



# Quarterly Report



## Water Services Update – January to March 2024

### Division Highlights

- The **Rate Study** for Water, Wastewater and Reclaimed Water was in full momentum this quarter, requesting recommendations from the Water Commission and direction from City Council on capacity fees and rate structure. There were two joint sessions of Water Commission and City Council on March 4 and March 25, to discuss the rate design.
- **Grant opportunities** are in the forefront, with:
  - Federal and state emergency management (FEMA/DEMA) grants in process for Rio de Flag Reclamation Plant back-up generators
  - Inner Basin fire and flood remediation through Arizona Department of Fire and Forest Management.
  - State Water Infrastructure Finance Authority Grants (WIFA) for non-revenue water studies and replacing old water meters with high-efficiency models with better tracking technology.
  - Water Services is partnering with Sustainability for an EPA grant to find new solutions to old problems of solids handling, in the form of solids drying to produce biochar.
  - The City is also requesting federal appropriations (WRDA) for assistance with development of a new water reclamation plant.
  - Army Corp (EI595) grants are in process for two Stormwater Projects – downtown laterals for the Rio de Flag Flood Control and Killip Inlet (Spruce Wash basins).
  - FEMA grants for Stormwater include Cedar Avenue culvert, Spruce Wash property acquisition, and Lower Spruce Wash Channel Resiliency.
- **Budget:** This year's budget season will track with the rate study recommendations, to bring operations budgets up to the needed levels. Budget increases are contingent on



the rate model passing. The Division has submitted around \$4 million in new funding operations requests (one-time and ongoing) for FY25.

- **Water Rights Settlements** made national news in March, with tribes and localities moving on a path toward an equitable agreement on Little Colorado Aquifer water rights.

## Recruitments

- Mac McNamara moved into the Engineering Section Director Position in January, coming over from the City's Capital Development Group.
- Congrats to Lee Williams, our new Treatment OPS Section Director. Lee moved from Water Production into this Admin position in March.
- Jackson Salazar moved into a new Project Manager position, from Plan Review
- Suzie Jonas is starting April 1 as Management Analyst

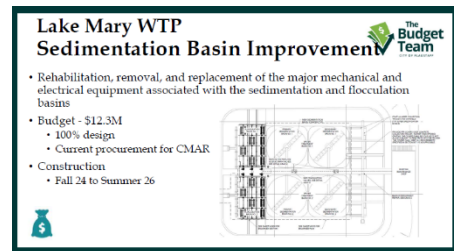
## Water Commission Agenda

- Robert Vane joined the Water Commission in February, replacing Ben Ruddell.
- Kurt Riegelman was reappointed Commission Chair for 2024, with John Nauman as Vice-Chair.
- Water Commission focused meetings on topics related to the rate study, capital projects, updates on the Water Conservation Strategic Plan and Water Awareness Month.

## Engineering

- Engineering presented on FY25 Capital Projects during the budget retreat. Some highlights were:

- Soliere Water Transmission Line is substantially complete!
- Switzer Phase 4 Water Transmission Lines – Near completion!
- Meter Vault Replacement – Cameo Mobile Home complete; next up is NAU meter and vault project
- Inner Basin Waterline Project, FEMA/DDFM Water Line and Road Rebuild
- Lake Mary Water Treatment Plant Sedimentation Basin Rehab-CMAR solicitation coming soon
- Reclaimed Waterline – 8" Bottleneck, construction starts in FY25
- Wildcat/Country Club Sewer Interceptor – Design contract with Ardurra is going to City Council for approval.
- Stormwater completed a suite of Spruce Wash projects.
- Schultz Creek Highway 180 Drainage Improvements project stated in March.

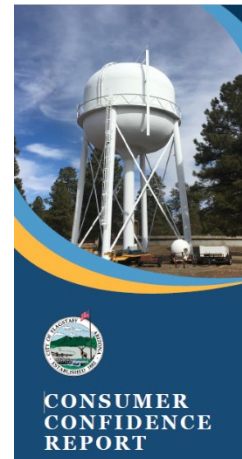


- Other Projects in process include:
  - Buffalo Park to Ellen Street Reclaimed Water Line Replacement Project is nearing design completion

- Rio Digester-In Design
  - Wildcat Digester-In Design
  - Primary Influent Pump Station Replacement – In Design
  - Wildcat Co-Gen – In Design
- Planning
    - Working on new engineering standards for low pressure sewer mains
    - In the scoping phase for the WS Treatment Facility Master Plan

## Regulatory Compliance

- Regulatory Compliance staff fielded ADEQ inspections and audits at both the Rio de Flag and Wildcat Hill Reclamation labs with minor findings.
- The city regularly hosts ADEQ-sponsored Operator Practice exams. The last practice exam in March had 20 enrollees from regional operators in northern Arizona, as well as City employees.
- Krista Snow has spearheaded the 2023 Water Quality Report, otherwise known as the *Consumer Confidence Report* or *CCR*. The final draft is in review and slated to be published and sent out to customers in May, well before the June 30 deadline. Nice work, Krista!
- Staff continues to partner for interns with the AmeriCorps program at NAU to facilitate research on the new EPA Lead and Copper Rule.
- A new ADEQ website posting constituent levels of unregulated contaminants from EPA-required sampling is currently in a test environment, allowing submitters to upload data and verify accuracy before releasing this information to the public.



