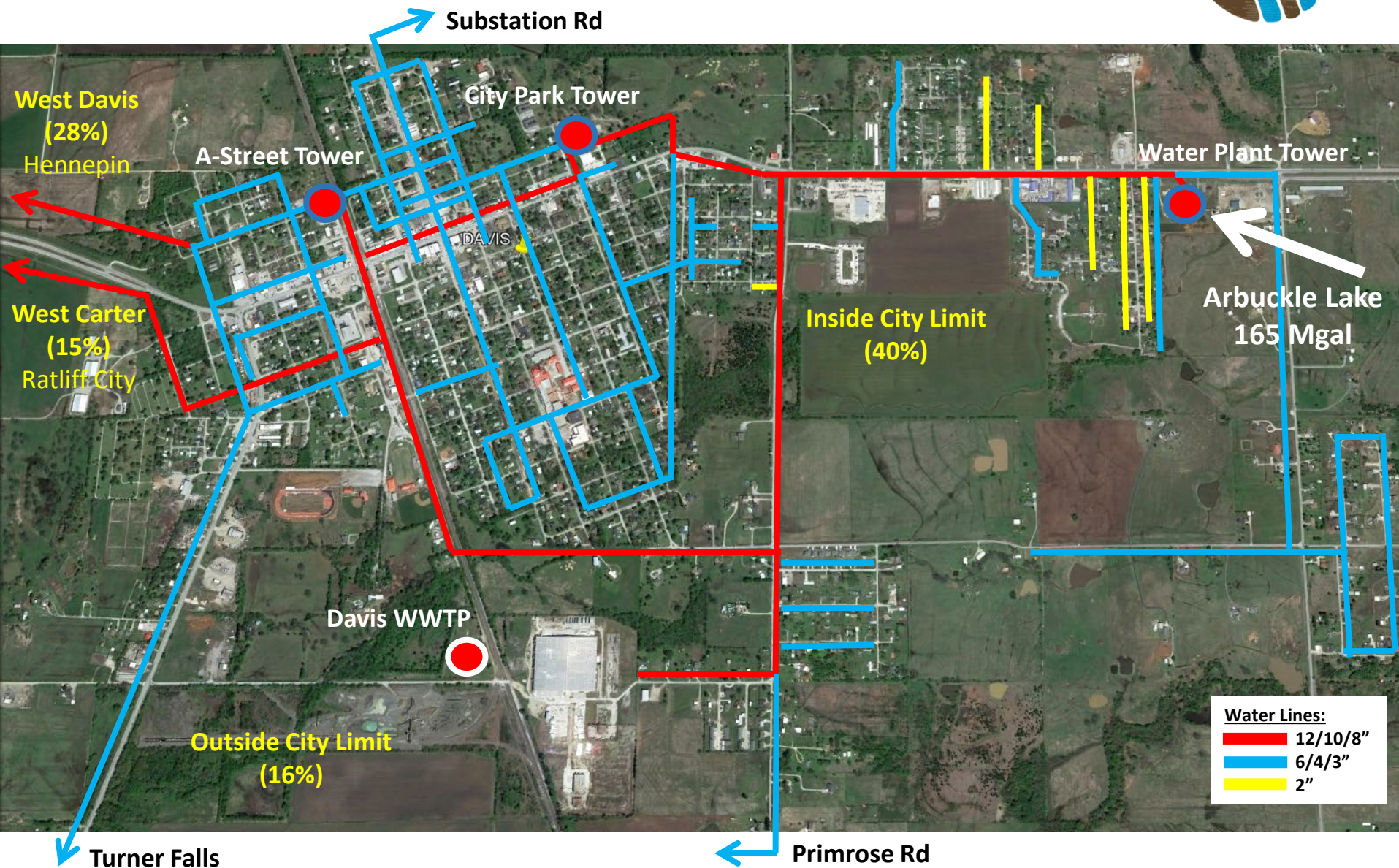




Davis Water Distribution





Davis Water – Source & Taste

City of Davis water is sourced from the Arbuckle Lake. It is treated at the Davis water treatment facility east of town and regularly tests water for various elements. City of Davis takes water samples from different locations within the city, three samples are sent each month to the OK State Environmental Laboratory (ODWQ) for testing. Although at times, the taste may be less than pleasant, it is safe to drink.

