



PLEASE SILENCE ALL ELECTRONIC COMMUNICATION DEVICES. THANK YOU.

NOTICE OF POSSIBLE QUORUM OF THE CITY OF BUCKEYE PLANNING AND ZONING COMMISSION OR OTHER COUNCIL APPOINTED BOARD: PLEASE NOTE THAT THERE MAY BE A QUORUM PRESENT BUT THERE WILL BE NO VOTING TAKING PLACE BY THE CITY PLANNING AND ZONING COMMISSION OR OTHER COUNCIL APPOINTED BOARD AT THIS MEETING.

**CITY OF BUCKEYE
COUNCIL WORKSHOP
MARCH 1, 2022
AGENDA**

**City Council Chambers
530 East Monroe Avenue
Buckeye, AZ 85326
3:30 PM**

Accessibility for all persons with disabilities will be provided upon request. Please telephone your accommodation request (623) 349-6911, 72 hours in advance if you need a sign language interpreter or alternate materials for a visual or hearing impairment.

Voting Members will either attend in person or by telephone conference call or video presentation. Items listed may be considered in any order

IMPORTANT NOTICE REGARDING PUBLIC PARTICIPATION

This meeting will be open to the public. Adherence to COVID-19 safety measures are recommended.

1. Call to Order/Roll Call

2. Workshop Items

2.A [Buckeye City Council to receive a presentation from the Water Resources and Engineering Departments on capital improvement projects that have been recently completed, are currently underway, or planned over the next five years. \(Approximate time: 2 hours\)](#)

Summary: On October 21, 2021, the City's Construction and Contracting Division issued their annual call for projects for Fiscal Year 2022-2023 to include the City's 5-year Capital Improvement Program (CIP). Project submittals were due December 31, 2021. Staff is seeking input and direction from Council on their Department's project submittals for the 5-Year Capital Improvement Program (CIP) submittals.

Staff Liaison: Alisha Solano, Water Resources Director, asolano@buckeyeaz.gov, (623) 349-6101
Scott Zipprich, City Engineer, szipprich@buckeyeaz.gov, (623) 349-6217

3. Adjournment.

**CITY OF BUCKEYE
Council Workshop Agenda
COUNCIL ACTION REPORT**

MEETING DATE: 03/01/22	AGENDA ITEM: 2.A. Buckeye City Council to receive a presentation from the Water Resources and Engineering Department on capital improvement projects that have been recently completed, are currently underway, or planned over the next five years. (Approximate time: 2 hours)
DATE PREPARED: 03/01/22	DISTRICT NO.:
STAFF LIAISON: Alisha Solano, Water Resources Director, asolano@buckeyeaz.gov, (623) 349-6101 Scott Zipprich, City Engineer, szipprich@buckeyeaz.gov, (623) 349-6217	
DEPARTMENT: Water Resources	AGENDA ITEM TYPE: Staff Reports / Discussion and Possible Direction from Council

TIME NEEDED: 2 hours

ACTION/MOTION: (This language identifies the formal motion to be made by the Council) Buckeye City Council to receive a presentation from the Water Resources and Engineering Departments on capital improvement projects that have been recently completed, are currently underway, or planned over the next five years. (Approximate time: 2 hours)

RELEVANT GOALS:

GOAL 4: Adequate, Well-Maintained and Well-Planned Public Infrastructure

ADDITIONAL RELEVANT GOALS:

GOAL 3: A Well-Planned Urban Community

SUMMARY

PROJECT DESCRIPTION:

The Water Resources and Engineering Department have a total of 67 projects in the 5-year CIP plan including 21 projects currently funded in FY 21-22 that will carry forward in FY 22/23 or future years and 46 projects requested over the next 5-year period. These projects include both water and wastewater planned projects including repair and replacement projects, growth and expansion projects and projects to secure new water sources for the City of Buckeye.

On October 21, 2021, the City's Construction and Contracting Division issued their annual call for projects for Fiscal Year 2022-2023 to include the City's 5-year Capital Improvement Program (CIP). Project submittals were due December 31, 2021. Staff is seeking input and direction from Council on their Department's project submittals for the 5-Year Capital Improvement Program (CIP) submittals.

BENEFITS:

These capital projects benefit Buckeye residents and businesses by providing safe and reliable quality water and wastewater delivery and removal, preserving our water resources, utilizing our effluent

resources and bringing in new water supplise to the city to continue to support growth into the future.

FUTURE ACTION:

Projects requeting funding in FY 22/23 CIP will be included as part of Council's adoption of the FY 22/23 budget.

FINANCIAL IMPACT STATEMENT:

Project funnding will be coming from various sources including the water and wastewater funds, development impact fees, grants and potential federal and state funding sources.