## SCADA Information Systems

- Congrats to Lorne Cargill, SCADA's new Program Manager!
- Staff are working on a study for the best location for a Master Radio site, communicating to wells and booster stations.
- Communication to/from Lake Mary is back online, after lightning strikes took down the system.
- Staff is completing septage communications at Wildcat Hill and coordinating with Regulatory Compliance to create Standard Operating Procedures.
- Ryan Urena, GIS Specialist, is busy in the CMMS system, with Corryn on leave. He's helping Stormwater collections with work order requests, sorted by watershed and a cleaning schedule for basins. He's also working on entering infrastructure as-builts to the work order system in the facilities.

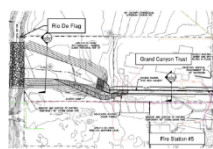
- Cameras and doors project at WSAB and the Bonito load-out station is nearing completion.
- Gate projects at both reclamation plants are prepping concrete slabs for cabinet controls.
- Staff are replacing batteries for pressure sensors in sewer, stormwater and distribution system.
- A new network at McAllister well is up and running, with communications to Lake Mary #2 master radio site
- SCADA Team is providing input for the interface and controls of Ft Tuthill pumphouse.

## Stormwater

- Stormwater Capital Improvements
  - The Highway 180 culvert project has a CMAR on-board with design at 90% and construction beginning in April through June.
  - The Downtown Mile project is coordinating with the Downtown Lateral – Santa Fe project on a comprehensive drainage plan on Santa Fe. Making good progress and working around BNSF stipulations. The project is being managed by Trevor, Christine, and Ed.
  - The Spruce Wash suite of bond projects is underway, you may notice utility re-alignments in Main and Grandview, trees being removed that are in conflict with the channel, as well as a new staging yard at “the Wedge”. Eagle Mountain Construction is the CMAR.

**Schultz Creek Drainage Improvements @ US Highway 180**

- Funded by \$8.9M of State appropriated funds
- Construction costs of \$7.8 million
- Construction starting March 25<sup>th</sup>, new stormwater infrastructure to be completed by July



**Scope**


- Prop 441 approved November 2022
- Stormwater Infrastructure improvements in the Spruce Wash area to lessen the impacts of flooding in affected neighborhoods
- Ten (10) projects

**Budget \$39.9M**

- Prop. 441 Total - \$26M
- RR&SS - \$5.6M
- Grants - \$8.2M
- Water Services - \$148K

**Schedule**

- Design underway - Summer 23 to 25
- Construction - Fall 23 to 26



**Key Flood Projects**

1. Grandview Drive Reconstruction
2. "The Wedge" Detention Basin
3. Linda Vista Drive Crossing
4. Cesar Avenue to Linda Vista Drive Channel
5. Cesar Avenue Crossing
6. Arroyo Seco Drive to Dorita Avenue Channel
7. Arroyo Seco Drive Inlet
8. D&D Delta Inlet
9. D&D Delta Inlet
10. Park Way Basin

**Completed Key Flood Projects**

- Spruce Wash Channel Improvements Project (Cesar Avenue to Dorita Avenue)
- Spruce Wash Channel Improvements Project (Dorita Avenue Inlet)
- Klap School Regional Detention Basin Project

- The Lower Spruce/Switzer Wash channel restoration is in final design, this is a FEMA-City partnership. The construction phase is awaiting grant award from DEMA. Stormwater is managing the project internally.
- Stormwater and Capital are working with BNSF on design for the culvert at 338.9 milepost (Big Fill Lake – Continental Country Club), we are utilizing BNSF’s sub-contractor for the design.
- Chase is working on minor “spot” drainage improvements along Izabel, we have a winning bid and working through procurement.

