



City Council Work Session
City Hall - Canyon Trails Room 1 & 2
1900 N. Civic Square
Goodyear, AZ 85395
Monday, March 3, 2025
5:00 PM

Mayor
Joe Pizzillo

Vice Mayor
Wally Campbell

Councilmember
Brannon Hampton

Councilmember
Laura Kaino

Councilwoman
Vicki Gillis

Councilmember
Benita Beckles

Councilmember
Trey Terry



PROCEDURES

Pursuant to A.R.S. § 38-431.02, notice is hereby given to the members of the Goodyear City Council and to the general public that the Council of the city of Goodyear will hold a meeting open to the public. Public body members of the city of Goodyear will attend either in person or by telephone conference call and/or video communication. The Goodyear City Council may vote to go into Executive Session, pursuant to A.R.S. § 38-431.03(A)(3), which will not be open to the public, to discuss certain matters. Meetings are conducted in accordance with the City Council Meetings Council Rules of Procedure adopted by Resolution No. 2018-1879.

THE CITY OF GOODYEAR ENDEAVORS TO MAKE ALL PUBLIC MEETINGS ACCESSIBLE TO PERSONS WITH DISABILITIES. With 48-hour advance notice, special assistance can be provided for sight and/or hearing-impaired persons at this meeting. Reasonable accommodations will be made upon request for persons with disabilities or non-English speaking residents. Please call the City Clerk (623) 882-7830 or Arizona Relay (TDD) 7-1-1 to request an accommodation to participate in this public meeting.

Si necesita asistencia o traducción en español, favor de llamar al menos 48 horas antes de la reunión al (623) 882-7830.



City Clerk's Office: 1900 N. Civic Square, Goodyear, AZ 85395 (623) 882-7830
www.goodyearaz.gov/cityclerk
City Council Meeting Live Broadcast: <https://www.facebook.com/goodyearazgov/videos>

CALL TO ORDER**ROLL CALL****AGENDA ITEMS FOR DISCUSSION**

ALL ITEMS LISTED ARE FOR DISCUSSION ONLY. NO ACTION CAN NOR WILL BE TAKEN.

1. **FY2025 STRATEGIC PLAN – WATER AND WASTEWATER ANALYSIS - 2024
INTEGRATED WATER MASTER PLAN**

Summary

Council will receive an update on the Water Services Department's (Water Services) Fiscal Year (FY) 2025 Strategic Plan action item within the infrastructure focus area. The Water and Wastewater Analysis action item is intended to review the current condition and future needs of the water and wastewater systems. The deliverable from this action item is the updated 2024 Integrated Water Master Plan (IWMP). Last updated in 2016, Water Services staff will present the updated 2024 IWMP to Council. Council adoption of the updated 2024 IWMP will be requested at a future Council meeting. (Barbara Chappell, Water Services Director)

ADJOURNMENT**POSTING VERIFICATION**

This agenda was posted on 02/26/2025 at 5:16 p.m. by VM.

ITEM #: 1.
DATE: 03/03/2025
AI #:2218



CITY COUNCIL ACTION REPORT

SUBJECT: FY2025 STRATEGIC PLAN – WATER AND WASTEWATER ANALYSIS - 2024 INTEGRATED WATER MASTER PLAN

STAFF PRESENTER(S): Barbara Chappell, Water Services Director

Summary

Council will receive an update on the Water Services Department's (Water Services) Fiscal Year (FY) 2025 Strategic Plan action item within the infrastructure focus area. The Water and Wastewater Analysis action item is intended to review the current condition and future needs of the water and wastewater systems. The deliverable from this action item is the updated 2024 Integrated Water Master Plan (IWMP). Last updated in 2016, Water Services staff will present the updated 2024 IWMP to Council. Council adoption of the updated 2024 IWMP will be requested at a future Council meeting. (Barbara Chappell, Water Services Director)

FISCAL IMPACT

The updated 2024 IWMP identifies infrastructure needs and will be used to inform future Capital Improvement Programs, Development Impact Fee Programs, and water/wastewater fees/rate studies. These future infrastructure investments will be brought before Council for action at the appropriate time.

BACKGROUND AND PREVIOUS ACTIONS

On November 13, 2023 (AI-1649), Council adopted Resolution No. 2023-2363 ADOPTING THE CITY OF GOODYEAR FY2025-2027 STRATEGIC PLAN. In the adopted Strategic Plan under the Infrastructure Focus Area, the Water Services Department (Water Services) has a Water and Wastewater Analysis action item to review the current condition and future needs of the water and wastewater systems, which is to be completed in FY2025.

The Water and Wastewater Analysis action item is included in the updated FY2025-2028 Strategic Plan, which Council adopted at its November 18, 2024 meeting through Resolution No. 2024-2434 ADOPTING THE CITY OF GOODYEAR FY2025-2028 STRATEGIC PLAN.

The IWMP is essential to continue to meet or exceed industry standards for water and sewer services, while planning and expanding Water Services' systems for anticipated growth. The IWMP is a dynamic master planning process for municipal water and wastewater services that accounts for current population, while also predicting future economic development, residential growth and redevelopment activities. Additionally, the City's planning processes must also account for water resource availability, drought management and new water quality

regulations.

The updated 2024 IWMP is a comprehensive study that was completed by Carollo Engineering (Consultant). The Consultant's scope of services also included working with Water Services staff on the application to the Arizona Department of Water Resources (ADWR) to modify Goodyear's Designation of Assured Water Supply (DAWS).

For a city growing as rapidly as Goodyear and with the ever-changing landscape of water resources in Arizona, the IWMP should be updated every five years to provide critical information for our capital and infrastructure improvement plans, to help guide our city's growth strategies, and to formulate our service rates and development impact fees.

STAFF ANALYSIS

The updated 2024 IWMP analyzed in significant detail the current condition of our water and wastewater systems, as well as formulating 5-year and 10-year planning horizons. The updated 2024 IWMP also reviewed the City's build-out plans for our service area, but in less detail. Since the growth Goodyear has experienced since the 2016 IWMP far exceeded its predictions, Water Services staff spent a significant amount of time with the Consultant analyzing current service levels and system needs.

The updated 2024 IWMP effort also utilized the City's recently adopted Goodyear General Plan 2035 in coordination with some of the City's larger developers in order to identify the needs to support anticipated growth for the next ten years.

There are several important recommendations identified within the updated 2024 IWMP, which include:

1. Water Supply Development Strategies for Rainbow Valley: Explore ideas for how to provide utility services to support development in the Rainbow Valley area.
2. Expand 157th Water Reclamation Facility by 2030: Due to the rapid growth, the water reclamation facility located on 157th Avenue needs to be expanded. The expansion project is currently in the design phase, and due to the pace of growth in the City, the construction phase is anticipated to begin once the design work is finished. The expansion is projected to support 10 years of growth for the area.
3. Expand the Surface Water Treatment Facility by 2030: When the surface water treatment facility was constructed, there was a second phase anticipated in the 2035 - 2040 time frame. Due to the rapid growth the City has been experiencing, it is anticipated that this facility will need to be expanded in 2030. This project will expand the capacity of the facility from 8 million gallons per day (mgd) to 16 mgd.

