

El Dorado's Water Supply

Protecting Our Drinking Water

The superior quality of El Dorado Water Treatment Facility's drinking water is the result of a combination of the proper operation of a multistage treatment facility and a laboratory that performs 2,500 monthly tests on samples taken during the treatment process and throughout the 100 miles of distribution system piping.

El Dorado currently has four personnel that hold a Class IV Water Operator's license, the State's highest certification level. Water quality is monitored 24 hours a day, 365 days a year.



El Dorado's great tasting water

To have great tasting water it certainly helps to have great source water. El Dorado Reservoir is fairly young reservoir, completed in 1981. The drainage basin above El Dorado is mainly grasslands and rainwater runoff comprises most of the water entering the Lake. Because of these factors, the water is relatively soft (low mineral content) and the clarity is also very good.

Treatment is also very good at the El Dorado Water Treatment Facility. Chemical dosages are scrutinized daily and sophisticated instrumentation keeps a close watch on water quality. Another aide in achieving great tasting water is the addition of powdered activated carbon (PAC). PAC absorbs many of the musty odors associated with surface water, and is then filtered out in the dual media filters.

Water Taste & Odor

- Annual Disinfection of the Distribution System

The Kansas Department of Health and Environment recommends all cities switch from chloramines to free chlorine for at least one week a year to thoroughly disinfect the distribution system. The type of chlorine normally in the water, chloramines, has no chlorine taste or odor, which most people prefer, but it is not as powerful a disinfectant as free chlorine. Most people notice the change in the taste of the water for about a week. After the week of free chlorine, we follow with our annual hydrant-flushing program. The flushing, scours and cleans water distribution system lines; allows us to check proper operation of fire hydrants; and gets rid of the free chlorine in the water, responsible for the taste and odor problems.

- Algae Taste and Odor Problems

Algae taste and odor problems are usually not a problem in El Dorado for two reasons. First, we have very clean, good quality source water in El Dorado Lake with low nutrient levels. Excessive nutrients lead to algae blooms. Second, for any algae blooms that have occurred, we have a powdered activated carbon treatment system that absorbs the taste and odors associated with algae. This system operates continuously to give us the best tasting water possible.

Water Pressure

Water pressure in El Dorado is generally between 30 – 60 psi, depending upon the elevation where you live and the size of the water distribution lines in your area. Water pressure can also be affected by restrictions in plumbing, undersized meter, or plugged faucet strainers. Water pressure leaving the Water Treatment Plant is 90 – 95 psi when the pumps are running. However, the pumps do not run continuously, they cycle on and off to fill the water towers as needed. The elevated storage (water towers) provides pressure when the pumps are not running.

If you feel you do not have adequate water pressure contact us to have your pressure tested. We can determine whether pressure is within an acceptable range and if it is not, we can determine whether the pressure loss is in the City main or the homeowners system.

The FACTS on the West Pressure Zone Project (Spring 2010)

- **Who will it affect?**
All customers (business and residential) west of Haverhill will be on the new pressure zone.
- **Why is this information important?**
We, the City of El Dorado, is gradually increasing the water pressure to the homes and businesses in that area. This increase of pressure will be a new load to those water lines, connections, faucets, etc in that area. Professionally installed plumbing systems made of either copper or PVC are rated well above 100psi and should handle the increase of pressure without worry. However, individuals in the "west pressure zone" should keep a close eye on their systems for leaks. And should consider having their plumbing systems checked by a professional before full pressure is reached. All increases will be made gradually, only 5 psi at a time until maximum pressure of 70 psi is reached. Pressure increases will be made weekly and will be reported here.
- **More about the project:**
El Dorado has grown to the point that it is necessary to create a "West Pressure Zone" in order to provide adequate pressure on the far west side of town. In the new pressure zone, water will be pumped directly to the Industrial Park Water Tower and then booster pumps will pump out into the west pressure zone.