CURRENT FISCAL YEAR TOTAL COST:

N/A

FISCAL YEAR:

FY 22/23

Items related to a project or facility location must include an attached vicinity map for Council Review.

ATTACHMENTS:

[CIP - Power Point 2022 - Water Resources - Engineering_DRAFT Final.pdf](#)



Water Resources CIP Review

Alisha Solano, Water Resources Director

Scott Zipprich, City Engineer

March 1, 2022



Agenda

Wastewater Projects

- Wastewater Projects Completed
- Wastewater Projects Carried Forward
- FY 22/23 New Requested Projects
- Future Year Projects

Water Projects

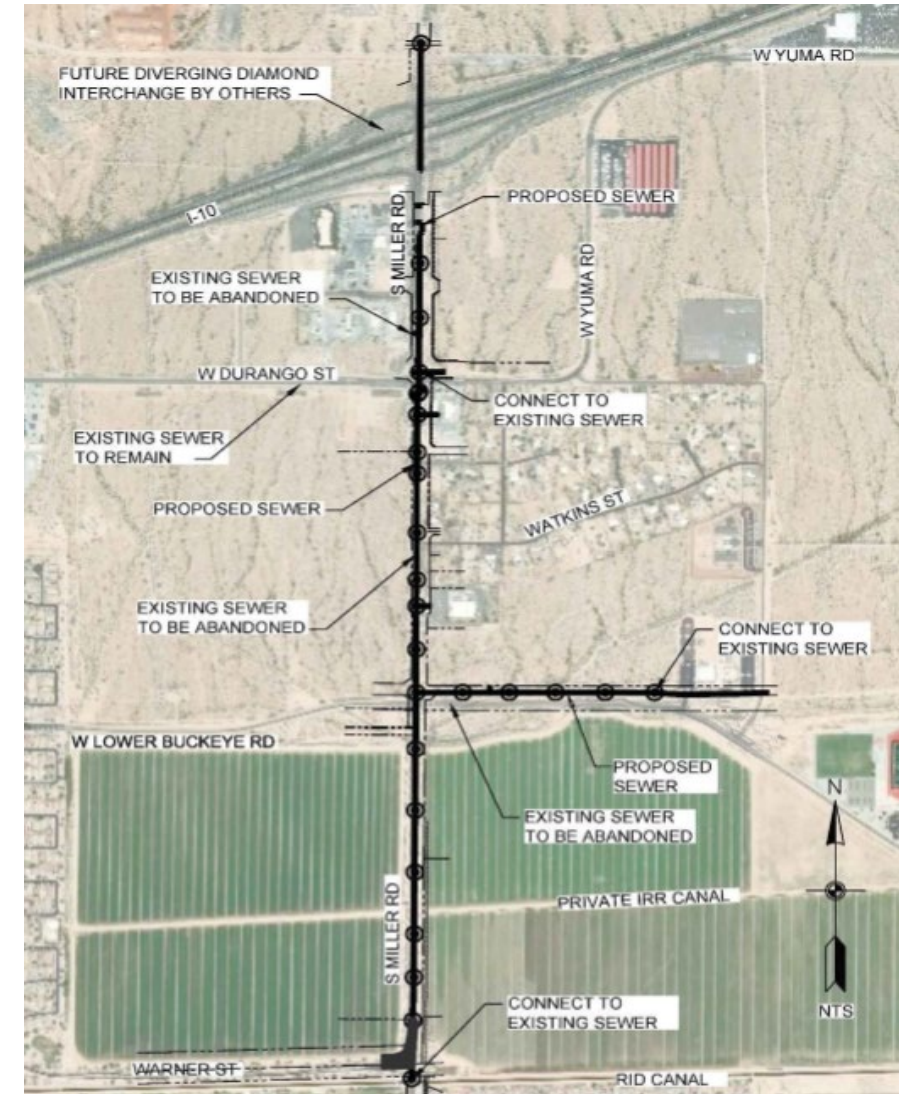
- Water Projects Completed
- Water Projects Carried Forward
- FY 22/23 New Requested Projects
- Future Year Projects

Wastewater Information

- 4 Wastewater Facilities treated 4.6 MGD or 1.7 billion gallons annually
- 4 Wastewater Facilities produced 4.4 MGD or 1.6 billion gallons of effluent annually
- 321 miles of sewer main
- 7,530 manholes

Wastewater Projects Completed

- Miller Road Trunk Sewer
- Central Plant Rehabilitation
- Festival Ranch Basin # 2
- SCADA Upgrades
- Apache Road Manhole Rehabilitation
- NE Lift Station Odor Scrubber Repairs
- Tartesso UV Disinfection/Effluent Pump Station