About 15 percent of U.S. uses well water from the groundwater. The other 85 percent of the U.S. population gets their water from municipal systems that comes from surface sources, rivers, lakes, or a combination. These surface water takes a long journey, from the source to the treatment plant and then distributed through the city, often below city streets, and finally through the pipes in homes.

Those pipes, as well as the source of the water itself, can influence the taste of what comes out of the tap. Some of the flavors of tap water, and what causes them:

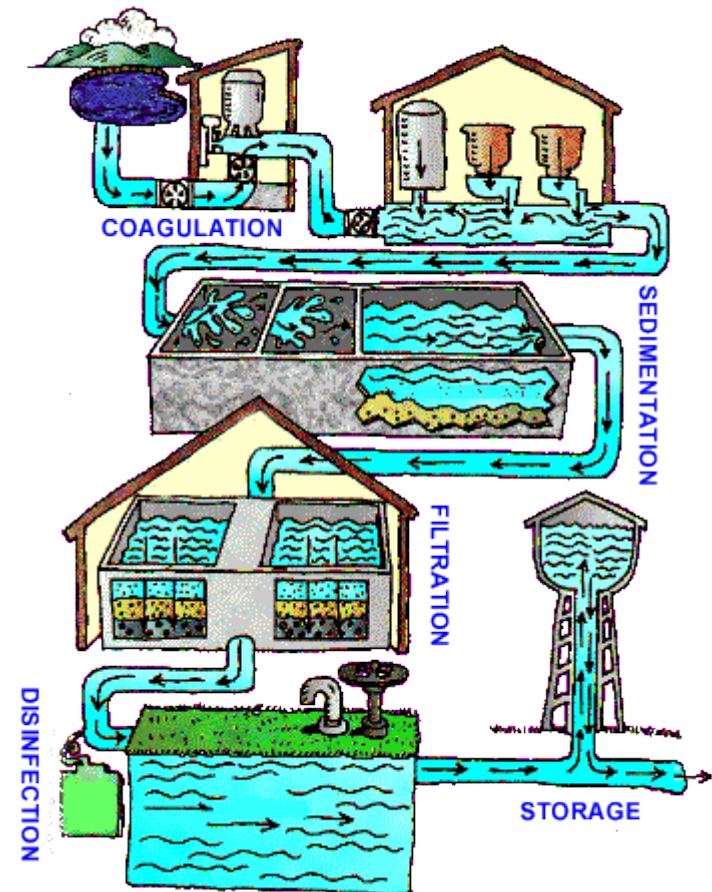
- **Fishy, earthy, dirty, moldy, musty:** The likely reason for any of these tastes is [algal blooms](#) in the source water. Municipal water is treated, so there shouldn't be any algae in it, but the taste may linger. Another reason for this flavor could be bacterial growth within the water system or even a person's own sink, all of which are usually harmless.
- **Chlorine, bleach, chemical:** These tastes may be the most common flavor in tap water. Water may taste like chlorine because many systems use [chlorine](#) to disinfect their water supply. Chlorine is generally present in small amounts in treated water and is safe to drink at these levels.



