

# Wastewater Rate Adjustments

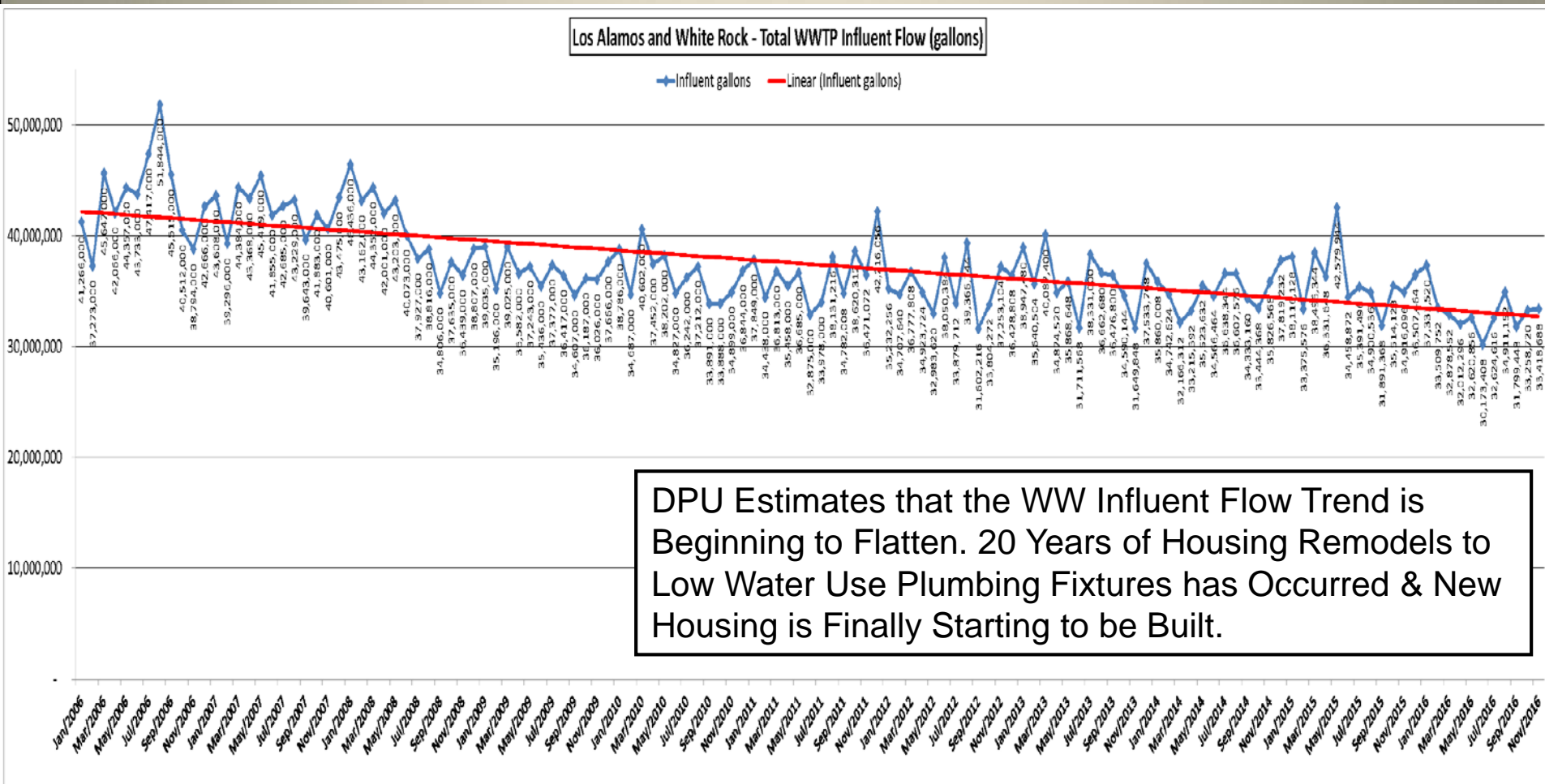
FY 2020 thru FY 2022

*Board of Public Utilities & County Council  
October thru November 2019 Meetings*



ATTACHMENT A

# Total LA + WR WWTP Influent Flow 2006 - 2016



# DPU Financial Policy for Cash Reserves – Waste Water Fund

## In Each Utilities Fund or Sub-Fund:

1. 180-Days of Budgeted O&M Expenses for the Following Year (90-Days Min. Floor)
2. Debt Service Reserve (Sufficient to Fund All Debt Service for the Following Year)
3. Contingency Reserve (Only One Occurrence in any Single Year)  
WC = \$750,000 Replace a Major Segment of Pipeline  
WT = \$750,000 Replace a Major System or Component
4. Retirement/Reclamation Reserve (Only One Occurrence in any Single Year)  
WC = \$150,000 Abandon a Sewer Lift Station  
WT = \$150,000 Abandon a Treatment System Basin & Equipment

