



**Water
Solid Waste & Recycling
Rates and 5-Year Plans
PWAB Recommendation Workshop**

Eric Braun, Assistant Public Works Director

Today's Agenda

- Recap of critical infrastructure projects, & Solid Waste needs
- Discussion and decision-making exercise regarding which Water Rate Option and Solid Waste & Recycling Option to recommend to Town Council
- Draft and approve a recommendation letter to Town Council

Draft Letter Main Ideas

- “The Public Works Advisory Board has investigated the 5 Year Capital Improvement Plan for Water and found the projects contained within it to be of critical need for the sustained, efficient operation of water service.”
- “The cost pressures associated with the operation, maintenance and repair of the water system have caused the need for additional revenue to maintain the existing level of service for the Town.”
- “The cost impacts from landfill service and increasing maintenance costs for an aging Solid Waste fleet have caused the need for additional revenue to maintain the existing level of service.”
- The PWAB recommends:
 - “That the Gilbert Town Council approve a Notice of Intent to Increase Rates and Fees at its November 28, 2023 Council Meeting and set a Public Hearing date of February 6, 2024
 - That the Town Council consider the “XXXX Option” for the Water Fund, and the SWR increase as presented”

Mayor and Council,

The Town Council formed a Public Works Advisory Board on June 6, 2023 to review and make recommendations on behalf of Gilbert residents to the Town Council regarding the planning, strategy, approach, and funding of initiatives and large-scale infrastructure projects across all divisions of the Public Works Department to meet the needs of Gilbert. Of particular importance, the Public Works Advisory Board is not just tasked with ensuring any recommendations meet Gilbert’s immediate infrastructure needs within the next five years. The Board also bears the responsibility of formulating recommendations that also address the long-term needs of Gilbert for the next several decades. The work of the Public Works Advisory Board is intended to safeguard Gilbert’s future for all residents and businesses.

The Public Works Advisory Board recognizes that the Town of Gilbert is dedicated to providing quality water services and infrastructure today and in the future, and that solid waste and recycling services are vital for public health and safety.

The Public Works Advisory Board has met multiple times since its inception, with the goal of understanding the numerous lines of service and resource needs related to both the water and solid waste and recycling services. We have invested significant time investigating the 5 Year Capital Improvement Plan for Water and found the projects contained within it to be of critical need for the sustained, efficient operation of water service. We also recognize that the unprecedented market volatility and cost escalation of the past few years has deeply impacted local governments such as Gilbert. The cost pressures associated with the operation, maintenance and repair of the water system have caused the need for additional revenue to maintain the existing level of service for the Town. ** Additionally, the cost impacts from landfill service and increasing maintenance costs for an aging Solid Waste fleet have also created the need for additional revenue to maintain the existing level of service.

In keeping with its current approach of evaluating two of Gilbert’s four utilities every other year, the Town Council authorized a rate study of Gilbert’s Water fund and its Solid Waste/Recycling fund on March 2, 2023. Town Council financial policies emphasize prudent financial planning regarding the funding of ongoing and future maintenance and operations and capital improvements. A key fundamental to this careful financial planning is maintaining a minimum fund balance and a healthy Repair and Replacement fund. These policies dictate that additional investment is needed in both the Water and Solid Waste and Recycling funds. After several months of extensive evaluation, the current rate study presents three options for balancing the five year costs with additional revenue for the Water Fund, and one option for each of the Solid Waste and Recycling Funds (Residential and Commercial).

Based on the Public Works Advisory Boards understanding of the financial needs of the water and Solid Waste and Recycling funds, the Gilbert Public Works Advisory Board recommends that the Gilbert Town Council approve a Notice of Intent to Increase Rates and Fees at its November 28, 2023 Council Meeting and set a Public Hearing date of February 6, 2024. We

further recommend that the Town Council consider the “XXXX Option” for increasing revenues in the Water Fund, based on balancing the impact to the residents with both the short and long term financial needs of the water system operations and water resource resiliency needs.

