Consumer Confidence Report for 1999 IRISH BEACH WATER DISTRICT P.O. Box 67 Manchester, CA 95459

We're pleased to present to you the Annual Water Quality Report for the 1999 calendar year. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our current water sources are the Irish Gulch Upper Diversion dam and the Unit 9 deep well.

We have a Watershed Sanitary Survey for Irish Gulch available at our office that provides more information such as potential sources of contamination. The Watershed Sanitary Survey for Irish Gulch was completed in the February 1996. The source is considered most vulnerable to: Suspended Sediment and Turbidity, Herbicides, Fuel Spills, Solid Waste, Animals and Wildfire. A copy of the complete assessment is available at Department of Health Services, Drinking Water Field Operations, 50 D Street, Santa Rosa, California, 95404-4752 or Irish Beach Water District, P.O. Box 67, Manchester, California 95459 for a copying charge.

I'm pleased to report that our drinking water is safe and meets all federal and state requirements. This report shows our water quality and what it means.

If you have any questions about this report or concerning your water utility, please contact Charles Acker, Operations Manager at 877-3474. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held bi-monthly on the second Saturday at 10:00 a.m. at the Irish Beach Firehouse on 15401 Forest View Drive. The next regular meeting is July 8, 2000.

Irish Beach Water District routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 1999. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Regulatory Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Public Health Goal or 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.

	TES	T RES	SULT	S Irish	Gulch U	pper	Dive	rsion
Contaminant	Violatio	Level	Range	Unit	MCL	PHG	MCLG	Likely Source of Contamination
		Detected		Measure				
Microbiological Cor	tamina	ints		ment				
1. Total Coliform Bacteria	N	Absent	N/A	N/A	presence of coliform bacteria in 5% of monthly	N/A	0	Naturally present in the environment
2 Fecal coliform and	NT -	Absent	N/A	N/A	samples a routine	N/A	0	Human and animal waste
E.coli					sample and repeat sample are total coliform positive, and one is also fecal coliform or			
					E. coli positive	······································		
3. Turbidity	N	<.5	N/A	NTU	TT	N/A	N/A	Soil runoff

Radioactive Contai	ninant	s						
6. Radium 226 & 228 (total)	N	1.53	N/A	pCi/L	5	N/A	N/A	Erosion of natural deposits
Inorganic Contami	nants							
Aluminum	N	1	N/A	ppm	l	N/A	N/A	Erosion of natural deposits; residue from some surface water treatment processes
Fluoride	N	11	N/A	ug/l	2000	1000	N/A	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Secondary Unregulated Contaminants The following constituents are not considered a health hazard but are monitored to determine aesthetic quality:

Iron	N	503*	ND-503	ug/l	NA	N/A	300	Erosion of natural deposits
							ug/l	-
Chloride	N	330	N/A	mg/l	250	N/A	N/A	Erosion of natural deposits
Sulfate	N	11	N/A	mg/l	250	N/A	N/A	Erosion of natural deposits
Zinc	N	120	N/A	ug/l	5000	N/A	N/A	Erosion of natural deposits

*Iron result is high from samples of raw water taken during high runoff periods. Levels are reduced by treatement and also reduce after high runoff periods end.

Synthetic Organic Contaminants including Pesticides and Herbicides

none detected

Volatile Organic Contaminants

none detected

TEST RESULTS Unit 9 well												
Contaminant	Violatio n Y/N	Level Detected	Range	Unit Measure ment	MCL	PHG	MCLG	Likely Source of Contamination				
Microbiological Contaminants												
1. Total Coliform Bacteria	N	Absent			presence of coliform bacteria in 5% of monthly samples	N/Â	0	Naturally present in the environment				
2. Fecal coliform and <i>E.coli</i>	N	Absent			a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	N/A	0	Human and animal waste				
3. Turbidity	N	<.5	N/A	NTU	TT	N/A	N/A	Soil runoff				

Radioactive Conta	minant	5						
6. Radium 226 & 228 (total)	N	2.28	N/A	pCi/L	5	N/A	N/A	Erosion of natural deposits
Inorganic Contami	nants					_		
Aluminum	N	54	N/A	ug/l	1	N/A	N/A	Erosion of natural deposits; residue from some surface water treatment processes
Fluoride	N	340	N/A	ррb	2000	1000	N/A	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Secondary Unregulated Contaminants The following constituents are not considered a health hazard but are monitored to determine aesthetic quality:

Manganese	N	36	N/A	ppb		50 ppb	NA	Erosion of natural deposits
Zinc	Ν	30	N/A	ppb	5000		NA	Erosion of natural deposits

Synthetic Organic Contaminants including Pesticides and Herbicides none detected

Volatile Organic Contaminants

volatile Organic Co	ontaminants						
Lead and Copper	No. of Samples Collected	90 th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant	
Lead (ppb)	5	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers, erosion of natural deposits.	
*Copper (ppb)	5	320	0	1300	170	Internal corrosion of household water plumbing systems; erosion from natural deposits; leaching from wood preservatives.	

*Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

All 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system. The costs may be reflected in the rate structure, because rate adjustments may be necessary in order to make these improvements.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791)."

Please call IBWD Operations Manager, Charlie Acker at 877-3474 if you have questions.

2000 Consumer Confidence Report

Water System Name: Irish Beach Water District Report Date: June 15, 2001

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, 2000.

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

Type of water source(s) in use: <u>Surface Water and Deep Well</u>

Name & location of source(s): <u>Irish Gulch Upper Diversion, 1/2 mile up Irish Gulch.</u> Unit Nine Well, in the forested area behind Unit Nine (Alta Mesa Road).

Drinking Water Source Assessment information:

A "Zero Discharge Ordinance" (of potential water pollutants) is in place to protect the Irish Gulch water source from contamination. A well protection ordinance is being drafted to protect the Unit Nine well. A Watershed Sanitary Survey for Irish Gulch was completed in February 1996. The Irish Gulch source is considered most vulnerable to: Suspended Sediment and Turbidity, Herbicides, Fuel Spills, Solid Waste, Animals and Wildfire. A copy of the complete assessment is available at Department of Health Services, Drinking Water Field Operations, 50 D Street, Santa Rosa, California, 95404-4752 or from the Irish Beach Water District, P.O. Box 67, Manchester, California 95459 for a copying charge.

Time and place of regularly scheduled board meetings for public participation: <u>The second Saturday</u> of each month at the Irish Beach Firehouse, 15401 Forest View Drive at Irish Beach.

For more information, contact Charles Acker, Operations Manager Phone: (707) 877-3474

TERMS USED IN THIS REPORT: Maximum Contaminant Level (MCL): The highest Public Health Goal (PHG): The level of a level of a contaminant that is allowed in drinking contaminant in drinking water below which there is water. Primary MCLs are set as close to the PHGs no known or expected risk to health. PHGs are set (or MCLGs) as is economically and technologically by the California Environmental Protection Agency. feasible. Secondary MCLs are set to protect the Maximum Contaminant Level Goal (MCLG): The odor, taste, and appearance of drinking water. level of a contaminant in drinking water below which Primary Drinking Water Standards (PDWS): there is no known or expected risk to health. MCLs for contaminants that affect health along MCLGs are set by the U.S. Environmental Protection with their monitoring and reporting requirements, Agency (USEPA). and water treatment requirements. Regulatory Action Level (AL): The concentration Secondary Drinking Water Standards (SDWS): of a contaminant which, if exceeded, triggers MCLs for contaminants that affect taste, odor, or treatment or other requirements which a water appearance of the drinking water. Contaminants system must follow. with SDWSs do not affect the health at the MCL ppb: parts per billion or micrograms per liter (ug/L) levels. ppt: parts per trillion or nanograms per liter (ng/L) ND: not detectable at testing limit pCi/L: picocuries per liter (a measure of radiation) ppm: parts per million or milligrams per liter (mg/L)

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*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, 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 requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

IRISH GULCH UPPER DIVERSION:

TABLE 1 - SAMPLING RESULTS FOR IRISH GULCH SHOWING THE DETECTION OF COLIFORM BACTERIA

(NONE DETECTED)

TABLE 2 - SAMPLING RESULTS FOR IRISH GULCH SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (no Lead detected)	No. of samples collected	90 th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Copper (ppb)	5	320	0	1300	170	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 - SAMPLING RESULTS FOR IRISH GULCH SHOWING 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)	3/20/01	15	NA	none	none	Generally found in ground and surface water
Hardness (ppm)	3/20/01	63	NA	none	none	Generally found in ground and surface water

TABLE 4 - DET	TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD											
IRISH GULCH:												
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant						
Aluminum (ug/L)	3/20/01	290	NA	1000	N/A	Erosion of natural deposits; residual from some surface water treatment processes						
Barium (ug/L)	3/20/01	13	NA	1000	(2000)	Erosion of natural deposits.						
Fluoride (ug/L)	3/20/01	310	NA	1000	N/A	Erosion of natural deposits.						

TABLE 5 - DETE	TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD										
IRISH GULCH:											
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant					
Color (Units)	3/20/01	7 units	N/A	15 units	N/A	Naturally-occurring organic materials					
Iron (ug/L)	3/20/01	220	N/A	300	N/A	Leaching from natural deposits; industrial wastes					
Total Dissolved Solids [TDS]ppm	3/20/01	130	N/A	1000	N/A	Runoff/leaching from natural deposits					
Specific Conductance (micromhos)	3/20/01	210	N/A	1600	N/A	Substances that form ions when in water; seawater influence					
Chloride (ppm)	3/20/01	16	N/A	500	N/À	Runoff/leaching from natural deposits; seawater influence					
Sulfate (ppm			N/A	500	N/A	Runoff/leaching from natural deposits' industrial wastes					

UNIT NINE WELL

TABLE 1 - SAMPLING RESULTS SHOWS NO DETECTION OF COLIFORM BACTERIA

FOR THE UNIT NINE WELL

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER FOR UNIT NINE WELL										
Lead and Copper (no Lead was detected)	No. of samples collected	90 th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant				
Copper (ppb)	5	320	0	1300	170	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.				

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

UNIT NINE WELL:								
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant		
Sodium (ppm)	3/20/01	39	NA	none	none	Generally found in ground and surface water		
Hardness (ppm)	3/20/01	109	NA	none	none	Generally found in ground and surface water		

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

UNIT	NINE	WELL:
------	------	-------

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ug/L)	3/16/01	54	NA	1000	N/A	Erosion of natural deposits; residual from some surface water treatment processes
Fluoride (ug/L)	3/15/00	340	NA	1000	N/A	Erosion of natural deposits.

