## **2015 Consumer Confidence Report**

Water System Name: Report Date: June 30, 2016 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, 2015 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: 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 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: Second Saturday of each odd 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 Primary Drinking Water Standards (PDWS): MCLs and 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.

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 (µg/L)

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

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

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

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 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA									
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation			MCL		Typical Source of Bacteria		
Total Coliform Bacteria	(In a mo.) 1*	(	)	More than 1 sample in a month with a detection		0	Naturally present in the environment *resamples-non-detected		
Fecal Coliform or E. coli	(In the year)	O A routine sample and repeat sample detect total coliform and eith sample also detects fe coliform or <i>E. coli</i>		e detect n and either detects fecal	0	Human and animal fecal waste			
TABLE 2	– SAMPLIN	IG RESUL	TS SHOV	WING THE	DETECTION	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 <sup>th</sup> 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 – SAMPLING RESULTS FOR SODIUM AND HARDNESS								
Chemical or Constituent (and reporting units)	Sample Date	Level Detecte		Range of Detections	MCL	PHG (MCLG)	<b>Typical Source of Contaminant</b>		
Sodium (ppm)	3/31/14	37		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 <u>PRIMARY</u> 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	06/29/15	0.20	.1624	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	08/28/15	5.37		60		Byproduct of drinking water disinfection
Total Trihalomethanes (ppb)	08/28/15	46		80		Byproduct of drinking water disinfection

# TABLE 5 – DETECTION OF CONTAMINANTS WITH A $\underline{SECONDARY}$ DRINKING WATER STANDARD

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Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminium (ug/L)	06/29/15	128	ND - 314	1000	NA	Runoff/leaching from natural deposits
Bicarbonate (mg/l)	06/29/15	162	148 - 210			Erosion of natural deposits
Barium	06/29/15	160		1000		Erosion of natural deposits
Calcium (mg/l)	06/29/15	10.5	9.5 - 14	NA	NA	Leaching from natural deposits
Chloride (mg/l)	06/29/15	20.5	17 - 22	500	NA	Runoff/leaching from natural deposits; seawater influence
Iron (ug/l)	06/29/15	33.3	<100 - 100	300		Leaching from natural deposits
Magnesium (mg/l)	06/29/15	8.95	8.5 – 9.4		NA	Leaching from natural deposits
Nitrate (AS NO3)	06/29/15	4.7		45		Runoff/leaching from natural deposits
Specific Conductance (umhos/cm)	06/29/15	375	310 - 440	1600	NA	Substances that form ions when in water; seawater influence
Sulfate (mg/l)	06/29/15	18	14 -22	500	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	06/29/15	225.3	180-270	1000	NA	Runoff/leaching from natural deposits

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS							
Chemical or Constituent (and reporting units)  Sample Date  Detected  Range of Detections  Notification Level  Health Effects Language							
None							

<sup>\*</sup>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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

# 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  [MRDLG]						
E. coli	(In the year)	quarterly	0	(0)	Human and animal fecal waste	

Enterococci	(In the year) 2*	quarterly	TT	n/a	Human and animal fecal waste *resolved by chlorination
Coliphage	(In the year)	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 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 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 <sup>(a)</sup> (Type of approved filtration technology used)	pressure filters				
	Turbidity of the filtered water must:				
Turbidity Performance Standards <sup>(b)</sup> (that must be met through the water treatment process)	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	0.3				
Number of violations of any surface water treatment requirements	0				

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

### Summary Information for Violation of a Surface Water TT

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

## **Summary Information for Operating Under a Variance or Exemption**

IBWD is not operating under any variances or exemptions.

<sup>(</sup>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.

<sup>\*</sup> Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.