Active Wastewater Projects Carried Forward

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY 27/28	Total Project Cost
Sundance WRF	\$12,295,650						\$12,295,650
Manhole Condition Assessment and Rehabilitation	\$750,000	\$380,000	\$380,000	\$380,000	\$380,000	\$380,000	\$2,650,000
Wastewater Repair and Replacement Program	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$3,000,000
Festival Ranch WRF Improvements	\$2,400,000						\$2,400,000
WRF #6 Phase 1 (3.0 mgd)	\$1,500,000		\$500,000	\$500,000	\$25,000,000	\$25,000,000	\$52,500,00

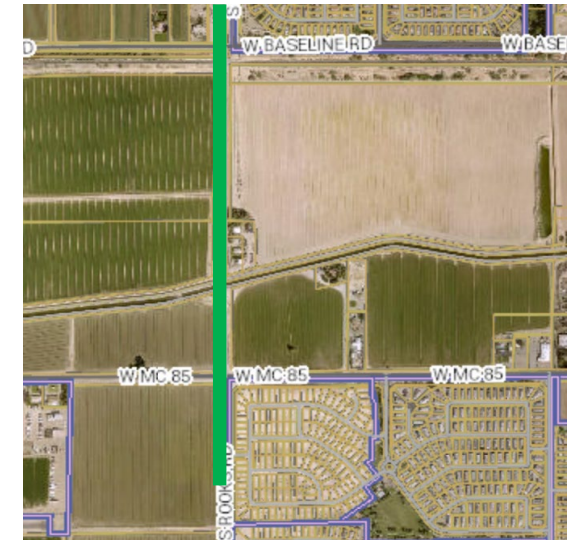
FY 22-23 New Projects

- Festival Recharge Facility
- Rooks Rd Sewer Main (JDA Resolution)
- Festival WRF Improvements Phase 2
- Sundance WRF Improvements Phase 3
- Central WWTP Improvements Phase 3
- Tartesso WRF Improvements Phase 2
- Central WWTP - Effluent Water Line Beloit to Miller north to RID
- Central WWTP Ring Levee Project
- Lift Station west of SR85, north of MC85 (Merit; APS substation in the Buckeye Industrial Park)
- Sewer line 2nd St to Centre Rehabilitation

Sewer Main Projects

Design and construction of VCP sewer mains. Includes connections to existing sewers and may include jack and bores.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY 27/28	Total Project Cost
Rooks Rd. Sewer (JDA Resolution/Kore Power)	\$4,000,000						\$4,000,000
Sewer Line 2 nd St to Centre Rehabilitation	\$300,000						\$300,000



Sewage Pump Station Projects

Re-imbursement for lift station constructed by Developer.

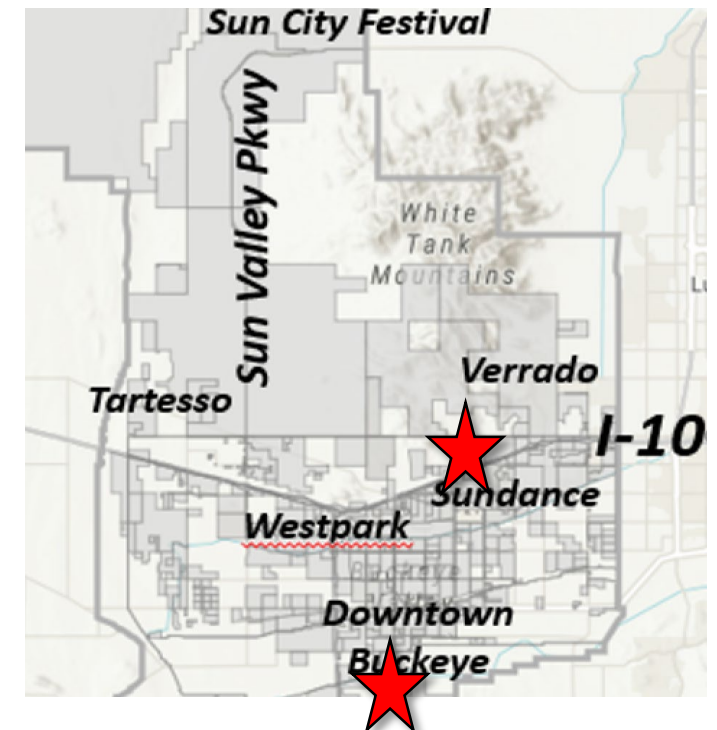
Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY 27/28	Total Project Cost
Lift Station West of MC85 (BIP)	\$4,500,000						\$4,500,000



Water Reclamation Facility (WRF) Projects

Design and construction of repairs and improvements not related to expansions of capacity.

