

YOUR 2016

CONSUMER 

CONFIDENCE REPORT

—  *Trusted, Quality Service Since 1905*



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CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
1350 S. "E" STREET, SAN BERNARDINO, CA 92408 | PHONE: 909.384.5141



RELIABILITY IS OUR RESPONSIBILITY

It is my pleasure to present San Bernardino Municipal Water Department's (SBMWD) 2016 Consumer Confidence Report, which details the results of our water quality testing, conservation programs and additional information about your water service.

SBMWD is committed to water quality excellence. More than 37,000 water samples tested in 2016 showed that all of the water served to homes and businesses met or exceeded health and safety standards.

The Water Department was also found to be a well-maintained and operated public water system, following a recent routine inspection by the State Water Resources Control Board, Division of Drinking Water. The finding was based on a thorough review of SBMWD's drinking water supply facilities, water quality monitoring, operations, and maintenance programs.

SBMWD strives for service that goes above and beyond expectations. As part of that effort, the Water Department has permanently relocated its offices from City Hall to a dedicated service center at 1350 S. E Street in San Bernardino. The move was prompted by the need for seismic retrofitting at City Hall. SBMWD opted for a new home in a non-leased building to minimize expenses. You may visit us at the new location to conduct business or pay bills. We also have a drop box available for after-hours payments.

The Water Department has been serving customers across San Bernardino since 1905. Our supplies come entirely from the Bunker Hill Groundwater Basin, which is fed by rain and snowmelt in the San Bernardino Mountains. The Basin is further replenished with imported supplies from the State Water Project, and in the future by the City's Clean Water Factory.

To protect this valuable resource, the Water Department asks customers to continue using water as efficiently as possible. We as a community must embrace "conservation as a California way of life." Conserving water saves money, allows us to avoid buying costly imported supplies, and ensures we have water stored in the event of future drought. We offer numerous programs and rebates to assist you with conservation, including water smart landscaping classes and turf removal incentives.

More information about these programs and water quality testing is included in this report. These services remain an important part of fulfilling SBMWD's promise to maintain a robust and resilient water system for our community.

Yours in service,



Stacey R. Aldstadt
General Manager

ABOUT YOUR WATER DEPARTMENT

10.5 billion gallons of water was produced in 2016

Which served **202,000 people**

This is approximately the same amount as 2015



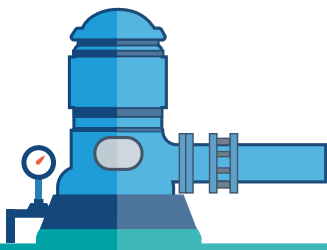
Water supply consists of 100% groundwater from the Bunker Hill Basin. The basin is primarily replenished naturally through surface water runoff. When available, State Water Project water also provides basin replenishment. In the future, recycled water will also help refill the basin.

4 Granular Activated Carbon (GAC) water treatment plants

2 air unit treatment plants

51 active groundwater wells

38 active storage reservoirs/tanks



126 million gallons of water storage capacity

THE WATER DEPARTMENT HAS A NEW HOME!



SBMWD moved its offices from City Hall to a permanent location at 1350 S. E St., San Bernardino, CA 92408.

Our new customer service center is in a City-owned building adjacent to Interstate 215 and an Omnitrans bus stop. The location provides easy access for customers paying bills and conducting business or using the drop box for after-hours payments.

The Water Department and all other City Hall offices moved in May 2017 because the entire building must be retrofitted for earthquake safety. SBMWD's new facility required minor safety related improvements and the addition of a parking lot, which includes disabled access.

Service hours and phone numbers remain the same: Monday–Thursday, 7:30 a.m.–5:30 p.m.; Fridays, 7:30 a.m.–4:30 p.m.; Customer Service, 909-384-5095; reception and after-hours emergencies, 909-384-5141. Payments can also be processed by mail: SBMWD, P.O. Box 710, San Bernardino, CA, 92402; by credit or debit card by calling 877-238-6048 or online at officialpayments.com.



44,000+ connections

750 miles of pipeline in service area

In 2016, **5.2** billion gallons of water from the State Water Project were used for recharging the Bunker Hill Basin

CALIFORNIA DROUGHT

MAKING CONSERVATION A CALIFORNIA WAY OF LIFE

Like the rest of California, the City of San Bernardino is recovering from more than five years of severe drought, which impacted the health of our primary water source, the Bunker Hill Groundwater Basin.

Despite above-average rainfall in early 2017, local groundwater basins still hover at historic lows, and the next dry spell could be right around the corner. To ensure sustainable water supplies for the future, it is essential that we continue our water-saving efforts and, as state water regulators have directed, embrace “conservation as a California way of life.”

An important component of promoting long-term conservation is eliminating water waste. To encourage efficient water use and to comply with state regulations, SBMWD’s Board of Water Commissioners implemented Stage IIA of the Department’s Water Supply Shortage Contingency Plan.

