2018 Consumer Confidence Report

Water System Name: **Best Road Mutual Water Company** Report Date: June 20, 2019

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2018 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Best Road Mutual Water Company a (925) 437-8831 para asistirlo en español.

这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 Best Road Mutual Water Company

以获得中文的帮助: 975 Maranatha Drive, Hollister, CA 95023 (925) 437-8831

Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Best Road Mutual Water Company, 975 Maranatha Drive, Hollister, CA 95023 o tumawag sa (925) 437-8831 para matulungan sa wikang Tagalog.

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Best Road Mutual Water Company tại (925) 437-8831 để được hỗ trợ giúp bằng tiếng Việt.

Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Best Road Mutual Water Company ntawm (925) 437-8831 rau kev pab hauv lus Askiv.

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Type of water source(s) in use: Groundwater	
Name & general location of source(s): Wells 1 and 2 are located on John Smith Fairview Rd.	Road approximately 1 mile from
Drinking Water Source Assessment information: See attached; dated August 20	002 (Well #1 & #2)
Time and place of regularly scheduled board meetings for public participation: of every month at 7 pm. See the website for more nformation (www.brmwc.com)	Monthly meetings are the 2 nd Thursday
For more information, contact: Julian Rogers	Phone: (925) 437-8831

TERMS USED IN THIS REPORT

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 U.S. Environmental Protection Agency (U.S. EPA).

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.

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.

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

Secondary Drinking Water Standards (**SDWS**): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Variances and Exemptions: Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter ($\mu g/L$)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

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

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.

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 stormwater 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 application, and septic systems.
- Radioactive contaminants, that 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, the U.S. EPA 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.

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 –	TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA								
Microbiological Contaminants (complete if bacteria detected) Highest No. of Detections No. of Months in Violation MCL		MCLG	Typical Source of Bacteria						
Total Coliform Bacteria (state Total Coliform Rule)	(In a month)	0	1 positive monthly sample	0	Naturally present in the environment				
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		Human and animal fecal waste				
E. coli (federal Revised Total Coliform Rule)	(In the year)	0	(a)	0	Human and animal fecal waste				

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

TABLE 2	- SAMPL	ING RESU	LTS SHOW	ING THE D	ETECT	ION OI	F LEAD AND (COPPER
Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	2016	5	2.5	0	15	0.2		Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2016	5	0.7	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
2017	254.5	232 - 277	None	None	Salt present in the water and is generally naturally occurring
2017	165.5	160 - 171	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
ECTION O	F CONTAMINA	ANTS WITH A	<u>PRIMARY</u>	DRINKING	WATER STANDARD
Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
2017	0.12	ND - 0.24	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
2018	25.3*	ND – 45 *	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
2017	0.13	0.13 - 0.13	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
2017	0.13	ND - 0.25	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2018	0.4	ND – 0.8	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
NANTS					
2016	1.35	ND – 2.7	15	(0)	Erosion of natural deposits
CTION OF	CONTAMINAN	NTS WITH A <u>S</u>	ECONDAR	<u>Y</u> DRINKIN	G WATER STANDARD
Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
2017	177	151 - 203	500	None	Runoff/leaching from natural deposits; seawater influence
2018	14.6	ND - 190	300	None	Leaching from natural deposits; industrial wastes
2018	102*	25 - 194*	50	None	Leaching from natural deposits
2017	14.5	4 - 25	500	None	Runoff/leaching from natural deposits; industrial wastes
2017	817.5	750 - 885	1000	None	Runoff/leaching from natural deposits
2017	4.6	2.6 – 6.5 *	5	None	Soil runoff
2017	0.08	ND – 0.17	5	None	Runoff/leaching from natural deposits; industrial wastes
TABLE (6 – DETECTION	OF UNREGU	LATED CO	ONTAMINA	NTS
Sample Date	Level Detected	Range of Detections	Notifica	ntion Level	Health Effects Language
2017	0.95	ND – 1.9	().02	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.
	2017 2017 ECTION O Sample Date 2017 2018 2017 2018 JANTS 2016 CTION OF Sample Date 2017 2018 2017 2018 2017 2017 2018 2017 2017 2017 2017 2017 2017	Date Detected 2017 254.5	Date Detected Detections 2017 254.5 232 - 277 2017 165.5 160 - 171 ECTION OF CONTAMINANTS WITH A Range of Detections 2017 0.12 ND - 0.24 2018 25.3* ND - 45* 2017 0.13 0.13 - 0.13 2017 0.13 ND - 0.25 2018 0.4 ND - 0.8 NANTS 2016 1.35 ND - 2.7 CTION OF CONTAMINANTS WITH A SI Sample Date Level Detected Range of Detections 2017 177 151 - 203 2018 14.6 ND - 190 2018 14.6 ND - 190 2018 14.5 4 - 25 2017 817.5 750 - 885 2017 4.6 2.6 - 6.5* 2017 4.6 2.6 - 6.5* 2017 4.6 2.6 - 6.5* 2017 4.6 2.6 - 6.5* 2017 4.6 2.6 -	Date Detected Detections MCL 2017 254.5 232 - 277 None 2017 165.5 160 - 171 None ECTION OF CONTAMINANTS WITH A PRIMARY Sample Date Level Detection MCL [MRDL] 2017 0.12 ND - 0.24 1 2018 25.3* ND - 45* 10 2017 0.13 0.13 - 0.13 1 2018 0.4 ND - 0.25 2.0 2018 0.4 ND - 0.8 10 NANTS 2016 1.35 ND - 2.7 15 CTION OF CONTAMINANTS WITH A SECONDAR Sample Date Level Detected Range of Detections SMCL 2017 177 151 - 203 500 2018 14.6 ND - 190 300 2018 102* 25 - 194* 50 2017 14.5 4 - 25 500 2017 4.6 2.6 - 6.5* 5 201	Date Detected Detections MCL (MCLG)