## Cash Balance and Risk Sharing Between System Sub-Funds/Sub-Groups

WC & WT Sub-Group's Budgets for Contingency and Retirement/Reclamation Reserves are Split 50/50

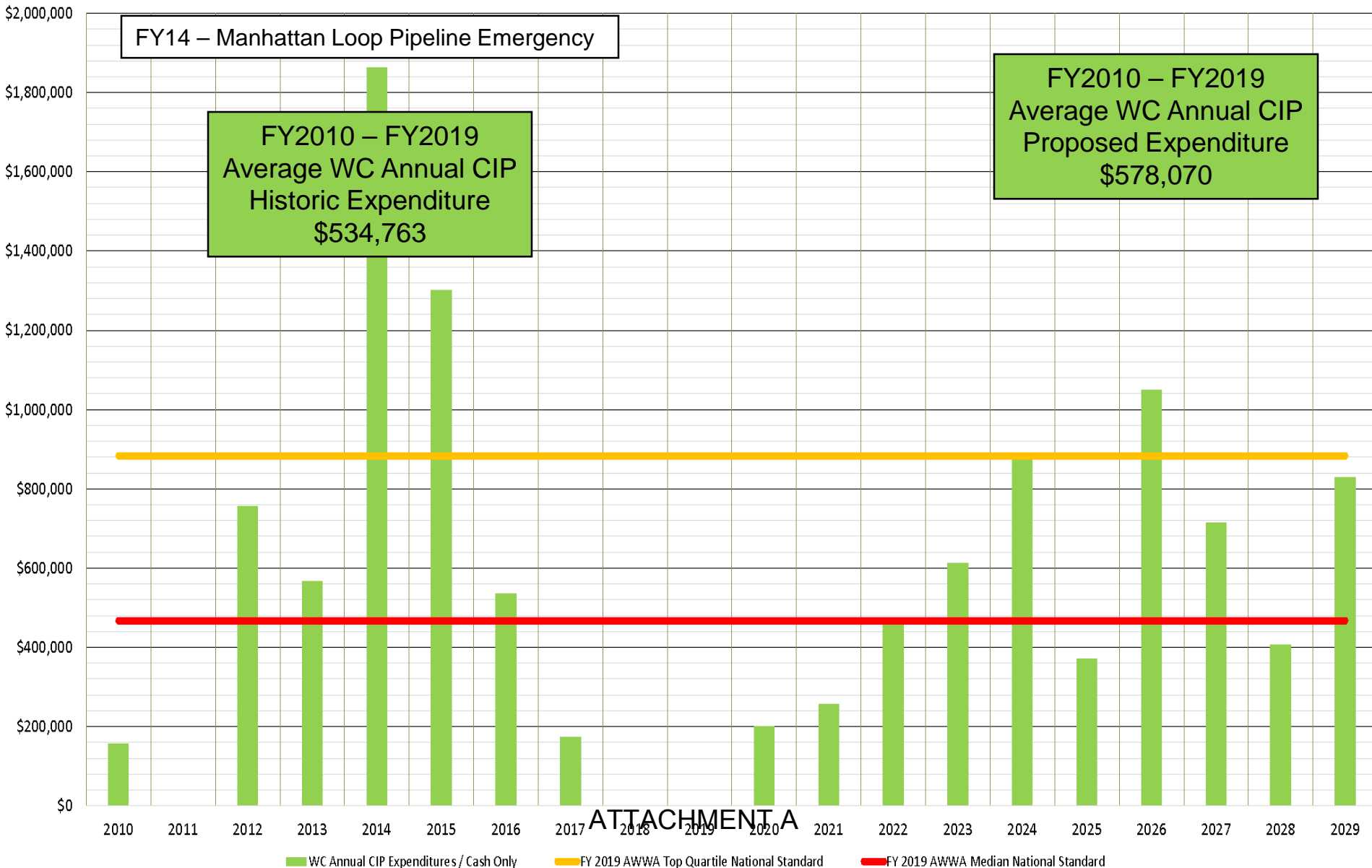
5. Actual CIP Program Expenditures for the Following Year – or – The System's Annual Depreciation Plus 2.5% (whichever is greater)

## Capital Improvement Program (CIP) – Waste Water Fund Financial Policy versus Historic & Proposed

5. Actual CIP Program Expenditures for the  
Following Year – or – The System's Annual  
Depreciation Plus 2.5% (whichever is greater)
  - WC = \$496,394 (FY20 Dep. + 2.5%) Compared  
to \$534,763 (Historic) & \$578,070 (Proposed)
  - WT = \$330,930 (FY20 Dep. + 2.5%) Compared  
to \$188,825 (Historic) & \$324,029 (Proposed)

# AWWA / Wastewater WC Sub-System R & R

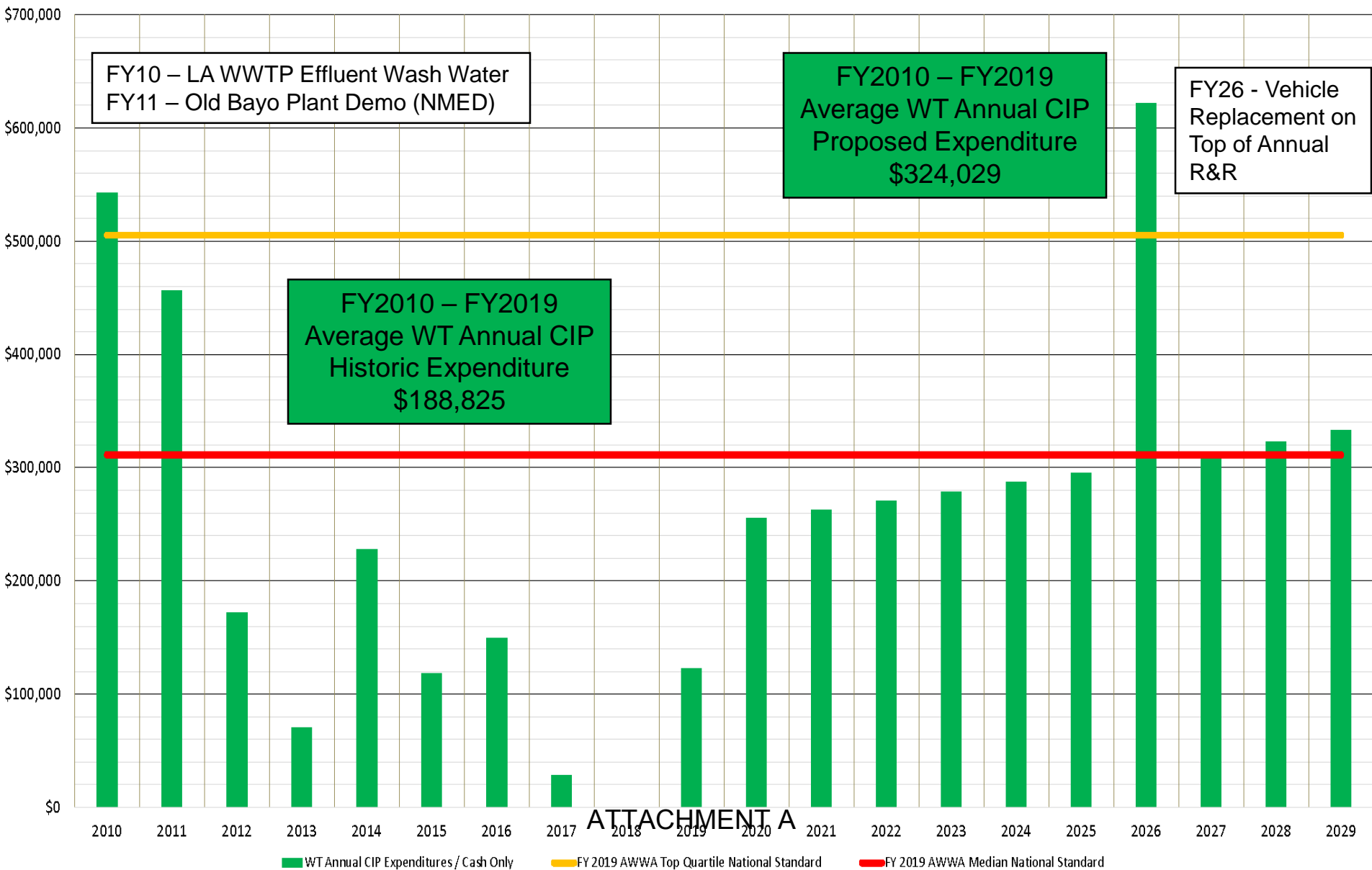
WC CIP EXPENDITURES / FY 2010 - FY 2019 HISTORIC & FY 2020 - FY 2029 PROPOSED VERSUS AWWA NATIONAL STANDARD





# AWWA / Wastewater – WT Sub-System R & R

WT CIP EXPENDITURES / FY 2010 - FY 2019 HISTORIC & FY 2020 - FY 2029 PROPOSED VERSUS AWWA NATIONAL STANDARD



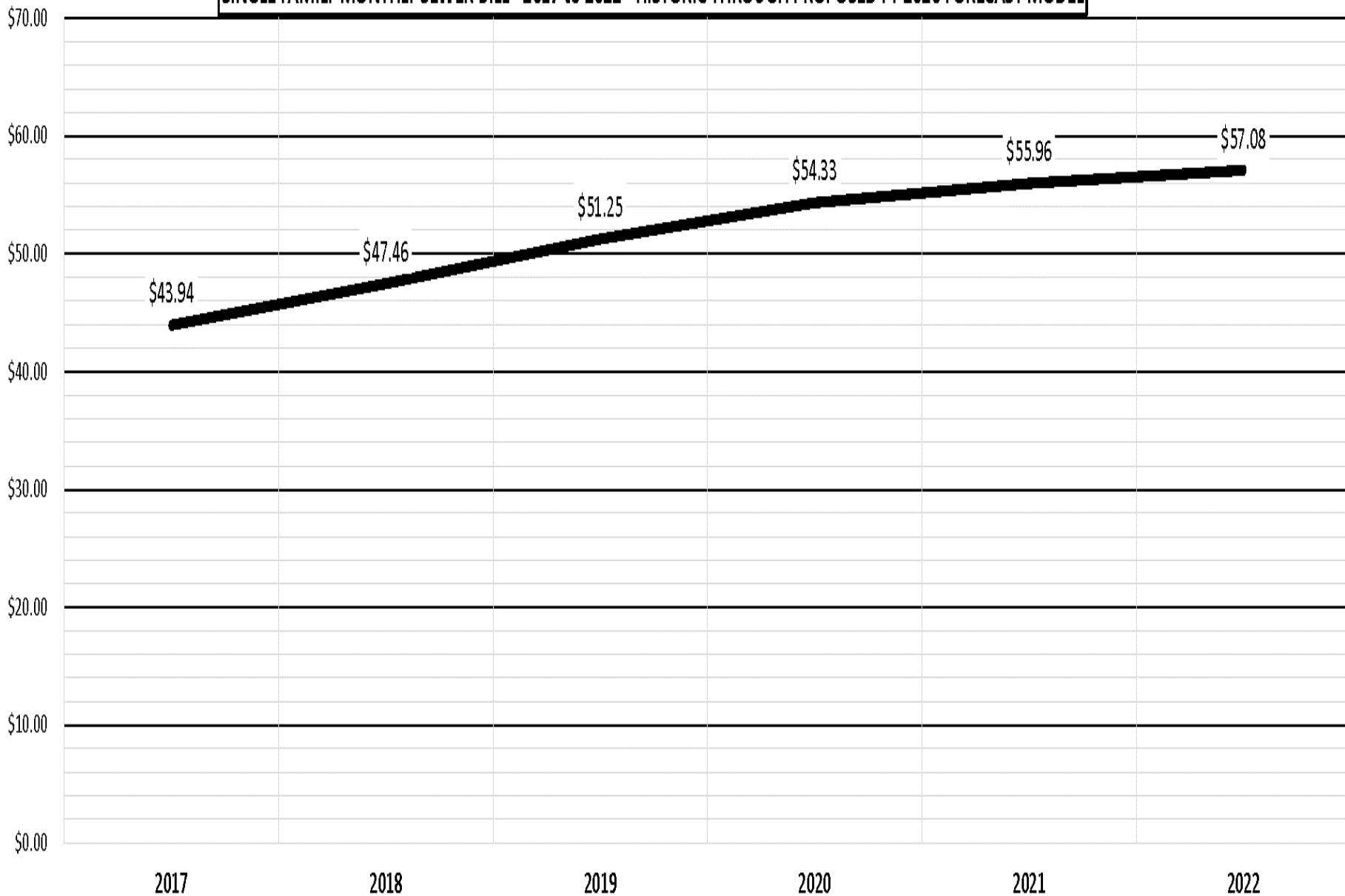
# National Comparable - AWWA / System R & R – W & WW

## System Renewal & Replacement AWWA National Standard Percentages

|  | Actual CY 2017 / Dashboard FY 2020 AWWA System Renewal & Replacement Percentage |                     |              |  | Annual Repair & Replacement National Standard (PWV) X (System R&R %)              |                    |              |
|--|---|---------------------|--------------|--|---|--------------------|--------------|
| AWWA Asset Class                         | Bottom Quartile   | Median              | Top Quartile | Actual FY 2018 / Dashboard FY 2020 Present Worth Value of the GWS Sub-Group System | Bottom Quartile   | Median             | Top Quartile |
| 1. Water Supply                          | 0.7%  | 1.9%                | 5.1%         |  |   |                    |              |
| 2. Water Treatment Facilities (not used) | 1.1%  | 2.4%                | 5.5%         |  |   |                    |              |
| 3. Water Pump Station                    | 0.5%  | 1.2%                | 6.4%         |  |   |                    |              |
| 4. Water Transmission and Distribution   | 0.6%  | 1.5%                | 2.7%         |  |   |                    |              |
| 5. Wastewater Collection                 | 0.8%  | 1.5%                | 3.0%         |  | <b>Proposed CIP Program<br/>Average Annual FY 2020 thru<br/>FY 2029 CIP Costs</b> |                    |              |
| 6. Wastewater Pump Stations              | 1.6%  | 3.1%                | 5.7%         |  |   |                    |              |
| 7. Wastewater Treatment                  | 0.9%  | 2.3%                | 3.4%         |  |   |                    |              |
|  |   |                     |              |  |   | <b>\$1,945,984</b> |              |
| Water Production (average 1, 3 & 4)      | 0.60%   | 1.53%               | 4.73%        | \$34,456,203   | \$206,737   | \$527,180          | \$1,629,778  |
|  |   |                     |              |  |   | <b>\$473,938</b>   |              |
| Water Distribution (4 only)              | 0.60%   | 1.50%               | 2.70%        | \$18,715,209   | \$112,291   | \$280,728          | \$505,311    |
|  |   |                     |              |  |   | <b>\$578,070</b>   |              |
| Wastewater Collection (average 5 & 6)    | 1.20%   | 2.30%               | 4.35%        | \$20,306,557   | \$243,679   | \$467,051          | \$883,335    |
|  |   | <b>ATTACHMENT A</b> |              |  |   | <b>\$324,029</b>   |              |
| Wastewater Treatment (7 only)            | 0.90%   | 2.30%               | 3.40%        | \$13,537,704   | \$121,839   | \$311,367          | \$460,282    |

