# 2014 Consumer Confidence Report

Water System Name: **Elkhorn Water Assoc. #4** Report Date: April 22, 2015

*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 - December 31, 2006.*

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

Type of water source(s) in use: One groundwater well

Name & location of source(s): Elkhorn Water #4, located off Hidden Valley Rd., Watsonville, CA - I.D.#270-0579

Drinking Water Source Assessment information: N/A

Time and place of regularly scheduled board meetings for public participation: Prunedale Library Community Meeting Room; 17822 Moro Rd., Salinas, CA 93907. Alt. meeting sites are at the home(s) of members. Meetings scheduled once annually and/or as needed, at member request.

*For more information, contact:* Bill Fenwick *Phone:* ( 831 ) 768-7300

***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 (USEPA).

**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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

**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**: Department permission 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 (ug/L)

**ppt**: parts per trillion or nanograms per liter (ng/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 USEPA and the state Department of Health Services (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

**Tables 1, 2, 3, 4, and 5 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 Department 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.

**TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

| **Microbiological Contaminants** (to be completed only if there was a detection of bacteria ) | **Highest No. of detections** | **No. of months in violation** | **MCL** | **MCLG** | **Typical Source of Bacteria** |
|---|---|---|---|---|---|
| Total Coliform Bacteria | (In a mo.) 0 | 0 | More than 1 sample in a month with a detection | 0 | Naturally present in the environment |
| Fecal Coliform or *E. coli* | (In the year) 0 | 0 | A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli* | 0 | Human and animal fecal waste |

**TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

| **Lead and Copper** (to be completed only if there was a detection of lead or copper in the last sample set) | **No. of samples collected** | **90th percentile level detected** | **No. sites exceeding AL** | **AL** | **PHG** | **Typical Source of Contaminant** |
|---|---|---|---|---|---|---|
| Lead (ppb) | 4/26/13 – four samples total | Result = 331, ND, 174, ND ug/L | 0 | 1300 | | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 4/26/13 – four samples total | Result = ND, ND, ND, ND | 0 | 15 | | 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 (mg/L) | 12/03/12 | 32 | | N/A | | Generally found in ground & surface water |
| Hardness (mg/L) | 12/03/12 | 81.9 | | N/A | | Generally found in ground & surface water |

**Any violation of an MCL or AL is marked with an asterisk. Additional information regarding the violation is provided later in this report.*

| 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** |
| Nitrate (as NO3) mg/L | 2/21/14, 5/19/14, 8/8/14, 11/10/14 | 33, 33, 32, 34 | | 45 | | Nitrate comes from nitrogen, a plant nutrient supplied by inorganic fertilizer and animal manure. Additionally, airborne from industry and automobiles. |
| Title 22 Primary compounds | 6/19/13 | ND | | | | All test results were ND or below MCL |
| Secondary compounds - inorganics: | 6/19/13 | ND | | | | All test results were ND or below MCL |
| Perchlorate and Asbestos | 7/28/14 | ND | | | | All test results were ND or below MCL |

| TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD | | | | | | |
|---|---|---|---|---|---|---|
| **Chemical or Constituent** (and reporting units) | **Sample Date** | **Level Detected** | **Range of Detections** | **MCL** | **PHG (MCLG)** | **Typical Source of Contaminant** |
| Cl (Chloride) | 12/03/12 | 47 | | 250 | | Seawater intrusion, natural saline seeps, animal and human waste. |
| Conductivity | 12/03/12 | 347 | | 900 | | This is used to determine water purity. |
| Copper (Cu) | 12/03/12 | ND | | 1000 | | Major sources of copper in drinking water are from household plumbing systems. |
| Manganese (Mn) | 12/03/12 | ND | | 50 | | Naturally occurring in the environment, children with liver disease are at higher risk. |
| SO4 (Sulfate) | 12/03/12 | 11 | | 250 | | Naturally occurring in the environment but high doses have been linked to diarrhea. |
| Turbidity (Laboratory) | 12/03/12 | 0.05 | | 5 | | This test is key of water quality. |

| TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS | | | | |
|---|---|---|---|---|
| **Chemical or Constituent** (and reporting units) | **Sample Date** | **Level Detected** | **Notification Level** | **Health Effects Language** |
| N/A | | | | |
| | | | | |
| | | | | |

*****Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

## 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 USEPA'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. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Reports:

7/28/2014 – Perchlorate test was performed by BSK Analytical Lab; results were ND (required once annually)

11/6/2014 – Hexavalent Chromium initial test taken. Required quarterly until further notice.

Nitrate Testing: Quarterly monitoring required while nitrate level is above 23 mg/L, but below 45 mg/L.

## Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

11/6/2014 – Hexavalent Chromium initial test taken with a result of 0.011 mg/L (MCL is 0.010 mg/L)

11/21/2014 – Members / users of EWA#4 Water Association were notified by email, communication and letter that the Hexavalent Chromium levels exceeded the MCL by 0.001 mg/L (see email notification copy on file).

## For Systems Providing Surface Water as a Source Of Drinking Water:

*(Refer to page 1, "Type of water source in use" to see if your source of water is surface water or groundwater)*

| TABLE 7 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES | |
|---|---|
| *Treatment Technique* [(a)]<br>(Type of approved filtration technology used) | N/A |
| Turbidity Performance Standards [(b)]<br>(that must be met through the water treatment process) | Turbidity of the filtered water must:<br>1 – Be less than or equal to _____ NTU in 95% of measurements in a month.<br>2 – Not exceed _____ NTU for more than eight consecutive hours.<br>3 – Not exceed ____ 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 | N/A |

(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 Surface Water Treatment

2014 CCR for EWA#4 distributed to membership via email, during annual meeting and hardcopy on request to Bill Fenwick (phone 831.768.7300) – also see attachment 7 (CCR Certification form) and uploaded on to the CA State DRINC System.

# Drinking Water Source Assessment

*Water System*

**ELKHORN WS #4**

Monterey County

*Water Source*

**WELL 01**

*Assessment Date*

**May, 2001**

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

| | |
|---|---|
| **District No.** | **57** |
| **System No.** | **2700579** |
| **Source No.** | **001** |
| **PS Code** | **2700579-001** |

# Assessment Summary

District Name LPA Monterey County | District No. 57 | County Monterey

System Name ELKHORN WS #4 | System No. 2700579

Source Name WELL 01 | Source No. 001 | PS Code 2700579-001

Completed by Dan Wessell | Date May, 2001

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

## Description of System and Source

The ELKHORN WS #4 is located in north Monterey County and serves several residence off Campagna Way. There are approximately 20 service connections, 3 of which are inactive, serving an estimated population of 60 people.

