The background is a gradient of blue and purple with a subtle, abstract pattern. A thin, horizontal line is visible on the left side, extending across the width of the slide.

# History of the Thornhollow Springs Water Supply

# Pendleton Incorporated 1880

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- 1883—Dr. F.W. Vincent was instrumental in developing the 1<sup>st</sup> water system, a water wheel in the Byers Mill Race which was an open canal near the current Little League Ball Park

# Dr. Fred Vincent

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# Water Quality Issues Persist

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- 1899—System was upgraded to a separate intake with closed piping
- Fish found in drinking water supply despite 1/4" screens

# Pendleton Water Commission

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Frank B. Clopton

- Pendleton Water Commission was created Feb. 16, 1901.
- Frank B. Clopton was the first chairman.

# Pendleton Grows—Needs Water

## Main Street—circa 1908



1912 & 1914--Dr. I.U.Temple urges  
residents to boil water to prevent  
Typhoid



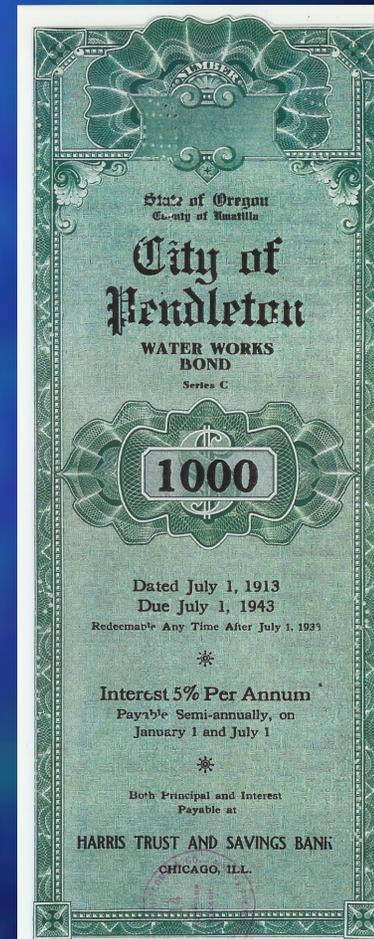
# Thornhollow Springs

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- Springs located 17-22 miles up the Umatilla River were identified as a source of drinking water
- 1910—Pipeline for the Thornhollow Springs water system was surveyed

# Water Works Bonds Pass

- 1911—Pendleton residents vote in favor of issuing \$200,000 in bonds to finance the construction



# Construction of Pipeline Began in 1913 and lasted about 18 months

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- NOTE: Since no photos were found of the Thornhollow Springs project, photos on the following pages are from construction at Tumalo Irrigation Project, Deschutes County, 1914