TABLE 5 - DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD										
UNIT NINE WELL:										
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant				
Color (Units)	3/16/00	4 units	N/A	15 units	N/A	Naturally-occurring organic materials				
Total Dissolved Solids [TDS] ppm	3/16/00	174	N/A	1000	N/A	Runoff/leaching from natural deposits				
Specific Conductance (micromhos)	3/16/00	348	N/A	1600	N/A	Substances that form ions when in water; seawater influence				
Chloride (ppm)	3/16/00	24	N/A	500	N/A	Runoff/leaching from natural deposits; seawater influence				
Sulfate (ppm	3/16/00	22	N/A	500	N/A	Runoff/leaching from natural deposits' industrial wastes				

Additional General Information On Drinking Water

All 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).

TABLE 6 - SAMPLING RESULTS SI SURFACE WATER SOURCE	HOWING TREATMENT OF AT IRISH GULCH
Treatment Technique *	Direct filtration
Turbidity Performance Standards ** (that must be met through the water treatment process)	 <u>Turbidity of the filtered water must</u>: 1 - Be less than or equal to .5 NTU in 95% of measurements in a month. 2 - Not exceed 1 NTU for more than eight consecutive hours. 3 - Not exceed 5 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	.5
The number of violations of any surface water treatment requirements	None

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

** 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

The water quality remained within state and federal standards throughout the year 2000. During the 1999 calendar year, a temporary Boil Water Order for the Irish Gulch source was issued because storm water was too dirty (turbid) for the existing filters to handle. Filter upgrades designed to eliminate this problem are planned for installation later in 2001. Inadequately treated water may contain organisms that can cause illness when consumed. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Water System Name: Irish Beach Water District Report Date: August 15, 2002

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, 2001.

2001 Consumer Confidence Report

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

Type of water source(s) in use: Surface Water and Deep Well

Name & location of source(s): Irish Gulch Upper Diversion, 1/2 mile up Irish Gulch.

Unit Nine Well, in the forested area behind Unit Nine (Alta Mesa Road).

Drinking Water Source Assessment information:

A "Zero Discharge Ordinance" (of potential water pollutants) is in place to protect the Irish Gulch water source from contamination. A well protection ordinance is being drafted to protect the Unit Nine well. A Watershed Sanitary Survey for Irish Gulch was completed in February 1996. The Irish Gulch source is considered most vulnerable to: Suspended Sediment and Turbidity, Herbicides, Fuel Spills, Solid Waste, Animals and Wildfire. A copy of the complete assessment is available at Department of Health Services, Drinking Water Field Operations, 50 D Street, Santa Rosa, California, 95404-4752 or from the Irish Beach Water District, P.O. Box 67, Manchester, California 95459 for a copying charge.

Time and place of regularly scheduled board meetings for public participation: <u>The second Saturday</u> of each month at the Irish Beach Firehouse, 15401 Forest View Drive at Irish Beach.

For more information, contact Charles Acker, Operations Manager Phone: (707) 877-3474

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.

Primary Drinking Water Standards (PDWS): MCLs 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.

ND: not detectable at testing limit ppm: parts per million or milligrams per liter (mg/L) 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 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).

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

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*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, 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 requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

IRISH GULCH UPPER DIVERSION:

TABLE 1 - SAMPLING RESULTS FOR IRISH GULCH SHOWING THE DETECTION OF COLIFORM BACTERIA

(NONE DETECTED)

TABLE 2 - SAMPLING RESULTS FOR IRISH GULCH SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (no Lead detected)	No. of samples collected	90 th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Copper (ppb)	5	320	0	1300	170	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 - SAMPLING RESULTS FOR IRISH GULCH SHOWING SODIUM AND H	HARDNESS
---	----------

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	3/20/01	15	NA	none	none	Generally found in ground and surface water
Hardness (ppm)	3/20/01	63	NA	none	none	Generally found in ground and surface water

.

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD									
			IRISH G	ULCH:					
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant			
Aluminum (ug/L)	3/20/01	290	NA	1000	N/A	Erosion of natural deposits; residual from some surface water treatment processes			
Barium (ug/L)	3/20/01	13	NA	1000	(2000)	Erosion of natural deposits.			
Fluoride (ug/L)	3/20/01	310	NA	1000	N/A	Erosion of natural deposits.			

TABLE 5 - DETE	CTION OF	CONTAMIN	NANTS WITH	H A <u>SECON</u>	IDARY_DRI	NKING WATER STANDARD				
IRISH GULCH:										
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant				
Color (Units)	3/20/01	7 units	N/A	15 units	N/A	Naturally-occurring organic materials				
Iron (ug/L)	3/20/01	220	N/A	300	N/A	Leaching from natural deposits; industrial wastes				
Total Dissolved Solids [TDS]ppm	3/20/01	130	N/A	1000	N/A	Runoff/leaching from natural deposits				
Specific Conductance (micromhos)	3/20/01	210	N/A	1600	N/A	Substances that form ions when in water; seawater influence				
Chloride (ppm)	3/20/01	16	N/A	500	N/A	Runoff/leaching from natural deposits; seawater influence				
Sulfate (ppm			N/A	500	N/A	Runoff/leaching from natural deposits' industrial wastes				

UNIT NINE WELL

TABLE 1 - SAMPLING RESULTS SHOWS NO DETECTION OF COLIFORM BACTERIA

FOR THE UNIT NINE WELL

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER FOR UNIT NINE WELL								
Lead and Copper (no Lead was detected)	No. of samples collected	90 th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant		
Copper (ppb)	5	320	0	1300	170	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.		

٦

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

UNIT	NINE	WELL:	
------	------	-------	--

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	3/20/01	39	NA	none	none	Generally found in ground and surface water
Hardness (ppm)	3/20/01	109	NA	none	none	Generally found in ground and surface water

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

UNIT NINE WELL:

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ug/L)	3/16/01	54	NA	1000	N/A	Erosion of natural deposits; residual from some surface water treatment processes
Fluoride (ug/L)	3/15/00	340	NA	1000	N/A	Erosion of natural deposits.

	UNIT NINE WELL:											
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant						
Color (Units)	3/16/00	4 units	N/A	15 units	N/A	Naturally-occurring organic materials						
Total Dissolved Solids [TDS] ppm	3/16/00	174	N/A	1000	N/A	Runoff/leaching from natural deposits						
Specific Conductance (micromhos)	3/16/00	348	N/A	1600	N/A	Substances that form ions when in water; seawater influence						
Chloride (ppm)	3/16/00	24	N/A	500	N/A	Runoff/leaching from natural deposits; seawater influence						
Sulfate (ppm	3/16/00	22	N/A	500	N/A	Runoff/leaching from natural deposits' industrial wastes						

Additional General Information On Drinking Water

All 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). ſ

SURFACE WATER SOURCE	SURFACE WATER SOURCE AT IRISH GULCH									
Treatment Technique * (Type of approved filtration technology used)	Direct filtration									
<i>Turbidity Performance Standards</i> ** (that must be met through the water treatment process)	 <u>Turbidity of the filtered water must</u>: 1 - Be less than or equal to .5 NTU in 95% of measurements in a month. 2 - Not exceed 1 NTU for more than eight consecutive hours. 3 - Not exceed 5 NTU at any time. 									
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%									
Highest single turbidity measurement during the year	.5									
The number of violations of any surface water treatment requirements	None									

T . OL D /

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

** 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

The water quality remained within state and federal standards throughout the year 2001. Filter upgrades designed to eliminate winter-runoff caused increased turbidity were installed late in 2001. The installation of a Diatomaceous Earth filter now reduces the possibility of inadequately treated water being distributed through the system.

2002 Consumer Confidence Report

Water System Name:

Irish Beach Water District Report Date:

July 1, 2003

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, 2002.

Este informe contiene informaciÛn muy importante sobre su agua beber. Trad·zcalo Û hable con alguien que lo entienda bien.

Type of water source(s) in use:

Surface

Water and Deep Well

Name & location of source(s): Irish Gulch Upper Diversion, 1/2 mile up Irish Gulch.

Unit Nine Well, in the forested area behind Unit Nine (Alta Mesa Road).

Drinking Water Source Assessment information:

A Watershed Sanitary Survey for Irish Gulch was completed in February 1996. An update is due to be completed by August, 2003. The Source Water Assessment was completed early this year. The Irish Gulch source is considered most vulnerable to: Suspended Sediment and Turbidity, Herbicides, Fuel Spills, Solid Waste, Animals and Wildfire. A copy of the complete assessment is available at Department of Health Services, Drinking Water Field Operations, 50 D Street, Santa Rosa, California, 95404-4752 or from the Irish Beach Water District, P.O. Box 67, Manchester, California 95459 for a copying charge.

Time and place of regularly scheduled board meetings for public participation: The second Saturday

of every other (odd numbered) month, 10:00 a.m. at the Irish Beach Firehouse, 15401 Forest View Drive at Irish Beach.

For more information, contact Charles Acker, Operations Manager *Phone:* (707) 877-3474

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. Primary Drinking Water Standards (PDWS): MCLs 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. 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) 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 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). 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 which a water system must follow. Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

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*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial
 processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining
 activities.

In order to ensure that tap water is safe to drink, 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 requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

IRISH GULCH UPPER DIVERSION:

	ſ	TABLE 1 -	SAMPLI	NG RESU	LTS SHOW	ING THE	DETEC	TION OF COLIFORM BACTERIA	
Microbiological Co	ontaminan	ts (to be comp	leted only	if there w	as a detectio	n of bacteri	a)	Highest No. of detections	No.
	of mont	hs in violatio	'n	MCL	MCLG	Typical	Source	e of Bacteria	
Total Coliform Bo	acteria	(In a mo.)	1	None	;	N	ore the	an 1 sample in a month with a detection	0
				Na	turally pres	ent in the e	nvironn	nent	
	TABLE	2 - SAMPL	ING RES	ULTS FO	R IRISH (ULCH SHO	OWING	THE DETECTION OF LEAD AND CO	OPPER
Lead and Copper		No. of sam	ples coll	ected	90 ^{tt}	percentile	: level (detected	No.
	Sites ex	ceeding AL		AL	MCLG	Typical	Source	e of Contaminant	
Copper (ppb)		5	320	0	13	100 1	70	Internal corrosion of household wa	ter

plumbing systems; erosion of natural deposits; leaching from wood preservatives.

