2022 Consumer Confidence Report

Water System Information

Water System Name: **PARADISE LAKE MUTUAL WATER COMPANY (CA2700674)**

Report Date: **MAY 10, 2023**

Type of Water Source(s) in Use: **WELLS**

Name and General Location of Source(s): **WELL #1 IS ON LAKEVIEW DRIVE. WELL #2 AND WELL #3 ARE AT THE END OF SAGE COURT, SALINAS, CA. 93907**

Drinking Water Source Assessment Information: **See attached, dated January 2003**

Time and Place of Regularly Scheduled Board Meetings for Public Participation:**Time and place TBA**

For More Information, Contact: **Gary Holzhausen (831) 239-0975**

About This Report

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, 2022 and may include earlier monitoring data.

Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse PARADISE LAKE MUTUAL WATER COMPANY a 8305 PRUNEDALE NORTH ROAD #43 para asistirlo en español.

Language in Mandarin: 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PARADISE LAKE MUTUAL WATER COMPANY以获得中文的帮助：8305 PRUNEDALE NORTH ROAD #43

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa PARADISE LAKE MUTUAL WATER COMPANY o tumawag sa 8305 PRUNEDALE NORTH ROAD #43 para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ PARADISE LAKE MUTUAL WATER COMPANY tại 8305 PRUNEDALE NORTH ROAD #43 để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau PARADISE LAKE MUTUAL WATER COMPANY ntawm 8305 PRUNEDALE NORTH ROAD #43 rau kev pab hauv lus Askiv.

Terms Used in This Report

Term	Definition
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.
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).
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.
Public Health Goal (PHG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.
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.
ND	Not detectable at testing limit.
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or micrograms per liter (µg/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)

Sources of Drinking Water and Contaminants that May Be Present in Source 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.

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.

Regulation of Drinking Water and Bottled Water Quality

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.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6, and 8 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. Sampling Results Showing the Detection of Coliform Bacteria

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
E. coli	(In the year) 0	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. Sampling Results Showing the Detection of Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	8/26/2020	5	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8/26/2020	5	0.22	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 3. Sampling Results for Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2014,2016 & 2019	31	29-34	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2014,2016 & 2019	59.7	53.5-66.6	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are

						usually naturally occurring

Table 4. Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Chromium (ppb)	2014,2016 & 2019	14.3	2.9-28	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (ppm)	2014,2016 & 2019	0.17	0.14-0.22	2.0	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha (pCi/L)	2020 & 2022	1.8	0-3.37	15	(0)	Erosion of natural deposits
Nitrate (as nitrogen, N) (ppm)	2019 & 2022	1.35	0.5-1.7	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

Table 5. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Turbidity (units)	**2014,2016 & 2019**	**3.75**	**0.10-11***	5	N/A	Soil runoff
Chloride (ppm)	2014,2016 & 2019	35.3	33-40	500	N/A	Runoff/leaching from natural

						deposits; seawater influence
Conductivity (umho/cm)	2020 & 2021	250	240-260	1,600	N/A	Substances that form ions when in water; seawater influence
Iron (ppb)	**2014,2016 & 2019**	**966***	**0-2900***	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb)	**2014,2016 & 2019**	**120***	**0-360***	50	N/A	Leaching from natural deposits
Sulfate (ppm)	2014,2016 & 2019	3.6	2.8-4.9	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	2014,2016 & 2019	173.3	140-190	1,000	N/A	Runoff/leaching from natural deposits
Zinc (ppm)	2014, 2016 & 2019	0.4	0-1.3	5.0	N/A	Runoff/leaching from natural deposits; industrial wastes

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
N/A					

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. [Enter Water System's Name] 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. [Optional: 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.

Additional Special Language for Nitrate, Arsenic, Lead, Radon, and *Cryptosporidium*: [Enter Additional Information Described in Instructions for SWS CCR Document]

State Revised Total Coliform Rule (RTCR): [Enter Additional Information Described in Instructions for SWS CCR Document]

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

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
*Turbidity	Well #1 (standby) has levels over the MCL.	September 2019 was the first MCL overage.	No action required at this time. The next testing will be in 2025.	There is no standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.
*Iron	Well #1 (standby) has levels over the MCL.	September 2019 was the first MCL overage.	No action required at this time. The next testing will be in 2025.	There is no standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.
*Manganese	Well #1 (standby) has levels over the MCL.	September 2019 was the first MCL overage.	No action required at this time. The next testing will be in 2025.	Manganese exposures resulted in neurological effects. High levels of manganese in people have been shown to result in adverse effects to the nervous system.

