

# **Consumer Confidence Report - 2009**

## **Section 1. Annual Drinking Water Quality Report**

### **Wolf Creek Property Owners Association Group A Community Water System - ID#11476H**

## **Section 2.**

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality 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 water sources are referred to as Well #2 and Well #3. The Washington State Department of Health (DOH) has assigned source numbers S03 and S05 respectively to these wells, which are situated in what is referred to as Well Field S04. All of these sources are located in the Cottonwood Meadows portion of the association, and are drawn from the Methow Aquifer.

As stated in the 2008 Consumer Confidence Report, we've completed a Ground Water Contamination Susceptibility Assessment Survey, which was approved by the DOH, and are adding to the protective measures identified in that report with a Wellhead Protection Plan. In 2009 we formalized a No Spray Agreement with Okanogan County for the vicinity of our wellheads as an example of this type of protective measure. These source water protection plans are available upon request.

## ***Section 3.***

This report shows our water quality and what it means.

## ***Section 4.***

If you have any questions about this report or concerning your water utility, please contact Pete Soderquist, Property/Water System Manager, at 509-996-3112. 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 typically held on the second Thursday of the month at 7 p.m. at the Rural Electric Co-op building on the West Chewuch Road. Contact any of your WCPOA board members for updates on time and place. A current list of board members is available at the WCPOA website:

<http://www.wolfcreekpropertyowners.org>

## ***Section 5.***

The WCPOA water system routinely monitors for constituents in your drinking water according to Federal and State laws. Table 1 shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2009. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

## ***Section 6.***

In Table 1, 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.

*Variances & Exemptions (V&E)* - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

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

*Maximum Contaminant Level* - (mandatory language) 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* - (mandatory language) 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.

*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.

*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.

## ***Section 7.***

No contaminants were detected at or above established maximum contaminant levels in 2009. While not required because all samples were below MCLs, Table 1 is being provided for the readers information for most of those potential contaminants that were sampled as designated in the annual Water Quality Monitoring Report that is assigned by DOH. The membership was notified of positive sample results for coliform bacteria (but not positive for E. Coli) taken during the May 2010 sampling period. Extensive sampling under the guidance of the DOH was completed during the remainder of May 2010 and into June at well distributed residences throughout the association, as well as at our sources. These samples all tested negative for coliform bacteria.

**TABLE 1. TEST RESULTS**

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Total Coliform Bacteria	N	Negative		0	(systems that collect 40 or more samples per month) 5% of monthly samples are positive; (systems that collect fewer than 40 samples per month) 1 positive monthly sample	Naturally present in the environment
Fecal coliform and <i>E.coli</i>	N	Negative		0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste
Turbidity	N	0.2		n/a	TT	Soil runoff
<b>Inorganic Contaminants</b>						
Antimony	N	<0.005	mg/l	0.006	0.006	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic * A community water system that detects arsenic above 10 ppb and up to and including 50ppb must include the arsenic health effects language.	N	<0.002	mg/l	n/a	0.010	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N	0.011	mg/l	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	N	0.0002	mg/l	0.004	0.004	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium	N	<0.0003	mg/l	0.005	0.005	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chlorine	N	<0.05	ppm	MRDL G = 4	MRDL = 4	Water additive used to control microbes.
Chromium	N	<0.0047	mg/l	0.1	0.1	Discharge from steel and pulp mills; erosion of natural deposits
Copper	N	0.00395		1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits.