	TA	BLE 3 -	SAMPLI	ING RESU	ILTS FO	R IRISH	GULCH	SHOW	VING	SODIU	AND HARDNESS	
Chemical or Const	tituent (and re	eporting	units)	Sampl	e Date		Level	Detect	ed			lange
of Detections		MCL	PHG	(MCLG)		Typical	Source	of Co	ntamin	ant		
Sodium (ppm)	6/2	25/02	18	NA	n	one	none	G	eneral	ly found	in ground and surface w	vater
Hardness (ppm)	6/2	25/02	87	NA	n	one	none	G	eneral	y found	in ground and surface w	vater
* Any violation of	an MCL or AL	is asteri	sked. Ad	ditional in	formatio	n regardii	ng the vi	olation	is pro	vided on	the next page.	
	TABLE 4 -	DETECT	TON OF	CONTAN	INANT	5 WITH	A PRIM	<u>ARY</u> D	RINK	ING WA	TER STANDARD IRL	5H 6
Chemical or Const	tituent (and re	eporting	units)	Sampl	e Date		Level I	Detect	ed			lange
of Detections		MCL	PHG	(MCLG)		Typical	Source	of Co	ntamin	ant		
Barium (ug/L)		6/25/02	2 15	NA		1000	(20	00)	Eros	ion of na	itural deposits.	
	TABLE 5 - C	ETECTI	ION OF	CONTAM	INANTS	WITH A	SECON	NDARY	DRIN	IKING V	VATER STANDARD I	राडम
Chemical or Const	tituent (and re	eporting	units)	Sampl	e Date		Level I	Detect	ed			≀ange
of Detections		MCL	PHG	(MCLG)		Typical	Source	of Co	ntamin	ant		-
	Total Dissol	ved Solic	is [TDS]	ppm	6/25/0	2 150		N/A		1000	N/A	
	L			Ru	noff/lea	ching from	n natura	depos	sits		i	
	Specific Cor	ductanc	e (microm	nos)	6/25/0	2 260		N/A		1600	N/A	
	L	Substan	ces that	form ions	when in v	vater; sea	water in	fluence	e			
Chloride (ppm)		6/25/02	. 18	N/A	4	500	N/A		Runo	ff/leach	ing from natural deposi	ts;
				seawate	r influen	ce						
Sulfate (ppm		6/25/02	! 13	N//	4	500	N/A	1	Runo	ff/leach	ing from natural deposi	ts
				industri	al wastes							
TABLE 6 - DE	ETECTION O	F UNRE	GULATE	CONTA	MINANT	S IRISH	GULCH	1:				
1	Chemical	or Const	tituent	Sample	Date		Leve	el Dete	ected	Action	Level	
						Health E	ffects L	anguad	10			
Boron (ppb)	6/3	25/02	64	_	1000		Some n	nen who	o drink	water c	ontaining boron in exce	ss of
							1 1		1 .			-

the action level over many years may experience reproductive effects, based on studies in dogs.

UNIT NINE WELL TABLE 1 - SAMPLING RESULTS SHOWS NO DETECTION OF COLIFORM BACTERIA FOR THE UNIT NINE

	TABLE 2 - SAMPLI	NG RES	ULTS SHO	WING T	HE D	ETECTION OF L	EAD AND COPPER FO	R UNIT NINE	WI
Lead and Copper	(no Lead was detected)	No. of	samples c	ollected		90 th percenti	le level detected	No) .
	Sites exceeding AL		AL	MCLG	-	Typical Source of	Contaminant		
Copper (ppb)	5	320	0		1300	170	Internal corrosion of	household water	
	plumbing systems; er	osion of	natural de	posits; lea	aching	from wood preser	vatives.		

Chemical or Constituent	(and reporting	g units)	Sample Dat	te	Level Det	ected Range
of Detections	MCL	PHG (A	ACLG)	Typical	Source of	Contaminant
Sodium (ppm)	6/25/02	* 38	NA	none	none	Generally found in ground and surface water
Hardness (ppm)	6/25/02	107	NA	none	none	Generally found in ground and surface water

TABLE 4 - DETECTION O	CONTAMINANTS WITH	A PRIMARY DRINKING	WATER STANDARD UNIT NIN

C	hemical or Constituent	(and reporting un	nits)	Sample Date		Level Dete	cted	Range
	of Detections	MCL	PHG (N	nclg)	Typical	Source of (Contaminant	
	Fluoride (ug/L)	6/25/02	210	NA	1000	N/A	Erosion of natural deposits.	
	Gross Alpha (pCi/L)	6/25/02	.49	NA	15	N/A	Erosion of natural deposits	

т	ABLE 5 - DETECTION	OF CONT	AMINANTS	NITH A	SE <u>CONDARY</u>	DRINKING	WATER STANDARD UNIT N
Chemical or Const	t ituent (and reporting u	nits) S	iample Date		Level Detect	ed	Range
of Detections	MCL	PHG (MCL	. G)	Typical	Source of Co	ntaminant	
Color (Units)	6/25/02	15 units	N/A	15 units	N/A	Naturally-	occurring organic materials
	Total Dissolved Solids	[TDS] ppm	6/25/0	2 240	N/A	1000	N/A
			Runoff/lea	ching from	n natural depo	sits	
	Specific Conductance	(micromhos)	6/25/0	390	N/A	1600	N/A
	Substance	es that form	ions when in w	vater; sea	water influenc	e	
Chloride (ppm)	6/25/02	27	N/A	500	N/A	Runoff/lea	ching from natural deposits;
		Sec	water influer	ice			
Sulfate (ppm	6/25/02	23	N/A	500	N/A	Runoff/lea	iching from natural deposits
		ind	lustrial waste:	5			
	<i>x</i>						
TABLE 6 - DE	ETECTION OF UNREG	ULATED CO	NTAMINANI	'S UNIT	NINE WELL:		
	Chemical or Consti	tuent Sa	mple Date		Level Dete	ected Act	tion Level
	· · · · · · · · · · · · · · · · · · ·			Health Ef	fects Languag	ge	
Boron (ppb)	6/25/02	140	1000		Some men wh	o drink wate	r containing boron in excess of
the action level o	over many years may exp	perience repr	oductive effe	cts, based	d on studies in	dogs.	

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided below.

Additional General Information On Drinking Water

All 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).

Summary Information for Contaminants Exceeding an MCL or AL, or a Violation of any Treatment or Monitoring and Reporting Requirements

None of the chemicals tested for in Irish Beach's two water sources were found to exceed maximum regulatory levels.

For Systems Providing Surface Water As A Source Of Drinking Water:

 TABLE 7 - SAMPLING RESULTS SHOWING TREATMENT OF
 SURFACE WATER SOURCES

 Treatment Technique
 Direct filtration

 Turbidity Performance Standards** (that must be met through the water treatment process)
 Turbidity of the filtered water must:

 1 - Be less than or equal to 0.5 NTU in 95% of measurements in a month. 2 - Not exceed 1.0 NTU for more than eight consecutive hours.
 3 - Not exceed 5.0 NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year .50 NTU	
The number of violations of any surface water treatment requirements	NONE

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

** 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

The Irish Beach Water District's water treatment system met all state and federal drinking water standards in 2002.

2002 through 2006 Comprehensive Consumer Confidence Report

Water System Name: Irish Beach Water District Report Date: July 1, 2007

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, 2002 thru 2006.

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

Type of water source(s) used:	Surface Water and Deep Well					
Name & location of source(s): Irish Gulch Upper Diversion, 1/2 mile up Irish Gulch.						
Unit Nine Well, in the forested area behind Unit Nine (Alta Mesa Road).						
Drinking Water Source Assessment information:						
The Course Matter Are seen at and Courts as Course and the Lin Are at 2002. The Taish						

The Source Water Assessment and Sanitary Survey was completed in August 2003. The Irish Gulch source is considered most vulnerable to: Suspended Sediment and Turbidity, Herbicides, Fuel Spills, Solid Waste, Animals and Wildfire. A copy of the complete assessment is available at Department of Health Services, Drinking Water Field Operations, 50 D Street, Santa Rosa, California, 95404-4752 or from the Irish Beach Water District, P.O. Box 67, Manchester, California 95459 for a copying charge.

Time and place of regularly scheduled board meetings for public participation: The second Saturday of every other (odd numbered) month, 10:00 a.m. at the Irish Beach Firehouse, 15401 Forest View Drive at Irish Beach.

For more information, contact Charles Acker, Operations Manager Phone: (707) 877-1800

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.

Primary Drinking Water Standards (PDWS): MCLs 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.

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)

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 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).

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 which a water system must follow.

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions. 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, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, 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 requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. 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.) 1 in Dec. 2002	none	More than 1 month with c A routine sa	sample in a detection	none	Naturally present in the environment.		
Fecal Coliform or E. Coli	none	none	Repeat sample detect total coliform and either sample also detects fecal coliform.		none	Human and animal waste.		
TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER								
Lead and Copper	No. of samples collected	90 th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant		
Copper (ppb)	10	0.50	0	1300	170	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.		

TABLE 3 - SAMPLING RESULTS FOR IRISH GULCH INTAKE SHOWING 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)	Average.	18	13 - 21	none	none	Generally found in ground and surface water			
Hardness (ppm)	Average	77	36 - 106	none	none	Generally found in ground and surface water			

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

IRISH GULCH INTAKE:

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Barium (ppb)	Average	16	15 - 19	1000	2000	Erosion of natural deposits
Fluoride (ppb)	6/25/03	180	NA	2000	1000	Erosion of natural deposits: discharge from fertilizers.
Gross Alpha Activity	6/25/02	0.49	NA	15	(0)	Erosion of natural deposits

Chemical or Constituent (and reporting units)	Sample Date	Levei Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Total Dissolved Solids [TDS]ppm	Average	148	100 - 190	1000	NS	Runoff/leaching from natural deposits
Specific Conductance (micromhos)	Average	240	140 - 320	1600	NS	Substances that form ions when in water; seawater influence
Chloride (ppm)	Average	20	17 - 25	500	NS	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	Average	12	6.6 - 14	500	NS	Runoff/leaching from natural deposits' industrial wastes

Chemical or Constituent	Sample Date	Level Detected	Action Level	Health Effects Language
Boron (ppb)	Average	57	1000	No effects under notification level.

pag	e	4
-----	---	---

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS								
UNIT NINE WELL:								
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	Phg (MCLG)	Typical Source of Contaminant		
Sodium (ppm)	Average	43	38 - 47	none	none	Generally found in ground and surface water		
Hardness (ppm)	Average	111	107 - 115	none	none	Generally found in ground and surface water		

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD								
UNIT NINE WELL:								
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant		
Fluoride (ppb)	Average	170	130 - 210	20000	1000	Erosion of natural deposits.		
Gross Alpha (pCi/L)	6/25/02	.10	NA	15	(0)	Erosion of natural deposits		

TABLE 5 - DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD									
UNIT NINE WELL:									
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant			
Turbidity (NTU)	Average	0.48	0.35 - 0.6	5	NS	Soil runoff.			
Total Dissolved Solids [TDS] ppm	Average	240	240 - 240	1000	NS	Runoff/leaching from natural deposits			
Specific Conductance (micromhos)	Average	395	390 - 400	1600	NS	Substances that form ions when in water; seawater influence			
Chloride (ppm)	Average	26	24 - 27	500	NS	Runoff/leaching from natural deposits; seawater influence			
Sulfate (ppm	Average	23	22 - 24	500	NS	Runoff/leaching from natural deposits' industrial wastes			

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS UNIT NINE WELL:								
Chemical or Constituent	nical or Constituent Sample Level Date Detected		Action Level	Health Effects Language				
Boron (ppb)	Average	150	1000	No effects under notification level.				

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.

