

## City of White Sulphur Springs

The Public Hearing of the City Council was held on March 21, 2023 at 5:30 pm followed afterwards with the Regular Session. Mayor Rick Nelson called the meeting to order with the following members present:

Ron Coleman  
Pattie Berg  
Rick Ellison

**March 21, 2023 @ 5:30 pm**

### **PUBLIC HEARING**

#### **A. City's Water Preliminary Engineering Report (PER) Update.**

Discussion:

White Sulphur Springs and Great West Engineering representatives will explain the project's purpose, the project area, the scope of work, the budget, possible funding sources, and any costs that may result for local citizens because of the project. Great West Engineering will also present its assessment of the project's environmental impact. Also funding options, including the Montana Department of Commerce, Montana Department of Natural Resources and Conservation, USDA Rural Development, or the Department of Environmental Quality's Drinking Water State Revolving Fund Program.

Public Comment.

Jessica Salo discussed the City's Water System Improvements Preliminary Engineering Report (PER). A PER is a required component of funding applications when a community applies for state funding to assist with infrastructure improvement projects. The PER includes an evaluation of existing conditions, identifies problems or deficiencies, develops potential alternatives to address the issues, estimates costs, and ultimately provides a preferred project and associated funding scenario. Public involvement is also conducted as part of the process. The PER provides the technical analysis and justification for the proposed project. Environmental implications are also evaluated.

The 2020 Census population is 955.

The 2045 Design Population Estimate:

1% annual growth projection

1,225 estimated design year population

#### **Evaluation of Existing System**

surface water diversion structure

surface water intake pond and dam

raw/surface water transmission main

surface water slow sand filter treatment plant

1 water storage tank

treated water transmission main

2 groundwater wells

distribution system

Water Use can be evaluated two ways, based on source date and metered data. The source data was 242,537 gallons per day and the meter data was 120,487 gallons per day. The unaccounted water was 122,000 gallons per day or 50% of the water pumped into the system is lost (anything over 15% is considered excessive). 30% of the City's Water System is old cast iron, steel, or ductile iron.

**Water Supply:**

surface water source is the South Fork of Willow Creek diversion structure and dam provide water to a 6-inch pvc transmission main that flows by gravity to the slow sand filter building after treatment water flows to the storage tank where it is chlorinated before entering the distribution system groundwater supply source are two groundwater wells located close together at the City shop facility wells are pumps directly in the distribution system, feeding the user demands and filling the storage tank no treatment other than disinfection with chlorine

**Water Supply – Diversion Structure:**

diversion structure on the South Fork of Willow Creek diverts flow to the water system  
1940s construction  
two concrete channels, one for the diverted flow and one for the mainstream flow  
a bar screen and slide gate on the diversion channel.  
the slide gate is used to isolate the City's water system from Willow Creek.

**Water Supply – Intake Pond and Dam:**

intake pond and dam on willow Creek Reservoir  
concrete dam with spillway, flushing valve, and wooden catwalk.  
flushing valve is used to drain the pond and flush sediment  
staff must walk on catwalk to operate valve  
dam structure is 1940s era  
engineered sand filter with perforated pipes was added in the 1990s underneath the pond  
pipes collect water, manifold together, and supply water to the transmission main

**Water Supply – Groundwater Wells: Well #1 (1986) and Well #2 (1999)**

City uses groundwater when Willow Creek source is not in use or as a supplement source to Willow Creek well house at City Shop Yard

**Water Supply Assessment:**

the diversion structure is in good condition  
concrete dam is in good condition but the catwalk is deteriorated  
flushing valve is not functional  
pond is filled with silt, aquatic plants and deadfall  
buildup of sediment is affecting quality of water  
Willow Creek source has not been used reliably for the past two to three years  
transmission main from intake to the treatment plant was last upgraded in the 1980s and there are no known issues.  
access to diversion/intake is difficult  
coordination with Forest Service is important to manage deadfall  
groundwater well meters not in the correct place to meter both wells  
City needs both water sources in order to meet demands  
water quantity could become an issue within the planning period if no improvements are made or if leakage is not reduced.  
finished water quality is good and the City routinely meets drinking water standards.

