

A Historical View of the Medford Water Commission

When, What & Why



**Board of Water
Commissioners Study Session
November 6, 2013**

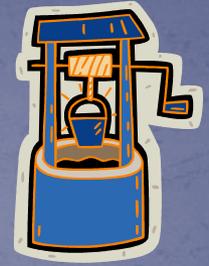
Credits:



Materials utilized for this presentation included the following:

- ❖ Medford Water Commission archives
- ❖ Research conducted by the Southern Oregon Historical Society
- ❖ Web site on Medford water prepared by Ben Truwe (<http://id.mind.net/~truwe/tina/water.html>)

The Early Years



- ❖ Medford incorporated as a town in 1885; water from wells initially adequate
- ❖ As town grew, more and deeper wells were dug, with little success
- ❖ By 1888, no choice but to seek more water
 - Town lacked protection from fire – huge risk
 - Deal to build flour mill fell through because lack of water
- ❖ Town built diversion dam on Bear Creek 2.5 miles upstream; open ditch dug to town

Water from Bear Creek



- ❖ Initial glee at completion of the ditch: “The water ditch has been completed, and the water was turned on for the first time Wednesday. This is a valuable improvement for the town and one that will be of great benefit.” (Ashland Tidings, May 24, 1889)



- ❖ July 1, 1889: citizens (population 1000 +/-) vote on \$20,000 bond to construct water works (2013 equivalent: \$500,000)
- ❖ 1890 – Two redwood tanks (32,000 gallons each) built next to Alba Park, fed by water from ditch

Water from Bear Creek, cont.

- ❖ Marginal water quality worsened as ditch passed by barnyards in path to town
- ❖ “The water will be carried in pipes all over the city for fire and irrigating purposes only, as the water is not fit for domestic purposes. The town is to be congratulated on its providing means by which it can be guarded against fire.”
(Oregonian, April 8, 1890)
- ❖ 1902 – Ditch abandoned; pumping station built on Bear Creek and pipelines installed to redwood tanks
 - Pumps initially steam powered
 - Replaced with electric pump; power provided by new Condor Power Co.



Notable Efforts Made; Challenges Continue

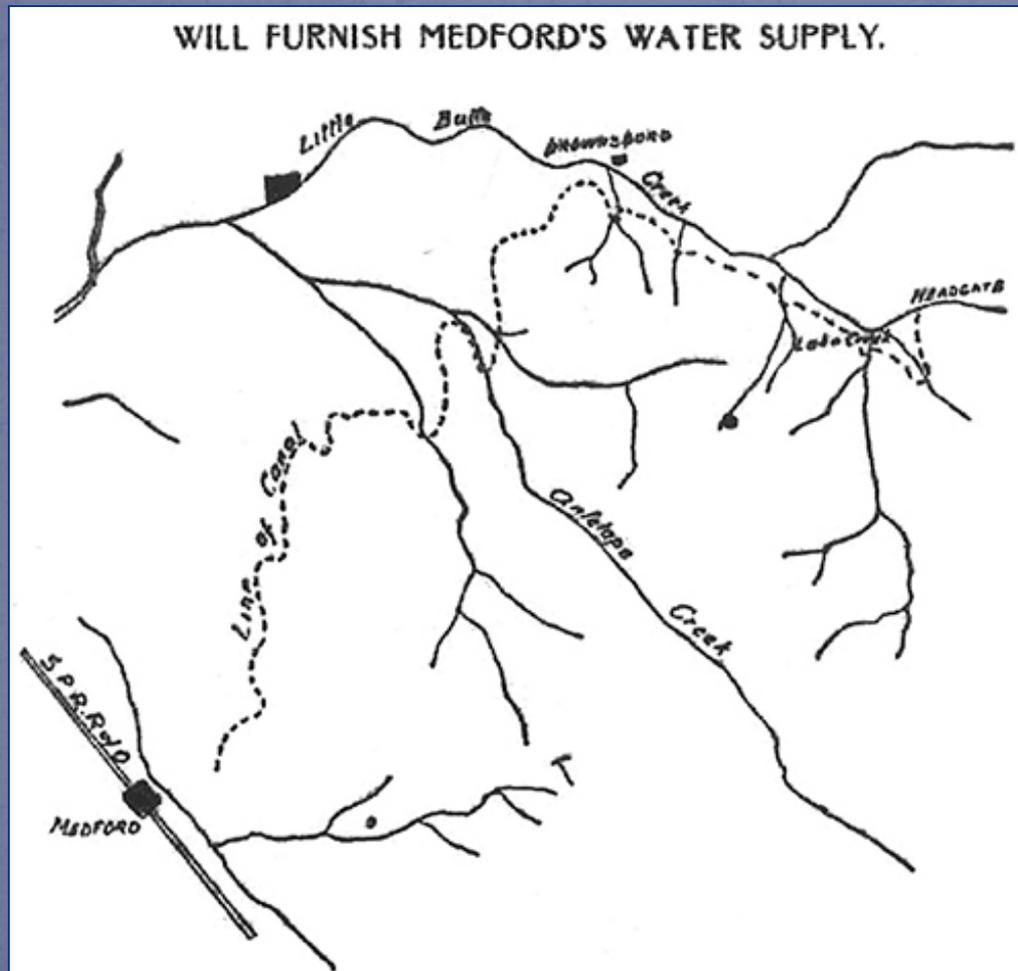


- ❖ Amount of water from Bear Creek inadequate; Medford at mercy of upstream water rights holders; efforts to dig wells to supplement not successful
- ❖ Tanks nearly emptied at times; notices issued in newspapers for “violators to desist at once or suffer the consequences.”
- ❖ 1901 - Medford seriously in debt; take actions to make water and power self supporting; meters to be installed on residences to be charged at \$0.08 / 1000 gallons (equivalent today \$2.17 / 1000 gal)
- ❖ Bear Creek quality /taste/odor poor; “clogging the meters; it is a serious question whether to sell such stuff as water is not a violation of the pure food law” (Geo Putnam, Editor, Medford Mail)

Seeking New Water Options

- ❖ 1905 – Population had doubled to about 2,500 people and Medford reincorporated as a city
- ❖ Water for drinking and cooking came from shallow wells; well water quality also questioned; typhoid fever prevalent
- ❖ Use of pumps was expensive and subject to failures; inconvenient but also completely shut businesses down
- ❖ Citizens committed to obtaining better water supply
 - High quality a priority
 - Sufficient quantity to support growth
 - Preference for source that could flow by gravity to town

Fish Lake / Little Butte Creek - Initially Considered in 1900



August 27, 1900, city entered into contract with Oregon Irrigating & Power Co. for water to be supplied by a ditch to go from junction of forks of Little Butte Creek to Talent

Portion of canal may have been built for irrigation, but Medford's use didn't come to pass at this time

Fish Lake Re-Considered 1907

Young & Kelsey report on water source options, March 1907:

- ❖ Noted poor condition of current intake well adjacent to Bear Creek, many pipes in poor condition and small pipe sizes don't provide good fire protection
- ❖ 92% of the 342 service connections were metered, minimum charge of 50 cents/mo plus 10 cents/1000 gallons (2013 equivalent: \$12.15/mo, \$2.13/1000 gal)
- ❖ Seven water sources evaluated; recommended best source was Little Butte Creek (fed by Fish Lake and Fourmile Lake)
- ❖ Suggested use of wood stave pipe from intake at end of Fish Lake Water Co canal, construction of filters, distribution reservoir and distributing pipe system

Twists and Turns...

