

PHX WATER SMART



HELLO FROM ENVIRONMENTAL SERVICES DIVISION (ESD):

The Environmental Services Division (ESD) ensures that City water and wastewater facilities protect public health and the environment by maintaining compliance with environmental laws, and by providing high-quality and reliable services to the Department, City staff, and the public.

ESD consists of various sections:

BUSINESS OPERATIONS: Administrative, community outreach, laboratory safety, and environmental training coordination.

COMPLIANCE: Air, hazardous material, wastewater, and water regulatory compliance.

LABORATORY: Analytical testing of water and wastewater. Licensed by the Arizona Department of Health Services (ADHS) and certified by The National Environmental Laboratory Accreditation Program (NELAP).

MONITORING: Monitoring and sampling of water and wastewater accredited by The National Environmental Field Accreditation Program.

POLLUTION, PREVENTION, & PERMITTING: Commercial, Industrial Pretreatment, and Stormwater programs conduct inspections, prevention, permitting, and sampling.

QUALITY ASSURANCE: Quality assurance, compliance and monitoring.

SAFETY: Safety oversight and training for all Water Services Department employees.

ESD STAFF TAKES HOME AWARDS AT THE ARIZONA WATER ASSOCIATION CONFERENCE

Laboratory Analyst of the Year Award – Ruth Haldeman

Ruth Haldeman, Chemist II at the 91st Ave Wastewater Treatment Plant (WWTP) Lab, received the Laboratory Analyst of the Year Award at the Arizona Water Association Annual Conference in May 2023. Ruth takes on many research projects for 91st Ave WWTP and helps the operational staff optimize processes and solve treatment problems. Her ability to innovate and create solutions for technical issues is impressive, and she trains her staff to assess and tackle these assignments. Ruth has developed personal and professional relationships with operations staff and management at 91st Ave. This helps the lab and plant work together and build trust.



Gimmicks And Gadgets: Renewable Energy – Mike Vega

Mike Vega, a senior water quality inspector, developed a solar charging station for auto-sampler batteries. The idea was for safety, not free power. The building is over 30 years old and does not have a room with proper ventilation for charging batteries safely. The solar charging unit provides safe and cost-free energy. The unit charges the batteries faster than the electrical charging stations and charge three batteries at the same time. The fabrication took eight hours, and the solar panels and metal framing were repurposed items, and the only cost was the two solar charge controllers at \$40 each.



WASTEWATER METERING STATION INSTALLATION

The 91st Avenue Wastewater Treatment Plant is cooperatively owned by the Subregional Operating Group (SROG), which, includes the Cities of Phoenix, Mesa, Tempe, Scottsdale, and Glendale. Per the SROG agreement between the Cities, wastewater sampling is conducted at wastewater metering stations (metering stations) located at the border of each City prior to the mixing of wastewater between the City of Phoenix and the neighboring City. The Environmental Services Division, Wastewater Monitoring Section (ESD WWM) performs the sample collection at all SROG metering stations.

After extensive design and construction, the City of Glendale recently completed the installation of an underground metering station at 99th Avenue and Camelback Road. Before the installation, the sampling was performed by ESD WWM Inspectors at a sewer manhole using a truck-mounted crane while in traffic under the protection of a police officer and traffic barricades. Additionally, once the sewer manhole was opened, hydrogen sulfide (H₂S) gas was present in high concentrations. H₂S gas is toxic, corrosive, and flammable.

The new metering station is of significant benefit to the safety of ESD WWM Inspectors as it is equipped with several safety features. It is located out of traffic, is enclosed from the sewer, which protects the Inspectors from H₂S gas, has lighting, positive pressure ventilation, and stairs with handrails for access. Thank you SROG partner City of Glendale!

WASTEWATER METERING STATION INSTALLATION



BEFORE INSTALLATION



AFTER INSTALLATION



WHAT ARE PFAS

Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals used in many household products, including nonstick cookware (e.g., Teflon™), stain repellants (e.g., Scotchgard™), and waterproofing (e.g., GORE-TEX™). They are also used in industrial applications such as in firefighting foams and electronics production. There are thousands of PFAS chemicals, and they persist in the environment. Two well-known PFAS chemicals are perfluorooctanoic acid (PFOA) and perfluoro octane sulfonic acid (PFOS). These were phased out of production in the United States and replaced by hexafluoropropylene oxide-dimer acid (commonly known as GenX), perfluoro butane sulfonic acid (PFBS) and others.

Additional information on PFAS from the United States Environmental Protection Agency (U.S. EPA) can be found at <https://www.epa.gov/pfas>.

DID YOU KNOW THE CITY OF PHOENIX HAS A PERMIT TO DISCHARGE STORMWATER?

