

***CENTRAL WYOMING REGIONAL WATER SYSTEM
JOINT POWERS BOARD***

MEETING PROCEEDINGS

June 15, 2021 – **REVISED DUE TO SCRIVER'S ERROR**

A public meeting of the Central Wyoming Regional Water System Joint Powers Board (Board) was held Tuesday, June 15, 2021 at 11:30 a.m., in the Joint Powers Board Conference Room, Regional Water Treatment Plant, 1500 SW Wyoming Boulevard, Casper, WY.

Board Members Present - Chairman King, Vice-Chairman Keffer, Secretary Waters, Treasurer Bertoglio and Board Members Cathey, Freel, Knell and Powell.

City of Casper – Cathey, Freel, Knell, Powell, Andrew Beamer, Bruce Martin, Seth Van Wyck, Clint Conner, Janette Brown

Natrona County – Bertoglio

Salt Creek Joint Powers Board – King

Wardwell Water & Sewer District – Keffer

Pioneer Water & Sewer District – Waters

Poison Spider Improvement & Service District –

Wyoming Water Development Office -

Sandy Lakes Estates -

Lakeview Improvement & Service District -

33 Mile Road Improvement & Service District –

Mile-Hi Improvement and Service District –

Central Wyoming Groundwater Guardian Team (CWGG) –

Others — Charlie Chapin – Williams, Porter, Day & Neville, P.C.; Steve Quail, Pierre Kwan, and Gabe Lauber – HDR Engineering, Inc.

The Board meeting was called to order at 11:30 a.m.

1. In Announcements, Mr. Martin stated that lunch should arrive any minute.

2. Chairman King asked for a motion to approve the minutes from the May 18, 2021 Regular and Executive meetings. A motion was made by Secretary Waters and seconded by Board Member Freel to approve the minutes from the May 18, 2021 Regular and Executive meetings. Motion put and carried with Treasurer Bertoglio, and Board Members Cathey and Powell abstaining from the vote.
3. Mr. Martin informed the Board that one additional voucher was added to the voucher listing that was sent out in the agenda packet: Voucher 8302 for Williams, Porter, Day & Neville, P.C. in the amount of \$295.50 for Legal Expenses. Mr. Martin recommended approval of the vouchers and offered to answer any questions the Board may have on the voucher listing.

Chairman King asked for a motion to approve the June 2021 vouchers. A motion was made by Board Member Powell and seconded by Vice-Chairman Keffer to approve the June 2021 voucher listing to include voucher numbers 8296 through 8302 in the amount of \$425,472.59. Motion put and carried.

4. Mr. Martin asked the Board to reference the Gallons Produced table in the agenda packet. Mr. Martin stated that production for May 2021 was 245 MG, which is 16 MG less than the five-year average. Mr. Martin stated that year to date production is 3.289 BG, 106 MG more than the five-year average. Mr. Martin stated that so far production for June is 30 MG more than the same time last year.

Mr. Martin asked the Board to reference the Income Statement in the monthly compilation. Mr. Martin stated that Water Utility Charges for FY2021 is \$6,678,001, which is an increase of approximately \$344,000 more than FY2020 due to the water rate increase and higher than average water sales this year.

Mr. Martin stated that Reimbursable Contract Expense is \$3,028,318, which is approximately \$71,000 less than last year. Mr. Martin stated that this due to the timing of chemical purchases, and is right about where staff expected it to be.

Treasurer Bertoglio asked that the Principal and Interest be broken out for FY2019 and FY2020 in the Financial Report, instead of being combined. Mr. Martin stated that he will get with Finance on this issue.

Chairman King asked for a motion to approve the May 2021 Financial Report as presented. A motion was made by Treasurer Bertoglio and seconded by Secretary Waters to approve the May 2021 Financial Report as presented. Motion put and carried.

5. Chairman King turned the time over to Mr. Conner for the Transmission System Update.

Mr. Conner stated that a second vertical turbine pump for Airport Booster has been ordered, but there is a 14-16 week lag time before it will arrive.