In addition to mandatory water reduction for all customers, Stage IIA outlines several outdoor restrictions against wasteful water use:



Irrigation is permitted only before 8 a.m. and after 6 p.m. on designated days



Irrigation is only allowed on Mondays, Wednesdays and Fridays



No watering of outdoor landscapes that causes excessive runoff



All leaks shall be corrected within 72 hours of Department notice



No irrigation within 48 hours of a significant rainfall event



No washing down driveways, sidewalks or other hardscapes



Washing of vehicles is not permitted unless using hoses with an automatic shut-off device, or at a commercial car washing facility



No use of fountains that use potable water unless the water is recirculated



Irrigation of ornamental turf on public street medians is prohibited

CONSERVATION IN OUR COMMUNITY

SBMWD knows that our customers are our greatest ally in the fight against water waste. The good news is, conservation doesn’t have to mean sacrifice. We strive to provide our customers with the tools necessary to become more water efficient. For more information about SBMWD’s water conservation programs, or to report water waste, please visit www.sbcitywater.org, or call (909) 384-5141.

WATER SUPPLY RELIABILITY

In February 2017, the State Water Resources Control Board (SWRCB) completed a thorough inspection of SBMWD's drinking water supply facilities, operations, water quality monitoring and maintenance programs. We are pleased to report that SBMWD is rated as a well-maintained and operated public water system, run by qualified and experienced staff.



CLEAN WATER FACTORY WILL CREATE A SUSTAINABLE SUPPLY



Plans for a state-of-the-art recycled water project, known as the Clean Water Factory, continue to move forward. In 2017, the City certified the final environmental impact report for what will be the most advanced recycled water project in the region. Design work has begun on the Factory's tertiary treatment system and advanced purification pilot plant.

The Clean Water Factory is a critical component in SBMWD's effort to secure sustainable supplies that will be able to withstand drought and other challenges.

The project will capture up to 22 million gallons of wastewater each day and deliver it to percolation basins at the foothills of the San Bernardino Mountains. Prior to being delivered to the basins, the wastewater will go through intense treatment, including reverse osmosis and ultraviolet treatment. Once delivered to the basins, the highly treated water will undergo natural filtration in the same way that snowmelt and rain water do as they percolate back into local groundwater basins. The project will also provide a direct supply to customers for non-potable use, such as irrigation along the delivery route to the basins, further helping us to conserve water.

The Clean Water Factory will change how our region uses – and reuses – water.



STATE WATER PROJECT SUPPLIES HELP REPLENISH THE BUNKER HILL BASIN

In 2016, SBMWD purchased **5.2 billion** gallons of water from the State Water Project to replenish groundwater basins along the foothills. The Water Department has plans to recharge a similar amount spread in groundwater basins in the same locations in 2017. The imported water replenishes the Bunker Hill Basin, the aquifer that SBMWD relies on for 100 percent of its water supply. Currently, this is the only method and supply available to SBMWD for replenishing the groundwater basin.

INFRASTRUCTURE RELIABILITY

In order to provide a safe and reliable water supply, SBMWD staff is continually working to maintain and improve its aging infrastructure, to meet or exceed state and federal standards. This is in large part accomplished by identifying deficient areas in our drinking water system that require enhancement, rehabilitation or replacement.

Some of the more critical system improvements that are currently in progress are:

MILES OF WATER MAINS TO BE MOVED FROM ALLEYS

SBMWD is replacing and relocating miles of aging distribution pipelines in the alleys behind homes. This ongoing project, which began in 2010, will improve access for meter reading and repairs, and bring location of the equipment up to current standards. Many of the mains involved are undersized and have a history of leaks.

Replacements have occurred in several locations throughout the city:

- ✧ **Temple Street** Alley Main Relocation Project replaced 1,916 feet of pipe between Sierra Way and Wall Avenue.
- ✧ **Systemwide** Alley Main Relocation Project covered 10,310 feet along Trenton Street, 16th, 17th, 18th and 19th streets, west of H Street.
- ✧ **Highland Avenue** Alley Main Relocation Project relocated 3,000 feet of pipelines along Campus Way, 20th and 21st streets, and Highland Avenue, west of G Street.
- ✧ **Bellevue/Vine Street** Alley Main Relocation Project involved 3,390 feet of mains along Bellevue and Vine streets and Rialto Avenue.

Additional relocation projects in alleys will be implemented as funding allows.



RAIL PROJECT REQUIRES PIPE RELOCATION

The Water Department is moving pipelines as part of two projects to build a light rail system between San Bernardino and Redlands.

The first phase, known as the Downtown San Bernardino Passenger Rail Project, began in 2014 and is nearly complete. It extends rail service from the Santa Fe Depot to a new Downtown Transit Center at Rialto Avenue and E Street.

The second phase, the Redlands Rail Extension, will extend light rail service from the Transit Center to the City of Redlands. The San Bernardino County Transportation Commission is finalizing plans for that segment.



The projects require SBMWD to relocate pipelines at about 13 crossings between downtown and Mountain View Avenue. That work is expected to begin this year.

SEISMIC RETROFITTING PROJECTS WILL PROTECT RESERVOIRS

Work will begin this year on retrofitting four steel reservoirs to protect SBMWD's water supply in case of earthquake.

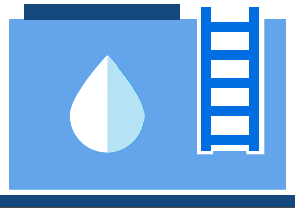
The tanks were identified for repair, along with 12 others, during a 2012 assessment of about half of the Water Department's reservoirs. They were found to be deficient and potentially vulnerable in a significant earthquake.



