2016

Water Quality Report

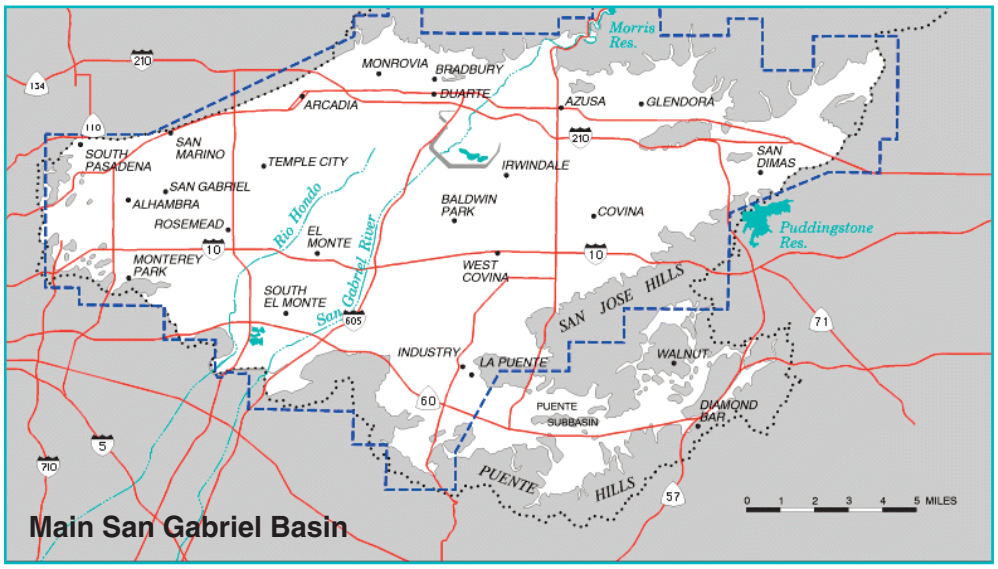
CITY OF ARCADIA

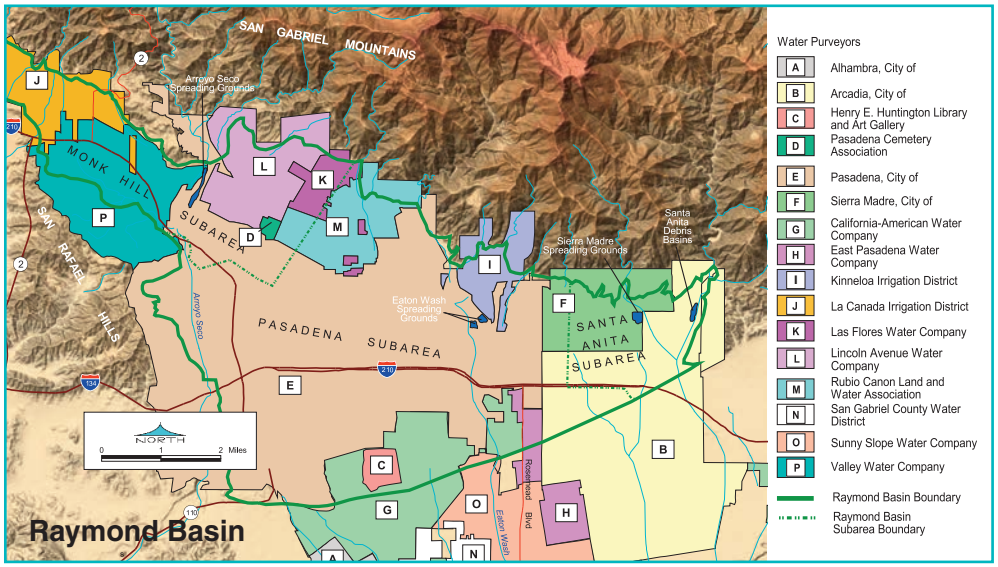
The City of Arcadia is committed to keeping you informed on the quality of your drinking water and is dedicated to providing you with a safe and reliable supply of high quality water. This report is provided to you annually and includes information describing where your drinking water comes from, the constituents found in your drinking water and how the water quality compares with the regulatory standards. To ensure that your drinking water is safe to drink, public water systems must comply with all Federal and State drinking water standards. The drinking water provided by the City of Arcadia in 2016 complies with all Federal and State drinking water standards.