Davis Water - Treatment

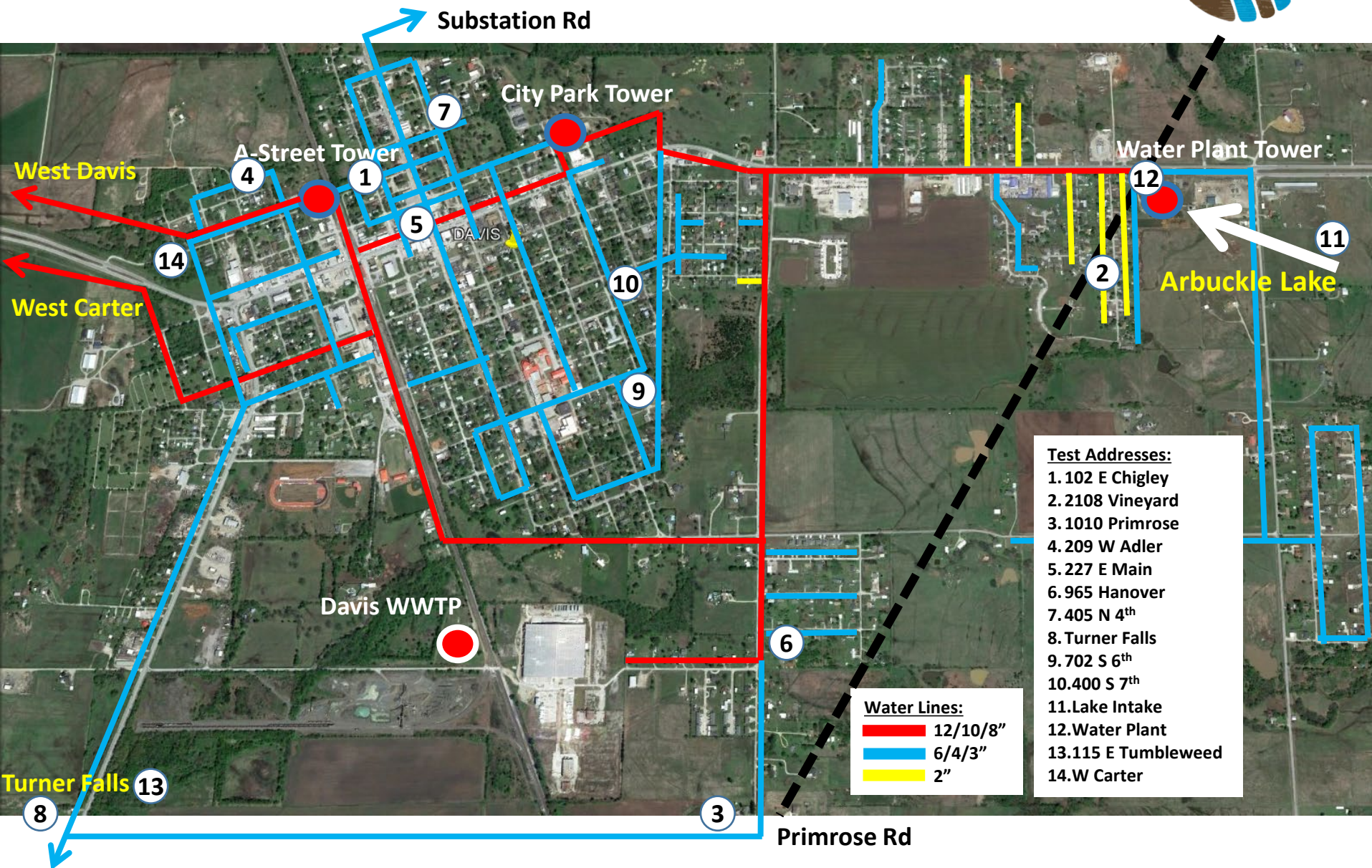
Drinking water supplies in the United States are among the safest in the world. However, drinking water sources are subject to contamination and require appropriate treatment to remove disease-causing agents. Public drinking water systems use various methods of water treatment but the most common community water treatment (mainly surface water treatment) include:

- **Coagulation & Flocculation** - Chemicals with a positive charge are added to water that neutralizes the negative charge of dirt and binds to dissolved particles to form larger particles, called floc.
- **Sedimentation** - process where floc settles to the bottom of the water supply, due to its weight.
- **Filtration** – After floc has settled to the bottom of the water supply, the clear water on top will pass through filters of sand, gravel, charcoal, and pore sizes in order to remove dissolved particles, such as dust, parasites, bacteria, viruses, and chemicals.
- **Disinfection** - After filtered, a disinfectant (chlorine, chloramine) may be added to kill any remaining parasites, bacteria, and viruses, and to protect the from germs when it is piped to homes and businesses.