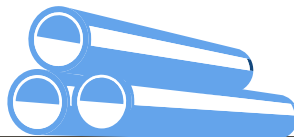
Reservoir failure could result in pressure loss that can cause water quality issues and impact the ability to fight fires. The retrofit work is extensive and will occur over multiple years.

MAINTENANCE OVERVIEW

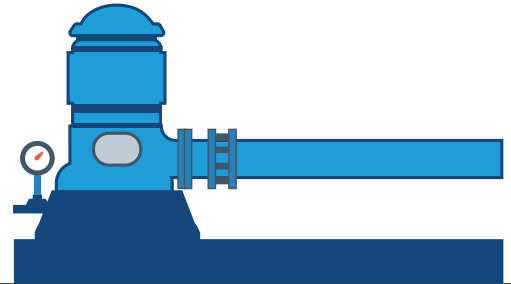
Routine maintenance of the water system is essential for a safe and reliable water supply.



15 planned seismic upgrades over 5 years



3.3 miles of pipeline replaced in 2016



9 wells rehabilitated in 2016

MAINTENANCE IN 2016



26 system gate valves replaced



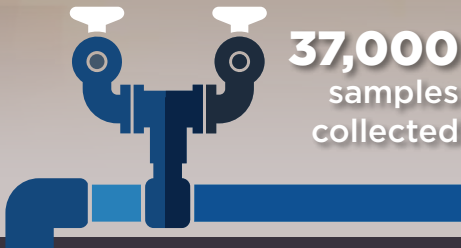
13 auto blow offs to improve quality



43 fire hydrant leaks repaired



11 reservoirs inspected & cleaned



37,000 samples collected



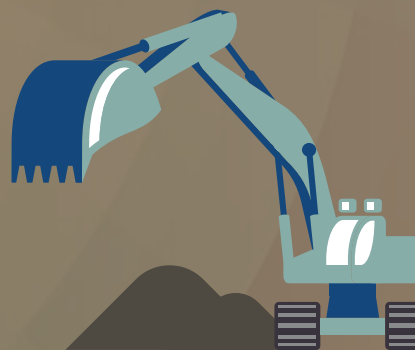
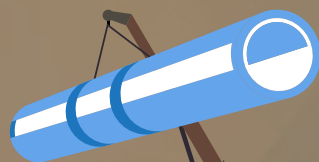
50 fire hydrants replaced

13 fire hydrants flushed to maintain quality

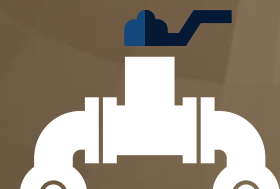


1,215 water meters replaced

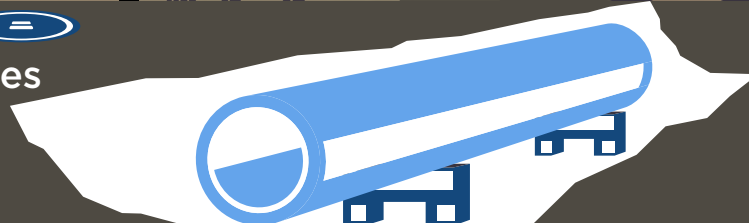
4,000 backflow devices tested & inspected



387 meter leaks repaired



105 service valves & system leaks repaired



150 water main leaks repaired



WATER QUALITY REPORT

INFORME DE CALIDAD DEL AGUA



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

ABOUT THIS REPORT

SBMWD is proud to announce that all of the water we served in 2016 met all the required standards for drinking water. Throughout 2016, as we do each year, the Water Department collected more than 37,000 water samples that were analyzed by our contract laboratories.

These labs conducted more than 100,000 tests to identify all of the constituents in our drinking water, ensuring its quality. This report describes in detail the constituents found in the drinking water we served and how much of each constituent was present. Some of these constituents are naturally occurring while others are man-made.

The State Water Resources Control Board, Division of Drinking Water (State Board) regulates some of these constituents, both natural and man-made, and has set maximum contaminant levels (MCLs). In some cases, there are Federal maximum contaminant level goals (MCLGs) for chemical or mineral constituents. If any of these limits were exceeded in the drinking water during the year 2016, we inform you about it in this report. If any MCL or MCLG was exceeded, we also describe treatment technology that can be used to eliminate the contaminants.

State law also requires that we inform you, our customers, how much it will cost to install the treatment equipment, and how much it will increase the cost of your water. We do all of this in this report because consumers have a right to know about their drinking water quality. We believe that educated consumers are more likely to help protect their drinking water sources and to understand the true costs of safe drinking water.

SOBRE ESTE INFORME

El Departamento Municipal de Agua de San Bernardino esta orgulloso en poderles reportar que toda el agua servida a nuestros clientes, en el año 2016 satisfizo todas las normas de calidad establecidas para el agua potable doméstica. Durante el 2016, tomamos más de 37,000 muestras para que fueron analizadas por laboratorios contratados por nosotros.

Estas laboratorios conducieron mas de 100,000 pruebas para identificar todos los contiyentes en nuestra agua potable y asi poder asegurar su calidad. En este reporte, describimos en detalle cuales constituyentes encontramos en el agua potable que suministramos, y que cantidad de cada constituyente se encontró presente. Algunos de estos constituyentes ocurren naturalmente mientras que otros son causados por presencia de animales y actividades humanas.