**SINGLE FAMILY MONTHLY SEWER BILL - 2017 to 2022 - HISTORIC THROUGH PROPOSED FY 2020 FORECAST MODEL**

**MONTHLY FLAT RATE + SERVICE CHARGE TOTAL**



**FISCAL YEAR**

**ATTACHMENT A**  
Single Family Residential Monthly Sewer Bill



## Projected Average Sewer Bill for Residential Customers - FY 2017 through FY 2022

|        | Monthly Sewer | Rate Increase Percentage | Additional Annual Cost Over Previous Year | Los Alamos Median Household Income * | Assumed Annual Income Increase | Percentage of Income Needed to Pay Sewer Bill |  | New Mexico Median Household Income ** | Assumed Annual Income Increase | Percentage of Income Needed to Pay Sewer Bill |
|--------|---------------|--------------------------|---|--------------------------------------|--------------------------------|---|--|---------------------------------------|--------------------------------|---|
| FY2017 | \$43.94       | 8.00%                    | \$39.00                                   | \$110,190                            | 2.5%                           | 0.48%   |  | \$46,744                              | 0.0%                           | 1.13%   |
| FY2018 | \$47.46       | 8.00%                    | \$42.18                                   | \$112,945                            | 2.5%                           | 0.50%   |  | \$46,744                              | 0.0%                           | 1.22%   |
| FY2019 | \$51.25       | 8.00%                    | \$45.56                                   | \$115,768                            | 2.5%                           | 0.53%   |  | \$46,744                              | 0.0%                           | 1.32%   |
| FY2020 | \$54.32       | 6.00%                    | \$36.82                                   | \$118,663                            | 2.5%                           | 0.55%   |  | \$46,744                              | 0.0%                           | 1.39%   |
| FY2021 | \$55.95       | 3.00%                    | \$19.56                                   | \$121,629                            | 2.5%                           | 0.55%   |  | \$46,744                              | 0.0%                           | 1.44%   |
| FY2022 | \$57.07       | 2.00%                    | \$13.44                                   | \$124,670                            | 2.5%                           | 0.55%   |  | \$46,744                              | 0.0%                           | 1.47%   |
|        |               |                          |   |                                      |                                |   |  |                                       |                                |   |

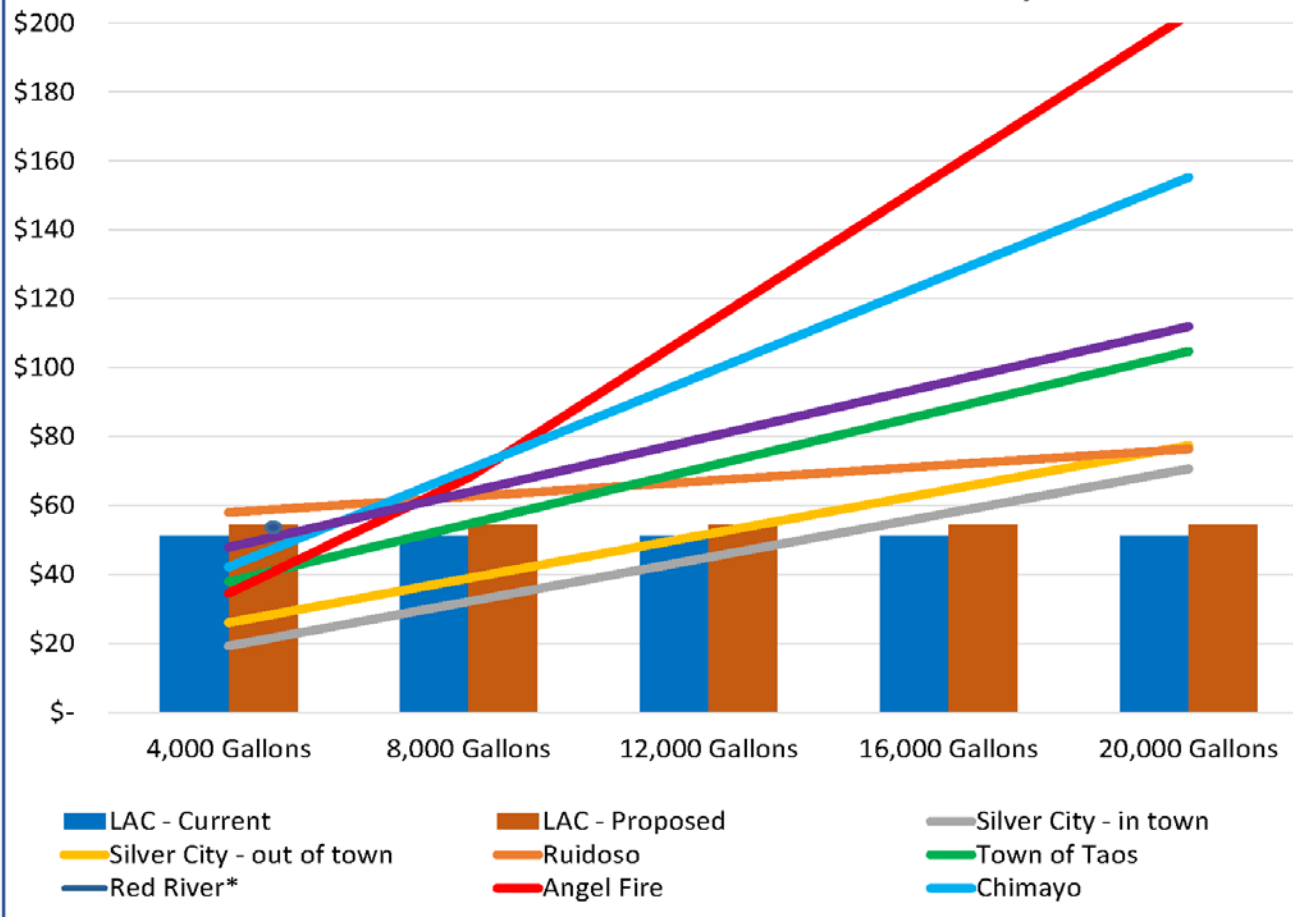
\* 2017 data point from <https://www.census.gov/quickfacts/fact/table/losalamoscountynewmexico/PST045217> - 2013-2017 data, 2017 dollars

