

2024 Annual Water Quality Report

PRESIDIO OF SAN FRANCISCO



Report Date: July 1, 2025

The Presidio Water Treatment Plant vigilantly safeguards its water supplies. Last year, Presidio tap water met all U.S. Environmental Protection Agency (USEPA) and State Water Resources Control Board's Division of Drinking Water (SWRCB) drinking water health standards. This report details where your water comes from and how its quality is measured.

(Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.)

**PRESIDIO
TRUST®**

The Presidio Water Supply

The Presidio gets its water from two sources. Approximately 80 percent is drawn from the Presidio's Lobos Creek, the last free-flowing natural stream in San Francisco. The remainder is purchased from the San Francisco Water Department. This water is drawn from the Hetch Hetchy Watershed, the Alameda County Watershed, and the Peninsula Watershed.

LOBOS CREEK

Most of the Presidio's potable water needs are met by a local surface water source, Lobos Creek, which runs along the Presidio's southwest corner. Daily flows in 2024 averaged 1.44 million gallons per day. The Presidio Water Treatment Plant (PWTP) draws source (or "raw") water from Lobos Creek, treats the water, and distributes the treated (or "finished") water park-wide to more than 1,200 service connections. Treatment processes at the PWTP include coagulation, flocculation, sedimentation and filtration to remove contaminants, chlorine for disinfection, fluoridation for dental health protection, and chloramination for maintaining disinfectant residual and minimizing the formation of regulated disinfection byproducts.

To ensure healthy water, the Presidio Trust implements a Water Quality Management Plan that includes procedures to detect and remedy any potential sources of contaminants. The Trust also has a sampling program that requires quarterly Volatile Organic Compounds (VOC) testing. Additionally, the Trust monitors the trend of Tetrachloroethylene (PCE) levels in Lobos Creek (for complete results, see the tables beginning on p. 6). Raw samples are taken from Lobos Creek; samples of finished water are taken from the main reservoir.

The Presidio Trust prepared a Watershed Sanitary Survey for Lobos Creek. It is updated every five years and completed with support from its partner agency, the National Park Service. It was last updated in November 2021. A copy is available for review at the Presidio Trust by calling (415) 561-2713. In this survey, potential contaminant sources included wastewater collection systems (primarily that of the San Francisco Public Utilities Commission), urban runoff, commercial and residential activity in the Richmond District of San Francisco, and landfill/environmental sites. In 2020, Lobos Creek sample analysis results detected low levels (up to 0.57 parts per billion) of PCE, likely from

dry cleaning establishments located throughout the neighboring Richmond District. However, samples collected in 2022, 2023, and 2024 from both Lobos Creek and from finished water (i.e., post-treatment) did not detect any PCE. In 2024, Lobos Creek also contained detectable levels of nitrates that may come from leaks in the San Francisco combined sanitary/storm water sewer system; the nitrate levels, however, have never exceeded the Maximum Contaminant Level (MCL) in finished water.

The landfill/environmental sites identified in the 2021 sanitary survey include a former military missile site and landfills located northeast of the creek. These sites were cleaned up as part of the Presidio Trust remediation program. Ground water monitoring has been conducted at all remediation sites before and after clean-up to ensure the Trust's potable water sources remain safe. Other potential contaminant sources identified in the 2021 sanitary survey include recreational use, unauthorized camps, vegetation/habitat management, and wildlife. Though these types of activities exist within the watershed boundary, there is no evidence that they contaminate the water supply.

The Lobos Creek *Watershed Sanitary Survey* will be updated in 2026.



SAN FRANCISCO REGIONAL WATER SYSTEM (SFRWS)

The following information is supplied by the San Francisco Regional Water System (SFRWS), a wholesaler owned and managed by the San Francisco Public Utilities Commission (SFPUC).

SFRWS Drinking Water Sources and Treatment

The SFRWS supply consists of surface water and groundwater that are well protected and carefully managed by the SFPUC. These sources are diverse in both the origin and the location with the surface water stored in reservoirs located in the Sierra Nevada, Alameda County and San Mateo County, and groundwater stored in a deep aquifer located in the northern part of San Mateo County. Maintaining this variety of sources is an important component of the SFPUC's near- and long-term water supply management strategy. A diverse mix of sources protects us from potential disruptions due to emergencies or natural disasters, provides resiliency during periods of drought, and helps us ensure a long-term, sustainable water supply as we address issues such as climate uncertainty, regulatory changes, and population growth.