El Departamento de Salud Publica de California establece y regula los niveles máximos de contaminantes (MCLs). En ciertos casos, existen Metas Federales de Máximo Nivel de Contaminante (MCLGs), para los constituyentes químicos o minerales. Si se excedió cualquiera de estos límites en el agua potable durante el año pasado, nosotros lo divulgamos en este informe. Si MCLs o MCLGs fueron excedidos, también revelamos la tecnología de tratamiento que puede ser empleada para eliminar los contaminantes.

Leyes Estatales también requieren que avisemos a nuestra clientela cual será el costo de instalar el equipo de tratamiento y cuanto aumentara el costo de su agua. Nosotros creemos que los consumidores educados tienen más probabilidades de ayudar a proteger sus fuentes de agua potable y comprender los costos verdaderos del agua potable.

ABOUT OUR WATER SOURCE

The water that we serve comes from a natural underground aquifer called the Bunker Hill Groundwater Basin. This basin was formed by ancient earthquakes that tilted huge portions of the bedrock deep under the surface of the earth to form the sides and bottoms of the basin. These bedrock formations prevent the groundwater from flowing away underground to the Pacific Ocean. Rain and melting snow from the local mountains replace the water we take out of the basin, replenishing our water supply. SBMWD also imports water from the State Water Project and spreads this water in local basins to replenish our groundwater. Both natural and imported water percolates through the ground to be captured and stored in the Bunker Hill Basin.

It is estimated there is as much as 1.6 trillion gallons of water in the basin. This water fills all of the pores and open spaces in between grains of sand and gravel that also fill the basin. The sand and gravel act as a filtering agent and help to give us the high quality water that we enjoy. This valuable natural resource significantly reduces the need to import water from Northern California or from the Colorado River, as many other cities in Southern California must do. This keeps our rates relatively low and also helps to keep our water quality high.

We share the water in the Bunker Hill Groundwater Basin with more than 20 other local public and private water suppliers. All of these water suppliers have developed long-term plans to protect the quality of water in the basin and to protect the watershed. It is now one of our highest priorities to follow and update these plans as the Inland Empire's population and water needs change. This is done collaboratively with other suppliers through a groundwater basin management plan. In all, more than 600,000 residents of the greater Riverside-San Bernardino area depend on the basin for their water, making our jobs a tremendous responsibility.

SOBRE EL ABASTECIMIENTO DE AGUA SUBTERRANEA

El agua que proveemos a nuestros clientes viene de un depósito de agua subterráneo natural llamado Bunker Hill Ground Water Basin. Esta cuenca fue formada por temblores que inclinaron grandes porciones de roca profunda bajo la superficie de la tierra para formar los lados y el suelo de la cuenca.

Nuestro abastecimiento de agua subterránea constantemente es reabastecido por la nieve derretida y por el escurrimiento de las lluvias que provienen de las montañas locales. Bajo ciertas circunstancias, importamos agua por parte del Proyecto de Agua Estatal (State Water Project) para reabastecer nuestra cuenca, lo cual también hacen otras agencias que usan la cuenca. Esta agua se filtra al suelo y es almacenada en la cuenca.

Se calcula que existen aproximadamente 1.6 trillones de galones de agua en la cuenca. Esta agua llena todos los poros y espacios entre granos de tierra y piedras que también llenan la cuenca. La tierra y piedra ayudan a filtrar el agua de alta calidad que disfrutamos. Este valioso recurso natural libera a nuestra ciudad de los costos de importar agua del norte de California o del Río Colorado. Esto mantiene nuestras tarifas bajas y ayuda mantener nuestra calidad de agua.

Compartimos la cuenca subterránea con más de 20 proveedores de agua locales y privados. Todos los proveedores de agua han desarrollado planes de largo plazo para proteger la calidad de agua en la cuenca y para proteger la tierra que almacena nuestra agua potable. Es una de nuestras prioridades más importantes ponernos al corriente de estos planes más ahora que cambia la población y las necesidades de agua de nuestra comunidad. Esto se hace de manera colaborativa con otros proveedores a través de un plan de manejo de cuenca subterránea. En total, más de 600,000 residentes de la gran área de Riverside-San Bernardino dependen de la cuenca para recibir su agua.

VULNERABLE POPULATION



Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-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 from infections. These people should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (USEPA) and the 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 (1-800-426-4791).

ADDITIONAL REQUIRED INFORMATION

The Safe Drinking Water Act requires additional health information based on finding contamination at a certain level within a utility sample. Although we have met all of the state MCLs for nitrate, arsenic and lead, we are required to report the following information:

NITRATE: Nitrate as Nitrogen (N) 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 a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate as N 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 certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate as N levels may rise quickly for short periods of time because of rainfall or agricultural activity.

ARSENIC: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The USEPA 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.

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. SBMWD 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

REGULATIONS

In order to ensure that tap water is safe to drink, USEPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Additional information on bottled water is available on the California Department of Public Health website: <http://www.cdph.ca.gov/programs/Pages/fdbBVW.aspx>. The sources of drinking water (both tap 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 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 stormwater runoff, and residential uses.



Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural applications, 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. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).



