



# February/March 2023 Update



## WATER COMMISSION

### March 16 Agenda:

- Water Awareness Month Activities – Emily Melhorn
- Unfunded Capital Projects – Gary Miller
- Forest Management Update – Matt McGrath, Coconino National Forest District Ranger

## RECOGNITION

- Krista Snow received a WOW award from Gary Miller for her work on the Arizona Department of Water Resources Dam report. Great job, Krista!



## RECRUITMENT

- Recruitment is underway for Industrial Pretreatment Program Manager.
- Water Production Operator recruitment closes this week. Water Production Maintenance Supervisor recruitment is next and then we'll advertise for temporary summer staff; this has been on hiatus since 2020.
- Water Reclamation welcomes new staff member Josh Cantrell.
- Admin welcomes our new Administrative Specialist, April Belinti, to the WSAB Team.
- Tyler Boswell, a retired Water Distribution Operator, is back at work on a part-time basis. Welcome back, Tyler!
- Interviews for Water Reclamation Plant Manager are scheduled for March 28.
- SCADA IS interviewed for GIS Specialist. There was a good candidate pool, and we look forward to hiring soon.
- SCADA IS is preparing to recruit for an OT Specialist, who will work on fiscal inventory and with the city's cyber-security analyst.

## ENGINEERING

- Digesters for the Rio de Flag Water Reclamation Plant are now at 60% plans.
- The treatment facility master plan is going out for bid. This is the first step in the treatment plant expansion.
- The USFS general use permit is being renewed. Staff is currently reviewing any changes needed.
- Engineering is going to start contracting out project management services for select bond projects to relieve our at-capacity internal project management.
- Bid results for two Streets water projects, Switzer Canyon PH IV and Soliere, came in over estimate. We are analyzing options and timelines with the Project Management Team.

## RECLAIMED WATER

- Reclaimed water supply to Arizona Snowbowl from the Rio plant was shut off on March 1, in accordance with agreements.

## REGULATORY COMPLIANCE

- A new NAU/AmeriCorps intern will be assisting with researching public and private drinking water piping for a new EPA directive, creating an inventory compliant to the Lead and Copper Research Rule.
- The annual biosolids report has been submitted, as well as the reclamation report.
- Staff took advantage of ADEQ certification practice testing opportunities.

## SCADA INFORMATION SYSTEMS

- An APS powerline fell onto infrastructure at Wildcat Hill, leading to burnt out power supply boxes and wiring. The SCADA team is working through repairs.
- City Council will be considering an agenda item for a contract for unlimited seats in Cityworks, our asset management software.
- Council approved a contract for aerial imaging that will benefit multiple Water Services operations sections.
- SCADA is providing input for Rio de Flag WRP digester project, planning for electrical and integration needs.
- SCADA is also working with the engineers for Ft. Tuthill #2 well house and pump station.
- WaterNet separation from the IT system has begun, as we prioritize links in a 2-year horizon.
- SCADA is testing out electronics and creating SOP's for Lake Mary generator transfer switch, to be ready in case of emergency.
- SCADA has installed flow devices in drainages to monitor I&I, Inflow & Infiltration, from snow melt.
- Staff is working on facility cameras, including ones at the septage receiving and Bonito load out stations.



Damaged power supply boxes at Wildcat Hill WRP.