Additional General Information On Drinking Water

All 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).

Summary Information for Contaminants Exceeding an MCL or AL, or a Violation of any Treatment or Monitoring and Reporting Requirements

None of the chemicals tested for in Irish Beach's two water sources were found to exceed maximum regulatory levels. One household sample was rerun for lead and no detection was thus determined. Failure to deliver Consumer Confidence Reports to customers in the years 2002 through 2005.

For Systems Providing Surface Water As A Source Of Drinking Water:

TABLE 7 - SAMPLING RESULTS SI SURFACE WATER	IOWING TREATMENT OF SOURCES			
Treatment Technique:	Direct filtration and			
(Type of approved filtration technology used)	Diatomaceous Earth filtration			
<i>Turbidity Performance Standards</i> ** (that must be met through the water treatment process)	 <u>Turbidity of the filtered water must</u>: 1 - Be less than or equal to 0.3 NTU (.5 before 2005) in 95% of measurements in a month. 2 - Not exceed 1.0 NTU for more than eight consecutive hours. 3 - Not exceed 5.0 NTU at any time. 			
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	2002= 98%; 2003= 98%; 2004= 99% 2005= 95%; 2006= 98%			
Highest single turbidity measurement during the year (in NTU)	2002= .5; 2003= 1; 2004= .53; 2005= .32; 2006= .58			
The number of violations of any surface water treatment requirements	None			

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

** 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

The Irish Beach Water District's water treatment system met all state and federal drinking water standards in 2002 through 2006.

2007 Consumer Confidence Report

Water System Name:	Irish Beach Water District	Report Date:	July 1, 2008

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, 2007.

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: Irish Gulch Upper Intake; Unit 9 Well

Name & location of source(s):Irish Gulch Upper Intake is located about 1.6 miles inland from the ocean onIrish Gulch. The Unit 9 Well is located about 3000 feet past the Unit 9 subdivision near Alta Mesa Road.

Drinking Water Source Assessment information: <u>The Source Water Assessment and Sanitary Survey were completed</u> in August 2003. Irish Gulch is considered most vulnerable to suspended sediment and turbidity, herbicides, fuel spills. solid waste, animals and wildfire. A copy of the complete assessment is available at the California Department of Public Health, Drinking Water Field Operations, 50 D Street, Santa Rosa, CA 95404 or from the Irish Beach Water District, P.O. Box 67, Manchester, CA 95459.

Time and place of regularly scheduled board meetings for public participation: <u>The second Saturday of every other</u> (odd-numbered) month, 10:00 a.m. at the Irish Beach Fire House, 15401 Forest View Rd. at Irish Beach.

For more information, contact: Charles Acker, Operations Manager Phone: (

Phone: (707) 877-1800

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 Public Health (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.

Results for Irish Gulch and Unit 9 Well:

TABLE 1 -	SAMPLING	RESULTS Iri	SHOWING T	HE DETECT d Unit 9 W	TION OF ('ell	COLIFORM BACTERIA
Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MC	L	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) <u>1</u>	0	More than 1 sam month with a det	ple in a ection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) <u>0</u>	0	A routine sample sample detect tot and either sample fecal coliform or	e and a repeat cal coliform e also detects <i>E. coli</i>	0	Human and animal fecal waste
TABLE 2	- SAMPLIN	G RESULT IRIS	IS SHOWING H GULCH AN	THE DETEC D UNIT 9 W	- CTION OF 'ELL	F 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	90 th percentile level detected	No. sites exceeding AL	AL	РНС	Typical Source of Contaminant
Lead (ppb)	10	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Copper (ppm)	10	.49	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
TABLE 3	- SAMPLIN	G RESULTS	S FOR SODIU	M AND HA	RDNESS ()	IRISH GULCH ONLY)
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	3/19/07	17		none	none	Generally found in ground & surface water
Hardness (ppm)	3/19/07	63		none	none	Generally found in ground & surface water
*Any violation of an MCL or A	1L is marked wi	ith an asterisk	. Additional info	prmation rega	rding the viol	ation is provided later in this report.
TABLE 4 - DET	TECTION OI	F CONTAM	INANTS WIT	TH A <u>PRIM</u>	<u>ARY</u> DRIN	KING WATER STANDARD
			IRISH G	ULCH	T	
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum (ppm)	3/19/07	.063	NA	1	60	Erosion of natural deposits; residue from some surface water treatment processes.
Barium (ppm)	3/19/07	.011	NA	1	2	Erosion of natural deposits
Cadmium (ppb)	3/19/07	1.1	NA	5	.04	Erosion of natural deposits
Fluoride (ppm)	3/19/07	.100	NA	2	j	Erosion of natural deposits
Gross Alpha (pCi/L)	3/19/07	.109	NA	50	(0)	Decay of natural and man-made deposits
Radium 228 (pCi/L)	3/19/07	.083	NA	5	(0)	Erosion of natural deposits
TABLE 5 - DETE	CTION OF (CONTAMI	NANTS WITH	A <u>SECONI</u>	DARY DRI	NKING WATER STANDARD
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Calcium (ppm)	3/19/07	16	NA	NA	NA	Leaching from natural deposits
Chloride (ppm)	3/19/07	16	NA	500	NA	Runoff/leaching from natural deposits; seawater influence
Color (units)	3/19/07	5	NA	15	NA	Naturally-occurring organic materials
Magnesium (ppm)	3/19/07	5.8	NA	NA	NA	Leaching from natural deposits
Specific Conductance (µS/cm)	3/19/07	200	NA	1600	NA	Substances that form ions when in water; seawater influence
Sulfate (ppm)	3/19/07	11	NA	500	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	3/19/07	120	NA	1000	NA	Runoff/leaching from natural deposits

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

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS IRISH GULCH										
IRISH GULCH Disinfectant Byproducts, Disinfectant Residuals and Disinfectant Byproduct Precursors										
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	MCL	Typical Source of Contaminate	Health Effects Language					
TTHMs (Total Trihalomethanes) (ppb)	9/29/07	48.05	80	Byproduct of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.					
Haloacetic Acids (ppb)	9/29/07	4.1	60	Byproduct of drinking water disinfection	Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.					
Chlorine (ppm)	>4x/ Month	.2545	4.0	Drinking water disinfectant added for treatment.	Some people who use water containing chlorine in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.					

TABLI	E 3 - SAMPL	ING RESU	LTS FOR SOI	DIUM AND	HARDNES	S (WELL 9 ONLY)
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	3/19/07	17	NA	none	none	Generally found in ground & surface water
Hardness (ppm)	3/19/07	63	NA	none	none	Generally found in ground & surface water
TABLE 4 - DET	ECTION OF	CONTAM	INANTS WIT	TH A <u>PRIM</u>	<u>ARY</u> DRINI	KING WATER STANDARD
			UNIT 9 V	WELL		
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL MRDL	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Fluoride (ppm)	12/29/05	.130	NA	2	1	Erosion of natural deposits
Gross Alpha (pCi/L)	6/5/02	.10	NA	50	(0)	Decay of natural and man-made deposits
TABLE 5 - DETE	CTION OF (CONTAMIN	NANTS WITH	I A <u>SECON</u> I	DARY DRI	NKING WATER STANDARD
			UNIT 9 V	WELL		
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Calcium (ppm)	3/19/07	20	NA	NA	NA	Leaching from natural deposits
Chloride (ppm)	3/19/07	27	NA	500	NA	Runoff/leaching from natural deposits; seawater influence
Magnesium (ppm)	3/19/07	15	NA	NA	NA	Leaching from natural deposits

Month

chlorine in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach

discomfort.

Specific Conductance (µS/cm)	3/1	9/07	390	NA	1600	NA	Substances that form ions when in water: seawater influence
Sulfate (ppm)	3/1	9/07	23	NA	500	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	3/1	9/07	230	NA	1000	NA	Runoff/leaching from natural deposits
*Any violation of an MCL, M	fRDL, or TI	" is asteriske	d. Additic	onal information	on regarding the vio	lation i.	s provided later in this report.
	TAE	BLE 6 - DE	TECTIC	ON OF UNR	EGULATED CO	NTAN	AINANTS
				IRISH G	ULCH		
Disi	nfectant B	yproducts.	, Disinfe	ctant Residu	als and Disinfect	ant By	product Precursors
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	MCL	Ty	pical Source of Contaminate		Health Effects Language
TTHMs (Total Trihalomethanes) (ppb)	9/29/07	3.2	80	Byproduct of disinfection	f drinking water		Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Chlorine (npm)	>4x/	25-45	40	Drinking wa	ter disinfectant adde	ad be	Some people who use water containing

for treatment.

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. Immunocompromised 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).

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

None of the chemicals tested for in Irish Beach's two water sources were found to exceed maximum regulatory levels.

TABLE 7 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

Treatment Technique ^(a) (Type of approved filtration technology used)	Direct filtration
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 0.3 NTU in 95% of measurements in a month.2 - Not exceed 1.0 NTU for more than eight consecutive hours.3 - Not exceed 2 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	.99
Number of violations of any surface water treatment requirements	none

(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.

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided earlier in this report.

Summary Information for Surface Water Treatment

Irish Beach Water District's water treatment system met all state and federal drinking water standards in 2007.

2008 Consumer Confidence Report

Water System Name: Irish Beach Water District

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, 2008.

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: <u>Irish Gulch Upper Intake; Unit 9 Well</u>

Name & location of source(s): Irish Gulch Upper Intake is located about 1.6 miles inland from the ocean on

Irish Gulch. The Unit 9 Well is located about 3000 feet past the Unit 9 subdivision near Alta Mesa Road.

Measurements are taken at the Lower Intake of Irish Gulch representing both Upper and Lower Intake water quality.

Drinking Water Source Assessment information: <u>The Source Water Assessment and Sanitary Survey were completed</u> in August 2003. Irish Gulch is considered most vulnerable to suspended sediment and turbidity, herbicides, fuel spills, solid waste, animals and wildfire. A copy of the complete assessment is available at the California Department of Public Health, Drinking Water Field Operations, 50 D Street, Santa Rosa, CA 95404 or from the Irish Beach Water District, P.O. Box 67, Manchester, CA 95459.

Time and place of regularly scheduled board meetings for public participation: ______ The second Saturday of every other (odd-numbered) month, 10:00 a.m. at the Irish Beach Fire House, 15401 Forest View Rd. at Irish Beach.

For more information, contact: Charles Acker, Operations Manager Phone: (707) 877-1800

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.

Report Date: July 1, 2009

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 Public Health (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.