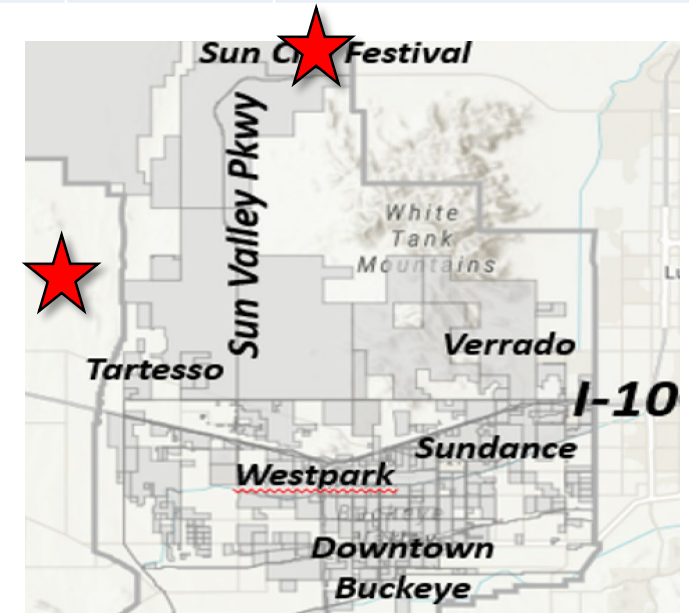
Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY 27/28	Total Project Cost
Central WRF Imp. – Phase 3	\$1,000,000	\$1,000,000	\$1,600,000	\$1,000,000	\$		\$4,600,000
Sundance WRF Imp. – Phase 3	\$1,750,000	\$2,450,000	\$1,250,000	\$	\$		\$5,450,000



Water Reclamation Facility (WRF) Projects

Design and construction of repairs and improvements not related to expansions of capacity.

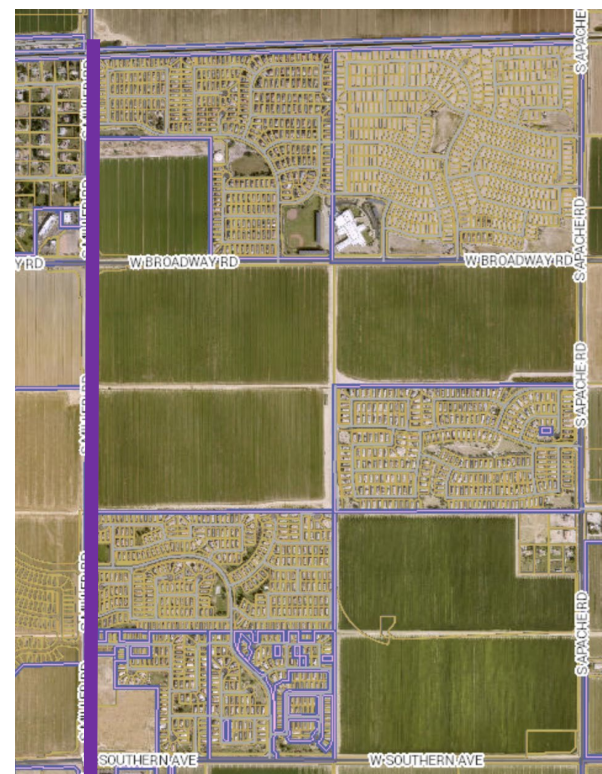
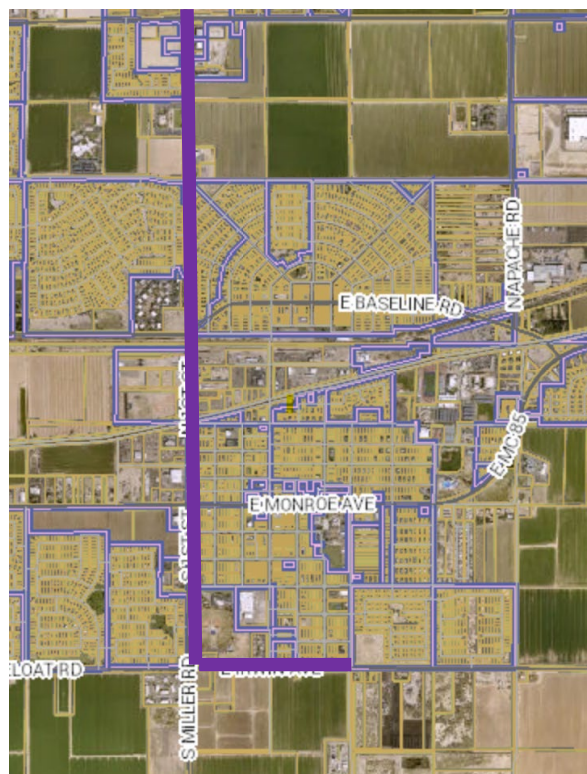
Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY 27/28	Total Project Cost
Festival WRF Improvements – Phase 2	\$2,000,000	\$1,500,000	\$1,700,000				\$5,200,000
Tartesso WRF Improvements – Phase 2	\$500,000	\$1,000,000					\$1,500,000