**Water Treatment:**

a slow sand filtration facility treats the water diverted from Willow Creek  
constructed in 2004  
includes four filter compartments  
current practice includes raking the sand after spring runoff  
plant can treat around 120 to 140 gpm when the turbidity is 0.6 NTU or lower  
finished water is collected at the bottom of the filters via an underdrain system before going to the storage tank  
system is 100% gravity  
groundwater wells are disinfected with gaseous chlorine

### **Treatment Assessment:**

facility is relatively new and in excellent condition  
the City's slow sand filters are not performing at the level that slow sand filters are typically designed to operate  
should be able to treat water with a turbidity of 10-20 NTU  
causes may be due to clays and algae in the water, wrong size of filter sand, ineffective cleaning procedures, or a combination of these factors.  
another issue is there is no way to measure raw turbidity when the plant is not in use, making it difficult to know when the plant can be put into service  
no issues with groundwater disinfection system.

### **Storage:**

a 560,000 gallon storage tank was constructed in 2012 and is located approximately 2 miles SE of the City.  
partially buried prestressed concrete storage tank  
80-foot diameter, 15 feet high  
good condition

### **Storage Assessment**

storage capacity is adequate for existing demands but starts to fall short when looking at projected demands  
if leakage can be reduced, storage volume will be adequate  
tank was recently constructed in 2012  
in excellent condition  
buried concrete tanks can have high design life on the order of 100 years  
no improvements to storage needed at this time

### **Transmission Main**

line was originally constructed in the 1940s as steel  
a portion was replaced in 1986 with PVC and another portion in 2010 with PVC  
there is a remaining portion of the main that is still 1946 steel and is believed to be the biggest source of leakage in the system

### **Distribution System Assessment**

undersized 4-inch mains (should be at least 6-inch water mains to provide adequate fire flow protection and serving fire hydrants)  
pipe that have exceeded their useful life  
cast iron lines are prone to breaks  
some looping needed  
use of a phased approach is necessary  
transmission main leakage and in need of replacement

### **Alternative Analysis**

#### **Supply Alternatives**

Alt. S-1: No Action  
Alt. S-2: Investigate Pond Intake  
Alt. S-3: Pond Improvements  
Alt. S-4: Pond Turbidity Meter  
Alt. S-5: Well House Plumbing Modifications  
Alt. S-6: Well Rehabilitation Project  
Alt. S-7: Purchase Backup Pump/Motor

#### **Treatment Alternatives**

Alt. T-1: No Action  
Alt. T-2: Reduce Algae and Turbidity Loads on WTP (see alternative S3)  
Alt. T-3: Replace Filter Media  
Alt. T-4a: Implement Scaping Technique  
Alt. T-4b: Implement Harrowing Technique  
Alt. T-5: Install Combined Filter Effluent Turbidimeter  
Alt. T-6: Install Two New Slow Sand Filters

Storage Alternatives

No Alternatives for Storage

Distribution System Alternatives

- Alt. D-1: No Action
- Alt. D-2: Replace 12-inch Transmission Main
- Alt. D-3: Water Main Distribution Replacements
- Alt. D-4: Water Main Looping

The Mayor, City Attorney, and Council discussed the Alternatives and Funding Scenarios. The 12-inch transmission line from the storage tank to the City limits has evolved over the years and sections have been replaced. The line was originally constructed in the 1940s as steel. A portion was replaced in 1988 with PVC and another portion in 2010 with PVC. There is a remaining portion of the main that is still 1946 steel and is believed to be the biggest source of leakage in the system. This line would be replaced by a 12-inch Transmission Main and realigned the main along the Castle Mountain Estate Road and along property lines in the adjoining subdivision. Easement negotiations will be required for the realignment. The Council discussed that the City would rebuild the torn up road and it would likely be left in much better condition that it is now. The Council discussed putting hydrants along the road to help with fire suppression.

If the City wanted to get started with the project before July 2025 the SRF Loan Program was the way to go, because the City really can't afford to wait on starting the project due to all of the leaks (122,000 treated water gallons per day) with the last replacement of water transmission main last section. The City currently qualifies as a disadvantaged community with the current Median Household Income (MHI) data that is being used. The MHI has gone up and when those new numbers go into effect, the City won't have the disadvantaged community status anymore. Disadvantaged community status is eligible for the 75% SRF forgiveness. A positive for going with Scenario #3 is that the City would not have to wait 2 years until DNRC/MCEP funding is available. SRF loans are relatively easy to obtain and could have the project ready to bid potentially by early next year.

