UTICA WATER AND POWER AUTHORITY

The value of hydroelectric generation to the ratepayers of Angels Camp and Union Public Utility District

Board of Directors · October 27, 2026

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Why a 100 -year planning horizon?

Hydroelectric Plants are multi -generational assets. This is living history as documented in the assessment. Murphys Powerhouse is 73 years old. Angels Powerhouse is 86 years old.

Simply put, the decisions before us will outlive us all. This is a fair time frame given the history, to use, and we should plan for our children and grandchildren to inherit what we have. Utica was established to protect local control of our water rights.

Does this plan presented to the board change rates?

No, the plan itself cannot change rates. It's information.

- This plan is inline with everything Utica Water and Power Authority has been doing in long range planning (i.e. Strategic Plan, CIP, Master Plan).
- This was developed to answer important questions regarding long -term planning for the Highway 4 corridor.
- This plan also set out to confirm independent water rate studies from 2016, 2019, 2021, 2022, and 2024 and whether the figures still aligned today, and into the future.
- This plan aligned the Strategic Plan, CIP, Master Plan, and reserves policy to nominal figures, while still confirming previous studies' validity.
- Information such as CIP costs are nominal, but will be honed as studies are completed. Nominal figures are the correct path for planning.
- Regulatory fork paths are known, but remained unresolved. This plan analyzes both forks.
- All Prop 218 requirements exist, and remain unchained, because they have to be adhered to.

Strategic Funding Plan written in nominal values

1. Nominal Values (Unadjusted for Inflation)

Definition: A raw monetary figure that shows current -day prices or amounts removing the distorting effects of inflation

Common in long -term financial planning.

Annual budgets will do the work of using actual -value. (i.e. long-term versus short -term planning)

Why nominal figures?

Why the Plan Uses Nominal, Flat -Dollar Figures

- This plan states every figure in nominal dollars and holds both revenues and core costs flat across the horizon. That is a de lib erate choice, made for three reasons.

- First, the plan's purpose is to compare options, not to forecast the Authority's budget a century out. The information before th e Board is whether hydroelectric generation is worth keeping, and every option is measured against the same baseline: the same water rate, the s ame O&M, the same compliance program. Inflation applied to those shared lines would raise or lower every option together and leave the gap betw een them unchanged. Section 5 tests this directly. A compounding O&M escalator lowers both Retain and Retire by the same amount, and t he advantage between them does not move.

- Second, holding revenues and costs flat together is equivalent to assuming they rise together. A flat -dollar model is in effect a constant - purchasing -power view: it assumes the cost of labor, materials, and compliance grows at roughly the same pace as the revenue tha t pays for it. Inflating only one side would build a conclusion into the model. Inflating both sides would add a century of rate and price a ssumptions that no one can defend, and would make the figures harder for the Board and ratepayers to check.

- Third, the flat convention is conservative toward the recommendation. Hydroelectric revenue is held at its 32 -year average with no growth. California's rising power demand suggests generation revenue is more likely to rise than fall. If power prices keep pace with inflation, the value of retaining the asset grows in nominal terms, and Retain's lead widens.

The plan does not propose a 100 -year rate. Rates are set through the Proposition 218 process, typically for no more than five ye ars at a time, and the plan is refreshed every five years. At each refresh, actual costs, revenues, and inflation are re -baselined, and any indexing of rates is decided on current data rather than assumed today.

WHY THIS MATTERS NOW

Hydropower already works for ratepayers, and should keep working

The 100-Year Strategic Funding Plan confirms the Authority’s existing practice: hydroelectric generation is integral to the water system, and every dollar it earns keeps working for ratepayers.

The plan’s finding

Keeping hydro beats retiring it by $104M to $129M over 100 years.

Aging assets

After 32 years of UWPA operation, the powerhouses need rehabilitation investment.