To meet drinking water standards for consumption, all surface water supplies including the upcountry non-Hetch Hetchy sources (UNHHS) undergo treatment by the SFRWS before it is delivered. Water from Hetch Hetchy Reservoir is exempt from federal and State filtration requirements but receives the following treatment: disinfection using ultraviolet light and chlorine, pH adjustment for optimum corrosion control, fluoridation for dental health protection, and chloramination for maintaining disinfectant residual and minimizing the formation of regulated disinfection byproducts. Water from local Bay Area reservoirs in Alameda County and UNHHS is delivered to Sunol Valley Water Treatment Plant (SVWTP); whereas water from local reservoirs in San Mateo County is delivered to Harry Tracy Water Treatment Plant (HTWTP). Water treatment at these plants consists of filtration,

disinfection, fluoridation, optimum corrosion control, and taste and odor removal. In 2024, neither upcountry non-Hetch Hetchy sources nor groundwater was used by the SFRWS.

Watershed Protection

The SFRWS conducts watershed sanitary surveys for the Hetch Hetchy source annually and for non-Hetch Hetchy surface water sources every five years. The latest sanitary surveys for the non-Hetch Hetchy watersheds were completed in 2021 for the period of 2016-2020. All these surveys, together with SFRWS's stringent watershed protection management activities, were completed with support from partner agencies including the National Park Service and the US Forest Service. The purposes of the surveys are to evaluate the sanitary conditions and water quality of the watersheds and to review results of watershed management activities conducted in the preceding years. Wildfire, wildlife, livestock, and human activities continue to be potential contamination sources. You may contact the San Francisco District office of the State Water Resources Control Board's Division of Drinking Water (SWRCB) at 510-620-3474 for the review of these reports.

QUESTIONS?

If you have questions about this report or Presidio drinking water, please contact Dan Patrick at the Presidio Water Treatment Plant, at (415) 561-4134. To learn about drinking water regulations, visit the California Department of Public Health at www.cdph.ca.gov or the U.S. Environmental Protection Agency at www.epa.gov.

San Francisco water policy issues are decided at the San Francisco Public Utilities Commission hearings, held the second and fourth Tuesdays of each month at 1:30 pm at San Francisco City Hall, Room 400 (visit www.sfwater.org). For information about Presidio Trust public meetings, call (415) 561-5300 or visit www.presidio.gov.



WHY TEST DRINKING WATER?

The Presidio Trust conducts extensive testing of the park's water supplies and distribution system to ensure that the Presidio's drinking water is safe and healthy. In all cases, Presidio drinking water meets or exceeds the standards set by federal and state health protection agencies. The State of California allows the Trust to monitor for some contaminants less than once per year because concentrations of these contaminants do not change frequently. Some of the data, though representative, are more than one year old.

Nationwide, the sources of drinking water (both 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. Such substances are called contaminants.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that 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 that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. To ensure that tap water is safe to drink, the USEPA and the SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. More information

about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800) 426-4791.

IRON AND MANGANESE

information in the tables attached) in Lobos Creek. However, treated water testing results were well below the Secondary Maximum Contaminant Level (MCL). Iron and manganese are secondary constituents that affect the aesthetic quality of water (i.e. taste, color and odor), but do not pose a health threat. Manganese has a tendency to discolor water.

Periodically, your water may appear yellowish-brown. If you experience this, let your water run for several minutes or until the color goes away. If the problem persists, please call the Presidio Water Treatment Plant at (415) 561-4134.

RADIOLOGICAL WATER QUALITY

Results of most recent test for radiological constituents: Below MCL: All. Date: 1/22/2022

DISINFECTION AND FLUORIDATION

The Presidio Water Treatment Plant used chloramines as a disinfectant in 2024. The San Francisco Water Department also uses chloramines. Chloramines are a combination of chlorine and ammonia. Chloramines are disinfectants that are believed to reduce potentially harmful by-products of chlorine alone. Chloramines may be toxic to some pet fish and kidney dialysis patients.