The Mayor, City Attorney, Great West Engineering – Jessica Salo, and Council discussed the PER and they were in agreement that the preferred alternative would be:

OPINION OF PROBABLE COST						
City of White Sulphur Springs, Montana						
Alternative 02: Replace 12-inch Transmission Main						
#	BID ITEM	QTY	UNITS	UNIT PRICE <sup>1</sup>	TOTAL	
1	12-inch PVC Water Main	4,000	LF	\$ 125.00	\$ 500,000	
2	12-inch Gate Valve	5	EA	\$ 80,000	\$ 400,000	
3	12-inch Fittings	5	EA	\$ 45,000	\$ 225,000	
4	HDPE Bore for Culvert Crossing	150	LF	\$ 250.00	\$ 37,500	
5	Gravel Surface Restoration	4,000	LF	\$ 27.50	\$ 110,000	
6	Seed and Fertilize	1	LS	\$ 8,000	\$ 8,000	
<b>Direct Construction Subtotal</b>					<b>\$ 786,000</b>	
Miscellaneous					1%	\$ 7,860
Traffic Control					1%	\$ 7,860
<b>Construction Subtotal</b>					<b>\$ 786,000</b>	
2024 Construction Cost <sup>2</sup>					8.7%	\$ 68,382
Contingency					20%	\$ 157,200
Permitting						\$ 5,000
Land Acquisition						\$ 2,500
Geotechnical Investigation						\$ 10,000
Engineering Design					10%	\$ 78,600
Engineering Construction					10%	\$ 78,600
Grant Admin. Legal & Administrative						\$ 80,000
<b>TOTAL<sup>3</sup></b>					<b>\$ 1,325,300</b>	

With the Funding Scenario of: Scenario #3

FUNDING OPTIONS FOR WHITE SULPHUR SPRINGS - Based on 622 EDUs WATER SYSTEM IMPROVEMENTS		
ITEM	SCENARIO #3	SCENARIO #4
	ARPA MAG. SRF Loan (20-yrs. 2.5%) w/ SRF Forgiveness	ARPA MAG, DNRC, MCEP, SRF Loan (30-yrs. 2.5%) w/ SRF Forgiveness
Alternative D2 Replace 12-inch Transmission Main	\$1,325,300	\$1,325,300
<b>Rounded Total</b>	<b>\$1,325,300</b>	<b>\$1,325,300</b>
ARPA MAG (City & County Combined)	\$306,708	\$306,708
CDBG Grant		
DNRC Grant		\$125,000
MCEP Grant		\$500,000
RD Grant or SRF Loan Forgiveness	\$750,000	\$295,194
RD or SRF Loan	-	\$98,398
<b>Total Project Funds</b>	<b>\$1,325,300</b>	<b>\$1,325,300</b>
SRF Bond Reserve (1/2 year payment)	\$8,608	\$2,352
RD - Interim Interest (loans > \$500,000 check rate w/ RD Staff)		
<b>Total Loan Amount</b>	<b>\$277,200</b>	<b>\$100,750</b>
Annual Loan Payment	\$17,770	\$4,820
Total Loan Payments Over Life of Loan	\$355,400	\$144,600
Total Interest Paid Over Life of Loan	\$78,200	\$43,850
Annual Loan Coverage	\$1,777	\$482
<b>TOTAL ANNUAL CAPITAL DEBT SERVICE COST</b>	<b>\$19,547</b>	<b>\$5,302</b>
User Capital Cost/Month <sup>(1)</sup>	\$2.62	\$0.71
Current Annual O&M <sup>(2)</sup>	\$250,000	\$250,000
Current Annual Debt Service <sup>(2)</sup>	\$132,058	\$132,058
Additional O&M Due To Project	\$0	\$0
<b>TOTAL ANNUAL O&amp;M COSTS</b>	<b>\$382,058</b>	<b>\$382,058</b>
User O&M Cost/Month <sup>(2)</sup>	\$51.22	\$51.22
<b>USER COST/MONTH</b>	<b>\$53.84</b>	<b>\$51.93</b>
Existing Average User Cost/Month/EDU	\$48.86	\$48.86
<b>COST/MONTH INCREASE/EDU</b>	<b>\$4.98</b>	<b>\$3.07</b>
Existing Other System Cost/Month	\$42.00	\$42.00
Total Proposed Water & Sewer Cost/Month	\$95.84	\$93.93
Combined Systems Target Rate <sup>(3)</sup>	\$79.46	\$79.46
<b>PERCENT OF COMBINED TARGET RATE</b>	<b>120.6%</b>	<b>118.2%</b>

<sup>(1)</sup> Based on 622 EDUs

<sup>(2)</sup> Based on brief analysis of last three years actual expenditures - subject to change after more thorough analysis

<sup>(3)</sup> Based on highest calculated coverage calculation - SRF Debt Service Schedule on Current Drinking Water Loans

<sup>(4)</sup> Note: Minimum City of Presources Target Rate

**The Environmental Assessment comments received from:**

- US Fish & Wildlife Service
- Montana Historical Society (*diversion/intake may need to be recorded prior to rehabilitation*)
- Montana Land Reliance
- DNRC Water Sources
- Meagher County
- Helena-Lewis & Clark National Forest
- Montana Fish, Wildlife and Parks (*Westslope Cutthroat Trout considerations*)

The Environmental Assessment decision was that no significant impacts have been identified.

- The next steps would be to:
- Finalize the PER and Prepare the SRF Application - March/April 2023
  - Finalize Funding and Contract for Design - May/June 2023
  - Easement Negotiations and Design - July 2023
  - Bidding - January 2024
  - Construction - Spring 2025

**Motion/Vote to Close Public Hearing and Adjourn to Regular Business Meeting.**

**March 21, 2023 @ 6:15 pm**

The Mayor asked if there was a motion to close the Public Hearing. Ron Coleman motioned to close the Public Hearing. Pattie Berg seconded the motion. Ron Coleman, Pattie Berg, and Rick Ellison all said Aye. Motion carried and passed.

**A. Call Regular Meeting to Order**

**B. Roll Call**

**C. Pledge of Allegiance to Flag**

**D. Public Comment:**

Public comment will be accepted on public matters not listed on this agenda and are within the jurisdiction of the City Council and having a significant interest to the public. During a regular session, there will be time after each agenda item for comment about that item.

1. Step up to the podium and state your name and address for the record.
2. Please limit your comments to THREE (3) minutes.

**E. Unfinished Business - Items for Discussion and/or Action**

**1. Phase 4 Water Transmission Project: Action on PER and Proposed Project with Funding –  
Jessica Salo/Craig Erickson from Great West and Council**

Discussion and/or Action

Continue discussion from Public Hearing and March 6, 2023 meeting as to Adopting PER and Proposed Phase 4 Project, together with decisions as to Funding, considering: 1) all regular system operation and maintenance expenses, 2) fund a reasonable system repair & replacement reserve account, and 3) cover 110% of all principal and interest payments due on outstanding bonds at our present rate structure; and whether our present categories adequately reflect equivalencies between dwellings and businesses and their corresponding impact on the system or require alteration.

Accept Public Comment

*Motion to Adopt proposed PER together with Proposed Phase 4 Water Transmission Project, and funding alternative, OR Motion to continue discussion.*

The Mayor asked if there was a motion to approve the presentation and move forward with the proposed alternative. Ron Coleman motioned to proceed with the PER as presented and proceed with the Distribution System - Alternative D2 (replace 12 - inch Transmission Main). Pattie Berg seconded the motion. Ron Coleman, Pattie Berg, and Rick Ellison all said Aye. Motion carried and passed.

**2. Montana Department of Transportation – Ted Jones – Request a permanent through traffic street closure of 5<sup>th</sup> Ave SW between the streets of SW Hancock St and SW Garfield St.**

Discussion and/or Action

Continued discussion regarding need for street closure requested by Montana Department of Transportation (MDT) as to their property located between SW Hancock and SW Garfield which straddles 5<sup>th</sup> Ave SW and their plans for development of this property.

Accept Public Comment

*Possible Motion: Move to grant street closure (2 gates) and bring matter back for formal Resolution; or Move to continue matter for further discussion.*

The City Attorney, Susan Wordal, said that the first place to begin is with the Petition to Abandon. Susan Wordal, Montana Department of Transportation, Ted Jones, and DOT Attorney, Bart LaMont have been working together to get the necessary documents for the discontinuance of 5<sup>th</sup> Avenue SW between Hancock and Garfield. The Mayor, City Attorney, Department of Transportation discussed the Petition to Abandon a Portion, Notice of Hearing on Abandonment Petition, Private Access and Utility Easement with Reversion Clause to public Use and Deed Restriction, and the Utility Easement. Susan Wordal said that there are two easements. One is a general agreement about access into the abandoned street for purposes of any City utility work. The City wants to maintain that easement for water/sewer/etc., which requires we be able to access the area under certain situations. The second one is a reversion document which allows for the abandoned street and the easement to revert back to the City in the event the MDOT should decide to shift their operation out of that location and sell the street after MDOT and its successors in interest leave that site, it will be much less of a challenge if we retain a reversionary interest. MT DOT said that they would like to start and demolish the current building shop in May and build a new shop that sets a little farther back and is closer to the street. MT DOT will be presenting the Council with the formal petition documents in April.

**3. Freedom Days LLC - Labor Day Rodeo Street Closure/Alcohol Waiver**

Discussion and/or Action

Continued from March 6<sup>th</sup>: Presentation as to Freedom Day's Rodeo event and the street closure/alcohol waiver request for the 4<sup>th</sup> of September.

Accept Public Comment

*Possible Motion: Move to approve Freedom Day's Rodeo's Open Container Waiver for September 3<sup>rd</sup>*  
The Mayor said that Freedom Days LLC is not here, so this will be at the next meeting in April.



## **F. Comments/Discussion**

### 1. Future Business

### 2. Mayor's Comments—Rick Nelson

The Mayor, Marc Pryor, and Heather Harrington met with the County Commissioners at 3:30 pm to talk about the Spay & Neuter Clinic happening June 17<sup>th</sup>, and they have agreed to contribute up to \$1,500, the cost of the clinic will be about \$2,350 for two vet teams. Local Motels have donated rooms, and others have donated beverages. The Spay & Neuter Clinic will be on the next agenda for the Council's approval of paying the same amount part of costs. The Mayor said that he also reminded the Commissioners that it was the County's turn to host the Clean Up Day. This will also be on the next agenda to coordinate with the County and come up with a date for Clean Up Day. May 2-4 in Bozeman will be the Montana Municipal Institute for Elected Officials, Clerks, Treasurers, & Finance Officers. The Mayor said that Ron Coleman and himself will be attending. Pattie Berg will look at the draft agenda and her calendar and let the office know if she will be attending or not. Assistant Clerk, Heather Harrington, will be attending the Institute this year. Clerk-Treasurer, Michelle Stidham, will not be attending the Institute this time due to the Audit that is scheduled for May 1-4 this year. The Mayor said that he will only be gone one of the days but would be there for the rest of Audit. The City Attorney, Susan Wordal, will be attending the Tillotson Service Program for Municipal Attorneys in Bozeman May 3-5, presented by Montana League of Cities and Towns and MMIA.

### 3. Council Comments/Discussion

#### a. President of the Council—Ron Coleman

Nothing. Hopefully Spring will be coming soon.

#### b. Council Member—Lee Blanchard

Not in attendance.

#### c. Council Member—Pattie Berg

Working with Great West Engineering on the Parks. Waiting on the electricity Rotary Shelter Building for the quote. The Mayor said that the quote was forwarded onto Jen Frazer and the quote came in at \$2,500 plus up to 10% just in case needed.

Still would like to see Rocky Vinton's paperwork. The Mayor said that Rocky Vinton has it on his desk at the City Shop, but he is gone at Rural Water training in Great Falls this week. City Clerk-Treasurer registered and will be attending the Great Falls, Rural Water on March 22<sup>nd</sup> for the WASACT Funding Workshop 8:00-12:30 via live streaming.

#### d. Council Member—Rick Ellison

Via Zoom. Nothing to report, but it has been snowing and raining where he is at on his vacation.

## **G. Council Review of Financials**

Received a copy Budget Expenditure/Revenue February 2023

## **H. Claims Signing/Motion to Approve the Bills**

Will be included at the April 3<sup>rd</sup> meeting.

## **I. Motion/Vote to Adjourn the Meeting**

The Mayor asked the Council if there is a motion to adjourn the meeting. Pattie Berg motioned to adjourn the meeting. Ron Coleman seconded the motion. All said Aye. Meeting adjourned at 6:35 pm.



Michelle Stidham—Clerk-Treasurer



Mayor – Rick Nelson