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\*\* <https://www.deptofnumbers.com/income/new-mexico/> - 2017 data

AWWA Sewer Service Affordability for FY 2020  
National Benchmark Median Value = 0.78%  
Compared to National Median Household Income

### NM Mountainous Communities Residential Sewer Rate Comparison



### RESIDENTIAL SEWER RATES: LOS ALAMOS VS. COMPARABLE COMMUNITIES

| Monthly Usage  | LAC - Current | LAC - Proposed | Silver City - in town | Silver City - out of town | Ruidoso | Town of Taos | Red River* | Angel Fire | Chimayo | Aztec  |
|----------------|---------------|----------------|-----------------------|---------------------------|---------|--------------|------------|------------|---------|--------|
| 4,000 Gallons  | 51.24         | 54.32          | 19.34                 | 26.10                     | 58.04   | 38.02        |            | 34.59      | 42.26   | 47.95  |
| 6,000 Gallons  | 51.24         | 54.32          | 25.76                 | 32.52                     | 60.34   | 46.36        | 47.99      | 34.59      | 56.38   | 55.95  |
| 8,000 Gallons  | 51.24         | 54.32          | 32.18                 | 38.94                     | 62.64   | 54.70        |            | 68.16      | 70.50   | 63.95  |
| 12,000 Gallons | 51.24         | 54.32          | 45.02                 | 51.78                     | 67.24   | 71.38        |            | 112.92     | 98.74   | 79.95  |
| 14,000 Gallons | 51.24         | 54.32          | 51.44                 | 58.20                     | 69.54   | 79.72        |            | 135.30     | 112.86  | 87.95  |
| 16,000 Gallons | 51.24         | 54.32          | 57.86                 | 64.62                     | 71.84   | 88.06        |            | 157.68     | 126.98  | 95.95  |
| 20,000 Gallons | 51.24         | 54.32          | 70.70                 | 77.46                     | 76.44   | 104.74       |            | 202.44     | 155.22  | 111.95 |
| 30,000 Gallons | 51.24         | 54.32          | 102.40                | 111.95                    | 87.95   | 146.44       |            | 314.34     | 225.82  | 151.95 |

\* Available data for Red River is for Dec. 2015, 6 kgal only.

SINGLE FAMILY MONTHLY SEWER BILL - 1985 to 2039 - HISTORIC THROUGH PROPOSED FY 2020 FORECAST MODEL

NOTE: Single Family Monthly Sewer Bill Calculations were Revised from a Commodity Charge Based on Water Use (Assumed to be 4,300 Gallons per Month for Purposes of these Comparisons) to a Flat Rate in FY 2013.

