



Marine Corps Air Station Yuma Yuma, Arizona Drinking Water Sampling for PFAS

May 2023

The Navy and Marine Corps are requesting permission to sample drinking water obtained from wells within a sampling area near Marine Corps Air Station (MCAS) Yuma for certain per- and polyfluoroalkyl substances, commonly known as PFAS.

PFAS are a family of thousands of different chemicals which have been widely used in many household and industrial products since the 1950s. The Navy and Marine Corps developed a proactive policy to address past releases of PFAS at installations nationwide, as several PFAS are of emerging public health concern. Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are two PFAS compounds that have United States Environmental Protection Agency (EPA) health advisories and are the most studied and understood.

The most common activity associated with the historical release of PFAS to the environment at MCAS Yuma is the use of firefighting foam (specifically aqueous film-forming foam, or AFFF) for testing, training, firefighting, and life-saving emergency responses. Due to this historical use, PFAS are present in the groundwater on-base and may also be present in nearby off-base drinking water wells located in the direction that groundwater flows away from the base.

In 2019, a comprehensive Basewide PFAS Preliminary Assessment was completed, which identified known and potential releases of PFAS to the environment. The Basewide Site Inspection (SI) of the PFAS release areas was completed in 2019 and PFOA and PFOS were detected in groundwater at MCAS Yuma. At that time, no drinking water wells were identified within 1 mile in the direction that groundwater flows away from the release areas investigated in the SI. A Remedial Investigation (RI) is currently underway to further investigate PFAS release areas. To date, 41 additional wells have been installed during the RI throughout the installation. The locations of the additional wells further to the southwest have changed the Navy's understanding of groundwater flow. Potential off-base drinking water wells have been identified within 1 mile of detections of PFOA and/or PFOS above 70 ppt. As a result, a sampling area has been established 1 mile in the direction that groundwater flows away from these detections (**Figure 1 & 2**).