Reclaimed Water Distribution Projects

Design and construction of effluent distribution mains.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Central WRF – Effluent WL Line Beloat to Miller North to RID	\$250,000	\$8,750,000					\$9,000,000



Other Projects

Possible grant funded projects.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Central WWTP Ring Levee Project	\$500,000	\$3,000,000					\$3,500,000
Festival Recharge Facility	\$250,000	\$12,000,000					\$12,250,000

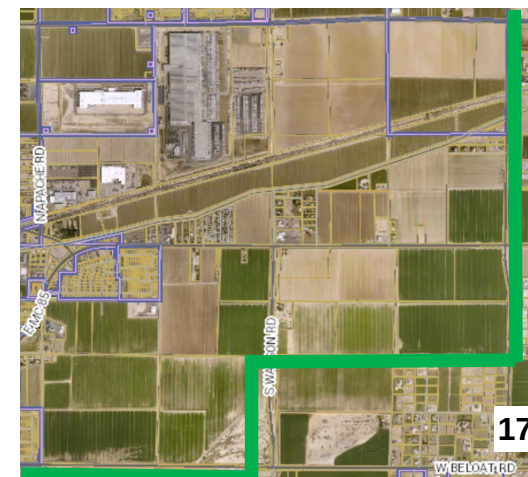
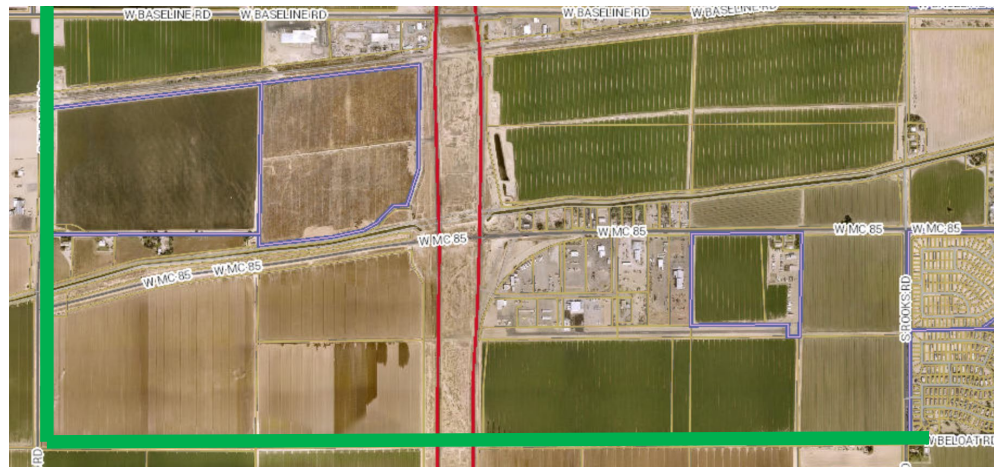
Future Years New Wastewater Projects

- Trunk Sewer Main - 16,000 LF Beloit from Rooks to Turner and on Turner from Beloit to Baseline
- Trunk Sewer Main - 5280 LF on Beloit from Apache to Watson
- Monroe Street Towner Sewer Project
- Trunk Sewer Main - 22,000 LF from Central WWRP to Southern & Rainbow
- Central Wastewater Treatment Plant 1.5 MGD Expansion
- Sundance WRF Expansion

Trunk Sewer Projects

Design and construction of trunk sewer – larger diameter, VCP mains.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
22,000 LF – Central WWTP to Southern & Rainbow		\$200,000	\$19,800,000	\$10,000,000			\$30,000,000
16,000 LF - Beloit Road from Rooks to Turner then north to Baseline		\$2,000,000	\$14,000,000	\$14,000,000			\$30,000,000
5,280 LF - Beloit Road from Apache to Watson		\$500,000	\$7,500,000				\$8,000,000



WW Plant Expansions

The following projects are future wastewater treatment plant expansions to treat buildout flows at the site.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Sundance WRF Expansion			\$500,000	\$8,500,000	\$7,500,00	\$7,000,000	\$23,500,000
Central WRF 1.5 MGD Expansion			\$500,000	\$14,000,000	\$14,000,000		\$28,500,000

Sewer Main Projects

Design and construction of VCP sewer mains. Includes connections to existing sewers and may include jack and bores.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Monroe Street Towner Project		\$240,000	\$2,400,000				\$2,640,000