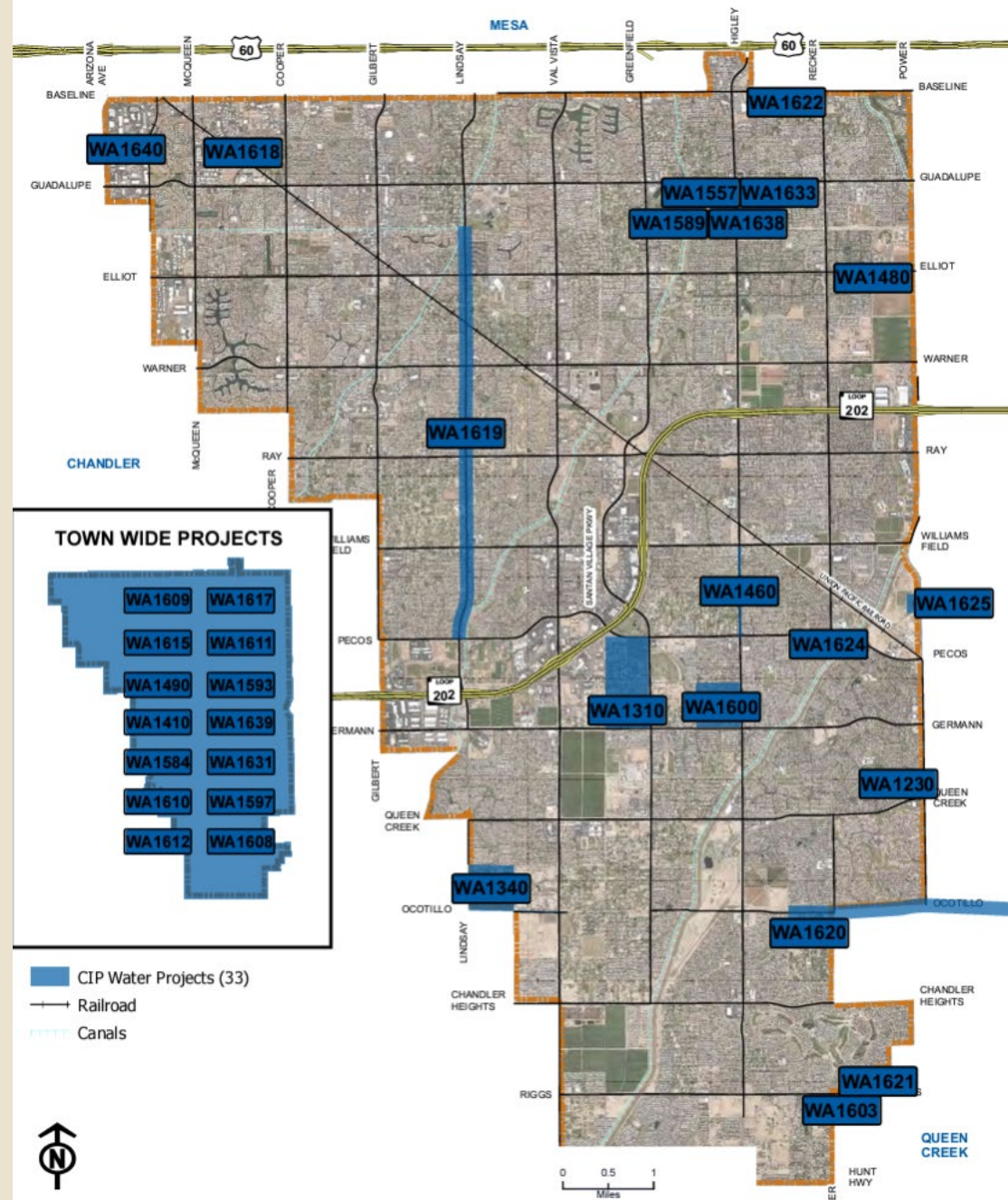
Respectfully,

Fariya Sharif
PWAB Chair

Sam Elliott
PWAB Vice Chair

Water CIP Recap





\$920

Million Dollars

Budget Prioritization

\$428

Million Dollars

Programmed inside of 5-year budget

- Projects Currently Under Construction
- Replacements associated with streets projects
- Critical Projects from the IWRMP
 - Addressing existing deficiencies in the system
 - Needed to utilize full capacity of the NWTP
- Water rights and resiliency Projects
 - Well drilling projects
- Regulatory Compliance driven projects
- Begin funding pipeline replacements

Deferred outside of 5-year budget

- Large water main replacement projects
 - Tankersly areas
 - The Islands
 - Pony Lane
- Non time-sensitive projects from the IWRMP
- Projects related to optimization and upgrades of equipment and infrastructure

WA 1589 – NWTP Reconstruction



Business Case Development

Regulations

- Growth in the community requires new regulatory approach
 - Additional sampling sites + redistribution of existing sites
- Increased challenge meeting TTHM requirements

2018

2025 - Zone 1 Future Operations

Business Case Development

Water Resources

- Gilbert must demonstrate adequate water to support the community and future growth
- Currently not using the full allocation of surface water
 - Overusing groundwater to meet demand
- Need to balance operations to meet current and future raw water conditions
- NWTP is the key that unlocks efficient, cost-effective use of entire system

-7,000 AF/YR
Purchased, renewable, unused surface water

\$250-700/AF
Cost to replenish storage balance

\$1.8-4.9M/YR
Cost to

Business Case Development

Water Quality

- NWTP source water is highly variable
 - Salt River – High DBP formation, turbidity, organics
 - Verde River – elevated arsenic, color
 - Well Water – Elevated DBP precursors, poor settling
- Historically, water changes were seasonal
- Catastrophic wildfire, drought, intensified wet/dry cycles driving water source changes weekly and even daily
- Takeaway: NWTP was designed during a substantially less volatile water portfolio

Salt River Project Watershed
2.9M acres burned since 2000

Business Case Development

Site Condition

- Facility construction prematurely failing
- Condition assessment and follow-up
 - \$70M in structural rehab
 - Annual reinvestment is double industry standard
- Facility design constrains optimization

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Elliot and Gilbert Intersection

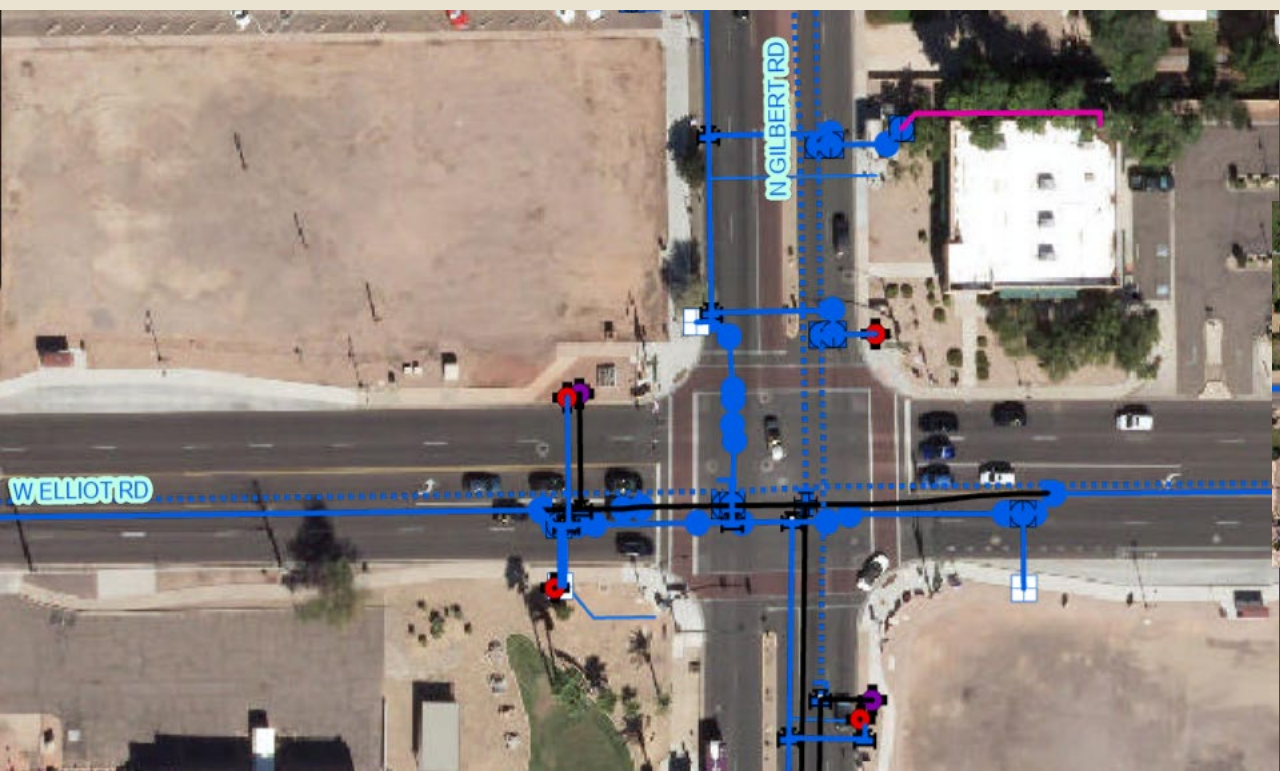
Project #: ST1320

Project Description:

Design and construction of intersection improvements at Elliot and Gilbert Roads to reduce congestion. Project scope includes widening to provide additional through, left and/or right turn lanes, and bike lanes as justified by traffic studies conducted as part of the design. Project also includes traffic signal, water line replacement, and related drainage improvements.

Project Information:

- Project is necessary for growth/development and is therefore eligible for System Development Fee funding
- Project improves existing infrastructure and therefore, maintenance is included in the operating budget



Cooper Rd - Encinas to Baseline

Project #: ST1800

Project Description:

Major reconstruction of deteriorated asphalt pavement on Cooper Road from Encinas Street to Baseline Road. Additional improvements will include minor traffic signal work at Houston Road and the installation of a 12" PVC water line.

Project Information:

- No new maintenance costs are anticipated as this is replacing existing infrastructure
- Potential Intergovernmental Agreement with City of Mesa



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Fire Flow Improvements Phase 1 Playa Palms

Project #: WA1640

Project Description:

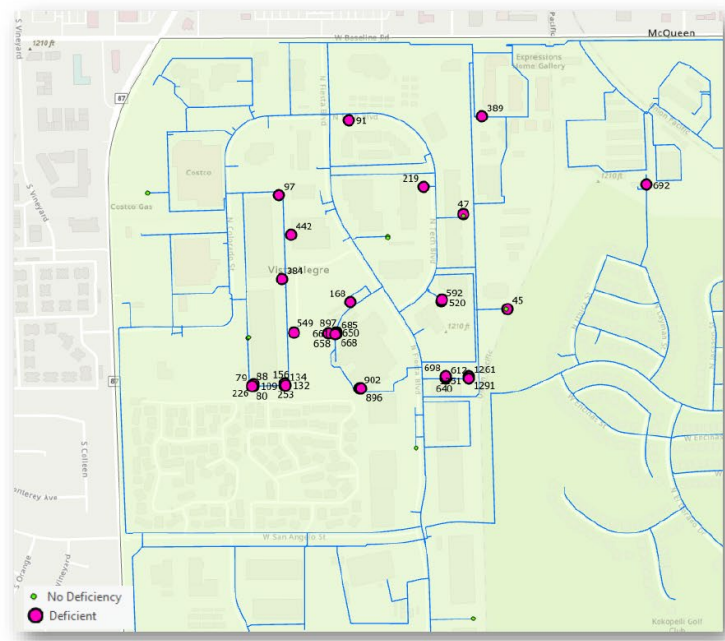
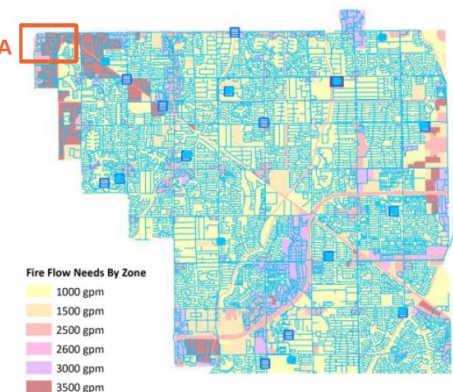
Design and construction of fire flow improvements within the Playa Palms neighborhood area. The project will include 1,950 lineal feet (LF) of 12" ductile Iron pipe (DIP) and 1,000 LF of 8" DIP to meet fire flow criteria.