Additional General Information on 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

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. U.S. 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 Drinking Water Hotline (1-800-426-4791).

Lead-Specific Language: 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. Best Road Mutual Water Company 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. 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.

Manganese and turbidity: There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION	N OF A MCL, MRDL, AL	, TT, OR MONITORING	AND REPORTING REQ	UIREMENT
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
Arsenic	Arsenic levels have been over the MCL.	Ongoing	If the levels exceed the MCL then a notice is sent to the homeowners quarterly.	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.

Drinking Water Source Assessment

Water System

BEST ROAD MWC

San Benito County

Water Source

WELL 01

Assessment Date

August, 2002

Assessment Completed By

CDPH Monterey District

California Department of Public Health Drinking Water Field Operations Branch CDPH Monterey District

District No. 05

System No. 3500823

Source No. 002

PS Code 3500823-002

oility Summary					
CDPH Monterey District BEST ROAD MWC	District No. 05	County	San Benito System	n No. 3500823	
WELL 01	Source No	002	PS Code	3500823-002	
CDPH Monterey District		D	ate August, 20	nn2	_
CDF11 Monterey District			August, 20	002	
CDPH records, this Source is System Method.	Groundwater. This Ass				
	CDPH Monterey District BEST ROAD MWC WELL 01	CDPH Monterey District BEST ROAD MWC WELL 01 Source No.	CDPH Monterey District BEST ROAD MWC WELL 01 Source No. 05 County 002	CDPH Monterey District District No. 05 County San Benito BEST ROAD MWC System WELL 01 Source No. 002 PS Code	CDPH Monterey District District No. 05 County San Benito System No. 3500823

The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Septic systems - low density [<1/acre]

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Crops, nonirrigated [e.g., Christmas trees, grains, grass seeds, hay, Transportation corridors - Roads/Streets
Storm Water Detention Facilities

Discussion of Vulnerability

Well 01 is considered most vulnerable to low density septic systems. This activity is associated with the contaminant nitrate, which has been detected in the water supply. The well is also considered vulnerable to the following activity not associated with any detected contaminants: storm water detention facilities.

Although outside of the 10 year zone of influence, there is a landfill located approximately 1 mile from the wells. This landfill could have long term effects on water quality in the area.

A copy of the complete assessment may be viewed at:

Best Road MWC P.O. Box 395 Hollister, CA 95024

You may request a summary of the assessment be sent to you by contacting:

Bob DeGeorge President (831) 636-9782

Vulnerability Ranking

District Name	CDPH Monterey District	District No. 05	County	San Benito			
System Name	BEST ROAD MWC			System	ı No	3500823	
Source Name	WELL 01	Source No.	002	PS Code	350	00823-002	
Completed by	CDPH Monterey District		Г	ate August 20	<u> </u>		

The following PCAs were identified in the assessment and are listed in priority order based on risk to the water supply. Refer to the last page for more information.

