

Boom to Busted



By Trey Daywood

Perhaps no era in our country's history is romanticized more than the Old West. The untamed open plains, high adventure, hidden danger, new discoveries, Herculean challenges, unprecedented opportunities, rugged freedom and true grit still hold lots of appeal for us, even today.

In this state, perhaps our most notable frontiersmen were the Texas Rangers, who prided themselves in "being able to take care of their business with minimal assistance, but...weren't too proud to ask for help when they needed it." With their reputations, it's not surprising then how much attention was attracted in the 1870's when a group

of Texas Rangers began camping along Palo Pinto Creek in modern day Eastland County. The encampment became known as Ranger Camp Valley, and, in 1880 after the donation of 160 acres of land, was incorporated as the city of Ranger, Texas.

Water has always played a central role in the history of Ranger. A severe drought plagued the Valley in 1917, the same year the first major oil well was drilled by Texas Pacific Coal & Oil Company, setting off one of the largest oil booms in Texas history. By 1920, \$5 million in bank deposits (equivalent purchasing power of approximately \$58 million in today's currency) had been made, and the population swelled to 16,201. Some historians estimate a peak of 30,000

residents after a second railroad was constructed. Five trains per day were stopping in the fledgling boom town.

But in 1921, the drought finally broke. Dream town dusty streets became muddy nightmares. Unsanitary conditions caused a typhoid fever outbreak. Then the banks failed and as the euphemism goes, "The rest is history." The big boom went bust, and by 1930 the population in Ranger dwindled to just a fifth of its peak. Today there are just under 2,500 living there. The Golden Age had turned to lead.

The present day city of Ranger, where the median household income is about half the national average, is still feeling the effects of the

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crash, as one family learned when their two-year-old son's vocabulary lagged behind those of other small children his age. The culprit? Aging Infrastructure. A doctor's tests revealed that he had an unusually high concentration of lead in his blood. Water samples taken at their home revealed a lead concentration 28 times greater than the Environmental Protection Agency (EPA) maximum contaminant level (MCL) of 15 parts per billion.

The EPA goal for Lead in drinking water is 0.00 ppb because no safe blood level has been identified for young children. Lead exposure causes significant adverse health effects such as “irreversible brain damage, lowered IQ, behavioral problems and language delays.” The level detected in the family's home was 418 ppb!

Although it was commonly known the city's 100-plus year old infrastructure was constructed with substantial amounts of lead lines, chronic lack of resources prohibited water quality sampling, reporting, public notification and corrective actions from being performed.

An investigative report by USA Today, originally published December 13, 2016, concluded that “regulators are more lenient with small water systems because they lack resources” and “the nation's drinking water enforcement system doesn't make small utilities play by the same safety rules as everyone else.” Meaningful progress was not made in ameliorating the city's situation, which resulted in state Enforcement Referrals,



Enforcement Actions, and Fines for noncompliance.

High lead concentrations coupled with a lack of corrective actions by city officials has resulted in some describing the situation as a "tiny Flint," according to USA Today, a reference to the Flint, Michigan debacle.

EPA Lead & Copper Rule Revisions

It's because of Flint, Michigan, and situations like the one this family found in Ranger, that the EPA published changes in 2021 to the Lead & Copper Rules that apply to

all Community Water Systems and Non-Transient Non-Community Water Systems. Their published Rule Review results stated that replacing 100% of Lead Service Lines (LSLs) is urgently needed to protect the public health of all Americans. This includes those who can't afford replacing the customer-owned portions of their LSLs.

The most immediate, most significant change in the new rules for Public Water Systems is the requirement that systems “develop an inventory to identify the materials of service lines connected to the public water distribution system.”

The initial inventory represents best available data and "...must include all service lines regardless of ownership." Every single utility and customer-owned service line will be categorized as either Lead, Non-Lead, Galvanized Requiring Replacement or Lead Status Unknown. The inventory will serve as a "living document," which means water systems should periodically edit, update, expand and refer to it as future needs require. The data the inventory contains could also be utilized to serve different purposes over time.

To assist systems with this time-consuming endeavor and standardize the data collected, TCEQ has created a Service Line Inventory Form that systems are required to use to complete their inventories by the October 16, 2024, deadline.

TCEQ has postponed publishing its own detailed guidance so as not to create redundant information with the EPA Guidance for Developing and Maintaining a Service Line Inventory. Rather, they plan to draft their advice based on any areas not covered by EPA's guidance document and any other state-specific matters. In the near term, TCEQ also plans to publish an instructional video to further assist systems to ensure their success with completing the inventory.

Where Do I Start?

System records are the most logical place to start in preparing the LSL inventory. This process can be utilized to eliminate areas where it is known

that no lead lines exist. By narrowing down the areas of potential concern to focus on, systems can minimize labor and other costs.

Non-Lead must be determined not to be lead or galvanized requiring replacement through evidence-based record, method, or technique. "Evidence-based record(s)" can include:

- All construction and plumbing codes, permits and existing records or other documentation which indicates the service line materials used to connect structures to the distribution system.
- All water system records, including distribution system maps and drawings, historical records on each service connection, meter installation records, historical capital improvement or master plans and standard operating procedures.
- All inspections and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system.
- Any resource, information, or identification method provided or required by the state to assess service line materials.

If a utility can demonstrate through these evidence-based record that areas, communities, subdivisions, individual homes or businesses were constructed after the TCEQ Lead ban (effective

July 1, 1988), that can streamline this process. Specific instructions are provided for recording all Non-Lead designated SLs on your inventory. That work still must be done, however, valuable time, labor, and equipment can be redirected to locations constructed before 1988 or areas for which you are missing records.

Additional documentation sources can also include Ordinances, County Appraisal District (CAD) records (for structure construction dates), Service Connection Work Orders and Maintenance records, Customer Service Inspection reports and Customer Service Agreements.

Who Do I Contact If I Need More Help?

It is not possible to cover all the critical information and details in such a short article. If you still feel you need help completing your inventory, reach out to TRWA through our Help Request form at trwa.org/page/help. Or you can attend one of TRWA and TCEQ's free Lead Service Line Inventory workshops this summer. (See page 28 for a full schedule.)

Completing an LSL inventory is going to be a long, complex undertaking for many systems, but one vital to the health and success of communities like Ranger.



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