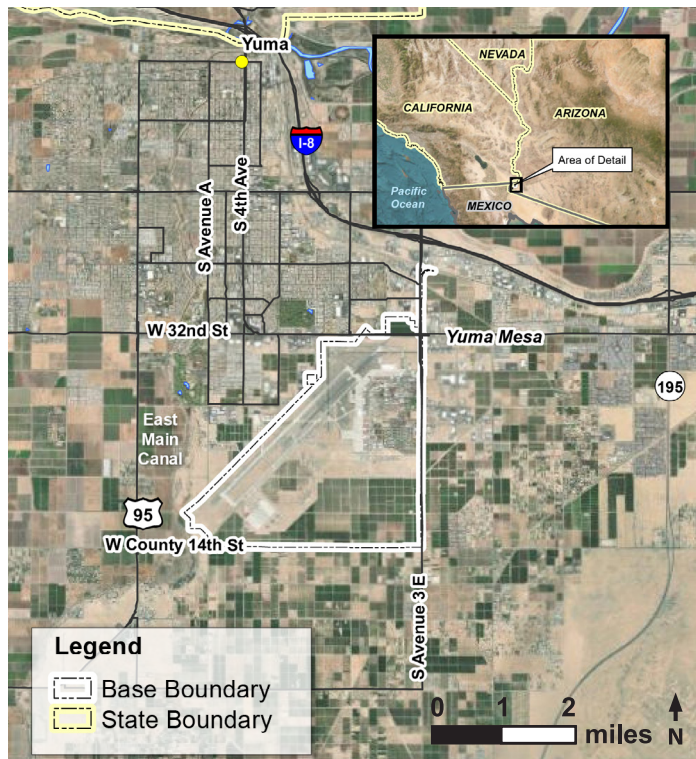


Figure 1 – MCAS Yuma

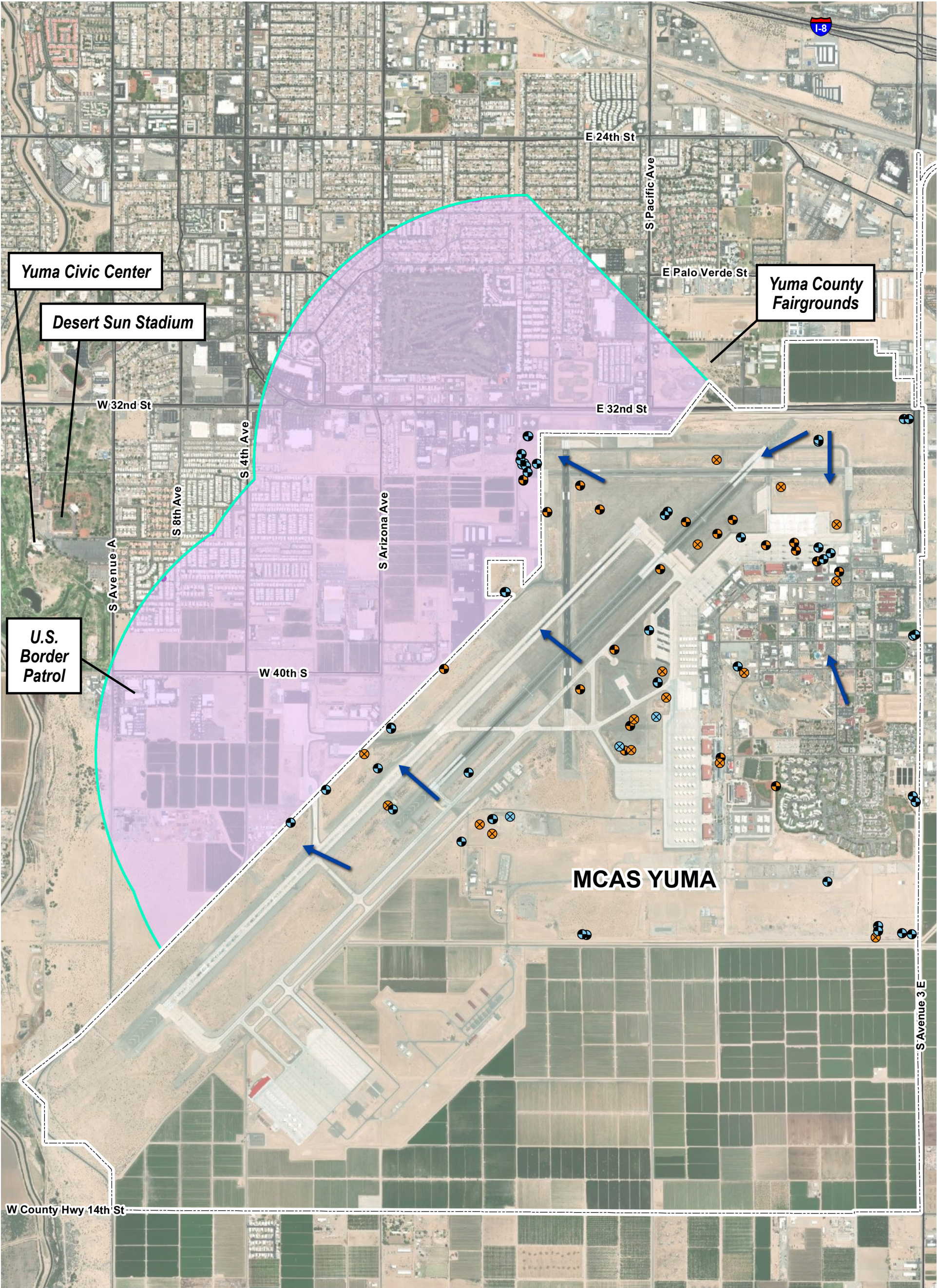
Records indicate that drinking water for the majority of properties within the sampling area is provided by the City of Yuma Water Utilities; however, some properties within the sampling area may use a private well for their drinking water.

The Navy and Marine Corps would like to sample to determine if PFOA and PFOS, individually or combined, are above 70 parts per trillion (ppt) in these drinking water wells.

There is no legal requirement to conduct this drinking water testing. We are conducting the sampling in collaboration with partners such as EPA Region 9, Agency for Toxic Substances and Disease Registry (ATSDR) Region 9, the Arizona Department of Environmental Quality, and the Arizona Department of Health Services.

The Navy and Marine Corps will provide bottled water for drinking and cooking to any property owner or tenant in the sampling area whose well contains drinking water with PFOA and/or PFOS above 70 ppt. The Navy and Marine Corps will provide bottled water until a long-term solution is implemented.

