</b>						
	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>TOTAL</b>
<b>Operations &amp; General Management</b>	6.0	4.4	5.2	0.4	1.2	17.2
<b>Pumping</b>	3.4	1.3	2.0	0.0	2.8	9.5
<b>Source of Supply - Other</b>	7.5	1.0	107.8	22.5	19.0	157.8
<b>Source of Supply - Storage</b>	18.0	16.4	16.7	25.0	102.4	178.5
<b>Source of Supply - Water</b>	28.9	29.5	36.5	19.5	19.5	133.9
<b>Transmission &amp; Distribution</b>	18.1	25.9	14.6	8.1	12.2	78.9
<b>Treatment</b>	24.1	20.5	14.2	30.8	24.1	113.7
<b>TOTAL WATER</b>	<b>\$106.0</b>	<b>\$99.0</b>	<b>\$197.0</b>	<b>\$106.3</b>	<b>\$181.2</b>	<b>\$689.5</b>
<b>Collection</b>	43.6	29.5	5.2	6.4	40.7	125.4
<b>Operations &amp; General Management</b>	2.3	2.0	0.0	0.0	1.5	5.8
<b>Stormwater</b>	1.9	17.3	6.6	10.5	23.5	59.8
<b>TOTAL WASTEWATER</b>	<b>\$47.8</b>	<b>\$48.8</b>	<b>\$11.8</b>	<b>\$16.9</b>	<b>\$65.7</b>	<b>\$191.0</b>
<b>TOTAL ALL PROJECTS</b>	<b>\$153.8</b>	<b>\$147.8</b>	<b>\$208.8</b>	<b>\$123.2</b>	<b>\$246.9</b>	<b>\$880.5</b>

Significant Water Fund projects planned for 2022-2026 by program include the following.

**Operations & General Management**

- **Meter Replacement Program (AMI) (\$12.0 million)** – This project is to replace the current meter system installed in 2005, which is at the end of its life. There will be annual meter replacements over the next three years.
- **Solar Projects (\$3.3 million)** – Renewable energy opportunities were identified in 2012 Energy Master Plan. Based on this analysis, AW will be implementing a 360 KW DC fixed tilt, ballasted tank mount solar PV system project at the Robertsdale Pump Station.

## Pumping

- **Pump Station Improvements (\$6.3 million)** – improvements in the five-year plan include expansion of raw water pumping capacity and/or pump replacement at the following pump stations: Quincy (2022), Eagle Bend (2022), and Robertsdale (2023, 2024). These projects will improve the reliability, dependability and efficiency of the pump stations.
- **Prairie Waters Raw Water Pump Station Expansion (\$3.3 million)** – expansion of three conveyance pump stations on the Prairie Water Conveyance System (2023, 2026).

## Source of Supply - Other

- **Rampart Appurtenance Rehab (\$2.3 million)** – perform necessary rehabilitation and replacement on mainline valves, blow-offs, assemblies and other appurtenances of the 40" and 54" parallel Rampart raw water pipelines.
- **Prairie Waters North Campus Expansion (\$8.3 million)** – phased expansion of the Prairie Waters North Campus from a firm capacity of approximately 16.0 million gallons per day (MGD) to 40 MGD in future years. Project includes drilling additional wells and construction of related appurtenant facilities.
- **Well Field Land Acquisition (\$3.0 million)** – phased plan for land acquisition related to the Prairie Waters North Campus expansion. (2024).
- **North Campus Well Rehab (\$1.5 million)** – annual rehabilitation and maintenance for the North Campus River Bank Filtration and Aquifer Recharge and Recovery. Additionally, a North Campus Pilot Well will evaluate water collection methods for potential use by comparing two types of horizontal wells to determine cost per gallon of water produced. This cost would include impact to treat the water based on the water quality obtained from the wells, required permitting, infrastructure design/installation, maintenance costs and well capacity to determine the most cost-effective solution for increasing well field capacity.
- **Wemlinger Blended Water Pipeline (\$3.0 million)** – design of the second pipeline between Aurora Reservoir and Wemlinger WPF. This project adds treatment capacity and flexibility.
- **Rampart Delivery System Expansion (\$137.7 million)** – this project will expand the capacity of the Rampart Delivery System to meet growing demand.
- **Water Delivery Infrastructure (\$1.5 million)** – design, land acquisition and construction of three diversions and measurement flumes to divert changed share water from the Brantner Ditch for use by Aurora. The locations include the Brantner to Brighton ditch transfer, Brantner to Big Dry Creek and Brantner to Little Dry Creek.

## Source of Supply – Storage

- **Wild Horse Reservoir (\$118.0 million, final amounts yet to be determined)** – land acquisition, design, engineering, geotechnical and environmental studies, and construction of Wild Horse Reservoir in the Upper South Platte River Basin.
- **ASR: Aquifer Storage and Recovery (\$16.9 million)** - geotechnical investigations, testing and analysis of alluvial and confined aquifers under and adjacent to the City. The development of such storage could give Aurora Water additional flexibility in water resources management, help meet storage needs and allow maximum utilization of water supplies.

- **Homestake Capital Projects (\$16.9 million)** – improvements to the Homestake Water System under agreement with Colorado Springs Utilities.
- **Kirby-Dersham Gravel Pit/Challenger (\$4.4 million)** - development of gravel pits and infrastructure to support Kirby Dersham and Challenger reservoirs. This infrastructure is expected to include a pump station, slurry wall, and interconnect projects.
- **Eagle River Project (\$5.1 million)** – multi-partner, new water supply development project in the Eagle River basin that will provide Aurora with 10,000 acre-feet of yield, Colorado Springs with 10,000 acre-feet of yield, west-slope partners with 10,000 acre-feet of yield, and Climax with 3,000 acre-feet of storage.
- **Lower South Platte Storage/Everist (\$12.3 million)** – purchase and development of gravel pit reservoirs near Weld County Road 18 from LG Everist pursuant to the 2011 Amended and Restated Purchase and Sale Agreement. Once completed, Aurora will have about 11,000 acre-foot of water storage at this location.

#### Source of Supply – Water

- **Water Rights Acquisition (\$103.0 million)** – purchase of water rights to meet future municipal water demands as the population of Aurora grows. The actual budget needed to purchase water rights is very unpredictable and will be updated through budget supplementals as needed.
- **Raw Water Rehabilitation (\$23.4 million)** – the five-year plan is driven by the Rampart prestressed concrete cylinder pipe (PCCP) repair at Quincy & Orchard (2022-2023), Strontia Springs Reservoir improvements (2022-2023) and construction of the Sand Creek reclaimed water line (2022).
- **Arkansas Basin Land Acquisition (\$7.5 million)** - purchase of additional land and associated water rights (when applicable) in the Arkansas River Basin.

#### Transmission & Distribution

- **New T&D Water Mains (\$35.6 million)** – installation of new water mains to support growth and development in the City. Projects anticipated in the five-year plan are predominately located in the northeast portion of the City around Gun Club Road.
- **Line Replacement (\$12.5 million)** – annual waterline replacement of oldest pipes and pipes with increased frequency of breaks, upgrade of lines to meet new City standards, and addition of fire hydrants to improve fire protection.
- **Transmission and Vault Rehab (\$7.4 million)** – installation of miscellaneous transmission mains, appurtenances, and other water distributions system infrastructure required to improve the City's potable water distribution system.
- **PRV Rehab Replacement (\$9.9 million)** – design and construction of rehabilitation of critical pressure reducing valves throughout the city, including Jewell and Powhaton.
- **Storage Tank (\$10.0 million)** – construction of a storage tank in Zone 7 located in Southeast Aurora to expand capacity to serve the increasing population of Aurora.

## Treatment

- **Griswold WPF Plan Renovation (\$43.9 million)** – various improvements and renovation projects to Griswold Water Purification Facility including Solids Handling System construction (2022-2023), HVAC improvements (2022), Chemical Feed Improvements (2023, 2026) and Filter Media, Retaining Troughs, Effluent Valves, and Flow Meters (2022-2026).
- **Binney WPF Improvements (\$14.7 million)** – various improvements and renovation projects to Binney Water Purification Facility including Flocculation/Sedimentation construction (2022), Potable Waterline (2022), Filter Media (2024-2026), Hydrogen Peroxide Tank (2022), and construction of a Ground Water Pump Station (2022).
- **Wemlinger WPF Improvements (\$55.3 million)** – various improvements, renovations, and modifications to Wemlinger Water Purification Facility including chemical feed improvements (2024-2026) and filter rehabilitation (2022-2026)

Significant Wastewater Fund projects planned for 2022-2026 by program include the following.

## Operations & General Management

- **Sand Creek Water Reuse Plant (\$4.5 million)** – upgrades to the Sand Creek Water Reuse Plant including blower improvements, HVAC improvements, and a ground water pump station will begin construction in Q4 2021. Phase II design will begin in 2026.

## Collection

- **Annual Sewer Rehab (\$6.0 million)** – Annual rehabilitation of vitrified clay pipe (VCP) ranging from 8” to 18” in diameter using the cured-in-place pipe (CIPP) process. The pipe is over 50 years old and is largely located in the northwest part of Aurora.
- **Misc. Sewer Replacement (\$10.6 million)** – sewer line replacement including Lima Paris, U.S. 225 to N. Laredo St. and Billings St. to N. Sable Blvd, and S. Chambers Road and E. Alameda Pkwy.
- **First Creek Interceptor (\$51.6 million)** – design and construction of FC2 segment 1B-1D NTP West Interceptor on N. Picadilly Ave. and E. 56<sup>th</sup> Ave. from N. Dunkirk St. to N. Rome St. (2022 – 2023).
- **Sewer Line Construction (\$40.6 million)** – New sewer line construction including Sand Creek Interceptor East from E. Colfax Ave. to E. Airport Road, Sand Creek Interceptor East E. Airport Road to U.S. 225, and E. 4<sup>th</sup> Ave. and Kings Pointe Interceptor from S. Parker Road to S. Chambers Way.

## Stormwater

- **Westerly Creek Future Phases (\$17.9 million)** –Westerly Creek improvements including detention facilities and underground pipe infrastructure. Some projects included in the five-year projection are Virginia Tributary pipe (2022-2023) and Alameda Storm Outfall pipe (2022-2023).
- **Storm Corrugated Metal Pipe (CMP) Rehab (\$4.7 million)** – rehabilitation of CMP pipes per the citywide CMP inspections completed in 2014. The five-year plan includes construction to rehabilitate deteriorated CMP pipes with cured-in-place pipe (CIPP).

- **Crossing Structure Projects (\$2.3 million)** – rehabilitation of deteriorating and aging bridges and construction of new culverts throughout the system. Projects include Bridge Replacement at Mexico Ave (2024-2025).
- **Detention Ponds and Improvements (\$11.5 million)** - this project will be used to construct various subprojects related to detention ponds and detention improvements to attenuate peak flows resulting from upstream development. Projects include WS11 Pond C land acquisition and construction (2026).

**Ending Funds Available**

The following table summarizes Sources, Uses and Changes in Funds Available for the Water Fund.

**WATER FUND**  
**Schedule of Sources, Uses and Changes in Funds Available**  
**(\$ Millions)**

	<b>2019 Actual</b>	<b>2020 Actual</b>	<b>2021 Adopted Budget</b>	<b>2021 Projection</b>	<b>2022 Proposed</b>
Revenues	\$172.3	\$198.3	\$170.8	\$190.1	\$196.9
Proceeds from Borrowing	0.0	0.0	120.0	120.5	0.0
<b>Sources</b>	<b>\$172.3</b>	<b>\$198.3</b>	<b>\$290.8</b>	<b>\$310.6</b>	<b>\$196.9</b>
Operating Costs	\$62.7	\$64.2	\$69.6	\$69.2	\$72.9
Debt Service	63.1	20.9	22.9	22.9	28.6
Capital Projects (Continuing Appropriations)	75.7	147.6	150.1	191.9	106.0
<b>Total Uses</b>	<b>\$201.6</b>	<b>\$232.7</b>	<b>\$242.6</b>	<b>\$283.9</b>	<b>\$207.5</b>
<b>Beginning Funds Available</b>	<b>\$83.9</b>	<b>\$54.6</b>	<b>\$20.1</b>	<b>\$20.1</b>	<b>\$46.8</b>
Net Changes in Funds Available	(29.3)	(34.5)	48.3	26.7	(10.6)
<b>Ending Funds Available</b>	<b>\$54.6</b>	<b>\$20.1</b>	<b>\$68.3</b>	<b>\$46.8</b>	<b>\$36.2</b>

December 31, 2021, ending funds available for the Water Fund are projected to decrease by \$21.5 million compared to the 2021 Adopted Budget. This reduction is primarily due to projected increases in Capital Projects funding (continuing appropriation) for water rights acquisitions that will be requested with a supplemental. Capital Projects supplemental funding is partially offset by higher than anticipated revenues. December 31, 2022, ending funds available are anticipated to decrease by \$10.6 million compared to the 2021 projection, primarily due to decreased proceeds from borrowings, offset by a reduction in capital projects.

**Ending Funds Available**

The following table summarizes Sources, Uses and Changes in Funds Available for the Wastewater Fund.

**WASTEWATER FUND**  
**Schedule of Sources, Uses and Changes in Funds Available**  
**(\$ Millions)**

	<b>2019 Actual</b>	<b>2020 Actual</b>	<b>2021 Adopted Budget</b>	<b>2021 Projection</b>	<b>2022 Proposed</b>
Revenues	\$80.1	\$87.6	\$83.2	\$84.3	\$89.8
Proceeds from Borrowing	0.0	0.0	44.0	60.3	0.0
<b>Sources</b>	<b>\$80.1</b>	<b>\$87.6</b>	<b>\$127.2</b>	<b>\$144.6</b>	<b>\$89.8</b>
Operating Costs	\$53.1	\$52.3	\$55.6	\$53.2	\$60.4
Debt Service	3.6	3.7	5.3	21.3	9.2
Capital Projects (Continuing Appropriations)	10.1	20.0	79.6	79.6	47.8
<b>Total Uses</b>	<b>\$66.8</b>	<b>\$76.0</b>	<b>\$140.6</b>	<b>\$154.2</b>	<b>\$117.4</b>
<b>Beginning Funds Available</b>	<b>\$14.3</b>	<b>\$27.6</b>	<b>\$39.2</b>	<b>\$39.2</b>	<b>\$29.6</b>
Net Changes in Funds Available	13.3	11.6	(13.4)	(9.6)	(27.6)
<b>Ending Funds Available</b>	<b>\$27.6</b>	<b>\$39.2</b>	<b>\$25.8</b>	<b>\$29.6</b>	<b>\$2.0</b>

December 31, 2021, ending funds available for the Wastewater Fund are projected to increase by \$3.8 million compared to the 2021 Adopted Budget. This is mainly due to a \$16 million debt repayment to the water fund, offset by additional proceeds needed from borrowing. December 31, 2022, ending funds available are anticipated to decrease by \$27.6 million compared to the 2021 projection, primarily due to a reduction in proceeds from borrowing, offset by a reduction in capital projects.

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# Aurora Water

## 2022 Proposed Operating And Capital Improvement Program Budget

Citizens' Water Advisory Committee  
July 13, 2021



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# 2022 Proposed Budget

## Council Dates to Remember

- September 14th City Manager, Appointees and staff present to Council
- September 14th Boards & Commissions present to Council
- September 25th Council Fall Budget Workshop
- October 25th First reading of the 2022 budget by Council
- November 8th Second reading of the 2022 budget by Council

## Assumptions used to develop the proposed 2022 budget

- Average year temperature and precipitation
- Population growth rate of 1.7%
- 2.4% inflation factor (derived from the Employment Cost Index for State and Local Government Compensation) applied to 2022 Service Fees



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# 2022 Proposed Budget Water Fund Summary (\$ Millions)

## WATER FUND Schedule of Sources, Uses and Changes in Funds Available (\$ Millions)

	2019 Actual	2020 Actual	2021 Adopted Budget	2021 Projection	2022 Proposed
Revenues	\$172.3	\$198.3	\$170.8	\$190.1	\$196.9
Proceeds from Borrowing	0.0	0.0	120.0	120.5	0.0
From restricted Assets	0.0	0.0	0.0	0.0	0.0
<b>Sources</b>	<b>\$172.3</b>	<b>\$198.3</b>	<b>\$290.8</b>	<b>\$310.6</b>	<b>\$196.9</b>
Operating Costs	\$62.7	\$64.2	\$69.6	\$69.2	\$72.9
Debt Service	63.1	20.9	22.9	22.9	28.6
Loan to Other Funds	0.0	0.0	0.0	0.0	0.0
Capital Projects (Continuing Appropriations)	75.7	147.6	150.1	191.9	106.0
<b>Total Uses</b>	<b>\$201.6</b>	<b>\$232.7</b>	<b>\$242.6</b>	<b>\$283.9</b>	<b>\$207.5</b>
<b>Beginning Funds Available</b>	<b>\$83.9</b>	<b>\$54.6</b>	<b>\$20.1</b>	<b>\$20.1</b>	<b>\$46.8</b>
Net Changes in Funds Available	(29.3)	(34.5)	48.3	26.7	(10.6)
<b>Ending Funds Available</b>	<b>\$54.6</b>	<b>\$20.1</b>	<b>\$68.3</b>	<b>\$46.8</b>	<b>\$36.2</b>

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# 2022 Proposed Budget Wastewater Fund Summary (\$ Millions)

## WASTEWATER FUND Schedule of Sources, Uses and Changes in Funds Available (\$ Millions)

	2019 Actual	2020 Actual	2021 Adopted Budget	2021 Projection	2022 Proposed
<b>Revenues</b>	\$80.1	\$87.6	\$83.2	\$84.3	\$89.8
Proceeds from Borrowing	0.0	0.0	44.0	60.3	0.0
Loan from Other Funds	0.0	0.0	0.0	0.0	0.0
<b>Sources</b>	<b>\$80.1</b>	<b>\$87.6</b>	<b>\$127.2</b>	<b>\$144.6</b>	<b>\$89.8</b>
Operating Costs	\$53.1	\$52.3	\$55.6	\$53.2	\$60.4
Debt Service	3.6	3.7	5.3	21.3*	9.2
Capital Projects (Continuing Appropriations)	10.1	20.0	79.6	79.6	47.8
<b>Total Uses</b>	<b>\$66.8</b>	<b>\$76.0</b>	<b>\$140.6</b>	<b>\$154.2</b>	<b>\$117.4</b>
<b>Beginning Funds Available</b>	<b>\$14.3</b>	<b>\$27.6</b>	<b>\$39.2</b>	<b>\$39.2</b>	<b>\$29.6</b>
Net Changes in Funds Available	13.3	11.6	(13.4)	(9.6)	(27.6)
<b>Ending Funds Available</b>	<b>\$27.6</b>	<b>\$39.2</b>	<b>\$25.8</b>	<b>\$29.6</b>	<b>\$2.0</b>



\* \$16M Debt Related repayment to Water Fund in May 2021

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# 2021 to 2022

## Operating Budget Comparison

### *Water and Wastewater (Combined)*

	<b>2021 Adopted Operating Budget</b>	<b>2022 Proposed Operating Budget</b>	<b>Increase / (Decrease)</b>
<b>Personal Services</b>	\$45.9	\$49.1	\$3.2
<b>Allocated Expenses</b>	7.0	7.0	0.0
<b>Supplies and Services</b>	27.1	28.0	0.9
<b>Utilities</b>	37.6	41.0	3.4
<b>Interfund Charges</b>	3.4	3.8	0.4
<b>Debt Related</b>	28.1	37.8	9.7
<b>Capital Related</b>	4.3	4.5	0.2
<b>TOTAL</b>	<b>\$153.4</b>	<b>\$171.2</b>	<b>\$17.8</b>



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# 2022 Operating Budget

- **Personal Services** increased by \$3.2 million. 2021 Furlough adjustments (\$725,519), 2021 Spring Supplemental added 4.0 FTE (\$297,792), 2% Salary adjustments, 2.5% CDL adjustments and \$500 retention bonus for CDL positions, and 2% Overtime adjustments (\$364,090), Add 13.0 FTE (\$1,162,846).
- **Supplies and Services** increased by \$0.9 million. SLAR Technical Adjustment for Rocky Ford II Revegetation Efforts & Land Management (\$300,000), Department Specific mandated cost increases (\$698,684), decrease to Efficiency Alignments and an adjustment to Eliminate Print Shop Chargebacks (\$-195,380).
- **Utilities** increased by \$3.4 million primarily for Metro Wastewater. Projection based on the averages of flows and loadings of the previous years. A 2% increase in rates assumed for 2022.
- **Interfund Charges** increased by \$0.4 million due to fleet fuel and maintenance costs (\$241,819) and Risk Management internal fund charges. (\$195,580).
- **Debt Related** increase of \$9.7 million to account for the principal and interest in the original debt schedules in Water Fund (\$5.8 million) and Wastewater Fund (\$3.9 million).
- **Capital Related** increased by \$0.2 million due to new vehicle purchases for 3.0 FTE requested for 2022 SLARs.



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# 2022 FTE REQUESTS

- Add 1.0 FTE Senior Natural Resources Specialist (\$107,450)
  - To manage the utility's compliance with the Revised Lead and Copper Rule.
  
- Add 1.0 FTE Water Resources Specialist (\$90,288)
  - To assist with the growing need for water acquisitions, raw water accounting and operations, legal and engineering analysis, and storage development to ensure the Water Department can provide dependable and sustainable water into the future. Includes one-time supplies.
  
- Add 1.0 FTE Treatment Technician (Water Utility Worker) (\$62,061)
  - To address the need for entry level operators and take advantage of both internal candidates and the current labor market to address the shortage of Certified "A" Water Treatment Plant Operators. Includes ongoing training and uniforms.



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# 2022 FTE REQUESTS

- Add 1.0 FTE Water Utility Emergency Response Manager (Superintendent Level 2) (\$190,414)
  - To ensure Aurora Water's regulatory compliance pertaining to emergency management, perform all internal training for water department staff relating to water related emergency planning, exercises, updating and maintenance of the many plans in place. Includes ongoing training, one-time supplies, and new vehicle purchase.
  
- Add 1.0 FTE SCADA System Administrator (SCADA Specialist) (\$184,582)
  - To maintain and improve the City of Aurora SCADA architecture and business processes required to maintain complex critical water infrastructure, support the increased cybersecurity demands for Aurora Water Operations. Includes one-time supplies and new vehicle purchase.



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# 2022 FTE REQUESTS

- Add 1.0 FTE Project Engineer (Energy and Facilities) (\$107,582)
  - To provide energy and facilities management for current utilities and with the completion of SEAM.
  
- Add 1.0 FTE Engineer (W/WW Modeling) (\$100,050)
  - To provide support for Water and Wastewater system modeling due to an increase in capital projects, an increase in growth and development and an increase in the number of operations modeling requests.
  
- Add 1.0 FTE Engineering Technician (\$81,080)
  - To provide administrative support for the Development Review team.



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# 2022 FTE REQUESTS

- Conversion of Contract Staff to FTE - GIS Specialist (\$74,906)
  - Additional GIS staff is required due to growth and development related workload as well as an increased reliance on GIS data and mapping throughout the utility. Includes one-time Temp-Salary conversion (\$-43,075).
  
- Conversion of Contract Staff to FTE - Engineering Technician (\$81,080)
  - Additional Taps Office staff is required to assist with increased workload due to growth and development for the City of Aurora. Includes one-time Temp-Salary conversion (\$-51,072).
  
- Add 1.0 FTE Electrical Specialist (Trades Specialist) (\$198,464)
  - To meet Occupational Safety and Health Administration (OSHA) standards for electrical energized parts management of complex critical water infrastructure for Aurora Water Operations. Includes one-time supplies and new vehicle purchase.



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# 2022 FTE REQUESTS

- Add 1.0 FTE Senior Assistant City Attorney (Water) (\$150,009)
  - To provide legal advice and assistance to the Water Department in anticipation of the retirement in 2022 of a long-time outside attorney who handles a major portion of the City's water work.
  
- Add 0.5 FTE Debt Financial Analyst (HCS, Water) (\$45,683)
  - To provide support to long-term City goals as they relate to capital planning and financing needs of water and affordable housing, economic development efforts of the City, increase efficiencies in debt, treasury and investments and support accounting in financial reporting.
  
- Add 0.5 FTE Sr. Procurement Agent (IT, Water) (\$54,045)
  - To provide support for IT and Water related purchases.



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# Capital Improvement Program 2022-2026 (Millions)

	2022	2023	2024	2025	2026	TOTAL
<b>TOTAL WATER FUND</b>	<b>\$106.0</b>	<b>\$99.0</b>	<b>\$197.0</b>	<b>\$106.3</b>	<b>\$181.2</b>	<b>\$689.5</b>
Sanitary Sewer	\$45.9	\$31.5	\$5.2	\$6.4	\$42.2	\$131.2
Storm Drain	\$1.9	\$17.3	\$6.6	\$10.5	\$23.5	\$59.8
<b>TOTAL WASTEWATER FUND</b>	<b>\$47.8</b>	<b>\$48.8</b>	<b>\$11.8</b>	<b>\$16.9</b>	<b>\$65.7</b>	<b>\$191.0</b>
<b>TOTAL CIP</b>	<b>\$153.8</b>	<b>\$147.8</b>	<b>\$208.8</b>	<b>\$123.2</b>	<b>\$246.9</b>	<b>\$880.5</b>



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# Capital Improvement Program 2022-2026 By Program

## Water

- Operations & General Management (\$17.2 million)
- Pumping (\$9.5 million)
- Source of Supply - Other (\$157.8 million)
- Source of Supply - Storage (\$178.5 million)
- Source of Supply – Water (\$133.9 million)
- Transmission & Distribution (\$78.9 million)
- Treatment (\$113.7 million)

## Wastewater Fund

- Collection (\$125.4 million)
- Operations & General Management (\$5.8 million)
- Stormwater (\$59.8 million)



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# Looking Ahead 2022 and Beyond

- Continue to work on partnering opportunities for effective regional solutions to water and wastewater challenges (Metro, WISE, etc.) and ensure watershed/source water protection
  - WISE Contract - Full delivery delayed, expected to start in 2022
- Continue to monitor long-term water supply availability and plan for the future; continue to look for creative ways to acquire water
- Continue to enhance conservation efforts (new residential rate structure) to make better use of Aurora's existing water supplies
- Anticipate legal and regulatory challenges
  - Current topics being monitored include lead and copper regulations and PFAS regulations
- Develop long-term technology strategy to better serve customers and work more efficiently
  - A technology master plan has been developed and is being finalized.



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# 2022 Proposed Budget

## Questions?



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# Memorandum



**To: Citizens' Water Advisory Committee**

**From: Marshall P. Brown, General Manager, Aurora Water  
Jo Ann Giddings, Deputy Director Water Financial Administration**

**Date: July 14, 2021**

**Subject: 2022 Proposed Rate and Fee Changes**

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Aurora Water's Financial Administration Division continually monitors and evaluates our fees and rates for adequacy to fund our capital and operating needs in the water, sanitary sewer, and storm drainage system. This memo summarizes the proposed changes to rates and fees in each utility for the 2022 budget.

## Summary

The proposed 2022 budget includes the proposed rate and fee adjustments based on the latest financial plan. Aurora Water understands the impacts rate increases have to customers and therefore have a policy, whenever possible, to have small incremental rate increases as opposed to having infrequent large rate increases. Proposed changes for 2022 are:

Utility	Revenue Increase	Connection Fee Increase
Water	3.5%	10.6%
Sewer	4.0%	6.3%
Stormwater	3.5%	0.0%

## Revenue and Rate Increases

The last average water rate increase was 3.2% in 2019 and no increases were adopted in 2021 due to the pandemic, but the residential water restructure was adjusted due to the outdated structure that did not encourage water conservation. The planned needs for operations and maintenance of the system require an average 3.5% increase in water revenues for the 2022 budget. The increase by customer class will vary with single family revenues to increase by 4.0%, multi-family 2.0%, irrigation accounts 3.5%, commercial accounts 4.0%, hydrant accounts 3.5% and fire protection accounts 4.7%. The financial plan also projects 3.5% increase in 2023 and 2025. These future increases are reviewed annually, and increases are requested when needed through the budget process.

The sewer rates are adjusted based on Aurora's cost for sewer infrastructure maintenance and operations and the costs passed through from Metropolitan Wastewater Reclamation District for the treatment process. No increases were adopted in 2021 due to the pandemic. A proposed 4% increase is included in the 2022 budget based on the financial plan. A 4% annual rate increase is projected in future years as well.

A rate increase of 3.5% for stormwater is also proposed in the 2022 budget. Currently Aurora Water financial planning projects the need for a 3.5% increase in 2023 and 2025. Future rates are reviewed annually and proposed when needed through the budget process.

**Residential Rate Structure**

In 2021 Aurora Water adjusted the residential class water rate structure. Staff developed a multi-year plan that would keep rates at the existing levels for 10 years for customers with usage of 5,000 gallons and below by changing the Tiers and implementing the increases s to usage above 5,000 gallons. This plan will provide a strong conservation message to large users while providing affordability to low users.

The 10-year plan is based on current assumptions and projected needed increases from Aurora Water’s financial plan. Changes in some of the underlining assumptions (usage patterns, droughts, growth) as well as changes in the financial plan will have an effect on the plan. Aurora Water will review the plan and the assumption every time a rate adjustment are proposed and will try to stay within the plan as much as possible.

The proposed 2022 residential rates will be the second adjustment in the phased-in plan the rates are designed to recover 4% more revenues than the existing ones with no changes in usage below 5,000 gallons.

Tier	Existing	Proposed	Difference
Tier 1 / 0-5 Kgal	\$5.63	\$5.63	\$0.00
Tier 2 / 6-10 Kgal	\$5.73	\$5.93	\$0.20
Tier 3 / 11-20 Kgal	\$5.83	\$6.50	\$0.67
Tier 4 / 21Kgals+	\$8.01	\$10.00	\$1.99

The proposed rates include a 1.5% increase in the monthly service charge. The average residential customer will have a total monthly increase of \$2.26 (2.5%) of which \$0.97 is sewer (assumes 5,000 of winter quarter average usage), \$0.37 is storm, and \$0.92 is water. Aurora Water utility rates are still very affordable compared to other utilities in the Front Range.

**Water Connection Fee**

In 2016 Aurora Water updated the water connection fee and water transmission development fees based on the Integrated Water Master Plan completed by the Engineering and Planning Division. A phase-in plan of the full connection fee increase was implemented. In 2017 and 2019 the City adopted the first and second of those increases. The third and fourth increase of the phase-in plan are proposed for 2022 and 2023.

The proposed phase-in plan as well as the different calculated components of the water connection fee are presented below (Fee is in Dollars per gallons per day \$/GPD):

Item	Existing Fee	2022 Proposed	2023 Proposed
Water Resource Fee	\$16.23	\$19.60	\$19.60
Source of Supply	\$22.29	\$23.65	\$25.22
Treatment & Transmission	\$10.92	\$11.38	\$11.38
Transmission Dev. Fee	\$1.39	\$1.48	\$2.29
Carrying Cost	\$2.04	\$2.04	\$2.04
Water Losses	\$10.75	\$12.23	\$12.59
<b>Total Water Connection Fee</b>	<b>\$63.62</b>	<b>\$70.38</b>	<b>\$73.12</b>
<b>% Increase</b>		<b>10.6%</b>	<b>3.9%</b>

The Water Resource Fee presented above is intended for the acquisition of water rights to serve new customers. The fee is based on the market price of the water rights Aurora Water acquires. The current fee assumes a \$14,490 per acre feet but Aurora Water average water right’s acquisition price is \$17,500. For 2022 we are proposing adjusting the water resource fee to Aurora Water’s average acquisition price and review the fee in 2023 based on market conditions.

The water connection fee will be reviewed based on new master plans which is expected to be completed in the next two years.

**Sewer Connection Fee**

In 2017 Aurora Water’s Planning and Engineering Division completed a master plan for the sanitary sewer system. As part of that study, staff evaluated the sewer connection and interceptor development fees for their adequacy to fund the projected capital costs needed to expand the sanitary sewer system. In 2017 we presented a phase-in plan to adjust the sewer connection and interceptor development fee. The first two increases of the four increase were adopted in 2019 and 2020 no increase was adopted in 2021 due to the pandemic the remainder two increases are proposed for 2022 and 2023.

The proposed plan for the sewer connection fees is the following:

Sewer Connection Fee	2020	2021	2022	2023
Connection Fee per ERU (58")	\$3,040	\$3,040	\$3,220	\$3,400
Dev Fee per ERU (5/8")	\$240	\$240	\$270	\$310
<b>Total Fee per ERU</b>	<b>\$3,280</b>	<b>\$3,280</b>	<b>\$3,490</b>	<b>\$3,710</b>
% increase	6.4%	0.0%	6.4%	6.3%

The sewer connection fee will be reviewed based on new master plans which is expected to be completed in the three (3) years.

**Stormwater Development Fee**

No increase in the stormwater development fee are proposed for 2022. Aurora Water’s planning and engineering division is evaluating the stormwater future needed projects as well the share of responsibility between Aurora Water, developers, and Mile High Flood District in order to determine the appropriate needs for the stormwater development fees.

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The background of the slide is a close-up photograph of water. The water is dark blue and black, with numerous bright, circular light reflections scattered across the surface, creating a bokeh effect. The reflections vary in size and brightness, giving the water a shimmering appearance.

**Aurora Water**

**Water and Sewer 2022 Rate  
and Fees Adjustments 2022**

**July 14, 2021 Water Policy Committee Meeting**

# Rates and Fees Adjustments

## Proposed Rate Revenue Adjustments

Utility	2021	2022	2023	2024	2025	2026
Water	0.0%*	<b>3.5%</b>	3.5%	0.0%	3.5%	0.0%
Sewer	0.0%	<b>4.0%</b>	4.0%	4.0%	4.0%	4.0%
Stormwater	0.0%	<b>3.5%</b>	3.5%	0.0%	3.5%	0.0%

\* Change in Residential rate structure

## Proposed Fee Adjustments

Utility	2021	2022	2023	2024	2025	2026
Water	0.0%	10.6%	3.9%	TBD**		
Sewer	0.0%	6.3%	6.4%			
Stormwater	0.0%	0.0%	0.0%**			

\*\*Fees will be reviewed based on new master plans to be completed in the next two years



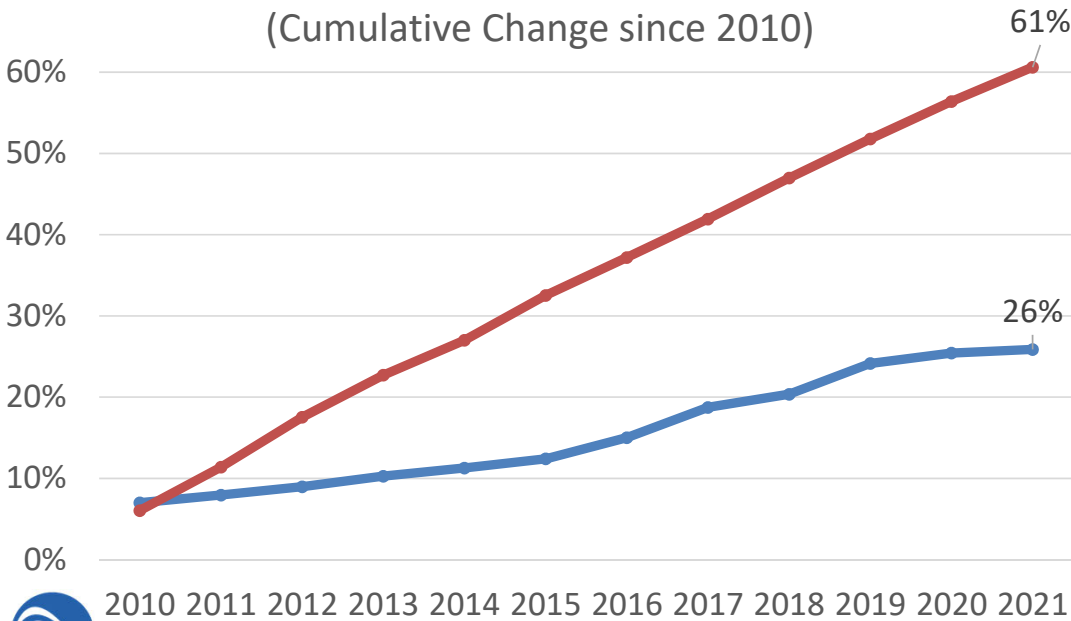
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# Water and Sewer Inflation

Aurora Water Rate Adjustments vs. Water/Sewer Inflation Index  
(Cumulative Change since 2010)



**Average National Water and Wastewater Cost annual increase 4.03%**

**Aurora Water’s average bill annual increase 1.95%**



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# Revenue Adjustments

- No adjustments in 2021
- Last adjustments - water and Storm 2019, Sewer 2020
- Water CIP 2021-2026 = \$1.1 billions
  - SEAM - \$120M
  - Wild Horse - \$330M
  - Rampart - \$130M
- New Debt Issues to fund capital expenses
  - Storm Loan 2019 -\$30M
  - 2021 Bond Issue -\$169M (\$120M water / \$49M WW)
  - Projected water issue 2024 \$250M



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# Proposed Water Revenue Adjustments by Class (Millions)

Customer Class	Revenues under Existing Rates	Revenues under Proposed Rates	Difference %
Single Family Residential	\$55.02	\$57.22	4.0%
Multi-Family 2+ Units	23.90	24.37	2.0%
Irrigation	12.85	13.30	3.5%
Commercial	23.09	24.00	4.0%
Hydrant	1.86	1.93	3.5%
Fire Protection	0.29	0.31	4.7%
<b>Totals</b>	<b>\$117.02</b>	<b>\$121.13</b>	<b>3.5%</b>



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# Proposed 2022 Rates

## Monthly Service Charges (1.5% and 3.5% Increase)

Meter	Residential, Commercial, Multi-Family Class			Irrigation Customers		
	Existing	Proposed	Difference	Existing	Proposed	Difference
5/8" & 3/4"	\$12.81	\$13.00	\$0.19	\$12.01	\$12.43	\$0.42
1"	\$19.59	\$19.88	\$0.29	\$17.58	\$18.20	\$0.62
1 1/2"	\$30.90	\$31.36	\$0.46	\$26.88	\$27.82	\$0.94
2"	\$44.47	\$45.14	\$0.67	\$38.04	\$39.37	\$1.33
3"	\$80.64	\$81.85	\$1.21	\$67.79	\$70.16	\$2.37
4"	\$121.33	\$123.15	\$1.82	\$101.26	\$104.80	\$3.54
6"	\$234.38	\$237.90	\$3.52	\$194.24	\$201.04	\$6.80
8"	\$479.57	\$486.76	\$7.19	\$305.80	\$316.50	\$10.70

## Block 1 Volumetric Rate

Class	Existing	2022		%
	Rate	Proposed	Difference	Difference
Multi-Family 2+ Units	\$5.80	\$5.92	\$0.12	2.0%
Irrigation	\$7.21	\$7.46	\$0.25	3.5%
Commercial	\$5.87	\$6.11	\$0.24	4.1%



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# Proposed 2022 Rates Continued

Fire Line	Fire Protection (4.7%)			Hydrant Meter (3.5%)		
	Existing	Proposed	Difference	Existing	Proposed	Difference
2"	\$2.08	\$2.18	\$0.10	\$11.72	\$12.13	\$0.41
3"	\$4.56	\$4.77	\$0.21	\$74.36	\$76.96	\$2.60
4"	\$8.21	\$8.59	\$0.38			
6"	\$18.24	\$19.10	\$0.86			
8"	\$31.27	\$32.74	\$1.47			
10"	\$49.51	\$51.84	\$2.33			
12"	\$65.14	\$68.20	\$3.06			
Rate Per 1,000 Gallons				\$9.47	\$9.80	\$0.33



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# Proposed Residential 2022 Water Rates

Tier	Existing	Proposed	Difference
Tier 1 / 0-5 Kgal	\$5.63	\$5.63	\$0.00
Tier 2 / 6-10 Kgal	\$5.73	\$5.93	\$0.20
Tier 3 / 11-20 Kgal	\$5.83	\$6.50	\$0.67
Tier 4 / 21Kgals+	\$8.01	\$10.00	\$1.99

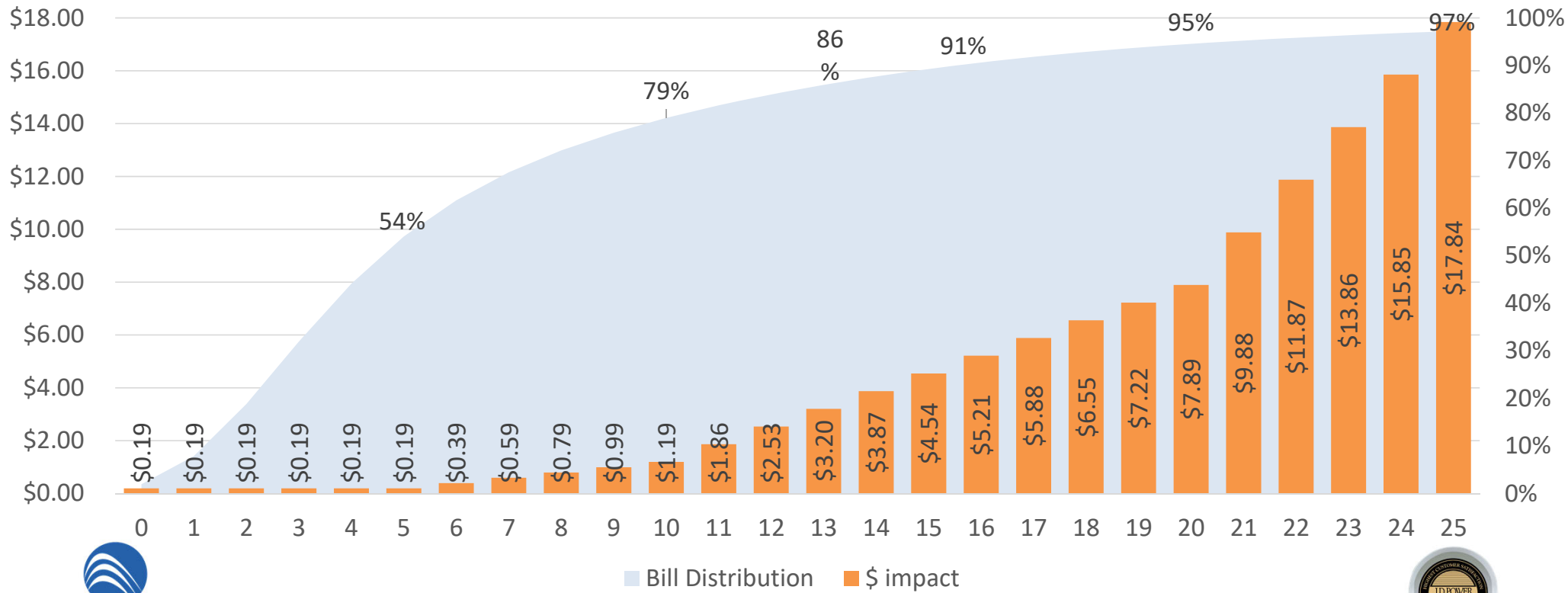
- Consistent with the multi-year phase-in plan
- No increase on the first 5K gallons
- Promotes affordability for low users



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# Residential Monthly Bill (Water Only) Impact



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