Project Information:

- Keyword(s):



Zone 1: Location A Fire Flow Deficiencies



Zone 2 Relief Transmission Main 2

Project #: WA1638

Project Description:

Design and construction of a parallel water transmission main along N Higley Road, from the North Water Treatment Plant (NWTP) to E Olney Avenue. The new piping will reduce the high velocities observed during modeling. The project will include 2,300 lineal feet (LF) of 24" ductile iron pipe (DIP). The need for this project is partially due to new growth and would therefore be eligible for SDF funding.

Project Information:

- Coordinate with Zone 1 Relief Transmission Main I (WA1634), Zone 1 Relief Transmission Main II (WA1635) Site 26 Booster Station Imp (WA1636), and Zone 2 Relief Transmission Main I (WA1637) projects
- Related to NWTP Upgrades and Reconstruction (WA1589)
- Future growth funding as a funding source indicates that the project will be evaluated for inclusion or revision in a future System Development Fee study



Growth Area

- Heritage District
- Baseline Medical
- Central 202 Core
- Gilbert and the 202
- Power Road
- Gateway Village Center
- Via Vista Medical
- Northeast



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Site 36 Well Development

(7)

Project #: WA1609

Project Description:

Design and development of a new 2 million gallon per day (MGD) well to support water system resiliency and growth.

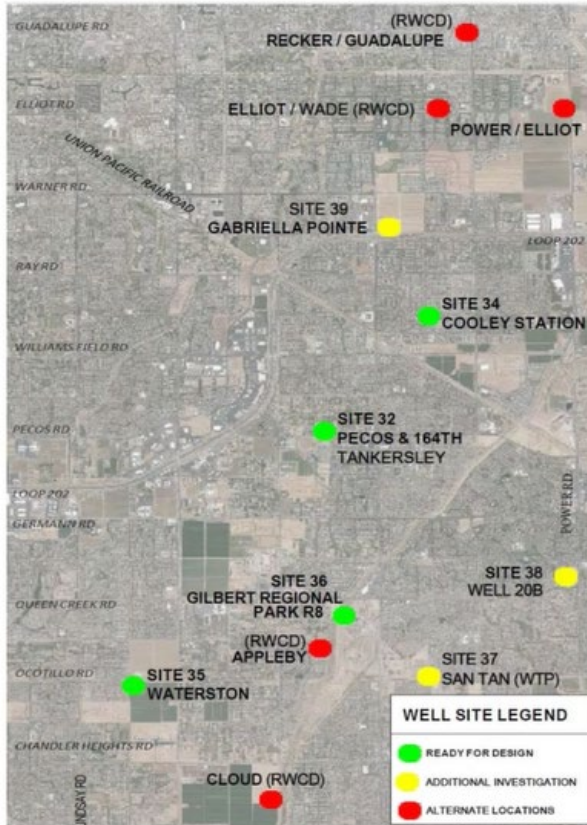
Project Information:

- Coordinate with Development Services
- Coordinate with Well Siting Analysis Phase 1 (WA1608)
- Well adds 2.0 MGD of capacity to the system
- Key Word(s): System Wide, Well, Remote Site



- WA0810 – Site 35 Waterston
- WA0880 – Site 32 Tankersley

- Appleby (RWCD)
- Cloud (RWCD)
- Recker/ Guadalupe (RWCD)
- Ranch – Power / Elliot
- Elliot/Wade (RWCD)



- WA0270 – Site 34 Cooley
- WA1609 – Site 36 Regional Park

- WA1610–Site 37 SanTan (WTP)
- WA1611–Site 38
- WA1612 – Site 39 Gabriella Pointe

