TGW 2020 Newsletter & 2019 Consumer Confidence Report

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ACCOMPLISHMENTS

It's been a busy year for Trout Gulch Mutual Water Co. as we closed the $2.9M USDA project on budget!! The remaining contingency money of $143K was applied to the back end of the 40-year loan. The USDA accomplishments are as follows:

New Treatment & Power Roof

- ✓ Reimbursed Well #3 repairs of new pump, motor & drop pipe
- ✓ Installed Earthquake Flex Coupler on Meadow Ranch Tank
- ✓ Upgraded Treatment Tank including a Level Indicator.
- ✓ New Treatment & Power Structure at Meadow Yard
- ✓ Purchased redundant Treatment Pump
- ✓ Installed new Fencing for Meadow Ranch Yard
- ✓ Existing Treatment Pump repaired
- ✓ Co-shared Skyward Drive road sealing after improvements
- ✓ Paved Norman Tank Yard
- ✓ Purchased Solar Battery backup SCADA kits
- ✓ Purchased Buried Pipe Detection equipment
- ✓ Purchased larger Generator to run all 3 Wells
- ✓ Purchased new Water Sampling Station

INSIDE THIS ISSUE

New Large Generator!!

GENERAL MANAGER'S REPORT

Patricia Newby

TGW has come along way since the purchase of the company!

New Member: TGW has a new member, we are now at 186!!

Personell: In addition to adding a General Manager this year, TGW has contracted with a backup system operator company Weber-Hayes & Assoc. (WHA). They will be able to fill in when our regular operator is not available and plan to train quarterly to keep up to date on our system.

Operations: Our new Well #4 failed prematurely. TGW had to replace a defective pump which fortunately was under warranty.
TGW has established a new Maintenance Plan where among many other things, Operations successfully completed the flushing of all hydrants and system blow offs.

Power outages: As you are well aware, we have had quite a few power outages; some planned and some unplanned. TGW started the year during the planned power outages with our regular generator that can run one well so we were able to ensure our tanks were full. At the end of the USDA loan we were able to purchase a larger generator that will run up to 3 wells. This will be a big help in case there is a wild fire, but lets keep our fingers crossed that we don't have to use it for that!

Covid-19: Due to the flexibility of the independent contractor schedules, TGW was able to conduct business as usual. TGW has a comprehensive SCADA system that allows us to view and control the wells, pumps and tanks remotely. We were able to social distance at the yard and perform most administrative work off site.

IN PROCESS & CHALLENGES

- AB5 compliance: This year California Assembly Bill 5 (AB5) went into effect. The court held that most workers are employees, ought to be classified as such, and the burden of proof for classifying individuals as independent contractors belongs to the hiring entity. TGW has investigated the matter thoroughly and will be making employment offers to our independent contractors.
- USDA Loan in effect-need to raise rates:
  After a tremendous amount of effort, substantial expense, and an incredibly good USDA loan, TGW's water system has been largely brought up to the current water system standards. The transition to a new infrastructure was a necessary expense that will save the company money in the long run, nonetheless, TGW is going to have to raise rates in order to pay off the loan and spread these increases over four years.

  These increases will be substantial, reflecting both today's cost for replacing infrastructure, and the spread-out nature of our membership, where the distance between houses requires about more than three times as much pipe per household as is required to support a suburban city neighborhood. Along with new infrastructure, requires more system maintenance.

  Unfortunately, TGW was unable to secure an easement for Solar to offset the PGE costs as hoped with the remaining loan funds.

  Below is the rate increase scheduled for the Fiscal Year 2020-2021:

Water Rate Increases

SERVICE CHARGE		
METER SIZE	5/8 – 1 inch	2 inch
CURRENT	$186.14e $188.14	$196.14e $198.14
2020/2021	$196.64e $198.64	$206.64e $208.64

WATER USAGE			
	TIERS	UNITS	AMOUNT
CURRENT	1 2 3	0-14 14.1-30 30.1+	5.50 7.00 9.00
2020/2021	1 2 3	0-14 14.1-30 30.1+	$6.00 $7.50 $9.50

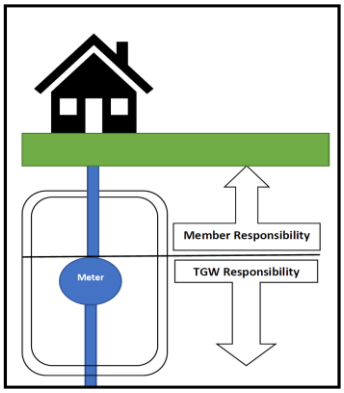
Effective 7/1/20 billing Sept 2020

FY2020/2021 OUTLOOK

Focusing on System Operations & Maintenance

MEMBER REMINDERS

- Member responsibility is on the property side of the meter .
- Check your irrigation for leaks



How can I get involved?

- Trout Gulch Mutual Water Company (TGW) is a non-profit, member-owned and operated mutual benefit corporation in business solely to provide its members with water-related services including safe drinking water, irrigation, fire protection and more.