The drinking water source for the ELKHORN WS #4 water system is one well. General land use is rural residential and agriculture.

## Assessment Procedures

The assessment of the source was conducted by the County of Monterey, the LPA office. The following sources of information were used in the assessment: Water system files.

Procedures used to conduct the assessment include: File review, site visit and historical knowledge of the area.

## Contents of this Assessment

| | | |
|---|---|---|
| Yes [X] | No [ ] | Assessment Summary |
| Yes [X] | No [ ] | Vulnerability Summary |
| Yes [ ] | No [X] | Source Location Form |
| Yes [X] | No [ ] | Delineation of Water Protection Zones |
| Yes [X] | No [ ] | Physical Barrier Effectiveness Checklist |
| Yes [X] | No [ ] | Source Data Sheet |
| Yes [X] | No [ ] | Inventory of Possible Contaminating Activities |
| Yes [X] | No [ ] | Vulnerability Ranking |
| Yes [X] | No [ ] | Assessment Map |

## Comments

The zones of delineation and possible contaminating activity inventory is based on a brief field survey, previous information compiled from local county files and general historical knowledge of the area.

It is recommended that future involved parties update and refine this information when appropriate.

*Drinking Water Source Assessment and Protection (DWSAP) Program*

# Vulnerability Summary

District Name LPA Monterey County District No. 57 County Monterey

System Name ELKHORN WS #4 System No. 2700579

Source Name WELL 01 Source No. 001 PS Code 2700579-001

Completed by Dan Wessell Date May, 2001

**THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE SYSTEM CONSUMER CONFIDENCE REPORT**

A source water assessment was conducted for the **WELL 01**

of the **ELKHORN WS #4** water system in **May, 2001**

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

Septic systems - high density

## Discussion of Vulnerability

There is limited well data for this source. The water system should submit a well drillers report to the Monterey County Health Department or any other useful information that it may have, e.g. results of source capacity test, etc..

A copy of the complete assessment may be viewed at:

MontereyCounty Health Department
1270 Natividad Road
Room 102
California, CA 93906

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

District Environmental Health Specialist
(831) 755-4507

*Drinking Water Source Assessment and Protection (DWSAP) Program*

# Delineation of Water Protection Zones

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

**System Name** ELKHORN WS #4 **System No.** 2700579

**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

**Completed by** Dan Wessell **Date** May, 2001

**Method Used to Delineate Protection Zones**

**X 1. Calculated Fixed Radius**

2. Modified Calculated Fixed Radius (Attach documentation for direction of ground water flow.)
3. More Detailed Methods
4. Arbitrary Fixed Radius (For use only by or permission of DHS)

| | | | |
|---|---|---|---|
| Maximum Pumping Rate of Well (Q) | **140** | gallons/minute | |
| | **226** | acre feet/year | |
| | **9,837,380** | cubic feet/year | |
| Effective Porosity | **0.20** | | [X] Default Value |
| Screened Interval of Well | **10** | feet | [ ] Default Value |

| Protection Zone | Calculated Value | Minimum Value | Radius of Protection Zone |
|---|---|---|---|
| Zone A - 2 Year TOT* | 1,770 Feet | 600 Feet | **1,770** Feet |
| Zone B5 - 5 Year TOT* | 2,798 Feet | 1,000 Feet | **2,798** Feet |
| Zone B10 - 10 Year TOT* | 3,957 Feet | 1,500 Feet | **3,957** Feet |

*TOT = Time of Travel

*Drinking Water Source Assessment and Protection (DWSAP) Program*

# Physical Barrier Effectiveness (PBE)

District Name: LPA Monterey County | District No.: 57 | County: Monterey

System Name: ELKHORN WS #4 | System No.: 2700579

Source Name: WELL 01 | Source No.: 001 | PS Code: 2700579-001

Completed by: Dan Wessell | Date: May, 2001

| Parameter | | Possible Points | This Source | Score |
|---|---|---|---|---|
| **Type of Aquifer** **Confinement** | | | | |
| 1. Unconfined, Semi-confined, Fractured Rock, Unknown Aquifer | | 0 | X | 0 |
| 2. Confined | | 50 | | |
| **Aquifer Material (Unconfined Aquifers)** **Type of material within aquifer** | | | | |
| 1. Porous Media (Interbedded sands, silts, clays, gravels) with continuous clay layer minimum 25' thick above water table within Zone A | | 20 | | |
| 2. Porous Media (Interbedded sands, silts, clays, gravels) | | 10 | X | 10 |
| 3. Fractured rock ( Low Physical Barrier Effectiveness - no further questions required) | | 0 | | |
| **Pathways of Contamination (All Aquifers)** **Presence of Abandoned or Improperly Destroyed Wells** | | | | |
| 1. Present within Zone A (2 year TOT distance) | Yes | 0 | | |
| | No | 5 | X | 5 |
| | Unknown | 0 | | |
| 2. Present within Zone B5 (2 -5 year TOT distance) | Yes | 0 | | |
| | No | 3 | | |
| | Unknown | 0 | X | 0 |
| 3. Present within Zone B10 (5-10 year TOT distance) | Yes | 0 | | |
| | No | 2 | | |
| | Unknown | 0 | X | 0 |
| **Static Water Conditions (Unconfined Aquifers)** | | | | |
| Depth to Static Water (DTW) 120 feet | 0 to 20 feet | 0 | | |
| | 20 to 50 feet | 2 | | |
| | 50 to 100 feet | 6 | | |
| | Greater than 100 feet | 10 | X | 10 |
| | Unknown | 0 | | |
| **Well Operation (Unconfined Aquifers)** | | | | |
| Depth to Uppermost Perforations (DUP) 140 feet | | | | |
| Maximum Pumping Rate of Well (Q) 140 gallons/minute | | | | |
| Length of Screened Interval (H) 10 feet | | | | |
| | Less than 5 | 0 | X | 0 |
| [DUP - DTW / Q/H] 1.43 | Between 5 and 10 | 5 | | |
| | Greater than 10 | 10 | | |
| | Unknown | 0 | | |