Zone	PCA (Risk Ranking)	*	PCA Risk Points	Zone Points	PBE Points	Vulnerability Score
B5	Septic systems - low density [<1/acre] (H in Zone A, otherwise L)	*	1	3	3	7
B10	Septic systems - low density [<1/acre] (H in Zone A, otherwise L)	*	1	1	3	5
A	Crops, nonirrigated [e.g., Christmas trees, grains, grass seeds, hay, pasture] [includes drip-irrigated crops] (L)		1	5	3	9
Α	Transportation corridors - Roads/Streets (L)		1	5	3	9
B5	Storm Water Detention Facilities (M)		3	3	3	9

^{* =} A contaminant potentially associated with this activity has been detected in the water supply.

Explanation of Source Water Assessments and Definition of Terms

A source water assessment was recently completed for this drinking water source. The assessment identifies the vulnerability of the drinking water supply to contamination from typical human activities. The assessments are intended to facilitate and provide the basic information necessary for a local community to develop a program to protect the drinking water supply.

A summary of the complete assessment is provided here. For more information, contact the agency or individual that prepared the assessment (shown in summary). You may also contact the local Department of Public Health Drinking Water Field Operations Branch district office http://www.cdph.ca.gov/programs/Documents/DDWEM/OriginalDistrictMapCDPH.pdf).

Additional information about assessments can be found at: http://www.cdph.ca.gov/certlic/drinkingwater/Pages/DWSAP.aspx

Terms used in this summary:

Source Water Assessment: An assessment is an evaluation of a drinking water source to determine the "possible contaminating activities" (PCAs) to which the source is most vulnerable. The assessment includes: a delineation of protection zones around the source; an inventory of the types of PCAs within the source protection zones; and an analysis to determine the PCAs to which the source is most vulnerable. The information is compiled into a report that includes a map, calculations, checklists, and a summary of the findings.

Possible Contaminating Activity (PCA): A PCA is a current or historic human activity that is an actual or potential origin of contamination for a drinking water source. PCAs include activities that use, store, produce or dispose of chemicals that have the potential to contaminate drinking water supplies. There are 110 types of PCAs in the California DWSAP program.

PCA Risk Ranking: Each type of PCA is assigned a risk ranking (Very High, High, Moderate, or Low). The risk ranking is based on the contaminant(s) typically associated with that PCA, the likelihood of release from that type of facility based on historical experience, and the mobility of the contaminant(s).

PCA Inventory: The PCA inventory is a review using local knowledge, databases, and on-site evaluations to identify the occurrence and approximate location of PCAs in the source water zones. The inventory for the basic DWSAP assessments is a presence-absence review. If a type of PCA occurs in a zone, a "Yes" is noted in the inventory for that zone, regardless of whether there is one or many of that type of facility within the zone. If a PCA has been associated with a contaminant detected in the water supply, a notation is made in the PCA inventory.

Source Water Zones or Areas: These are areas located around and typically adjacent to a drinking water source that have been identified as initial protection areas.

For **groundwater sources**, there are typically three concentric circular zones around a source (Zones A, B5 and B10). The sizes of the are determined based on characteristics of the source. PCAs located in the inner Zone A are considered more of a risk to the water supply than PCAs located in the middle Zone B5. Similarly, PCAs located in Zone B5 are considered more of a risk than PCAs located in the outer Zone B10.

For **surface water sources**, the watershed is defined as the overall protection area, and as an option, zones are defined closer to the source. Two types of zones are typically established. Zone A is the area within and near the surface water body and its tributaries. Zone B is an area within 2,500 feet of the intake, not including areas in Zone A. For surface water sources, PCAs located in Zone A are considered a greater threat than PCAs located in Zone B. PCAs located on the watershed outside of the zones are considered to be of less risk to the water supply. If zones have not been defined, PCAs are considered to be of equal risk regardless of location on the watershed.

