

**MINUTES OF COMBINED PUBLIC AND REGULAR MEETING
OF THE BOARD OF DIRECTORS
OF LOCKWOOD WATER AND SEWER DISTRICT**

April 19, 2018

The combined public and regular meeting of the Lockwood Water and Sewer District Board of Directors was held on April 19, 2018. President Carl Peters called the meeting to order at 7:00 p.m. in the conference room at the Lockwood Fire Station, 501 Johnson Lane, Billings, Montana.

Present at the meeting were Board members Carl Peters, Nancy Belk, Carlotta Hecker, Merrill Walker and Stuart Deans. Also present were Manager Mike Ariztia, Assistant Manager Tony Reed, and Jill Cook of Morrison-Maierle.

Three members of the public attended the meeting, Xzlmer Anderson, Woody Woods, and Jackie Pepin.

Attendance and Voting Record attached to minutes

PUBLIC COMMENT:

None.

PUBLIC MEETING ON PROPOSED 2018 WATER MASTER PLAN UPDATE

Jill Cook, P.E., of Morrison-Maierle gave an in-depth presentation on the proposed water master plan update, covering existing system and proposed future upgrades, cost estimates and user rate impacts, and the environmental impact assessment.

The latest Preliminary Engineering Report is an amendment to the PER prepared in 2016. The amended report covers all aspects of the Water Master Plan. The amended report centers on meeting current demands, current regulations, any deficiencies, and if deficiencies are found, how they should be prioritized and the methods the District will use to remedy them.

Situations are also reviewed for future capacity needs, which include population projections, water demand projections, and implementation of expected upcoming regulations. Alternatives are developed and evaluated to remedy deficiencies, and plans are developed to identify funding strategies.

Lockwood has experienced an average of 1.2%-1.3% annual increase over a decade. The projected population growth for the future is 1.5% due partly to the availability of sewer in Phase

1 and 2 areas, subdivision redevelopment, and consultation in conjunction with the City/County Planning Department and LWSD.

Average water demand growth is figured at 5%. The highest water use year was 2013. The 2013 water use/population per capita demand figure (162) was used in future projections.

Improvements recommended in the 2016 PER are currently underway and consist of the following: Added 4th raw water intake screen; 4 vertical turbine pumps; sized for future capacity; new building with Hydroburst System; chlorination system upgrades; added mixers to Johnson Lane and East Reservoirs.

LWSD is in compliance with existing regulations for finished water quality, and is in compliance with current monitoring requirements. Ongoing upgrades to the treatment system include 2005 - Pre-Sed; 2012 - 2nd Clearwell; 2014 - Clarifier and filter upgrade; 2018 - chlorination upgrade. Current treatment capacity is 3.0 MGD.

The treatment system is conventional filtration encompassing raw water pumping; solids removal; filtration; disinfection and high lift pumping. The system meets current demands and state quality regulations. Overall, the plant works very well.

Some operational limitations are lack of redundancy with filter does not meet DEQ requirements; aging equipment and components, and some components are approaching end of useful life, bearing in mind the original equipment was installed in 1987.

LWSD has a total of 249,100 feet of pipe. The pipe materials are asbestos cement, PVC. Some of the undersized mains lead to inadequate fire flows, additional looping is needed for redundancy, and future line extensions are recommended. High service pumping was built in 1987 and pumps to the entire system. There are reservoirs at Johnson Lane, Coburn Road and East reservoir. The Noblewood pumping station boosts to the mid-zone.

There are deficiencies and items of concern. They consist of (a) Intake -- taken care of by ongoing 2018 project; (b) Treatment -- lack of filter redundancy and capacity to meet future demands; aging equipment; (c) Distribution -- fire flow improvements; looping and redundancy; extensions for future; (d) Storage -- additional storage needed in low and mid-zones.

Summary of Capital Costs for Treatment – Upgrade Alternatives:

Treatment Upgrade Alternatives

ALTERNATIVE	ESTIMATED CAPITAL COST
T1 - Do Nothing	

T2 - Additional conventional treatment trains	\$4,600,000
T3 - Pressure membrane filtration	3,800,000
T4 - Submerged vacuum membrane filtration	7,000,000

Summary of Present Worth Costs for Treatment - Upgrade Alternatives

ALTERNATIVE	ESTIMATED ANNUAL O&M COST	ESTIMATED PRESENT WORTH
T1 - Do Nothing		
T2 - Additional conventional Treatment Trains	\$18,000	\$4,700,000
T3 - Pressure membrane filtration	65,400	5,000,000
T4 - Submerged vacuum membrane filtration	108,000	8,800,000

Summary of Capital Costs for Distribution System - Alternatives

ALTERNATIVE	ESTIMATED CAPITAL COST 2018 dollars
Alternative F1 - Fire Flow recommended upgrades (Annual program) (2019)	\$330,000 yr
Alternative W1 - Water Main recommended upgrades (Annual program) (2019)	500,000 yr
Alternative W2 - Future pipe extensions recommended upgrades (as needed) - To be paid by development	