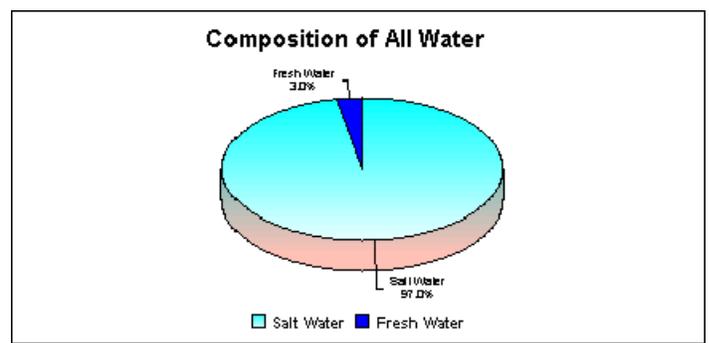
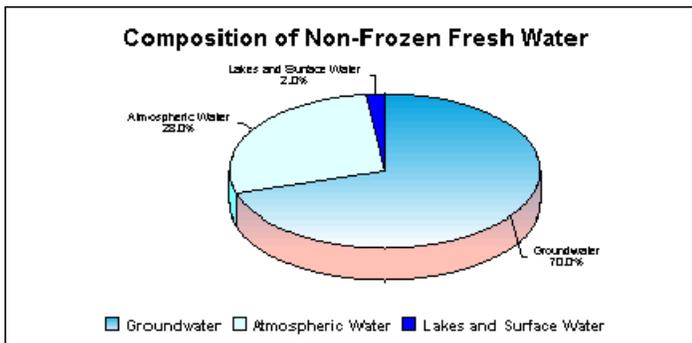
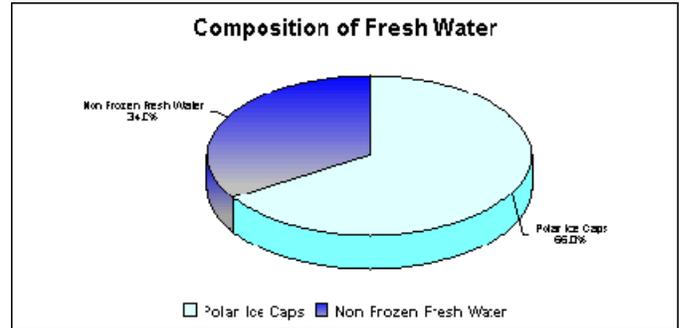
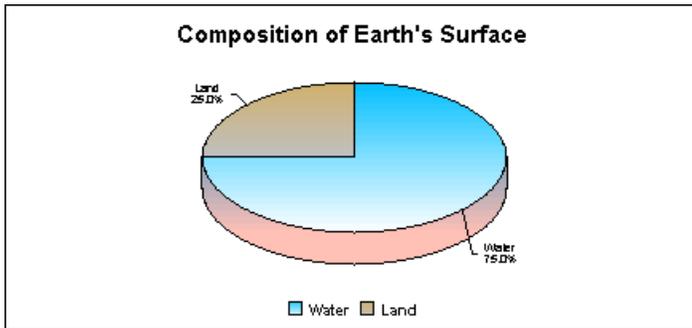
West Distribution Static Pressures

Location	Pre-Startup Pressures		Current Pressure	
	Date	PSI	Date	PSI
Metcalfe & 6th	2/24/2010	38	3/29/2010	52
Metcalfe & 3rd	2/24/2010	40	3/29/2010	58
Village & 3rd	2/24/2010	30	3/29/2010	48
Wal Mart N. end	2/24/2010	30	3/29/2010	48
School & 2nd	2/24/2010	28	3/29/2010	46
School & 5th	2/24/2010	25	3/29/2010	42
Northern & 2nd	2/24/2010	30	3/29/2010	50
Flinthills Services	2/24/2010	25	3/29/2010	42
Enterprise & Haverhill	2/24/2010	40	3/29/2010	58

- **Where?**
The dividing line for the west pressure zone is Haverhill Road.
- **When does it start and how long will it go on?**
Increasing pressure has begun and will continue at a rate of 5psi per week until we reach 70 psi pressure levels.
- **What should I do?**
Please be aware, if your homes or businesses have had plumbing repairs by someone other than a licensed plumber, you may want to have them checked prior to our implementation of the full pressure increase. Again, we will be incrementally increasing pressure throughout March and mid-April until 70 psi is reached. If you have questions, please call Judy at the City of El Dorado Public Utilities Department. (316) 321-9100

-Where is the water?

The majority of cities in Kansas get their water from surface supplies just as El Dorado does, but did you ever think about how rare fresh water on the surface of the earth is? The graphs below show just how little fresh water there is on the surface of the earth.



-Water Facts and your Health

We all know that water is important but did you know that...

75% of Americans are chronically dehydrated.

In 37% of Americans, the thirst mechanism is so weak that it is often mistaken for hunger.

Even MILD dehydration will slow down one's metabolism as much as 3%.

One glass of water shuts down midnight hunger pangs for almost 100% of the dieters studied in a University of Washington study.

Lack of water is the #1 trigger of daytime fatigue.

Preliminary research indicates that 8-10 glasses of water a day could significantly ease back and joint pain for up to 80% of sufferers.

A mere 2% drop in body water can trigger fuzzy short-term memory, trouble with basic math, and difficulty focusing on the computer screen or on a printed page.

Drinking 5 glasses of water daily decreases the risk of colon cancer by 45%, plus it can slash the risk of breast cancer by 79%, and one is 50% less likely to develop bladder cancer.