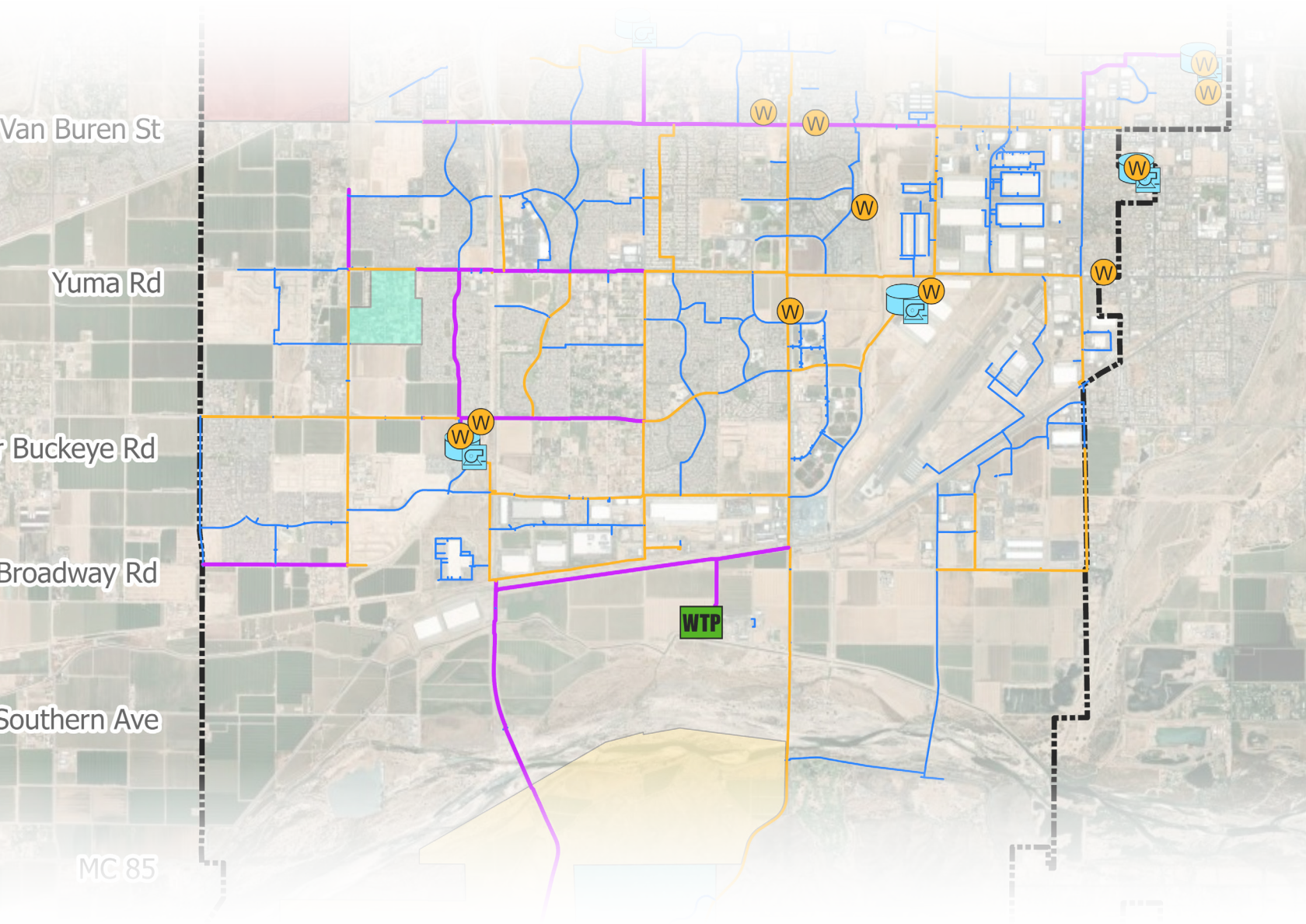
An Executive Summary of the 2024 IWMP is included as Attachment A.

Attachments

Attachment A - IWMP Executive Summary
Staff Presentation

2024 Integrated Water Master Plan

DRAFT / October 2024



Goodyear's Integrated Water Master Plan is Driven by Rapid Growth, Water Resource Changes, and Rainbow Valley Strategies

The Purpose of Goodyear's Integrated Water Master Plan is to:

- ✓ Plan water resources for future development.
- ✓ Submit a modification to the City's Designation of Assured Water Supply.
- ✓ Establish a strategy for Rainbow Valley water supply and infrastructure.
- ✓ Plan water, wastewater, and reclaimed infrastructure.

This Executive Summary presents an overview of the 2024 Integrated Water Master Plan containing the following information:

- Updates to the Modified Designation of Assured Water Supply (MDAWS) application and groundwater availability in Rainbow Valley.
- Updates to the water, wastewater, reclaimed water flow projections.
- Water resource evaluations and strategies.
- Capital Improvement Plans for water, wastewater, and reclaimed water infrastructure.

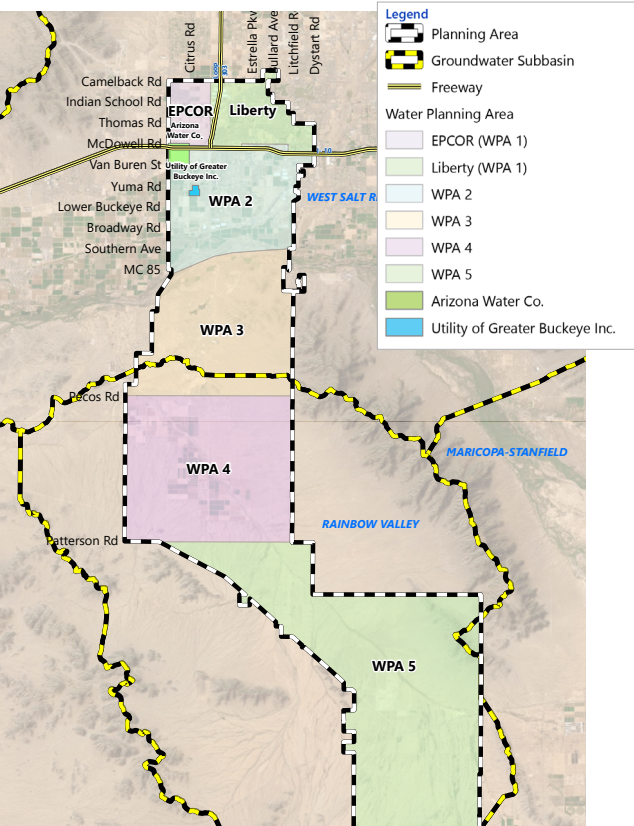
The MDAWS Application Process Identified Water Resources and Strategies to Quantify the Water Resources Goodyear needs for Continued Growth

The MDAWS application incorporated the following:

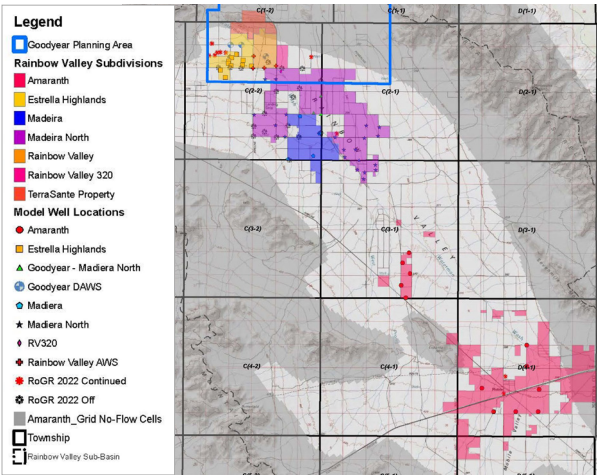
- Groundwater model that identified groundwater in Rainbow Valley for Goodyear.
- Central Arizona Project water resource delivered to Goodyear's surface water plant.
- West Salt River Valley groundwater allocation remains unchanged.

The following challenges are addressed in the MDAWS application:

- Groundwater would be taken from two groundwater basins operating under different rules.
- A legal mechanism does not exist to transfer groundwater rights held by developers to the City so the City can serve the developments as a designated provider.



The plan includes lands in WPA 2, WPA 3, and the northern portion of WPA 4 in the City's planning area that are expected to develop through 2040. The EPCOR portion of WPA 1 is included in the sewer plan. The Liberty service area in WPA 1 is planned by Liberty Utilities. WPA 5 may be included in future plans and could be served by a private utility

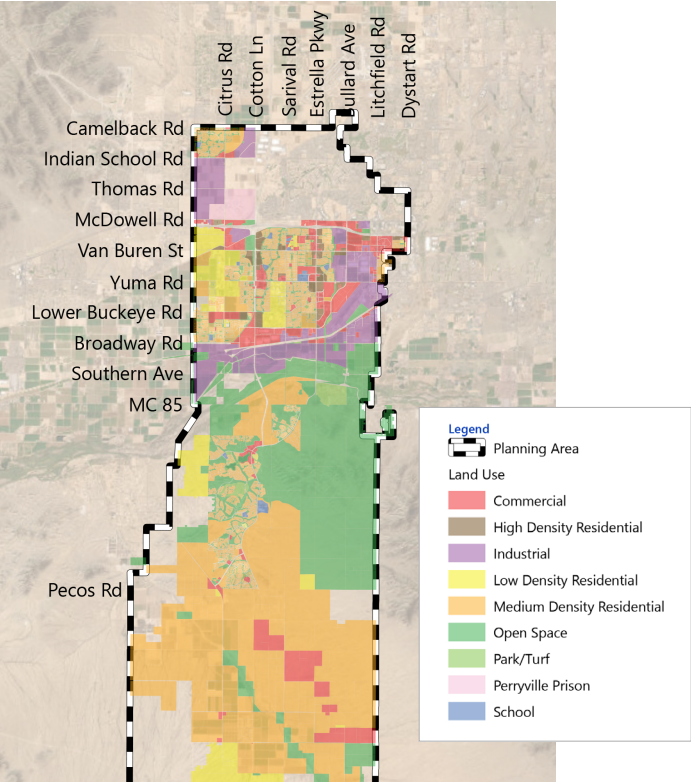


Groundwater modeling in the Rainbow Valley subbasin demonstrated the volume of groundwater available to the City for the MDAWS