For Water Systems Providing Groundwater as a Source of Drinking Water

Table 8. Sampling Results Showing Fecal Indicator-Positive Groundwater Source Samples

Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
E. coli	(In the year) 0	N/A	0	(0)	Human and animal fecal waste
Enterococci	(In the year) 0	N/A	TT	N/A	Human and animal fecal waste
Coliphage	(In the year) 0	N/A	TT	N/A	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Violation of a Groundwater TT

Special Notice of Fecal Indicator-Positive Groundwater Source Sample: NONE

Special Notice for Uncorrected Significant Deficiencies: NONE

Table 9. Violation of Groundwater TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
None				

For Systems Providing Surface Water as a Source of Drinking Water

Table 10. Sampling Results Showing Treatment of Surface Water Sources

Treatment Technique [(a)] (Type of approved filtration technology used)	Not Applicable
Turbidity Performance Standards [(b)] (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to [Enter Turbidity Performance Standard to Be Less Than or Equal to 95% of Measurements in a Month] NTU in 95% of measurements in a month. 2 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded for More Than Eight Consecutive Hours] NTU for more than eight consecutive hours. 3 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded at Any Time] NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	N/A
Highest single turbidity measurement during the year	N/A
Number of violations of any surface water treatment requirements	0

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

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Violation of a Surface Water TT

Table 11. Violation of Surface Water TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
N/A				

Summary Information for Operating Under a Variance or Exemption

Not Applicable

Summary Information for Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

If a water system is required to comply with a Level 1 or Level 2 assessment requirement that is not due to an *E. coli* MCL violation, include the following information below [22 CCR section 64481(n)(1)].

Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. Finding coliforms indicates the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

The water system shall include the following statements, as appropriate:

During the past year there were NO Level 1 assessment(s) required to be completed for our water system. Zero (0) Level 1 assessment(s) were completed. In addition, we were required to take zero (0) corrective actions and we completed zero (0) of these actions.

During the past year there were NO Level 2 assessments required to be completed for our water system. Zero (0) Level 2 assessments were completed. In addition, we were required to take zero (0) corrective actions and we completed zero (0) of these actions.

If the water system failed to complete all the required assessments or correct all identified sanitary defects, the water system is in violation of the treatment technique requirement and shall include the following statements, as appropriate:

Not Applicable

[For Violation of the Total Coliform Bacteria TT Requirement, Enter Additional Information Described in Instructions for SWS CCR Document]

If a water system is required to comply with a Level 2 assessment requirement that is due to an *E. coli* MCL violation, include the information below [22 CCR section 64481(n)(2)].

Level 2 Assessment Requirement Due to an *E. coli* MCL Violation

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) identify problems and to correct any problems that were found during these assessments.

We were NOT required to complete a Level 2 assessment because we DID NOT find *E. coli* in our water system. In addition, we were required to take ZERO (0) corrective actions and we completed ZERO (0) of these actions.

If a water system failed to complete the required assessment or correct all identified sanitary defects, the water system is in violation of the treatment technique requirement and shall include the following statements, as appropriate:

Not Applicable

If a water system detects *E. coli* and has violated the *E. coli* MCL, include one or more the following statements to describe any noncompliance, as applicable:

Not Applicable

[If a water system detects *E. coli* and has not violated the *E. coli* MCL, the water system may include a statement that explains that although they have detected *E. coli*, they are not in violation of the *E. coli* MCL.]