Water Rights - SRP CAP Interconnect

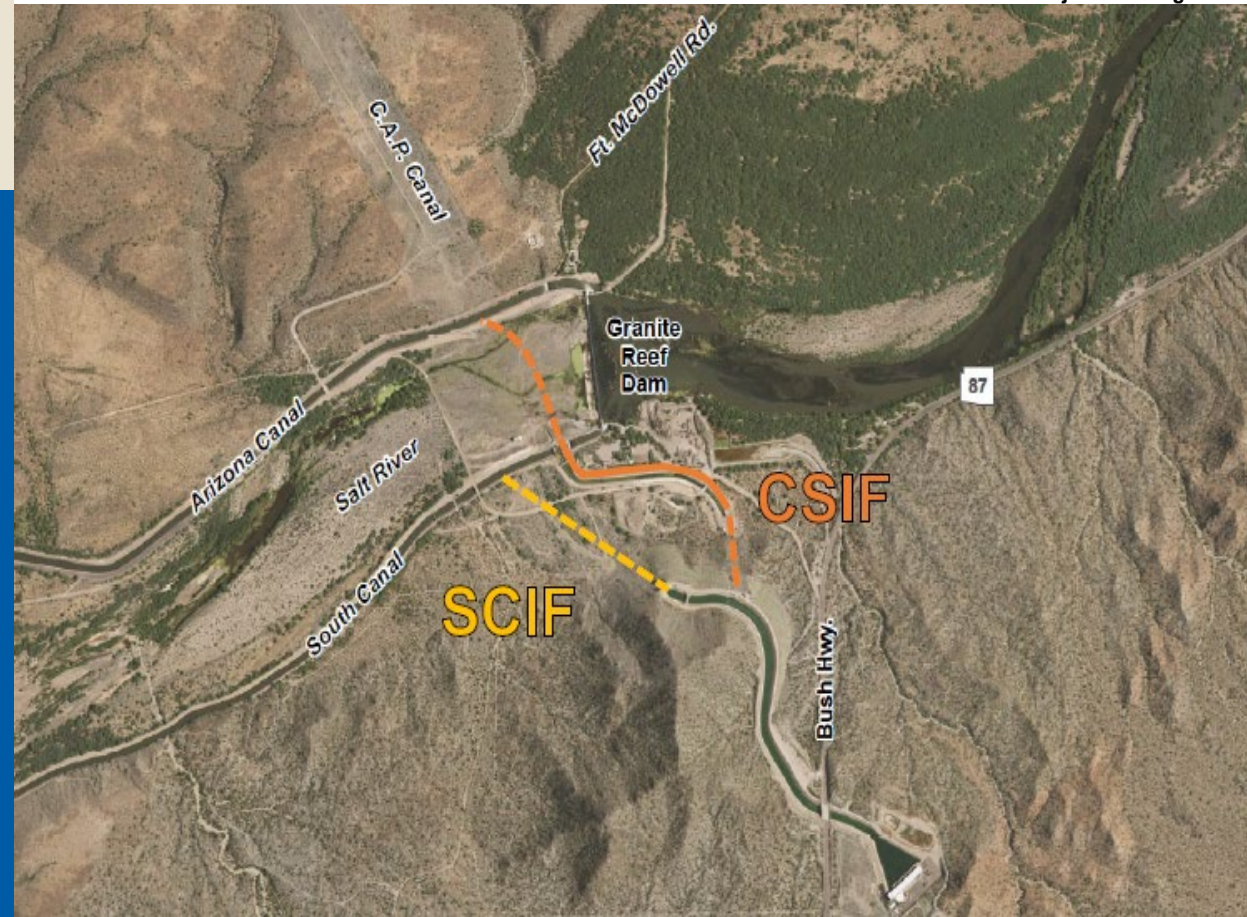
Project #: WA1631

Project Description:

Participation in the design and construction by the Salt River Project (SRP), in partnership with municipalities and CAP for the SRP-CAP Interconnection Facility (SCIF). This facility would allow SRP water to be delivered into the CAP system. Gilbert's participation in the SCIF is estimated to provide 11 MGD of peaking capacity to the system by diverting recovered and future supplies to the Santan Plant. This capacity is considered resiliency capacity to offset reductions to existing CAP supplies.

Project Information:

- Keyword(s):



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Project Description:

Study to develop a lead service line inventory and service line replacement program in accordance to the EPA revisions to the Safe Drinking Water Act's Lead and Copper Rule. This effort will facilitate the removal of lead service lines throughout the community, if required.

Project Information:

- Project may be funded through a grant
- Keyword(s):



Project Description:

Design and construction of systems necessary to reduce or eliminate water distribution system auto flusher. Site solution will likely include an on-site disinfection system and appurtenances.

Project Information:

- Keyword(s):



EPA
Improving Lead Sampling to Better Protect Public Health
 EPA's Revisions to the Lead and Copper Rule

EPA's new rule:

1. Targets water that's actually from the lead service lines, not just the faucet or premise plumbing
2. Targets where the highest levels of lead are to identify problems sooner
3. Leads to more lead service line replacements and improved treatment to reduce lead
4. Better protects public health

Testing where the Lead is
 For homes with lead service lines, the 5th liter of water must be tested for lead, not the 1st liter like the old rule.

Legend:
 - PREMISE PLUMBING (Green)
 - SERVICE LINE (Purple)
 - WATER MAIN (Grey)

Diagram labels:
 - Premise Plumbing: Premise plumbing is located inside the house.
 - Lead Service Line: A lead service line is a pipe that runs from the water main to the home's internal plumbing.
 - WATER METER
 - MAIN WATERLINE