Water Testing Sites



[illegible]

EPA Standards & Regulations for Testing



Location	10-22-20			11-12-20		11-18-20	12-02-20	01-20-21
11. Lake Intake (From)			0 – 140 MG/L 0 – 3.79 MG/L		0 – 140 MG/L 0 – 4.08 MG/L		0 – 140 MG/L 0 – 4.12 MG/L	
12. WTP Release (To)	*Y – See Notes		0 – 138 MG/L 0 – 2.15 MG/L	Y – .05-5 UG/L	0 – 138 MG/L 0 – 2.23 MG/L	Y – 1-5 UG/L	0 – 138 MG/L 0 – 2.14 MG/L	0 – 0.20 MG/L
13. 115 E Tumbleweed	Y – 1-2 UG/L	0 – 1.6-42.6 UG/L						
14. W Davis Hwy-7	Y – 1-2 UG/L	0 – 1.4-39.3 UG/L						
0 = Reporting Level 3.79-2.15=1.64 MG/L 1.64/3.79=43% Must be >25% removal Y = Less Than Indicator Reading is < Indicator	Monochloroacetic Dichloroacetic Trichloroacetic Monobromoacetic Dibromoacetic Bromochloroacetic Haloacetic	Chloroform Bromoform Bromodichloromethane Dibromochloromethane TTHM	Alkalinity Carbon	Arsenic Barium Cadmium Chromium Fluoride Mercury Nickel Selenium Sodium Antimony Beryllium Thallium	Alkalinity Carbon	Dalapon Glyphosate Picloram Dinoseb 2,4-D 2,4,5-TP Pentachlorophenol Dicamba	Alkalinity Carbon	Nitrate
	Notes: Methyl Tert-Butyle Ether 1,2,4-Trichlorobenzene CIS-1,2-Dichloroethylene Chloroform Bromoform Bromodichloromethane Dibromochloromethane Xylenes Xylene, Meta & Para	Dichloromethane O-Dichlorobenzene P-Dichlorobenzene Vinyl Chloride 1,1-Dichloroethylene Trans-1,2-Dichloroethylene 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloropropane						



More to remove bad taste & smell?

Even though EPA regulates & sets standards, many use a household water treatment system:

- Remove specific contaminants
- Take extra precautions if having a compromised immune system
- Improve the taste of drinking water

The most common types of household water treatment systems consist of:

- Filtration Systems - device which removes impurities from water by means of a physical barrier, chemical, and/or biological process.
- Water Softeners - device that reduces the hardness of the water using sodium or potassium ions to replace calcium and magnesium ions, the ions that create “hardness.”
- Distillation Systems - impure water is boiled and the steam is collected and condensed in a separate container, leaving solid contaminants behind.
- Disinfection - physical (ultraviolet light, electronic radiation, heat) or chemical (chlorine, chlorine dioxide, ozone) process where pathogenic microorganisms are killed.

Discussion - Based on discussions with operations staff and water user feedback, the T&O compounds are expected to be related to algal/bacterial growth. Operational changes at the WTP may have minimal impact to these compounds. The most common process implemented to improve T&O outcomes for surface water supplies is the addition of some form of activated carbon. This could include filtration via Granular Activated Carbon (GAC) or the addition of Powdered Activated Carbon (PAC).

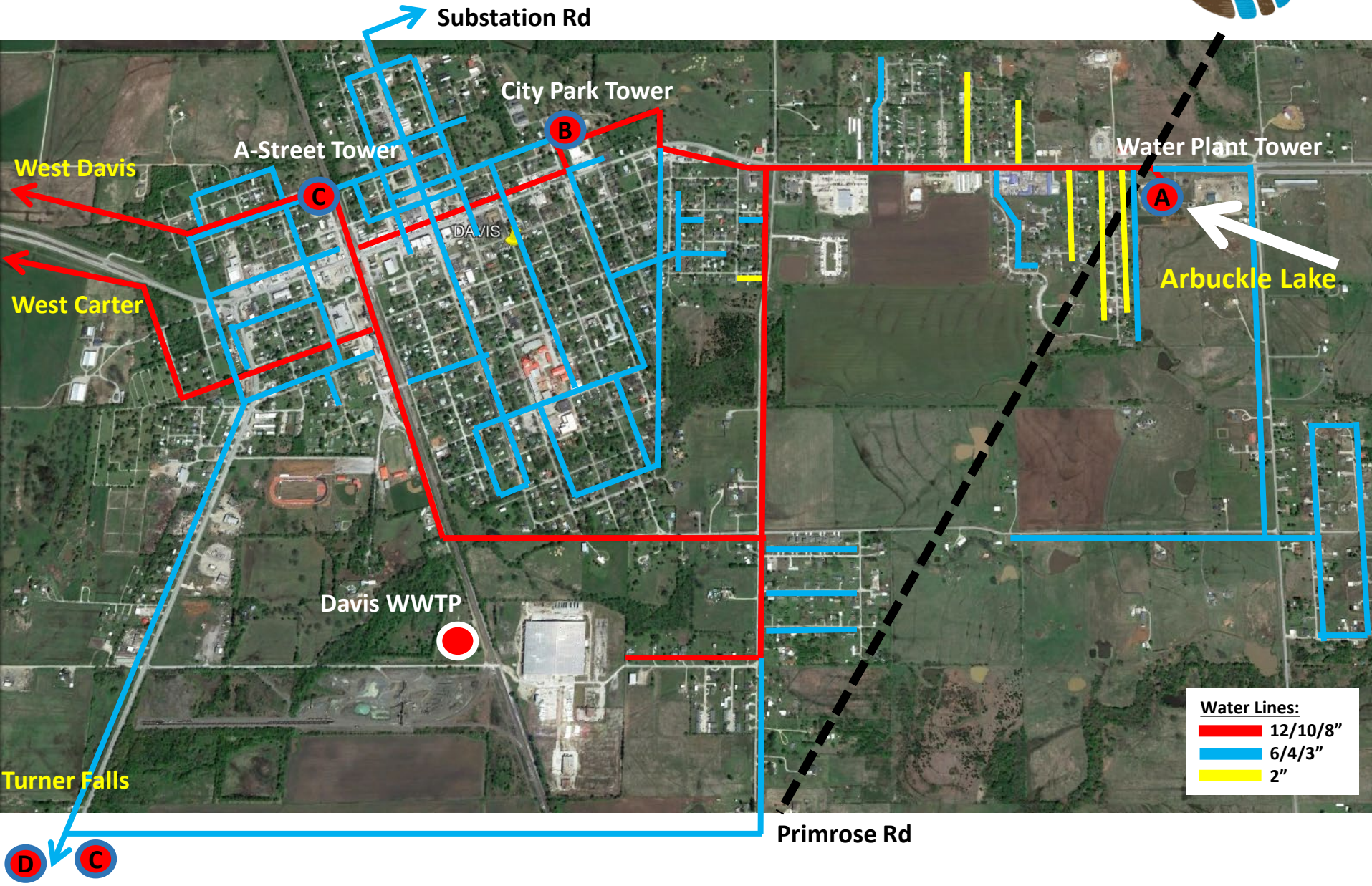


More to remove bad taste & smell?

Who should I contact if my water has a funny smell, taste, or appearance?

- A change in your water's taste, color, or smell is not necessarily a health concern. However, sometimes a change can be a sign of problems. If you notice a change in your water, call your public water system company. **City of Davis at (580) 369-3333.**
- If you want to test your water, your local health department should assist in explaining any tests that you need for various contaminants. If your local health department is not able to help, contact a state certified laboratory to perform the test. To find a state certified laboratory in your area, call the **Safe Drinking Water Hotline at (800) 426-4791** or visit the State Certified Drinking Water Laboratories list.

Low Water Pressure Reporting



Water Towers



City Park Tower



A-Street Tower



Water Plant Tower



Water Towers & Plant Equipment

Tower/Tanks	Storage	Direction	Pressure	Current	Area Supplied
1. Water Plant Tower	60 Kgal	East	86'-8'	75.1' - 87%	Hazelwood, Fairview & Cherry Roads
2. City Park Tower	80 Kgal	South	103'-5'	87.1' - 84%	1 st to 10 th Street & Primrose Road
3. A-Street Tower	100 Kgal	West	103'-5'	87.1' - 84%	A-F Streets, Hwy-77 & Rural Districts
4. Pie Shop Tank	300 Kgal	South	78 psi	Empty - 0%	South of River
5. Turner Falls Tank	100 Kgal	North	Filled	Empty - 0%	Turner Falls
Pumps	Capacity	Direction	Head Pressure		
#1 Pump	1.6 Mgal	East	Cannot run concurrently		
#2 Pump	1.6 Mgal	West			
#3 Pump	1.6 Mgal	West			
Filters	Cleaning	Back-flush	Normal Frequency		Current Frequency
#1 Filter	300 Kgal	25 kgal	Daily		6 Hrs
#2 Filter	300 Kgal	25 kgal	Daily		6 Hrs
#3 Filter	300 Kgal	25 kgal	Daily		6 Hrs
#4 Filter	300 Kgal	25 kgal	Daily		6 Hrs
Customers	Avg Usage	Percent	Low Pressure	No Water	Reported Leaks
City Limit	181 Kgal	40%			
Out of City Limit	72 Kgal	16%			
West Davis	127 Kgal	28%			
West Carter	68 Kgal	15%			