POBLACIONES VULNERABLES



Algunas personas son más vulnerables a los contaminantes en el agua que la población general. Personas con el sistema inmunológico comprometido, tales como las personas con cáncer sometidas a quimioterapia, personas que han sido sometidas a transplantes de órganos, personas con VIH/SIDA, o otros trastornos del sistema inmunológico, algunos ancianos, y bebés podrían estar a riesgo de contraer infecciones. Estas personas deberían consultar con su médico sobre el agua potable. Las pautas de la Agencia Federal de Protección Ambiental (USEPA/Control de Enfermedades) sobre las maneras apropiadas para reducir el riesgo de infección por *Cryptosporidio* y otros contaminantes microbianos están disponibles por medio de la línea telefónica para agua potable segura (Safe Drinking Water Hotline) 1-800-426-4791 o en <http://www.epa.gov/lead>.

INFORMACIÓN ADICIONAL REQUERIDA

El Decreto de Agua Potable Segura requiere que se de información adicional sobre la salud si se encuentran ciertos niveles de contaminantes dentro de la muestra de utilidad. Aunque cumplimos con todos los MCLs del estado para nitrato y arsénico, se nos requiere divulgar la siguiente información:

NITRATO: Nitrato como Nitrógeno (N) en agua potable a niveles mas de 10 mg/L es un riesgo para la salud de bebés de menos de 6 meses de edad. Tales niveles en agua potable pueden interferir con la capacidad de cargar oxígeno en la sangre del infante, causando enfermedades serias; síntomas incluyen tono azul de piel y respiraciones cortas. Niveles de nitrato como N de mas de 10 mg/L también podrían afectar la habilidad de la sangre de cargar oxígeno en otros individuos así como mujeres embarazadas y aquellos con deficiencias de enzimas. Si usted cuida infantes o esta embarazada debería pedir el consejo de su doctor. Los niveles de Nitrato como N pueden incrementar rápidamente por periodos cortos de tiempo a causa de lluvia o actividades agrícolas.

ARSÉNICO: Mientras su agua potable cumple con el estándar actual de la Agencia Federal de Protección Ambiental (USEPA) para el arsénico, contiene niveles mínimos de este mismo. El estándar equilibra la comprensión actual de efectos posibles de salud contra los costos de quitar el arsénico del agua potable. El USEPA continua investigando los efectos de la salud de niveles mínimos de arsénico, el cual es un mineral capaz de causar cáncer en altas concentraciones y es ligado a otros efectos de la salud tales como daño a la piel y problemas circulatorios.

PLOMO: Niveles elevados de plomo, si existen, podrían causar serios problemas de salud especialmente para mujeres embarazadas y niños pequeños. La presencia de plomo en el agua potable es causada por materiales y componentes asociados con las líneas de servicio y la tubería de la casa. El Departamento Municipal de Agua de la Ciudad de San Bernardino toma mucho orgullo en suministrarle agua potable de alta calidad, pero no puede controlar la variedad de materiales utilizados en los componentes de su plomería. Usted puede minimizar el riesgo de ser expuesto al plomo dejando que el agua de su grifo corra de 30 segundos a 2 minutos antes de utilizar.

REGULACIONES

Para asegurar que el agua que sale del grifo sea segura para beber, la Agencia de Protección Ambiental de los Estados Unidos (USEPA) y el Departamento de Salud Pública de California (DPH) prescriben regulaciones que limitan la cantidad de ciertos contaminantes en el agua proporcionada por los sistemas públicos de agua. Los reglamentos de la Administración de Alimentos y Medicamentos de los Estados Unidos y la ley de California también establece límites para contaminantes en agua embotellada que proporcionan la misma protección para la salud pública. Información adicional sobre el agua embotellada está disponible en el sitio web del Departamento de Salud Pública de California: <http://www.cdph.ca.gov/programs/Pages/fdbBVW.aspx>. Si desea más información a cerca de estas regulaciones, puede contactar a la Oficina de Plantas, Comidas Lácteas, y Bebidas, de la FDA llamando al (301) 436-2023. Las fuentes de nuestra agua potable (del grifo o embotellada) incluyen ríos, lagos, arroyos, estanques, cuencas y pozos. Cuando el agua pasa por la superficie de la tierra o por el suelo, los minerales que ocurren naturalmente y en algunos casos los materiales radioactivos, son disueltos. Al mismo tiempo, puede recoger sustancias que son resultado de presencia de animales y actividades humanas. Los contaminantes que pueden estar presentes en las fuentes de agua incluyen:



Contaminantes microbianos, tales como el virus y la bacteria, los cuales pueden resultar a causa de plantas de tratamiento de aguas negras, sistemas sépticos, y operaciones agrícolas de ganado y fauna.



Contaminantes inorgánicos, tales como sales y metales, los cuales pueden ocurrir naturalmente o ser el resultado de escurrimiento urbano de aguas lluvias, vertidos de aguas negras industriales o domésticas, o de la producción de petróleo y gas, minas o agrícola.



Plaguicidas y herbicidas los cuales pueden resultar de una variedad de fuentes tales como la agricultura, escurrimiento urbano de aguas lluvias, y usos residenciales.



Contaminantes químico orgánicos, incluyendo químicos sintéticos y orgánicos volátiles los cuales son subproductos de procesos industriales y de la producción de petróleos o también a causa de gasolineras, escurrimiento urbano de aguas lluvias, o de sistemas sépticos.