Mr. Conner stated that Water Distribution staff has been spraying the weeds and mowing

at the RWS boosters, tanks and fire hydrants.

Mr. Conner stated that the RWS ARV's out in the system and the Crosstown Pipeline ARV's have been exercised and serviced.

Mr. Conner stated that two hot taps were made on RWS water mains; one 1-inch tap on Grey Cloud Road, and one 12-inch tap on Chamberlin Road for the Buffalo Meadows project in Mills. Mr. Conner stated that this project is re-routing the RWS Airport waterline.

Mr. Conner stated that chlorine residuals are really good out in the system.

Mr. Conner stated that the backflow preventers at the RWS boosters were tested.

Mr. Conner stated that a check valve has been ordered for pump #1 at the Wardwell booster.

Mr. Conner stated that the small recharge pump for the Morad wellfield was pulled. Mr. Conner stated that this pump is totally worn out, so a larger replacement pump will be needed for a backup.

Chairman King turned the time over to Mr. Van Wyck for the Operations Update.

Mr. Van Wyck stated that two Plant Mechanics were hired, Mike Day and Matt Burgardt from Water Distribution.

Mr. Van Wyck stated that two actuators for Raw Water intake pumps were ordered.

Mr. Van Wyck stated that a new impeller for Ground Water High Service Pump No. 1 was also ordered. Mr. Van Wyck stated that originally he looked at ordering a stainless steel impeller, thinking it would last longer, but it had a 20 week lead time. Mr. Van Wyck stated that the impeller that was ordered is aluminum/bronze and will take two weeks to arrive, and the cost is quite a bit less than the stainless steel.

Mr. Van Wyck stated that the new expansion tank for the boiler was installed.

Mr. Van Wyck stated that Casper 20 well is back in service after being rehabilitated. Mr. Van Wyck stated that Casper 10 well has a cracked well casing and will be discussed later in the meeting.

Mr. Van Wyck stated that the roof for the 2.6 MG tank should be installed by the end of the week. Mr. Van Wyck stated that spot welding was being done on the floor of the tank, and they wanted the light from the roof being off to make sure they didn't miss any of the spots.

Mr. Van Wyck stated that the surface plant has been going through six ferric trucks a

week. Chairman King asked if there has been any issues with getting chemical deliveries. Mr. Van Wyck stated that there have been issues this last week with getting ferric, as the ferric plant had issues and stopped production. Mr. Van Wyck stated that all the suppliers were having issues getting ferric, as they all get it from the same plant. Mr. Van Wyck stated that a ferric truck was received Sunday at 10:00 p.m., Monday at 8:00 p.m., and a truck is scheduled to arrive this afternoon. Mr. Van Wyck stated that eleven additional trucks will be received in the next two weeks to catch up. Mr. Van Wyck stated that all the suppliers asked why we use ferric, because it is one of the hardest chemicals to get. Chairman King stated that his town ordered just a little bit a while back and they didn't show up. Chairman King stated that staff called to see where the order was and was told it was 15 weeks out.

Board Member Knell asked if staff is looking into a different chemical to use instead of ferric. Mr. Martin stated that staff will be investigating different chemicals, however, testing will have to be done to make sure it works, and EPA will have to give approval before a change can be made. Mr. Martin stated that in the meantime, staff is looking into getting a temporary storage tank for emergency storage in place, or converting a couple of tanks that are not in use for ferric. Mr. Martin stated that staff doesn't want to be in this situation again.

Board Member Knell asked what other chemicals are being used by other water plants. Mr. Martin stated that some water plants use ferric sulfate, aluminum sulfate, and other options.

Vice-Chairman Keffer asked if it is worthwhile ordering a stainless steel impeller for the pump, and asked how long the aluminum/bronze pump impeller lasted. Mr. Conner stated that the last impeller was zinc/bronze, which there have been issues with. Mr. Conner stated that two pump stations that had impellers replaced in the last five years were checked and the impellers were damaged by the corrosiveness of the water. Mr. Conner stated that the Wardwell booster had been running 24/7 for a year and a half while the tank was out of service and when the pump was pulled to inspect it, the impeller looked brand new. Mr. Conner stated that this impeller is nickel/bronze. Mr. Conner stated that the stainless steel impellers are approximately \$35,000, while an aluminum/bronze impeller is \$11,000.