ONE SYSTEM, TWO PURPOSES

The same water makes power on its way to your tap

1 · RIGHTS

Pre-1914 water rights

North Fork Stanislaus River: 16,107 to 33,514 acre-feet a year, by water year

→

2 · CONVEYANCE

The Utica system

Ditches, flumes and reservoirs in service since 1852

→

3 · GENERATION

Two powerhouses

Angels (1940) and Murphys (1955) turn gravity fed water into revenue

→

4 · DELIVERY

Raw water to members

City of Angels Camp and Union Public Utility District

Water and power are not two businesses. They share one water right, one canal system, one workforce and one budget. Neither raw water deliveries to Member Agencies go through both powerhouses, however, rates are reduced by both powerhouses.

FERC licenses: Utica Project No. 2019 · Angels Project No. 2699

WHAT HYDRO EARNS

More than $1.569 million a year, every year (water year 2.0 over 32 years)

$1.57M

Average annual hydro revenue over 32 years ($1,569,889)

$0.6 – 1.8M

Annual range, Murphys and Angels powerhouses, by water -year allocation ($617,541 to $1,788,109)

$157M

Hydro revenue over the 100 -Year Plan's horizon, held flat at today's average (nominal)

Sources: UWPA revenue records; 100 -Year Strategic Funding Plan, §2.2 and §3.2

WHERE THE MONEY GOES

Every hydro dollar lowers the cost of water

Offsets conveyance

Power sales pay a large share of the cost of operating and maintaining the canal system that delivers raw water.

No profit kept

UWPA is a public joint powers authority. It has no shareholders and keeps no profit.

WHAT HYDRO IS WORTH TO EVERY METER?

$23.86

per meter, every month, earned by power rather than charged to ratepayers

$1.569,889 (WY2.0) - $478,589.43 (hydro staff fully weighted salaries and benefits) = $1,110,839
$1,110,839 a year ÷ 3,879 meters ÷ 12 months = $23.86.

Meters: 3,879 across UPUD and the City of Angels Camp (100 -Year Strategic Funding Plan, §1.2)

THE 100 - YEAR PLAN'S VERDICT

Keeping hydro wins under every test the plan ran

+$123M

Retain over Retire across 100 years, before compliance costs

+$104M

Fully costed, even crediting Retire with selling the water instead

+$92M

Smallest lead in any stress test: hydro revenue cut 20% for 100 years

Retain leads at every checkpoint, by $38M at 25 years. Securing the FERC conduit exemption lifts the lead.

Source: 100-Year Strategic Funding Plan, §3.4, §3.6, §4.3.1 and Appendix C. Nominal dollars, 2028 –2127.

THE CHOICE

Keep hydro integrated, or wall it off

RECOMMENDED

Keep hydro integrated

- Hydro revenue keeps crediting the cost of conveyance
- One water right, one system, one budget
- The plan’s surplus funds renewal, reserves and rate relief

NOT RECOMMENDED

Decommission

- No hydro credit toward conveyance, ever again
- Conveyance loses the surplus that funds its renewal
- Shared canal costs must be split and argued over

WHAT KEEPING HYDRO REQUIRES

Four obligations that come with keeping hydro

Secure the exemption

Pursue a perpetual FERC conduit exemption for Projects 2019 and 2699, with a funded relicensing fallback.

Rehabilitate the powerhouses

Size the renewal program through the FY 2026 –27 capital studies, Master Plan and CIP.

Fund it from surplus

Pay for renewal from operating surplus, reserves under Resolution No. 22 -11. No loan is assumed but large projects may require debt service.

Protect and report the revenue

Treat hydro revenue as operating priority #1 and report it, and its use, to the Board each year.

Source: 100-Year Strategic Funding Plan, §4.4–4.6, §5.5–5.6 and §7

2021 Financial Assessment

HDR Recommendations

- Public agencies following best practices should ensure there is adequate funding for the following:
  - Current and future operating costs to keep up with inflation
  - Adequate reinvestment in infrastructure to maintain safe and reliable service
  - Prudent reserve levels
  - Financial metrics (if debt is issued)
- While it can be difficult to increase rates in the community, it is necessary in order to manage and maintain a water supply system
- Drastically cutting expenses to avoid the need for rate increases in the short-term can be shortsighted and will have negative long-term impacts on water supply reliability and increase costs over the long-term
- Adopting a plan that adequately funds Utica operating and capital needs while minimizing the reliance on available reserves and balances the risk of a low water year

2016 Rate Study

PROPOSED UPUD UWPA FEE[3]

Water Year	2016/2017[2] Current MPH+APH $35/MWhr	2017/2018 Current MPH+APH $35/MWhr	2017/2018 ReMat APH $35/MWhr MPH $90/MWhr	2018/2019 Current MPH+APH $35/MWhr	2018/2019 ReMat APH $35/MWhr MPH $90/MWhr	2019/2020 Current MPH+APH $35/MWhr	2019/2020 ReMat APH $35/MWhr MPH $90/MWhr	2020/2021 Current MPH+APH $35/MWhr	2020/2021 ReMat APH $35/MWhr MPH $90/MWhr
I	$17.46	$19.98	$1.70	$21.84	$1.70	$23.80	$3.48	$25.85	$5.53
II		$22.03	$4.03	$23.89	$5.89	$25.84	$7.85	$27.89	$9.90
III		$24.05	$8.34	$25.91	$10.20	$27.87	$12.15	$29.92	$14.20
IV		$26.91	$14.23	$28.77	$16.09	$30.72	$18.04	$32.77	$20.09
V		$28.81	$18.26	$30.67	$20.12	$32.62	$22.07	$34.67	$24.13
VI		$30.38	$22.24	$32.24	$24.10	$34.19	$26.05	$36.24	$28.10

[1] Based upon information from UWPA, member contributions for 2016/2017 will total $460,000 ($230,000 each from UPUD and the City of Angels)

[2] Assumes increase in UWPA fee effective by Dec. 1, 2016

[3] Includes contractual payment of $40,000/year from UPUD to UWPA in addition to UWPA projected deficit.

$29.92 in 2021 is worth approximately $37.20 today.
This calculation is based on official Consumer Price Index (CPI) data tracked by the U.S. Bureau of Labor Statistics.

Source: https://www.uticawater.com/files/b4c74d2e2/2016+WGA+rate+study.pdf

2021 Financial Assessment

	FY 2021 - 2022	FY 2022 - 2023	FY 2023 - 2024	FY 2024 - 2025	FY 2025 - 2026	FY 2026 - 2027
		UWPA 5-YEAR BUDGET PROJECTIONS FY 2022-23 THRU FY 2026-27				
		JPA Contribution Worksheet				
	FY 2021 - 2022 APPROVED	FY 2022 - 2023 PROJECTED	FY 2023 - 2024 PROJECTED	FY 2024 - 2025 PROJECTED	FY 2025 - 2026 PROJECTED	FY 2026 - 2027 PROJECTED
REVENUE						
OPERATING INCOME ①	$ 1,128,969	$ 1,475,484	$ 1,476,758	$ 1,478,072	$ 1,479,425	$ 1,480,818
NON OPERATING INCOME ②	$ 1,272,360	$ 1,363,875	$ 1,366,639	$ 1,369,665	$ 1,372,993	$ 1,376,675
TOTAL REVENUE:	$ 2,401,329	$ 2,839,359	$ 2,843,397	$ 2,847,737	$ 2,852,418	$ 2,857,493
EXPENDITURES						
WAGES & BENEFITS ③	$ 1,049,602	$ 1,097,094	$ 1,147,431	$ 1,202,820	$ 1,261,537	$ 1,323,795
SERVICES & SUPPLIES ④	$ 957,625	$ 739,149	$ 720,125	$ 758,589	$ 799,746	$ 844,140
CAPITAL IMPROVEMENT PROGRAM ⑤	$ 273,000	$ 512,500	$ 650,000	$ 510,000	$ 475,000	$ 410,000
CAPITAL OUTLAY ⑥	$ 61,500	$ 84,500	$ 87,035	$ 89,646	$ 92,335	$ 95,105
RESERVES ⑦	$ 489,416	$ 446,050	$ 521,082	$ 571,114	$ 571,147	$ 571,182
FERC 5-10 Year Reserves	$ 73,800	$ 73,800	$ 73,800	$ 73,800	$ 73,800	$ 73,800
GRANTS ⑧	$ 395,000	$ 150,000	$ -	$ -	$ -	$ -
TOTAL:	$ 3,226,143	$ 3,103,093	$ 3,199,473	$ 3,205,969	$ 3,273,565	$ 3,318,022
NET SURPLUS / SHORTFALL:	$ (824,814)	$ (263,734)	$ (356,075.77)	$ (358,232)	$ (421,147)	$ (460,529)
Ramp-Up Option	$ 447,000	$ 490,000	$ 650,000	$ 750,000	$ 850,000	[illegible]
UPUD Rate / Customer	$ 18	$ 20	$ 27	$ 31	$ 35	$ 38
COA Rate / Customer	$ 19	$ 23	$ 30	$ 35	$ 39	$ 42
UPUD Percentage Increase		13%	33%	15%	13%	6%
COA Percentage Increase		19%	33%	15%	13%	6%
UPUD Rate	2,000 cust.					
COA Rate	1,800 cust.					

① Assumes $0 annual water sales to NCPA, due to GEP; Irrigation sales increasing 3% per year; Power Sales per chart at Water Year 3; Water sales & Other Income flat at 2022-23 levels
② Includes $380,000 in Grant Funds FY2021-22
② Assumes Interest Income to increase by 20% per year assuming full funding & interest rate increases;Leases increase 3% per year; Member Contributions TBD; $0 for grants
③ Assumes a 2.5% COLA and a 2.5% Step increase annually, total: 5%
④ Assumes 3% general increase except 5% for Maintenance & Repair and Utilities and 25% for Professional Services; blended rate 8%
⑤ Assumes current CIP plus Angels Governor Retrofit
⑥ Assumes Capital Outlay per CIP starting in 2021-22
⑦ Reserve Funding Based Reolution 20-05 adopted on June 23rd, 2020
⑧ Assumes no Grant Funding Available

4.2 PROPOSED UWPA FEE POLICY

Going forward, the District Board proposed to assess the UWPA Fee on a per-meter basis. This is a departure from the current practice of assessing the fee to each account and each "additional" dwelling unit. The UWPA fee is calculated by dividing the required UWPA contribution by the District's total number of meters.

The UWPA Fee is designed to be a "pass-through" that covers the costs of the District's projected contribution amounts. The projected contributions are based on UWPA projections. This Study recommends establishing a pass-through policy that resets the UWPA fee every year based on the projected UWPA contributions for the following year.

The District would be required to notify customers of the proposed pass-through policy in a Proposition 218 notification letter. If the policy passes the Proposition 218 adoption requirements, the District will be authorized to recalculate the UWPA Fee to account for any changes in the UWPA contribution. Such an adjustment will not require a public hearing or any additional action by the District Board however the District will be required to provide customers with notice of the expected adjustment at least 30 days before the effective date of the adjustment.

Table 10 provides an example of how the UWPA Fee could be calculated given an example contribution to UWPA and example number of then-current number of meters in the District (based on billing data).

Table 10: Example of UWPA Fee Pass-Through Calculation

Example UWPA contribution:	$500,000
Then-current District meters:	1,668
Cost per meter per month:	$24.98

2022 Water Rate Study

Source:
https://www.uticawater.com/files/7ce91a0ef/Union+Public+Utility+District+Rate+Study+2022+12.8.22+Final+Report.pdf

2024 Water Rate Study

UWPA Charge

The District relies directly on Utica Water & Power Authority (UWPA) for delivery of surface water from the North Fork Stanislaus River to District facilities. The water delivered by UPWA is then treated by the District's water treatment plant to potable use standards for the domestic system and distributed to domestic customers; whereas the raw water is distributed to raw water customers without being treated to potable use standards by the District. The UWPA Charge is designed to be a "pass-through" that covers the costs of the District's projected contribution amounts to UWPA for delivery of surface water.

Based on input from District staff and the District Board of Directors, the proposed maximum charge is calculated by dividing the District's budgeted yearly required UWPA contribution by the District's total number of accounts and additional dwelling units (both domestic and raw water customers), as shown in Figure 12 below.

Figure 13. UWPA Charges by Calendar Year

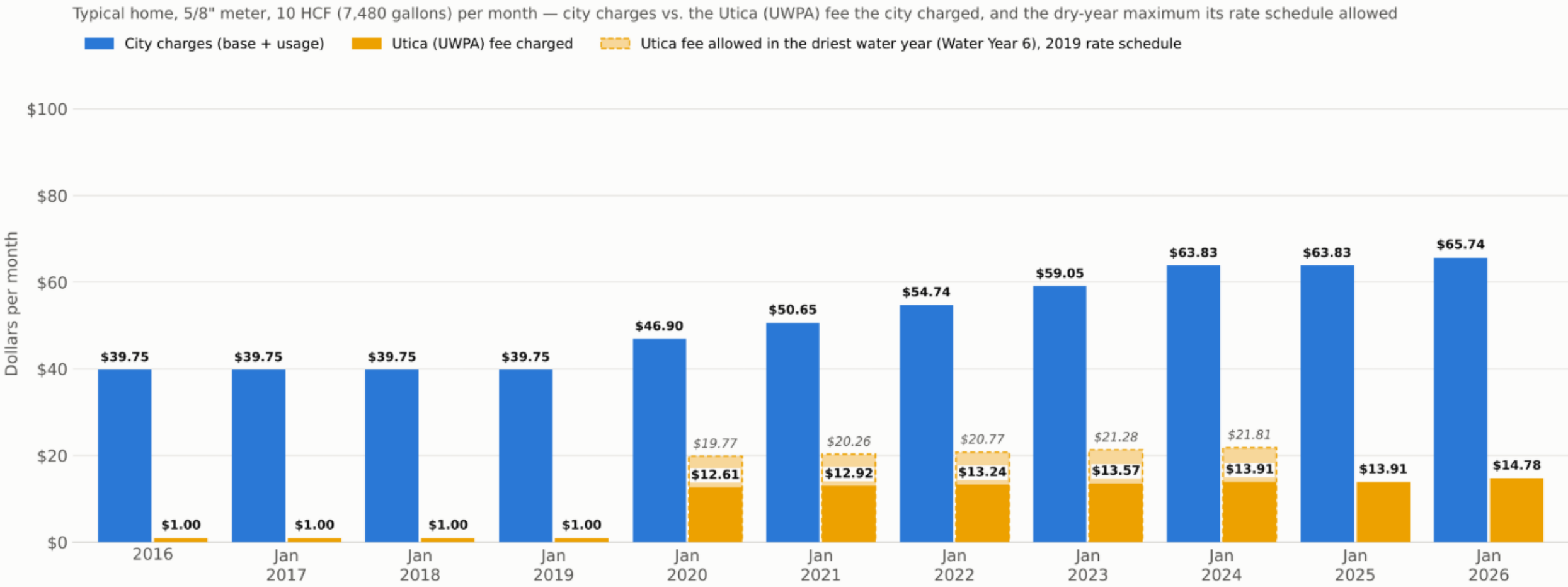
Category	January 1, 2025	January 1, 2026	January 1, 2027	January 1, 2028	January 1, 2029
UWPA Contribution	$ 388,500	$ 427,350	$ 470,085	$ 517,094	$ 568,803
Number of Accounts & Dwelling Units	1,998	2,038	2,079	2,120	2,163
UPWA Monthly Charge	$ 16.20	$ 17.47	$ 18.85	$ 20.32	$ 21.92

Per direction from the District Board of Directors on October 23, 2024, a pass-through policy will not be included in the as part of the Proposition 218 notification letter. Therefore, even if the required UWPA contribution amount increases above the projected contribution amounts found in Figure 13 during the five-year rate adoption period, the District will not be authorized to recalculate the UWPA Fee in excess of the maximum monthly charges listed in the notification letter without undertaking another Proposition 218 process.

Source:
https://www.uticawater.com/files/e8da81eab/UPUD+Water+Rate+Study_FINAL_2024_10_25.pdf

City of Angels Camp: Monthly Water Bill, 2016–2026

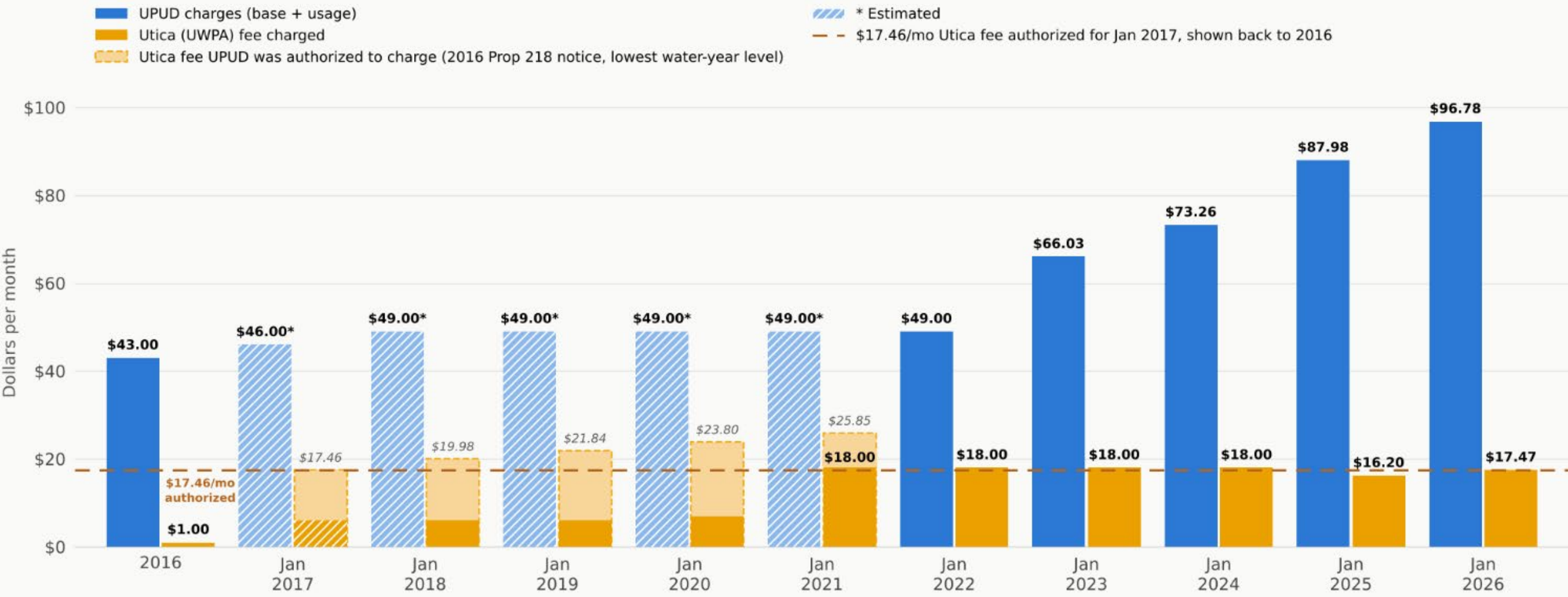
Typical home, 5/8" meter, 10 HCF (7,480 gallons) per month — city charges vs. the Utica (UWPA) fee the city charged, and the dry-year maximum its rate schedule allowed



2016 → Jan 2026: city charges +$25.99 | Utica fee +$13.78. FY 2019/20–2023/24: the city charged the average-year (Water Year 3) fee, $7.16–$7.90 per month below the Water Year 6 maximum.
Aug 2009 rates in effect through Aug 2019 (first 10 HCF included in base). New rates took effect Aug 21, 2019, then each July 1. The 2019 schedule ran through FY 2023/24; the 2025 study lists only average-year (WY 2.5) fees.
Sources: City of Angels Camp Rate Study (Bartle Wells Associates, 2019), Tables 9–10; Water & Wastewater Rates Study (BWA, 2025 draft).

Union Public Utility District (UPUD): Monthly Water Bill, 2016–2026

Typical home, 5/8" meter, 10 HCF (7,480 gallons) per month — UPUD charges vs. the Utica (UWPA) fee UPUD charged, and the fee it was authorized to charge



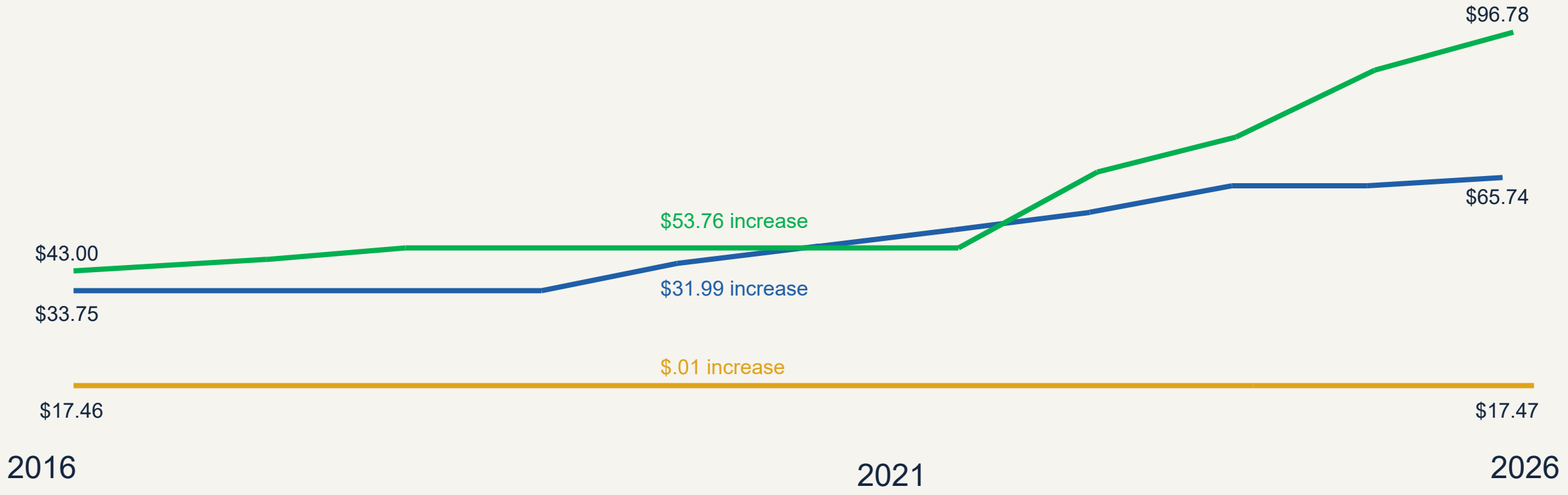
2016 → Jan 2026: UPUD charges +$53.78 | Utica fee +$16.47. FY 2017/18–2020/21: UPUD charged $7.85–$16.80 per month less than its noticed Utica fee schedule allowed.

Dashed line marks the $17.46/mo Utica fee authorized for Jan 2017 (2016 Prop 218 notice) extended across all years for comparison; it is not the amount charged.

*Estimated: UPUD base charges for 2017–2021 (between the documented $43 in 2016 and $49 in 2022; base included 10 HCF through 2022) and the Jan 2017 Utica fee.

Sources: UPUD UWPA Fee Study (Weber, Ghio & Assoc., Aug. 2016), Table 1; UPUD board minutes, July 18, 2018; UPUD Notice of UWPA Fee Increase, June 10, 2020; UPUD 2022 & 2024 Rate Studies.