Wastewater Total Projects FY 23-FY 28

Wastewater	Total Project Cost
Wastewater Total CIP Projects – Growth Related	\$203,985,650
Wastewater Total CIP Projects – Non-growth Related	\$41,800,000
Total Wastewater CIP Projects	\$245,785,650
• Impact Fee Fund	\$24,550,000*
• Grants	\$6,250,000**
• Economic Dev.	\$4,000,000
• Wastewater Fund	\$210,985,650

* Impact fees received and estimated as of 2/8/22

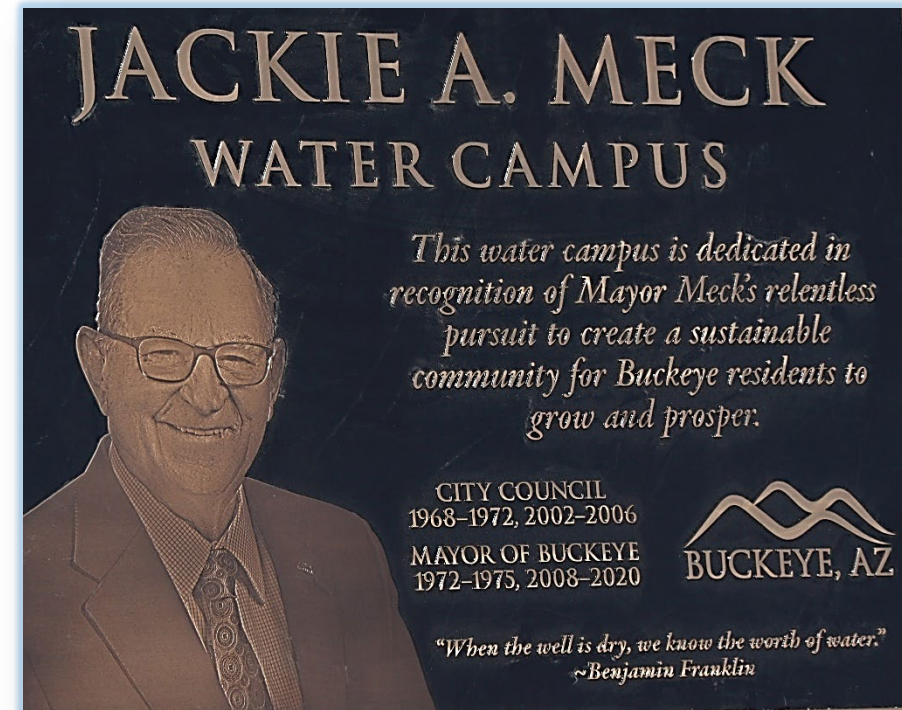
** Estimated grant award

Water Information

- 3.3 Billion Gallons produced in 2021
- 29 operating wells
- 423 miles of distribution water main
- Over 27K meters
- 3,157 new meters connected since January 2020
- 3,230 fire hydrants
- 5,515 water isolation valves

Water Projects Completed

- Jackie Meck Water Campus (Phase I)
- Airport Commercial Waterline
- Drilled 9 new wells
 - 3 operating
 - 4 pending equipment
 - 2 potential RO wells



Water Projects Carried Forward

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Farallon WC	\$47,000,000						\$47,000,000
Tartesso Fluoride Treatment	\$500,000	\$7,500,000					\$8,000,000
WC #3 Improvements (West Phx Estates)	\$5,800,000	\$6,190,000					\$11,990,000
Well #13	\$4,750,000						\$4,750,000
JMWC Well #8 (Schult Well)	\$4,500,000						\$4,500,000

Water Projects Carried Forward - Continued

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Sundance Well #10 (Tract A)	\$750,000	\$2,750,000					\$3,500,000
WC #9	\$2,000,000		\$2,900,000	\$2,000,000	\$25,000,000	\$25,000,00	\$56,900,00
Reach Line Connection to JMWC Reservoir	\$2,500,000						\$2,500,000
WC #5	\$1,750,000	\$5,776,286	\$12,228,914				\$19,755,200
PRVs – Global Service Area	\$1,000,000	\$1,725,000					\$2,725,000
EPCOR Interconnect at Dean & McDowell	\$1,000,000						\$1,000,000

FY22/23 New Water Projects

- Harquahala Water
- Jackie Meck WC Well #9
- Sundance Arsenic Vessel #6
- 16-inch WL in Verrado between Van Buren & Yuma Rd with PRV
- North Airport WC - Fluoride Removal
- Farallon WC Well #2
- Well Transmission Mains - Jackie Meck WC Service Area
- Water Infrastructure and Quality Assessment
- Well Transmission Mains - Farallon WC Service Area

FY22/23 New Water Projects - Continued

- Historic Booster Station Expansion
- Jackie Meck Water Campus R/O and Brine Disposal
- Farallon WSA Well #1
- Farallon WSA Well - Bowe-Torres Well Site & Well
- Pressure Reducing Valve (PRV) Station - WC#16 - Baseline Rd West of Miller Rd
- Pressure Reducing Valve (PRV) Station - WC#16 - Roeser Rd Between SR 85 and 263rd Ave.
- Water Main - Rooks Rd adjacent to future N. Bridge Abutment at the Buckeye Canal
- CDBG Project 4th Street - Centre to Beloat Water Main Rehabilitation

Well Projects

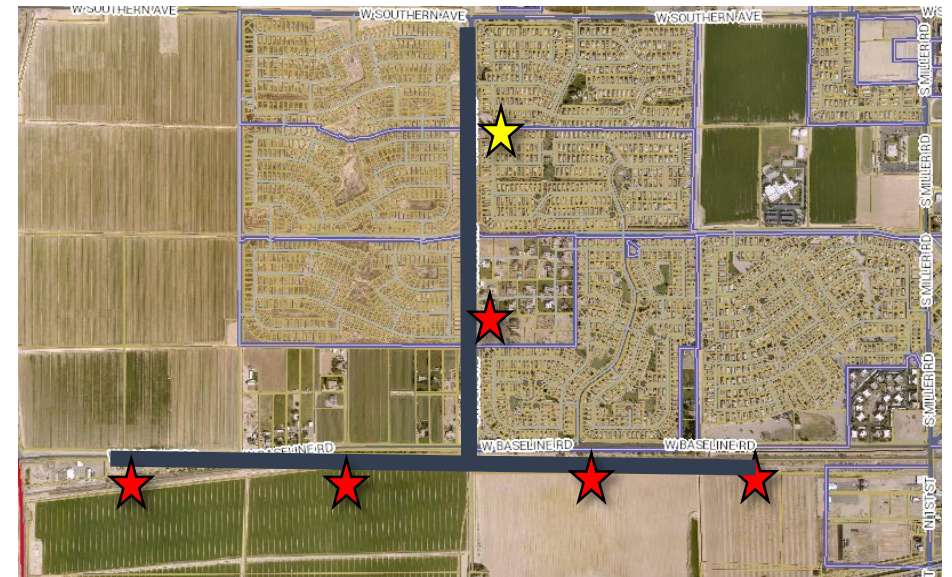
Well site acquisition, test hole, drilling & casing, well site design, equipping, and construction.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
JMWC Well #9	\$750,000	\$2,400,000					\$3,150,000
Farallon WSA Well – TBD #1	\$500,000	\$3,300,000					\$3,800,000
Farallon WSA Well – TBD #2	\$3,500,000						\$3,500,000
Farallon – Bowe-Torres	\$150,000	\$3,500,000					\$3,650,000

Well Transmission Main Projects

Various sized ductile iron pipe between well sites and existing transmission mains to add water supply.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Jackie Meck Service Area	\$2,640,000						\$2,640,000
Farallon Water Service Area	\$3,700,000	\$4,220,000					\$7,920,000



Water Main Projects

Design and construction of water mains.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
16" WL in Verrado between Van Buren & Yuma Rd with PRV	\$1,650,000						\$1,650,000
In Rooks Rd – Adjacent to Future Bridge Abutment at Buckeye Canal	\$25,000	\$120,000					\$145,000



Pressure Reducing Valves (PRV) Projects

Projects that promote the integration of the water systems, movement of water from zones of high pressure to low pressure, and projects to manage excessive pressure. Projects involve land acquisition, valves, pipe, and sitework.

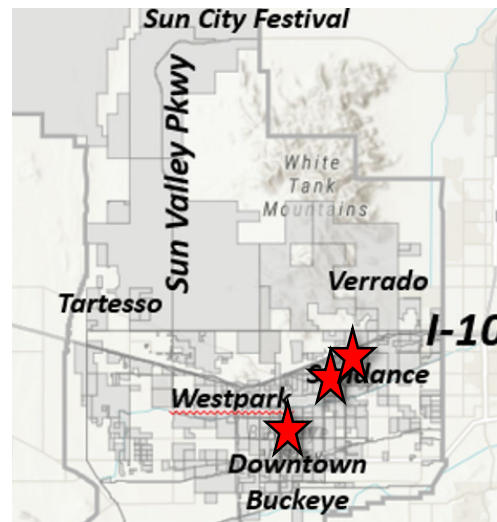
Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
WC#16 – Roesser Rd between SR85 & 263 rd Ave. (Z2 to Z1)	\$100,000	\$150,000	\$1,400,000				\$1,650,000
WC#16 – Baseline Rd. W. of Miller Rd. (Z1 to Historic)	\$100,000	\$150,000	\$1,400,000				\$1,650,000



Water Campus (WC) Projects

Treatment capacity expansions and upgrades to address changes in water supply and water quality.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Sundance WC - Arsenic Vessel #6	\$1,830,000						\$1,830,000
North Airport WC – Fluoride Removal	\$600,000	\$8,000,000					\$8,600,000
Jackie Meck WC RO	\$250,000	\$9,750,000	\$20,000,000				\$30,000,000



Replacement/Renewal Projects

Water main rehabilitation and replacement.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
CDBG Project 4 th Street – Centre to Beloit Water Main Rehabilitation	\$154,859	\$778,657					\$933,516



Other Projects

Project \$300	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Harquahala Water	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$60,000,000
Water Infrastructure and Quality Assessment	\$850,000						\$850,000
Historic Booster Station Expansion	\$300,000						\$300,000

Future Year New Water Projects

- Brine Management - Payment to PVNGS and Related Infrastructure at 96" Line
- Water Resources Admin Building and Warehouse
- Monroe Street Towner Property Water Project
- Pressure Reducing Valves (PRVs) - WSA #16
- Water Main - MC85 - Shepards Trl to S. 233rd Dr. (Public Works Office)
- Pressure Reducing Valve (PRV) Station - WC#7 - Zone 1 to Historic
- Jackie Meck Water Campus Expansion
- Jackie Meck Water Campus Well #10

Future Year New Water Projects - Continued

- Valencia System Water Mains Upgrade
- Water Campus #9 Well #1
- Water Campus #6-Water Master Plan/DCR for Buckeye Airport Area
- Water Campus #7
- Water Campus #9 Well #2
- Water Campus #7 Well #1
- Water Campus #7 Well #2

Water Campus (WC) Projects

Treatment capacity expansions and upgrades to address changes in water quality.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Jackie Meck Campus Water Campus Expansion			\$1,000,000	\$14,000,000	\$20,000,000	\$20,000,000	\$55,000,000
WTP #6 – Water Master Plan/DCR Buckeye Airport			\$250,000	\$12,750,000			\$13,000,000

Pressure Reducing Valves (PRV) Projects

Projects that promote the integration of the water systems, movement of water from zones of high pressure to low pressure, and projects to manage excessive pressure. Projects involve land acquisition, valves, pipe, and site work.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/29	Total Project Cost
WC#7 – Between Z1 & Historic		\$100,000	\$1,550,000				\$1,650,000
WSA #16		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000



Water Main Projects

Design and construction of water mains.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Monroe Street – Towner Property Water Project		\$1,980,000					\$1,980,000
In MC85 – Shepards Trail to S. 233 rd Dr. (Public Works)		\$300,000	\$1,950,000				\$2,250,000



Replacement/Renewal Projects

Water main rehabilitation and replacement.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Valencia System Water Mains Upgrade			\$800,000	\$3,000,000	\$3,000,000	\$3,000,000	\$9,800,000

Well Projects

Well site acquisition, test hole, drilling & casing, well site design, equipping, and construction.

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
JMWC Well #10			\$1,000,000	\$2,500,000			\$3,500,000
Water Campus #9 Well #1			\$500,000	\$3,300,000			\$3,800,000
Water Campus #9 Well #2				\$500,000	\$3,300,000		\$3,800,000
Water Campus #7 Well #1				\$500,000	\$3,300,000		\$3,800,000
Water Campus #7 Well #2					\$500,000	\$3,300,000	\$3,800,000
Water Campus #7				\$2,000,000	\$10,000,000	\$25,000,000	\$37,000,000

Other Projects

Project	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	Total Project Cost
Water Resources Administration Building and Warehouse		\$3,000,000	\$8,000,000				\$11,000,000
Brine Management – Payment to APS and related Infrastructure at 96” Line		\$4,100,000					\$4,100,000

Water Total Projects FY23-FY28

Water	Total Project Cost
Water Total CIP Projects – Growth Related	\$399,465,200
Water Total CIP Projects – Non-growth Related	\$74,903,516
Water Total CIP Projects	\$474,368,716
• Impact Fee Fund	\$53,347,000*
• Grants	\$18,900,000**
• Water Fund	\$402,121,716

- * Impacts Fees available and estimated as of 2/8/22
- ** Estimated grants awarded

FY 22/23 Requests

- Wastewater

- Rollover projects = \$17,445,650
- FY 22/23 projects = \$15,050,000
- Total for FY 22/23 = \$32,495,650

- Impact Fees

- Est FY 22/23 = \$ 6,000,000

- Grants

- Est FY 22/23 = \$ 6,500,000

- Water

- Rollover projects = \$71,550,000
- FY 22/23 projects = \$27,099,859
- Total for FY 22/23 = \$98,649,859

- Impact Fees

- Est FY 22/23 = \$20,000,000

- Grants

- Est FY 22/23 = \$18,900,000

Questions?