- Administration
  - Doug is managing the Stormwater Drainage Design Manual update, the first since 2009. The draft design was crafted by Woodson-Ardurra and is in technical peer review with an expectation of taking to Council in June.
  - Chase is coordinating several LOMRs (Letter of Map Revisions) in the community on top of regular engineering reviews, probably the most concurrently in the City’s history.
  - Chase is working on revising Chapter 12 of City Code to meet some new verbiage requirements of FEMA and ADWR (the State representative for floodplain regulations). This is in Legal review.
  - Chase is also working on the 5 year CRS audit, this is a very intensive process but important for maintaining our 25% discount for NFIP (federal flood insurance policies). We met with FEMA on March 28<sup>th</sup> and expect to have a final audit package submitted by May.
  - Shannon Long continues to work through a high volume of Stormwater credit manual applications and Stormwater rate questions.
  - Lots of grants, and grant proposals, in the works and continuing research with partners: we were recently awarded approximately \$1M in federal funding for Cedar Ave. culvert at Spruce Wash, awaiting funding decision on the Killip Secondary Outlet grant and a transfer of funds from USDA for “the Wedge”.

## Section Director – Field Ops

- Field Ops Section Director Patrick O’Connor is presenting water meter contracts for city council approval for regular maintenance change outs.
- The WIFA grant agreement is under review and will come before City Council this spring. In the meantime, staff are working on a separate meter contract for the WIFA grant, including federal compliance requirements.
- Field Ops signed up for 55 (operator) seats with American Water College. This allows operator and field technicians to receive needed training in a variety of disciplines throughout the year.
- Staff took delivery of the second (and final) water distribution service truck on order since 2020, partly due to supply chain and vendor staffing challenges.



## Water Distribution

- The Section has four vacant positions.
- February and March had 5 service replacements, two main breaks

- We are currently down two service trucks for repair. Luckily, we have two new trucks in service.
- Three hydrants were replaced from snowplow and vehicular damage. Crews also replaced several snowplow-damaged meter boxes.
- A new replacement waterline is being installed on Grandview Dr. as part of the Spruce Wash bond project.
- A new waterline is being installed on University Ave and Beulah
- Construction walk-throughs for new water service at Chick fil A on E. Rte 66 and N. Fourth St, Timber Sky Adora Phase 2 subdivision, and In N Out Burger on S. Milton Road were completed.
- Crews attended annual confined space, trenching and excavating classes.



## Wastewater Collections

- Staff picked up the Collections TV Van, once repairs were completed. This equipment has repeatedly had problems and is under review.
- The Purchase order for the new WW Combo Truck has been issued. Now, the waiting period, while the truck is built.
- Wastewater Collections currently has four vacancies.
- SSO's (Sanitary Sewer Overflows) are increasing; two this quarter.
- We are experiencing availability issues for service parts. Suppliers are experiencing shortages and long lead times for delivery.
- Crews attended annual confined space, trenching and excavating classes



## Stormwater Collections

- Crews cleared the Bear Paw open channel drainage.
- Our new stormwater operator, Kristina, obtained her class A CDL as well as obtaining her grade one wastewater certification.
- Storm water filled its last vacancy with hiring Michael Gouhin. He was able to obtain his class A CDL and pass grade one wastewater certification.
- Lorn Sampson and Paul Wolf renewed their Pesticide certifications.
- Crews attended annual confined space, trenching and excavating classes.

## Water Production

- Our largest booster pump at the Lake Mary Water Treatment Plant is out of commission. Initially the downstream valve was suspect, then we assessed the pump and motor which were fine. Culprit is now thought to be electrical related, options for soft-start replacement are on the table with staff and contractors looking into quotes. All discharge valves at the LMWTP town-pump building were rebuilt using all stainless-steel hardware for the first time.
- For the first time in about 8 years we are trying a new coagulant for surface water production, due to a force majeure for the one we have been using for nearly a decade with significantly inflated pricing from the vendor. The new coagulant did not perform as well as current, showing we were already using a great product. Force Majeure with current coagulant vendor was supposed to be over by the end of February.
- The Lake Mary Sedimentation Basin RSOQ is in procurement/legal hands for review; hopefully advertising for solicitation this spring.
- Snowstorms in February took out our Woody Mtn. Wellfield and Booster Station for a couple days. Issue ended up being on APS side with a wire down. Due to snowfall creating a limited access the wellfield was reduced to a single well in operation after power was restored. Access was also difficult and limited in Lake Mary Wellfield due to snowfall.
- SCADA staff continue to work on communications with the Raw Water Pump Station. Water Production staff are still required to take morning and evening drives to the station to start and stop pumps, regardless of weather and conditions. Staff are getting levels of Upper Lake Mary manually due to lack of communication with the dam. This time of year and with recent snowpack we should start to see infill into Upper Lake Mary, especially if we get any rain on snow events.
- Later in March SCADA staff made progress with the related communications from the Upper Lake Mary Dam, now visible at the LMWTP, with lake levels rising by the day.
- We filled the Water Production Maintenance Supervisor position with a start date in mid-May, and now have a vacancy for Operations Supervisor, with Lee Williams promoted to the Facilities Section Director position.
- Well & Pump Maintenance (used to service all water production groundwater wells etc.) and a Tank Rehabilitation Project including Railroad Springs, Kinlani and Buffalo Park Tanks along with the Woody Mountain Booster Station Forebay are under review from procurement and legal and should be advertised soon.
- We finally got Lake Mary Well #9 functionality restored last month since lightning damage took it out on labor-day weekend last year. It took a lot of coordination with the contractor on electric component needs. Contractor was able to rebuild the old contactor, so we now have a spare.
- We had a record setting ADEQ certification test series, with five staff registered and passing in multiple disciplines.

