



# NAVAL Support Activity Crane 2015 CONSUMER CONFIDENCE REPORT

*Public Works Department (PWD) Crane is pleased to present to you the 2015 annual water quality report (WQR). This report is intended to provide you with*



Main Gate at Naval Support Activity Crane

*important information about your drinking water, helpful conservation tips, waterplant upgrades, and fun facts about water.*

*The Crane Water Treatment Facility operated by PWD Crane draws its water from Lake Greenwood, a surface water source, located on board NSA Crane.*

*The Public Works Department Crane team is committed to providing our customers with the safest and highest quality drinking water possible. In fact, many upgrades to the plant equipment and infrastructure have been implemented to improve the water quality.*

## **Is our drinking water safe? "In a word, Yes"!**

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 at (1-800-426-4791).

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

**S**ome 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 guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

## **Sources of Drinking Water**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

## Crane Regulated Contaminants Detected in 2014

Contaminant (unit of measurement)	MCLG	MCL	Highest Level Detected	Range of Levels Detected	Violation	Likely Source of Contamination
<b><u>Inorganic Contaminants</u></b>						
<b>Antimony</b> (ppb)	6	6	1	0.7—0.7	NO	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition
<b>Arsenic</b> (ppb)	0	10	1	1.4—1.4	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
<b>Barium</b> (ppm)	2	2	0.0239	0.0239-0.0239	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Fluoride</b> (ppm)	4	4.0	0.7	0.744 - 0.744	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Nitrate</b> (ppm) {measured as Nitrogen}	10	10	0.12	0.12-0.12	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Selenium</b> (ppb)	50	50	0.2	0.2—0.2	NO	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
<b><u>Disinfectants &amp; Disinfection By-Products</u></b>						
<b>Haloacetic Acids (HAA5)</b> (ppb)	n/a	60	31	0 - 33.4	NO	By-product of drinking water disinfection
<b>Chlorine</b> (ppm)	MRDLG=4	MRDL=4	1	1 - 1	NO	Water additive used to control microbes
<b>Total Trihalomethanes (TTHMs)</b> (ppb)	n/a	80	35	12.5-52.8	NO	By-product of drinking water disinfection
<b><u>Radioactive Contaminants</u></b>						
<b>Beta/photon emitters</b> (mrem/yr)	0	4	1	1-1	NO	Decay of natural and man-made deposits.
<b>Gross alpha excluding radon and uranium</b> (pCi/L)	0	15	1.2	1.2-1.2	NO	Erosion of natural deposits.

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
<b>Highest single measurement</b>	1 NTU	0.13 NTU	N	Soil runoff
<b>Lowest monthly % meeting limit</b>	0.3 NTU	100%	N	Soil runoff
Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.				

Lead and Copper (unit of measurement)	MCLG	Action Level (AL)	90th Percentile	#Sites Over AL	Violation	Likely Source of Contamination
<b>Copper</b> (ppm)	1.3	1.3	0.08		N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
<b>Lead</b> (ppb)	0	15	8.1	1	N	Corrosion of household plumbing systems; Erosion of natural deposits

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. We are responsible for providing high quality drinking water, but we 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>.

**Total Organic Carbon (TOC):** The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set.

**(MCLG) Maximum Contaminant Level Goal:** 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.

**(MCL) Maximum Contaminant Level:** 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.

**Highest Level Detected:** The single highest result of all samples collected during the Water Quality Report (WQR) calendar year. In some cases, it may represent a single sample if only one sample was collected.

**Range of Levels Detected:** The range of individual sample results, from lowest to highest, that were collected during the WQR calendar year.

**(MRDL) Maximum Residual Disinfectant Level:** The highest level of disinfectant allowed in drinking water.

**(MRDLG) Maximum Residual Disinfectant Level Goal:** The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

**n/a:** Not applicable.

**(AL) Action Level:** The concentration of a

contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**(ALG) Action Level Goal:** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**(TT) Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

**Avg:** Regulatory compliance with some MCLs are based on a running annual average of monthly samples.

**(BDL) - Below Detectable Limit**

**Unit of Measurement Definitions:**

**ppm:** Parts per million, or milligrams per liter (or one ounce in 7,350 gallons of water).

**pci/l:** Picocuries per liter, a measure for radiation.

**mg/l:** Milligrams per liter.

**ppb:** Micrograms per liter or parts per billion (or one ounce in 7,350,000 gallons of water.)

**NTU:** Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

**mrem/Yr:** Millirems per year

### Helpful Comparisons for use in Consumer Confidence Reports

Often the measures used for detected contaminants are confusing to consumers. Terms such as one part per million and one part per billion are hard to visualize and grasp. Consider these comparisons to help explain the contaminant amounts found

Think of one part per million as:

- 1 inch in 16 miles
- 1 minute in two years
- 1 cent in \$10,000

Think of one part per billion as:

- 1 inch in 16,000 miles
- 1 second in 32 years
- 1 cent in \$10 million

### UNREGULATED CONTAMINANTS

CONTAMINANT	AVERAGE	RANGE
BROMODI-CHLOROMETHANE	4.8 ppb	4.8—4.8
CHLOROFORM	35.9 ppb	35.9—35.9
SODIUM	10.8 ppm	10.8—10.8

**HOT WATER FREEZES FASTER**



## WAYS TO CONSERVE WATER—USE IT WISELY

-Plant in the spring and fall when watering requirements are lower.