- All members are encouraged to stay current with TGW information by frequently visiting our website at www.troutgulchwater.org. In addition, members are welcome to assist in necessary work to operate and maintain the company by seeking a position on the voluntary Board of Directors. There are many tasks necessary to keep the water flowing. Please participate; many hands make light work for all. TGW Board of Directors meets monthly. All members are encouraged to attend. Meeting schedules and locations are posted on the web at www.troutgulchwater.org.

- The Board of Directors meets on the third Thursday of each month at the local fire station on Soquel Road near Mar Vista Elementary School. All members are welcome (and encouraged) to come. Meetings begin at 6:30 pm. A Typical meeting will last 2 hours. Currently, in the Covid-19 era, TGW is holding virtual meetings by Zoom. Members are welcome to join. Please seek information at the company website.

- TGW provides information regarding water quality and other important water related data in this annual report and on the web at https //www.troutgulchwater.org. Information on the web is continually updated as changes occur. Visit often to remain informed with the latest developments and Company status.

WATER QUALITY
2019 CONSUMER CONFIDENCE REPORT

By Chris Klein

Is My Water Safe?

TGW is pleased to present the 2019 Annual Water Quality Report (Consumer Confidence Report or CCR) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's (2019) water quality. We are committed to providing you with information because informed customers are our best allies.

A Consumer Confidence Reports is an annual water quality report or a drinking water quality report, provides information on your local drinking water quality.

Do I need to take special precautions?

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. EPA/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 Water Drinking Hotline (800-426-4791). TGW water is treated with chlorine (sodium hypocrite) to prevent and kill bacteria that can occasionally contaminate infrastructure when repairs or maintenance work occurs in the distribution system. Along with the positive effects of disinfection, some unpleasant side effects may occur. You may have detected the odor of chlorine and in some cases, slight discoloration as chlorine oxidizes the manganese in the water causing a precipitate that tints the water slightly brown. Water is tested regularly and meets all identified safety standards. Monthly reports are sent to the Santa Cruz County Department of Environmental Health as required by law.

Where does my water come from?

In 2019, TGW produced and distributed water solely from deep-water wells. The groundwater in the basin below the TGW service area is largely the Purisima Aquifer. Water in the aquifers serving TGW has remained stable over many years. Inherently, groundwater has less potential for contamination than surface water sources.

No contamination of TGW source water was identified in 2019.

Water Sources:

TGW operates 4 deep-water wells (defined below) that comprise the source water served to the membership through the distribution system, a matrix of approximately 5 miles of pipes. With the completion of the USDA Project (2017 & 2019) TGW infrastructure is largely renewed and improved. Expectations are for decades of good use from these upgrades. In addition to four wells, TGW has a connection to Soquel Creek Water District (called an Intertie) to use in the event of an emergency should the need for additional water arise.

Where does my water come from? cont.

- Well #1 - Norman Well (Circa 1932), Active but in standby mode. This well was not used for distribution in 2019. This old well was in use serving the Norman Service Area when TGW was established on July 1, 2008. Water produced is of good quality when analyzed for safe drinking standards but manganese, a secondary standard, is extremely high (approximately 20 times higher than maximum allowed). Well #1 would require further treatment and filtration before it could be used as a routine water source again. It was placed in standby mode in 2009 and has not been actively used since. This well remains a backup for emergency use and fire protection.
- Well #2 - Old Meadow Ranch Well (1961). Active and in use periodically. This well produces good quality water that meets or exceeds regulatory requirements. However, due to the age and type of the well casing it now provides a low volume output. Well #2 has been upgraded with non-corrosive drop-pipe and an efficient electric motor, pump, and controller combination in 2012. Because the water produced is very low in manganese (lab results often show non-delectable) it is used to blend with water from Well #3 and Well #4, as needed, to reduce the overall concentration of manganese (Mn) in the water distributed. Expectations are that this well will serve many more years in terms of the mechanical aspects. However, the well casing is nearing the end of its useful life expectancy. Should the well casing fail, TGW will likely abandon this well.
- Well #3 - Newer Meadow Ranch Well (2009). Active and in use daily. This well produces good quality water in high volume. At times, water produced exceeds the Mn MCL of 50 ppb. Water from this well may be blended with production from Well #2 to lower the total Mn delivered. During 2018, Well #3 was upgraded with new stainless-steel drop pipe and new motor and pump. This well and its twin, Well #4 are the primary source of water for all TGW connections.
- Well #4 - Meadow Ranch Well 2018. This well is a product of the USDA Project. Well #4 is virtually a twin to Well #3 and produces similar quantities and quality water. With the addition of this newest well, TGW has achieved substantial redundancy of its primary water supply. Having redundant primary source wells allows TGW the freedom from having to rely on neighboring Soquel Creek Water District for backup water supply in times of repairs or failures of one of our two primary source wells.
- SCWD Intertie – A Soquel Creek Water District to TGW water connection 2009. In place primarily as an emergency backup and for fire protection if needed. The Intertie was not required for use in 2019 to meet the water demands of TGW. The Intertie is tested annually to assure water safety standards are achieved.

Source water assessment and its availability

TGW derives its water largely from the Purisima Aquifer. This aquifer is one of two aquifers in the Mid-County area of Santa Cruz County. The other is the Aromas Redsands Aquifer. The Aromas Aquifer is inherently much lower in manganese content. TGW believes Well #2 may in fact draw some of its water production from this aquifer, explaining why manganese is at especially low levels. All of our water is local and underground. That's right: 100% of the water in the mid-Santa Cruz county region comes from rainfall that percolates under the ground and eventually becomes groundwater. The Mid-County Groundwater Agency (MGA) was formed years ago and is tasked with providing a sustainability plan for the entire Mid-County Santa Cruz region. TGW is one of many who depend upon the water from these two aquifers. Much information is available on the MGA website (https://www.midcountygroundwater.org). Members are encouraged to become educated regarding where our water comes from and aware of sustainability plans for the future. TGW maintains active involvement in this agency and attends scheduled meetings ongoingly.

Why are there contaminants in my drinking water?

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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, which 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; organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Disinfection Information

Ground water from multiple deep-water wells is the primary source of water distributed to TGW member connections. Distributed water is disinfected as it enters the distribution system. Water samples are routinely analyzed to assure drinking water safety standards are achieved..

TGW uses an NSF approved chlorine, Multi-Chlor, a 12.5% solution of Sodium Hypochlorite. Chlorine levels are monitored closely to ensure they are within safe limits provided by the Safe Drinking Water Standards. TGW water is sampled and laboratory tested monthly. No contamination issues have occurred during 2019.

Description of Water Treatment Process

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Additional information for 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. Trout Gulch Mutual Water is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Additional Information for Arsenic

While your drinking water meets EPA's standard for arsenic, it may contain low levels of arsenic. TGW lab results from 2019 show arsenic non-detectable.

EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which

is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no comtaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below, please contact us so that we can discuss the issue, and if needed, survey your connection and asist you in isolating it if that is necessary.

- Boiler/Radiant heater (water hearters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs no included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

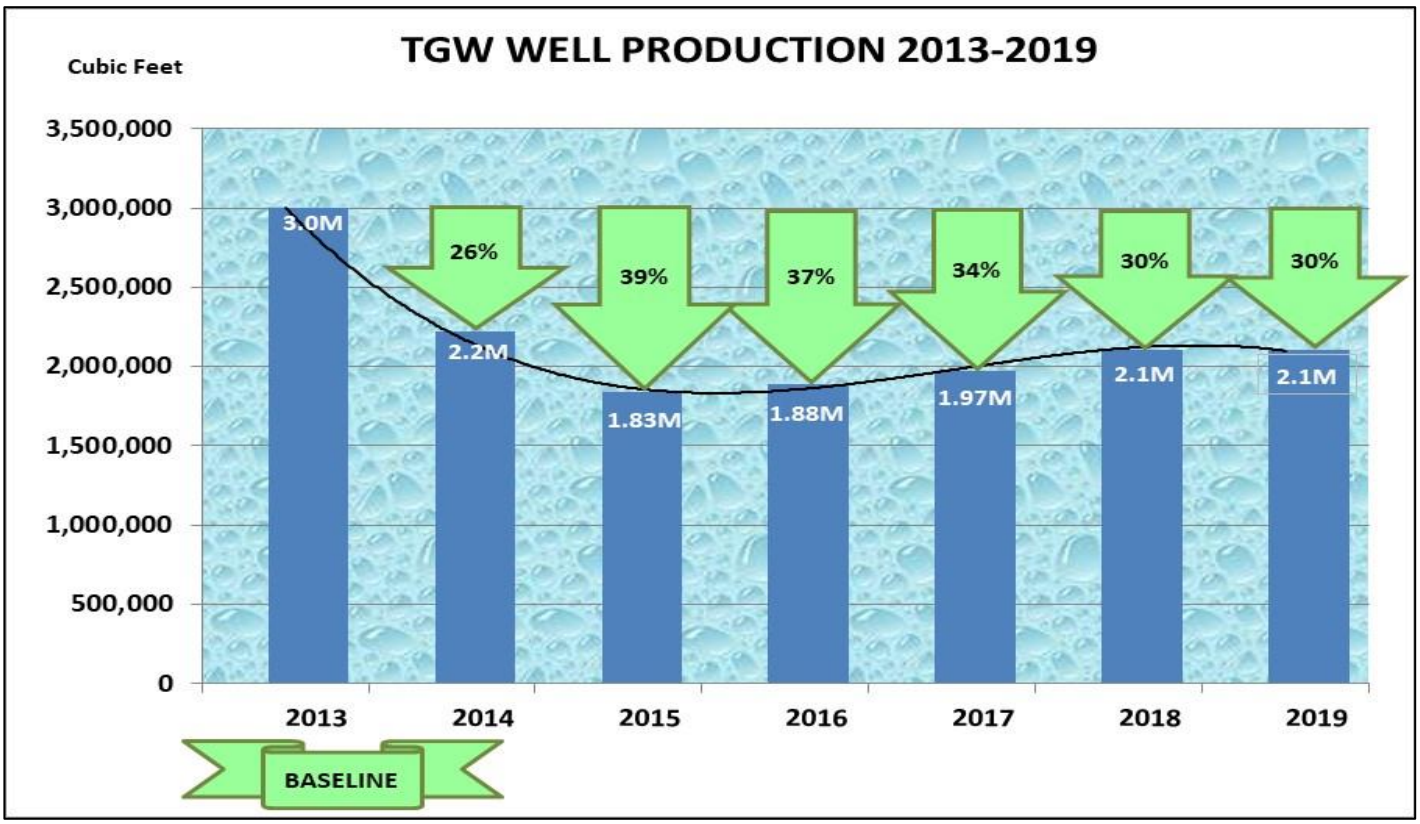
Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community: Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider staring one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street draing reminding people "Dump No Water – Drains to River" or Protect Your Water".

Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

In 2019 TGW Well Production stayed at 30% reduction from the 2013 Baseline per the below chart.



Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions back of the report.

In 2019, TGW sampled Primary Well #3 for Volitle Organic Contaminants, Perchlorate and Conductance. Blending Well #2 was aslo tested in 2019. For information regarding Well #2 testing results contract Chris klein at tgw.operations@gmail.com In 2018 Well #4 had complete Title 22 testing. In this report, 2018 test data represents Well #4 except where specified.

Unit Descriptions	
Term	**Definition**
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
ppt	ppt: parts per trillion, or nanograms per liter
MFL	MFL: million fibers per liter, used to measure asbestos concentration
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
positive samples	positive samples/yr: The number of positive samples taken that year
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required but recommended.

Important Drinking Water Definitions	
Term	**Definition**
MCLG	MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

2019 Volatile Organic Contaminants Lab Results

BSK ASSOCIATES

A9D2575

General- State Form Reporting

9040542 Trout Gulch Mutual Water Company

Certificate of Analysis

Sample ID: A9D2575-03
Sampled By: Chris Klein
Sample Description: Well #3 (4400502-004)

Sample Date - Time: 04/16/19 - 16:38
Matrix: Drinking Water
Sample Type: Grab

BSK Associates Laboratory Fresno

General Chemistry

Analyte	Method	Result	RL	Units	RL Mult	MCL	Batch	Prepared	Analyzed	Qual
Conductivity @ 25C	SM 2510B	**480**	1.0	umhos/cm	1		A905415	04/22/19	04/22/19	
Perchlorate	EPA 314.0	ND	2.0	ug/L	1	6	A905567	04/24/19	04/24/19	

Organics

Analyte	Method	Result	RL	Units	RL Mult	MCL	Batch	Prepared	Analyzed	Qual
Volatile Organics by GC-MS										
1,1,1,2-Tetrachloroethane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
1,1,1-Trichloroethane	EPA 524.2	ND	0.50	ug/L	1	200	A905349	04/19/19	04/19/19	
1,1,2,2-Tetrachloroethane	EPA 524.2	ND	0.50	ug/L	1	1	A905349	04/19/19	04/19/19	
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 524.2	ND	10	ug/L	1	1200	A905349	04/19/19	04/19/19	
1,1,2-Trichloroethane	EPA 524.2	ND	0.50	ug/L	1	5	A905349	04/19/19	04/19/19	
1,1-Dichloroethane	EPA 524.2	ND	0.50	ug/L	1	5	A905349	04/19/19	04/19/19	
1,1-Dichloroethene	EPA 524.2	ND	0.50	ug/L	1	6	A905349	04/19/19	04/19/19	
1,1-Dichloropropene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
1,2,3-Trichlorobenzene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
1,2,4-Trichlorobenzene	EPA 524.2	ND	0.50	ug/L	1	5	A905349	04/19/19	04/19/19	
1,2,4-Trimethylbenzene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
1,2-Dichlorobenzene	EPA 524.2	ND	0.50	ug/L	1	600	A905349	04/19/19	04/19/19	
1,2-Dichloroethane	EPA 524.2	ND	0.50	ug/L	1	0.5	A905349	04/19/19	04/19/19	
1,2-Dichloropropane	EPA 524.2	ND	0.50	ug/L	1	5	A905349	04/19/19	04/19/19	
1,3,5-Trimethylbenzene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
1,3-Dichlorobenzene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
1,3-Dichloropropane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
1,4-Dichlorobenzene	EPA 524.2	ND	0.50	ug/L	1	5	A905349	04/19/19	04/19/19	
2,2-Dichloropropane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
2-Butanone	EPA 524.2	ND	5.0	ug/L	1		A905349	04/19/19	04/19/19	
2-Chlorotoluene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
2-Hexanone	EPA 524.2	ND	10	ug/L	1		A905349	04/19/19	04/19/19	
4-Chlorotoluene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
4-Methyl-2-pentanone	EPA 524.2	ND	5.0	ug/L	1		A905349	04/19/19	04/19/19	
Acetone	EPA 524.2	ND	10	ug/L	1		A905349	04/19/19	04/19/19	
Benzene	EPA 524.2	ND	0.50	ug/L	1	1	A905349	04/19/19	04/19/19	
Bromobenzene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Bromochloromethane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Bromodichloromethane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Bromoform	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Bromomethane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Carbon Tetrachloride	EPA 524.2	ND	0.50	ug/L	1	0.5	A905349	04/19/19	04/19/19	
Chlorobenzene	EPA 524.2	ND	0.50	ug/L	1	70	A905349	04/19/19	04/19/19	
Chloroethane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Chloroform	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Chloromethane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

A9D2575 FINAL 05012019 1513

BSK ASSOCIATES

A9D2575

General- State Form Reporting

9040542 Trout Gulch Mutual Water Company

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Organics

Analyte	Method	Result	RL	Units	RL Mult	MCL	Batch	Prepared	Analyzed	Qual
Volatile Organics by GC-MS										
cis-1,2-Dichloroethene	EPA 524.2	ND	0.50	ug/L	1	6	A905349	04/19/19	04/19/19	
cis-1,3-Dichloropropene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Dibromochloromethane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Dibromomethane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Dichlorodifluoromethane	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Dichloromethane	EPA 524.2	ND	0.50	ug/L	1	5	A905349	04/19/19	04/19/19	
Di-isopropyl ether (DIPE)	EPA 524.2	ND	3.0	ug/L	1		A905349	04/19/19	04/19/19	
Ethyl tert-Butyl Ether (ETBE)	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Ethylbenzene	EPA 524.2	ND	0.50	ug/L	1	300	A905349	04/19/19	04/19/19	
Hexachlorobutadiene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Isopropylbenzene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
m,p-Xylenes	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Methyl-t-butyl ether	EPA 524.2	ND	0.50	ug/L	1	13	A905349	04/19/19	04/19/19	
Naphthalene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
n-Butylbenzene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
n-Propylbenzene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
o-Xylene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
p-Isopropyltoluene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
sec-Butylbenzene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Styrene	EPA 524.2	ND	0.50	ug/L	1	100	A905349	04/19/19	04/19/19	
tert-Amyl Methyl Ether (TAME)	EPA 524.2	ND	3.0	ug/L	1		A905349	04/19/19	04/19/19	
tert-Butyl alcohol (TBA)	EPA 524.2	ND	2.0	ug/L	1		A905349	04/19/19	04/19/19	
tert-Butylbenzene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Tetrachloroethene (PCE)	EPA 524.2	ND	0.50	ug/L	1	5	A905349	04/19/19	04/19/19	
Toluene	EPA 524.2	ND	0.50	ug/L	1	150	A905349	04/19/19	04/19/19	
trans-1,2-Dichloroethene	EPA 524.2	ND	0.50	ug/L	1	10	A905349	04/19/19	04/19/19	
trans-1,3-Dichloropropene	EPA 524.2	ND	0.50	ug/L	1		A905349	04/19/19	04/19/19	
Trichloroethene (TCE)	EPA 524.2	ND	0.50	ug/L	1	5	A905349	04/19/19	04/19/19	
Trichlorofluoromethane	EPA 524.2	ND	5.0	ug/L	1	150	A905349	04/19/19	04/19/19	
Vinyl Chloride	EPA 524.2	ND	0.50	ug/L	1	0.5	A905349	04/19/19	04/19/19	
Surrogate: 1,2-Dichlorobenzene-d4	EPA 524.2	87 %	*Acceptable range: 70-130 %*							
Surrogate: Bromofluorobenzene	EPA 524.2	94 %	*Acceptable range: 70-130 %*							
Total 1,3-Dichloropropene		ND	0.50	ug/L		0.5				
Total Trihalomethanes		ND	0.50	ug/L		80				
Total Xylenes, EPA 524.2		ND	0.50	ug/L		1750				

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

2019 Nitrate, Nitrite, Arsenic Lab Results

ANALYTICAL CHEMISTS
and
BACTERIOLOGISTS
Approved by State of California

SOIL CONTROL LAB

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Trout Gulch Water System
90 Victoria Lane
Aptos, CA 95003
Attn: Chris Klein

Work Order #: 9040535
Reporting Date: May 2, 2019

Date Received: April 16, 2019
Project # / Name: None / None
Water System #: 4400502 TROUT GULCH MUTUAL WATER
Sample Identification: Well 3, sampled 4/16/2019 11:51:00AM
Sampler Name / Co.: Chris Klein / Trout Gulch Water
Matrix: Drinking Water
Laboratory #: 9040535-03

	Results	Units	RL	State Drinking Water Limits [1]	Analysis Method	Date Analyzed	Flags
Nitrate as N	ND	mg/L	0.10	10	EPA 300.0	04/17/19	
Nitrate+Nitrite as N	ND	mg/L	0.10	10	EPA 300.0	04/17/19	
Arsenic	ND	ug/L	2.0	10	EPA 200.8	04/30/19	
Nitrite as N	ND	mg/L	0.10	1	EPA 300.0	04/17/19	

RL - are levels down to which we can quantify with reliability, a result below this level is reported as "ND" for Not Detected.
State Drinking Water Limits[1] - as listed by California Administrative Code, Title 22.
* - a * in the left hand margin of the report means that particular constituent is above the California Drinking Water Limits.

cc. EHS

Mike Galloway

2019 Microbiological Contaminants

TGW samples for Fecal coliform/E.coli & Coliform monthly at 2 sample sites

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range		Violation	Typical Source
				Low	High		
Fecal coliform/E. coli - in the distribution system (positive samples)	0	1	0	NA	NA	No	Human and animal fecal waste
A violation occurs when a routine sample and a repeat sample, in any given month, are total coliform positive, and one is also fecal coliform or E. coli positive.							
Total Coliform (positive samples/month)	0	1	0	NA	NA	No	Naturally present in the environment
Sample plan changed in 2019 for improved environment sample locations within the system.							

2019-20 Bacteriological Stoplight Chart

TGW BACTERIALOGICAL STOP LIGHT CHART

TEST	ECOLI	COLIFORM	ECOLI	COLIFORM
MONTH	121 VICTORIA		220 BAKER	
JANUARY 2019	PASS	PASS	PASS	PASS
FEBRUARY	PASS	PASS	PASS	PASS
MARCH	PASS	PASS	PASS	PASS
APRIL	PASS	PASS	PASS	FAILED
APRIL RETEST	PASS	PASS	PASS	PASS
MAY	PASS	PASS	PASS	PASS
NEW SITES	920 TROUT GUCH		115 NORMAN	
MAY 2019	PASS	PASS	PASS	PASS
JUNE	PASS	PASS	PASS	PASS
JULY	PASS	PASS	PASS	PASS
AUGUST	PASS	PASS	PASS	PASS
SEPTEMBER	PASS	PASS	PASS	PASS
OCTOBER	PASS	PASS	PASS	PASS
NOVEMBER	PASS	PASS	PASS	PASS
DECEMBER	PASS	PASS	PASS	PASS
JANUARY 2020	PASS	PASS	PASS	PASS

Prepared by: Patricia Newby

2019 Secondary Contaminants -Manganese

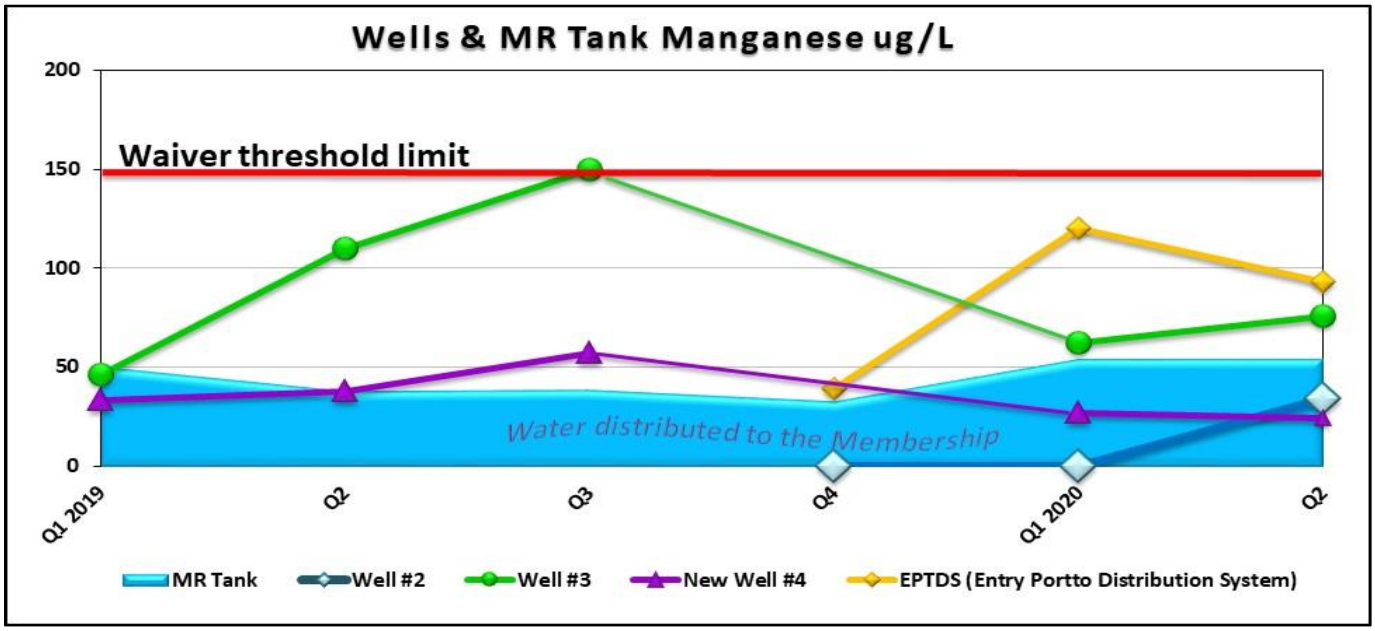
Variance and Exemptions

TGW has petitioned for and received a waiver of the Manganese rule from the State of California. The Manganese (Mn) Maximum Contaminate Level (MCL) is set at 50 parts per billion (ppb). With the approval of the TGW membership water distributed may be as high as 150 ppb. TGW continues to monitor Mn levels at least quarterly. Results have confirmed water distributed is consistently below 150 ppb. TGW continues to monitor Mn levels at least quarterly. Results have confirmed water distributed is consistently below 150 ppb.

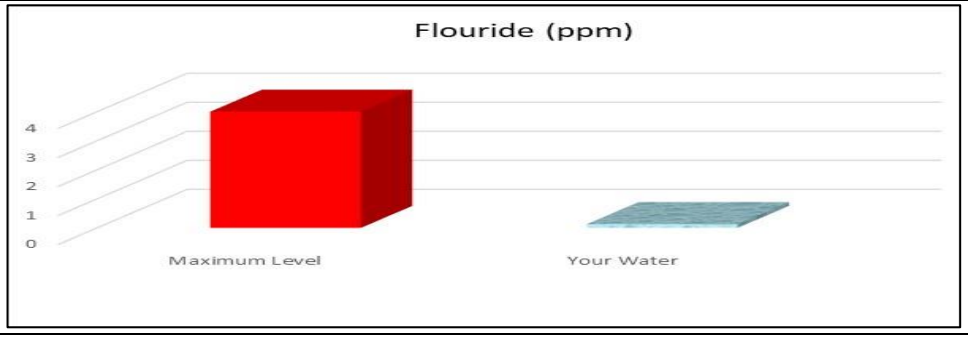
TGW is operating under a 9-year waiver issued on March 28, 2013, by the Santa Cruz County Environmental Health Service. All monitoring data is shared with the SCCEHS as well as any changes in source water or infrastructure that may affect resulting levels in distributed water. TGW samples all source wells and the

primary supply tank quarterly. Below is the TGW Manganese chart. For the latest Manganese levels, go to www.troutgulchwater.org

TGW MANGANESE CHART



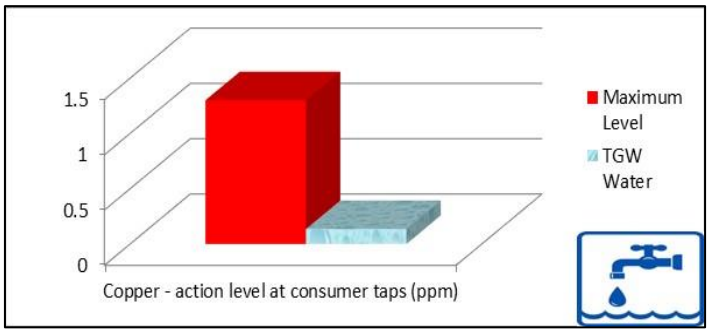
2018 Inorganic Contaminants								
Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range Low	Range High	Sample Date	Violation	Typical Source
Fluoride (ppm)	4	4	.13	NA	.13	2018	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. Well #3 showed Non-Detect for Fluoride. Only Well #2 & #4 showed listed amounts of Fluoride.

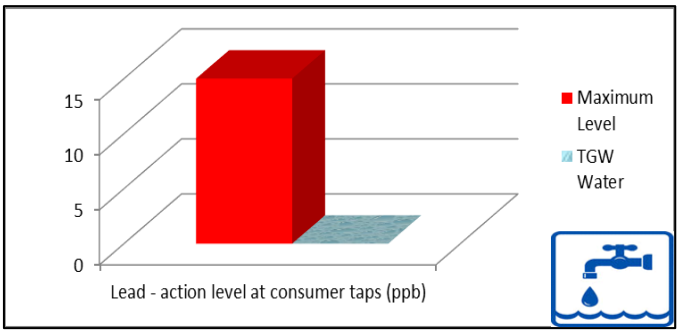


2018 Inorganic Contaminants at Consumer Tap							
Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Copper - action level at consumer taps (ppm)	1.3	1.3	.00135	2018	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

2018 Inorganic Contaminants at Consumer Tap

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Lead - action level at consumer taps (ppb)	0	15	0	2018	0	No	Corrosion of household plumbing systems; Erosion of natural deposits