Results for Irish Gulch and Unit 9 Well:

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA Irish Gulch and Unit 9 Well MCL MCLG **Typical Source of Bacteria** Microbiological Highest No. No. of of detections Contaminants months (to be completed only if there in was a detection of bacteria) violation 0 0 Total Coliform Bacteria (In a mo.) More than 1 sample in a Naturally present in the environment month with a detection 0 Fecal Coliform or E. coli (In the year) 0 0 Human and animal fecal waste A routine sample and a repeat sample detect total coliform 0 and either sample also detects fecal coliform or E. coli TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER **IRISH GULCH AND UNIT 9 WELL** 90th No. sites Lead and Copper AL PHG **Typical Source of Contaminant** No. of samples percentile (to be completed only if there exceeding was a detection of lead or copper collected level AL in the last sample set) detected 10 ND 0 15 2 Internal corrosion of household water Lead (ppb) plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Copper (ppm)	10	.49	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
TABLE 3	- SAMPLING	G RESULTS	FOR SODIU	M AND HA	RDNESS (I	RISH GULCH ONLY)
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	7/28/08	30		none	none	Generally found in ground & surface water
Hardness (ppm)	7/28/08	121		none	none	Generally found in ground & surface water
*Any violation of an MCL or A	L is marked wi	th an asterisk	Additional info	ormation rega	rding the viola	tion is provided later in this report.
TABLE 4 - DET	ECTION OF	CONTAM	INANTS WIT	TH A <u>PRIM</u>	ARY DRIN	KING WATER STANDARD
			IRISH G	ULCH		
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum (ug/L)	7/28/08	22	NA	1	60	Erosion of natural deposits; residue from some surface water treatment processes.
Barium (ug/L)	7/28/08	16	NA	1000	2	Erosion of natural deposits
Nickel (ug/L)	7/28/08	.72		100		
Fluoride (ppm)	7/28/08	.100	NA	2	1	Erosion of natural deposits
Gross Alpha (pCi/L)	3/19/07	.109	NA	50	(0)	Decay of natural and man-made deposits
Radium 228 (pCi/L)	3/19/07	.083	NA	5	(0)	Erosion of natural deposits
TABLE 5 - DETE	CTION OF (CONTAMI	NANTS WITH	I A <u>SECON</u>	DARY DRI	NKING WATER STANDARD
			IRISH G	ULCH		
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Calcium (ppm)	7/28/08	30	NA	NA	NA	Leaching from natural deposits
Chloride (ppm)	7/28/08	6.9	NA	500	NA	Runoff/leaching from natural deposits; seawater influence
Color (units)	7/28/08	5	NA	15	NA	Naturally-occurring organic materials
Magnesium (ppm)	7/28/08	11	NA	NA	NA	Leaching from natural deposits
Specific Conductance (µS/cm)	7/28/08	360	NA	1600	NA	Substances that form ions when in water; seawater influence
Sulfate (ppm)	7/28/08	3	NA	500	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	7/28/08	200	NA	1000	NA	Runoff/leaching from natural deposits

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

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS										
IRISH GULCH Disinfectant Byproducts Disinfectant Residuals and Disinfectant Byproduct Precursors										
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	MCL	Typical Source of Contaminate	Health Effects Language					
TTHMs (Total Trihalomethanes) (ppb)	9/29/08	38.41	80	Byproduct of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.					
Haloacetic Acids (ppb)	9/29/08	39	60	Byproduct of drinking water disinfection	Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.					
Chlorine (ppm)	>4x/ Month	.2545	4.0	Drinking water disinfectant added for treatment.	Some people who use water containing chlorine in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.					

TABLE	E 3 - SAMPL	ING RESU	LTS FOR SOI	DIUM AND	HARDNES	S (WELL 9 ONLY)
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	3/19/07	40	NA	none	none	Generally found in ground & surface water
Hardness (ppm)	3/19/07	110	NA	none	none	Generally found in ground & surface water
TABLE 4 - DET	ECTION OF	CONTAM	INANTS WIT	H A <u>PRIM</u>	ARY DRINI	KING WATER STANDARD
			UNIT 9 V	WELL		
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Fluoride (ppm)	3/10/09	.160	NA	2	1	Erosion of natural deposits
Gross Alpha (pCi/L)	7/17/08	0.000	NA	50	(0)	Decay of natural and man-made deposits
TABLE 5 - DETE	CTION OF O	CONTAMIN	NANTS WITH	A <u>SECONI</u>	DARY DRI	NKING WATER STANDARD
			UNIT 9 V	WELL		
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Calcium (ppm)	3/19/07	20	NA	NA	NA	Leaching from natural deposits
Chloride (ppm)	3/19/07	27	NA	500	NA	Runoff/leaching from natural deposits; seawater influence
Magnesium (ppm)	3/19/07	15	NA	NA	NA	Leaching from natural deposits

Month

chlorine in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach

discomfort.

Specific Conductance (µS/cm)	3/19	9/07	390	NA	1600	NA	Substances that form ions when in water; seawater influence
Sulfate (ppm)	3/19	9/07	23	NA	500	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	3/19	9/07	230	NA	1000	NA	Runoff/leaching from natural deposits
*Any violation of an MCL, M	RDL, or TI	' is asterisked	l. Additic	onal informatio	on regarding th	e violation	is provided later in this report.
	ТАВ	LE 6 - DE'	ТЕСТІ)N OF UNR	EGULATEI) CONTA	MINANTS
				IDIGU C	шсн		
				INISH G	ULUII		
Disir	ıfectant B	vproducts.	Disinfe	ctant Residu	als and Disi	ifectant B	vproduct Precursors
Disir Chemical or Constituent	nfectant B	yproducts, Level	Disinfe MCL	ctant Residu Tv	als and Disin pical Source o	nfectant B f	yproduct Precursors Health Effects Language
Disir Chemical or Constituent (and reporting units)	nfectant B Sample Date	yproducts, Level Detected	Disinfe MCL	ctant Residu Ty	als and Disin pical Source o Contaminate	nfectant B f	yproduct Precursors Health Effects Language
Disir Chemical or Constituent (and reporting units) TTHMs (Total Trihalomethanes) (ppb)	1fectant B Sample Date 9/29/08	yproducts, Level Detected 4.38	Disinfe MCL 80	Ctant Residu Ty Byproduct c disinfection	aals and Disin pical Source o Contaminate of drinking wate	nfectant B	yproduct Precursors Health Effects Language Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Disir Chemical or Constituent (and reporting units) TTHMs (Total Trihalomethanes) (ppb) Haloacetic Acids (ppb)	Sample Date 9/29/08 9/29/08	yproducts, Level Detected 4.38 2.4	Disinfe MCL 80 60	ctant Residu Ty Byproduct of disinfection Byproduct of disinfection	nals and Disin pical Source o Contaminate of drinking wate	nfectant B f er er	yproduct Precursors Health Effects Language Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer. Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.

for treatment.

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. Immunocompromised 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).

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

None of the chemicals tested for in Irish Beach's two water sources were found to exceed maximum regulatory levels.

TABLE 7 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

<i>Treatment Technique</i> ^(a) (Type of approved filtration technology used)	Direct filtration
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	 <u>Turbidity of the filtered water must</u>: 1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours. 3 – Not exceed 2 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	.99
Number of violations of any surface water treatment requirements	none

(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.

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided earlier in this report.

Summary Information for Surface Water Treatment

Irish Beach Water District's water treatment system met all state and federal drinking water standards in 2008.

2009 Consumer Confidence Report

Water System Name: Irish Beach Water District	Report Date: June 30, 2010
---	----------------------------

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, 2009.

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:	Irish Gulch Upper and Lower Intake; Unit 9 Well, Tank 5 Well
Name & location of source(s):	Irish Gulch Upper and Lower Intakes are located about .5 miles and 1.6 miles inland from the ocean on Irish Gulch.
The Unit 9 Well is located about	3000 feet past the Unit 9 subdivision near Alta Mesa Road. The Tank 5 Well is about
500 feet east of the Unit 9 well.	
Drinking Water Source Assessm in August 2003. Irish Gulch is c solid waste, animals and wildfire Health, Drinking Water Field Op P.O. Box 67, Manchester, CA 95	ent information: The Source Water Assessment and Sanitary Survey were completed onsidered most vulnerable to suspended sediment and turbidity, herbicides, fuel spills, . A copy of the complete assessment is available at the California Department of Public erations, 50 D Street, Santa Rosa, CA 95404 or from the Irish Beach Water District, 459.
Time and place of regularly sche	duled board meetings for public participation: The second Saturday of every other

(odd-numbered) month, 10:00 a.m. at the Irish Beach Fire House, 15401 Forest View Rd. at Irish Beach.

For more information, contact:Charles Acker, Operations ManagerPhone:(707) 877-1800

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 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: 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)

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 by-products 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 Public Health (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 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 –	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	(In a mo.) <u>0</u>	0	More than 1 sample in a month with a detection		0	Naturally present in the environment		
Fecal Coliform or <i>E. coli</i>	(In the year) $\underline{0}$	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>		0	Human and animal fecal waste		
TABLE 2	– SAMPLIN	G RESULT	TS SHOWING	THE DETE	CTION OI	F LEAD AND COPPER		
Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant		
Lead (ppb)	10	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits		
Copper (ppm)	10	.49	0	1.3	0.17	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)	12/22/09	43.3	19-71	none	none	Salt present in the water and is generally naturally occurring	
Hardness (ppm)	12/22/09	84	75-110	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring	

*Any violation of an MC or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Inorganic Contaminants						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Fluoride (ppm)	12/22/09	.21	.1624	2	1	Erosion of natural deposits
Arsenic	3/10/09	.830	.6799	10	2	Erosion of natural deposits
Aluminum	3/10/09	56.5	23 - 90	1000	50	Erosion of natural deposits
Nitrate (as nitrate, NO ₃) (ppm) (I.G. Lower)	12/22/09	9.1	NA	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Barium (ppb)	3/10/09	6.2	3.1 – 9.3	1000	100	Erosion of natural deposits

Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors							
TTHMs (Total Trihalomethanes) (ppb)	9/29/08	4.38*	NA	80	NA	Byproduct of drinking water disinfection	
Haloacetic Acids (ppb)	9/29/08	2.4*	NA	60	NA	Byproduct of drinking water disinfection	
Chlorine (ppm)	>4x/ month	.2040	.2040	4.0	NA	Drinking water disinfectant added for treatment.	

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	
Aluminium (ppb)	11/19/08	23	NA	200	50	Erosion of natural deposits; residual from some surface water treatment processes	
Chloride (ppm)	12/22/09	23	20 - 27	600	NA	Runoff/leaching from natural deposits; seawater influence	
Color (units)	12/22/09	15	NA	15	NA	Naturally-occurring organic materials	
Hardness (Total) as CACO3	12/22/09	84	67 - 110	NA	NA	Naturally-occurring	
Soduim	12/22/09	43	40 - 71	NA	NA	Runoff/leaching from natural deposits	
Total Dissolved Solids (TDS) (ppm)	12/22/09	220	150 - 280	1000	NA	Runoff/leaching from natural deposits	
Sulfate (ppm)	12/22/09	21	17 - 23	500	NA	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	Notifica	ation Level	Health Effects Language	
None detected in 2009							

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

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL or Violation of Any TT or Monitoring and Reporting Requirement

There was a monitoring violation for TTHMs (Total Trihalomethanes) and Haloacetic Acids because the annual samples were not taken in 2009. Though well under the maximum contaminant levels in 2008, the law requires that we list potential adverse health effects and the actions taken to address the violation:

We are required by the California Department of Public Health, to monitor your drinking water for total trihalomethanes (TTHM) and haloacetic acids (HAA5) on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. We did not monitor or test as required for TTHM and HAA5 in 2009 and therefore cannot be sure of the quality of our drinking water during that time. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer. Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.

Action taken: public notice was mailed to customers and published in a local paper. Testing will be done in August of 2010.

For Systems Providing Ground 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 FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES							
Microbiological Contaminants (complete if fecal-indicator detected)Total No. of DetectionsSample DatesMCL 							
E. coli	(In the year) 0	quarterly	0	(0)	Human and animal fecal waste		
Enterococci	(In the year) 0	quarterly	TT	n/a	Human and animal fecal waste		
Coliphage	(In the year) 0	quarterly	TT	n/a	Human and animal fecal waste		

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

Routine samples showed no Fecal Indicators were present in Irish Beach well waters.

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 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

Treatment Technique ^(a) (Type of approved filtration technology used)	Direct filtration
	Turbidity of the filtered water must:
Turbidity Performance Standards ^(b)	1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month.
(that must be met through the water treatment process)	2 – Not exceed 1.0 NTU for more than eight consecutive hours.
	3 – Not exceed 2 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	.99
Number of violations of any surface water treatment requirements	none

(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.

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided earlier in this report.

Summary Information for Violation of a Surface Water TT

There were no violations for Surface Water Treatment rules in 2009.

2010 Consumer Confidence Report

Water System Name: Irish Beach Water District

Report Date: June 30, 2011

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, 2010.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó bable con alguien que lo entíenda bien.

Type of water source(s) in use: Surface water and groundwater

Name & location of source(s): Irish Gulch Upper and Lower Intakes - approx .5 and 1.6 miles inland from the ocean. Unit 9 and Tank 5 Wells are located about 3000 feet east of the Unit 9 subdivision on Alta Mesa Rd.

Drinking Water Source Assessment information: <u>The Source Water Assessment and Sanitary Survey were completed</u> in August, 2003. Irish Gulch is considered most vulnerable to suspended sediment and turbidity, herbicides, fuel spills, solid waste, animals and wild fire. A copy of the complete assessment is available from the California Department of Health, Drinking Water Field Operations, 50 D Street, Suite 200, Santa Rosa, CA 95404 or from the Irish Beach Water District, P.O. Box 67, Manchester, CA 95459

Time and place of regularly scheduled board meetings for public participation: <u>Second Saturday of each odd-</u> numbered month at the Irish Beach Firehouse. 15401 Forest View Rd. at Irish Beach

For more information, contact: Charles Acker, Operations Manager Phone: (707) 877-1800

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 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: 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)

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

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 by-products 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 Public Health (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 provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, 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 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 T	HE DETECT	TION 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	(In a mo.) <u>0</u>	0	More than I sam with a detection	ple in a month	0	Naturally present in the environment
Fecal Coliform or E. coli	(In the year) <u>0</u>	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>		0	Human and animal fecal waste
TABLE 2	- SAMPLIN	G RESUL	TS SHOWING	THE DETE	CTION OI	F LEAD AND COPPER
Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	рнд	Typical Source of Contaminant
Lead (ppb)	10	ND	0	15	2	Internal corrosion of household water plumbing systems: discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10	.49	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	TABLE 3 -	- SAMPLI	NG RESULTS	FOR SODIU	M AND H	ARDNESS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	12-22-10	25	14-36	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	12-22-10	73	36-110	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium,

ousumer Confidence Report

					-	and are usually naturally occurring
ny violation of an MCL or A	L is asterisked	Additional	information rega	rding the viol	lation is provid	led later in this report.
TABLE 4 - DET	ECTION O	F CONTAN	IINANTS WI	TH A PRIM	ARY DRIN	KING WATER STANDARD
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL MRDL	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Fluoride	12-22-10	.16	NA	2.0	I	Erosion of natural deposits: water additiv which promotes strong teeth: discharge from fertilizer and aluminum factories.
Arsenic	12-22-10	.67	NA	10	2	Erosion of natural deposits.
Barium (ppm)	12-22-1	3.1	NA	1000	200	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposi-
Perchlorate (ppb)	2-28-10	4.6	NA	1000	6	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Nitrate (as nitrate, NO3) (ppm)	12-22-10	4,3	4.2-4.4	45	45	Runoff and leaching from fertilizer use: leaching from septic tanks and sewage: erosion of natural deposits.
Aluminum (ppb)	12-22-10	895	90-1700*	1000	100	Erosion of natural deposits: residue from some surface water treatment processes
TABLE 5 - DETE	CTION OF	CONTAMI	NANTS WIT	H A SECO	NDARY DR	INKING WATER STANDARD
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sulfate (ppm)	12-22-10	6.7	NA	500	NA	Runoff/ Leaching from natural deposits
Chromium (ppb)	12-22-10	LI	NA	5	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposit
Specific Conductance (umhos/cm)	12-22-10	340	NA	1600	NA	Substances that form ions when in water: seawater influence
Total Dissolved Solids (TDS) (ppm)	12-22-10	200	NA	1000	NA	Runoff/ Leaching from natural deposits
Iron (ppb)	12-22-10	345*	ND-690	220	NA	Leaching from natural deposits
Manganese (ppm)	12-22-10	18.6	3.6-15	79	NA	Leaching from natural deposits
Chloride (ppm)	12-22-10	17	NA	500	NA	Runoff/ Leaching from natural deposits
	TABLE 6	- DETECT	ION OF UNF	EGULATI	ED CONTA	MINANTS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notifica	tion Level	Health Effects Language
THMs (Total rihalomethanes) (ppb)	8-25-10	24.5	14-35		80	Some people who drink water containing trihalomethanes in excess of the MCL ov- many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting

Consumer Confidence Rep	oor1	-0			Page 4 of .
Haloacetic Acids ppb)	8-25-10	7.5	3.7-1(.3	60	Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.

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

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. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HTV/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).

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

Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
iron	Iron was detected at the Irish Gulch Lower Intake	ongoing	reduced by treatment	naturally occurring- ma stain laundry
duminum (ppm)	Iron was detected at the Irish Gulch Lower Intake and a low level at the U9 well.	ongoing	reduced by treatment monitoring is ongoing	Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestina) tract effects.

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

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING	RESULTS SHOWING	TREATMENT OF	SURFACE WATER SOURCES
		a state a state ta bort	

Treatment Technique ^(a) (Type of approved filtration technology used)	pressure filters
Turhidity 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 0.3 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours. 3 – Not exceed 2.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	99%
Highest single turbidity measurement during the year	8.6 (on one occasion)
Number of violations of any surface water treatment requirements	I (see below)

(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.

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

Summary Information for the Irish Beach Water District

Irish Beach Water District continues to provide safe and abundant water to the community. Recent well development projects have resulted in litigation over the Tank 5 Well which remains unsettled; however the successful Tank 2 Well is scheduled for development later in 2011. The IBWD has developed sources to meet the current system demand.

Irish Beach Water District received a Citation for Noncompliance of a Filter Operation in November, 2010. Turbidity over the .3 NTU (max level) was not detected in any system samples, however, turbidity of over 8 NTU did enter one storage tank. This tank was taken out of service until the turbidity was reduced and all affected customers were notified and given a "Boil Water Notice." the cause of the violation was operator error: an alarm switch had been overridden. No coliform bacteria was found in the system during or after the turbidity event.

2011 Consumer Confidence Report

Water System Name:Irish Beach Water DistrictReport Date:June 29, 2012

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, 2011.

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: Surface water and groundwater

Name & location of source(s): Irish Gulch Upper and Lower Intakes - approx .5 and 1.6 miles inland from the ocean. Unit 9 and Tank 5 Wells are located about 3000 feet east of the Unit 9 subdivision on Alta Mesa Rd.

Drinking Water Source Assessment information: <u>The Source Water Assessment and Sanitary Survey were completed</u> in August, 2003. Irish Gulch is considered most vulnerable to suspended sediment and turbidity, herbicides, fuel spills, solid waste, animals and wild fire. A copy of the complete assessment is available from the California Department of Health, Drinking Water Field Operations, 50 D Street, Suite 200, Santa Rosa, CA 95404 or from the Irish Beach Water District, P.O. Box 67, Manchester, CA 95459

Time and place of regularly scheduled board meetings for public participation: <u>Second Saturday of each odd-</u> numbered month at the Irish Beach Firehouse. 15401 Forest View Rd. at Irish Beach

For more information, contact: Charles Acker, Operations Manager Phone: (707) 877-1800

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 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: 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)

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 by-products 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 Public Health (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 provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, 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 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 (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	МС	L	MCLG	Typical Source of Bacteria		
Total Coliform Bacteria	(In a mo.) <u>0</u>	0	More than 1 sam month with a det	ple in a tection	0	Naturally present in the environment		
Fecal Coliform or <i>E. coli</i>	(In the year) $\underline{0}$	0	A routine sample sample detect to and either sampl fecal coliform or	e and a repeat tal coliform e also detects <i>E. coli</i>	0	Human and animal fecal waste		
TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER								
Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant		
Lead (ppb)	10	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits		
Copper (ppm)	10	.49	0 1.3		0.17	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)	10-19-11	48	23-73	none	none	Salt present in the water and is generally		

						naturally occurring			
Hardness (ppm)	10-19-11	68	66-70	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring			
*Any violation of an MCL or A	L is asterisked.	Additional	information rega	rding the vio	lation is provid	led later in this report.			
TABLE 4 – DET	ECTION OF	F CONTAN	AINANTS WI	ГН А <u>PRIN</u>	MARY DRIN	KING WATER STANDARD			
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant			
Fluoride	10-19-11	.16	.1531	2.0 1		Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.			
Perchlorate (ppb)	2-28-10	4.4	NA	1000 6		Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.			
Nitrate (as nitrate, NO3) (ppm)	10-19-11	4.9	4.9-5.0	45 45		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	MCL	PHG (MCLG)	Typical Source of Contaminant			
Sulfate (ppm)	10-19-11	15.5	10-21	500	NA	Runoff/ Leaching from natural deposits			
Specific Conductance (umhos/cm)	10-19-11	350	240-460	1600	NA	Substances that form ions when in water; seawater influence			
Total Dissolved Solids (TDS) (ppm)	10-19-11	215	150-280	1000	NA	Runoff/ Leaching from natural deposits			
Chloride (ppm)	10-19-11	19	16-22	500	NA	Runoff/ Leaching from natural deposits			
	TABLE 6	– DETEC	FION OF UNR	REGULAT	ED CONTA	MINANTS			
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notifica	tion Level	Health Effects Language			
TTHMs (Total Trihalomethanes) (ppb)	8-25-10	ND	NA	80		Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.			
Haloacetic Acids ppb)	8-25-10	ND	NA		60	Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.			