# Physical Barrier Effectiveness (PBE)

**System Name** ELKHORN WS #4 **System No.** 2700579

**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

| Parameter | | Possible Points | This Source | Score |
|---|---|---|---|---|
| **Well Construction (All Aquifers)** | | | | |
| Sanitary Seal (Annular Seal) Depth<br>0 feet | None or less than 20 feet | 0 | X | 0 |
| | Between 20 and 50 feet | 6 | | |
| | 50 feet or greater | 10 | | |
| | Unknown | 0 | | |
| Surface Seal (concrete cap) | Not present or improperly constructed | 0 | | |
| | Watertight, slopes away from well at least 2' laterally in all directions | 4 | X | 4 |
| | Unknown | 0 | | |
| Flooding potential at well site | Subject to localized flooding (i.e. in low area or unsealed pit or vault) or within 100 year flood plain | 0 | | |
| | Not subject to flooding | 1 | X | 1 |
| | Unknown | 0 | | |
| Security at well site | Not secure | 0 | X | 0 |
| | Secure | 5 | | |
| | Unknown | 0 | | |

| Score | Effectiveness |
|---|---|
| 0 to 35 | Low |
| 36 to 69 | Moderate |
| 70 to 100 | High |

**Maximum Score = 70**

**Score** 30

**Effectiveness** Low

*Drinking Water Source Assessment and Protection (DWSAP) Program*

# Inventory of Possible Contaminating Activities (PCA Inventory)

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

**System Name** ELKHORN WS #4 **System No.** 2700579

**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

**Completed by** Dan Wessell **Date** May, 2001

| PCA (Risk Ranking) | PCA in Zone A | PCA in Zone B5 | PCA in Zone B10 | * | Comments |
|---|---|---|---|---|---|
| **Residential/Municipal Activities** | | | | | |
| Airports - Maintenance/ fueling areas (VH) | N | N | N | | |
| Landfills/dumps (VH) | N | N | N | | |
| Railroad yards/ maintenance/ fueling areas (H) | N | N | N | | |
| Septic systems - high density (>1/acre) (VH in Zone A, otherwise M) | Y | N | N | | |
| Sewer collection systems (H in Zone A, otherwise L) | N | N | N | | |
| Utility stations - maintenance areas (H) | N | N | N | | |
| Wastewater treatment plants (VH in Zone A, otherwise H) | N | N | N | | |
| Drinking water treatment plants (M) | N | N | N | | |
| Golf courses (M) | N | N | N | | |
| Housing - high density (>1 house/0.5 acres) (M) | N | N | N | | |
| ptor pools (M) | N | N | N | | |
| arks (M) | N | N | N | | |
| Waste transfer/recycling stations (M) | N | N | N | | |
| Apartments and condominiums (L) | N | N | N | | |
| Campgrounds/ Recreational areas (L) | N | N | N | | |
| Fire stations (L) | N | N | N | | |
| RV Parks (L) | N | N | N | | |
| Schools (L) | N | N | N | | |
| Hotels, Motels (L) | N | N | N | | |
| **Agricultural/Rural Activities** | | | | | |
| Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M) | N | N | N | | |
| Concentrated Animal Feeding Operations (CAFOs) as defined in federal regulation1 (VH in Zone A, otherwise H) | N | N | N | | |
| Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H) | N | N | N | | |
| Other Animal operations (H in Zone A, otherwise M) | N | N | N | | |
| Farm chemical distributor/ application service (H) | N | N | N | | |
| Farm machinery repair (H) | N | N | N | | |
| ptic systems - low density (<1/acre) (H in Zone A, | Y | Y | Y | | |

**Y = Yes N = No U = Unknown**

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

# Inventory of Possible Contaminating Activities (PCA Inventory)

**System Name** ELKHORN WS #4 **System No.** 2700579

**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

| PCA (Risk Ranking) | PCA in Zone A | PCA in Zone B5 | PCA in Zone B10 | * | Comments |
|---|---|---|---|---|---|
| **Agricultural/Rural Activities** | | | | | |
| otherwise L) | | | | | |
| Lagoons / liquid wastes (H) | N | N | N | | |
| Machine shops (H) | N | N | N | | |
| Pesticide/fertilizer/ petroleum storage & transfer areas (H) | N | N | N | | |
| Agricultural Drainage (H in Zone A, otherwise M) | Y | U | U | | |
| Wells - Agricultural/ Irrigation (H) | Y | U | U | | |
| Managed Forests (M) | N | N | N | | |
| Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M) | Y | Y | Y | | |
| Fertilizer, Pesticide/ Herbicide Application (M) | Y | Y | Y | | |
| Sewage sludge/biosolids application (M) | N | N | N | | |
| Crops, nonirrigated (e.g., Christmas trees, grains, grass seeds, hay, pasture) (includes drip-irrigated crops) (L) | N | N | N | | |
| **ther Activities** | | | | | |
| NPDES/WDR permitted discharges (H) | N | N | N | | |
| Underground Injection of Commercial/Industrial Discharges (VH) | N | N | N | | |
| Historic gas stations (VH) | N | N | N | | |
| Historic waste dumps/ landfills (VH) | N | N | N | | |
| Illegal activities/ unauthorized dumping (H) | N | N | N | | |
| Injection wells/ dry wells/ sumps (VH) | N | N | N | | |
| Known Contaminant Plumes (VH) | N | N | N | | |
| Military installations (VH) | N | N | N | | |
| Mining operations - Historic (VH) | N | N | N | | |
| Mining operations - Active (VH) | N | N | N | | |
| Mining - Sand/Gravel (H) | N | N | N | | |
| Wells - Oil, Gas, Geothermal (H) | N | N | N | | |
| Salt Water Intrusion (H) | N | N | N | | |
| Recreational area - surface water source (H) | N | N | N | | |
| Underground storage tanks - Confirmed leaking tanks (VH) | N | N | N | | |
| Underground storage tanks - Decommissioned - inactive tanks (L) | N | N | N | | |
| derground storage tanks - Non-regulated tanks (tanks | N | N | N | | |