6. There was no Public Comment.
7. There was no Old Business.
 - a. There was no Other Old Business.
8. In New Business:
 - a. Mr. Martin asked the Board to reference Budget Amendments.
 - i. Mr. Martin stated that the WTP is going through a lot of ferric, and a load of corrosion inhibitor had to be ordered. Mr. Martin stated that the WTP

Operations Budget Amendment No. 2 is for an additional \$250,000 to cover the cost of the additional chemicals.

Board Member Knell asked why the WTP is going through so many chemicals right now. Mr. Martin stated that water production is very high, and the river has been low so the wells, which are less expensive to treat, are not producing much water. Mr. Martin stated that more surface water has to be treated, which in turn uses more chemicals.

Board Member Powell asked how high production has been. Mr. Martin stated that production has been between 23 – 25 MGD all of June so far.

A motion was made by Secretary Waters and seconded by Board Member Cathey to approve WTP Operations Budget Amendment No. 2 for FY2021 in the amount of \$250,000 for chemicals. Motion put and carried.

- ii. Mr. Martin stated that Agency Budget Amendment No. 3 includes the WTP Operations amendment for chemicals in the Reimbursement Contract Expense line item, and project encumbrances from FY2020 that carried over into the FY2021 budget. Mr. Martin stated that per the State of Wyoming, carry over encumbrances must be accounted for in the current budget. Mr. Martin stated that Agency Budget Amendment No. 3 is for \$2,444,072.

A motion was made by Treasurer Bertoglio and seconded by Vice-Chairman Keffer to approve Agency Budget Amendment No. 3 for FY2021 in the amount of \$2,444,072. Motion put and carried.

- b. Mr. Martin stated that Engineering Associates is under contract with the Board for the 2021 Well Rehabilitation Project for Casper 10 and Casper 20. Mr. Martin stated that the rehabilitation of Casper 20 went smooth, and it is back in service. Mr. Martin stated that during rehabilitation of Casper 10, it was discovered that the well casing was cracked and letting material inside the casing. Mr. Martin stated that the well needs to be relined. Mr. Martin showed several pictures of the well casing with the crack. Mr. Martin stated that a 16-inch stainless steel casing and screen liner section would be installed inside of the old 24-inch casing.

Chairman King asked how long of sleeve will be installed for the casing. Mr. Martin stated that a 13-foot section will be installed.

Mr. Martin stated that the Amendment includes the stainless steel sleeve and screen, and the rehabilitation of Casper 10. Mr. Martin stated that the Amendment is a “Not to Exceed” amount of \$65,000 due to the price of the materials changing so quickly. Mr. Martin stated that \$10,000 was added to the Amendment and the Contractor has agreed to not charge above the \$65,000.

A motion was made by Board Member Powell and seconded by Vice-Chairman

Keffer to approve Amendment No. 1 to the Contract for Professional Services with Engineering Associates for the repairs to Casper 10 well casing in the amount not to exceed \$65,000.

Board Member Cathey asked if the well will keep its current production with the decrease in the well casing size. Mr. Martin stated that the well should retain its production rate.

Motion put and carried.

- i. Mr. Martin stated that with Amendment No. 1 to this contract, funds need to be reallocated to the project. Mr. Martin stated that there is still some funding left in the Well Rehab Project, but additional funds are needed. Mr. Martin stated that there are additional funds leftover in the Roof Project that can be transferred to the Well Rehab Project. Mr. Martin stated that staff recommends transferring \$36,530 from the Roof Project to the Well Rehab Project to cover the cost of the contract amendment.

A motion was made by Board Member Knell and seconded by Secretary Waters to approve the budget reallocation of \$36,530 from the Roof Project to the Well Rehab Project. Motion put and carried.