Water fluoridation is a widely accepted practice, proven to be safe and effective for preventing and controlling tooth decay. The Presidio fluoride target level in finished water is 0.7 milligram per liter, consistent with current federal and state guidance. Infants fed formula mixed with water containing fluoride at this level may have an increased chance of developing tiny white lines or streaks in their teeth. These marks are referred to as mild to very mild fluorosis and are often only visible under a microscope. Even in cases where the marks are visible, they do not pose any health risk. The Centers for Disease Control (CDC) considers it safe to use optimally fluoridated water for preparing infant formula. To lessen this chance of dental fluorosis, you may choose to use low-fluoride bottled water to prepare infant formula. Nevertheless, children may still develop dental fluorosis due to fluoride intake from other sources such as food, toothpaste and dental products. Contact your health provider or SWRCB if you have concerns about dental fluorosis. For additional information visit the SWRCB website www.swrcb.ca.gov/ and search for fluoride, or the CDC website www.cdc.gov/fluoridation.



CRYPTOSPORIDIUM

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this waterborne pathogen, and found it at very low levels in source water and finished water in 2024; it has also been previously detected at low levels in Lobos Creek. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of Cryptosporidium may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

SPECIAL NEEDS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater.

MONITORING OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

PFAS is a group of approximately 5,000 man-made, persistent chemicals used in a variety of industries and consumer products. In 2021, our wholesaler conducted a second round of voluntary monitoring using a newer analytical method adopted by the USEPA for some other PFAS contaminants. No PFAS were detected above

the SWRCB's Consumer Confidence Report Detection Levels in surface water and groundwater sources. For additional information about PFAS, you may visit SWRCB website waterboards.ca.gov/pfas, SFPUC website [PFASfactsheet.pdf \(sfpuc.org\)](http://PFASfactsheet.pdf(sfpuc.org)), and/or USEPA website epa.gov/pfas.

LEAD SERVICE LINE INVENTORY AND REPLACEMENT

The Presidio Trust has completed the initial lead service line inventory required by U.S. EPA's Lead and Copper Rule Revisions. The deadline for the initial inventory was October 16, 2024.

Through completing historical records review and field investigations, The Presidio Trust has determined it has no lead or galvanized requiring replacement service lines in its distribution system.

The Presidio Trust reviewed all applicable sources of information, including

- All construction and plumbing codes, permits, and existing records or other documentation which indicates the service line materials.
- All water system records, including distribution system maps and drawings, historical records on each service connection, meter installation records, historical capital improvement or master plans, and standard operating procedures.
- All inspections and records of the distribution system that indicate service line material, including inspections conducted during normal operations (e.g., checking service line materials when reading water meters or performing maintenance activities); and
- All previous service line or meter replacements were conducted.

In addition to reviewing the above sources of information, The Presidio Trust physically inspected all service lines in its distribution system, regardless of ownership. All service lines were verified non-lead.

Water Quality Data

These tables list all drinking water contaminants detected in the Presidio in 2024. Presidio drinking water met or surpassed all state and federal water quality requirements.

KEY TERMS

Following are definitions of key terms noted on the adjacent water quality data tables. These terms refer to the standards and goals for water quality described below.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Regulatory Action Level (RAL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

| TABLE 1: INDIVIDUAL TAP MONITORING FOR LEAD AND COPPER | | | | | |
|---|----------------|--------------------------------|--------------|-----|-------------------------------|
| Monitoring of individual taps from locations within the water system is performed every three years and was last performed in June 2022 to verify that the delivered water does not contain lead or copper at levels that may have negative health effects. The next round of tests is scheduled for June 2025. This table summarizes the most recent monitoring for these constituents. No site exceeded the regulatory action level. | | | | | |
| | NO. OF SAMPLES | 90TH PERCENTILE LEVEL DETECTED | ACTION LEVEL | PHG | TYPICAL SOURCE |
| Lead (ppb) | 11 | 3.2 | 15 | 0.2 | Corrosion of plumbing systems |
| Copper (ppm) | 11 | 0.197 | 1.3 | 0.3 | Corrosion of plumbing systems |

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. There are no known lead service lines in the Presidio’s water distribution system. The Presidio Water Treatment Plant 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

| TABLE 2: DISTRIBUTION SYSTEM MICROBIOLOGICAL SUMMARY | | | | |
|--|---------------------------|---|------|--------------------------------------|
| MICROBIOLOGICAL CONTAMINANTS | HIGHEST NO. OF DETECTIONS | MCL | MCLG | TYPICAL SOURCE OF BACTERIA |
| Total Coliform | 0 | More than one sample in a month with a detection | 0 | Naturally present in the environment |
| Fecal Coliform or E. coli | 0 | A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E. coli | 0 | Human and animal fecal waste |

| TABLE 3: DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD | | | | | | |
|---|-------------|----------------|---------------------|-----|------------|---|
| CHEMICAL OR CONSTITUENT (REPORTING UNITS) | SAMPLE DATE | LEVEL DETECTED | RANGE OF DETECTIONS | MCL | PHG (MCLG) | TYPICAL SOURCE OF CONTAMINANT |
| Nitrate as N (mg/L) | 2024 | 6.74 | 1.66 – 6.74 | 10 | 10 | Erosion of natural deposits, soil run-off |