Drinking Water Source Assessment

Water System

PARADISE LAKE MWC

Monterey County

Water Source

WELL 02

Assessment Date

January, 2003

Assessment Completed By

Monterey County

California Department of Public Health
Drinking Water Field Operations Branch
LPA Monterey County

District No.	**57**
System No.	**2700674**
Source No.	**002**
PS Code	**2700674-002**

Vulnerability Summary

District Name Monterey County **District No.** 57 **County** Monterey

System Name PARADISE LAKE MWC **System No.** 2700674

Source Name WELL 02 **Source No.** 002 **PS Code** 2700674-002

Completed by Monterey County **Date** January, 2003

According to CDPH records, this Source is Groundwater. This Assessment was done using the Default Groundwater System Method.

A source water assessment was conducted for the **WELL 02**

of the **PARADISE LAKE MWC** water system in **January, 2003**

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

Septic systems - high density [>1/acre]

Discussion of Vulnerability

There have been no contaminants detected in the water supply recently, however the source is still considered vulnerable to activities located near the drinking water source. This area of North Monterey County has a history of high nitrates in the drinking water but this system has very low nitrates.

A copy of the complete assessment may be viewed at:

Monterey County Health Department
1270 Natividad Road
Room 109
California, CA 93906

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

Sandy Ayala
Environmental Health Specialist
(831)755-8924
(831)755-8929 (fax)
ayalasa@co.monterey.ca.us

Vulnerability Ranking

District Name Monterey County **District No.** 57 **County** Monterey

System Name PARADISE LAKE MWC **System No.** 2700674

Source Name WELL 02 **Source No.** 002 **PS Code** 2700674-002

Completed by Monterey County **Date** January, 2003

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
A	Septic systems - high density [>1/acre] (VH in Zone A, otherwise M)		7	5	3	15
A	Housing - high density [>1 house/0.5 acres] (M)		3	5	3	11
A	Wells - Water supply (M)		3	5	3	11
A	Transportation corridors - Roads/Streets (L)		1	5	3	9
B5	Housing - high density [>1 house/0.5 acres] (M)		3	3	3	9
B5	Septic systems - high density [>1/acre] (VH in Zone A, otherwise M)		3	3	3	9
B5	Wells - Water supply (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

PARADISE LAKE MWC

Monterey County

Water Source

WELL 03

Assessment Date

January, 2003

Assessment Completed By

Monterey County

California Department of Public Health
Drinking Water Field Operations Branch
LPA Monterey County

District No.	**57**
System No.	**2700674**
Source No.	**003**
PS Code	**2700674-003**

Vulnerability Summary

District Name Monterey County **District No.** 57 **County** Monterey

System Name PARADISE LAKE MWC **System No.** 2700674

Source Name WELL 03 **Source No.** 003 **PS Code** 2700674-003

Completed by Monterey County **Date** January, 2003

According to CDPH records, this Source is Groundwater. This Assessment was done using the Default Groundwater System Method.

A source water assessment was conducted for the **WELL 03**

of the **PARADISE LAKE MWC** water system in **January, 2003**

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

Septic systems - high density [>1/acre]

Discussion of Vulnerability

There have been no contaminants detected in the water supply recently, however the source is still considered vulnerable to activities located near the drinking water source. This area of North Monterey County has a history of high nitrates in the drinking water but this system has very low nitrates.

A copy of the complete assessment may be viewed at:

Monterey County Health Department
1270 Natividad Road
Room 109
California, CA 93906

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

Sandy Ayala
Environmental Health Specialist
(831)755-8924
(831)755-8929 (fax)
ayalasa@co.monterey.ca.us

Vulnerability Ranking

District Name Monterey County **District No.** 57 **County** Monterey

System Name PARADISE LAKE MWC **System No.** 2700674

Source Name WELL 03 **Source No.** 003 **PS Code** 2700674-003

Completed by Monterey County **Date** January, 2003

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
A	Septic systems - high density [>1/acre] (VH in Zone A, otherwise M)		7	5	3	15
A	Housing - high density [>1 house/0.5 acres] (M)		3	5	3	11
A	Wells - Water supply (M)		3	5	3	11
A	Surface water - streams/lakes/rivers (L)		1	5	3	9
A	Transportation corridors - Roads/Streets (L)		1	5	3	9
B5	Housing - high density [>1 house/0.5 acres] (M)		3	3	3	9
B5	Septic systems - high density [>1/acre] (VH in Zone A, otherwise M)		3	3	3	9
B5	Wells - Water supply (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.