Materials were transported to the site with mule teams and wagons



# Teams were used for much of the construction



# Humans & Horses worked side-by-side



# Job site camps were set up to house workers



# Driving home 20 miles after work was not an option

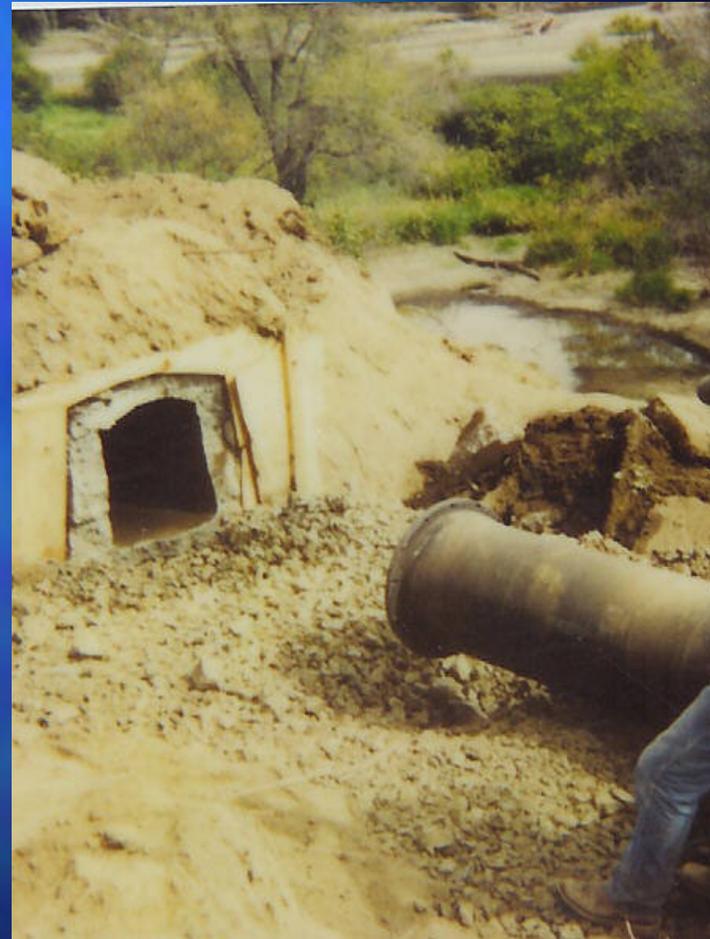


# Meals were provided at camp

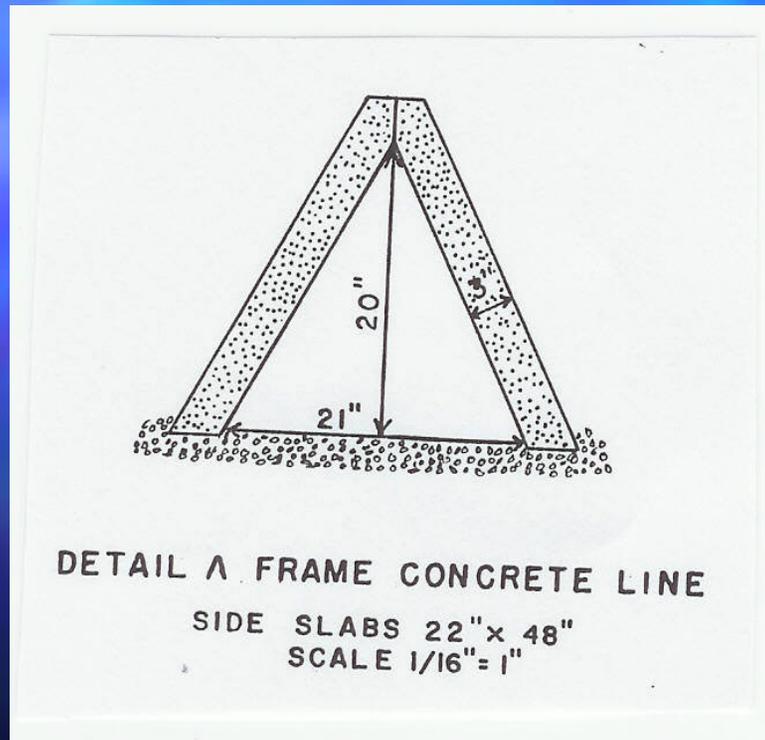


# 1913—Construction Begins

- The pipeline was one of the first in the country constructed of concrete instead of wood stave pressure pipe
- 1996 Photo