Water Rates/Fees 2016 -2026



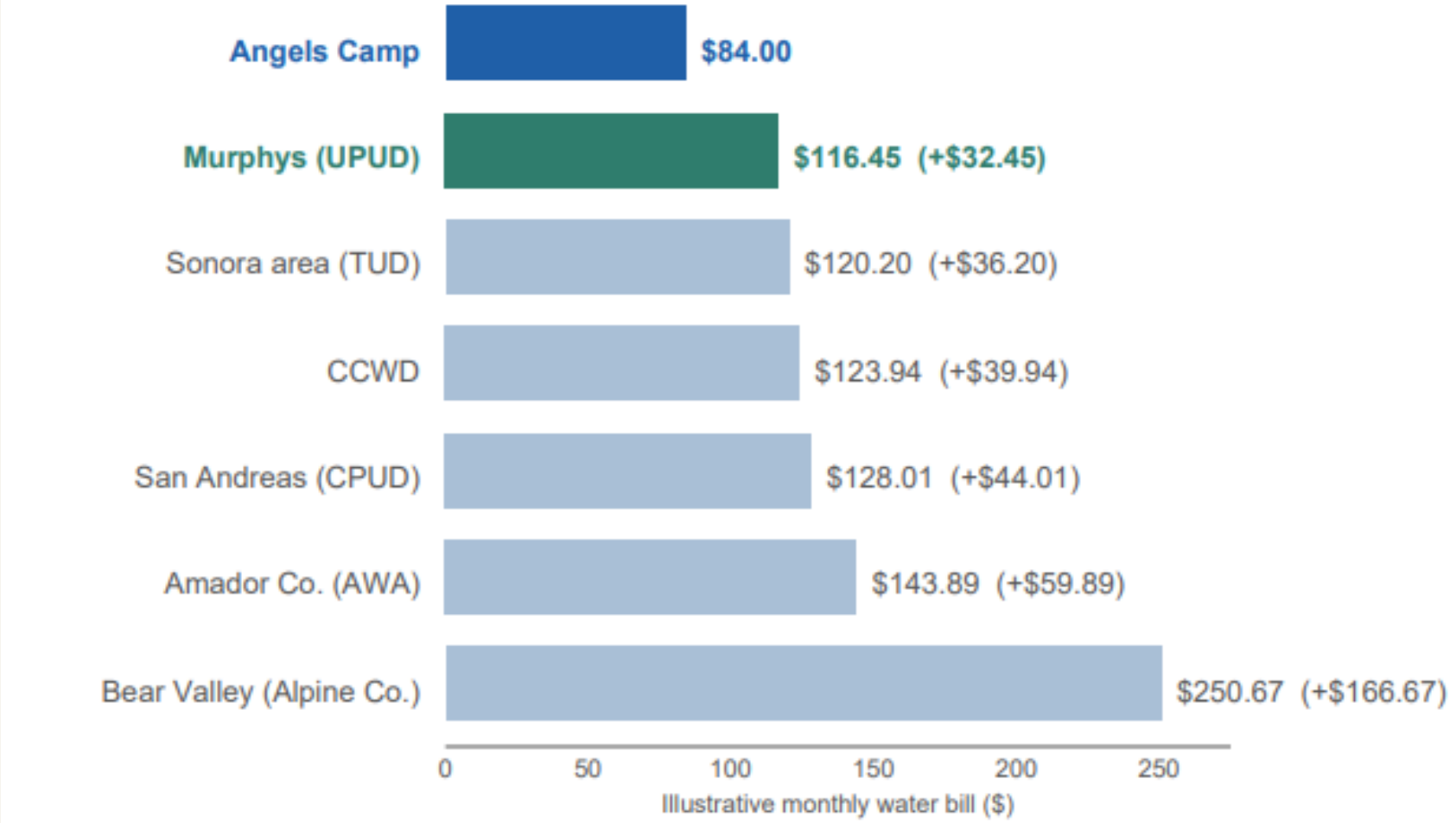
UPUD

CITY OF ANGELS CAMP

UTICA

Illustrative monthly water bill by community / utility

Difference from Angels Camp shown in parentheses.



SOURCES

Where these figures come from

- Hydro revenue: UWPA records, 32 -year water -year average of $1,569,889 a year
- Retain vs. Retire, stress tests, rate -relief options, compliance costs and meter count (3,879): UWPA 100 -Year Strategic Funding Plan, Full Report
- Reserve structure and targets: Revised Utica Reserve Policy, Resolution No. 22 -11
- UPUD rates and Utica fee: UWPA Fee Study (Weber, Ghio & Associates, Aug. 2016); 2022 Rate Study (Hildebrand Consulting); 2024 Rate Study (NBS)
- Angels Camp rates and Utica fee: Rate Study (Bartle Wells Associates, 2019); Water and Wastewater Rates Study (BWA, 2025 draf t)
- Bill comparisons: typical home, 5/8" meter, 10 HCF (7,480 gallons) a month, rates in effect January 2026



“We are committed to preserving local control of our water resources through sound fiscal and operational management, rigorous dam safety practices, and regulatory compliance ensuring a safe and reliable water supply for municipal and agricultural stakeholders NOW and FOR FUTURE GENERATIONS”