Report on the quality of our drinking water

CITY OF SAN ANGELO — JUNE 2012

HICKORY WATER SUPPLY PROJECT

Construction of the Hickory Water Supply Project is underway. This project will provide the City of San Angelo with water from the Hickory Aquifer; the City's first ground water supply source.

The project is being constructed under four contracts to expedite delivery of water to San Angelo. The first contract, installation of 9 miles of pipelines to collect water from within the well field, is complete. The second project contract which will deliver water from the well field through 62 miles of 30" pipe to San Angelo is underway and scheduled for completion in July 2013.

Development of the well field with pumps and storage tanks, and the construction of a booster pump station will be accomplished under the third contract that wil be completed in July 2013. The final contract will provide for the construction of a treatment facility for the Hickory water. The plant will be located adjacent to the City's existing facility in San Angelo and is planned to be under construction in 2013 and completed in 2014.

With the completion of these contracts, the Hickory Project will initally supply the City with 6 million gallons of water per day. Should there be a need for additional water from this source in the future, the project has been designed to provide an ultimate capacity of 10.7 million gallons per day.

San Angelo Water System Facts

	2009	2010	2011
Total Year Pumpage (Billion gallons)	4.98	4.87	5.75
Daily Treatment Capacity (Million gallons)	42	42	42
Maximum Day Usage (Million gallons)	24	24	27
Average Day Usage (Million gallons)	14	14	16
Average Person Usage (Gallons per day)	159	155	177
Distribution system (Miles)	653	655	656
Service connections (Water meters)	31,618	31,721	31,893
Fire hydrants	2,698	2,703	2,709

San Angelo City Council

Alvin New	Mayor
Paul Alexander	SMD #1
Dwain Morrison	SMD #2
Johnny Silvas	SMD #3
Fredd Adams	SMD #4
Kendall Hirschfeld	SMD #5
Charlotte Farmer	SMD #6

Who we are

The Department of Water Utilities is part of your city government.

If you have questions about this report, you may contact us by telephone or mail:

(325) 657-4209
Department of Water Utilities
72 W. College
San Angelo, TX 76903

San Angelo City Council

The San Angelo City Council meets on the first and third Tuesday of each month.

Meetings are held at the McNease Convention Center, 500 Rio Concho Drive.

The regular meeting time is 9:00 a.m.

Este reporte incluye información importante sobre el agua, para Español, favor de llamar el telefono.

(325) 657-4209

Water Quality Monitoring Results

SUBSTANCE (UNITS)		STATE and FEDERAL STANDARDS MCLG	MCL	LEVELS IN SAN ANGELO WATER AVERAGE LEVEL DETECTED	MINIMUM LEVEL DETECTED	MAXIMUM LEVEL DETECTED	POSSIBLE SOURCE
Flouride[1] (ppm)		4	4	0.50	0.50	0.50	Erosion of natural deposits
Nitrate[1] (ppm)		10	10	0.38	0.38	0.38	Runoff from fertilizer use Leaching from septic tanks Erosion of natural deposits
Turbidity[1] (ntu)	Highest Single Sample Lowest Monthly Percent Meeting Limit	NA NA	1 0.30	NA 100%	NA NA	0.30 NA	Soil Runoff
Total Haloacetic acid[1] (ppd)		NA	60	22.0	19.7	24.6	Water disinfection by-product
Total trihalomethanes[1] (ppb)		NA	80	57.0	42.1	77.5	Water disinfection by-products
Arsenic[1] (ppb)		0	10	4.9	4.9	4.9	Erosion of natural deposits
Barium[1] (ppm)		2	2	0.269	0.269	0.269	Erosion of natural deposits
Chloramines[1] (ppm)		<4	4 (MRDL)	3.28	0.50	5.90	Disinfectant used to control microbes
Total Coliform Bacteria[1]		NA	5% of monthly samples	NA	0	0	Naturally present in the environment
Lead[2] (ppb)		0	Action level = 15	No site exceeded action level		90th percentile value - 0	Corrosion of household plumbing systems
Copper[2] (ppm)		1.3	Action level = 1.3	No site exceeded action level		90th percentile value - .0271	Corrosion of household plumbing systems

[1] Tested 2011 [2] Tested 2009

The Quiz

1. When was O.C. Fisher Dam constructed?
2. At what temperature does water boil?
3. How much does a gallon of water weigh?
4. How many gallons of water does the elevated water tank along FM 2288 hold?

Answers can be found on the 2012 Capital Projects page.

What is this in our drinking water?

Water is the most universal solvent known. On the surface or underground, when it moves and when it is still, water dissolves naturally occurring minerals and picks up substances generated by animal and human activity. Water contaminants can include microbes, inorganic salts and minerals, organic compounds from industrial processes or petroleum use, pesticides and herbicides, and radioactive elements.

All drinking water, including bottled water may reasonably be expected to contain at least small amounts of some contaminants. Levels of contaminants found in San Angelo water and the accepted levels of the contaminants are shown in the Water Quality Monitoring Results chart. You can get more information about contaminants and their potential effects on health by calling the Environmental Protection Agency's **Safe Drinking Water Hotline: (800) 426-4791.**

The presence of a contaminant does not automatically indicate a health risk. San Angelo's water is safe. Like all water, it contains some contaminants; San Angelo water is within safe limits for all primary measured contaminants.

Secondary Constituents in San Angelo water

Some substances in drinking water can cause problems involving taste, odor, and color. Elements that cause these problems, called *secondary constituents*, may pose aesthetic problems, but they seldom create a public health concern.

- Taste is affected by minerals such as calcium, sulphur, and salts naturally dissolved in the water.
- Odors usually are caused by microscopic algae that grows in lake and river water.
- Color usually is caused by rust in pipes that deliver water.

Taste, odor, and color typically do not relate to public health concerns.

Special Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

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. This water supply 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 http://www.epa.gov/safewater/lead.

Secondary and other Not Regulated constituents

YEAR TESTED	CONSTITUENT (Unit of Measure)	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL	LIMIT	SOURCE OF CONSTITUENT
2011	Bicarbonate (ppm)	172	172	172	NA	Corrosion of rocks such as limestone
2011	Chloride (ppm)	416	416	416	300	Naturally occurring elements
2011	pH (units)	7.8	7.8	7.8	>7.0	Measure of corrosivity of water
2011	Sulfate (ppm)	343	343	343	300	Naturally occurring
2011	Total Alkalinity as CaC03 (ppm)	141	141	141	NA	Naturally occurring soluble mineral salts
2011	Total Dissolved Solids (ppm)	1340	1340	1340	1000	Total dissolved mineral constituents in water

Key to Water Quality and Secondary Constituents Charts

MCLG = **M**aximum **C**ontaminant **L**evel **G**oal. Contaminant level in drinking water below which there is no known or expected health risk.

MCL = **M**aximum **C**ontaminant **L**evel. Highest contaminant level allowed in drinking water by state or federal standards.

MRDL = **M**aximum **R**esidual **D**isinfectant **L**evel. Highest level of disinfectant allowed in drinking water by state or federal standards.

TT = **T**reatment **T**echnique. Required process intended to reduce the level of a contaminant in drinking water.

AL = **A**ction **L**evel. Concentration of a contaminant which, if exceeded, triggers requirements which a system must follow.

NTU = **N**ephelometric **T**urbidity **U**nits. Measure of the cloudiness of water.

ppb = **P**arts **P**er **B**illion **ppm** = **P**arts **P**er **M**illion **pci/l** = **P**icocuries **P**er **L**iter (measure of radiation) **NA** = **N**ot **A**pplicable

True Texans Use Water Wisely

Current 2012 Capital Projects

- Replace 20,000 feet of water mains; $1.0 million.
- Replace large valves on transmission pipelines; $500,000
- Hickory Water Supply project; $56 million.
- Replace 18" wastewater collector main in northeast San Angelo; $2.3 million.

Projects Planned for 2013

- Replace 20,000 feet of water mains; $1.0 million.
- Hickory Water Treatment Plant; $23.4 million
- Replace 18" wastewater main near Sulfur Draw; $2.1 million
- Replace 24" wastewater main thru central San Angelo; $6.2 million.

Quiz Answers

1. Construction completed in 1951 for $16.2 million.
2. 212° Fahrenheit; 100° Celsius
3. 8.34 pounds
4. 2 million gallons

Fats Oils Grease FOG

Preventing Grease Buildup Beginning At The Kitchen Sink

We Need Your Help

Fats
Oils
Grease
Food Scraps...

These materials are generated during food preparation.

They don't mix well with water. When flushed, these materials can build up and block the entire sewer pipeline and cause raw sewage overflows into your home, lawns, streets, parks and rivers ...

Creating Health Risks • Destroying the environment • Costing you money

Don't Get Clogged.

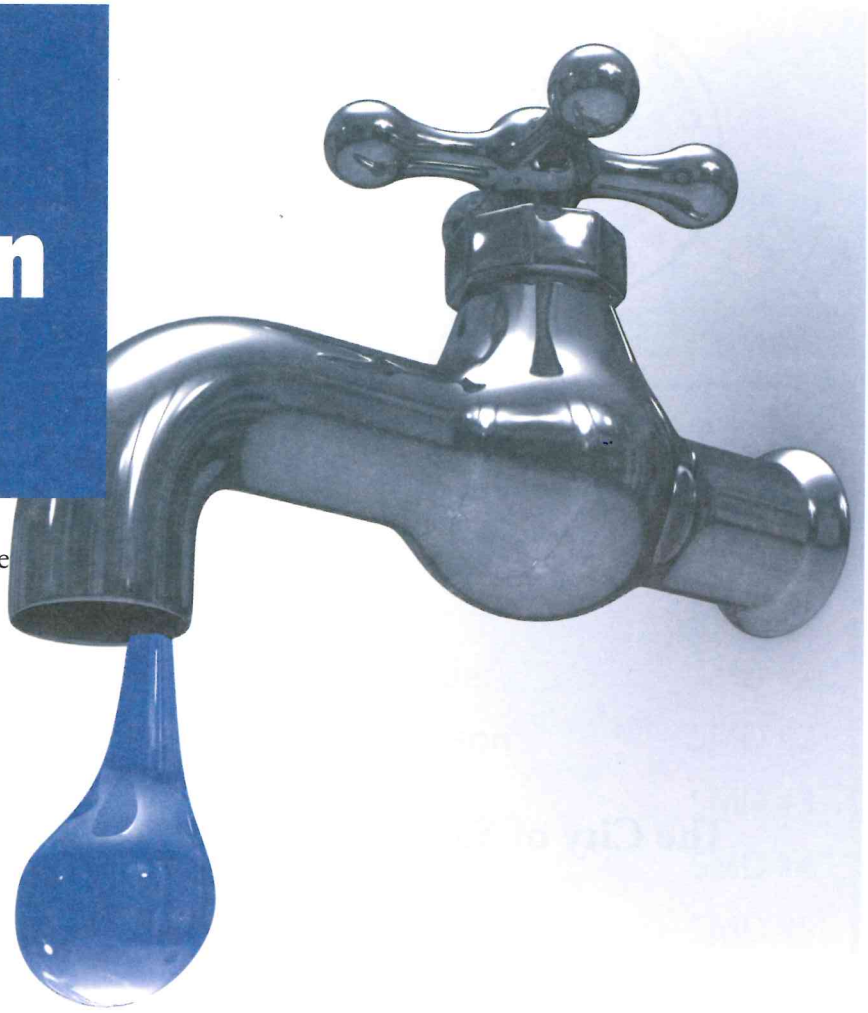
NEVER pour fats, oil, grease or food scraps into your sink, garbage disposal or toilet.
Scrape grease and food scraps from pots, pans, grills and utensils into a can and place in your garbage.

An environmental message from the City of San Angelo Water Utilities Department
For more information about the proper disposal of fats, oils and grease, call 325-657-4209.

Working Together To Make San Angelo Better

We Thank You!....

Water Conservation Tips



- Grab a wrench and fix the leaky faucet. It's simple and inexpensive.
- Plug the bathtub before turning the water on then adjust the temperature as the tub fills up.
- Install a rain shut-off device on your automatic sprinklers to eliminate unnecessary watering.
- Do one thing each day that saves water. Even if the savings are small, every drop counts.

Water Conservation Watering Schedule

	Standard	Drought Level I	Drought Level II
April 1 thru October 31	Twice / 7 Days	Twice / 7 Days	Once / 7 Days
November 1 thru March 31	Once / 7 Days	Once / 14 Days	Once 14 / Days

Special Note:

- No outside watering noon to 6 p.m. from April 1 thru October 31
- Watering is allowed any time of day from November 1 thru March 31
- Hand watering may be done on any day year round; except between noon and 6 p.m. from April 1 thru October 31
- Waste of water occurs when: treated or raw city water or well water runs off property to a gutter, street, alley, ditch or drainage facility; for a distance of more than 150 feet.

For more information, contact the Water Conservation Division at

DEPARTMENT OF WATER UTILITIES
72 W. College
San Angelo, TX 76903

The City of San Angelo's Annual Report on Our Drinking Water

About San Angelo Water

Where it comes from

San Angelo has six surface water sources:

Twin Buttes Reservoir
O.C. Fisher Lake
Lake Nasworthy
O.H. Ivie Reservoir
E.V. Spence Reservoir

The City of San Angelo also takes water from the **South Concho River** (at Lone Wolf Dam, by the Water Plant on Ave. I and Metcalf).

Where it goes

Residential	62%
Commercial	18%
System operation	16%
Industrial	4%

Water is life.
Conserve it. Protect it.