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ACP Water Line Replacements

Project #: WA1597

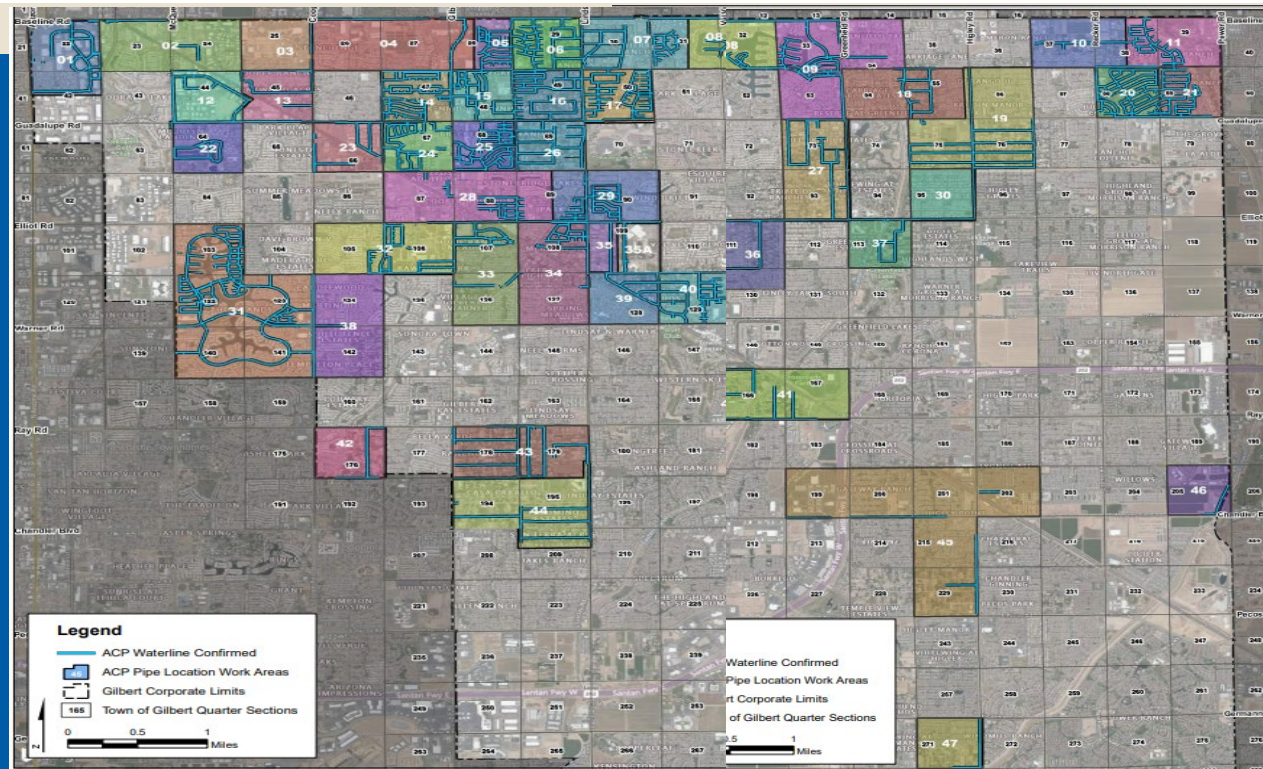


Project Description:

Design and construction to replace existing Asbestos Cement Pipe (ACP) water lines throughout Gilbert's water distribution system. Replacement includes associated valves, service connections, fire hydrants, appurtenances, and pavement.

Project Information:

- Project to be coordinated with on-going Long-Range Infrastructure Plan (LRIP) streets projects as appropriate
- Keyword(s): Water Line, System Wide



Solid Waste and Recycling Cost Pressures



Increased Volume & Tipping Fees



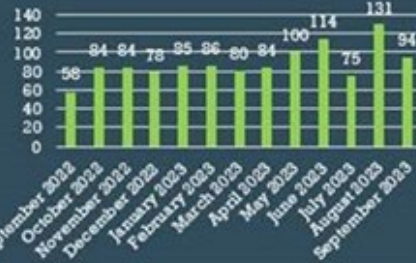
Repair and Maintenance



Recycling Market Volatility

Fleet/Solid Waste and Recycling Month in Review

of BREAK DOWNS

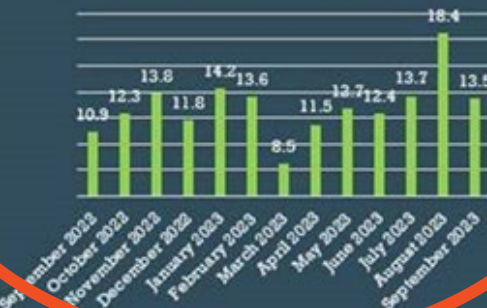


of WRITE UPS



20% of FTE

Avg # Trucks Down @ Start of Day



PMs COMPLETED
(Target = 15)

16

TIME OFF ROUTE DUE TO LACK OF TRUCK AVAILABILITY
(ASL)