*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. Immunocompromised 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).

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

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

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT							
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language			

(none)

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

Treatment Technique ^(a) (Type of approved filtration technology used)	pressure filters
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 0.3 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours. 3 – Not exceed 2.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	99%
Highest single turbidity measurement during the year	.3
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.

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

Summary Information for the Irish Beach Water District

Irish Beach Water District continues to provide safe and abundant water to the community. Recent well development projects have resulted in litigation over the Tank 5 Well that remains unsettled; the successful Tank 2 Well is scheduled for development after litigation is settled. The IBWD has developed sources to meet the current system demand.

2012 Consumer Confidence Report

Water System Name: Irish Beach Water District

Report Date: June 29, 2012

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, 2012 and may include earlier monitoring data.

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: Surface water and groundwater

Name & location of source(s): Irish Gulch Upper and Lower Intakes - approx .5 and 1.6 miles inland from the ocean. Unit 9 and Tank 5 Wells are located about 3000 feet east of the Unit 9 subdivision on Alta Mesa Rd.

Drinking Water Source Assessment information: <u>The Source Water Assessment and Sanitary Survey were completed</u> in August, 2003. Irish Gulch is considered most vulnerable to suspended sediment and turbidity, herbicides, fuel spills, solid waste, animals and wild fire. A copy of the complete assessment is available from the California Department of Health, Drinking Water Field Operations, 50 D Street, Suite 200, Santa Rosa, CA 95404 or from the Irish Beach Water District, P.O. Box 67, Manchester, CA 95459

Time and place of regularly scheduled board meetings for public participation: <u>Second Saturday of each odd-</u> numbered month at the Irish Beach Firehouse 10 a.m. 15401 Forest View Rd. at Irish Beach

For more information, contact: Charles Acker, Operations Manager Phone: (707) 877-1800

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 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: 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 ($\mu g/L$)

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 by-products 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 California Department of Public Health (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 provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, 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 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 (No bacteria detected)	Highest No. of Detections	No. of months in violation	МС	Ľ	MCLG	Typical Source of Bacteria		
Total Coliform Bacteria	(In a mo.) <u>0</u>	0	More than 1 sam month with a det	ple in a tection	0	Naturally present in the environment		
Fecal Coliform or <i>E. coli</i>	(In the year) $\underline{0}$	0	A routine sample sample detect to and either sampl fecal coliform or	e and a repeat tal coliform e also detects <i>E. coli</i>	0	Human and animal fecal waste		
TABLE 2	– SAMPLIN	G RESUL	FS SHOWING	THE DETE	CTION OI	F LEAD AND COPPER		
Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant		
Lead (ppb)	10	ND	0 15		0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits		
Copper (ppm)	10	.49	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)	12-28-12	41	15-73	none	none	Salt present in the water and is generally naturally occurring						
Hardness (ppm)	12-28-12	90	70-110	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring						
*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.												
TABLE 4 – DET	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						
Fluoride	12-28-12	.24	.1531	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.						
Turbidity (NTU)	12-28-12	4.7	.40-9	TT	NA	Soil runoff						
Total Trihalomethanes (ppb)	10-4-12	32	NA	80	NA	Byproduct of drinking water disinfection						
Haloacetic Acids	10-4-12	ND	NA	60	NA	Byproduct of drinking water disinfection						
Gross Alpha Particle Activity (pCi/L)	3-19-07	.11	.11	15	0	Erosion of natural deposits						
TABLE 5 – DETE	CTION OF	CONTAMI	NANTS WITH	I A <u>SECO</u>	NDARY DR	INKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant						
Bicarbonate (mg/l)	12-28-12	129	39-220		NA	Leaching from natural deposits						
Calcium (mg/l)	12-28-12	14	7.5-20		NA	Leaching from natural deposits						
Chloride (mg/l)	12-28-12	23	19-26	500	NA	Runoff/leaching from natural deposits; seawater influence						
Magnesium (mg/l)	12-28-12	9	3-15		NA	Leaching from natural deposits						
Specific Conductance (umhos/cm)	12-28-12	310	160-460	1600	NA	Substances that form ions when in water; seawater influence						
Sulfate	12-28-12	16	7.8-25	500	NA	Runoff/leaching from natural deposits; industrial wastes						
Total Dissolved Solids (TDS) (ppm)	12-28-12	195	110-280	1000	NA	Runoff/leaching from natural deposits						

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

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. Immunocompromised 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).

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

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES							
Treatment Technique ^(a) (Type of approved filtration technology used)	pressure filters						
	Turbidity of the filtered water must:						
Turbidity Performance Standards ^(b)	1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month.						
(that must be met through the water treatment process)	2 – Not exceed 1.0 NTU for more than eight consecutive hours.						
	3 – Not exceed 2 NTU at any time.						
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	99%						
Highest single turbidity measurement during the year	.3						
Number of violations of any surface water treatment requirements	0						

For Systems Providing Surface Water as a Source of Drinking Water

(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.

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

2013 Consumer Confidence Report

Water System Name: Irish Beach Water District Report Date: June 30, 2014

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, 2013 and may include earlier monitoring data.

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: Surface Water and Ground Water

Name & general location of source(s): <u>Irish Gulch Upper and Lower Intakes - approx .5 and 1.6 miles inland from the</u> ocean on Irish Gulch. Unit 9 and Tank 5 wells are located about 3000 feet east of the Unit 9 subdivision on Alta Mesa Road.

Drinking Water Source Assessment information: The Source Water Assessment and Sanitary Survey were completed in May 2014 Irish Gulch is considered most vulnerable to suspended sediment and turbidity, herbicides, fuel spills, solid waste, animals and wild fire. A copy of the complete assessment is available from the California Department of Health, Drinking Water Field Operations, 50 D Street, Suite 200, Santa Rosa, CA 95404 or from the Irish Beach Water District, P.O. Box 67, Manchester, CA 95459

Time and place of regularly scheduled board meetings for public participation: <u>Second Saturday of each odd-</u> numbered month at 10:00 a.m. at the Irish Beach Firehouse 15401 Forest View Road at Irish Beach

For more information, contact: Charles Acker, Operations Manager Phone: (707) 877-1800

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 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: 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 (μ 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 by-products 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 California Department of Public Health (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 provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, 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 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 (complete if bacteria detected)	Highest No. of Detections	No. of m viola	No. of months in violation		MCL		Typical Source of Bacteria		
Total Coliform Bacteria	(In a mo.) <u>0</u>		0	More than 1 sa month with a c		0	Naturally present in the environment		
Fecal Coliform or <i>E. coli</i>	(In the year) <u>0</u>		0		A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>		Human and animal fecal waste		
TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF 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 percentil level detected	e No. sites exceeding AL	AL	PHG	Typical Source of Contaminant		
Lead (ppb)	9/23/2011	10	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits		
Copper (ppm)	9/23/2011	10	.49	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
	TABLE 3	- SAMPL	ING RES	SULTS FOR S	SODIUM A	AND HARDI	NESS		
Chemical or Constituent (and reporting units)	Sample Date	Level Detecte	ed	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant		
Sodium (ppm)	12/28/12	38		15-73	none	none	Salt present in the water and is generally naturally occurring		