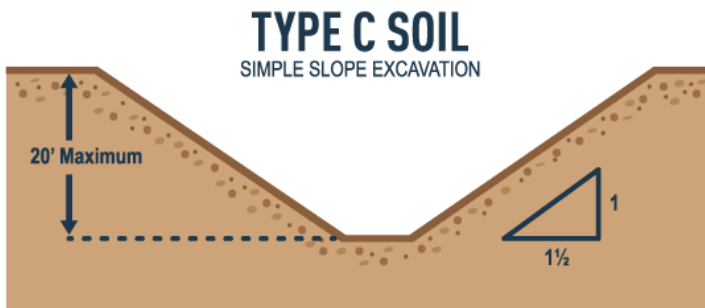
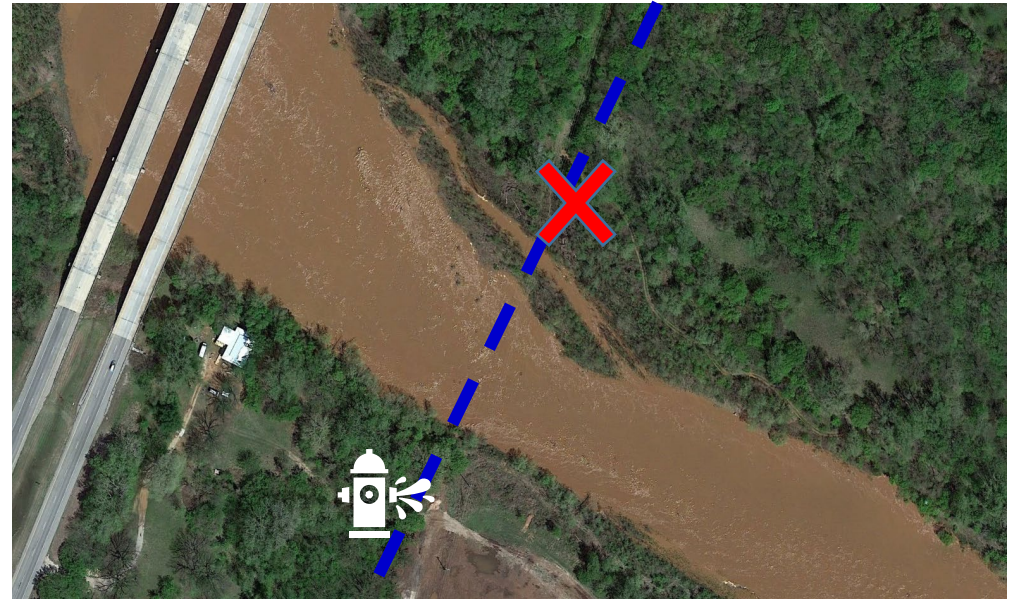


Waterline Repair

6" waterline south of Washita leaking at depth of 40'.

Digging not feasible due to stabilization of Type C (gravel/sand) soil requires:

- Slope - 34 degrees (120'+ wide excavation), up to 20' maximum depth.
- Shoring - Extensive sheet piling to ensure personnel safety.



Exploring option to install a new 6" water line 1,000' bored 20' under Washita River.



Maintenance Responsibilities

Most homeowners assume the city is responsible for sewer lines near or past the public street, but that is seldom true. Property owners are responsible for upper & lower lateral lines that connect from their house to the city's sewer lines. The **city** is responsible for that connection and onto the city's sewer main and lines.



Wolf Creek Clean-up