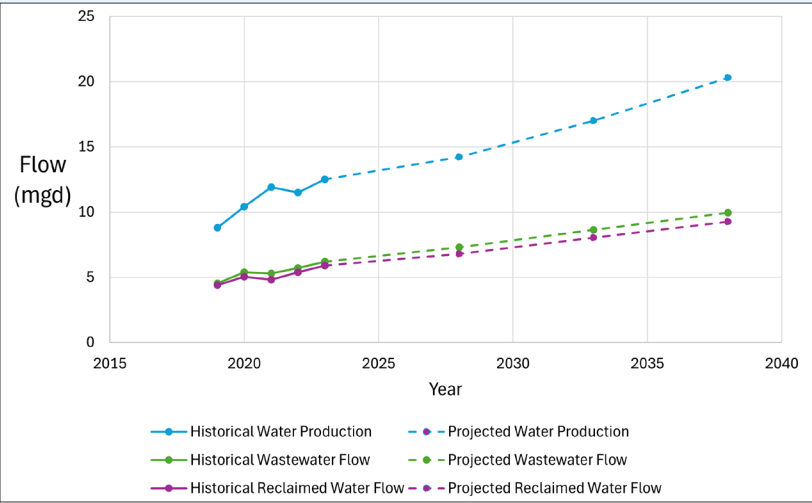
Flow Projections Predict the Timing and Location of Growth

Flow projections were established for Water Planning Areas 2 – 4 for growth through 2038:

- Aligns with the Goodyear General Plan 2035 population projections and land use.
- Uses customer billing data to represent current conservation levels and water use patterns.
- Includes planned developments in Rainbow Valley.
- Correlates water use to wastewater flows to reclaimed water availability.



Flow Projections were developed based on the Goodyear General Plan 2035 Land Use and Population Projections

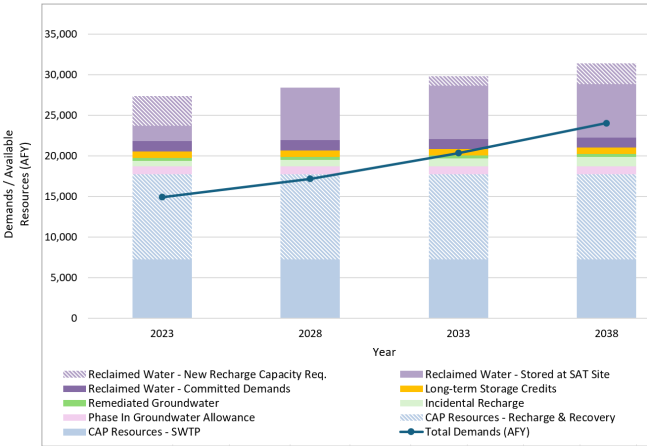
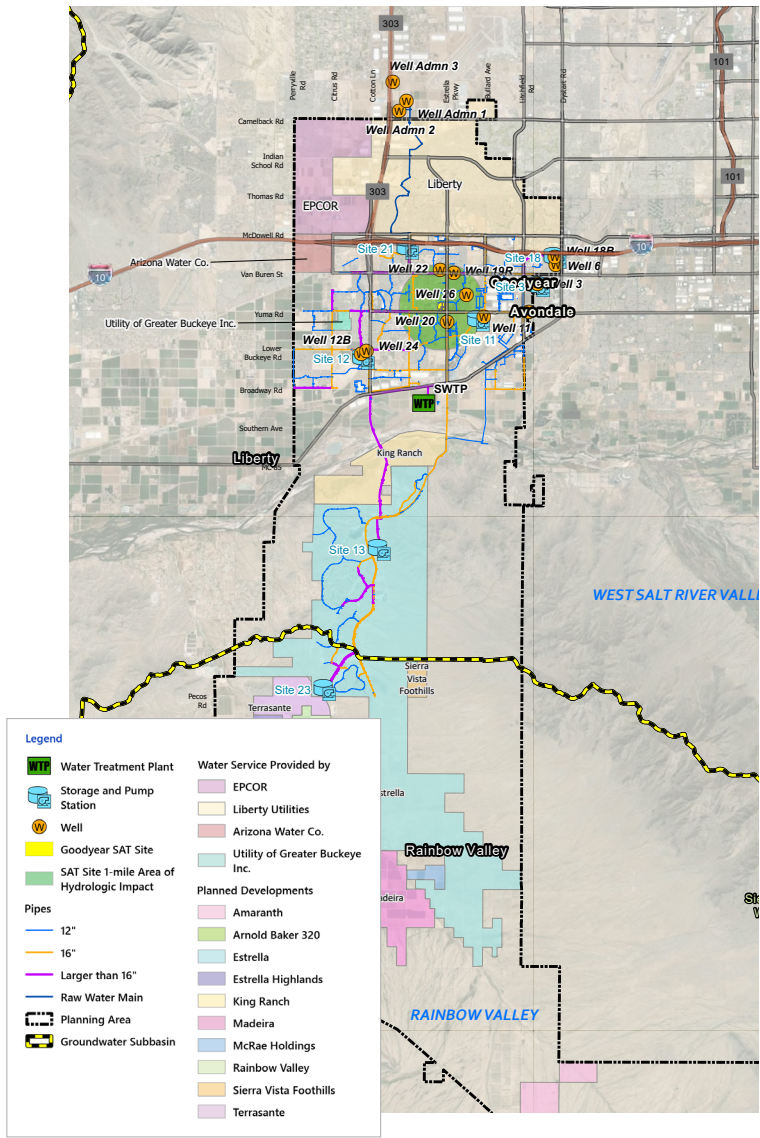


Projected Water Production, Wastewater, and Reclaimed Water Flow defines growth for infrastructure planning

Goodyear Water, Wastewater, and Reclaimed Water Flow Projections

	Historical Flows (mgd)					Projected Flows (mgd)		
	2019	2020	2021	2022	2023	2028	2033	2038
Water	8.8	10.4	11.9	11.5	12.5	14.2	17	20.3
Wastewater	4.5	5.4	5.3	5.7	6.2	7.3	8.6	10.0
Reclaimed Water	4.4	5.0	4.8	5.4	5.9	6.8	8.0	9.3

Water Resources

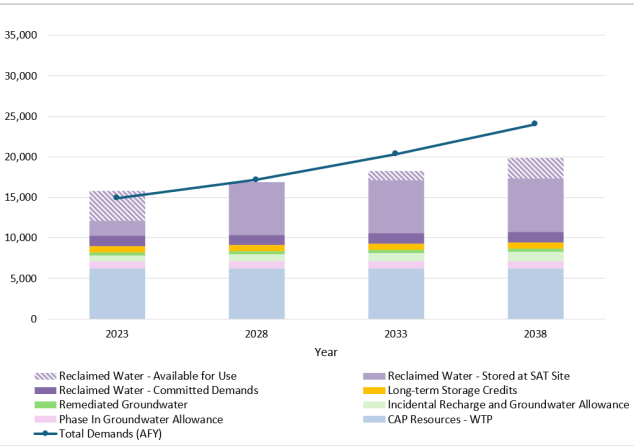


Supplies exceed projected water demands for normal demand conditions

Water resource recommendations include:

- Install a transmission main to fully utilize the Soil Acquirer Transfer (SAT) site recharge capacity.
- Structure development agreements so that the City owns the reclaimed water.
- Construct additional recharge capacity beyond 2033 to beneficially use reclaimed water.
- Purchase and recharge the full Central Arizona Project (CAP) water allocation until this allocation is needed for customers.
- Expand the surface water treatment plant prior to 2030 to fully utilize the City's CAP allocation.
- Recharge and recover CAP water within the area of hydrologic impact so that recovered CAP water is not counted against the City's groundwater physical availability.
- Seek opportunities to bank additional long-term storage credits to protect the City during times of drought when groundwater pumping exemptions are not available.
- Work with Arizona Division of Water Resources (ADWR) to find ways to transfer groundwater physical availability determinations held by a developer to the City's water resource portfolio.
- Develop quantitative water conservation targets for the City's water use restriction stages.
- Engage with Salt River Project (SRP) in discussions to obtain Bartlet Dam surface water.
- Pursue opportunities to purchase/lease water that flows in the Buckeye irrigation canal.