The City of Phoenix is nearly 520 square miles in size, which is a lot of area for rain to fall on. However, for even a drop of rainfall to runoff to a nearby river or lake, the City requires a permit

issued through Arizona Department of Environmental Quality (ADEQ) to “allow” stormwater runoff to be conveyed through its storm drain system.

So, why do we need a permit for something that happens naturally, such as rainfall. While Wastewater is collected and is transferred to one of the City’s wastewater treatment plants, stormwater is not treated. It enters the storm drain system and from there is discharged directly to a waterway. Because it is not treated, it presents water quality challenges. Stormwater can pick up pollutants, chemicals, gas, oil, dog waste, trash/debris, sediment, you name it. Because of this, it is a main contributor to water pollution in our waterways. To protect public health and the environment, permits are required to manage activities.

The City operates our storm drain system under a Municipal Separate Storm Sewer System (or MS4) permit issued by the Arizona Department of Environmental Quality under the federal Clean Water Act and state Surface Water Protection Program. This permit allows the City to discharge stormwater into Protected Surface Waters. The MS4 permit places stipulations on the City to manage stormwater runoff to ensure it is as free of pollutants as it can be.

To ensure compliance with the MS4 permit, several City departments, including Water Services, Streets, Planning and Development, Public Works, and the Office of Environmental Programs work together to protect stormwater runoff from excessive pollution. The City maintains stormwater infrastructure, conducts inspections of facilities, investigates potential polluters, and other activities related to stormwater management.

However, the City can only do so much, 520 square miles is a lot of ground to cover. We need you to help us in these efforts. If you see or suspect someone is illegally dumping pollutants, please report it to us. We will investigate and mitigate the issue. Just remember, next time you see someone dumping automotive fluids or other pollutants on the street and it rains, those pollutants will end up in your local retention basin or nearby river, untreated and can negatively impact our drinking water sources!

IMAGINE A DAY WITHOUT WATER

Can you imagine not having water to drink, flush the toilet, take a shower, or do your laundry?

We are all very aware of how important water is in our lives and for our livelihood here in the Water Services Department. This is why Imagine a Day Without Water is such an important national reminder and education campaign! After all, not everyone is aware of the impact water has in their lives. This ninth annual day of awareness will take place on October 19th to include events, resolutions, student contest, and social media engagement.

Anyone can participate to spread the word using the Value of Water Campaign’s free resources through the toolkit and resources page on their [website](https://imagineadaywithoutwater.org/) (<https://imagineadaywithoutwater.org/>).

Though every day is a celebration of water for WSD, this is a great reminder that what we do matters and is important!

ONLY RAIN IN THE STORM DRAIN

Be monsoon ready in Phoenix. Before the wind and rain kick up in the Valley, the Phoenix Water Services Dept. asks for your help to keep storm drains clear of debris and pollutants. Stormwater in the Valley is not treated, which means every time it rains, stormwater runoff picks up pollutants like oil, pesticides, fertilizers, pet waste, and trash from any place where water can flow, such as driveways, streets, and parking lots. The untreated water then discharges into surrounding rivers, washes, and retention areas. If too much debris or trash gets into the stormwater system, localized flooding could occur.

Here's what you can do to prepare:

- Pick up and properly dispose of trash
- Sweep, bag, and toss pet waste in the trash
- Collect and dispose of yard waste
- Maintain leaky vehicles
- Keep culverts, catch basins free of debris

To report clogged storm drains, call 602-262-6441. Remember: Only Rain in the Storm Drain.



UPCOMING EVENTS

- Know your pipe type? Visit pipes.phoenix.gov to check out the **Lead and Copper Rule Revision Website** .



ENVIRONMENTAL SERVICES DIVISION - WATER SERVICES DEPARTMENT

200 W. Washington St.

Phoenix, AZ 85003

Website: phoenix.gov/esd

If you have questions or would like additional information, you can contact ESD at:

ask.water@phoenix.gov

(602) 262-1859

Clogged Storm drains:

(602) 262-6441

Drinking Water Compliance:

(602) 262-5012

Stormwater:

(602) 256-3190

CITY OF PHOENIX WATER SERVICES DEPARTMENT

QUALITY. RELIABILITY. VALUE.

   /PHXWATER | PHOENIX.GOV/WATER

This email contains information about the City of Phoenix Water Services Department Environmental Services Division. You received this email because you subscribed to our email newsletter, but are free to adjust your subscription at any time.

[Unsubscribe from this email list](#)

This email was sent by Environmental Services Division at 200 West Washington Street Phoenix, AZ 85003.

[Unsubscribe or update your email preferences](#)