2022 TOWN OF PAYSON
Consumer Confidence Report
Public Water System ID AZ0404032

CLEAN, SAFE WATER THAT OUR CUSTOMERS CAN TRUST

The Arizona Department of Environmental Quality (ADEQ) requires water systems to publish and make available an annual Consumer Confidence Report to provide background on the quality of your water and to show compliance with the federal Environmental Protection Agency (EPA) under the Safe Drinking Water Act (SDWA) and state drinking water standards.

This 2022 Annual Consumer Confidence Report is a snapshot of the quality of our local water supply in the Town of Payson during 2022. Included are details about where your water comes from, what it contains and how it compares to strict Federal and State standards. We are committed to providing you with information because informed customers are our best allies.

WHERE DOES OUR WATER COME FROM?

TOWN OF PAYSON(TOP) WATER SUPPLY PORTFOLIO

TOP Water's supply comes from two main sources, ground water and surface water . Leveraging multiple sources of water ensures our customers always have water when they need it. A staff of 21 well trained and reliable full-time employees provides a variety of services for our customers.

GROUNDWATER

Payson's groundwater is considered hard. The hardness is due to dissolved minerals primarily calcium and magnesium in the water. These minerals are not harmful but can leave white spots on glassware and plumbing fixtures. Most recent testing of our active wells showed hardness in the range of 964-380 ppm (5.6–18.08 gpg). The groundwater is treated by adding a small amount of Sodium Hypochlorite also known as liquid bleach or Calcium Hypochlorite to disinfect the water and prevent bacterial growth.

SURFACE WATER & RECHARGED WATER

The Town is treating surface water from the C.C. Cragin Reservoir to meet its municipal demand and storing (recharging) excess treated surface water in the underlying fractured bedrock aquifer. C.C. Cragin's surface water is considered soft, with a median hardness of 28 ppm (1.6 gpg). The town buffers the water by adding minerals to stabilize the water and prevent corrosion. Surface water from C.C. Cragin Reservoir is treated by micro-filtration and granular activated carbon. Next, lime and carbon dioxide are added to buffer the water and prevent corrosion. The final process includes adding a small amount of Sodium Hypochlorite to disinfect and prevent bacterial growth.

WATER TALK:

HOW MUCH WATER IS IN AN ACRE-FOOT?

One acre-foot of water equals 325,851 gallons of water. That's enough water to cover a football field one foot deep.

TOP WATER SNAPSHOT FOR 2022

Serving our community safe and reliable water that meets or surpasses rigorous state and federal standards is a must for our department. It takes a lot of water quality sampling and analysis, storage facilities, pumps, and pipelines, along with our talented team of water professionals, to make sure water is delivered to your homes 24/7.

8,977
Service Connections

157
State Required Water Tests for 2022

36 Production Wells
that draw water from an aquifer consisting of a series of complex random cracks and fractures in the granite rock beneath the town.

16351
Population Served

577+ Million
Gallons of Water Served to Customers in 2022

9.1 Million
Gallons of Water Storage Capacity

200
Miles of Pipe

2,525
Acre-feet of Water Stored from natural and injection recharge

9 ASR Wells
Aquifer Storage & Recovery Wells aka Injection Wells

Preserving our Future

The 2022 C.C. Cragin Operating Season was another huge success for the Water Department. This year the C.C. Cragin Project activities began in May 2022 and ended in November 2022. The Town switched back to groundwater resources in late November 2022. In 2022 the Water Department received 1,860 acre-feet of water from the C.C. Cragin reservoir, located about 18 miles north of Payson. Much of the water was sold to customers, amounting to 1,141 acre-feet. Water that was not needed by customers was recharged, or injected, back into the aquifer utilizing the Town's Aquifer Storage and Recovery well network. The Water Department recharged 719 acre-feet of water in the aquifer during the 2022 season, replenishing the water table for when groundwater resources are needed in drier seasons.

The Water Department is currently gearing up for the 2023. C.C. Cragin operating season and tracking reservoir storage levels. The reservoir water surface elevation has risen by over 55 feet in 2023 already. Based on the precipitation trends and water storage levels, we expect to receive ample amount of surface water from the C.C. Cragin Project for the 2023 Operating Season beginning in May.