City Council meetings provide an opportunity for public participation in decisions that may affect the quality of your water. Regularly scheduled meetings of the City Council are held on the first and third Tuesday of each month at 7:00 PM in the City Council Chambers located at 240 West Huntington Drive in Arcadia.

Where Does My Drinking Water Come From?

The water supply for the City of Arcadia comes from two sources: (1) groundwater from wells in the Main San Gabriel Basin; and (2) groundwater from wells in the Raymond Basin.





Groundwater comes from natural underground aquifers that are replenished with local rainwater and imported water. The groundwater basins from which the City of Arcadia pumps its water lay beneath the San Gabriel Valley. More than 30 retail water systems draw from the basins to provide water to residents and businesses.

What are Water Quality Standards?

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board, Division of Drinking Water (DDW) 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.

Drinking water standards established by USEPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

- **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 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 pathogens.
- **Primary Drinking Water Standard**: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **Regulatory Action Level (AL)**: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Notification Level (NL)**: An advisory level which, if exceeded, requires the drinking water system to notify the governing body of the local agency in which users of the drinking water reside (i.e. city council, board of directors, and county board of supervisors).

Water Conservation

Water is essential to our everyday lives. The City of Arcadia relies on local groundwater from the Main San Gabriel Basin and Raymond Basin. Since the beginning of the drought, groundwater level in the Main San Gabriel Basin has dropped over 57 feet and only recovered 10 feet to date. Although Governor Brown declared the drought emergency over in April 2017, local groundwater in the South Coast region is still recovering from the historic low, dated just last October.

Please continue to use water wisely over the summer and adhere to the watering schedule: from May 1 to October 31, only water on Tuesdays, Thursdays and Saturdays before 9:00 A.M. and after 6:00 P.M. During the winter from November 1 to April 30, only water on Tuesdays and Saturdays within the same time limitations.

Additionally, the following prohibitions on wasteful water use are permanent:

- No hose washing of sidewalks, walkways, driveways, or parking areas.
- No washing of motor vehicles, except where the hose is fitted with a shut-off nozzle.
- No water shall be used to clean, fill, or maintain levels in decorative fountains, unless part of a recirculating system.
- No lawn, landscape, or turf areas shall be watered in a wasteful manner creating runoff.
- No lawn, landscape, or turf areas shall be watered during and within 48 hours of measurable rainfall.
- No Arcadia water customer shall permit water to leak from any facilities on premises.
- No restaurant, hotel, café, cafeteria, bar, or other public place where food or beverage is served or offered for sale shall serve drinking water unless requested by the customer.
- No hotel or motel shall launder towels and linens of an occupied guestroom on a daily basis, unless requested by the guest.
- No watering of turf on public street medians.

Landscape Audits

Every day thousands of gallons of water are wasted through poorly functioning sprinklers and excess watering. Since the City is transitioning into a long-term conservation approach which prohibits wasteful water use, free irrigation audits are offered to Arcadia residents. The irrigation audits provide a careful evaluation of your irrigation system to identify water waste. To schedule a residential irrigation audit, call the City of Arcadia Public Works Services Department at 626-254-2720.

Around the Pool

In an effort to reduce water waste and improve water use efficiency, consider using a pool cover to save your pool water from evaporation. The City is curently offering rebates on newly purchased pool or spa covers. For more information, visit the City website at www.ArcadiaCA.gov or call the Public Works Services Department. Below are some key facts on pool covers and maintenance:

- Pool covers can prevent half of the water in your pool from evaporating over the course of a year (50-70 gallons per square foot annually).
- Pool covers reduce algae growth, as well as the need to add more pool chemicals.
- Pool covers conserve heat, helping you save on heating costs.
- Drain your pool only when necessary. If properly maintained, a pool should only need to be drained every few years.
- Check for cracks and leaks; a leaky pool can lose up to 100,000 gallons per year!
- Monitor your water bill and also:
  - Look for loose tiles or cracks in the shell of the pool
  - Look for soggy earth or uneven grass growth near the pool
  - Look for persistent water quality issues (algal growth shortly after treating water)
  - Notice if your covered pool loses more than 1/8 inch of water in 24 hours

What is a Water Quality Goal?

- **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 USEPA
- **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.
- **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.

What Contaminants may be Present in Sources of Drinking Water?

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.

- **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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Radioactive contaminants**, that can be naturally-occurring or be the result of oil and gas production and mining activities.
- **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 application and septic systems.

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 at 800-426-4791.

Are There any Precautions the Public Should Consider?

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. 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.

What is in My Drinking Water?

Your drinking water is regularly tested using DDW-approved methods to ensure its safety. The table in this report lists all the constituents detected in your drinking water that have Federal and State drinking water standards. Detected unregulated constituents and other constituents of interest are also included. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Nitrate

The maximum level of nitrate measured in the City of Arcadia's drinking water was 7.8 milligrams per liter (mg/l) in 2016. Although nitrate in your drinking water never exceeds the MCL of 10 mg/l, nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. 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 a 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 certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask for advice from your health care provider.

Lead in Tap Water

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 City of Arcadia is dedicated to 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 https://www.epa.gov/lead.

City of Arcadia 2016 Water Quality Table

Constituent and (units)	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	DLR	LOCAL GROUNDWATER Result (a)	LOCAL GROUNDWATER Range (Min-Max)	Typical Origins
PRIMARY DRINKING WATER STANDARDS - *Health-Related Standards*						
Microbiological						
Total Coliform **(b)**	5.0%	(0)	NA	2.3%	–	Naturally present in the environment
Disinfectant and Disinfection Byproducts (c)						
Total Trihalomethanes (TTHM) (µg/l)	80	NA	0.5	13.25	4 - 15	Byproduct of drinking water chlorination
Haloacetic acids (five) (HAA5) (µg/l)	60	NA	1-2	2.1	ND - 2.5	Byproduct of drinking water disinfection
Chlorine Residual (mg/l)	[4]	[4]	NA	0.71	0.2 - 1.6	Drinking water disinfectant
Organic Chemicals						
Tetrachloroethylene (PCE) (µg/l)	5	0.06	0.5	<0.5	ND - 3.1	Discharge from industrial activities
Trichloroethylene (TCE) (µg/l)	5	1.7	0.5	0.92	ND - 4.1	Discharge from industrial activities
Inorganic Chemicals						
Aluminum (mg/l)	1	0.6	0.05	<0.05	ND - 0.13	Erosion of natural deposits
Arsenic (µg/l)	10	0.004	2	<2	ND - 3.3	Erosion of natural deposits
Chromium, Hexavalent (µg/l)	10	0.02	1	3.6	ND - 9	Industrial discharge or erosion of natural deposits
Chromium, total (µg/l)	50	(100)	10	<10	ND - 11	Industrial discharge or erosion of natural deposits
Fluoride, Naturally-occuring (mg/l)	2	1	0.1	0.59	0.25 - 1.1	Erosion of natural deposits
Nitrate as N (mg/l)	10	10	0.4	3.3	0.4 - 7.8	Runoff and leaching from fertilizer use
Radioactivity (c)						
Gross Alpha Particle Activity (pCi/l)	15	(0)	3	<3	ND - 6.3	Erosion of natural deposits
Uranium (pCi/l)	20	0.43	1	2.9	ND - 5.3	Erosion of natural deposits
SECONDARY DRINKING WATER STANDARDS - *Aesthetic Standards, Not Health-Related*						
Aluminum (µg/l)	200	600	50	<50	ND - 130	Erosion of natural deposits
Chloride (mg/l)	500	NA	NA	21	7.4 - 30	Runoff/leaching from natural deposits
Copper (mg/l)	1	0.3	0.05	<0.05	ND - 0.076	Erosion of natural deposits
Foaming Agents (MBAS) (µg/l)	500	NA	NA	<50	ND - 77	Municipal and industrial waste discharges
Odor (threshold odor number)	3	NA	1	1	1	Runoff/leaching from natural deposits
Sulfate (mg/l)	500	NA	0.5	39	17 - 60	Runoff/leaching from natural deposits
Specific Conductance (µmho/cm)	1600	NA	NA	500	270 - 710	Substances that form ions in water
Total Dissolved Solids (mg/l)	1000	NA	NA	280	160 - 380	Runoff/leaching from natural deposits
Turbidity (NTU)	5	NA	0.1	<0.01	ND - 0.11	Runoff/leaching from natural deposits
Zinc (mg/l)	5	NA	0.05	<0.05	ND - 0.067	Runoff/leaching from natural deposits
UNREGULATED CONSTITUENTS OF INTEREST						
Boron (µg/l)	NL = 1	NA	0.1	0.17	ND - 0.38	Runoff/leaching from natural deposits
Hardness as CaCO3 (mg/l)	NA	NA	NA	180	33 - 320	Runoff/leaching from natural deposits
Sodium (mg/l)	NA	NA	NA	32	16 - 71	Runoff/leaching from natural deposits
UNREGULATED CONSTITUENTS REQUIRING MONITORING AT ENTRY POINTS INTO THE DISTRIBUTION SYSTEM						
1,4-Dioxane (µg/l)	NL = 1	NA	NA	<0.07	ND - 0.1	Industrial waste discharge
Chlorate (µg/l)	NL = 800	NA	NA	120	ND - 290	Byproduct of drinking water chlorination; industrial processes
Chromium, Hexavalent (µg/l) **(e)**	10	0.02	NA	4.5	0.47 - 11	Industrial discharge or erosion of natural deposits
Chromium, Total (µg/l) **(e)**	50	(100)	NA	4.8	0.51 - 12	Industrial discharge or erosion of natural deposits
Molybdenum, Total (µg/l)	NA	NA	NA	3.8	ND - 18	Runoff/leaching from natural deposits
Strontium, Total (µg/l)	NA	NA	NA	290	99 - 540	Runoff/leaching from natural deposits
Vanadium, Total (µg/l)	NL = 50	NA	NA	11	3.6 - 48	Runoff/leaching from natural deposits

LEAD AND COPPER TESTING AT RESIDENTIAL TAPS

Lead/Copper	Action Level (AL)	PHG	90th Percentile Value	Typical Origins
Copper (mg/l) **(f)**	1.3	0.3	0.39	Corrosion of household plumbing system
Lead (µg/l) **(f)**	15	0.2	ND	Corrosion of household plumbing system

UNREGULATED CONSTITUENTS REQUIRING MONITORING IN THE DISTRIBUTION SYSTEM

Chlorate (µg/l)	NL = 800	NA	NA	180	150 - 220	Byproduct of drinking water chlorination; industrial processes
Chromium, Hexavalent (µg/l) **(e)**	10	0.02	NA	4.3	3.2 - 5.9	Industrial discharge or erosion of natural deposits
Chromium, Total (µg/l) **(e)**	50	(100)	NA	4.1	3.5 - 4.6	Industrial discharge or erosion of natural deposits
Molybdenum, Total (µg/l)	NA	NA	NA	3	1.5 - 4.9	Runoff/leaching from natural deposits
Strontium, Total (µg/l)	NA	NA	NA	370	310 - 400	Runoff/leaching from natural deposits
Vanadium, Total (µg/l)	NL = 50	NA	NA	8.5	6.7 - 12	Runoff/leaching from natural deposits

Notes

mg/l = parts per million or milligrams per liter
µg/l = parts per billion or micrograms per liter
pCi/l = picoCuries per liter
µmho/cm = micromhos per centimeter
NTU = Nephelometric Turbidity Units

AL = Action Level
DLR = Detection Limit for the Purpose of Reporting
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
MRDL = Maximum Residual Disinfectant Level
MRDLG = Maximum Residual Disinfectant Level Goal

ND = Not Detected at DLR
NA = No Applicable Limit
NL = Notification Level
PHG = Public Health Goal
< = Detected but average is below the DLR

(a) The results reported in the table are average concentrations of the constituents detected in your drinking water during year 2016 or from the most recent tests done in compliance with regulations (2009-2016), except for TTHM, HAA5, lead and copper which are described below.

(b) The result is the highest percentage of positive samples collected in a month during 2016. Coliforms are bacteria used as an indicator that if present, indicates other potentially harmful organisms may be present. According to the State Water Resources Control Board, Division of Drinking Water (DDW), no more than 5.0% of the monthly samples may be Total Coliform-positive. Total Coliforms and Fecal/E. Coli were detected in one sample collected in the distribution system in January 2016; and Total Coliforms were detected in two samples collected in the distribution sysetm in February 2016. However, all follow-up confirmation samples were negative for Total Coliforms and Fecal/E. Coli bacteria. A routine sample and a repeat sample that are Total Coliform positive and where one of these is also Fecal/E. Coli positive constitutes an MCL violation. Therefore, the MCL was not violated in 2016.

(c) Four (4) locations in the distribution system are tested quarterly for disinfection byproducts. The highest locational running annual averages for TTHM and HAA5 are reported as "Result." The maximum and minimum of the individual results for TTHM and HAA5 are reported as "Range." Twenty (20) locations are tested weekly for chlorine residual.

(d) Not all sources were sampled for radioactivity in 2016; sources were sampled between 2010 to 2016. The most recent results are included.

(e) Hexavalent chromium and total chromium were included as part of the unregulated constituents requiring monitoring.

(f) Thirty (30) residences were sampled in June 2016 and July 2016. Concentrations were measured at the tap. Copper was detected at twenty-nine (29) locations; none exceeded the copper Action Level. Lead was not detected at any of the locations. The next round of lead and copper samples will be collected in 2019.

City of Arcadia
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Drinking Water Source Assessment

In accordance with the Federal Safe Drinking Water Act, an assessment of the drinking water sources for the City of Arcadia was completed in December 2002. The purpose of the drinking water source assessment is to promote source water protection by identifying types of activities in the proximity of the drinking water sources which could pose a threat to the water quality. The assessment concluded that the City of Arcadia's sources are considered vulnerable to the following activities or facilities associated with contaminants detected in the water supply: gasoline stations, automobile repair shops, chemical/petroleum pipelines, utility stations, electrical/electronic manufacturing, waste dumps/landfills, high density housing and dry cleaners. In addition, the sources are considered most vulnerable to the following activities or facilities not associated with contaminants detected in the water supply: sewer collection systems, car washes, transportation corridors, junk/scrap/salvage yards and above or below ground storage tanks. A copy of the complete drinking water source assessment is available at the City of Arcadia, Public Works Services Department located at 11800 Goldring Road, in Arcadia. You may request a summary of the assessment to be sent to you by contacting the City of Arcadia, Public Works Services Department at 626-254-2720.

Flouride in Drinking Water

Our local groundwater is not supplemented with fluoride. Fluoride levels in drinking water are limited under California state regulations at a maximum dosage of 2 parts per million (ppm).

Groundwater Facts

Groundwater is the result of precipitation that seeps down through the soil until it reaches rock material that traps it and becomes saturated with water, creating an underground basin. Water in the ground is stored in the spaces between rock particles. Groundwater slowly flows underground, generally at a downward angle, and may eventually seep into streams, lakes, and oceans.

About 30 percent of California's total annual water supply comes from groundwater in normal years, and up to 60 percent in drought years. The City of Arcadia relies almost exclusively on groundwater pumped from the Main San Gabriel and Raymond Basins.

Groundwater is a fragile resource that can be easily polluted, is very slow moving, difficult to monitor, hard to clean, and slow to recharge. Protecting Arcadia's drinking water source is everyone's responsibility. You can help protect our water by eliminating/reducing excess use of fertilizers and pesticides, picking up after your pets, conserving water and using it efficiently; and disposing of chemicals properly.

Improving on Utility

The City of Arcadia's drinking water supply comes from groundwater in the Main San Gabriel Basin and the Raymond Basin. Wells pump water from these basins to the City's water distribution system. Improving and maintaining efficiency in the City's distribution system is vital to the City's drinking water system and ensures a reliable watery supply.

Each year, City staff work on various projects to maintain and replace the City's drinking water infrastructure. In 2016, the City replaced mainline pipes and valves at Camino Real Avenue between Wesley Lane and Second Avenue. Additionally, a 30-inch main line valve replacement project was completed on Santa Anita Avenue.

Questions?

For more information or questions regarding this report, please contact Mr. Michael Thai at the City of Arcadia, Public Works Services Department at 626-254-2722.

Este informe contiene información muy importante sobre su agua potable. Para mas información ó traducción, favor de contactar the City of Arcadia, Public Works Services Department. Telefono: 626-254-2720.

此份有關你的食水報告,內有重要資料和訊息,請找
他人為你翻譯及解釋清楚。

City of Arcadia Public Works Services Department
626-254-2720