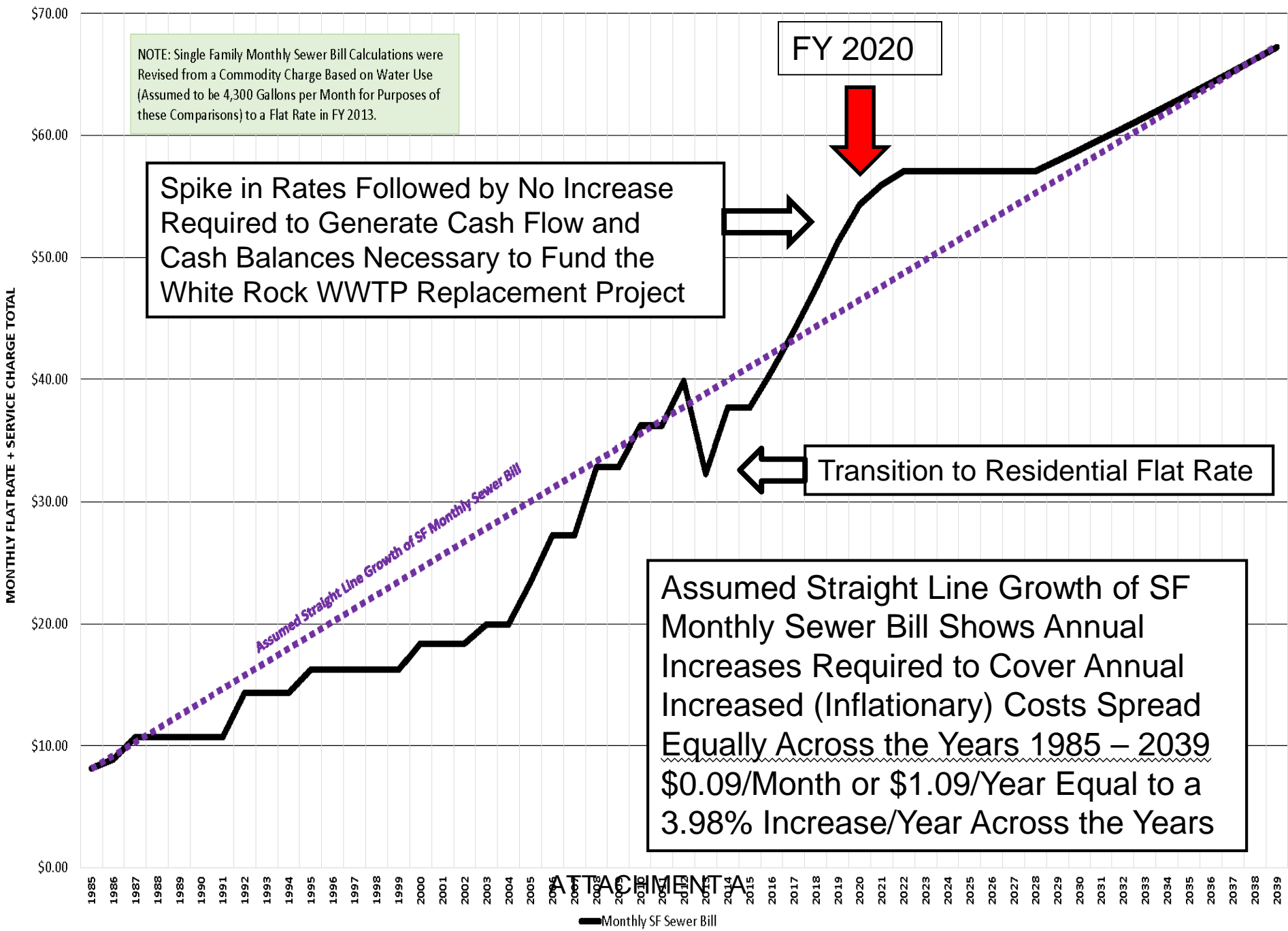
Spike in Rates Followed by No Increase Required to Generate Cash Flow and Cash Balances Necessary to Fund the White Rock WWTP Replacement Project