**Y = Yes N = No U = Unknown**

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

# Inventory of Possible Contaminating Activities (PCA Inventory)

**System Name** ELKHORN WS #4 **System No.** 2700579

**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

| PCA (Risk Ranking) | PCA in Zone A | PCA in Zone B5 | PCA in Zone B10 | * | Comments |
|---|---|---|---|---|---|
| **Other Activities** | | | | | |
| smaller than regulatory limit) (H) | | | | | |
| Underground storage tanks - Not yet upgraded or registered tanks (H) | N | N | N | | |
| Underground storage tanks - Upgraded and/or registered - active tanks (L) | N | N | N | | |
| Above ground storage tanks (M) | **U** | **U** | **U** | | |
| Wells - Water supply (M) | **Y** | **Y** | **Y** | | |
| Construction/demolition staging areas (M) | N | N | N | | |
| Contractor or government agency equipment storage yards (M) | N | N | N | | |
| Dredging (M) | N | N | N | | |
| Transportation corridors - Freeways/state highways (M) | N | N | N | | |
| Transportation corridors - Railroads (M) | N | N | N | | |
| Transportation corridors - Historic railroad right-of-ways (M) | N | N | N | | |
| Transportation corridors - Road Right-of-ways (herbicide use areas) (M) | N | N | N | | |
| Transportation corridors - Roads/ Streets (L) | **Y** | **Y** | **Y** | | |
| Hospitals (M) | N | N | N | | |
| Storm Drain Discharge Points (M) | N | N | N | | |
| Storm Water Detention Facilities (M) | N | N | N | | |
| Artificial Recharge Projects - Injection wells (potable water) (L) | N | N | N | | |
| Artificial Recharge Projects - Injection wells (non-potable water) (M) | N | N | N | | |
| Artificial Recharge Projects - Spreading Basins (potable water) (L) | N | N | N | | |
| Artificial Recharge Projects - Spreading Basins (non-potable water) (M) | N | N | N | | |
| Medical/dental offices/clinics (L) | N | N | N | | |
| Veterinary offices/clinics (L) | N | N | N | | |
| Surface water - streams/ lakes/rivers (L) | **Y** | **Y** | **Y** | | Slough and Swale |
| Wells - monitoring, test holes (L) | N | N | N | | |

**Y = Yes N = No U = Unknown**

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

*Drinking Water Source Assessment and Protection (DWSAP) Program*

# Vulnerability Ranking

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

**System Name** ELKHORN WS #4 **System No.** 2700579

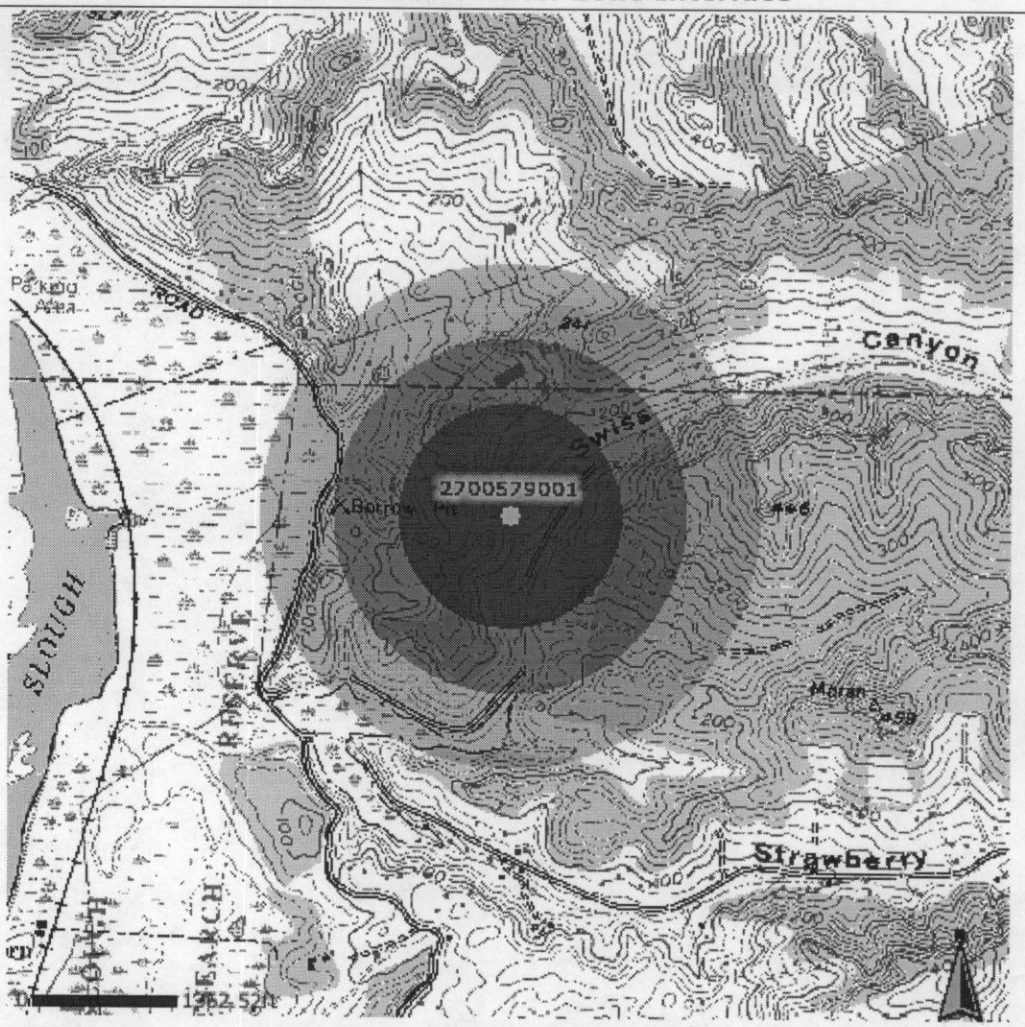
**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