Contaminantes radioactivos, pueden ocurrir naturalmente o pueden ser el resultado de la producción petrolera y gas o de actividades mineras.

Es razonable esperar que el agua potable, incluyendo el agua embotellada, contenga por lo menos pequeñas cantidades de algunos contaminantes. La presencia de contaminantes no indica necesariamente que el agua presente un riesgo a su salud. Puede obtener más información sobre los contaminantes y los posibles efectos a su salud llamando a la Línea de Agua Potable Segura (Safe Drinking Water Hotline) de la USEPA al (800) 426-4791.

CHLORINE IN THE WATER

Why do we put chlorine in the water? Chlorine is an oxidizing agent used as a disinfectant that when added to water, kills microorganisms such as bacteria and viruses. The State Board requires that we maintain a minimum residual of 0.2 parts per million (ppm) of chlorine in our water at all times to kill any potential microorganism(s).

WATER TREATMENT

A portion of the Bunker Hill Basin has been contaminated by historic discharges of volatile organic compounds (VOCs) known as trichloroethylene (TCE) and tetrachloroethylene (PCE). In partnership with the USEPA and under the auspices of a Superfund Project, SBMWD has undertaken a project to clean up this contamination. The project will cost approximately \$70 million over the project's 50-year lifetime. Because of the agreement, this project will not affect the cost of your drinking water. The project's primary method of removing these compounds involves passing contaminated water through a series of large vessels, each containing 30,000 pounds of granular activated carbon. Operating in pairs, the vessels can treat up to 750 gallons of water per minute. This process removes the TCE and PCE contaminants from your drinking water.

SOURCE WATER ASSESSMENT PROGRAM

In response to the Federal Safe Drinking Water Act (SDWA), State Board Division of Drinking Water and Environmental Management developed a program, called the Drinking Water Source Assessment and Protection Program (DWSAP), to assess the vulnerability of drinking water sources to contamination.

The San Bernardino Municipal Water Department completed its DWSAP in 2002, and continues to update the plan as needed. The DWSAP is available in our Engineering office located at: 397 Chandler Place, 1st Floor, San Bernardino, CA 92418. Based on this assessment, we have concluded that our sources of drinking water are most vulnerable to historic contamination from industrial operations.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR 3)



The 1996 amendments to the Safe Drinking Water Act (SDWA) require that once every five years, the U.S. Environmental Protection Agency (USEPA) issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWS). The Unregulated Contaminant

Monitoring Rule (UCMR) provides USEPA and other interested parties with scientifically valid data on the occurrence of contaminants in drinking water. This data serves as a primary source of occurrence and exposure information that the agency uses to develop regulatory decisions.

The SBMWD completed two rounds of UCMR 3 monitoring in July 2013 and January 2014. Any detected metal, chlorate, hexavalent chromium, 1,4 dioxane, volatile organics, perfluorinated compounds, and hormones detected are summarized in the Table of Constituents.

If you have questions regarding the information in this report, please contact:

Con Arrieta, Water Quality Control Officer – City of San Bernardino Municipal Water Department
P.O. Box 710, San Bernardino, CA 92402 | 909-453-6190 | e-mail: ccr_comments@sbmwd.org

Please include your name, address, and phone number so that we can respond to you directly.

CLORO EN EL AGUA

¿Por qué ponemos cloro en el agua? El cloro es un agente oxidante que cuando se le añade al agua elimina los microorganismos tales como la bacteria y el virus. El estado de California requiere que mantengamos un residuo mínimo de 0.2 partes por millón (ppm) de cloro en nuestra agua en todo momento para eliminar cualquier posible microorganismo.

TRATAMIENTO DEL AGUA

Una porción de la Cuenca de Bunker Hill, ha sido contaminada por descargas de compuestos orgánicos volátiles (VOCs) conocidos como tricloroetileno (TCE) y tetracloroetileno (PCE). En colaboración con la Agencia Federal de Protección Ambiental (USEPA) y bajo el auspicio de un Proyecto de Fondo Mayor, SBMWD ha iniciado un proyecto para limpiar esta contaminación. El costo aproximado del proyecto es \$70 millones; este será adjudicado durante los 50 años de vida del proyecto. Gracias a una resolución legal, este proyecto no afectará el costo de su agua potable. El método principal de extirpación de estos compuestos, consiste en pasar el agua contaminada por una serie de buques los cuales contienen 30,000 libras de granulado de carbón activado. Estos buques funcionan en pares, que pueden tratar 750 galones de agua por minuto. Este proceso extirpa el TCE y PCE del agua, convirtiéndola en agua segura para beber.

PROGRAMA DE EVALUACIÓN DE FUENTES DE AGUA

En respuesta al Acto Federal de Agua Potable Segura (SDWA), La división de Agua Potable y Manejo del Ambiente del Departamento de Servicios de Salud de California (CDPH) ha desarrollado un programa para evaluar la vulnerabilidad de las fuentes de agua potable a la contaminación, el cual se llama Evaluación y Protección de las Fuentes de Agua Potable (DWSAP). El Departamento Municipal de Agua de San Bernardino completó el programa DWSAP durante el año 2002, y está disponible en nuestra oficina localizada en el Oficina de ingeniería ubicada en: 397 Chandler Place, 1st Floor, San Bernardino, CA 92418. Con los resultados de



esta evaluación, hemos concluido que nuestro abastecimiento de agua es más sustible a contaminación histórica de actividades industriales. Las actividades industriales del último siglo han dejado ciertos compuestos orgánicos volátiles en la tierra que ahora han contaminado porciones de la Cuenca Subterránea Bunker Hill. Su agua potable es tratada para extirpar este tipo de compuestos antes de su suministro.

EL REGLAMENTO DE MONITOREO DE CONTAMINANTES NO REGULADOS

Las enmiendas de 1996 a la Acto Federal de Agua Potable Segura (SDWA) requieren que una vez cada cinco años, la U.S. Environmental Protection Agency (USEPA) emitirá una nueva lista de no más 30 contaminantes no regulados a ser monitoreados por los sistemas públicos de agua (PWS). El reglamento Monitoreo de Contaminantes No Regulados (UCMR) proporciona USEPA y otras partes interesadas con los datos científicamente válidos sobre la presencia de contaminantes en el agua potable. Estos datos sirven como la localidad primaria de ocurrencia y la exposición de información que la agencia utiliza para desarrollar las decisiones regulatorias.

SBMWD completó dos ciclos de UCMR 3 monitoreados en 2013 julio y enero de 2014. Cualquier metal detectado, clorato, cromo hexavalente, 1,4-dioxano, compuestos orgánicos volátiles, compuestos perfluorados, y las hormonas detectadas se resumen en la Tabla de Constituyentes.

Si usted tiene cualquier pregunta sobre la información contenida en este informe por favor comuníquese con:

Con Arrieta, Water Quality Control Officer – City of San Bernardino Municipal Water Department
P.O. Box 710, San Bernardino, CA 92402 | 909-453-6190 | e-mail: ccr_comments@sbmwd.org

Por favor, incluya su nombre, dirección y número de teléfono para que podamos responder a usted directamente.

	UNITS	YEAR SAMPLED	MCL (AL) [MRDL]	PHG (MCLG) [MRDLG]	AVERAGE VALUE	RANGE * (LOW-HIGH)	VIOLATIONS	TYPICAL SOURCE OF CONTAMINANT
PRIMARY REGULATED CONTAMINANTS								
ORGANIC CONTAMINANTS								
CIS-1,2 DICHLOROETHYLENE (C-1,2-DCE)	µg/L	2014-2016	6	100	ND	ND - 0.67	No	Discharge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination
TETRACHLOROETHYLENE (PCE)	µg/L	2014-2016	5	0.06	ND	ND - 1.80	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
TRICHLOROETHYLENE (TCE)	µg/L	2014-2016	5	1.7	ND	ND - 0.76	No	Discharge from metal degreasing sites and other factories
1,1-DICHLOROETHANE	ng/L	2013-2014	5000	3000	21.1	ND - 100	No	Halogenated alkane; extraction and degreasing solvent; used in manufacture of pharmaceuticals, stone, clay and glass products; fumigant
INORGANIC CONTAMINANTS								
ARSENIC	µg/L	2014-2016	10	0.004	ND	ND - 5.1	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
TOTAL CHROMIUM	µg/L	2014	50	(100)	1.36	ND - 2.9	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
HEXAVALENT CHROMIUM	µg/L	2014	10	0.02	ND	ND - 3.6	No	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
FLUORIDE	mg/L	2014-2016	2	1	0.61	0.2 - 1.7	No	Erosion of natural deposits; discharge from fertilizer and aluminum factories
NITRATE AS NO3	mg/L	2016	45	45	15.78	ND - 33.0	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
NITRATE AS NITROGEN	mg/L	2016	10	10	3.95	ND - 7.50	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIONUCLIDES								
GROSS ALPHA PARTICLE ACTIVITY	pCi/L	2001-2016	15	(0)	2.79	ND - 6.3	No	Erosion of natural deposits
URANIUM	pCi/L	2007-2016	20	0.43	3.35	ND - 4.58	No	Erosion of natural deposits
CHEMICAL DISINFECTANT								
CHLORINE	mg/L	2016	[4]	[4]	0.61	0.15 - 2.3	No	Drinking water disinfectant added for treatment
DISINFECTANT BY-PRODUCT								
TOTAL TRIHALOMETHANES (TTHM)	µg/L	2016	80	NS	5.8	1.2 - 9.2	No	By-product of drinking water disinfection
HALOACETIC ACIDS (HAA5)	µg/L	2016	60	NS	1.1	ND - 4.4	No	By-product of drinking water disinfection
MICROBIOLOGICAL ((TT))								
TOTAL COLIFORM BACTERIA - FEDERAL REVISED TOTAL COLIFORM RULE (F-TCR)	Present/Absent	2016	((TT))	(0)	Absent	Absent - 0.7%	No	Naturally present in the environment
AT-THE-TAP MONITORING								
COPPER - SITES COLLECTED: 65 / SITES EXCEEDING AL: 0	mg/L	2015	(1.3)	0.3	90th Percentile = 0.19	ND - 0.60	No	Internal corrosion of household plumbing systems
LEAD - SITES COLLECTED: 65 / SITES EXCEEDING AL: 0	µg/L	2015	(15)	0.2	90th Percentile = ND	ND - ND	No	Internal corrosion of household plumbing systems

TERMS & ABBREVIATIONS USED ABOVE

Contaminant: Any physical chemical, biological, or radiological substance or matter in water.

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

Secondary Drinking Water Standard: Secondary Drinking Water Standards shall not be exceeded in the water supplied to the public because these constituents may adversely affect the taste, odor, or appearance of drinking water.

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 United States Environmental Protection Agency.

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.

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.

	UNITS	YEAR SAMPLED	MCL (AL) [MRDL]	PHG (MCLG) [MRDLG]	AVERAGE VALUE	RANGE * (LOW-HIGH)	VIOLATIONS	TYPICAL SOURCE OF CONTAMINANT
SECONDARY REGULATED CONTAMINANTS								
AESTHETICS								
CHLORIDE	mg/L	2016	500	NS	22.16	3.1 - 59.0	No	Runoff/leaching from natural deposits
CORROSIVITY (NON-CORROSIVE)	Non-Corrosive	2014	Non-Corrosive	NS	0.28	0.0 - 0.61	No	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
IRON	µg/L	2014-2016	300	NS	ND	ND - ND	No	Leaching from natural deposits; industrial wastes
SPECIFIC CONDUCTANCE	µS/cm	2016	1600	NS	580.21	330 - 830	No	Substances that form ions when in water
SULFATE	mg/L	2016	500	NS	48.45	22 - 130.0	No	Runoff/leaching from natural deposits; industrial wastes
TOTAL DISSOLVED SOLIDS	mg/L	2016	1000	NS	331.27	210 - 490	No	Runoff/leaching from natural deposits
TURBIDITY	NTU	2016	5	NS	ND	ND - 0.46	No	Soil runoff
UNREGULATED CONTAMINANT [NL]								
DICHLORODIFLUOROMETHANE (FREON 12)	mg/L	2014 - 2016	[1]	NS	0.00137	ND - 0.00590	No	Polymerization processes, food sterilization, home and commercial refrigeration, paint and varnish remover manufacturing and use, water purification, copper and aluminum production, glass bottle manufacturing, leak detecting agent in thermal expansion valves. Prior to 1979, frequently used as an aerosol propellant for cosmetics, pharmaceuticals, insecticides, paints, adhesives, and cleaners.
UNREGULATED CONTAMINANT MONITORING RULE (UCMR 3)								
1,4-DIOXANE	µg/L	2013-2014	[1]	NS	0.02	ND - 0.12	No	Cyclic aliphatic ether; used as a solvent or solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos
CHLORATE	µg/L	2013-2014	[800]	NS	52.6	ND - 170	No	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide
CHLORODIFLUOROMETHANE	ng/L	2013-2014	NS	NS	41.6	ND - 170	No	Chlorofluorocarbon; occurs as a gas, and used as a refrigerant, as a low-temperature solvent, and in fluorocarbon resins, especially tetrafluoroethylene polymers
MOLYBDENUM	µg/L	2013-2014	NS	NS	2.81	1.8 - 5.0	No	Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide used as a chemical reagent
STRONTIUM	µg/L	2013-2014	NS	NS	385	160 - 740	No	Naturally-occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions
VANADIUM	µg/L	2013-2014	[50]	NS	3.04	2.0 - 4.6	No	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst
ADDITIONAL MONITORING								
HARDNESS (AS CaCO3)	mg/L	2016	NS	NS	251.6	120 - 350	N/A	Naturally-occurring
SODIUM	mg/L	2016	NS	NS	20.88	13.0 - 58.0	N/A	Naturally-occurring

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.

Regulatory Action Level (AL): 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.

No Standard (NS): No standard has been established as a guideline for a contaminant.

NL: Notification Level

ND: Non-Detect

NTU: Nephelometric Turbidity Units

PPM or mg/L: parts per million, or milligrams per liter.

PPB or µg/L: parts per billion, or micrograms per liter.

PPT or ng/L: parts per trillion, or nanograms per liter.

pCi/L: picocuries per liter (a measure of radioactivity)

µS/cm: measure of electric current

***** Local Groundwater

EMERGENCY NUMBERS

Police – Fire – Medical Emergencies Only	911
Poison Control	(800) 222-1222
National Suicide Prevention Lifeline	(800) 273-8255
Emergency Mental Health Hospital Services	(909) 580-1800
California Missing Children's Hotline	(800) 222-3463

WATER DEPARTMENT

General	(909) 384-5141
Customer Service	(909) 384-5095
Water Quality	(909) 453-6193

BOARD OF WATER COMMISSIONERS



Toni Callicott
President



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Commissioner

COMMENTS WELCOME

The City of San Bernardino Municipal Water Department (SBMWD) was formed by the City Charter and is governed by an appointed Board of Water Commissioners. The Water Board meets on the first and third Tuesday of the month. The meetings are held in the Boardroom at: 399 Chandler Place, San Bernardino CA, 92408. The public is welcome to attend these meetings.

Meeting agendas are posted in the SBMWD lobby at 1350 S. E Street, San Bernardino, CA, 92408, Feldheym Central Library, and our website, www.sbcitywater.org, at least 72 hours prior to each meeting.

For additional information on the Board meetings, contact Robin L. Ohama, Deputy General Manager, at (909) 384-7210.

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CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
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