Water resources are planned for the land areas that are expected to develop in Goodyear



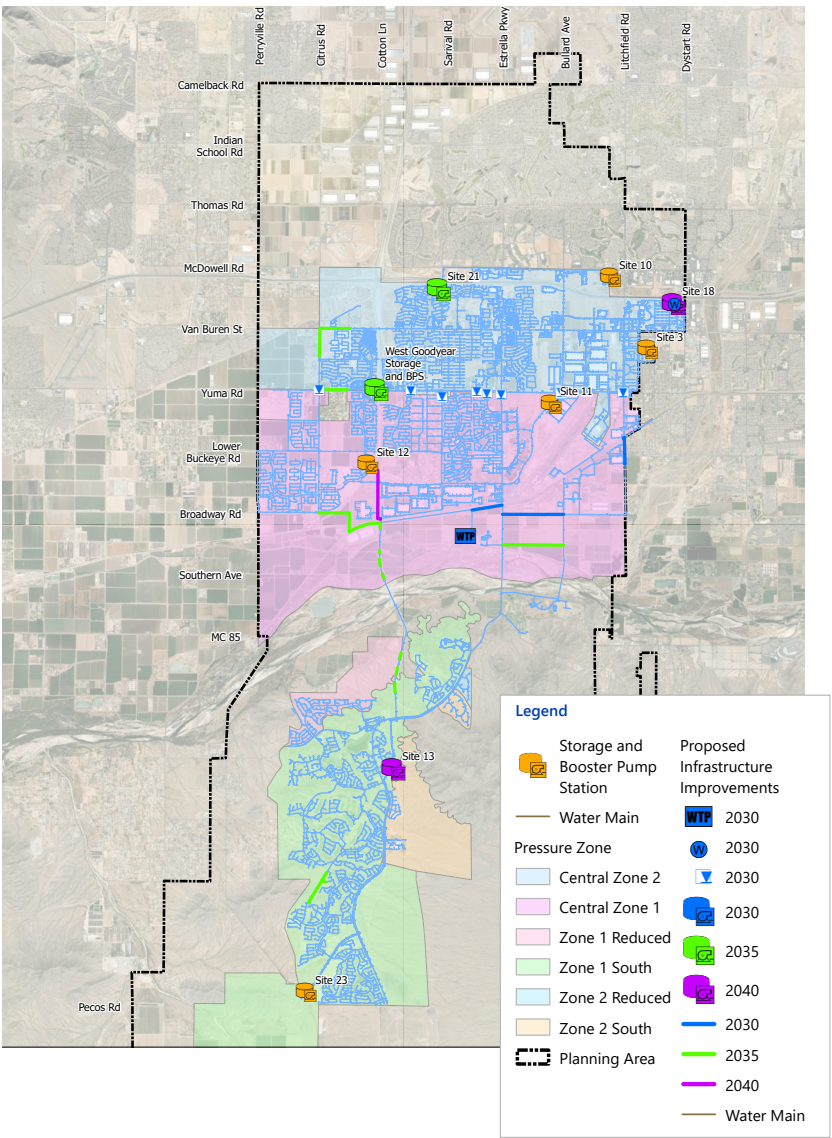
Additional water supplies are needed if CAP water supplies are cut by an extreme 65%

Water Infrastructure Plan

Water infrastructure plan recommendations include:

- Expand the Surface Water Treatment Plant to 16 mgd by 2030.
- Construct a new 2 MG storage tank at Site 18 by 2030.
- Install additional groundwater treatment capacity at Site 21 by 2030 to treat the full production capacity of the Adaman wells.
- Re-drill Well 18B by 2030.
- Construct a West Goodyear well, 2 MG storage tank, and booster station at Yuma Rd. and Cotton Lane to provide additional water supply, storage, and pumping capacity by 2035.
- Install PRV stations along the Yuma Rd. alignment to split the Central pressure zone to help manage pressures.
- Construct additional transmission mains in Central Goodyear to improve the ability to move water.
- Remove bottlenecks on the Cotton Lane transmission main.

Water Infrastructure Capital Project Locations



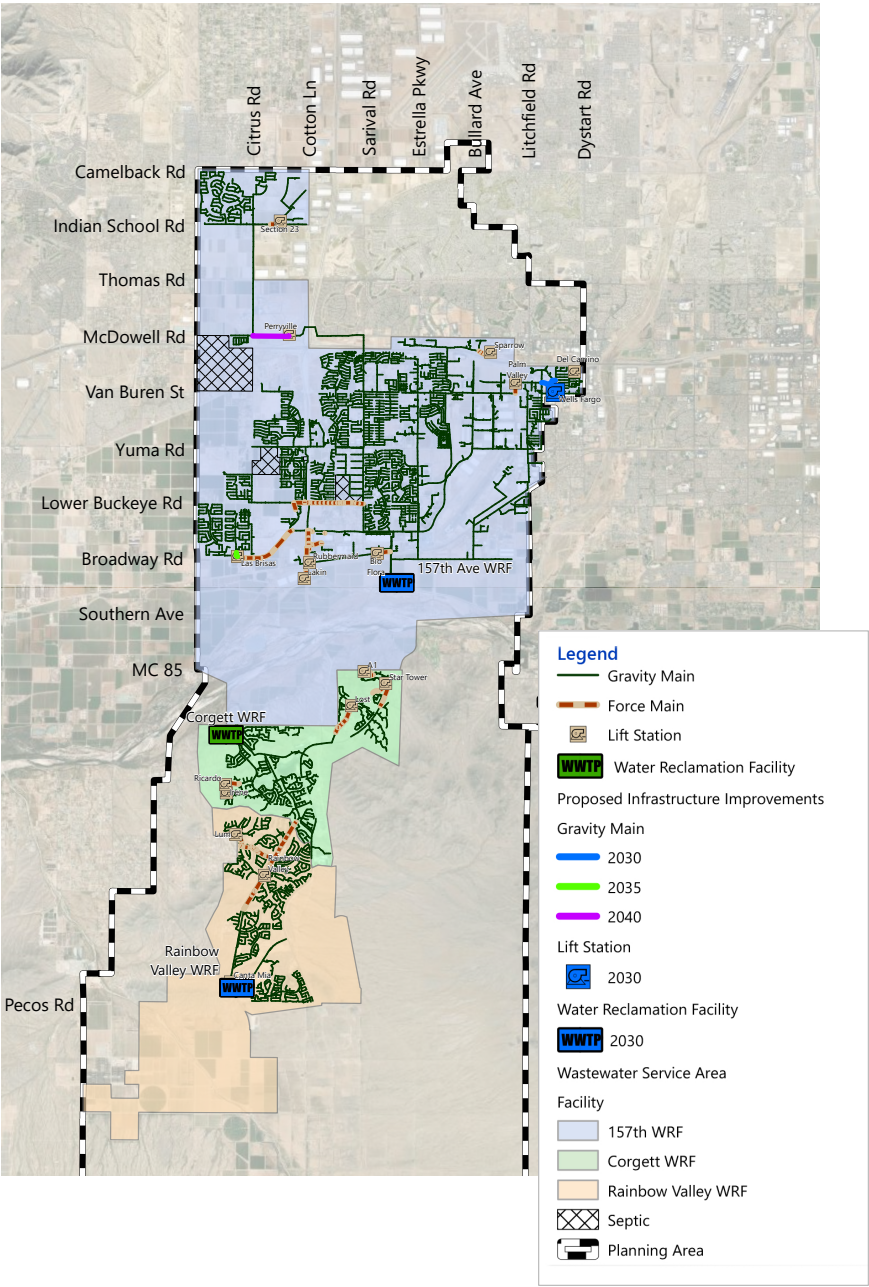
Water Infrastructure CIP Cost Summary

Facility Type	Planning Period Project Costs (\$)			Total Cost (\$)
	2030 (\$)	2035 (\$)	2040 (\$)	
Altitude Valve	0	496,000	0	496,000
PRV	0	7,064,000	0	7,064,000
Pump Station	3,500,000	8,827,000	5,467,000	17,794,000
Storage Tank	9,067,000	9,215,000	0	18,282,000
Water Main	10,397,000	28,246,000	5,727,000	44,370,000
Water Supply Purchase	0	17,000,000	0	17,000,000
Well + Groundwater Treatment	13,407,000	26,659,000	0	40,066,000
Surface Water Treatment Expansion	85,570,000	0	0	85,570,000
Total	121,941,000	97,507,000	11,194,000	230,642,000

Wastewater Infrastructure Plan

Wastewater infrastructure plan recommendations include:

- Upsize the gravity sewer downstream of the Wells Fargo lift station to handle increased flows.
- Expand the 157th Avenue Water Reclamation Facility to 9.5 mgd by 2030, then 12 mgd by 2040.
- Construct a 12-inch gravity sewer upstream from the Las Brisas lift station by 2035.
- Construct a parallel 18-inch gravity main along McDowell Road from Citrus Road to the Perryville prison by 2040.
- Expand the Rainbow Valley WRF to a capacity of 4 mgd by 2040.