FY 2020

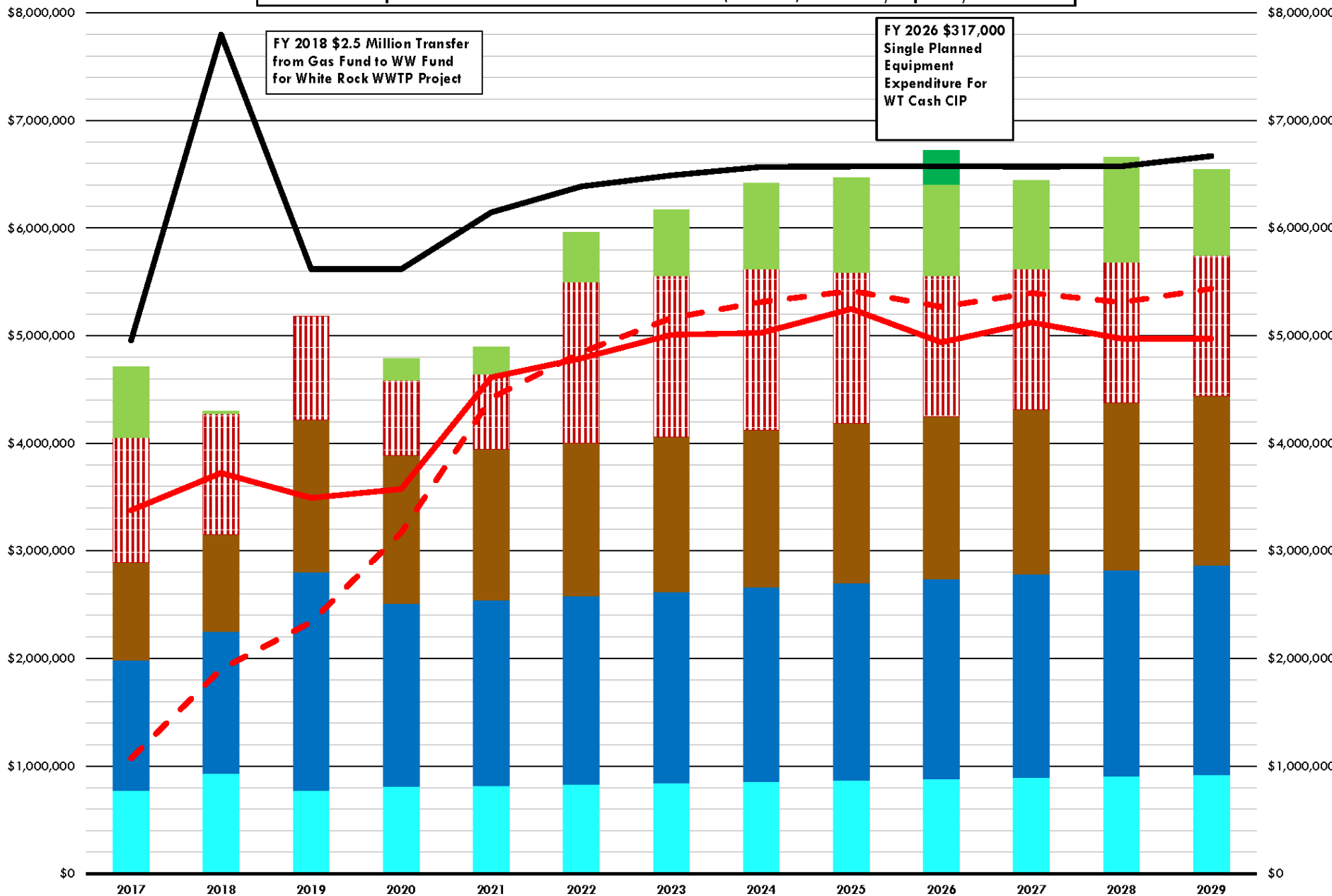


Transition to Residential Flat Rate

Assumed Straight Line Growth of SF Monthly Sewer Bill Shows Annual Increases Required to Cover Annual Increased (Inflationary) Costs Spread Equally Across the Years 1985 – 2039  
\$0.09/Month or \$1.09/Year Equal to a 3.98% Increase/Year Across the Years



# FY 2020 Rate Adjustment 10-Year Forecast - Wastewater Fund (WC + WT) - Revenue / Expense / Cash Balance



ATTACHMENT A

Total O&M Expenses - WC

Total O&M Expenses - WT

Total O&M Expenses - WW Fund IDC & ADA

Debt Service - WT Only

Total Capital Cash

Total Capital Cash - WT

Total Cash Inflow (exc/ Financing)

Calculated Cash Balance - WW Fund

Recommended Cash Balance - WW Fund

## CONCLUSIONS & RECOMMENDATIONS

- The Long Range Rate Adjustment Plan Executed by DPU over the Past Few Years has Established a Multi-Year Record of Financial Health Improvement in All Funds and Sub-Funds
- The Proposed CIP Programs for Each Sub-Group are Planned to Reach a “Modern Acceptable Standard” in Terms of Capacity and Physical Integrity Within the Current Long Range (20-Year) Planning Period
- It is Not Recommended to Further Delay Any System’s CIP Program
- If the Current Proposal for a 3-Year Rate Adjustment Program is Approved, and if Everything Goes According to Plan, the Financial Policy Goals of the BPU Will be Met By FY 2025 and the CIP Needs of all Sub-Groups Will be Met

## Continuous Improvement Steps

- Continue to Research Ways to Emphasize Repair & Rehabilitation of Existing Facilities In Lieu of Full CIP Replacement
- Annually Verify That All Revenue Related Assumptions Regarding Projected Sales Volumes, Number of Housing Units, Etc. Are Accurate In the Financial Models
- Annually Refine the Financial Models Data Sets and Assumptions
- Annually Review and Potentially Revise Proposed CIP Costs and Future Rates Based on the Best Available Data and Refined Model Output
- Every Year's Budget Includes a 10-Year Forecast Based on the Reviewed & Refined Financial Models



# Questions?

For a copy of this presentation please provide your email address on a comment card or directly email

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Department of Public Utilities

ATTACHMENT A