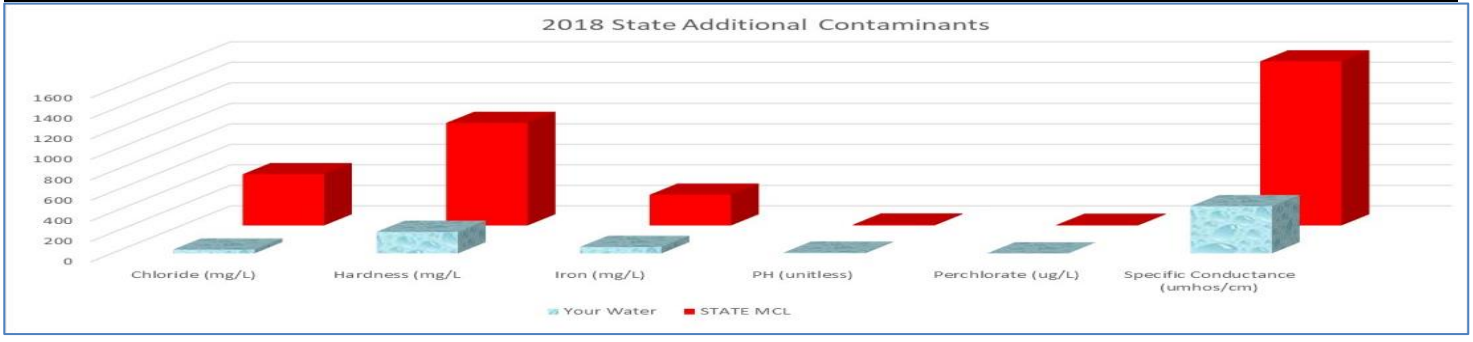
2018 Radioactive Contaminants

Alpha Emitters (pCi/L)	0	15	.413	NA	NA	2018	Erosion of Natural Deposits

2018 Additional Contaminants

In an effort to insure the safest water possible the State has required us to monitor some contaminants not required by Federal regulations. Of those contaminants only the ones listed below were found in your water. All additional contaminants tested in 2018.

Contaminants	State MCL	Your Water	Violation	Explanation and Comment
Chloride	500 mg/L	37 mg/L	No	Leaching from natural deposits
Hardness	1000 mg/L	210 mg/L	No	Sum of the polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring
Iron	300 mg/L	63 mg/L	No	Leaching from natural deposits
PH (unitless)	8.5	7.6	No	A measure of the acidity or alkalinity
Perchlorate	6 ug/L	0 ug/L	No	
Specific Conductance	1600 umhos/cm	460 umhos/cm	No	



2018 Undetected Contaminants

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Violation	Typical Source
1,2-Dichloroethane (ppb)	0	5	ND	No	Discharge from industrial chemical factories
2,4,5-TP (Silvex) (ppb)	50	50	ND	No	Residue of banned herbicide
2,4-D (ppb)	70	70	ND	No	Runoff from herbicide used on row crops
Antimony (ppb)	6	6	ND	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Arsenic (ppb)	0	10	ND	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Asbestos (MFL)	7	7	ND	No	Decay of asbestos cement water mains; Erosion of natural deposits
Barium (ppm)	2	2	ND	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	4	4	ND	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	5	5	ND	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
Chlordane (ppb)	0	2	ND	No	Residue of banned termiticide
Chromium (ppb)	100	100	ND	No	Discharge from steel and pulp mills; Erosion of natural deposits
Copper - source water (ppm)	NA		ND	No	Corrosion of household plumbing systems; Erosion of natural deposits
Cyanide (ppb)	200	200	ND	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Dalapon (ppb)	200	200	ND	No	Runoff from herbicide used on rights of way
Dibromochloropropane (DBCP) (ppt)	0	200	ND	No	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Endrin (ppb)	2	2	ND	No	Residue of banned insecticide
Heptachlor (ppt)	0	400	ND	No	Residue of banned pesticide
Hexachlorobenzene (ppb)	0	1	ND	No	Discharge from metal refineries and agricultural chemical factories
Lead - source water (ppm)	NA		ND	No	Corrosion of household plumbing systems; Erosion of natural deposits
Mercury (Inorganic) (ppm)	2	2	ND	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Methoxychlor (ppb)	40	40	ND	No	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Nitrate [measured as Nitrogen] (ppm)	10	10	ND	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

2018 Undetected Contaminants

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Violation	Typical Source
PCBs [Polychlorinated biphenyls] (ppt)	0	500	ND	No	Runoff from landfills; Discharge of waste chemicals
Pentachlorophenol (ppb)	0	1	ND	No	Discharge from wood preserving factories
Picloram (ppb)	500	500	ND	No	Herbicide runoff
Selenium (ppb)	50	50	ND	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Toxaphene (ppb)	0	3	ND	No	Runoff/leaching from insecticide used on cotton and cattle

For more information about the CCR Report, please contact:

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