## STORMWATER

- The Stormwater rate adjustment was adopted by City Council on the February 21. It will provide much needed operations, maintenance, and capital funding to address on-going community needs. The selected rate scenario assumes a healthy level of external funding including Federal, State, and possibly COF General Fund contributions.
- Stormwater Management Design Manual revisions are underway and a first draft for public review is expected this spring with a final expected this calendar year. The last revision was in 2009.
- The Highway 180 culvert replacement is in design with 30% designs reviewed by the City, ADOT, and County. Capital has indicated they will have project management capacity starting in April to take over the management of this priority Stormwater project.
- Frances Short Pond dredging is on hold until the snowpack, about 170% of normal amounts, lessens.
- Doug Slover has been assisting with the Inner Basin Pipeline project.
- Chase McLeod will be helping with Lake Mary dam risk analysis.
- The Spruce Wash improvements project is at the CMAR selection stage. This is managed by Public Works, Capital, Water Services, and several other divisions. Weekly coordination meetings have been occurring and progress on the series of Spruce Wash projects is ongoing.
- The South Elden Detention Basins are at 60% designs. Staff is coordinating with Kinder Morgan on review and potential property acquisition.
- Rio de Flag Flood Control Project is progressing quickly with final designs for Phase 1 (Clay Wash and lower RDF in Southside). The Army Corps is indicating that groundbreaking on Phase 1 may occur as early as this calendar year. Stormwater continues to coordinate with Capital, Engineering, and others on this long-standing project.



## WATER DISTRIBUTION

- The Bonito potable water load-out station/standpipe was temporarily down for repairs but quickly returned to operational status.
- Water Distribution has been experiencing fleet challenges with two critical service trucks down with major engine (valve train) failures.
- Emergency call-outs for service interruptions and pipe breaks are on the rise, likely due to the colder temperatures and wind chill values.
- Staff is conducting a final push for hydrant inspections for the year. Crews inspect, identify issues, and perform maintenance in the same visit.
- The new vacuum trailer has been received and will replace an older piece of equipment.
- We are excited to finally receive our meter order in April. This 1,000-meter order was placed back in June 2022.

## WATER PRODUCTION

- Upper Lake Mary received nearly 3 billion gallons of inflow during spring break week and overflowed on March 23.
- The lake level transducer is currently under ice and not working. Staff are using tape measure reads in the meantime.
- Staff are now starting to shut off wells and ramp up surface water production.
- Water Production, like all of Flagstaff after a record third snowiest January on record, has been hit hard with snowfall. Our 4WD backhoe and then a grader borrowed from Streets were inadequate at accessing our Woody Mountain Wellfield. A dozer borrowed from Wildcat had been the most successful, though slow going at accessing wells. Staff have been using cross country skis and snowshoes to access some facilities.
- Inner Basin Waterline and Road Project is proceeding with Hunter Contracting and Jacobs Engineering, with Forest Service supporting the permitting, survey, and review process. Good news! The Department of Forestry and Fire Management agreed to 100% fund the Project at \$16.1 million dollars.



Above: Upper Lake Mary overflowing into Lower Lake Mary

Left: Walnut Creek at Pine Grove Campground, a tributary not normally associated with Upper Lake Mary recharge, provided great inflow to the lake in March.

- LMWTP Sed Basin Solicitation was cancelled a week out from bid closing date (January 22) in hopes of federal funding of the project. Project may proceed via Construction Manager at Risk (CMAR), which should allow pre-purchase of materials necessary (with reported 52-week lead times) and federal funding if allocated.

## WATER RECLAMATION PLANTS

- Wildcat treated 12.89 Million gallons with a peak flow through the plant of 15.97 MGD in the last 24 hrs. All process parameters remain within range, effluent turbidity running higher due to having to partial bypass of the filters, but this parameter is ok for discharge water. However, it wasn't without some drama:

- The DLD lake tried to overflow the dam again so staff restarted our trailer pump and added more sandbags and dirt to the dam.
- Our grease tanks filled with stormwater, causing us to cancel grease receiving temporarily until we can get them pumped down.
- Flows are not an issue at the Rio plant, but it has been a challenge for treatment with such cold-water temperatures entering the plant and the road to the IP station has a river running through it. All parameters remain within range. The plant and staff are doing a great job with these record flows!
- Both reclamation plants had begun trenching for fiber conduit installation; these projects are on hold until the snow melts. A new gate and controls are also in progress for Wildcat Hill Plant.
- Contractors are coming out to modify our anoxic mixer shafts that were too long when installed. This should complete the first phase of the Rio mixer project.
- We are experiencing minor challenges with the UV lamp system.
- Staff is having challenges with the hypochlorite pump skid, but anticipate funding in FY24 to correct this.
- The Rio de Flag WRP is partnering with NAU to test for quat ammonia treatment, with a quat coagulant.
- A new front-end loader was approved for purchase on February 21. This machine is a workhorse for the plant.
- Staff are working with the procurement team on chemical budget increases and amendments due to increased costs for all of our chemicals, especially our chlorine gas.
- Staff is working through a number of capital projects at the Reclamation Plants:
  - Bond Projects
    - WCH Digesters - (Corollo Eng.) have monthly design meetings
    - WCH Co- Generation - Consultant selected and design phase is underway
    - WCH PEPS (Primary Pump System) - Garver working on redesign to include a headworks bypass
  - Wastewater Capital Projects updates
    - Rio Digesters (Water Works Eng.) – in 60% design phase
    - Reclaim modeling report was received and reviewed with consultant. We are submitting a federal appropriations request for these improvements.
    - WCH odor control – JOC Kear. Equipment is on site.
  - NORESO Energy Partnership Projects
    - WCH septage and Grease receiving (Water works Eng.) – designed. NORESO is considering Greaszilla.
    - NORESO (solar drier, etc.) – Plan reviewed by staff. Received lighting list for replacement.



Rio de Flag plant IP crossing

## WATER RESOURCES AND CONSERVATION

- Water Resources has contracted with Carollo Engineers to vet options for a range of federal funding opportunities.
- The Water/Wastewater/Reclaimed Water Rate study contract was awarded to Stantec, approved by City Council on March 7.
- Staff is coordinating with the Mayor's Office and Public Affairs to produce promotional materials (videos, graphics, radio spots) for both Water Awareness Month and the annual Wyland Foundation's National Mayor's Challenge. Water Conservation staff are coordinating several public events in April as well as tabling at many events being held by our partners. Some highlights include:
  - Downtown Water Conservation Scavenger Hunt – 4/1
  - First Friday Art Walk – 4/7
  - Lake Mary Water Treatment Plant Tour – 4/8
  - Water Energy Nexus talk @ Bright Side Bookshop – 4/19
  - Earth Day Festival – 4/22
  - Flagstaff's Water Resources talk @ Eastside Library – 4/27
  - Full STEAM Ahead – 4/29
- Staff submitted a grant application to Housing for a \$53,000 CDBG grant. This grant would fund water efficiency retrofits and leak repairs for qualifying low-income homeowners in Flagstaff. We will contract with plumbers to provide fixture retrofits and repairs, including leaking shower/tub valves, toilets, hose bibs, and the installation of pressure-reducing valves. If successful, funding will be available in fall 2023.



Erin Young with fellow attendees of the National Water Reuse Conference in Atlanta, Georgia

- Erin Young, Water Resources Manager, attended the National Water Reuse Conference in Atlanta, Georgia in early March, as the Vice President of the Arizona Section of the Water Reuse Association. She also toured indirect potable reuse facilities in the area.
- Water Resources recently closed out a grant issued through the National Park Service that funded a Water Resources intern (Mallory Rakowski) to compile a baseline hydrology report for the Upper Lake Mary Watershed Monitoring Program. The baseline report can be downloaded [here](#).

## SAFETY AND TRAININGS

Staff completed the following trainings:

- Safety Web Plus and NeoGOV Learn on-line trainings - ongoing
- Respirator training and fit testing
- All operations sections have undergone asbestos training.
- Reclamation staff had a lunch and learn on UV (Ultraviolet) system maintenance.
- Engineering hosted a brown bag on Wastewater Process technologies.
- Operations section completed confined space training.
- Glenn Kuyper in Industrial Pretreatment completed a two-day FOG – Fats, Oil, Grease – workshop in February.