Physical Barrier Effectiveness (PBE): The PBE for a source is an evaluation of the ability of the source and the surrounding area to prevent the movement of contaminants into the source. The PBE is based on the construction and operation features of the source, and the characteristics of the surrounding area. A source is assigned a PBE of Low, Moderate or High, where High indicates that the physical barriers of the source and site are very effective in preventing the movement of contaminants. By design, typical groundwater sources will have Moderate PBE, while typical surface water sources will have Low PBE. This is due to the greater exposure of surface water sources to contamination.

Vulnerability Ranking: The vulnerability ranking is a summary of the PCAs identified in the assessment prioritized by the risk that they pose to the water supply. The prioritization is based on the risk associated with a PCA, the zone in which it occurs, and the PBE of the source. In the vulnerability ranking, points are assigned as follows:

PCA risk ranking	Very High = 7	High = 5	Moderate = 3	Low = 1	Unknown in any zone = 0
Zone (Groundwater)	A = 5	B5 = 3	B10 = 1		
Zone (Surface water with zones)	A = 5	B = 3	Watershed = 1		
Zone (Surface water without zones)	Watershed = 5				
Physical Barrier Effectiveness	Low = 5	Moderate = 3	High = 1		

The points for each type of PCA in each zone are totaled to give a vulnerability score, and the PCAs are ranked in order from the highest score to the lowest score. PCAs associated with detected contaminants are ranked at the top, regardless of vulnerability score. By definition, groundwater sources are not considered vulnerable to PCAs with scores less than 8, and surface water sources are not considered vulnerable to PCAs with scores less than 11. It should be noted that the vulnerability ranking scores do not have a direct quantitative value. Rather, the points are used only to relatively rank the types of PCAs for an individual source.

Note: Some of the summaries do not include a vulnerability ranking. If the assessment was done on paper and the details were not entered into the database, the vulnerability ranking is not available here. In addition, alternate methods of determining vulnerability were allowed in some cases, and the vulnerability ranking is not in the database.

Vulnerability Summary: The source is considered most vulnerable to the PCAs with the highest score, and to PCAs associated with detected contaminants. These PCAs are noted in the vulnerability summary. Further details or discussion may be provided in the vulnerability discussion.

Drinking Water Source Assessment

Water System

BEST ROAD MWC

San Benito County

Water Source

WELL 02

Assessment Date

August, 2002

Assessment Completed By

CDPH Monterey District

California Department of Public Health Drinking Water Field Operations Branch CDPH Monterey District

District No. 05

System No. 3500823

Source No. 003

PS Code 3500823-003

Vulnerab	oility Summary					
	CDPH Monterey District BEST ROAD MWC	District No05	County _	San Benito System	No. 3500823	_
Source Name	WELL 02	Source No	003	_ PS Code	3500823-003	_
Completed by	CDPH Monterey District		Da	te August, 20	02	
•	CDPH records, this Source is Gr System Method.	oundwater. This Ass	essment wa	as done using	the Default	
	er assessment was conducted for ROAD MWC	or the WELL 02	_ water sy	stem in <u>Au</u>	gust, 2002	-

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Storm Water Detention Facilities

Discussion of Vulnerability

Although outside of the 10 year zone of influence, there is a landfill located approximately 1 mile from the wells. This landfill could have long term effects on water quality in the area.

A copy of the complete assessment may be viewed at:

Best Road MWC P.O. Box 395 Hollister, CA 95024

You may request a summary of the assessment be sent to you by contacting:

Bob DeGeorge President (831) 636-9782

Vulnerability Ranking

District Name	CDPH Monterey District	District No. 05	County	San Benito		
System Name	BEST ROAD MWC			System N	No. <u>3500823</u>	
Source Name	WELL 02	Source No	003	PS Code	3500823-003	
Completed by	CDPH Monterey District		D	ate August, 200)2	

The following PCAs were identified in the assessment and are listed in priority order based on risk to the water supply. Refer to the last page for more information.

Zone	PCA (Risk Ranking)	*	PCA Risk Points	Zone Points	PBE Points	Vulnerability Score
Α	Storm Water Detention Facilities (M)		3	5	3	11
A	Crops, nonirrigated [e.g., Christmas trees, grains, grass seeds, hay, pasture] [includes drip-irrigated crops] (L)		1	5	3	9
A	Transportation corridors - Roads/Streets (L)		1	5	3	9

^{* =} A contaminant potentially associated with this activity has been detected in the water supply.