**Completed by** Dan Wessell **Date** May, 2001

| 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 | 5 | 17 |
| A | Agricultural Drainage (H in Zone A, otherwise M) | | 5 | 5 | 5 | 15 |
| A | Septic systems - low density (<1/acre) (H in Zone A, otherwise L) | | 5 | 5 | 5 | 15 |
| A | Wells - Agricultural/ Irrigation (H) | | 5 | 5 | 5 | 15 |
| A | Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M) | | 3 | 5 | 5 | 13 |
| A | Fertilizer, Pesticide/ Herbicide Application (M) | | 3 | 5 | 5 | 13 |
| A | Wells - Water supply (M) | | 3 | 5 | 5 | 13 |
| A | Surface water - streams/ lakes/rivers (L) | | 1 | 5 | 5 | 11 |
| A | Transportation corridors - Roads/ Streets (L) | | 1 | 5 | 5 | 11 |
| B5 | Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M) | | 3 | 3 | 5 | 11 |
| B5 | Fertilizer, Pesticide/ Herbicide Application (M) | | 3 | 3 | 5 | 11 |
| B5 | Wells - Water supply (M) | | 3 | 3 | 5 | 11 |
| B5 | Wells - Agricultural/ Irrigation (H) | | 5 | 0 | 5 | 10 |
| B10 | Wells - Agricultural/ Irrigation (H) | | 5 | 0 | 5 | 10 |
| B5 | Septic systems - low density (<1/acre) (H in Zone A, otherwise L) | | 1 | 3 | 5 | 9 |
| B5 | Surface water - streams/ lakes/rivers (L) | | 1 | 3 | 5 | 9 |
| B5 | Transportation corridors - Roads/ Streets (L) | | 1 | 3 | 5 | 9 |
| B10 | Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M) | | 3 | 1 | 5 | 9 |
| B10 | Fertilizer, Pesticide/ Herbicide Application (M) | | 3 | 1 | 5 | 9 |
| B10 | Wells - Water supply (M) | | 3 | 1 | 5 | 9 |
| A | Above ground storage tanks (M) | | 3 | 0 | 5 | 8 |
| B5 | Above ground storage tanks (M) | | 3 | 0 | 5 | 8 |
| B5 | Agricultural Drainage (H in Zone A, otherwise M) | | 3 | 0 | 5 | 8 |
| B10 | Above ground storage tanks (M) | | 3 | 0 | 5 | 8 |
| B10 | Agricultural Drainage (H in Zone A, otherwise M) | | 3 | 0 | 5 | 8 |

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

## DWSAP Ground Water Zone Interface




| Well Position * | GPS'd | Longitude | Latitude |
|---|---|---|---|
| | Yes | -121.727 | 36.835 |

* Well location coordinates have been rounded to 3 decimal places due to security concerns.

| Well Statistics | |
|---|---|
| **Well Number** | 2700579001 |
| **Media Type** | Porous Media |
| **System Type** | All Other System |
| **Effective Porosity (n , decimal percent)** | 0.2 |
| **Screened Interval (H , feet)** | 10 |
| **Pumping Capacity (Q , gpm)** | 50 |
| **Azimuth of Flow (a , degrees)** | 0 - No Translation |

| Radii Measures | |
|---|---|
| **Defaults Used** | No |
| **R2** | 1056 ft |
| **R5** | 1673 ft |
| **R10** | 2365 ft |

# Drinking Water Source Assessment

*Water System*

**ELKHORN WS #4**

Monterey County

*Water Source*

**WELL 01**

*Assessment Date*

**May, 2001**

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

| | |
|---|---|
| **District No.** | **57** |
| **System No.** | **2700579** |
| **Source No.** | **001** |
| **PS Code** | **2700579-001** |

# Assessment Summary

District Name LPA Monterey County | District No. 57 | County Monterey

System Name ELKHORN WS #4 | System No. 2700579

Source Name WELL 01 | Source No. 001 | PS Code 2700579-001

Completed by Dan Wessell | Date May, 2001

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

## Description of System and Source

The ELKHORN WS #4 is located in north Monterey County and serves several residence off Campagna Way. There are approximately 20 service connections, 3 of which are inactive, serving an estimated population of 60 people.

The drinking water source for the ELKHORN WS #4 water system is one well. General land use is rural residential and agriculture.

## Assessment Procedures

The assessment of the source was conducted by the County of Monterey, the LPA office. The following sources of information were used in the assessment: Water system files.

Procedures used to conduct the assessment include: File review, site visit and historical knowledge of the area.

## Contents of this Assessment

| | | |
|---|---|---|
| Yes [X] | No [ ] | Assessment Summary |
| Yes [X] | No [ ] | Vulnerability Summary |
| Yes [ ] | No [X] | Source Location Form |
| Yes [X] | No [ ] | Delineation of Water Protection Zones |
| Yes [X] | No [ ] | Physical Barrier Effectiveness Checklist |
| Yes [X] | No [ ] | Source Data Sheet |
| Yes [X] | No [ ] | Inventory of Possible Contaminating Activities |
| Yes [X] | No [ ] | Vulnerability Ranking |
| Yes [X] | No [ ] | Assessment Map |

## Comments

The zones of delineation and possible contaminating activity inventory is based on a brief field survey, previous information compiled from local county files and general historical knowledge of the area.

It is recommended that future involved parties update and refine this information when appropriate.

*Drinking Water Source Assessment and Protection (DWSAP) Program*

# Vulnerability Summary

District Name LPA Monterey County District No. 57 County Monterey

System Name ELKHORN WS #4 System No. 2700579

Source Name WELL 01 Source No. 001 PS Code 2700579-001

Completed by Dan Wessell Date May, 2001

**THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE SYSTEM CONSUMER CONFIDENCE REPORT**

A source water assessment was conducted for the **WELL 01**

of the **ELKHORN WS #4** water system in **May, 2001**

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

Septic systems - high density

## Discussion of Vulnerability

There is limited well data for this source. The water system should submit a well drillers report to the Monterey County Health Department or any other useful information that it may have, e.g. results of source capacity test, etc..

A copy of the complete assessment may be viewed at:

MontereyCounty Health Department
1270 Natividad Road
Room 102
California, CA 93906

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

District Environmental Health Specialist
(831) 755-4507

*Drinking Water Source Assessment and Protection (DWSAP) Program*

# Delineation of Water Protection Zones

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

**System Name** ELKHORN WS #4 **System No.** 2700579

**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

**Completed by** Dan Wessell **Date** May, 2001

**Method Used to Delineate Protection Zones**

**X 1. Calculated Fixed Radius**

2. Modified Calculated Fixed Radius (Attach documentation for direction of ground water flow.)
3. More Detailed Methods
4. Arbitrary Fixed Radius (For use only by or permission of DHS)

| | | | |
|---|---|---|---|
| Maximum Pumping Rate of Well (Q) | **140** | gallons/minute | |
| | **226** | acre feet/year | |
| | **9,837,380** | cubic feet/year | |
| Effective Porosity | **0.20** | | [X] Default Value |
| Screened Interval of Well | **10** | feet | [ ] Default Value |

| Protection Zone | Calculated Value | Minimum Value | Radius of Protection Zone |
|---|---|---|---|
| Zone A - 2 Year TOT* | 1,770 Feet | 600 Feet | **1,770** Feet |
| Zone B5 - 5 Year TOT* | 2,798 Feet | 1,000 Feet | **2,798** Feet |
| Zone B10 - 10 Year TOT* | 3,957 Feet | 1,500 Feet | **3,957** Feet |

*TOT = Time of Travel

*Drinking Water Source Assessment and Protection (DWSAP) Program*

# Physical Barrier Effectiveness (PBE)

District Name: LPA Monterey County | District No.: 57 | County: Monterey

System Name: ELKHORN WS #4 | System No.: 2700579

Source Name: WELL 01 | Source No.: 001 | PS Code: 2700579-001

Completed by: Dan Wessell | Date: May, 2001

| Parameter | | Possible Points | This Source | Score |
|---|---|---|---|---|
| **Type of Aquifer** **Confinement** | | | | |
| 1. Unconfined, Semi-confined, Fractured Rock, Unknown Aquifer | | 0 | X | 0 |
| 2. Confined | | 50 | | |
| **Aquifer Material (Unconfined Aquifers)** **Type of material within aquifer** | | | | |
| 1. Porous Media (Interbedded sands, silts, clays, gravels) with continuous clay layer minimum 25' thick above water table within Zone A | | 20 | | |
| 2. Porous Media (Interbedded sands, silts, clays, gravels) | | 10 | X | 10 |
| 3. Fractured rock ( Low Physical Barrier Effectiveness - no further questions required) | | 0 | | |
| **Pathways of Contamination (All Aquifers)** **Presence of Abandoned or Improperly Destroyed Wells** | | | | |
| 1. Present within Zone A (2 year TOT distance) | Yes | 0 | | |
| | No | 5 | X | 5 |
| | Unknown | 0 | | |
| 2. Present within Zone B5 (2 -5 year TOT distance) | Yes | 0 | | |
| | No | 3 | | |
| | Unknown | 0 | X | 0 |
| 3. Present within Zone B10 (5-10 year TOT distance) | Yes | 0 | | |
| | No | 2 | | |
| | Unknown | 0 | X | 0 |
| **Static Water Conditions (Unconfined Aquifers)** | | | | |
| Depth to Static Water (DTW) 120 feet | 0 to 20 feet | 0 | | |
| | 20 to 50 feet | 2 | | |
| | 50 to 100 feet | 6 | | |
| | Greater than 100 feet | 10 | X | 10 |
| | Unknown | 0 | | |
| **Well Operation (Unconfined Aquifers)** | | | | |
| Depth to Uppermost Perforations (DUP) 140 feet | | | | |
| Maximum Pumping Rate of Well (Q) 140 gallons/minute | | | | |
| Length of Screened Interval (H) 10 feet | | | | |
| | Less than 5 | 0 | X | 0 |
| [DUP - DTW / Q/H] 1.43 | Between 5 and 10 | 5 | | |
| | Greater than 10 | 10 | | |
| | Unknown | 0 | | |

# Physical Barrier Effectiveness (PBE)

**System Name** ELKHORN WS #4 **System No.** 2700579

**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

| Parameter | | Possible Points | This Source | Score |
|---|---|---|---|---|
| **Well Construction (All Aquifers)** | | | | |
| Sanitary Seal (Annular Seal) Depth<br>0 feet | None or less than 20 feet | 0 | X | 0 |
| | Between 20 and 50 feet | 6 | | |
| | 50 feet or greater | 10 | | |
| | Unknown | 0 | | |
| Surface Seal (concrete cap) | Not present or improperly constructed | 0 | | |
| | Watertight, slopes away from well at least 2' laterally in all directions | 4 | X | 4 |
| | Unknown | 0 | | |
| Flooding potential at well site | Subject to localized flooding (i.e. in low area or unsealed pit or vault) or within 100 year flood plain | 0 | | |
| | Not subject to flooding | 1 | X | 1 |
| | Unknown | 0 | | |
| Security at well site | Not secure | 0 | X | 0 |
| | Secure | 5 | | |
| | Unknown | 0 | | |

| Score | Effectiveness |
|---|---|
| 0 to 35 | Low |
| 36 to 69 | Moderate |
| 70 to 100 | High |

**Maximum Score = 70**

**Score** 30

**Effectiveness** Low

*Drinking Water Source Assessment and Protection (DWSAP) Program*

# Inventory of Possible Contaminating Activities (PCA Inventory)

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

**System Name** ELKHORN WS #4 **System No.** 2700579

**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

**Completed by** Dan Wessell **Date** May, 2001

| PCA (Risk Ranking) | PCA in Zone A | PCA in Zone B5 | PCA in Zone B10 | * | Comments |
|---|---|---|---|---|---|
| **Residential/Municipal Activities** | | | | | |
| Airports - Maintenance/ fueling areas (VH) | N | N | N | | |
| Landfills/dumps (VH) | N | N | N | | |
| Railroad yards/ maintenance/ fueling areas (H) | N | N | N | | |
| Septic systems - high density (>1/acre) (VH in Zone A, otherwise M) | Y | N | N | | |
| Sewer collection systems (H in Zone A, otherwise L) | N | N | N | | |
| Utility stations - maintenance areas (H) | N | N | N | | |
| Wastewater treatment plants (VH in Zone A, otherwise H) | N | N | N | | |
| Drinking water treatment plants (M) | N | N | N | | |
| Golf courses (M) | N | N | N | | |
| Housing - high density (>1 house/0.5 acres) (M) | N | N | N | | |
| ptor pools (M) | N | N | N | | |
| arks (M) | N | N | N | | |
| Waste transfer/recycling stations (M) | N | N | N | | |
| Apartments and condominiums (L) | N | N | N | | |
| Campgrounds/ Recreational areas (L) | N | N | N | | |
| Fire stations (L) | N | N | N | | |
| RV Parks (L) | N | N | N | | |
| Schools (L) | N | N | N | | |
| Hotels, Motels (L) | N | N | N | | |
| **Agricultural/Rural Activities** | | | | | |
| Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M) | N | N | N | | |
| Concentrated Animal Feeding Operations (CAFOs) as defined in federal regulation1 (VH in Zone A, otherwise H) | N | N | N | | |
| Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H) | N | N | N | | |
| Other Animal operations (H in Zone A, otherwise M) | N | N | N | | |
| Farm chemical distributor/ application service (H) | N | N | N | | |
| Farm machinery repair (H) | N | N | N | | |
| ptic systems - low density (<1/acre) (H in Zone A, | Y | Y | Y | | |

**Y = Yes N = No U = Unknown**

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

# Inventory of Possible Contaminating Activities (PCA Inventory)

**System Name** ELKHORN WS #4 **System No.** 2700579

**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

| PCA (Risk Ranking) | PCA in Zone A | PCA in Zone B5 | PCA in Zone B10 | * | Comments |
|---|---|---|---|---|---|
| **Agricultural/Rural Activities** | | | | | |
| otherwise L) | | | | | |
| Lagoons / liquid wastes (H) | N | N | N | | |
| Machine shops (H) | N | N | N | | |
| Pesticide/fertilizer/ petroleum storage & transfer areas (H) | N | N | N | | |
| Agricultural Drainage (H in Zone A, otherwise M) | Y | U | U | | |
| Wells - Agricultural/ Irrigation (H) | Y | U | U | | |
| Managed Forests (M) | N | N | N | | |
| Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M) | Y | Y | Y | | |
| Fertilizer, Pesticide/ Herbicide Application (M) | Y | Y | Y | | |
| Sewage sludge/biosolids application (M) | N | N | N | | |
| Crops, nonirrigated (e.g., Christmas trees, grains, grass seeds, hay, pasture) (includes drip-irrigated crops) (L) | N | N | N | | |
| **ther Activities** | | | | | |
| NPDES/WDR permitted discharges (H) | N | N | N | | |
| Underground Injection of Commercial/Industrial Discharges (VH) | N | N | N | | |
| Historic gas stations (VH) | N | N | N | | |
| Historic waste dumps/ landfills (VH) | N | N | N | | |
| Illegal activities/ unauthorized dumping (H) | N | N | N | | |
| Injection wells/ dry wells/ sumps (VH) | N | N | N | | |
| Known Contaminant Plumes (VH) | N | N | N | | |
| Military installations (VH) | N | N | N | | |
| Mining operations - Historic (VH) | N | N | N | | |
| Mining operations - Active (VH) | N | N | N | | |
| Mining - Sand/Gravel (H) | N | N | N | | |
| Wells - Oil, Gas, Geothermal (H) | N | N | N | | |
| Salt Water Intrusion (H) | N | N | N | | |
| Recreational area - surface water source (H) | N | N | N | | |
| Underground storage tanks - Confirmed leaking tanks (VH) | N | N | N | | |
| Underground storage tanks - Decommissioned - inactive tanks (L) | N | N | N | | |
| derground storage tanks - Non-regulated tanks (tanks | N | N | N | | |

**Y = Yes N = No U = Unknown**

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

# Inventory of Possible Contaminating Activities (PCA Inventory)

**System Name** ELKHORN WS #4 **System No.** 2700579

**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

| PCA (Risk Ranking) | PCA in Zone A | PCA in Zone B5 | PCA in Zone B10 | * | Comments |
|---|---|---|---|---|---|
| **Other Activities** | | | | | |
| smaller than regulatory limit) (H) | | | | | |
| Underground storage tanks - Not yet upgraded or registered tanks (H) | N | N | N | | |
| Underground storage tanks - Upgraded and/or registered - active tanks (L) | N | N | N | | |
| Above ground storage tanks (M) | **U** | **U** | **U** | | |
| Wells - Water supply (M) | **Y** | **Y** | **Y** | | |
| Construction/demolition staging areas (M) | N | N | N | | |
| Contractor or government agency equipment storage yards (M) | N | N | N | | |
| Dredging (M) | N | N | N | | |
| Transportation corridors - Freeways/state highways (M) | N | N | N | | |
| Transportation corridors - Railroads (M) | N | N | N | | |
| Transportation corridors - Historic railroad right-of-ways (M) | N | N | N | | |
| Transportation corridors - Road Right-of-ways (herbicide use areas) (M) | N | N | N | | |
| Transportation corridors - Roads/ Streets (L) | **Y** | **Y** | **Y** | | |
| Hospitals (M) | N | N | N | | |
| Storm Drain Discharge Points (M) | N | N | N | | |
| Storm Water Detention Facilities (M) | N | N | N | | |
| Artificial Recharge Projects - Injection wells (potable water) (L) | N | N | N | | |
| Artificial Recharge Projects - Injection wells (non-potable water) (M) | N | N | N | | |
| Artificial Recharge Projects - Spreading Basins (potable water) (L) | N | N | N | | |
| Artificial Recharge Projects - Spreading Basins (non-potable water) (M) | N | N | N | | |
| Medical/dental offices/clinics (L) | N | N | N | | |
| Veterinary offices/clinics (L) | N | N | N | | |
| Surface water - streams/ lakes/rivers (L) | **Y** | **Y** | **Y** | | Slough and Swale |
| Wells - monitoring, test holes (L) | N | N | N | | |

**Y = Yes N = No U = Unknown**

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

*Drinking Water Source Assessment and Protection (DWSAP) Program*

# Vulnerability Ranking

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

**System Name** ELKHORN WS #4 **System No.** 2700579

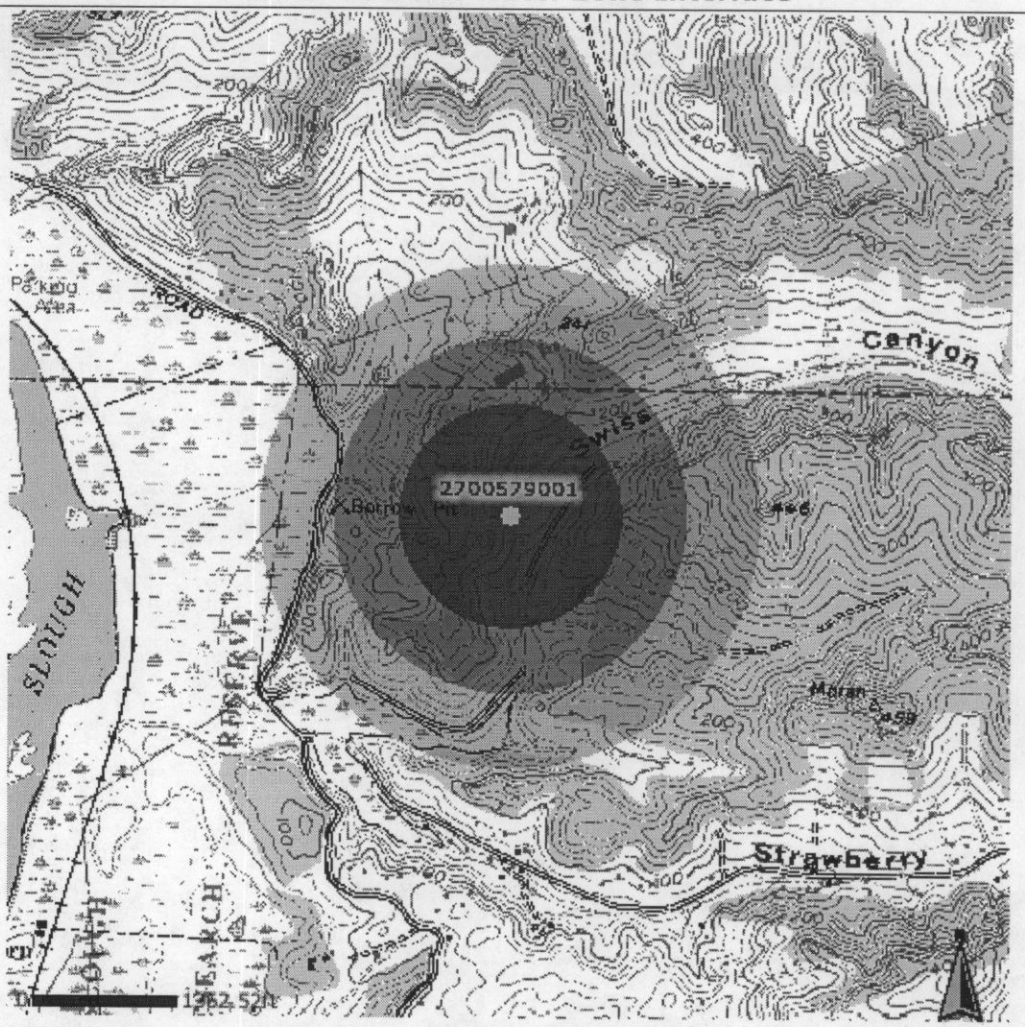
**Source Name** WELL 01 **Source No.** 001 **PS Code** 2700579-001

**Completed by** Dan Wessell **Date** May, 2001

| 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 | 5 | 17 |
| A | Agricultural Drainage (H in Zone A, otherwise M) | | 5 | 5 | 5 | 15 |
| A | Septic systems - low density (<1/acre) (H in Zone A, otherwise L) | | 5 | 5 | 5 | 15 |
| A | Wells - Agricultural/ Irrigation (H) | | 5 | 5 | 5 | 15 |
| A | Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M) | | 3 | 5 | 5 | 13 |
| A | Fertilizer, Pesticide/ Herbicide Application (M) | | 3 | 5 | 5 | 13 |
| A | Wells - Water supply (M) | | 3 | 5 | 5 | 13 |
| A | Surface water - streams/ lakes/rivers (L) | | 1 | 5 | 5 | 11 |
| A | Transportation corridors - Roads/ Streets (L) | | 1 | 5 | 5 | 11 |
| B5 | Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M) | | 3 | 3 | 5 | 11 |
| B5 | Fertilizer, Pesticide/ Herbicide Application (M) | | 3 | 3 | 5 | 11 |
| B5 | Wells - Water supply (M) | | 3 | 3 | 5 | 11 |
| B5 | Wells - Agricultural/ Irrigation (H) | | 5 | 0 | 5 | 10 |
| B10 | Wells - Agricultural/ Irrigation (H) | | 5 | 0 | 5 | 10 |
| B5 | Septic systems - low density (<1/acre) (H in Zone A, otherwise L) | | 1 | 3 | 5 | 9 |
| B5 | Surface water - streams/ lakes/rivers (L) | | 1 | 3 | 5 | 9 |
| B5 | Transportation corridors - Roads/ Streets (L) | | 1 | 3 | 5 | 9 |
| B10 | Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M) | | 3 | 1 | 5 | 9 |
| B10 | Fertilizer, Pesticide/ Herbicide Application (M) | | 3 | 1 | 5 | 9 |
| B10 | Wells - Water supply (M) | | 3 | 1 | 5 | 9 |
| A | Above ground storage tanks (M) | | 3 | 0 | 5 | 8 |
| B5 | Above ground storage tanks (M) | | 3 | 0 | 5 | 8 |
| B5 | Agricultural Drainage (H in Zone A, otherwise M) | | 3 | 0 | 5 | 8 |
| B10 | Above ground storage tanks (M) | | 3 | 0 | 5 | 8 |
| B10 | Agricultural Drainage (H in Zone A, otherwise M) | | 3 | 0 | 5 | 8 |

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

## DWSAP Ground Water Zone Interface




| Well Position * | GPS'd | Longitude | Latitude |
|---|---|---|---|
| | Yes | -121.727 | 36.835 |

* Well location coordinates have been rounded to 3 decimal places due to security concerns.

| Well Statistics | |
|---|---|
| **Well Number** | 2700579001 |
| **Media Type** | Porous Media |
| **System Type** | All Other System |
| **Effective Porosity (n , decimal percent)** | 0.2 |
| **Screened Interval (H , feet)** | 10 |
| **Pumping Capacity (Q , gpm)** | 50 |
| **Azimuth of Flow (a , degrees)** | 0 - No Translation |

| Radii Measures | |
|---|---|
| **Defaults Used** | No |
| **R2** | 1056 ft |
| **R5** | 1673 ft |
| **R10** | 2365 ft |