Storage System Alternatives

Alternative S1 - New 1.1 MG Johnson Lane reservoir (2020)	2,440,000
Alternative S2 - New Mid-Zone reservoir (2019/2020)	750,000

Priority 2 Mid-Term Improvements - (3-8 years)

1.1 MG Johnson Lane Reservoir (2022)
New River Intake Structure (2026 or beyond)

2020 Water System Upgrade Project – Total estimated project cost

Total Construction Cost (projected to 2020)	\$5,336,000
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Engineering & Construction Administration (20%)	1,067,000
Grant Administration & Financial Costs (5%)	267,000
Total Project Cost:	6,670,000

Funding options include LWSD Capital Improvement Reserves and low interest loans (revenue bonds). Grants may be available through TSEP, RRGL, USDA-RD (based on MHI of served area), CDBG (based on MHI of served area), and Coal Board.

The effect on rates will depend on availability of grants and final funding package. Assuming TSEP grant of \$625,000; RRGL grant of \$125,000, and SRF 30 year loan at 2.5%, the projected rate increase would be \$8.66 per EDU.

Environmental checklist and environmental assessment are available for review at the District office.

A copy of the above presentation can be viewed at the Lockwood Water & Sewer District website.

Regular Board Meeting

APPROVAL OF MINUTES:

The minutes of the March 14, 2018 Board meeting were presented for approval.

- I. Carlotta Hecker moved to approve the minutes of the March 14, 2018 Board meeting as written. Merrill Walker seconded the motion. Motion carried.

NEW BUSINESS:

* **Review of Change Order No. 4 to the Water Intake Project**

Western Municipal's Change Order No. 4 to the Water Intake Project was presented for approval. The Change Order covers:

Add submersible level transmitter in each pump tube, along with associated conduit and controls modification as shown on the attached revised M-2, E-3 and I-1. Total cost - \$13,417.73.

Add CMU sealer to make cleaning building easier. Total cost - \$816.90.

Total cost of Change Order: \$14,234.63.

- II. Stuart Deans moved to approve payment of Western Municipal Change Order No. 4 in the amount of \$14,234.63. Nancy Belk seconded the motion. Motion carried.

Copy of Change Order No. 4 attached to minutes

* **Approval of Western Municipal Construction Pay Application #5 for the Water Intake Project**

Western Municipal Pay Application #5 in the amount of \$378,563.98 was presented for payment for services performed as of March 30, 2018 on the Water Intake Project.

- III. Merrill Walker moved to approve payment of Western Municipal Construction Pay Application #5 in the amount of \$378,563.98. Stuart Deans seconded the motion. Motion carried.

Copy of Pay Application #5 attached to minutes

* **Award of construction contract for the Main Lift Station Improvement Project to Western Municipal Construction**

Western Municipal Construction was the sole bidder on the Main Lift Station Improvement Project. The bid opening took place on April 4, 2018. Western's bid was \$218,909. The Engineer's Estimate was \$196,000, just \$229.09 under the bid. Morrison-Maierle recommended that the bid be awarded to Western Municipal Construction as Western submitted a resume of an experienced superintendent, and has successfully performed previous work for the District.

- IV. Nancy Belk moved to award the bid to Western Municipal Construction for the Main Lift Station Improvement Project in the amount of \$218,909.00. Carlotta Hecker seconded the motion. Motion carried.

Morrison-Maierle Recommendation Letter attached to minutes

OLD BUSINESS:

None.

FINANCIAL REPORTS

The March Yellowstone County ending trial balance was not received.

Financial reports attached to the minutes are: Check/Claim Detail for the Accounting Period March, 2018; Trial Balance with Revenue and Expenditures for the Accounting Period March, 2018, Statement of Revenue Budget vs. Actual for the Accounting Period Statement, March, 2018; Statement of Expenditures - Budget vs. Actual Report for the Accounting Period March, 2018.

- V. Nancy Belk moved to approve payment of the bills submitted on the Check/Claim Detail List. Stuart Deans seconded the motion. Motion carried.

OTHER BUSINESS:

- * **Intake project update**
Sewer PER update

Intake project update

Jill Cook reported that the intake project continues to progress. The material has for the most part been removed from the cofferdam. The bank has been restored. Final completion is scheduled for June 26.

Sewer PER

The sewer PER update should be completed by August.

MANAGER REPORTS:

The water pumping record is as follows:

March, 2017	21,362,800
March, 2018	21,419,200

Wastewater record:

February, 2017	3,599,376
February, 2018	4,498,472

Manager Ariztia advised he had spoken to Exxon and they are agreeable to arranging a tour of their facility for the Board. He will advise as soon as he hears back from Exxon.

VI. Nancy Belk moved to adjourn the meeting. Merrill Walker seconded the motion. Motion carried.

There being no further business to come before the Board, the meeting was adjourned at 8:30 p.m.

The next Board meeting will be held on May 9, 2018.

Carlotta Hecker
Attest

[Signature]
Attest