Figure 2 – Sampling Area



LEGEND

Base Boundary

SI Location Where PFOA and/or PFOS Were Detected Above 70 ppt in Groundwater

SI Location Where PFOA and/or PFOS Were Not Detected Above 70 ppt in Groundwater

RI Location Where PFOA and/or PFOS Were Detected Above 70 ppt in Groundwater

RI Location Where PFOA and/or PFOS Were Not Detected Above 70 ppt in Groundwater

Groundwater Flow Direction

1-mile Downgradient of PFOA and/or PFOS Above 70 ppt

Sampling Area

0

0.5

1

mile

PFAS

PFAS have been used in many household and industrial products because of their stain- and water-repellent properties. PFAS are now present virtually everywhere in the world because of the large amounts that have been manufactured and used.

Once these compounds are released, many of them tend to stay in the environment for a very long time. Several PFAS are chemicals of emerging concern. Although the EPA has started the process to establish regulatory levels for several PFAS in drinking water, there are currently no Safe Drinking Water Act regulatory standards. The EPA has developed drinking water health advisories for a small number of PFAS; these advisories are non-enforceable and non-regulatory. These advisories provide technical information to states and other public health officials on health effects, analytical methodologies, and treatment technologies.

On March 14, 2023, the EPA proposed a draft regulatory drinking water standard for certain PFAS, including PFOA and PFOS. In response, the Department of Defense (DoD) has issued the following statement:

“DoD respects and values the public comment process on this proposed nationwide drinking water rule and looks forward to the clarity that a final regulatory drinking water standard for PFAS will provide. In anticipation of the final standard that EPA expects to publish by the end of 2023, the DoD is assessing what actions DoD can take to be prepared to incorporate EPA’s final regulatory standard into our current cleanup process, such as reviewing our existing data and conducting additional sampling where necessary. In addition, DoD will incorporate nationwide PFAS cleanup guidance, issued by EPA and applicable to all owners and operators under the federal cleanup law, as to when to provide alternate water when PFAS are present.”

More information about EPA’s actions for PFAS in drinking water is online at: <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>.

NAVY POLICY

For now, the Navy is continuing to follow the policy it issued in June 2016 to conduct investigations at installations where there has been a known or suspected release of PFAS to the environment. The first priority with these investigations is to ensure that PFOA and/or PFOS concentrations in drinking water are not above 70 ppt, individually or combined, as a result of Navy and Marine Corps operations.

ACTIONS BASED ON RESULTS

Preliminary drinking water sample results are typically received from the laboratory within 30 days after the samples are collected, and final laboratory reports are typically available within 3 months. Property owners and tenants will be called to notify them of their preliminary drinking water sample results. Final drinking water sample results will be mailed to property owners and tenants. Property information will be kept confidential to the extent permitted by law. Final drinking water sampling results are available online (<https://www.acq.osd.mil/eie/eeer/ecc/pfas/map/pfasmap.html>) for transparency with the public. Individual drinking water sample results cannot be linked with the sampled property on this website.

The Navy and Marine Corps will provide bottled water for drinking and cooking to any property owner or tenant in the sampling area whose drinking water well contains PFOA and PFOS, individually or combined, above 70 ppt, and will continue to provide bottled water until a permanent solution is implemented.

The Navy and Marine Corps will continue to investigate the presence of PFAS on MCAS Yuma and evaluate if actions are needed on base. Our team is committed to ensuring the safety of the residents that live in our community. The public can find out more about all MCAS Yuma environmental investigations, including those for PFAS, by visiting <http://www.navfac.navy.mil/MCASYuma>.

**FOR MORE INFORMATION ABOUT THIS
OFF-BASE DRINKING WATER SAMPLING**

<http://www.navfac.navy.mil/YumaPFAS>

IF YOU HAVE QUESTIONS

MCAS YUMA COMMSTRAT

928-269-5278

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HEALTH INFORMATION

Studies on PFOA and PFOS have found both compounds in the blood samples of the general population. Research to better understand health effects from exposure to low levels of PFOA, PFOS, and other PFAS is ongoing. Federal agencies such as ATSDR, and the EPA continue to conduct and support research into health effects associated with PFAS exposure. More information about health effects can be found online at:

ATSDR: <https://www.atsdr.cdc.gov/pfas/index.html>

EPA: <https://www.epa.gov/pfas>