Wastewater Infrastructure Capital Project Locations

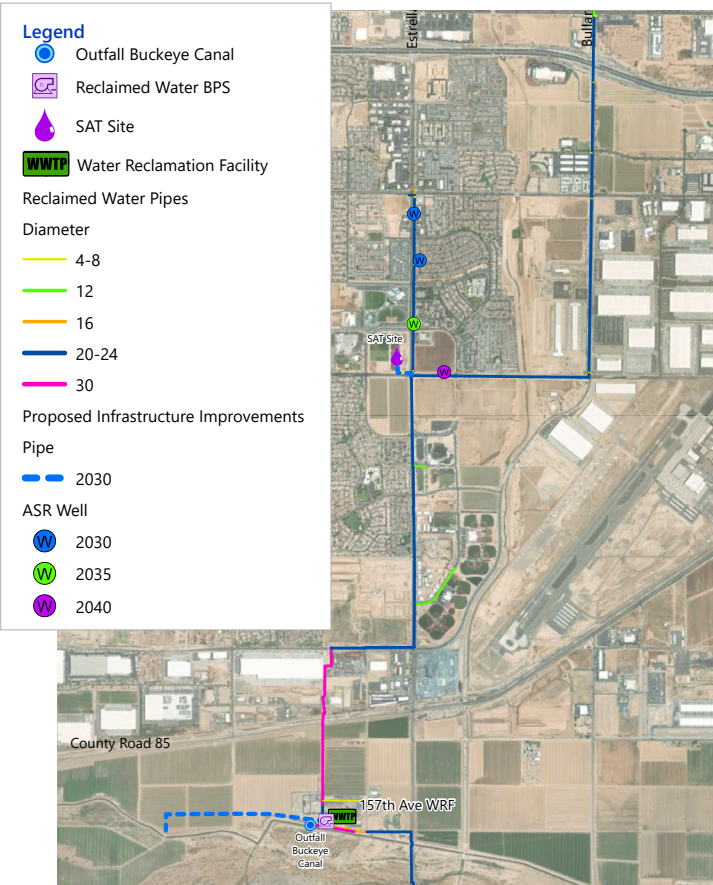
Wastewater Infrastructure CIP Cost Summary

Facility Type	Planning Period Project Costs (\$)			Total Cost (\$)
	2030 (\$)	2035 (\$)	2040 (\$)	
Gravity and Pressure Pipelines	8,224,000	250,000	2,842,000	11,316,000
Lift Station	6,851,000	0	0	6,851,000
WRF	256,000,000	0	83,000,000	339,000,000
Sewer Service Relocation	6,000,000	0	0	6,000,000
Total	277,075,000	250,000	85,842,000	363,167,000

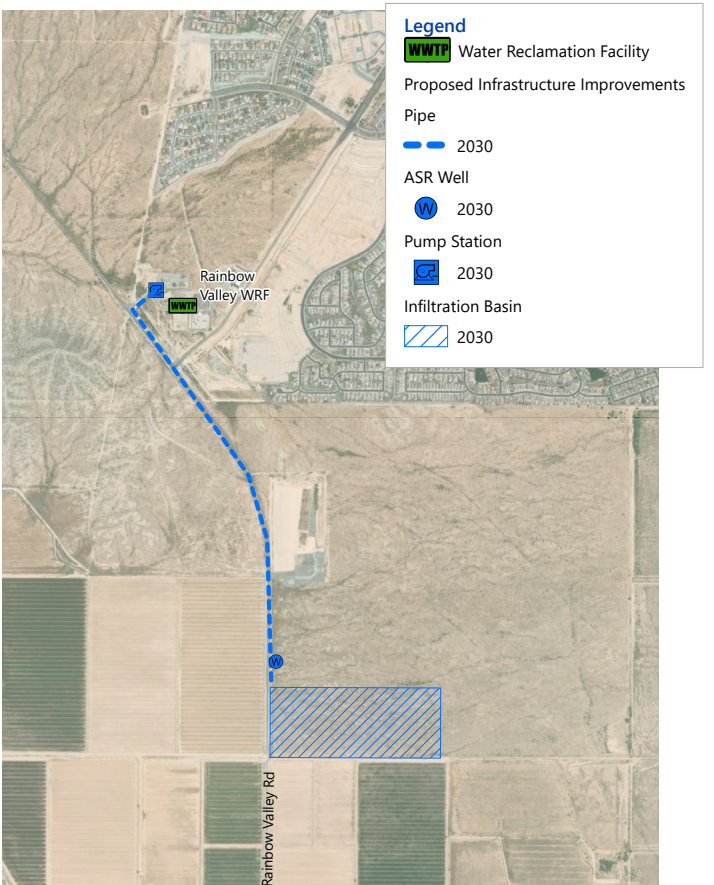
Reclaimed Water Infrastructure Plan

Reclaimed water infrastructure recommendations include:

- Expand the pipe capacity to the SAT site to 16 inches to fully use the capacity of the site by 2030.
- Construct two ASR wells in Central Goodyear to recharge reclaimed water from the 157th Avenue WRF by 2030.
- Construct the first phase (5 acres) of a spreading basin in Rainbow Valley by 2030, along with a pump station and reclaimed water line to recharge reclaimed water from the Rainbow Valley WRF.
- Construct the third ASR well in Central Goodyear by 2035.
- Construct the fourth ASR well in Central Goodyear by 2040.
- Expand the Rainbow Valley spreading basin to 30 acres and expand the reclaimed water pump station serving the spreading basin to 3 mgd.



Central Goodyear Reclaimed Water Infrastructure Project Locations



Rainbow Valley Reclaimed Water Infrastructure Project Locations

Reclaimed Water CIP Cost Summary

Facility Type	Planning Period Project Costs (\$)			Total Cost (\$)
	2030 (\$)	2035 (\$)	2040 (\$)	
Pipeline	17,356,000	0	0	17,356,000
Pump Station	3,361,000	0	6,497,000	9,858,000
ASR Wells	20,718,000	10,359,000	10,359,000	41,436,000
Spreading Basin	559,000	1,997,000	2,396,000	4,952,000
Total	41,994,000	12,356,000	19,252,000	73,602,000

We express appreciation to the following teams who have contributed to the success of this project through their time, insights, and expertise.

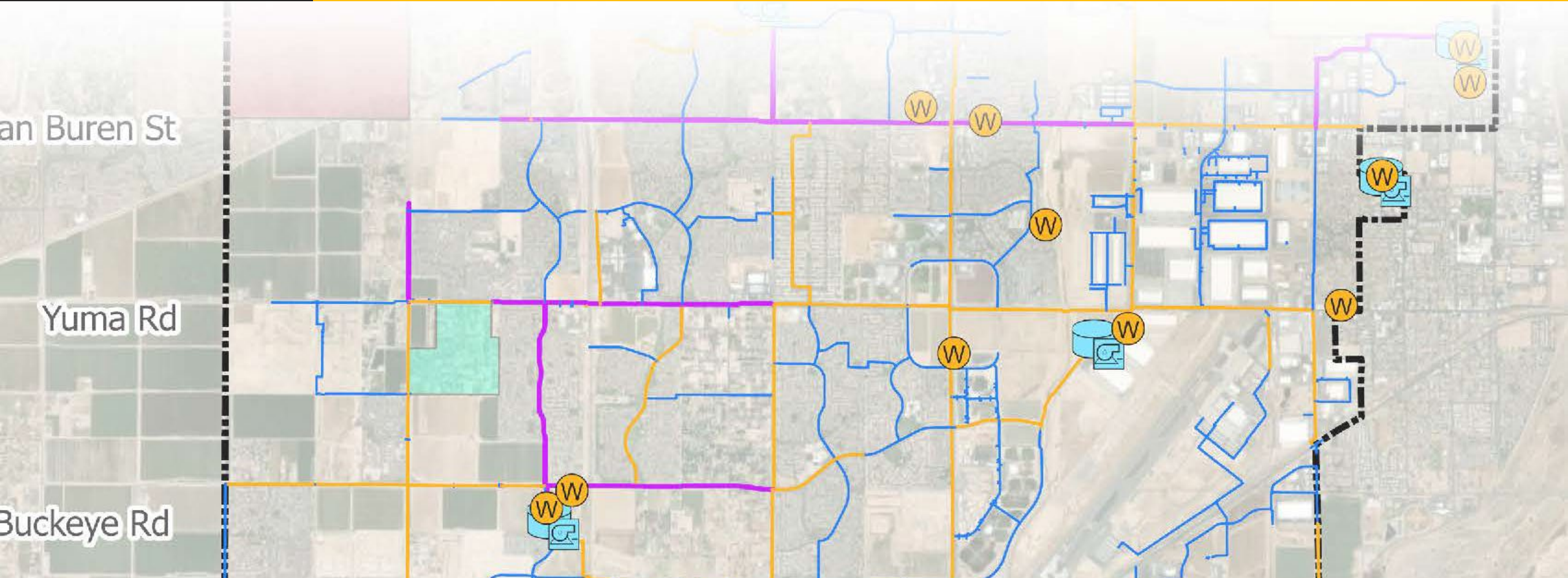
Water Services, Geographic Information Systems, Engineering, Finance,
Development Services





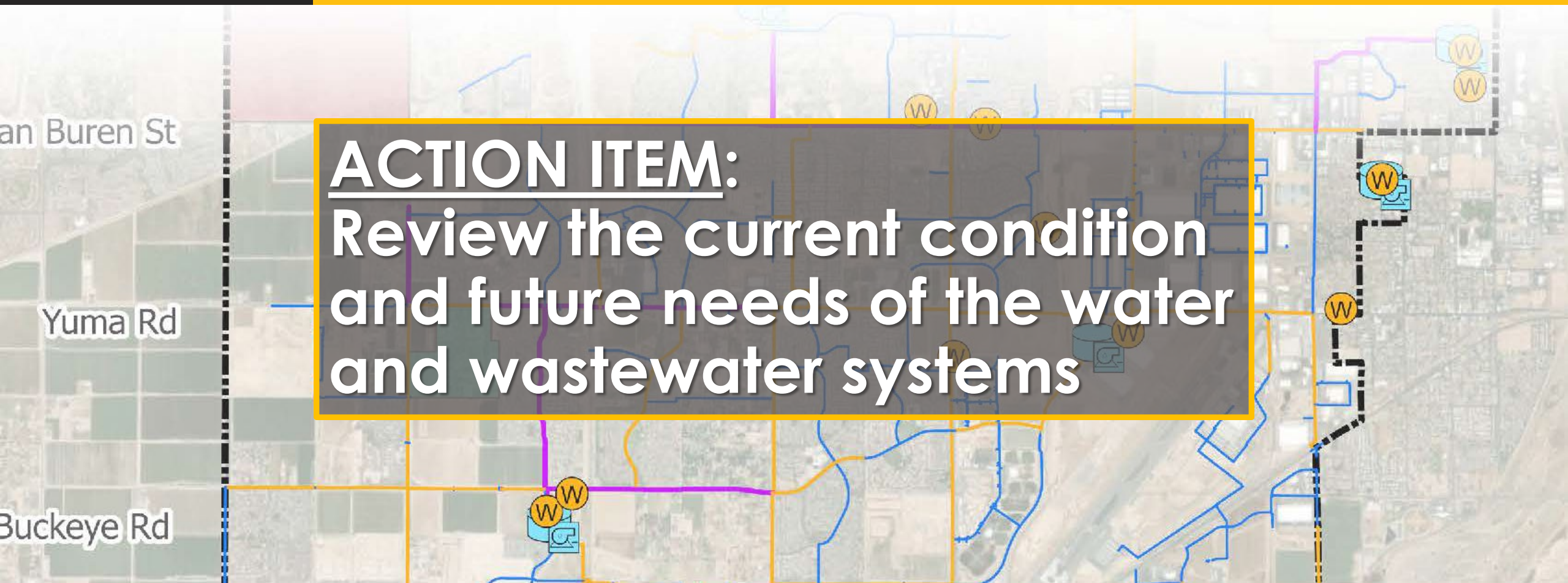
Water and Wastewater Analysis – Water Services Action Item

FY2025 Strategic Plan Update



Water and Wastewater Analysis – Water Services Action Item

FY2025 Strategic Plan Update



ACTION ITEM:
Review the current condition
and future needs of the water
and wastewater systems

Water and Wastewater Analysis – Water Services Action Item

FY2025 Strategic Plan Update



ACTION ITEM:
**Update the City's Integrated
Water Master Plan (IWMP)**



Water and Wastewater Analysis – Water Services Action Item

2024 Integrated Water Master Plan (IWMP)

Overview

- What is an IWMP?
- Purpose
- Water Planning Areas
- Areas of Focus
- Key Takeaways





Water and Wastewater Analysis – Water Services Action Item

2024 Integrated Water Master Plan (IWMP)

What is an IWMP?

- Resources
- Systems
- Current Conditions
- Growth Projections





Water and Wastewater Analysis – Water Services Action Item

2024 Integrated Water Master Plan (IWMP)

Purpose

- Water resources for future development
- System needs
- Modification of Designation of Assured Water Supply (DAWS)
- Rainbow Valley strategy



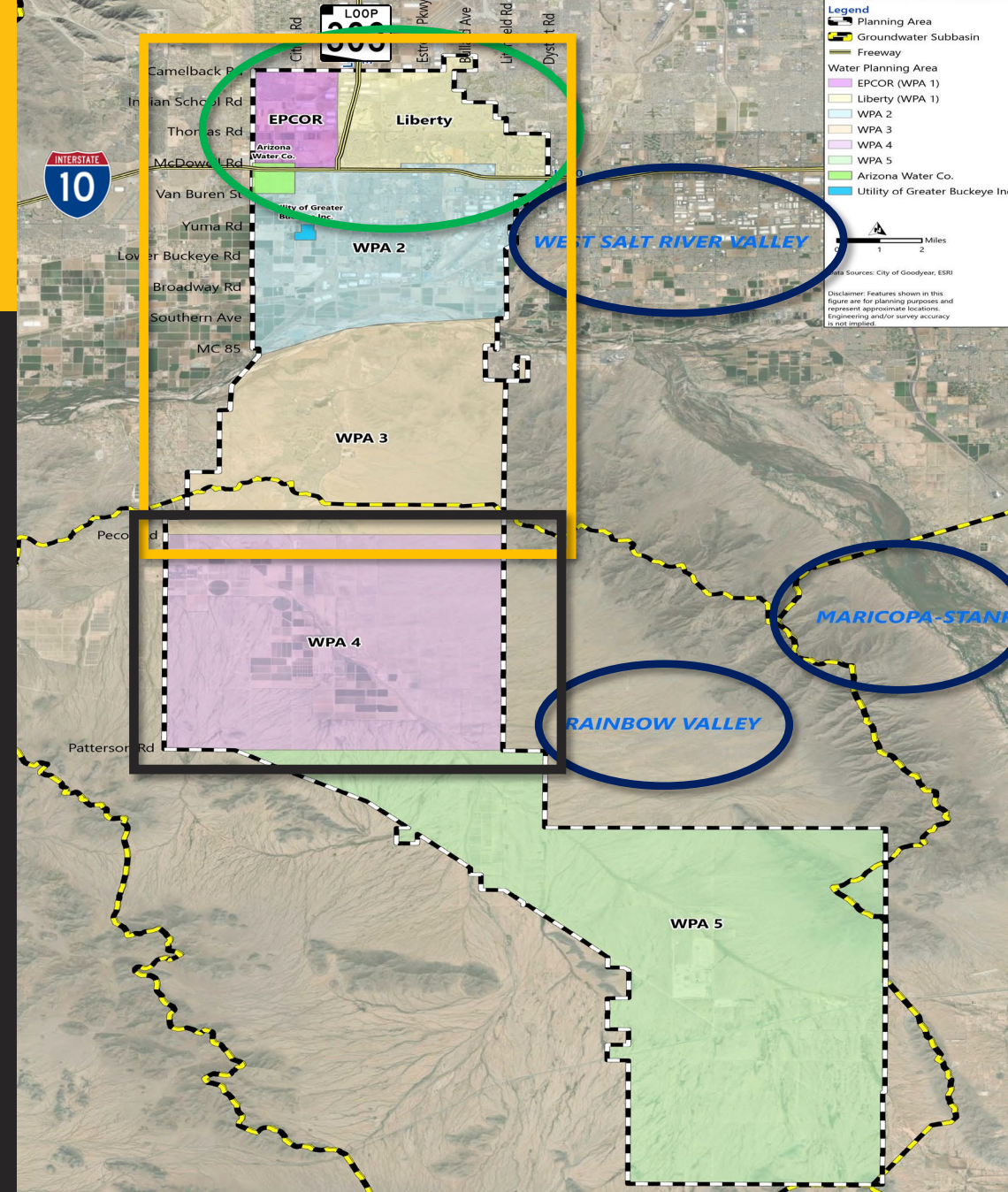


Water and Wastewater Analysis Water Services Action Item

2024 Integrated Water Master Plan (IWMP)

Water Planning Areas (WPA)

- Groundwater Basins
- Private Water Provider Service Areas
- City's Service Areas
 - Growth in WPA's 1, 2, & 3
 - Activity in WPA 4 – Rainbow Valley





Water and Wastewater Analysis – Water Services Action Item

2024 Integrated Water Master Plan (IWMP)

Areas of Focus

- Water Resources
- Water Infrastructure
- Wastewater Infrastructure
- Reclaimed Water





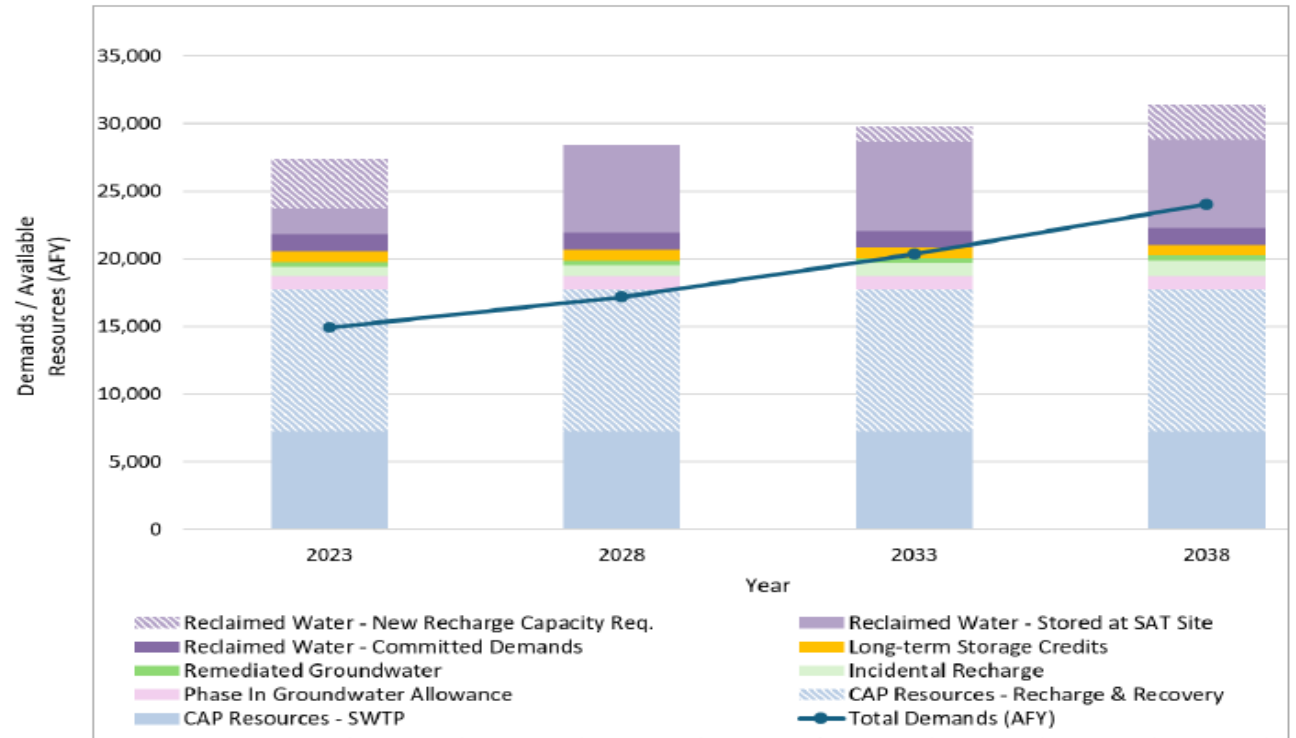
Water and Wastewater Analysis – Water Services Action Item

2024 Integrated Water Master Plan (IWMP)

Water Resources (pg. 4)

Paper Water

- Surface water
- Ground water
- Reclaimed water
- Long-term storage credits



Supplies exceed projected water demands for normal demand conditions



Water and Wastewater Analysis – Water Services Action Item

2024 Integrated Water Master Plan (IWMP)

Water Resources

Recommendations

- Water policy
- Maximize reclaimed water
- Rainbow Valley groundwater
- Bartlett Dam modifications