Cyanide	N	<0.01	mg/l	0.2	0.2	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	N	0.22	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead	N	0.0012		0.015	AL=0.015	Corrosion of household plumbing systems, erosion of natural deposits
Mercury (inorganic)	N	0.0003	mg/l	0.002	0.002	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nitrate (as Nitrogen)	N	0.75	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen)	N	<0.07	mg/l	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	<0.005	mg/l	0.05	0.05	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium	N	<0.001	mg/l	0.006	0.002	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>						
2,4-D	N	ND	ppb	70	70	Runoff from herbicide used on row crops
2,4,5-TP (Silvex)	N	ND	ppb	50	50	Residue of banned herbicide
Alachlor	N	ND	ppb	0	2	Runoff from herbicide used on row crops
Atrazine	N	ND	ppb	3	3	Runoff from herbicide used on row crops
Benzo(a)pyrene (PAH)	N	ND	nanograms/l	0	200	Leaching from linings of water storage tanks and distribution lines
Carbofuran	N	ND	ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
Chlordane	N	ND	ppb	0	2	Residue of banned termiticide
Dalapon	N	ND	ppb	200	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) adipate	N	ND	ppb	400	400	Discharge from chemical factories
Di(2-ethylhexyl) phthalate	N	ND	ppb	0	6	Discharge from rubber and chemical factories
Dinoseb	N	ND	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
Endrin	N	ND	ppb	2	2	Residue of banned insecticide
Heptachlor epoxide	N	ND	nanograms/l	0	200	Breakdown of heptachlor
Hexachlorobenzene	N	ND	ppb	0	1	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene	N	ND	ppb	50	50	Discharge from chemical factories
Lindane	N	ND	nanograms/l	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor	N	ND	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate]	N	ND	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes

PCBs [Polychlorinated biphenyls]	N	ND	nanograms/l	0	500	Runoff from landfills; discharge of waste chemicals
Pentachlorophenol	N	ND	ppb	0	1	Discharge from wood preserving factories
Picloram	N	ND	ppb	500	500	Herbicide runoff
Simazine	N	ND	ppb	4	4	Herbicide runoff
Toxaphene	N	ND	ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
<b>Volatile Organic Contaminants</b>						
Benzene	N	ND	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride	N	ND	ppb	0	5	Discharge from chemical plants and other industrial activities
Chlorobenzene	N	ND	ppb	100	100	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene	N	ND	ppb	600	600	Discharge from industrial chemical factories
p-Dichlorobenzene	N	ND	ppb	75	75	Discharge from industrial chemical factories
1,2 – Dichloroethane	N	ND	ppb	0	5	Discharge from industrial chemical factories
1,1 – Dichloroethylene	N	ND	ppb	7	7	Discharge from industrial chemical factories
cis-1,2-ichloroethylene	N	ND	ppb	70	70	Discharge from industrial chemical factories
trans - 1,2 – Dichloroethylene	N	ND	ppb	100	100	Discharge from industrial chemical factories
Dichloromethane	N	ND	ppb	0	5	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	N	ND	ppb	0	5	Discharge from industrial chemical factories
Ethylbenzene	N	ND	ppb	700	700	Discharge from petroleum refineries
Styrene	N	ND	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene	N	ND	ppb	0	5	Discharge from factories and dry cleaners
1,2,4 –Trichlorobenzene	N	ND	ppb	70	70	Discharge from textile-finishing factories
1,1,1 – Trichloroethane	N	ND	ppb	200	200	Discharge from metal degreasing sites and other factories
1,1,2 –Trichloroethane	N	ND	ppb	3	5	Discharge from industrial chemical factories
Trichloroethylene	N	ND	ppb	0	5	Discharge from metal degreasing sites and other factories
Toluene	N	ND	ppm	1	1	Discharge from petroleum factories
Vinyl Chloride	N	ND	ppb	0	2	Leaching from PVC piping; discharge from plastics factories
Xylenes	N	ND	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

## *Section 8*

While no violations were experienced in 2009 for the above and numerous other potential contaminants, and therefore it is not required to include the following health effects language, we are providing the information in the interest of our membership. The reader should also be advised that at the time of this writing in the summer of 2010 additional sampling of these and other potential contaminants, in accordance with our annual Water Quality Monitoring Reporting requirements, with the exception of the above mentioned May results, continue to show no levels for any sampled potential contaminants that approach minimum reporting levels. The reader/member may be interested to know that, because of our water quality sampling results over the past 2 years, the DOH has granted sampling waivers in numerous categories.