- c. **Mr. Martin stated that the Wholesale Water Rate Model for FY2022 was discussed in detail last month, and will be finalized today. Mr. Martin asked the Board to reference the rate model shown on the screen. Mr. Martin stated that the green line is 10% above the required reserves, and the blue line is the fund balance. Mr. Martin stated that the rate model includes all debt, and an inflation rate of 5%. Mr. Martin stated that if there is no increase to the wholesale water rate the reserves drop sharply. Mr. Martin stated that the budget amendment that was just approved lowers the starting point of reserves.**

Mr. Martin stated that the Board discussed the upcoming Ultra Violet (UV) Project and stated that there are two ways the Board can pay for this project; save the funds, or by getting a grant/loan for construction. Mr. Martin stated that if the Board looks at saving \$500,000 per year, it would result in a 14% - 16% rate increase per year. Mr. Martin stated that with the interest rates being so low, it would not be worth that rate increase. Mr. Martin stated that the model on the screen reflects using a funding source for the project. Mr. Martin stated that this will result in an increase of 5% per year taking the rate from \$1.93 per thousand to \$2.03 per thousand. Mr. Martin stated that with the 5% increase, reserves still dip down but increase when the City of Casper loan is paid off in FY23 - 24. Mr. Martin stated that it was discussed that if the Board gets funding for the UV Project, it will offset the City loan payoff.

Mr. Martin stated that if the Board wanted to go with a 7% rate increase over the next several years, once the City loan is paid off it would build the reserves very quickly. Board Member Knell asked where that would put the rate with a 7% increase. Mr. Martin stated that it would increase the rate to \$2.53 per thousand at the end of FY25, but for FY22 it would increase from \$1.93 to \$2.07 per thousand.

Treasurer Bertoglio asked if the 5% inflation number is constant, or does it drop back off. Mr. Martin stated that it is constant. Treasurer Bertoglio stated that if the inflation rate goes back down, it will have an effect on the rate model. Mr. Martin stated that was correct and showed the Board the change in the rate model with a lower inflation rate. Mr. Martin stated that he agrees with Ms. Johnson, City Finance Director, that the inflation rate will be higher than anticipated this fiscal year, but where it goes after that is unknown.

Board Member Powell asked about the chemical costs. Mr. Martin stated that chemical costs are increasing and staff is looking at alternative chemicals to use for the surface water. Mr. Martin stated that investigating and testing chemicals that are less expensive and more readily available to see if they will work is a long term project that takes time.

Mr. Martin stated that the Wholesale Water Rate is reviewed every year by the Board.

Chairman King stated that he informed the Salt Creek Board that the water rate will increase 5%. Chairman King stated that they balked at the 5% increase and he told them that the Board was also considering a 14% increase.

Board Member Knell stated that people will balk at the increase no matter what it is. Board Member Knell stated that it seems to him that the Board needs the increase to be 5%.

A motion was made by Board Member Knell and seconded by Treasurer Bertoglio to approve the 5% Wholesale Water Rate increase for FY2022, increasing the rate from \$1.93 per thousand to \$2.03 per thousand.

Chairman King asked if there was any further discussion on the rate. Ms. Brown informed Mr. Martin and the Board that the current rate for FY2021 is \$2.03 per thousand. Mr. Martin stated that was correct, and that he missed updating the rate in the model. Mr. Martin stated that the 5% increase would raise the rate to \$2.13 per thousand and thanked Ms. Brown for catching that. Mr. Martin apologized to the Board for the error. Board Member Knell stated that the rate still needs the 5% increase.

Motion put and carried.

- d. Mr. Martin stated that since the preliminary budget was reviewed in detail with the Board previously, he will just review any changes that were made for the final budget presentation.

Water Treatment Plant Operations Budget

Mr. Martin stated that there were no revisions made to the preliminary WTP Operations Budget. Mr. Martin stated that the FY22 Operations Budget is 3.8% greater than the FY21 Operations Budget. Mr. Martin stated that the increases are attributable to a slight increase in personnel costs, and increase in chemical costs, the addition of ozone monitor service to maintenance agreements and an increase to refuse collection.