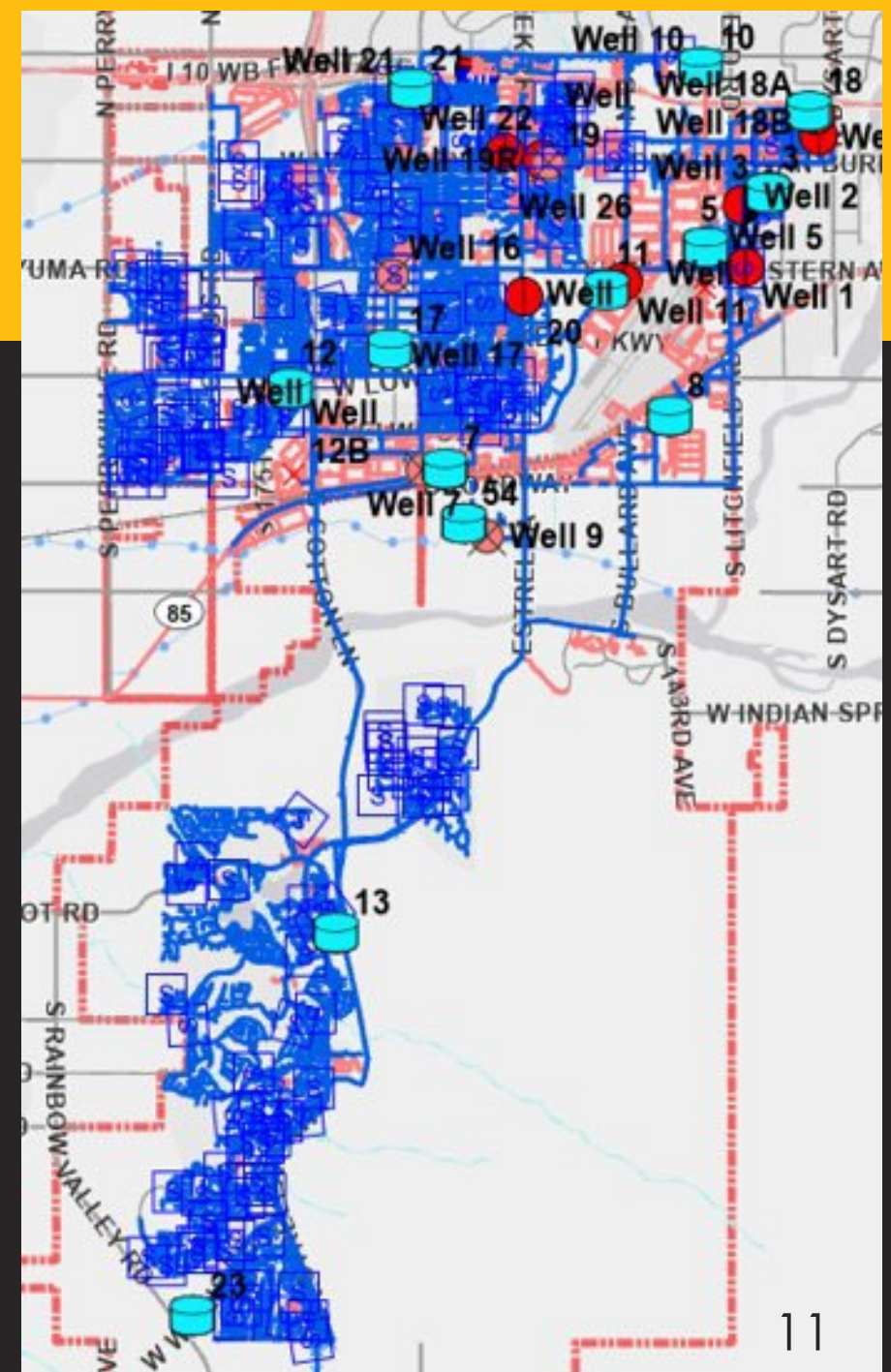




2024 Integrated Water Master Plan (IWMP)

Water Planning Areas 2 & 3

- Pipes & Hydrants
- Wells
- Treatment Plants
- Storage



Water and Wastewater Analysis – Water Services Action Item

2024 Integrated Water Master Plan (IWMP)

Water Infrastructure



Recommendations

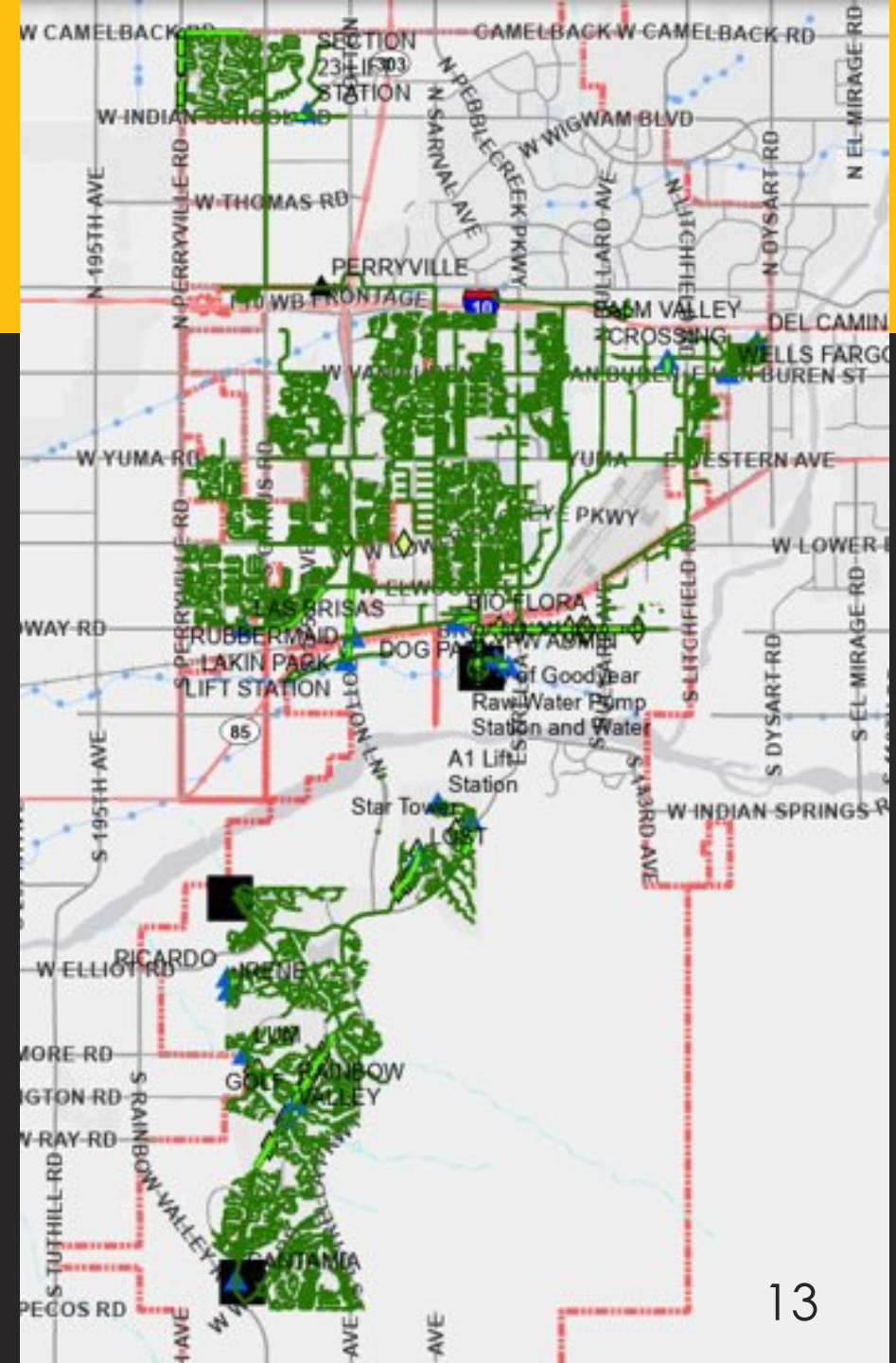
- Expand surface water treatment plant
- Additional storage
- Pressure zone
- Expand groundwater treatment



2024 Integrated Water Master Plan (IWMP)

Water Planning Areas 1, 2, & 3

- Pipes
- Manholes
- Lift Stations
- Treatment Plants





Recommendations

- Implement brine solution
- Infill improvements
- 157th Avenue Water Reclamation Facility expansion
- Rainbow Valley Water Reclamation Facility expansion



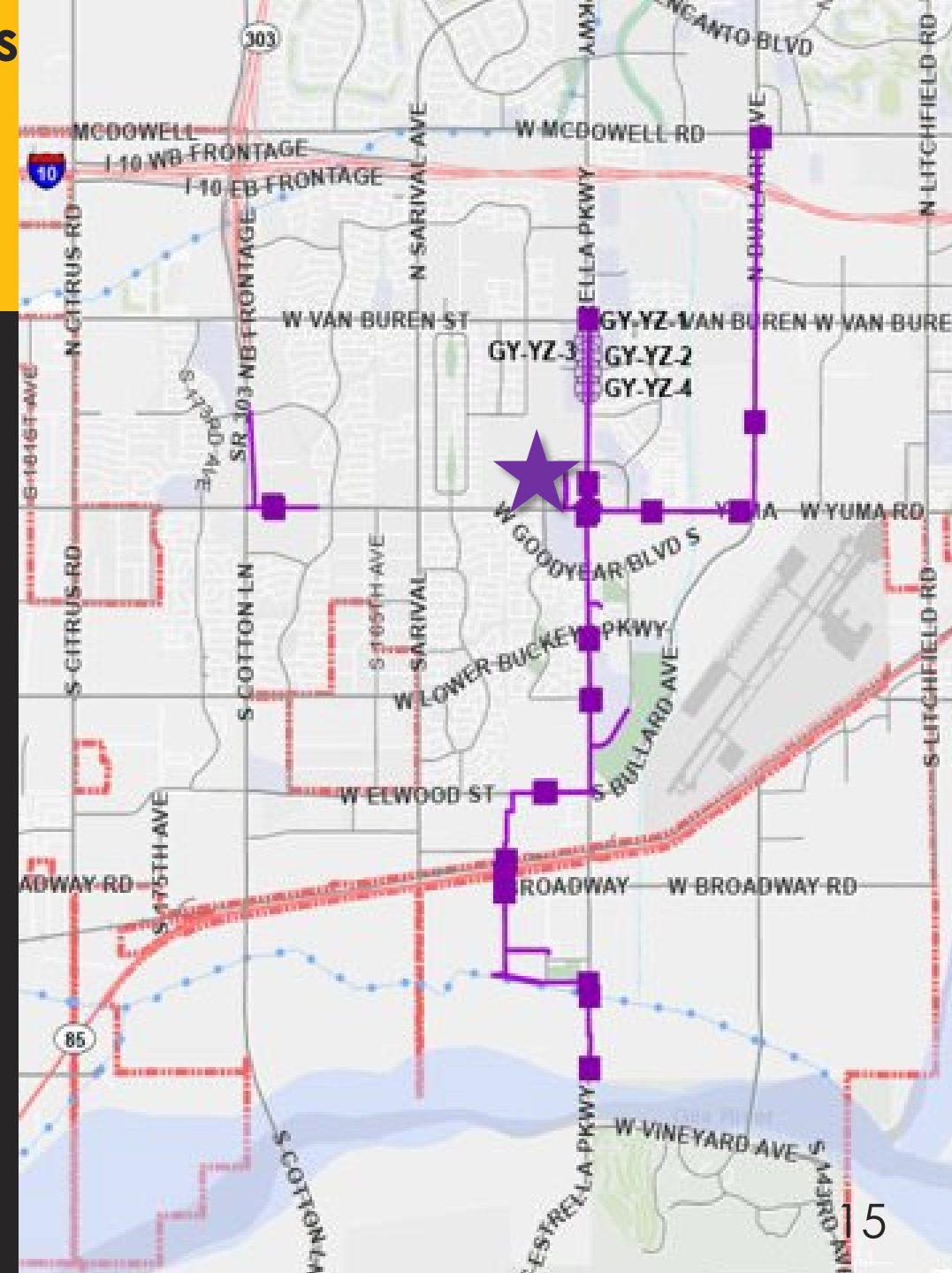
Water and Wastewater Analysis Water Services Action Item

2024 Integrated Water Master Plan (IWMP)

Reclaimed Water (pg. 7)

Water Planning Area 2

- Pipes
- Pumps
- Recharge Basins
- Wells



Reclaimed Water



Recommendations

- Increase recharge capabilities
- Extend recharge capabilities
- Direct use opportunities
- Future – Advanced water purification



Summary and Next Steps

Next Steps

Spring 2025

- WS Water Policy
- Adopt IWMP
- Adopt Water Policy

Fall 2025

- Adopt Ordinance(s)
- Rate/Impact Fees



Water and Wastewater Analysis – Water Services Action Item FY2025 STRATEGIC PLAN UPDATE

Questions and Discussion

ACTION ITEM:

Review the current condition
and future needs of the water
and wastewater systems