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant’s blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

| TABLE 4: SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES | | |
|---|--|-----------------|
| PRESIDIO TREATED WATER – 2024 | | |
| TREATMENT TECHNIQUE* | CONVENTIONAL FILTRATION | |
| Turbidity Performance Standards** | Turbidity of the filtered water must: 1 - Be less than or equal to 0.15 NTU in 95% of measurements in a month. 2 - Not to exceed one NTU for more than eight consecutive hours. 3 - Not to exceed five NTU at any time | |
| Lowest monthly % of samples that met Turbidity Performance Standard No. 1 | 100% | |
| Highest single turbidity measurement during the year | 0.049 NTU | |
| The number of violations of any surface water treatment requirements | None | |
| *A required process intended to reduce the level of a contaminant in drinking water. **Turbidity measured in nephelometric turbidity units (NTUs) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results that meet performance standards are considered to be in compliance with filtration requirements. | | |
| SAN FRANCISCO TREATED WATER – 2024 | | |
| Turbidity — Harry Tracy Treatment Plant | = or <0.3 NTU 100% of the time | - |
| Turbidity — Sunol Treatment Plant | or <0.3 NTU 99.97% of samples | - |
| Turbidity — Unfiltered Hetch Hetchy | Range 0.3 – 0.5 NTU monthly average 0.4 NTU | Highest 2.0 NTU |

Filtered water must be equal or less than 0.3 NTU 95% of the time. Both Harry Tracy and Sunol Water Treatment Plants met this standard 99% of the time.

| TABLE 4A: DISINFECTANT BYPRODUCTS | | | | | |
|-----------------------------------|------|-----|--------------------|--------------|----------------------------------|
| DETECTED CONTAMINANT | UNIT | MCL | RANGE OF DETECTION | HIGHEST LRAA | TYPICAL SOURCE IN DRINKING WATER |
| TTHM | ppb | 80 | 35.8 – 60.9 | 51 | Byproduct of chlorination |
| HAA5 | ppb | 60 | 13.0 – 17.4 | 17 | Byproduct of chlorination |

(ppm=parts per million / ppb=parts per billion / NTU=nephelometric trubidity unit / LRAA=locational running annual aveage / ND=non-detect)

| TABLE 5: SECONDARY STANDARDS | | | |
|--|----------------|---------------|---------------|
| No MCLG for secondary constituents. Typical source of contaminant for the following is run off/leaching from natural deposits. | | | |
| PRESIDIO WATER: LOBOS CREEK UNTREATED – 2024 | | | |
| | LEVEL DETECTED | SECONDARY MCL | |
| Hardness | 232 ppm | none set | |
| Sodium | 35.1 ppm | none set | |
| Sulfate | 21.8 ppm | 500 ppm | |
| Iron | 109 ppb | 300 ppb | |
| Manganese | 50.7 ppb | 50 ppb | |
| Chloride | 51.5 ppm | 500 ppm | |
| Color | <5 units | 15 units | |
| Conductivity | 631 uS/cm | 1600 uS/cm | |
| TDS | 338 ppm | 1000 ppm | |
| SAN FRANCISCO WATER: HETCH HETCHY AND TREATED FROM SVWTP AND HTWTP – 2024 | | | |
| | RANGE | AVERAGE | SECONDARY MCL |
| Hardness | 8.4 – 106 | 60 ppm | none set |
| Sodium | 3.1 – 24 | 16 ppm | none set |
| Sulfate | 1 – 41 | 18 ppm | 500 ppm |
| Iron | <6 – 31 | 14 ppb | 300 ppb |
| Manganese | <2 – 2.7 | <2 ppb | 50 ppb |
| Chloride | 3 – 18 | 9.3 ppm | 500 ppm |
| Color | <5 – 5 | <5 units | 15 units |
| Conductivity | 31 – 317 | 193 uS/cm | 1600 uS/cm |
| TDS | 24 – 169 | 102 ppm | 1000 ppm |