60:43

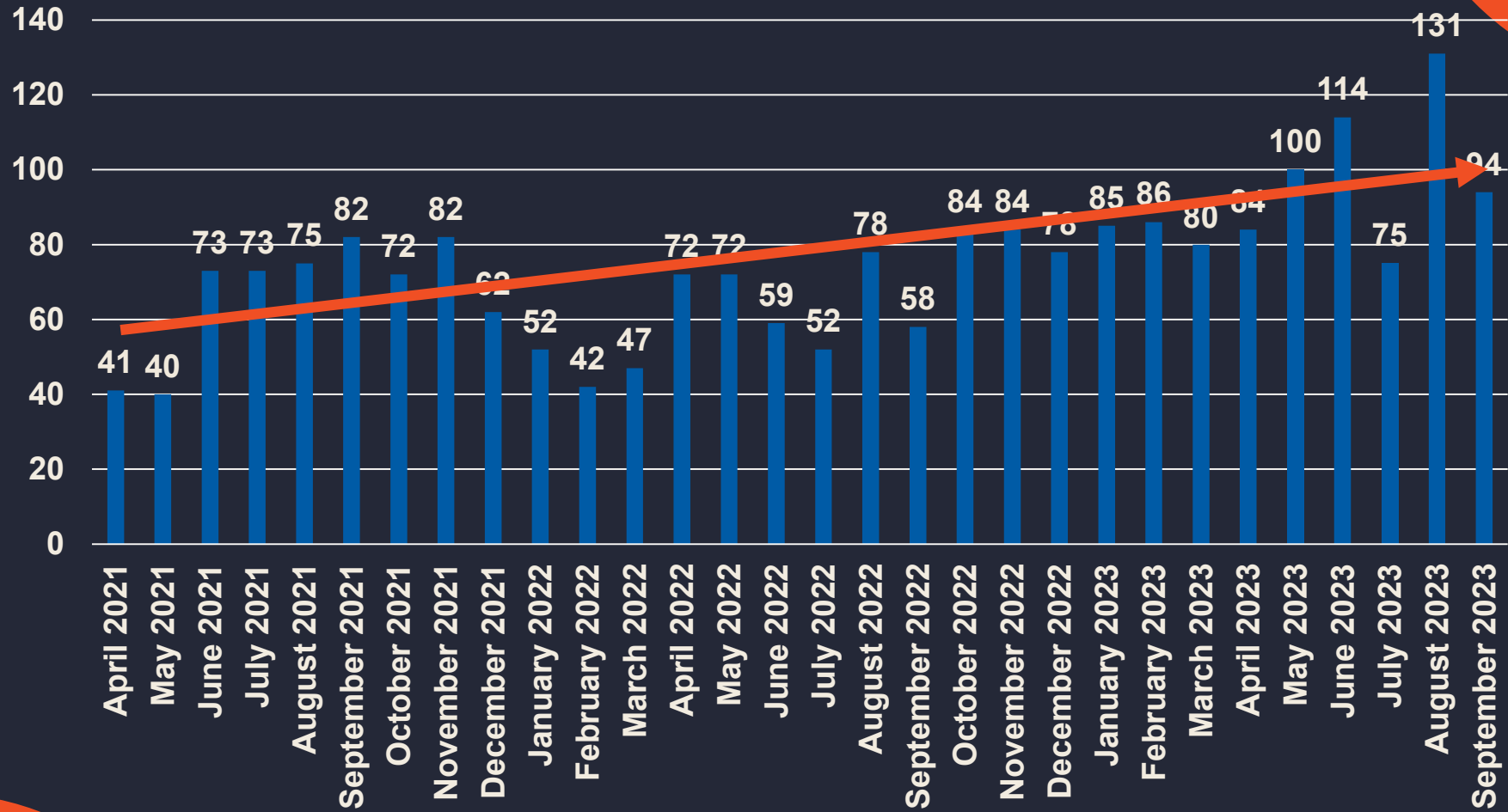
(FEL)

7:42

ROUTES DELAYED

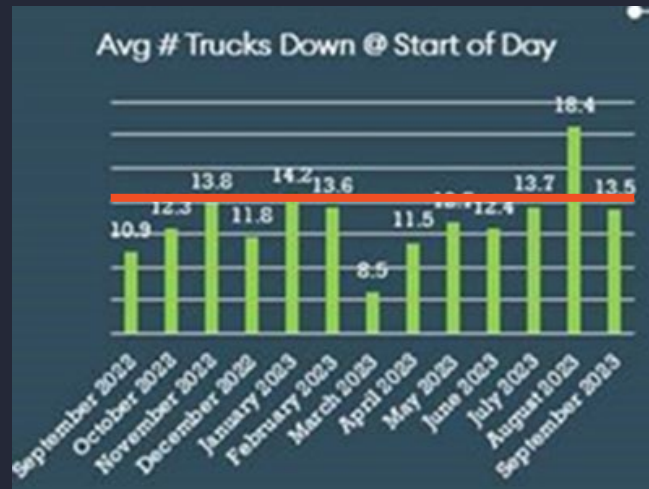
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Number of Breakdowns per Month