Explanation of Source Water Assessments and Definition of Terms

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Possible Contaminating Activity (PCA): A PCA is a current or historic human activity that is an actual or potential origin of contamination for a drinking water source. PCAs include activities that use, store, produce or dispose of chemicals that have the potential to contaminate drinking water supplies. There are 110 types of PCAs in the California DWSAP program.

PCA Risk Ranking: Each type of PCA is assigned a risk ranking (Very High, High, Moderate, or Low). The risk ranking is based on the contaminant(s) typically associated with that PCA, the likelihood of release from that type of facility based on historical experience, and the mobility of the contaminant(s).

PCA Inventory: The PCA inventory is a review using local knowledge, databases, and on-site evaluations to identify the occurrence and approximate location of PCAs in the source water zones. The inventory for the basic DWSAP assessments is a presence-absence review. If a type of PCA occurs in a zone, a "Yes" is noted in the inventory for that zone, regardless of whether there is one or many of that type of facility within the zone. If a PCA has been associated with a contaminant detected in the water supply, a notation is made in the PCA inventory.

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For **groundwater sources**, there are typically three concentric circular zones around a source (Zones A, B5 and B10). The sizes of the are determined based on characteristics of the source. PCAs located in the inner Zone A are considered more of a risk to the water supply than PCAs located in the middle Zone B5. Similarly, PCAs located in Zone B5 are considered more of a risk than PCAs located in the outer Zone B10.

For **surface water sources**, the watershed is defined as the overall protection area, and as an option, zones are defined closer to the source. Two types of zones are typically established. Zone A is the area within and near the surface water body and its tributaries. Zone B is an area within 2,500 feet of the intake, not including areas in Zone A. For surface water sources, PCAs located in Zone A are considered a greater threat than PCAs located in Zone B. PCAs located on the watershed outside of the zones are considered to be of less risk to the water supply. If zones have not been defined, PCAs are considered to be of equal risk regardless of location on the watershed.

Physical Barrier Effectiveness (PBE): The PBE for a source is an evaluation of the ability of the source and the surrounding area to prevent the movement of contaminants into the source. The PBE is based on the construction and operation features of the source, and the characteristics of the surrounding area. A source is assigned a PBE of Low, Moderate or High, where High indicates that the physical barriers of the source and site are very effective in preventing the movement of contaminants. By design, typical groundwater sources will have Moderate PBE, while typical surface water sources will have Low PBE. This is due to the greater exposure of surface water sources to contamination.

Vulnerability Ranking: The vulnerability ranking is a summary of the PCAs identified in the assessment prioritized by the risk that they pose to the water supply. The prioritization is based on the risk associated with a PCA, the zone in which it occurs, and the PBE of the source. In the vulnerability ranking, points are assigned as follows:

PCA risk ranking	Very High = 7	High = 5	Moderate = 3	Low = 1	Unknown in any zone = 0
Zone (Groundwater)	A = 5	B5 = 3	B10 = 1		
Zone (Surface water with zones)	A = 5	B = 3	Watershed = 1		
Zone (Surface water without zones)	Watershed = 5				
Physical Barrier Effectiveness	Low = 5	Moderate = 3	High = 1		

The points for each type of PCA in each zone are totaled to give a vulnerability score, and the PCAs are ranked in order from the highest score to the lowest score. PCAs associated with detected contaminants are ranked at the top, regardless of vulnerability score. By definition, groundwater sources are not considered vulnerable to PCAs with scores less than 8, and surface water sources are not considered vulnerable to PCAs with scores less than 11. It should be noted that the vulnerability ranking scores do not have a direct quantitative value. Rather, the points are used only to relatively rank the types of PCAs for an individual source.

Note: Some of the summaries do not include a vulnerability ranking. If the assessment was done on paper and the details were not entered into the database, the vulnerability ranking is not available here. In addition, alternate methods of determining vulnerability were allowed in some cases, and the vulnerability ranking is not in the database.

Vulnerability Summary: The source is considered most vulnerable to the PCAs with the highest score, and to PCAs associated with detected contaminants. These PCAs are noted in the vulnerability summary. Further details or discussion may be provided in the vulnerability discussion.