## Water Reclamation Plants

Reclamation Staff are honoring requests for tours, even as we manage staffing shortages.

- Reclaimed water demand for Snowbowl increased, in response to a dry January and February season. The water was turned off on March 1, according to the contract.
- Larger facility maintenance projects wrapping up this quarter include Anoxic Mixers at both reclamation plants and bar screens at the Rio de Flag facility. The Rio mixers are getting a new VFD (Variable Frequency Drive) motor, for top efficiency in operations.
- Primary equipment - disc filters and primary clarifiers- went down, with the crew responding with cleaning and repairs.
- Reclamation is actively recruiting for two operator positions and an operations supervisor.

### A Day in the Life of Water Reclamation

**Comment:** We got a lot of stuff done this week, even down two supervisors!

#### What that really means:

WCH staff cleaned a contact basin and clarifiers in between sending staff to Concentra for respirator examinations. Rio staff took a disk filter off-line for cleaning, participated in trenching and shoring training while also completing respirator exams. Another successful week for the lab. Next week, Wildcat will be switching contact basins, moving solids and performing cleaning, while preparing the plant for bio monitoring. Rio will be taking the sand filter offline next week for cleaning.



## Water Resources and Conservation

- The Water Resources Team led by Erin Young, is joining the Water Conservation Team's Water Awareness Month activities in April to raise awareness in the community of the impending rate study and its impact on the municipal services bill. Events are planned for:
  - April 1 at the Main Library
  - April 3 Jay Lively
  - April 6 at Willow Bend's Science Saturday and the Aquaplex

- April 8 Open House at the East Flagstaff Library
  - April 10 at Joe Montoya Senior Center
  - April 11 at the Aquaplex
  - April 17 at Hal Jensen Recreation Center
  - Earth Day Celebration on April 20
- Erin and staff have worked with the consultant to guide the Water Commission and City Council through a series of decision-making trees, to structure a rate that supports the utility's needs and is equitable across the customer base for the next five years. It's no easy task, and the process is nearly complete. Details can be found at [cleanwaterflagstaff.com](http://cleanwaterflagstaff.com)
  - Annual report for ADWR due end of March. This report maintains the city's designation for a 100-year adequate water supply. Rob Speer is updating GIS with zoning to base water demand estimates, as part of his thesis work, which aids this report.
  - We have transitioned our watershed monitoring contract from SRP to JE Fuller. The cameras can be accessed here: [coconino.jefulleralert.com/UpperLakeMaryMonitoring/](http://coconino.jefulleralert.com/UpperLakeMaryMonitoring/).
  - Water rights settlement (noted earlier) with the tribes is a BIG DEAL. There was a big push several years ago, which faltered. We're hoping this mediation will succeed. It will still be a long process to equitably manage future water rights in the Little Colorado River watershed.
  - Hydro GEOPHYSICS completed collection of data to inform the top 5 well sites for future needs.
  - The Beal monitoring well needs repairs for a cracked casing. The fix will include a seal on top and lid replacement.

## Water Conservation

- Arizona's Water Awareness Month is April. It opens with a Proclamation on April 2, and recognition for water professional week. A series of tabling events are scheduled to help residents save water.
- Conservation's WIFA contract was approved on March 5. The next step is to work on the consultant contract for the non-revenue water study.
- Conservation is working with Housing on a CDBG grant, to upgrade fixtures and leak repair to low-income or supplemental housing recipients.
- Consultations and Rebates. We're bringing in extra help for the WL Gore consultation, helping businesses reach conservation goals. We're finishing up with Kinlani Bordertown Dormitory to upgrade fixtures and toilets to low flow options. We are currently working with nine hotels and restaurants to provide water rebates.
- Staff is presenting to the local Master Gardeners group, on plants and methods to reduce outdoor watering. We are also hosting a rain barrel harvesting workshop.
- Direct mailers went out to targeted homes over 4 bathrooms, offering rebates and conservation consultations.

- Fix-a-leak week was March 18-23, and a campaign to empower customers for needed repairs was conducted. Conservation participated in the Chocolate Walk in February.
- Water Resources and Conservation is assisting with the Regional Plan efforts, providing data and input. Conservation staff are also providing assistance for the rate study outreach.
- Water enforcement begins in mid-April.
- AZ Project WET planning has begun, with a new director. This is a special water-focused event for local 4<sup>th</sup> grade schools held in September.