### *Microbiological Contaminants:*

**Total Coliform.** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

**Fecal coliform/E.Coli.** Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

**Turbidity.** Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

### *Radioactive Contaminants:*

**Beta/photon emitters.** Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Alpha emitters.** Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Combined Radium.** Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

**Uranium.** Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of cancer and kidney toxicity.

### *Inorganic Contaminants:*

**Antimony.** Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

**Arsenic.** Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

**Asbestos.** Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.

Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Beryllium. Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.

Bromate. Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of cancer.

Cadmium. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

Chloramines. Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines in excess of the MRDL could experience stomach discomfort or anemia.

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

Chlorine dioxide. Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.

Chlorite. Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.

Chromium. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Cyanide. Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Mercury (inorganic). Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Selenium. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

Thallium. Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

*Synthetic organic contaminants including pesticides and herbicides:*

2,4-D. Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.

2,4,5-TP (Silvex). Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.

Acrylamide. Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.

Alachlor. Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.

Atrazine. Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

Benzo(a)pyrene [PAH]. Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

Carbofuran. Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.

Chlordane. Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.

Dalapon. Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.

Di (2-ethylhexyl) adipate. Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience toxic effects such as weight loss, liver enlargement or possible reproductive difficulties.

Di (2-ethylhexyl) phthalate. Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.

Dibromochloropropane (DBCP). Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

Dinoseb. Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.

Dioxin (2,3,7,8-TCDD). Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

Diquat. Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.

Endothall. Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.

Endrin. Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.

Epichlorohydrin. Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.

Ethylene dibromide. Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.

Glyphosate. Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.

Heptachlor. Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.

Heptachlor epoxide. Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.

Hexachlorobenzene. Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.

Hexachlorocyclopentadiene. Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.

Lindane. Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.

Methoxychlor. Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.

Oxamyl [Vydate]. Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.

PCBs [Polychlorinated biphenyls]. Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.

Pentachlorophenol. Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.

Picloram. Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.

Simazine. Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.

Toxaphene. Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.

*Volatile Organic Contaminants:*

Benzene. Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.

Carbon Tetrachloride. Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

Chlorobenzene. Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.

o-Dichlorobenzene. Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

p-Dichlorobenzene. Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.

1,2-Dichloroethane. Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

1,1-Dichloroethylene. Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

cis-1,2-Dichloroethylene. Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

trans-1,2-Dichloroethylene. Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.

Dichloromethane. Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.

1,2-Dichloropropane. Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

Ethylbenzene. Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.

Haloacetic Acids (HAA). Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer

Styrene. Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

Tetrachloroethylene. Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.

1,2,4-Trichlorobenzene. Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.

1,1,1,-Trichloroethane. Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.

1,1,2-Trichloroethane. Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

Trichloroethylene. Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Toluene. Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.

Vinyl Chloride. Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.

Xylenes. Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

The WCPOA installed water treatment facilities in January of 2008 that include disinfection by continuous chlorination, which has proven to be effective in efforts to prevent disease causing organisms in our drinking water. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. It is our intention to continue to provide disinfection at established levels as part of our program to provide safe drinking water. In addition to the monthly sampling for coliform bacteria, we sample chlorine levels throughout the month to assure that the total amount of chlorine in the system, as well as free chlorine are at standardized levels. Additionally in 2009, we sampled for disinfection byproducts (DBP) associated with our chlorination system during August, when the temperatures are warmest, for Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5), both of which are DBPs and have potential adverse health effects. Samples taken for both constituents indicated that neither compound was detected at levels greater than or equal to State Reporting Levels (minimum reporting level) as determined by DOH.

## ***Section 9.***

The WCPOA water system sampling program detected no nitrates at levels above or near 5 mg/l, the state designated trigger, which is well below the MCL of 10.0 mg/l. In August of 2009 our sampling revealed Nitrate levels of 0.34 mg/l, and Nitrite at <0.07 mg/l. The nitrite trigger and MCL are 0.5 and 1.0 mg/l, respectively. However, the following language is being provided :

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Because of our 2008 sampling results for lead and copper we received waivers for sampling these constituents in 2009.