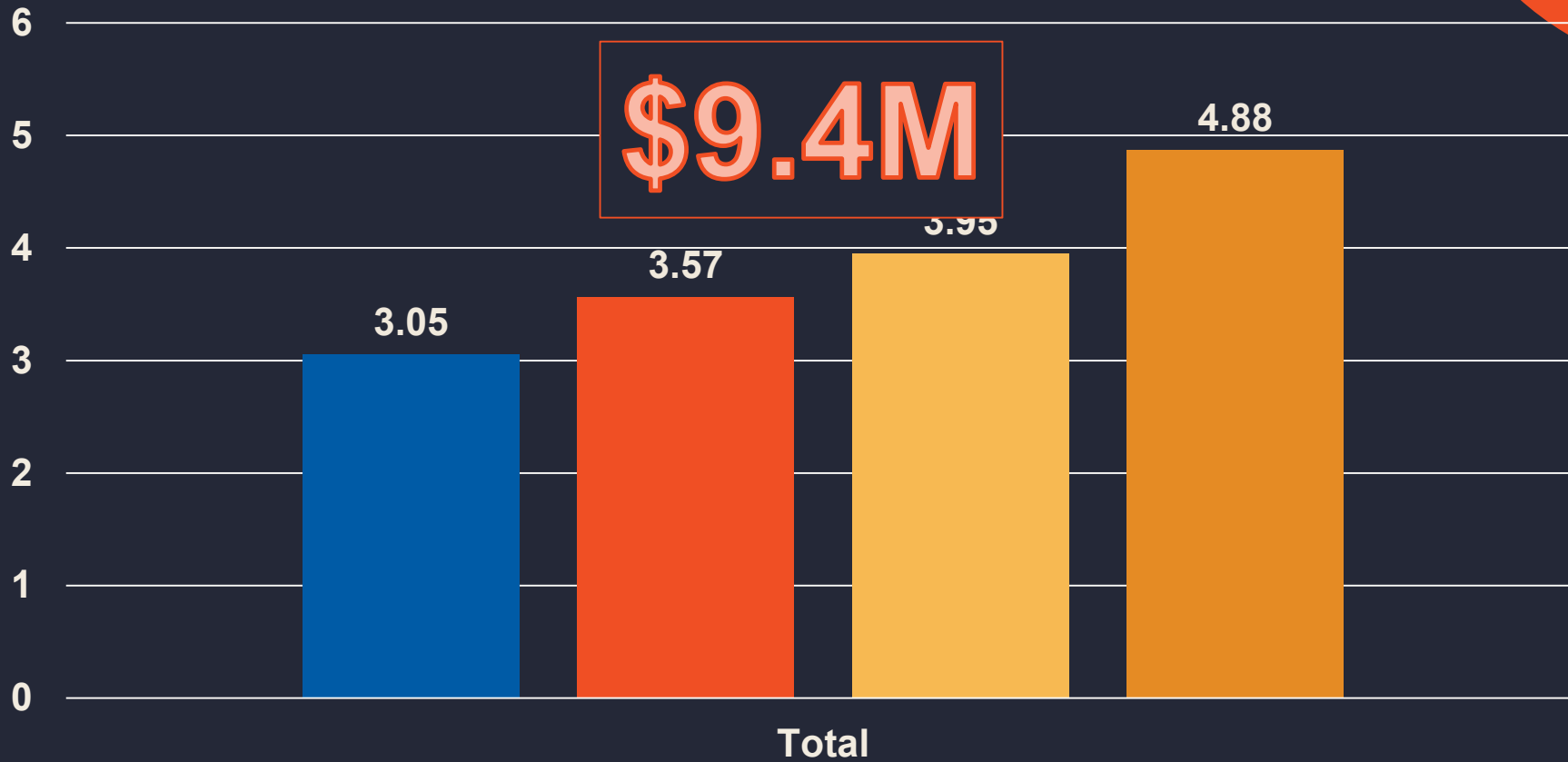
Automated Side Loaders

	Monday	Tuesday	Wednesday	Thursday	Friday
Trucks	39	39	39	39	39
Routes	26	25	26	27	26
Spares	13	14	13	12	13



Average Fleet Age by Fiscal Year SW&R: ASL's

FY20 FY21 FY22 FY23



47% of ASL's have met life expectancy

Today's Agenda

- 👉 Recap of critical infrastructure projects, & Solid Waste needs
- Discussion and decision-making exercise regarding which Water Rate Option and Solid Waste & Recycling Option to recommend to Town Council
- Draft and approve a recommendation letter to Town Council

Options Comparison

	Spring 2024 Rate Increase/ Average Bill	Spring 2025 Rate Increase/ Average Bill	Spring 2026 Rate Increase/ Average Bill	Total Rate Increase with Compounding	Bond Amount	Interest Paid on Bond	Operating Fund Ongoing Capacity (Starting FY29)	Annual R&R Project Capacity (Starting FY29)
Cash Funded	130% \$78	0% \$78	0% \$78	130%	\$0	\$0	\$6 Million	\$73 Million
Bond Funded	95% \$66	0% \$66	0% \$66	95%	\$205 Million	\$110 Million	\$2 Million	\$37 Million
Cash/Bond Gradual	50% \$51	25% \$64	25% \$80	134%	\$80 Million	\$43 Million	\$5 million	\$66 Million

Exercise Time!





CASH FUNDED OPTION FINANCIAL IMPACT

Collect and pay cash for all CIP within the 5 year plan

Requires an immediate rate increase of 130%

No increases planned in following year

No new debt

Ongoing capacity of \$6M for One-time CIP in Operating fund

Ongoing R&R fund capacity of \$73M in FY29

The average monthly residential water bill is \$34. Under this option it increases to \$78 in April.



BOND FUNDED OPTION FINANCIAL IMPACT

Bond \$205M of CIP costs in the 5 year plan

Requires an immediate rate increase of 95%

\$205M new debt

\$110M anticipated interest paid over 20 years

Ongoing capacity of \$2M for One-time CIP in
Operating fund

No increases planned in following year

Ongoing R&R fund capacity of \$37M in FY29

Lowest overall rate increase by total percent

The average monthly residential water bill is \$34. Under this option it increases to \$66 in April.

CASH/BOND GRADUAL FUNDED OPTION FINANCIAL IMPACT

Bond \$80M of CIP costs within the 5 year plan

Requires an immediate rate increase of 50%,
Followed by 25% in one year and another 25% in 2
years

\$80M new debt

\$43M anticipated interest paid over 20 years

Phased increase allows for customers to plan

Ongoing capacity of \$5M for One-time CIP in
Operating fund

Ongoing R&R fund capacity of \$66M in FY29

The average monthly residential water bill is \$34. Under this option it increases to \$51 in April.
Then \$64 in 2025, and \$80 in 2026.