Currently the reservoir is full and overflowing according to the SRP Watershed Connection website https://streamflow.watershedconnection.com/Home/Cragin

Fifth Unregulated Contaminant Monitoring Rule (UCMR 5) Participation

The Town of Payson is happy to announce our participation in the UCMR5 sampling. UCMR 5 requires sample collection for 29 per- and polyfluoroalkyl substances (PFAS) and lithium, during a 12-month period from January 2023 through December 2025, and completion of data reporting in 2026, using analytical methods developed by EPA and consensus organizations. The Town of Payson is anticipating completion of the UCMR5 sampling the end of May 2024. This action provides EPA and other interested parties with scientifically valid data on the national occurrence of these contaminants in drinking water. Consistent with EPA's PFAS Strategic Roadmap, UCMR 5 will provide new data that is critically needed to improve EPA's understanding of the frequency that 29 PFAS (and lithium) are found in the nation's drinking water systems and at what levels. This data will ensure science-based decision-making and help prioritize protection of disadvantaged communities.

General Information about Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the number of contaminants in water provided by public water systems. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may improve the taste of drinking water and have nutritional value at low levels. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The EPA and the Arizona Department of Environmental Quality (ADEQ) require us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infections.

These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, other microbial contaminants, contaminants, and potential health effects are available from the Safe Drinking Water Hotline (800) 426-4791.

About the Water Quality Data Table

ARSENIC

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

NITRATE

In drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods-of-time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Payson is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The Town of Payson does not add fluoride to its drinking water. Fluoride is naturally occurring in our groundwater with an average concentration of 0.5 ppm. Testing of C.C. Cragin water showed levels of fluoride in the range of 0.042 ppm or less.

TERMS & ABBREVIATIONS

To help you understand the terms and abbreviations used in this report, we have provided the following definitions:

- Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Contaminant Level (MCL) - The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (MCLG) - The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed i n drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- N/A = not applicable; N/D = not detected
- Nephelometric Turbidity Units (NTU) Measurement of the clarity or turbidity of water
- Parts per million (ppm) or Milligrams per liter (mg/L) -one part per million corresponds to one minute in two years or a single penny in $10,000.
- Parts per billion (ppb) or Micrograms per liter (µg/L) -one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.
- Locational Running Annual Average (LRAA) - An average of monitoring results for the previous 12 calendar months.

DRINKING WATER SOURCE ASSESSMENT & PROTECTION

On August 05, 2003, ADEQ staff published a Source Assessment document that provides detailed information on the Town of Payson's drinking water sources and the vulnerability of those sources to contamination. Based on currently available information, ADEQ determined that our source water is susceptible to possible future contamination. Source Water Assessments are on file with the Arizona Department of Environmental Quality and available for public review at: ADEQ, 1110 W. Washington Street, Phoenix, AZ 85007. The following lists examples of potential sources of contamination and their detected substances:

- Barium- Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
- Copper- Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
- Fluoride- Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
- Gross Alpha- Erosion of natural deposits
- Haloacetic Acids- Byproduct of drinking water chlorination
- Lead- Corrosion of household plumbing systems; Erosion of natural deposits
- Nitrate- Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
- Combined Radium- Erosion of natural deposits
- Tetrachloroethylene- Discharge from dry cleaners
- Total Trihalomethanes- By-product of drinking water chlorination
- Xylenes- Byproduct of Storage Reservoir Coating

The Sources of Drinking Water

Tap water and bottled water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, are byproducts of industrial processes and petroleum production, can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

Town of Payson 2022 Water Quality Analysis

The Water Quality Table lists all the drinking water contaminants that were detected during the 2022 calendar year. As such, some of our data, though representative, may be more than one year old. Although many more contaminants were tested, only detected constituents of concern deemed by primary drinking water standards are listed.

The table show results of our monitoring for the period of January 1 to December 31, 2022, for PWS 04-04032, unless otherwise noted.

Microbiological Revised Total Coliform Rule (RTCR)	Unit	MCL	MCLG	Low Range	High Range	Running Annual Average	Violation	Likely Source of Contamination
Total Coliform/E.coli (240 Annual samples)	Present/ Absent	TT	0	Absent	Absent	Absent	No	Naturally present in the environment

Disinfection By-Products, Disinfectants and Surface Water Rule	Unit	MCL	MCLG	Low Range	High Range	Running Annual Average	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHMs)	ppb	80	N/A	7.9	74	36	No	By-product of drinking water disinfection
Total Haloacetic Acids (HAAs)	ppb	60	N/A	<2	54	16.7	No	By-product of drinking water disinfection

Compliance is based on a system wide locational running annual average, not the highest detected amount.

	Unit	MCL / MRDL	MCLG / MRDLG	Low Range	High Range	Running Annual Average	Violation	Likely Source of Contamination
Chlorine Residual	ppm	4	4	0.22	1.7	0.69	No	Water additive used to control microbes

				Low Range	High Range	Highest Detected	Violation	Likely Source of Contamination
Turbidity (Surface Water)	NTU	-	-	0.018	0.27	0.27	No	Soil runoff

Lead and Copper	Unit	AL	MCLG	90th Percentile Value	Sites Exceeding Action Level	Likely Source of Contamination
Lead	ppm	0.015	0	0.0032	0	Corrosion of household plumbing
Copper (30 samples-annually)	ppm	1.3	1.3	0.1300	0	Corrosion of household plumbing

Lead and Copper Rule Standard: 90% of homes tested must have lead and copper levels below the action level.

Inorganic Contaminants	Unit	MCL	MCLG	Low Range	High Range	Avg. Detected	Violation	Likely Source of Contamination
Arsenic	ppb	10	0	N/D	2.3	1.80	No	Erosion of natural deposits; runoff from orchards, glass, and electronic production wastes
Barium	ppm	2	2	0.01	0.22	0.06	No	Discharge of drilling wastes; from metal refineries; erosion of natural deposits
Fluoride	ppm	4	4	N/D	1.8	0.45	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel	ppm	N/A	N/A	N/D	0.0084	0.0071	No	
Nitrate as N	ppm	10	10	N/D	4.0	1.20	No	Common element in nature
Sodium	ppm	N/A	N/A	8.0	61	21	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
								Erosion of natural deposits

Radioactive Contaminants	Unit	MCL	MCLG	Highest Level Detected	Range of levels Detected	Violation	Likely Source of Contamination
Gross Alpha excluding radon	pCi/L	15	0	15.8	0-15.8	No	Erosion of natural deposits, Please reference 40CFR 141.26(C)(3) for Information on maximum contaminant levels regarding radionuclide
Combined Radium 226/228	pCi/L	5	0	2.7	0-2.7	No	Erosion of natural deposits
Uranium	ug/l	30	0	7.3	0-7.3	No	Erosion of natural deposits

Volatile Organic Contaminants	Unit	MCL	MCLG	Highest Level Detected	Range of levels Detected	Violation	Likely Source of Contamination
Toluene	ppm	1	1	0.00061	00-0.000061	No	Discharge from petroleum factories

Secondary Standards Constituents of Frequent Interest to Customers for 2022	Unit	2nd MCL	2nd MCLG	Low Range	High Range	Avg. Detected	Violation	Noticeable Effects above Secondary MCL
Total Hardness	ppm	-	-	94	380	218.13	No	Mineral buildup on items;
	Grains	-	-	5.6	18.08	11.82	No	
Iron	ppm	0.3	-	N/D	0.34	0.05	No	Rusty Color; sediment; metallic taste; reddish or orange staining
PH	SU	6.5-8.5		7.34	8.5	7.96	No	

The Town of Payson is committed to providing a safe and sufficient supply of drinking water for our community both now and in the future.

Arizona Department of Environmental Quality (ADEQ) missed monitoring notice

The Town of Payson is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2019-2021 monitoring cycle for Synthetic Organic Chemicals (SOC), the Town did not sample at one Entry Point to the Distribution System (EPDS). ADEQ notified the Town early in 2023 of the violation that the samples were not taken. Before deactivation of the EPDS in 2019, Town personnel reached out to ADEQ compliance assistance coordinators and requested guidance for the deactivation process. All requests were met that were asked for from ADEQ, but sampling was not requested and did not occur due to oversight of the requirement by ADEQ and Town personnel.
The EPDS was inactivated in October of 2019 and was inactive for 2/3rds of the monitoring period due to utilizing it for the Aquifer Storage and Recovery program. The next cycle of SOC monitoring is between 2022-2024. SOC samples will be completed for all EPDS' twice in 2023 for the town. There is nothing that you need to do at this time as the EPDS was inactive and not feeding into our distribution system. Per our 10 year record retention, the distribution has not had any SOC exceedance.

If you have any questions about your drinking water, please call: Gordon Dimbat, Water Quality & Treatment Manager gdimbat@paysonaz.gov (928) 472-5109
Town of Payson's Web Site: www.paysonaz.gov

A paper version of this report is available at...

Town of Payson Water Department, 303 N. Beeline Highway,
Bldg. A,
Payson, AZ 85541

The Payson Public Library
328 N McLane Rd.
Payson, AZ 85541

EPA's Safe Drinking Water Hotline and website:
(800) 426-4791
EPA Ground and Drinking Water Arizona Department of Environmental Quality
(602)771-2300
ADEQ Water Quality Program

Payson
Arizona's Cool Mountain Town

Town of Payson Water Department
303 N. Beeline Highway
Bldg. A,
Payson, AZ 85.541

PRSTSTD
ECRWSS
U.S. POSTAGE
PAID
EDOM RETAIL

LOCAL
POSTALCUSTOMER