Hardness (ppm)	12/28/12	79	31-150	none	none	Sum of polyvalent cations present			
						in the water, generally magnesium			
						and calcium, and are usually naturally occurring			
*Any violation of an MCL or A	L is asterisked	l. Additional infor	mation regarding t	he violation i	s provided late	r in this report.			
TABLE 4 – DET	ECTION O	F CONTAMIN	ANTS WITH A	PRIMARY	DRINKING	WATER STANDARD			
					PHG				
Chemical or Constituent	Sample	Level	Range of	MCL	(MCLG)	Typical Source of Contaminant			
(and reporting units)	Date	Detected	Detections	[MRDL]	[MRDLG]				
Fluoride	8/31/12	0.24	15-31	2.0	1	Erosion of natural deposits; water			
						additive which promotes strong			
						teeth; discharge from fertilizer and			
Total Tribalomethanes	9/23/13	31.5	2-61	80	n/a	Byproduct of drinking water			
(nnh)	,,,,					disinfection			
	0/22/12	5 09	1.07.10.0	60	n/a	Puproduct of drinking water			
Haloacetic Acids	9/23/13	5.98	1.07-10.9	00	11/a	disinfection			
	2 21 14	0.24			0.010				
Radium 228	3-31-14	0.24	NA	5	0.019 nCi/I	Erosion of natural deposits			
pci/L					pci/L				
Gross Alpha Particle	3/19/07	0.11	0-0.11	15	0	Erosion of natural deposits			
Activity (pCi/L)									
Nitrate	6-28-13	4	0-6	45	45	Runoff and leaching from			
				(as	(as NO3)	fertilizer use; leaching from			
				NO3)		septic tanks and sewage;			
						erosion of natural deposits			
TABLE 5 – DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD									
TABLE 5 – DETE	CHON OF	CONTAMINA	NIS WIINA <u>SI</u>	LUNDAR	<u>Y</u> DRINKIN	G WATER STANDARD			
Chemical or Constituent	Sample	Level	Range of		PHG	G WATER STANDARD			
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	G WATER STANDARD Typical Source of Contaminant			
Chemical or Constituent (and reporting units) Calcium (mg/l)	Sample Date 8-30-13	Level Detected 11.32	Range of Detections 7.5-14	MCL NA	PHG (MCLG) NA	Typical Source of Contaminant Leaching from natural			
Chemical or Constituent (and reporting units) Calcium (mg/l)	Sample Date 8-30-13	Level Detected 11.32	Range of Detections 7.5-14	MCL NA	PHG (MCLG) NA	Typical Source of Contaminant Leaching from natural deposits			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l)	Sample Date 8-30-13 12-28-12	Level Detected 11.32 21	Range of Detections 7.5-14 16-26	MCL NA 500	PHG (MCLG) NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l)	Sample Date 8-30-13 12-28-12	Level Detected 11.32 21	Range of Detections 7.5-14 16-26	MCL NA 500	PHG (MCLG) NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l)	Sample Date 8-30-13 12-28-12 12-28-12	Level Detected 11.32 21 8.9 1000000000000000000000000000000000000	Range of Detections 7.5-14 16-26 3-14	MCL NA 500	PHG (MCLG) NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l)	Sample Date 8-30-13 12-28-12 12-28-12	Level Detected 11.32 21 8.9 8.9	Range of Detections 7.5-14 16-26 3-14	MCL NA 500	PHG (MCLG) NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance	Sample Date 8-30-13 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318	Range of Detections 7.5-14 16-26 3-14 160-460	MCL NA 500 1600	PHG (MCLG) NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits Substances that form ions			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm)	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318	Range of Detections 7.5-14 16-26 3-14 160-460	MCL NA 500 1600	PHG (MCLG) NA NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits Substances that form ions when in water; seawater			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm)	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318	Range of Detections 7.5-14 16-26 3-14 160-460	MCL NA 500 1600	PHG (MCLG) NA NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits; seawater influence Substances that form ions when in water; seawater influence			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm) Sulfate	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318 9.7 9.7	Range of Detections 7.5-14 16-26 3-14 160-460 0-21	MCL NA 500 1600 500	PHG (MCLG) NA NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm) Sulfate	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318 9.7 9.7	Range of Detections 7.5-14 16-26 3-14 160-460 0-21	MCL NA 500 1600 500	PHG (MCLG) NA NA NA NA NA	Typical Source of ContaminantLeaching from natural depositsRunoff/leaching from natural deposits; seawater influenceLeaching from natural depositsSubstances that form ions when in water; seawater influenceRunoff/leaching from natural deposits			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm) Sulfate Total Dissolved Solids	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318 9.7 183	Range of Detections 7.5-14 16-26 3-14 160-460 0-21 110-280	MCL NA 500 1600 500	PHG (MCLG) NA NA NA NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits; seawater influence Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes Runoff/leaching from natural deposits; industrial wastes			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm) Sulfate Total Dissolved Solids (TDS) (ppm)	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318 9.7 183	Range of Detections 7.5-14 16-26 3-14 160-460 0-21 110-280	MCL NA 500 1600 500 1000	PHG (MCLG) NA NA NA NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes Runoff/leaching from natural deposits; industrial wastes			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm) Sulfate Total Dissolved Solids (TDS) (ppm) Aluminium	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318 9.7 183 275 275	Range of Detections 7.5-14 16-26 3-14 160-460 0-21 110-280 ND to 1100	MCL NA 500 1600 500 1000	PHG (MCLG) NA NA NA NA NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes Runoff/leaching from natural deposits; must from natural deposits; must from natural deposits; must from natural deposits; must from natural deposits			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm) Sulfate Total Dissolved Solids (TDS) (ppm) Aluminium (ug/L)	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318 9.7 183 275 275	Range of Detections 7.5-14 16-26 3-14 160-460 0-21 110-280 ND to 1100	MCL NA 500 1600 500 1000	PHG (MCLG) NA NA NA NA NA NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes Runoff/leaching from natural deposits; industrial wastes Runoff/leaching from natural deposits			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm) Sulfate Total Dissolved Solids (TDS) (ppm) Aluminium (ug/L)	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318 9.7 183 275 5	Range of Detections 7.5-14 16-26 3-14 160-460 0-21 110-280 ND to 1100	MCL NA 500 1600 500 1000 1000	PHG (MCLG) NA NA NA NA NA NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes Runoff/leaching from natural deposits			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm) Sulfate Total Dissolved Solids (TDS) (ppm) Aluminium (ug/L)	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318 9.7 183 275 5 – DETECTIO	Range of Detections 7.5-14 16-26 3-14 160-460 0-21 110-280 ND to 1100 NOF UNREGU	MCL NA 500 1600 1000 1000	PHG (MCLG) NA NA NA NA NA NA NA NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes Runoff/leaching from natural deposits Runoff/leaching from natural deposits			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm) Sulfate Total Dissolved Solids (TDS) (ppm) Aluminium (ug/L) Chemical or Constituent (and reporting units)	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 5 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318 9.7 183 275 - DETECTION Level Detected	Range of Detections 7.5-14 16-26 3-14 160-460 0-21 110-280 ND to 1100 NOF UNREGUI Range of Detections	MCL NA 500 1600 500 1000 1000 LATED CC Notifica	PHG (MCLG) NA NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes Runoff/leaching from natural deposits NTS Health Effects Language			
Chemical or Constituent (and reporting units) Calcium (mg/l) Chloride (mg/l) Magnesium (mg/l) Specific Conductance (umhos/cm) Sulfate Total Dissolved Solids (TDS) (ppm) Aluminium (ug/L) Chemical or Constituent (and reporting units) None to report	Sample Date 8-30-13 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12 12-28-12	Level Detected 11.32 21 8.9 318 9.7 183 275 DETECTION Level Detected	Range of Detections 7.5-14 16-26 3-14 160-460 0-21 110-280 ND to 1100 NOF UNREGUI Range of Detections	MCL NA 500 1600 500 1000 1000 LATED CC Notifica	PHG (MCLG) NA	Typical Source of Contaminant Leaching from natural deposits Runoff/leaching from natural deposits; seawater influence Leaching from natural deposits Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes Runoff/leaching from natural deposits Runoff/leaching from natural deposits Runoff/leaching from natural deposits NTS Health Effects Language			

*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. Immunocompromised 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).

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

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

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT								
Violation	ExplanationDurationActions Taken to Correct the ViolationHealth Effects Language							
None								

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES									
Microbiological Contaminants (complete if fecal-indicator detected)Total No. of DetectionsSample DatesMCL 									
E. coli	(In the year) 0	quarterly	0	(0)	Human and animal fecal waste				
Enterococci	(In the year) 0	quarterly	TT	n/a	Human and animal fecal waste				
Coliphage	(In the year)	quarterly	TT	n/a	Human and animal fecal waste				

Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE

None

SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES

None								
VIOLATION OF GROUND WATER TT								
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language				
None								

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES Treatment Technique (a) pressure filters (Type of approved filtration technology used) Turbidity of the filtered water must: 1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month. Turbidity Performance Standards (b) (that must be met through the water treatment process) 2 - Not exceed 1.0 NTU for more than eight consecutive hours. 3 - Not exceed 2.0 NTU at any time. 99% Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. Highest single turbidity measurement during the year .3 0 Number of violations of any surface water treatment requirements

(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.

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT								
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language				
None								

Summary Information for Operating Under a Variance or Exemption

IBWD is not operating under any variances or exemptions.

2014 Consumer Confidence 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 - December 31, 2014 and may include earlier monitoring data.

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: Surface Water and Ground Water

Name & general location of source(s): Irish Gulch Upper and Lower Intakes - approx .5 and 1.6 miles inland from the ocean on Irish Gulch. Unit 9 and Tank 5 wells are located about 3000 feet east of the Unit 9 subdivision on Alta Mesa Road.

Drinking Water Source Assessment information: <u>The Source Water Assessment and Sanitary Survey were completed</u> in May 2014 Irish Gulch is considered most vulnerable to suspended sediment and turbidity, herbicides, fuel spills, solid waste, animals and wild fire. A copy of the complete assessment is available from the SWRCB, Drinking Water Field Operations, 50 D Street, Suite 200, Santa Rosa, CA 95404 or from the Irish Beach Water District, P.O. Box 67, Manchester, CA 95459

Time and place of regularly scheduled board meetings for public participation: <u>Second Saturday of each odd</u> numbered month at 10:00 a.m. at the Irish Beach Firehouse 15401 Forest View Road at Irish Beach

 For more information, contact:
 Charles Acker, General Manager
 Phone:
 (707) 877-1800

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 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: State Board 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 (μ 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 by-products 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 Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, 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.

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	(In a mo.) <u>0</u>	0		More than 1 sample in a month with a detection		0	Naturally present in the environment	
Fecal Coliform or <i>E. coli</i>	(In the year) <u>0</u>	0		A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>		0	Human and animal fecal waste	
TABLE 2	- SAMPLIN	IG RESUL	LTS SHOW	ING THE I	DETECTIO	ON OF LEA	D 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	Typical Source of Contaminant	
Lead (ppb)	9/28/14	10	<0.005	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	

Copper (ppm)	9/28/14	10	0.84	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	TABLE 3	- SAMPLI	NG RESU	JLTS FOR S	SODIUM A	AND HARDI	NESS
Chemical or Constituent (and reporting units)	Sample Date	Level Detecte	d D	Range of etections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	3/31/14	18		18-76	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	3/31/14	42		42-150	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, naturally occurring

*Any violation of an MCL or AL is asterisked. 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	
Fluoride	3/31/14	0.24	15-31	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.	
Gross Alpha Particle Activity (pCi/L)	9/30/09	0.11	<0.00 - 0.11	15	0	Erosion of natural deposits	
Haloacetic Acids	9/29/14	12		60		Byproduct of drinking water disinfection	
Total Trihalomethanes (ppb)	9/29/14	41		80		Byproduct of drinking water disinfection	
TABLE 5 – D	ETECTION (OF CONTAMINA	NTS WITH A <u>SE</u>	CONDARY	DRINKING	WATER STANDARD	
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant	
Aluminium (ug/L)	3/31/14	314	ND - 870	1000	NA	Runoff/leaching from natural deposits	
Bicarbonate (mg/l)	3/31/14	148	54 - 210			Erosion of natural deposits	
Calcium (mg/l)	3/31/14	10.5	9.5 - 14	NA	NA	Leaching from natural deposits	
Chloride (mg/l)	3/31/14	22.6	19 - 27	500	NA	Runoff/leaching from natural deposits; seawater influence	
Iron (ug/l)	3/31/14	143	<100 - 430	300		Leaching from natural deposits	

Magnesium (mg/l)	3/31/14	9.5	5.3 - 14		NA	Leaching from natural deposits
Specific Conductance (umhos/cm)	3/31/14	340	440 - 180	1600	NA	Substances that form ions when in water; seawater influence
Sulfate (mg/l)	3/31/14	10.4	0-22	500	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	3/31/14	226	160-270	1000	NA	Runoff/leaching from natural deposits
	TABL	E 6 – DETECTIO	N OF UNREGUL	ATED CON	TAMINANTS	5
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level		Health Effects Language
None						

*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).

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

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

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT								
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language				
None								

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES								
Microbiological Contaminants (complete if fecal-indicator detected) Total No. of Detections Sample Dates MCL [MRDL] PHG (MCLG) Typical Source of Contaminant								
E. coli	(In the year) 0	monthly	0	(0)	Human and animal fecal waste			
Enterococci	(In the year) 0	monthly	TT	n/a	Human and animal fecal waste			
Coliphage	(In the year) 0	monthly	TT	n/a	Human and animal fecal waste			

Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

SPECIAL	NOTICE OF FECAL IND	DICATOR-POSITIVE	GROUND WATER SOURCE	SAMPLE	
None					
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES					
None					
VIOLATION OF GROUND WATER TT					
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language	
None					

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES			
Treatment Technique ^(a)	Success filters		
(Type of approved filtration technology used)	pressure milers		
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 0.3 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours.		
Lowest monthly percentage of samples that met Turbidity	3 - Not exceed 2.0 NTU at any time. 99%		
Performance Standard No. 1.			
Highest single turbidity measurement during the year	0.3		
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.

* ANY VIOLATION OF A TT IS MARKED WITH AN ASTERISK. ADDITIONAL INFORMATION REGARDING THE VIOLATION IS PROVIDED BELOW.