Central Wyoming Regional Water System Agency Budget

Mr. Martin stated that in the Agency Budget there were a couple of changes in Capital that he will review with the Board.

Board Member Knell stated that \$5,000 needs removed from the Land Purchase listed in Capital. Mr. Martin stated that he added \$5,000 to the budget just in case the closing costs are higher than anticipated. Board Member Knell stated that the Board approved the land purchase up to \$70,000 and reiterated that \$5,000 needs removed from the budget. Mr. Martin stated that he will make the change.

Mr. Martin stated that \$50,000 was added to Major Equipment and Valve Replacements for a total of \$150,000. Mr. Martin stated that this is for unanticipated equipment and valve replacements during the year. Mr. Martin stated that WTP and/or wellfield equipment will fail unexpectedly needing immediate replacement or renovation.

Mr. Martin stated that \$75,000 was added to Well Rehabilitation for a total of \$425,000. Mr. Martin stated that this is part of a multi-year project to rehabilitate the groundwater wells. Mr. Martin stated that Caisson #2 will be rehabilitated, and it is hoped that two additional wells can be done as well.

Mr. Martin stated that the Agency budget anticipates an increase in revenues based on a wholesale water rate increase of 5%. Mr. Martin stated that the total amount budgeted for FY22 capital expenditures is \$1,697,000, an increase of \$422,000 from FY21.

A motion was made by Treasurer Bertoglio and seconded by Secretary Waters to approve the FY2022 WTP Operations Budget as presented, and the FY2022 Agency Budget as presented with the reduction of \$5,000 in Capital Expenditures. Motion put and carried.

- e. Mr. Martin stated that the Board has discussed the addition of Ultra Violet (UV) Treatment to the system over the last couple of years. Mr. Martin stated that next month a Request for Proposal for the UV System design will be sent out. Mr. Martin turned the time over to Mr. Steve Quail with HDR Engineering, Inc.

Mr. Quail stated that he and his coworkers are in attendance today to speak to the Board about UV disinfection. Mr. Quail introduced Mr. Pierre Kwan, who has built several UV systems in different states, to the Board.

Mr. Quail stated that in 2015 EPA required a second round of cryptosporidium testing. Mr. Quail stated that WTP staff knew the surface water would be upgraded to a BIN2 classification. Mr. Quail stated that operations were tweaked to meet the EPA requirements. Mr. Quail stated that the WTP has been operating under Alternative Treatment Techniques, which includes using a lot of ozone, and monitoring for Aerobic Spores.

Mr. Quail stated that staff has looked at UV disinfection and ultrafiltration for the groundwater system. Mr. Quail stated that UV is the most economical and was presented in the Facility Plan.

Mr. Quail stated that if UV is added to the groundwater, there are questions that will need to be answered by EPA. Mr. Quail stated that EPA needs to answer if UV can be used by itself, or if it will need to be used with ozone, and if so, how much ozone will be required. Mr. Quail stated that EPA is pushing for multilevel barrier protection. Mr. Quail stated that it is best to keep using ozone with the surface water as it helps with the filters. Mr. Quail turned the time over to Mr. Kwan.

Mr. Kwan stated that he has been a UV Design Lead for the last 20 years, and proceeded with his PowerPoint presentation on UV Disinfection.

Mr. Kwan stated that Cryptosporidium and Giardia are the least resistant to UV, and ozone and chloramines are good for getting rid of viruses. Mr. Kwan stated that UV works best if it is after ozone, and before chloramines are added.

Mr. Kwan stated that there is a difference between UV being used in a Water Treatment Plant (WTP) and a Wastewater Treatment Plant (WWTP). Mr. Kwan stated that a WWTP uses a lot of electricity and is an open channel. Mr. Kwan stated that a WTP UV system is very compact, enclosed, and uses less electricity. Mr. Kwan stated that there are different configurations that are used – low/medium pressure for the lamps. Mr. Kwan stated that if a configuration isn't chosen early on in the design, there are many issues.