Second engineering report 10/26/08 by WJ Roberts

- ❖ Medford had opted to purchase water rights from owners on Little Butte Creek tributaries (instead of Fish Lake Water Co. proposal); discovered that flows were insufficient
- ❖ Situation re-reviewed; among options discussed were:
 - Big Butte Springs – quality and quantity superb, but too difficult and far for pipeline; flume a poor alternative
 - Rogue River – less distance to town, pumping would add expense; some water treatment likely to be needed
- ❖ Recommendation: Fish Lake Water Company option would provide sufficient high quality water at reasonable price

Fish Lake / Little Butte Option Selected

- ❖ Bond issue of \$365,000 for Little Butte pipeline, receiving reservoir and distribution pipeline improvements (2013 equivalent approx. \$9 million; population about 8,000)
- ❖ Construction of distribution pipes in town began May 1908
- ❖ City Council called for election on 11/5/1908 to decide between the Little Butte, Big Butte and Rogue options
- ❖ City entered into contract with Fish Lake Water Co 12/5/1908



Capital Hill Reservoir #1 Constructed – 2 Million Gallons

- ❖ Needed to receive and store water from planned Little Butte supply
- ❖ Location determined December 1908; at sufficient elevation northeast of city
- ❖ Appears to have been completed by July 1909



Fish Lake Supply Developed



- ❖ Construction on pipeline began January 1909; constructed of wood staves, 16" in diameter
 - ❖ Initially had to pick up water from canal at Bradshaw Drop due to need for condemnation of pipe path near intake
-
- ❖ Pipeline from Bradshaw Drop to Medford completed July 1909
 - ❖ “New water system is now in use, and the people are happy... At 10:00 a.m. July 19, water from Mount Pitt Lake was turned into the city mains... The water as it left the pipeline was clear and sparkling.” (Medford Mail, July 23,1909)

Remainder of Fish Lake Project Completed

- ❖ October 1909 - settlement reached for pipe crossing
- ❖ System completed July 1910; capacity of 4 million gallons/day ; 20 miles of wood stave pipe



- ❖ “A source of pure water for a city is one of its greatest assets... Medford has realized this, and a water system second to none is the result... And ample provision has been made for the future.” (Medford Mail Tribune, July 31, 1910)
- ❖ Old water tower torn down September 1910

Joy Short Lived

- ❖ Medford was duly proud of the results of its efforts; health officer disclosed illness down 60%
- ❖ Break in supply line July 1, 1912; showed impact of reliance on single distant source
- ❖ Extended water shortage events began to occur; “Twenty arrests were made at Medford Thursday for violation of the sprinkling rules of the water department.” (Jacksonville News, July 18, 1914)

NOTICE TO WATER USERS

Commencing Thursday, June 10th, 1915
Irrigating Hours will be as follows:
5:00 A. M. to 11:00 P. M.

Monday, Wednesday and Friday on the East side of the Streets running North and South and North side of all Streets running East and West.

Tuesday, Thursday and Saturday on the West side of all Streets running North and South and on the South side of all Streets running East and West.

Sunday forenoon on the East side of all Streets running North and South and the North side of all Streets running East and West.

Sunday afternoon on the West side of all Streets running North and South and the South side of all Streets running East and West.

Wasteful use of water or using an open end hose for irrigating will not be permitted.

Corner property will be governed by the Street on which the house is numbered.

Water must be shut off immediately in case of a Fire Alarm.

Do not use a nozzle larger than one-quarter inch in diameter.

Do not set sprinkler so that it will interfere with traffic on side walk.

Do not allow water to run to waste down the gutter of streets or alleys.

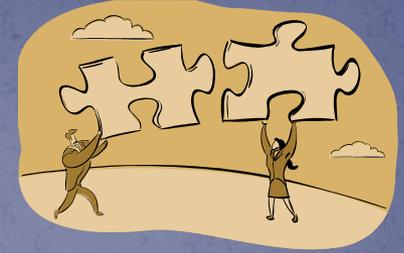
Violations of above rules are punishable by fines as provided for by Ordinance No. 669 as amended, and will be rigidly enforced.

O. ARNSPIGER,
Water Supt.

Community Dissatisfaction Builds

- ❖ Water quality suffered when Fish Lake dam raised; muddy, poor taste & odor made worse by decaying trees and brush not cleared from impounded area.
- ❖ Water quality problems were compounded by Medford's decision not to include filtration as suggested
- ❖ Citizens discouraged and upset
 - Community had shown huge commitment and \$\$ spent for good water supply
 - Both quantity and quality were proving inadequate within five years of completion of the project

No Easy Solutions



- ❖ A water committee began reviewing new supply options for Medford; filed for water rights to Big Butte Springs
- ❖ Water system heavily in debt; bonds still outstanding for both Bear Creek supply as well as Fish Lake system
- ❖ Initially not collecting enough; water fund net loss said to be \$15,000 per year (equivalent to \$200,000 in 2013)
- ❖ Rate increase of 25 cents per month unpopular
- ❖ Questions raised about water funds being spent on other city functions

Outcry Leads to Formation of Medford Water Commission

- ❖ Disgruntled citizens propose to remove operation of the water system from direct city control
- ❖ Management to be done by specialists outside the political arena
- ❖ Water revenues to be dedicated to self-supporting water system
- ❖ Approved November 7, 1922 election by vote of 1380 in favor to 1127 opposed

Now Showing at the Page Th

COUNCIL MEETS TO CANVASS RESULT OF CITY ELECTION

In the absence of Earl C. Gaddis, who is vice mayor, and Mayor C. E. Gates, Councilman J. M. Keene had the honor of presiding at last night's city council meeting over the deliberations of Councilmen H. U. Lumsden, J. W. Dressler, R. W. Antle and T. W. Mites. He would have been a success in that office had he lived up to the honor with a clean shaven face.

Mayor Elect Gaddis was not present for the reason that he had left early last Tuesday evening for Portland, without waiting to hear the local election returns and knowing whether or not he had been elected, to spend the rest of the week on business at the Pacific International Livestock exposition. Mayor Gates did not reach the council chamber until the meeting was over, being busy taking part in the K. of P. parade celebration over the election of C. M. Thomas as circuit judge.

The council canvassed the official vote cast in the city at Tuesday's election on the amendment of the city charter to create a city water commission, which proposition carried decisively except in a few precincts. Not much business was transacted by the council because of the absence of Gaddis and Gates, and the proposed rate ordinance for large commercial users of water was not acted on, being postponed until the next meeting.

The council adjourned to meet next Tuesday night when bids for the construction of the new city water reservoir to supplement the present reservoir, will be received and the contract probably awarded.

Oil Tax Injunction

VERA CRUZ, Nov. 9.—(By Associated Press.) A hearing on a motion to make permanent a temporary injunction enjoining the state of Vera Cruz from collecting a state oil tax from the Trans-Continental Oil company, an American concern, was adjourned here yesterday at the request of the state government. The adjournment was taken in order that the right of the federal court to grant an injunction against state government might be tested. This question is up before the Mexican supreme court.

MARCIA MANON AND MILTON GILLS IN "SKIN DEEP"



WATER COMMISSION MEASURE PASSED

Besides electing E. C. Gaddis mayor of Medford by one of the largest votes ever given a mayoralty candidate the voters of Medford on Tuesday passed a charter amendment providing for a water commission to be appointed by the mayor, and to have full control of the water department of the city. Practically every city owns its own water system has a similar commission, it having been found that the importance of this department of the municipal service, is so great that a city council with its other multifarious duties, can not attend to it, without sacrificing attention to other matters.

The vote in Medford for the water commission was Yes 1380, No 1127, a majority of 253. The members of the commission who will serve without pay will be appointed by the new mayor.

MR. GOOD GETS DAYS TO BE

Walter Good, the local dish washer, arrested suddenly for intoxication, an parolee last week from jail sentence on his pro form and so he could res acted badly again early th when he was full of moon Good was terrorizing th and patrons of a restaura claimed, and when Patrol sought to place him under resisted and Cayo had to si with his "billy," which la stituted the sewing up stiches in his head. He will be arraigned in police cou row, and in the meantime tinue to lie in jail nursing head.

FIVE PRIZE WINN GREEN OLIVE REC

Back to the Drawing Board

- ❖ First priority of new Medford Water Commission – to find a new water source
- ❖ Big Butte Springs an outstanding option based on water quality and quantity, but high expense to develop.
- ❖ More water rights filed for Big Butte Springs – October 20, 1925
- ❖ Aggressive actions to pay bonds also pursued before incurring additional debt

MEDFORD, OREGON, FRI

\$68,000 IN WATER BONDS PAID OFF BY CITY COUNCIL

In the article appearing in yesterday's paper it was shown that although the city had never paid off any of its \$113,000 of general bonds in some over thirty years prior to the taking office of the businessmen's administration, in 1918, yet that in the last seven years the businessmen's administration has paid off \$70,000 of the \$113,000 or over two-thirds of the entire general bonds of the city by economy in the conduct of the city's affairs and without raising the city tax levy, a truly remarkable record.

In this article we shall show the water bonds paid off by the recent administration.

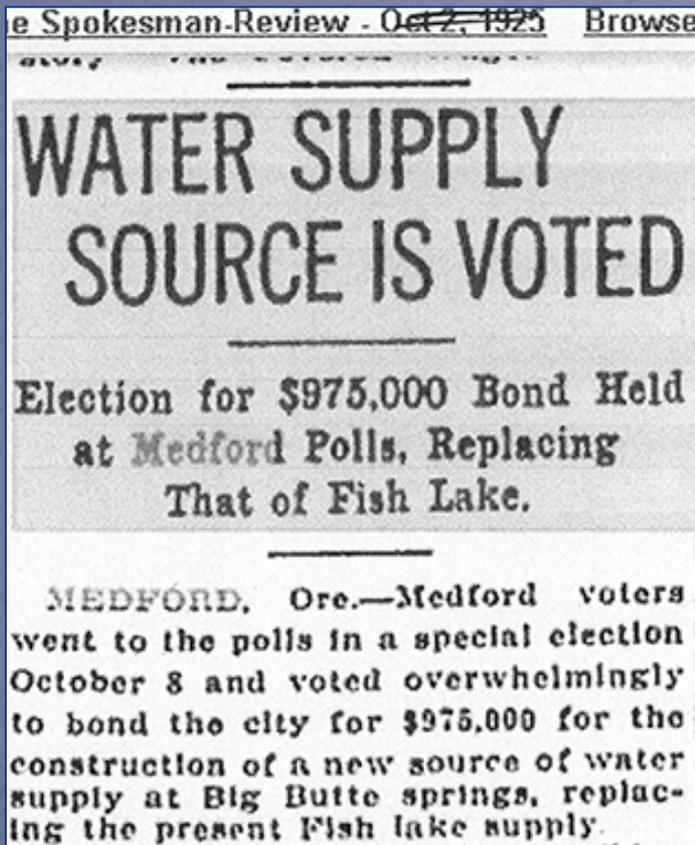
As you know these water bonds were issued for the so-called gravity pipe line running twenty-three miles from the intake to the city reservoir, etc., which was put in in 1908 and \$400,000 of water bonds issued.

In the eight years prior to the businessmen's administration not only had the water system failed to pay a single bond but the records disclose that it had borrowed from the paving and other funds of the city approximately \$10,000 to meet its operating and interest charges. Yet the present administration has paid off \$68,000 of these water bonds as follows, \$38,000 of which has been paid off in the past two years of the Gaddis administration:

Water Bond Payments	
March 1917	\$15,000
December 1921	5,000
August 1922	10,000
January 1923	2,000
January 1923	4,000
April 1923	15,000
June 1923	5,000
January 1924	2,000
April 1924	5,000
July 1924	5,000
Total	\$68,000

Thus for the first time in the fifteen years that the water plant has been in operation the water plant is on a sound basis, meeting its operating expenses, interest on bonds and installments of principal on the bonds as they become due.

Citizens Again Rise to the Occasion

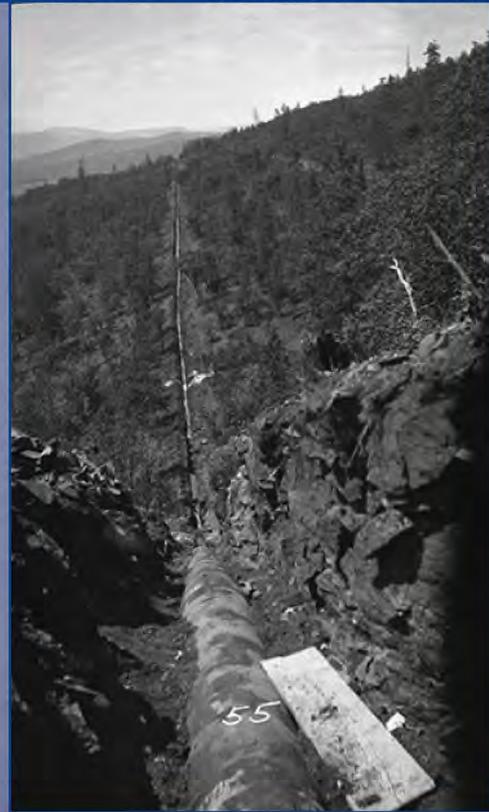
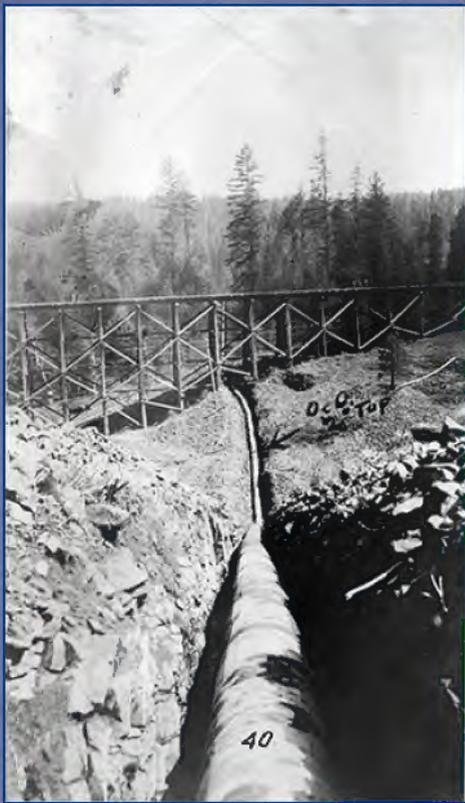


- ❖ Twice burned, citizens were naturally skeptical
- ❖ Much bantering in the local newspapers
- ❖ Proposed sale of \$975,000 in bonds to develop Big Butte Springs supply and build pipeline to town (approx. \$13.5 million in 2013 – population estimate about 12,000)
- ❖ Approved October 8, 1925 by a vote of 1564 for and 535 against

Pipeline Constructed

- ❖ Robert Duff hired to design and oversee project
- ❖ Pipe to be arc welded steel 21" to 25" in diameter; coated with an asphalt dip and spirally wrapped
- ❖ Thirty mile path of pipeline over 75 summits; much rock encountered

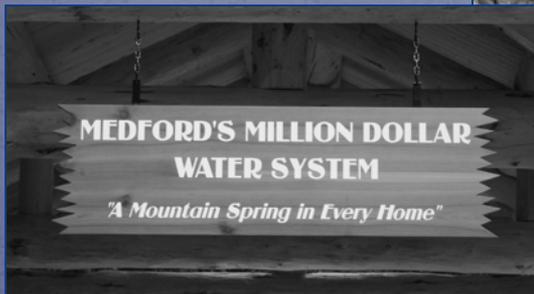
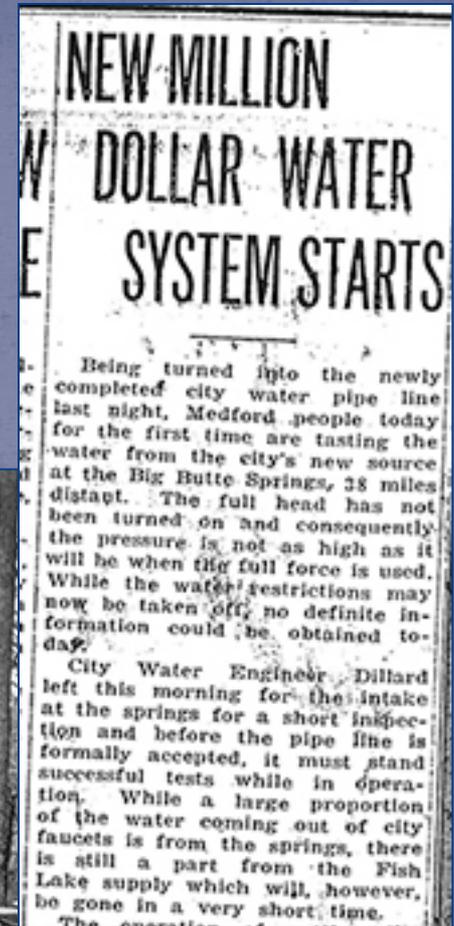




Project a Success!



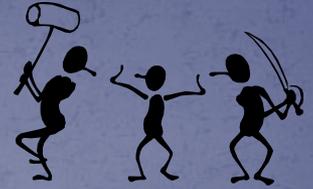
Completed
July 1, 1927



More Storage Also Needed; 2 Million Gallon Capital Hill Reservoir II Built



1930 - Ballot Measures to Determine Direction



- ❖ Debt and high water rates raise issues and ire; two measures on November ballot
- ❖ Consider change in City Charter to allow sales to water districts outside of city limits
 - City had allowed outside sales to nearby customers for years, but some citizens objected
 - With substantial surplus water from springs, sales to outside users at higher rates was a means of paying off debt
- ❖ Ballot measure to abolish Water Commission; faulted by some for high rates; others praised for paying off debt from prior systems too (majority of revenues going to pay debt)

Outcome of Elections:

- ❖ Medford Water Commission is retained
- ❖ Outside sales to be allowed: “authorizing the City of Medford to sell and dispose of its surplus water to organized water districts outside of and adjacent to the City of Medford, subject, however to the prior right of the City of Medford to use the same.”

1936 - Sales to Eagle Point Begin

- ❖ Eagle Point had no prior established water system
- ❖ Big Butte Springs pipeline passed very near the small town
- ❖ 9/8/36 – Eagle Point awarded a federal grant to fund 45% of waterworks construction
- ❖ 9/29/36 – Contract executed with Medford Water Commission agreeing to furnish water “out of its surplus water” subject to “the prior and superior rights of the citizens of the said City of Medford.”
- ❖ Extra charges applied for usage of over 5,000 gallons per service

WASHINGTON APPROVES FIVE OREGON PROJECTS

Five allotments for Oregon projects under the federal emergency administration of public works have received approval from Washington, C. C. Hockley, state director for Oregon, reported yesterday.

Projects approved are: Waterworks at Eagle Point, a grant of \$7364 on an estimated cost of \$16,364;

1941 – Plans for Camp White Announced; Big Impact

- ❖ Army desired 5 million gallons of water per day out of the 13 mgd pipeline capacity
- ❖ Additional water storage needed; Army to front funding
- ❖ To assure that there would be enough water to meet demands, meters were proposed
 - Requested a priority number to purchase meters; received priority but not in time for summer
 - Metering idea apparently abandoned

Water Board To Insist On Meters

Indications are, unless court action should be taken, that water meters will be installed in Medford if and when the city can get a priority number purchase of the meters.

Such was the impression gained by those who attended the public hearing on the water meter question Wednesday night. The court house auditorium was filled, and arguments both for and against the meters were heard.

More Storage Needed; 8.2 Million Gallon Capital Hill Reservoir III Built

- ❖ Central Point requesting service, but unable to supply them before additional storage was constructed
- ❖ Completed December 1945



1945 – Central Point Requests Water from MWC

- ❖ Water system installed in Central Point in 1910 now in disrepair; well water hard and insufficient quantity
- ❖ Citizen interest in connection to Medford water system in 1938 not strongly pursued by leaders
- ❖ Opportunity lost when Camp White established; no surplus water
- ❖ With end of war and completion of new Medford reservoir, Medford willing to serve
- ❖ Central Point bond measure vote in September 1945

Get Out to Vote Effort Proves Successful

Central Point bond measure for water connection to Medford and system improvements passed 256 to 6

Mr. and Mrs. DON Patterson, Mr. and Mrs. Jack Sanderson, Pfc. Kelly Taylor and wife, Mr. and Mrs. Walter Jensen and the host and hostess, Mr. and Mrs. Taylor. Jack Sanderson is home on thirty-day furlough. He went over with the 91st division.

Mrs. Roy Shreve, whose husband now deceased, opened up the Office Boy stationery store in Medford and her daughter, Janice and family visited friends in the valley and called on the E. P. Stone this week.

We Do Not Want A Dry Dead City
We want a live green city. Vote for MEDFORD WATER September 22.
Do not forget the Community Public Auction
LET'S MAKE THIS A BIG DAY!
Central Point Blacksmith Shop

Our Only Hope

For a dependable supply of really good water is to vote for connection with Medford's system. The present flow is entirely adequate for both cities, and more is available if needed. Few of us realize what a great advantage a dependable supply of pure, cold, soft water is. All softeners, chemical or mechanical, go out the window and soap required is cut in half. Less labor, less plumbig expense, less time in cleaning and washing clothing and linen last longer---

These and numerous other reasons make it imperative that we do not miss this chance.

Vote for Medford Water!!

ALEXANDER HARDWARE & IMPLEMENT CO.

WE BELIEVE

EVERYONE SHOULD VOTE YES For Medford Water.

WHY?

Here are The Reasons:

1. **Medford Water is SOFT.**
2. **Medford Water is PURE.**
Will Safeguard Your Health
3. **Medford Water will be plentiful.**
4. **Medford Water will bring new people to this city.**
Let Anyone Leave Who Wishes--New People Will Take Their Place.
5. **Medford Water will increase business.**
The First and Most Important Step in The Process of Making Central Point.
6. **Medford Water will make Central Point a better place to live.**
7. **Medford Water will reduce living cost and reduce medical bills.**
8. **Medford Water will cut down our fire losses.**
9. **Medford Water will help in beautifying our city.**
We Want A Green Park and Live Trees.
10. **Medford Water will give us something to talk about.**

No Excuses Will Be Needed to Defend Our Water Supply.

FABER'S MARKET

EVERETT and DON FABER

"We Are Sincere in Taking A Stand in Favor of Medford Water"

1946 - 1952 Water Shortages Experienced

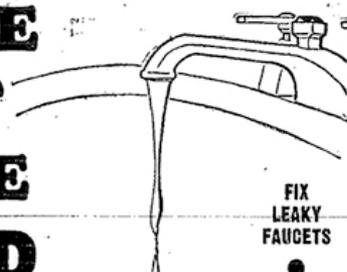
- ❖ A second Big Butte Springs pipeline discussed for some time, but not yet accomplished.
- ❖ Meters again discussed
- ❖ Watering restrictions imposed
- ❖ Warnings issued
- ❖ Penalties imposed

WHEN THE FIRE SIREN SOUNDS—Turn off your lawn sprinklers and other non-essential water uses during the emergency. This helps to provide more water at better pressure for fighting fires.



• This Is Fire Danger Time
• Demands On Water Are Heavy
So We Appeal to Medford Citizens

**PLEASE
DON'T
WASTE
WATER**



FIX
LEAKY
FAUCETS

**Save Every Drop You Can During
The Summer Season!**

Due to record-breaking hot weather the water supply facilities are taxed in providing you with a tremendous volume of water. Reduced pressure and small mains in the western section of Medford make the water supply inadequate in some instances. You will help your west side neighbors by using water sparingly at this time . . . by saving every possible drop not needed for household, lawn and garden use. Medford has sustained one great fire—this is a critical time and the fire hazard is serious during this dry season. It is important that a sufficient reserve be maintained to meet any emergency. It is YOUR water—for YOUR protection and use. Let us make EVERY GALLON go a LONG WAY! Let's NOT WASTE A DROP!

It's YOUR Water — Your Responsibility

YOUR job is to conserve water NOW—it is YOUR water so guard the supply carefully. Use it wisely for household, lawn and garden needs; be sure that leaky faucets are repaired; see that no waste water runs down gutters. There will be plenty of water for EVERYONE if all will help conserve. Remember! We must be sure that sufficient reserve is maintained against the threat of fire.

CITY of MEDFORD WATER DEPT.
City Hall Building • Phone 4906

Challenging Time; Why?

Record isn't clear why MWC was unprepared to meet demands; possible factors:

- ❖ Inability to construct new springs pipelines during war years due to lack of manpower and steel?
- ❖ Post-war baby boom resulted in sudden establishment of many new households and population increases?
- ❖ Water usage impacts of lumber industry booming to supply housing demand ?

Save Water Ruling Goes Into Effect

Water restrictions for lawn and garden irrigation went into effect Thursday midnight for Medford and those areas supplied from the city mains. The restrictions apply on alternate days to residences having odd and even numbers. On rural roads with unnumbered houses the same restrictions will be in effect and will be determined by the location of the house north and east or south and west of the highway.

- ❖ Period of hot, dry weather? Highest recorded temperature in Medford (115 degrees) occurred in 1946

Water Supply in Medford 'Serious' City Council Told

7-18-52 *Tribune*
Continued hot weather has made Medford's water supply situation "serious," Water Superintendent Robert Duff told the city council last night. The reservoirs have not been filling up overnight, Duff said, and stiffer restrictions on water use may be necessary to maintain vital reserve supplies.

Duff told the council there have been some flagrant violations of the present restrictions and that the water commission may have to resort to arrest and court citations if the drain on limited water supplies does not cease. The commission's patrolman has been kept busy stopping water waste and violations of irrigating restrictions, according to Duff. The council agreed there is too much public indifference to the seriousness of the shortage.

Second Big Butte Springs Project Proposed

- ❖ Robert Lee hired in 1947 as engineer to work on this project (Lee later served as Manager until 1983)
- ❖ May 19, 1950 – voters approve \$2.8 million in bonds to construct additional intakes at springs, pipeline to town (2013 equivalent \$27 million)
- ❖ Would double the water supplied by springs to 26 mgd
- ❖ Similar, but not identical path to town as first pipeline – to provide redundancy
- ❖ 20” to 30” steel pipe utilized; enameled at plant in White City; cathodic protection of pipeline selected in lieu of triple wrapping

Construction of Big Butte Springs II Facilities 1951-52



Willow Creek Dam Also Built

- ❖ Impoundment enabled Eagle Point Irrigation District water rights to be met when MWC fully utilized high quality Big Butte Springs water
- ❖ Provided 8,000 acre feet of water storage

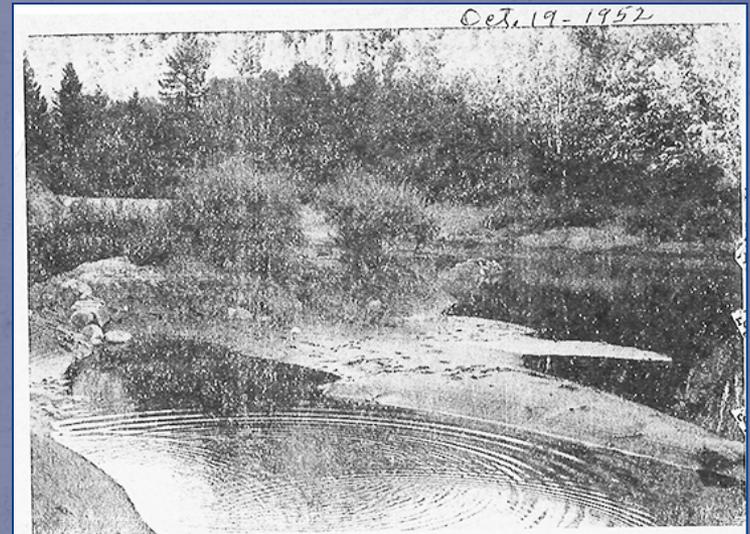


Chlorination

- ❖ No treatment of any kind done for about 15 years
- ❖ Part time chlorination began sometime in the 1940s
 - Done at “company house” in Butte Falls; chlorination building moved to springs after Rowden family moved there in 1948
 - Mainly in winter; establishment of Camp White appeared to have influenced adding chlorination
- ❖ Due to some occasional positive bacteria samples being found, and increasing water quality standards, full time chlorination added in 1962

1952 - Jacksonville Considers Water Options

- ❖ 1883 – Town directed water from Jackson Creek to four brick cisterns for fire storage
- ❖ Initial water system installed in 1910, included dam on Jackson Creek; \$30,000 in bonds sold (2013 equivalent about \$730,000)
- ❖ By 1950s, reservoir was in poor repair, control tower had collapsed, was leaking and heavily silted in



SILTING SHOWN—Pictured is an upper portion of the impounding reservoir on Jackson creek, which shows the effect of silting through the years. Such movement of silt into the reservoir has decreased the storage capacity of Jacksonville's reservoir and has been a direct result of the seasonal water shortages in this city. There are also various leaks in the dam which account for an estimated loss this year of 4.3 million gallons of water.

Jacksonville Reservoir Silting Described In Engineer's Report on Water System

(Editor's note: This is the first in a series of three articles based on the engineer's report on Jacksonville's water system and alternatives of development).

Jacksonville — The city council here has placed on the November 4 ballot a measure to provide Jacksonville with a con-

mit for 75 acre-feet. The present system is basically the same as to capacity and operation as when installed in 1910-11, with an impounding dam on Jackson creek and transmission line to a 250,000 gallon concrete distribution reservoir north of the city.

When a water shortage occurred in 1926, the dam and spillway were raised about four

The estimated required storage for 1972 is 51.1 million gallons with a daily peak demand 450,000 gallons.

Thus, disregarding silting, the maximum storage capacity of the impounding reservoir is 1 million gallons, while the current and future needs are considerably above this figure, requiring it by 1972.

Jacksonville Connects to Medford System - 1954

- ❖ Wells considered, but to be “too much of a gamble”
- ❖ New impoundments not likely to store enough water in dry years and treatment was advised
- ❖ Water from Medford would require pumping and long pipeline
- ❖ Water quality was determining factor; “If Medford’s water is not used, Jacksonville’s supply will always suffer by comparison”

Jacksonville Council Executes Water Agreement With Medford

Jacksonville — The Jacksonville city council took its biggest step to date in the proposed Medford-Jacksonville water pipeline connection at a special meeting Friday night.

It executed a water agreement with Medford, sold its water bonds and accepted contracting bids for materials, supplies and construction of the inter-city pipeline.

Ordinances Adopted
Ordinances were adopted ex-

desired, and a total of 500,000 gallons in any one day. In return for the water use, Jacksonville must pay a minimum monthly charge to Medford of \$250.

Will Pay Share
If Medford should decide to add flouride, chlorine, or other chemical to the water, Jacksonville will pay its share of the addition but no capital expenses. In the event of a water shortage, Medford agreed to pro rate

the non-Medford used water to its users with no priority rating. If Jacksonville should also use its own impounded or tunnel supply, the supply must pass state board of health tests.

The contract is effective for 10 years, subject to default for non-performance 30 days after a written notice.

Bonds Sold
Jacksonville sold its \$115,000 water system improvement bond issue to the First National Bank

water supply
Mail - Typant 1/15/54

Robert A Duff Water Treatment Plant

- ❖ Water rights to Rogue filed in 1954
- ❖ 1966 - Bond measure for \$2.6 million passed to construct Phase I of plant with 15 mgd capacity (2013 equivalent: \$18 million)
- ❖ Treatment plant, intakes and transmission main to town constructed 1967-68



Projects Ongoing; Enhance System and Keep Pace with Growth



- ❖ 10 million gallon Bullis Reservoir constructed (1965)
- ❖ Construction of stations to control system pressures : Conrad (1967), Martin (1969)
- ❖ Rancheria Springs developed (1968)
- ❖ Transmission mains built (1958, 1963, 1968, 1975, 1981...)
- ❖ Duff Plant and Rogue River Intake expanded to 30 mgd; 3 million gallon addition to Duff Plant reservoir (1983)

1980 - Phoenix Water Woes; Requests Service from MWC

- ❖ Chlorides increasing in wells above state limits, causing poor taste and odor; sodium levels also high
- ❖ TID water all appropriated, so not an option
- ❖ Request to Medford Water Commission in September 1980
- ❖ Phoenix voters approve \$1.2 million water bond (500 in favor, 111 opposed) November 1981; also vote to purchase Lost Creek Lake water, with similar outcome

Phoenix to seek water variance

By JOYCE KERLEY
Of the Tidings *Tue Apr 23 - 80*

PHOENIX — Smelly, strong-tasting water may be better than no water at all, the Phoenix City Council decided Monday evening in a study session.

So, after considerable discussion, the council informally asked Sen. Lott Hanson and Rep. Eldon Johnson to help the city obtain a variance to state water quality standards which limit the amount of chlorides which can be present in drinking water.

Sen. Hanson said he has already contacted state government officials in both the state Health Division and on Gov. Vic Atiyeh's staff, and has started work toward getting the variance.

But he warned there is no assurance it will be possible to get a variance. And

Sodium level may cause problems

PHOENIX — Sodium levels in city water may already be too high for residents with heart problems, members of the City Council learned in a study session Monday evening.

Utilities superintendent Walt Barker told the council that sodium levels in the city water system were running at 140 milligrams per liter when he tested the water Monday.

Even 60 milligrams per liter of sodium can be a hazard for people with heart problems, and the problem is there are many people who don't know they have heart problems, said Gary Stevens, director of environmental health for the Jackson County Health Department.

Walt Marquess, city engineer, suggested that people with heart problems or other ailments affected by a high salt content, buy bottled water or bring in drinking water from Medford or Ashland.

There is no sodium standard in state drinking water regulations.

Phoenix water quality worsens

By JOYCE KERLEY
Of the Tidings

PHOENIX — Water samples taken Thursday indicate chloride levels in the city's drinking water supply have increased beyond a level considered acceptable by the state Health Division.

That's the message the City Council got Monday night from utility superintendent Walt Barker and county environmental health sanitarian, Gary Stevens.

Barker said the percentage of chlorides in the water has been steadily increasing. In January 1981, city water contained 210 milligrams per liter.

The Thursday levels did not include water from well No. 10. That well has been disconnected because of its high chloride content, and will only be used in an emergency situation.

Stevens, said there is no cause for panic. "Chlorides are an aesthetic problem, rather than a health problem," he said.

have agreed not to take action at this time. A chloride maximum serves as kind of a warning light, he says. Often high chlorides result from sewage or industrial waste seepage, and this alerts the health department to make an investigation.

However, Stevens said he doesn't suspect any unsanitary seepage in Phoenix.

Chloride contamination in Phoenix probably occurs because the water runs through sedimentary conditions deep underground, he says.

- ❖ Water service from MWC begins in 1982 — First time water right purchase required

Continued MWC Projects to Meet Growth and Changing Water Quality Rules

- ❖ Installation of telemetry control (1990)
- ❖ Disinfection Facility at Big Butte Springs constructed (1993)
- ❖ West side transmission mains constructed (1993, 1995)
- ❖ Rossanley Pressure Control Station added (1994)
- ❖ Duff Plant upgrades and expansion to 45 mgd capacity accomplished with series of multi-year projects (1997 – 2000) - entirely completed without debt financing

Water Challenges in Talent Surface - 1996

- ❖ Minimal water rights - being exceeded
- ❖ Both treatment plants in poor repair and older than expected lifetime
- ❖ Storage insufficient in high demand days
- ❖ Moratorium imposed 12/96

The Mail Tribune, Thursday, Dec. 19, 1996

3A

Talent nears building freeze

Water problems continue to grow

By **DANI DODGE**
of the Mail Tribune

TALENT — Talent council members moved one step closer to declaring a moratorium on building in the city because of a shortage of water. The council Tuesday unanimously set a required public hearing for Feb. 6 that would allow the moratorium to be called.

Legally, the council has to notify state officials and hold the public hearing before it can impose a building moratorium.

And while some builders and developers were opposed to the idea, the moratorium did have the support of a number of Talent residents. About 300 property owners signed a petition asking for a moratorium on water hookups. Others spoke at the meeting.

"It is clear we have people who have invested money in hopes of building and I understand how people who put money down in good faith must feel, but we are talking about something vital," said Colin Mills-Canon. "We cannot live without water."

"We can live without profits, but not without water."

Council hires administrator, but name held

TALENT — The city council hired a new city administrator Tuesday, but declined to name her until 5 p.m. today.

And although they wouldn't give her name, the council didn't lack enthusiasm for their choice.

After Mayor Frank Falsarella appointed the city administrator, Councilwoman Lisa Shapiro sang out, "Can we all say, 'Hallelujah, Hallelujah, Hallelujah.'"

Councilman Donald Steyskal said the city has hired a knowledgeable manager.

"She has 17 years' experience in municipal government," he said. "She's well versed in budgets and moratoriums."

Falsarella said the day's delay in naming the new administrator will give her time to tell her current employer about the appointment.

The Mail Tribune, We

Talent water woes worsen

City lacks legal water rights; moratorium urged

By **DANI DODGE**
of the Mail Tribune

TALENT — A shortage of water may force a building moratorium in Talent.

At a council study session Tuesday, an engineer hired by the city reported that

to the city's water woes. Talent is asking residents to conserve water because the city's outdated water treatment plants can't properly treat the fast-rising water muddied by recent storms. In the summer, the city must conserve because there often

growth," Beverly said.

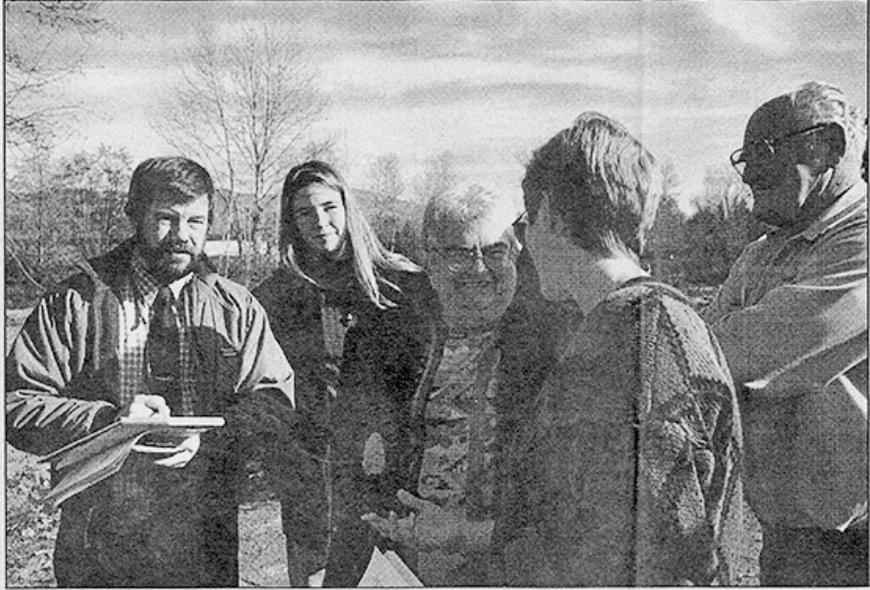
At Beverly's suggestion, council members agreed to draft a letter immediately asking for more water rights, but Beverly warned them the process could be lengthy.

Beverly said the problem of using more

Talent Challenges Add Up

- ❖ Bear Creek described as “worst water source in the state”
- ❖ Additional treatment requirements imposed following 1992 Crypto outbreak
- ❖ More chemical costs and staff time associated with running treatment plants
- ❖ Bear Creek intake damaged in December 1996 floods

PHOENIX / TALENT



Ashland Daily Tidings/Kristin Walp

Left to right: Jackson County environmental health manager Gary Stephens, RVCOG's Jennifer Lee, state Rep. Judy Uherbelau, RVCOG's Paula Brown and mayor Frank Falsarella discuss Talent's water emergency.

Talent faces water crisis

Council institutes building moratorium

By Kristin Walp
Ashland Daily Tidings
TALENT — The city council December 19 began the process of instituting a moratorium on new water

County declares state of emergency

By Kristin Walp
Ashland Daily Tidings
TALENT — The Jackson County Board of Com-

of two gas-powered, four-inch water pumps draining water from the creek into the treatment plant through thick plastic tubes. Between them, the

Talent Citizens Weigh In

Talent residents vote on water-system options

Crowd favors intertie with Medford water, upgrades to Bear Creek water plant

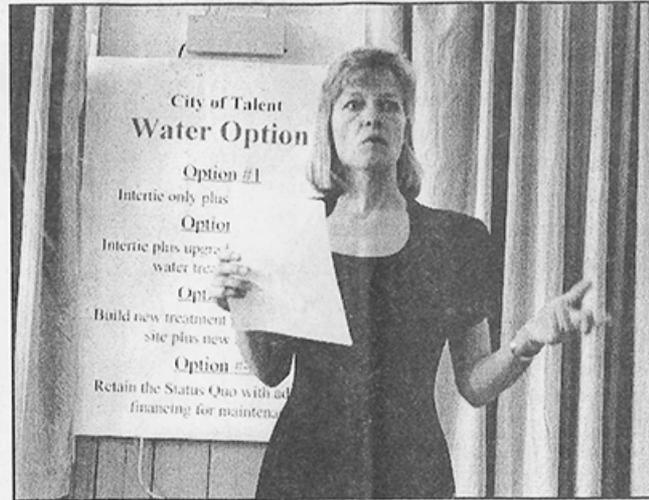
By Eric Fetters
Ashland Daily Tidings

TALENT — Residents on Thursday used stickers to tell the city they like the option of tapping into Medford's water system.

Approximately 125 people crowded into the Talent Community Hall and learned about possible solutions to the city's water problems. After hearing the options, they voted on their preferred one by placing stickers on posters outlining the proposals.

In the end, everyone seemed to agree on two things: something needs to be done, and it won't be cheap.

With an outdated system that is stretched to its capacity, Talent is



Ashland Daily Tidings/Eric Fetters

Talent City Administrator Leahnette York goes over the city's water options during the meeting Thursday.

tain the status quo.

As she finished placing her sticker on the poster for the first option, Talent resident Jolie Johnson said she wants Medford's good-quality water. She is not worried about giving up some control of the water system to the bigger city.

"The quality of the water's the most important thing to me," she said. "Right now we have control, but we also have sludge."

But resident Colin Mills-Cannon said he is concerned about giving Medford a big say in the future of Talent's water supply. He wants Talent to build its own facilities instead of depending on the intertie.

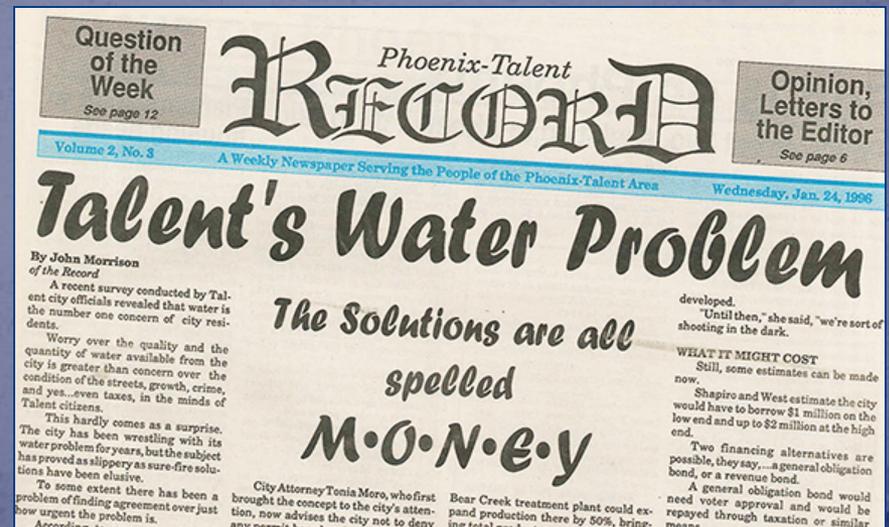
"Unless Talent is ready to invest in its own production and storage facilities and lines, it will have no control," Mills-Cannon said. "You have to pay up now or you pay later."

It will take two to three years for major water system improvements to be completed, Brown said. But the city is prepared to start as soon as possible. Talent already is pursuing government grants and loans

- ❖ Public meeting held April 1997; options presented
- ❖ Citizens favor intertie with Medford; ample high quality water supply more important than desire to run own system

Talent Solutions Expensive

- ❖ Discovery that current water costs were exceeding revenues, and no \$\$ saved for large projects
- ❖ Medford Water Commission agrees to provide water service, but Talent must build own pipelines to town and purchase Lost Creek Lake water
- ❖ Phoenix needs more pipeline capacity too and agrees to participate; Ashland also joins in
- ❖ TAP pipeline constructed; Talent receives water from Medford system in 2002
- ❖ Wagner Creek plant operated for few more years until pump station can be built



Today Becomes the History of Tomorrow

Continual projects ongoing to keep pace with growth, changing rules, technology and maintenance needs

- ❖ Ozonation added to Duff treatment (2002)
- ❖ Bullis Reservoir repair (2008-2009)
- ❖ Installation of T-Screens at Duff plant to meet updated fish screening requirements (2010)
- ❖ Capacity increase / upgrades to Conrad & Rossanley Pressure Control Stations (2011)
- ❖ Earthquake hardening / remodel of Duff Plant (2012)
- ❖ Wetland mitigation for future Duff II site (2011 - 2013)
- ❖ Replacement of Martin Pressure Control Station (2013)

Medford's Water System; Early Struggles Led to Success

- ❖ Medford citizens repeatedly made notable commitments and efforts for a safe and sufficient water supply
- ❖ Huge debt was incurred and paid off, from which we continue to benefit today
- ❖ Forward planning has resulted in:
 - Facilities that have been in place before they became urgent
 - Excellent water quality / modern treatment facilities
 - Strong fiscal practices and a well maintained water system
 - Conservation actions aimed at sustaining water supplies and delaying costly infrastructure

A Historical View of the Medford Water Commission

Questions?