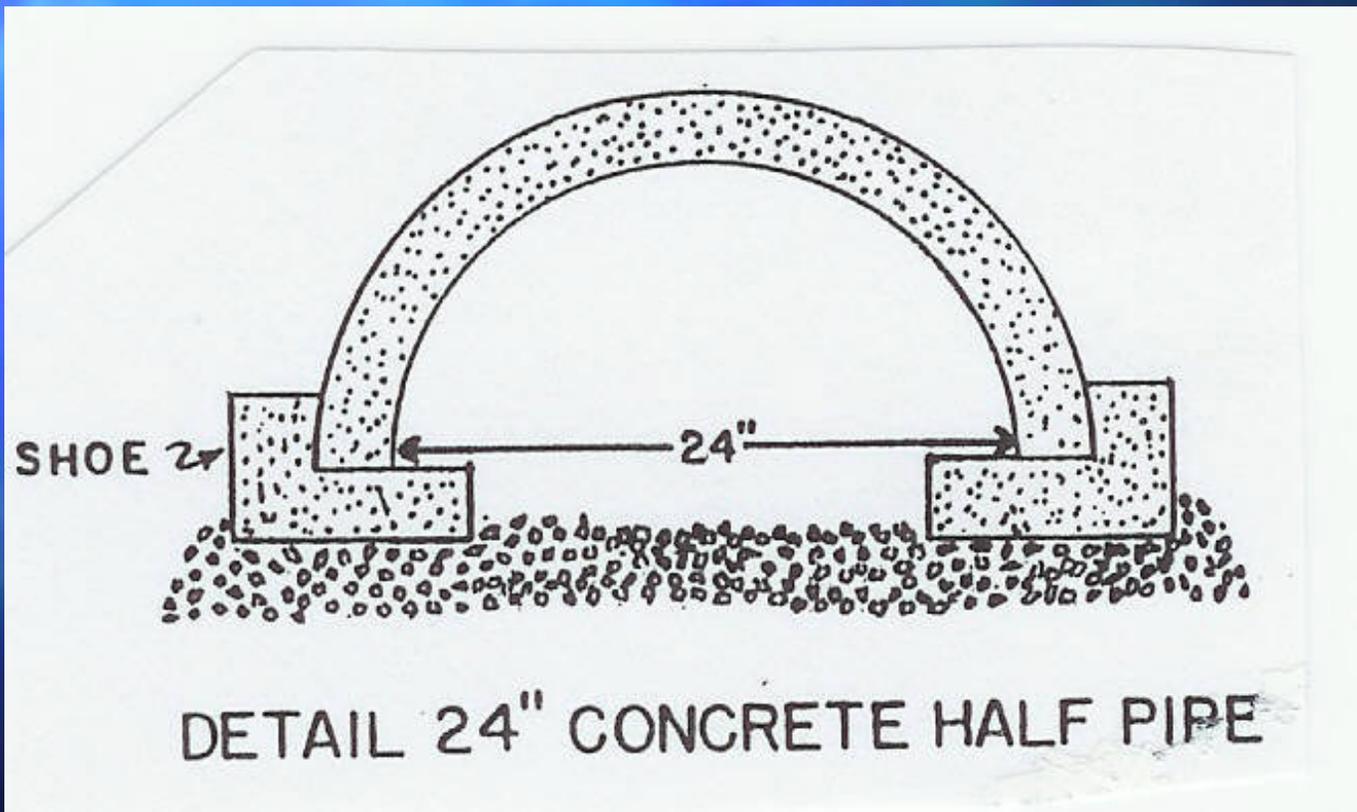


# Infiltration Gallery



- A-Frame & Concrete Half-Pipe were used; the bottom of the pipe was open to allow water to flow in

# Infiltration Gallery



# What is an Infiltration Gallery?

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- Underground water is collected in a series of open-bottom pipes or, more recently, perforated pipes
- The open-bottom pipes were replaced with underground perforated pipes in the 1980s

Pipes were connected at central locations  
(manholes) where flow was combined

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# Box-Style Manhole; Outside