Board Member Knell asked if the amount of production impacts the configuration. Mr. Kwan stated that it does, and capacity plays a big part. Mr.

Kwan stated that for UV, the higher the log removal, the more lamps that are added. Mr. Kwan stated that this requires coordination with EPA as they will determine if the ozone system will go away, or if it will stay in the treatment process. Mr. Kwan stated that ozone treatment is effective against viruses.

Mr. Kwan stated that the WTP could be retrofitted with a UV Disinfection system. Mr. Kwan stated that in order to do a retrofit, early equipment selection in the design process is critical. Mr. Kwan reviewed the different types of system equipment.

Board Member Knell asked if the ozone system could be kept. Mr. Kwan stated that it could be kept, but the current ozone equipment is aging, and if it is replaced, there is a possibility to go with smaller equipment. Mr. Quail stated that right now the WTP is achieving 8-log removal with ozone, and it is up to EPA to decide how much to reduce.

Treasurer Bertoglio stated that this WTP has two different treatment systems for the groundwater and surface water and asked if there would be two different UV systems, or just one. Mr. Kwan stated that there would be two UV systems for redundancy. Treasurer Bertoglio asked if there would be a range of flows for the UV system. Mr. Kwan stated that there would be. Mr. Quail stated that the range of flows would only be on the groundwater system.

Board Member Powell asked that if the UV system only costs \$300,000, how did the costs go to \$11 M. Mr. Kwan stated that the \$300,000 is only for the equipment, the additional cost is for a building to house the UV system. Mr. Quail stated that the cost of the UV system depends on the location and piping. Mr. Quail stated that one of the first things that will need to be done is to identify where the UV system would be placed. Board Member Knell asked if the UV system could be inserted in an existing area of the WTP. Mr. Quail stated that they would have to look at the hydraulics and electrical systems that are in place. Mr. Quail stated that in the very early discussions about a UV Disinfection System, the cost was overstated so there are no surprises.

Mr. Van Wyck asked what happens with the UV system if there is a power outage. Mr. Kwan stated that the WTP would have to shut down if the UV system is down.

Board Member Cathey stated that the WTP has an emergency power generator and asked if there would be a time-delay on the UV system. Mr. Kwan stated that part of the cost of the UV system would be batteries to keep the UV system running until the emergency generator comes on.

Board Member Knell asked how often there is a power outage at the WTP. Mr. Van Wyck stated that it depends on thunder storms and geese flying into transformers in the wellfields.

Board Member Powell asked if there would be any risk to the public if the power goes out for the UV system. Board Member Cathey stated that if there is no power, all the pumps would be off until the emergency generator kicks on so the water storage tanks would be feeding the system.

Board Member Knell stated that if the UV system can be installed in an existing building, it should. Mr. Quail stated that HDR's goal is to use the space that the Board already has.

Chairman King asked if the UV system has to be inside. Mr. Kwan stated that unlike a WWTP, the UV system for a WTP must be indoors.

The Board thanked Mr. Kwan for his presentation.

Treasurer Bertoglio left the meeting at 12:47 p.m.

- f. There was no Other New Business.
9. Chairman King asked for a motion to move into Executive Session to discuss potential property acquisition and potential litigation. A motion was made by Secretary Waters and seconded by Board Member Powell to adjourn into Executive Session at 12:48 p.m. to discuss potential property acquisition and potential litigation. Motion put and carried.
- A motion was made by Board Member Cathey and seconded by Secretary Waters to adjourn from Executive Session at 12:53 p.m. Motion put and carried.
Chairman King called the Regular Session to order at 12:54 p.m.
10. In the Chairman's Report, Chairman King stated that the next regular meeting would be held on July 20, 2021.

A motion was made by Board Member Cathey and seconded by Secretary Waters to adjourn the meeting at 12:55 p.m. Motion put and carried.


Chairman


Secretary