We sampled for Radionuclide (Gross Alpha) and Radium in May and again in September of 2009, both of which resulted in non-detection results for both constituents.

## ***Section 10.***

As you can see by Table 1, our system had no violations for all contaminants sampled. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected at low levels, however the EPA has determined that your water IS SAFE at these levels.

We regularly monitor for various constituents in the water supply to meet all regulatory requirements on a designated schedule. As indicated previously in this report, in 2009 we had no reporting or exceedence violations.

## ***Section 11.***

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, or by visiting the Washington State Department of Health, Office of Drinking Water website at:

<http://www.doh.wa.gov/ehp/dw/default.htm>

## ***Section 12.***

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

## ***Section 13.***

**Total Coliform:** The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

**Nitrates:** As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

**Lead:** Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

## **Section 14. Water Use Efficiency**

Unlike the summer of 2008, when, you may remember we were under a number of water conservation measures to facilitate a continued source of safe drinking water to our membership, the summer of 2009 was relatively unencumbered with water use restrictions.

By the beginning of 2009 we had completed the remaining metering of all existing service and source lines in the WCPOA. Once we were able to compare source to service meter numbers we could quantify the amount of water we were using to the amount we were pumping from our

sources. We found that a significant amount of water was being returned to the aquifer after we pumped it out of the ground. Once these results were reported to the DOH, we were issued a moratorium on new water connections, which was lifted somewhat in 2009 to our limitation of 52 out of our current projected buildout level of 79 service connections.

During the spring of 2009 we hired a leak detection service who found significant leakage in the suspected areas, the largest of which was showing no surface evidence. However, through these efforts and the subsequent repairs we have been able to reduce the amount of water leaking out of our system, and have concurrently improved water pressures to the tributary users in those sectors significantly. We have also benefited from the awareness of various members as we continue an ongoing program of maintenance and repairs as new leaks become known and repaired. In November of 2009 we hired a professional reservoir inspection, cleaning, and repair service to maintain our reservoir. As a result we were able to clean and repair additional leakage associated with our aging tank. We have continued the leak detection program into 2010 by once again hiring a professional leak detection service, performing another isolation exercise, and are currently installing additional listening points and valves in our system where access to the mainlines is limited. We are optimistic that these measures will soon allow us to be able to report greatly reduced leakage numbers back to the DOH, who will then consider lifting all limits on new service connections up to build out.

We've also found that some of the older meters are showing their age, and are not accurately recording actual usage. Pete Soderquist will be checking each meter this summer for accuracy, and replacing those that aren't working properly. There's a lot of water line out there (approximately 4 miles), and our property/water system manager can use your help by helping him keep an eye out for leaks. He gets around to most of the system on a periodic basis, however if you see a leak or a wet spot anywhere in the WCPOA please let him know so he can check it out, arrange for repairs, or advise you if it happens to be on your property

## ***Section 15.***

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 of these improvements may be reflected in the rate structure, and through the annual maintenance fee as the costs of any improvements in the system are passed on to the entire membership, rather than the subset currently connected to the water system as all members will benefit from improvements when they connect. Usage and/or annual fee rate adjustments may be necessary in order to address these improvements. The WCPOA Board of Directors (BOD) instituted a new water rate structure in 2010 after numerous discussions leading up to that change. Contact your BOD with any questions or comments.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

## ***Section 16.***

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).

## ***Section 17.***

Again, please contact your property/ water system manager, or any member of the board if you have questions. You may also consider running for a board position. We are always looking for new representatives on an annual basis, and would welcome your interest.

The WCPOA Board of Directors, and your property/water system manager are here to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community. As part of our overall program, keep your eyes peeled for our soon to be released, first edition of the Cross Connection Control Plan – WCPOA, in which we'll lay the groundwork for a program to prevent contamination of our sources and services.

Best Regards,

WCPOA Board of Directors