# Box-Style Manhole; Inside

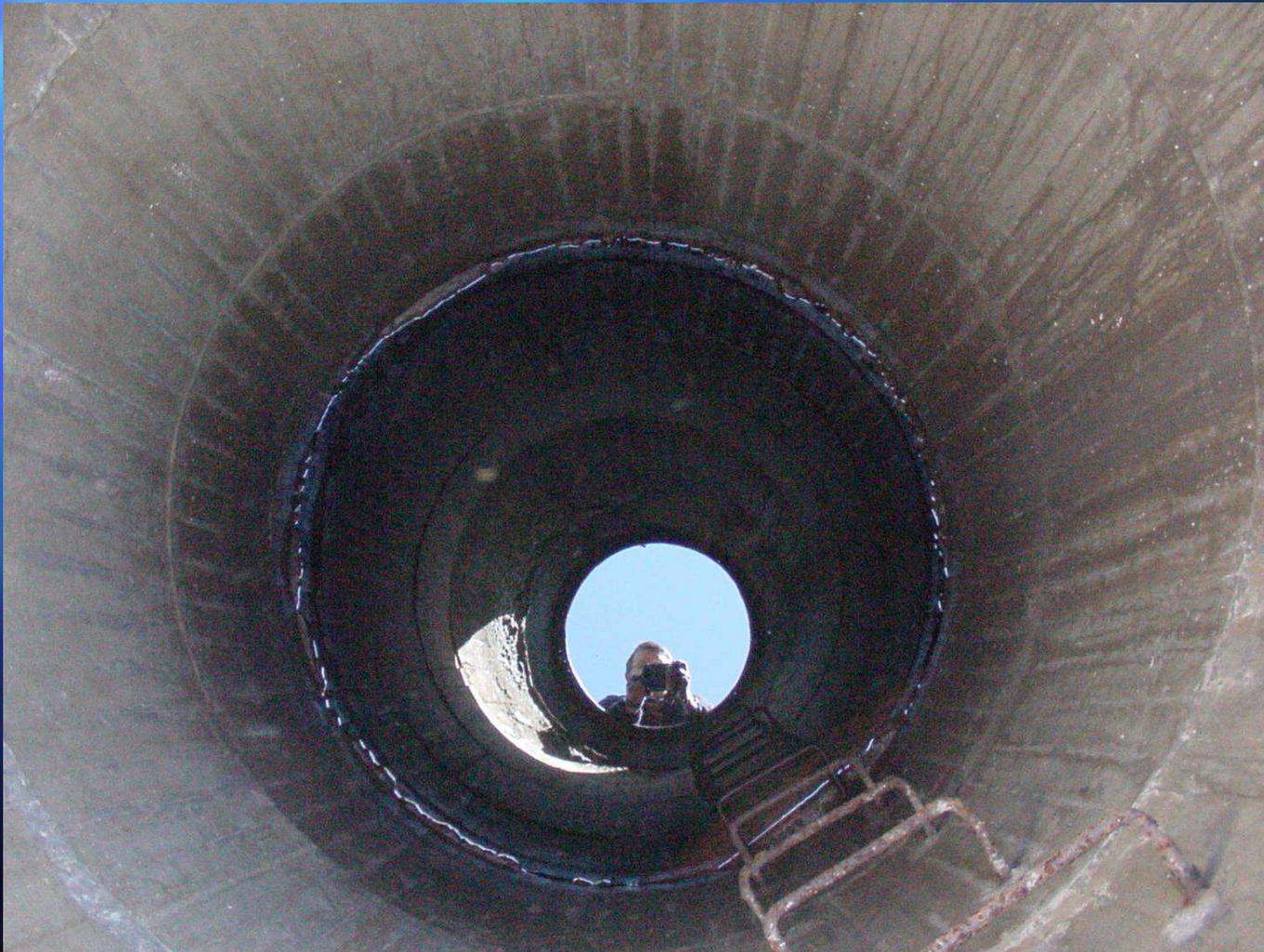


# Circular Manhole; Outside



# Circular Manhole; Inside

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# Water from the Springs was combined at the Weir House

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# Weir House Screen kept large debris out of the pipeline

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# The Pipeline

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Pipeline described as a “20-mile engineering wonder that winds like a snake up and down the canyons, across wheat fields, pasture lands, and through the forest.” Dorys Grover

# No Pumps; No Electricity

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The pipeline transported water from Thornhollow to Pendleton using gravity and siphons only

The elevation drop was from 1580 ft at the Weir House to 1325 ft at the South Hill Reservoir

# One of Seven Inverted Siphons Along the Pipeline





# Water from Springs came to the Pendleton South Hill Reservoir

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# South Hill Reservoir

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- Also built in 1914 as part of the \$200,000 bond measure
- Formerly known as the “Twin Reservoirs”
- Two 1,000,000 Gallon Tanks
- Still in use today

# Pipeline Not Without Controversy

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- A number of issues plagued the development of the Thornhollow water system, both before and during construction

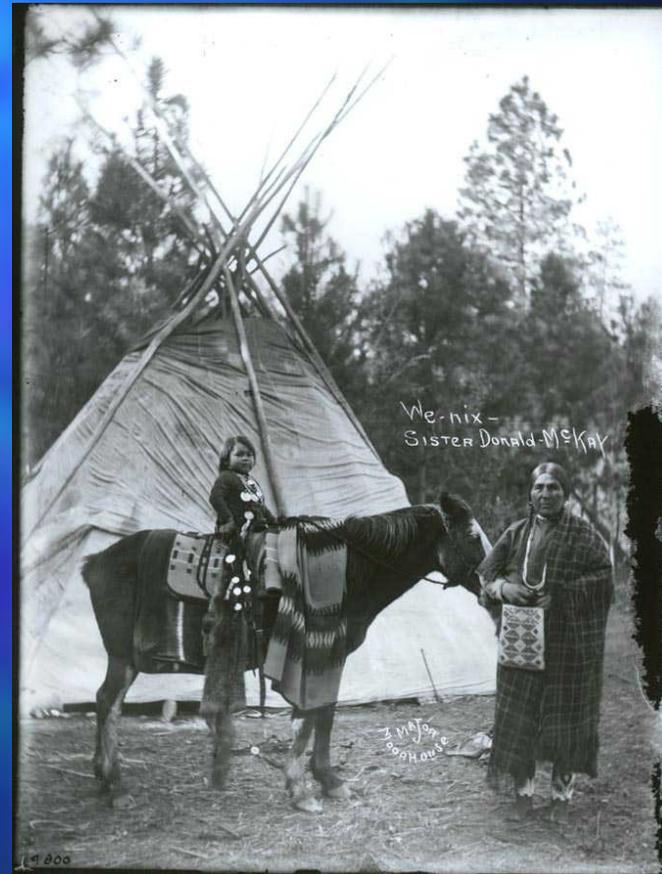
# Wenix forced to vacate her home at Thornhollow

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- City condemned the property and offered Wenix \$3200 for her land
- Wenix refused the offer and never spent the money deposited in her account
- Sheriff Till Taylor and crew had to carry Wenix and her 2 daughters off the property in 1912

# Wenix

- Special Collections and University Archives of University of Oregon Libraries and Courtesy of Tamastslikt Cultural Institute



# “City Dads are Acting Peeved”— EO headline

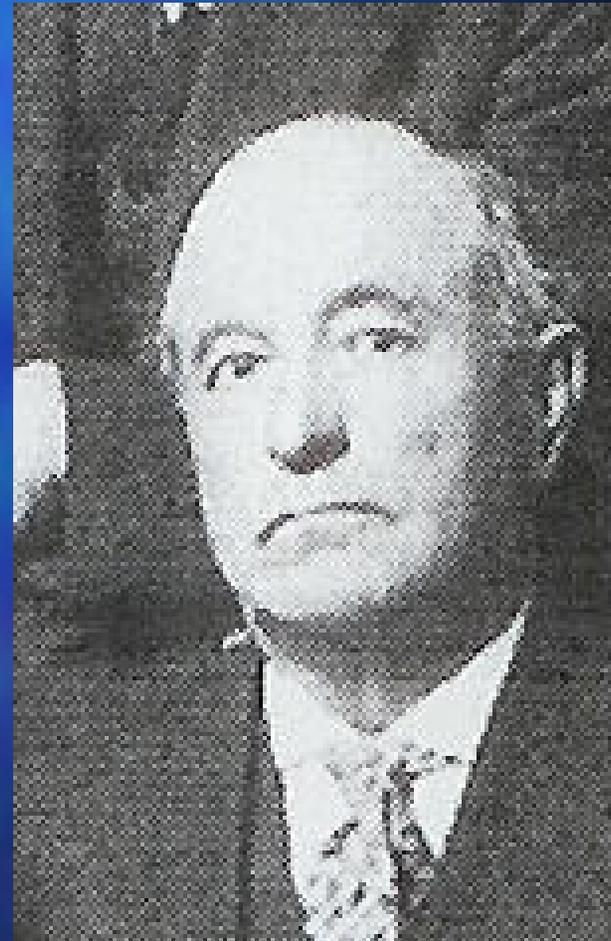
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- City Council thinks Water Commission should advise them of the status of the project
- They threaten to abolish the Water Commission
- Residents step up; they want the Water Commission on board to complete the project

# Dr. James A. Best

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- Dr. Best, who served as mayor of the City from 1916 to 1918, was at the center of controversy over the Thornhollow Project



# Best Charges Over-Payment

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- Dr. Best charged that project Engineer Frank C. Kelsey was overpaid
- Water Commission fired back that costs were all reasonable and opened books for review

# “Excess Cash is found instead of a ‘shortage’ ”—EO Headline

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- Accountants were brought in to investigate Dr. Best’s charges of dishonesty
- Accountant states, “Every reasonable precaution is used by the board (Water Commission) in ascertaining that bills and claims are valid and proper.”

# Dr. Best elected to Water Commission in 1914

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Dr. Best next challenged the water quality and quantity at Thornhollow

Dr. Best also charged that Will Moore and Marion Jack were not eligible to serve on the Water Commission

Countercharges were filed that Dr. Best was not a US citizen and not eligible to serve were also filed

# Marion Jack, Water Commissioner

photo courtesy of his grandson, Jim Cahill

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# Construction Continues

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- Despite all the controversy, construction continued
- Residents were excited about the new water system and soon had a chance to tour it themselves

# “Fifty-Cents for Round Trip to Thorn Hollow Sunday, Make Your Plans”--EO

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- April 26, 1914—A special excursion train was run from Pendleton to Thornhollow so that all could inspect the city water gravity project—EO

# Visitors to the Thornhollow Construction Project



# “More Money Will Be Needed to Pay for Gravity System” --EO

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- Construction of the Thornhollow Springs water system and the two new reservoirs exceeded the original \$200,000 in bonds
- Additional bonds totaling \$80,000 were approved in 1914

# “Gravity Water System is Now in Full Use”—EO headline

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- July 25, 1914—First water flowed through pipes in town
- Water coming into the system at the rate of 3,000,000 gallons per day
- Gravity water system opens the door to new growth in Pendleton

Water System completed; a smoker  
honored the men who made it  
possible

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- Gold Pendants were presented to Will Moore, J.T. Brown, G.I. La Dow and Marion Jack to honor them for making the water system a reality.

# Accolades for the new water system abound

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- Insurance rates drop within the City due to plentiful water supply
- Dr. Calvin S. White, state health officer, declared the Springs source free from contamination
- Less disease in City, better water is the cause

For a few years, water was plentiful

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- However, after a prolonged drought in 1917, residents saw the need to extend the water line further east to collect water from additional springs

# North and South Wenix were the original springs



Shaplish (also spelled Chaplish) Springs  
was added to the system in stages from  
1919 through 1921

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## Comments of Frank Hayes, Water Superintendent, on work at Shaplish

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- “In the spring of 1918 work was again started with about 100 laborers.”
- “Excavation of three miles of gravel and sand from a depth of four to 14 feet by pick and shovel is SOME job. In addition, we obtained our sand and pea gravel from the river by screening.”

Frank B. Hayes was appointed  
Water Superintendent in 1912

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# Simon Springs was added from 1926 to 1929

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# Longhair Springs was added in 1929

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# System served the City well

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- Thornhollow Springs required a great deal of maintenance, including annual de-rooting and frequent repairs
- Nonetheless, the system continued to supply all the drinking water for the City of Pendleton until 1947

# De-rooting of the Thornhollow Water Line was done annually



# Thornhollow Springs supplied water to the City for nearly 90 years

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- Until the mid-1990s, Thornhollow provided 60% of City's water
- Federal Safe Drinking Water Act regulations became increasingly strict
- By 2000, Thornhollow supplied only 40% of the City's water; wells supplied 60% of the drinking water

# Thornhollow Springs Abandoned

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- Thornhollow Springs water was last used December, 2003
- The infiltration gallery was officially abandoned in 2006
- Return of Springs lands to CTUIR is forthcoming