Backflow Prevention Awareness

WHEN BACKFLOW OCCURS THROUGH A CROSS CONNECTION, THE RESULTS CAN BE SERIOUS

- The City of Lockport New York received a \$9,717.99 payment from Northeast Paving in 2015 after the contractor's improper use of a fire hydrant led to contamination of the city's water system. The incident, caused by the absence of a check valve during hydroseeding, resulted in clogged pipes, a two-day drinking water advisory, and emergency flushing of the water lines.
- On October 1, 1991, parasitic worms were found in the water of two Southgate, Michigan homes after a malfunctioning atmospheric vacuum breaker on a residential irrigation system allowed contaminated water to backflow into the public supply during a water main break. The City flushed affected water mains, found no harmful bacteria, and cited the homeowner and unpermitted contractor for improper system installation.

These events may seem remote, but the potential for similar incidents also exist in the Presidio. The Presidio Trust Water Department prides itself in maintaining the potability of the Presidio's Distribution System by implementing and enforcing its crossconnection control program because Public Health is our goal.

These common household and commercial connections to the public water system pose a threat to our clean water if not protected by the appropriate Backflow Prevention Assembly

HOSE BIBS



Solution: Install a vacuum breaker to prevent backsiphonage

IRRIGATION SYSTEMS

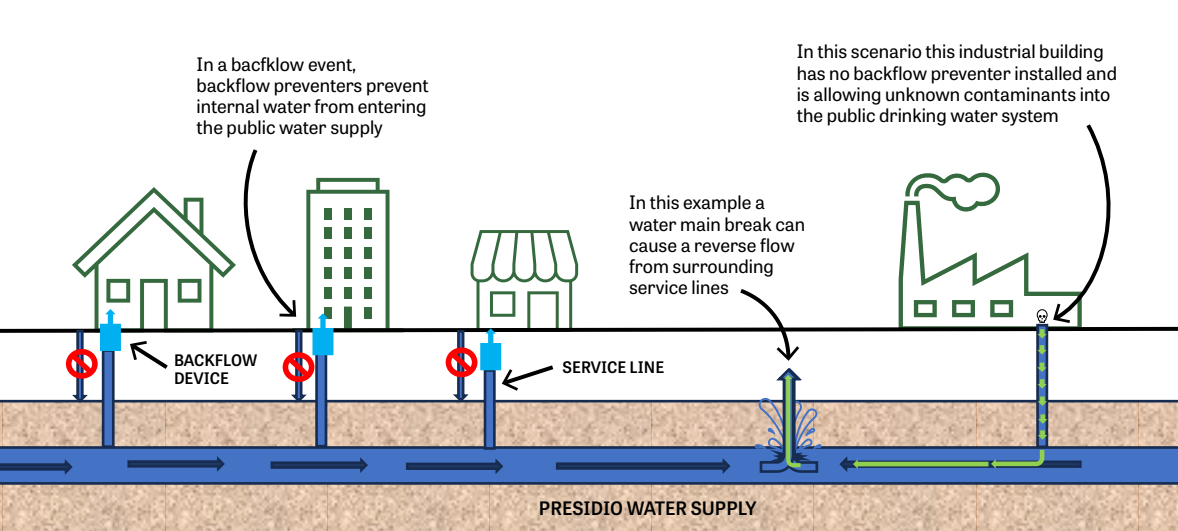


Solution: The installation of an approved backflow prevention device based on the degree of hazard

FIRE SPRINKLER SYSTEMS



Solution: The installation of an approved backflow prevention device based on the degree of hazard



WHAT IS A CROSS-CONNECTION?

An actual or potential connection between a potable water supply and any non-potable substance or source.

WHAT IS A BACKFLOW PREVENTION DEVICE?

Any approved assembly used to prevent backflow into a potable water system.

DO I NEED A BACKFLOW?

The Presidio Trust Water Department has long implemented a cross-connection control program systems like boilers, fire suppression systems and irrigation systems have been protected with a backflow device.

DO I NEED TO TEST MY BACKFLOW?

The Presidio Trust Water Department manages the cross-connection control program. Backflow testing is an annual requirement. You will be notified by mail or email if your backflow device needs to be tested.



- ✓ Required by state and federal law
- ✓ Required by state and federal law to be tested annually
- ✓ Keeps drinking water clean and safe for you and your neighbors