-Water audit your facility to find out your recommended water use, then monitor your utility bills to gauge your monthly water consumption.

-Know where your master shut off valve is located. Were a pipe to burst, this could save you several gallons of water (even hundreds or thousands) and prevent damage.

-When you give your pet fresh water, don't throw the old water down the drain. Use it to water your flowers and shrubs.

### Protect Source Water from Contamination

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

### Our Watershed Protection Efforts

Our water system is working with the community to increase awareness of better waste disposal and chemical usage practices to further protect the sources of our drinking water. We are also working with other agencies and local watershed groups to educate the community on ways to help keep our water safe.



# Source Water Protection

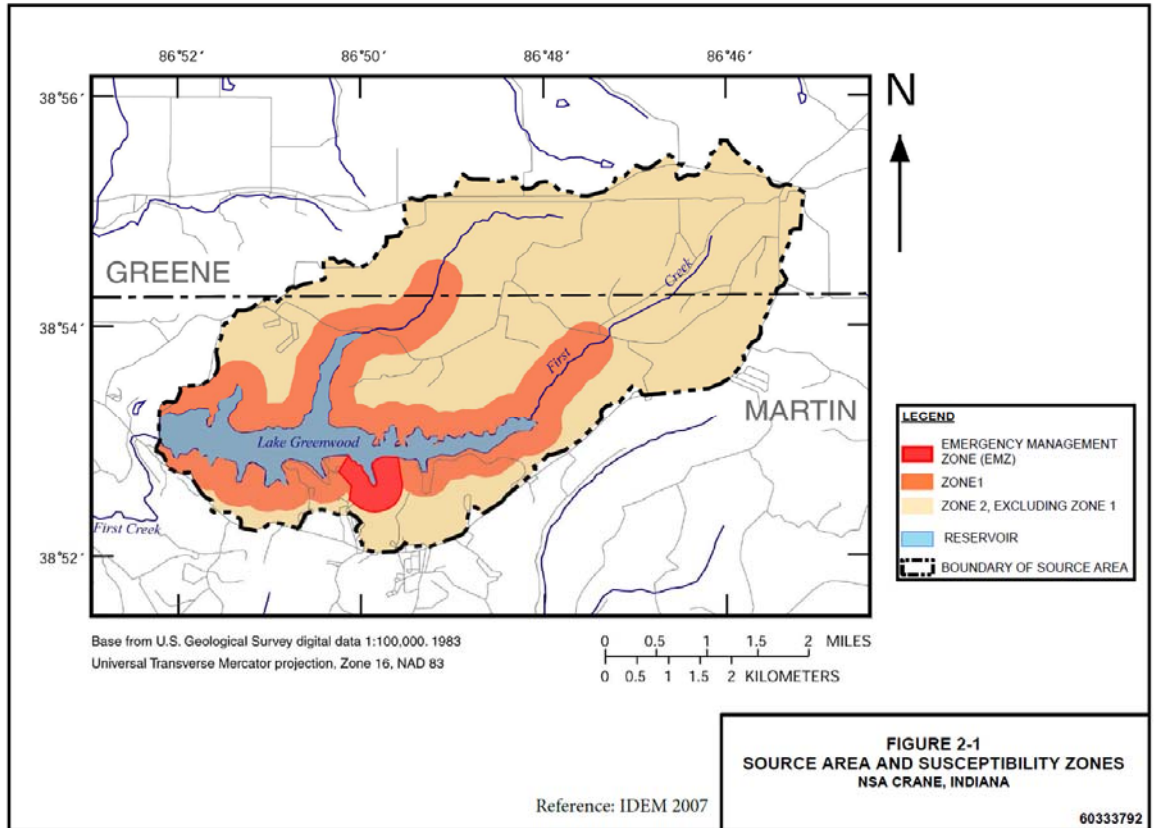
A Source Water Protection Plan is developed to evaluate conditions that affect the susceptibility of drinking water supply.

Three protection zones exist in the Lake Greenwood watershed (source water area) including:

1. Emergency Management Zone (EMZ)
2. Susceptibility Zone 1
3. Susceptibility Zone 2

The zones are established on the basis of distance from the surface water intakes and from Lake Greenwood. The EMZ is the most sensitive area.

Do you work in one of the protection zones? If so, are there potential contamination sources in your work processes that could be harmful to the water supply? What controls are used to ensure proper containment of the sources?



## FUN FACTS ABOUT WATER!!

- Water has three different states, liquid, gas and solid.
- All living things need water to live. People can live several weeks without food, but only a few days without water. We should drink 6 to 8 glasses a water each day.
- Water makes up 83% of our blood, 70% of our brain, and 90% of our lungs. Overall, our bodies are 70% water.
- A tomato is about 95% water. An apple, a pineapple, and an ear of corn are each 80% of water.

*Please share this information! Large water volume customers are encouraged to post extra copies of this report in conspicuous locations or to distribute them to your tenants, residents, patients, students, and/or employees.*

### Contact Us!

Utilities Director:

Dave Burrus  
(812) 854-4761

Water Plant Supervisor:

Stephen Reddick  
Office (812) 854-5225  
Cell (812) 296-0522

Water Plant Leader:

Monte Johnson  
Office (812) 854-1651  
Cell (812) 296-0090

Water Plant Operators /  
Water Complaints: