**MINUTES OF THE**

**UPPER SHEYENNE RIVER JOINT WATER RESOURCE BOARD**

March 15th, 2023

The Upper Sheyenne River Joint Water Resource Board met on March 15th, 2023, at the Eagles Club, Valley City, ND

Managers Present:

Jerry Hieb, Barnes County WRD

Monty Schaefer, Eddy County WRD

Ben Varnson, Nelson County WRD

Tor Bergstrom, Steele County WRD

Bill Deck, Pierce County WRD

Dennis Clark, Stutsman County WRD

Managers Absent:

Griggs County WRD

Ken Hoffert, Benson County WRD

Others Known To Be Present:

Mike Opat, Houston Engineering

Tracey Eslinger, Moore Engineering

Shawn Olanson, BCC

Doug Crum, Corps of Engineerings

Dave Carlsrud, VC

Mandar Nangare, Barr Engineering

Chad Peterson, KLJ

Scott Magnuson, UCFD

Bruce Anderson, BCWRD

Sue Lloyd, Barnes County EMS

Kurt Lysne, Moore Engineering

Rich Schueneman, COE

Donald Jorison, VC

John Sutter, ND Water

Kip Kovar, Garrison Diversion Conservancy District

Charlene Varnson, Nelson County WRD

Tasha Krueger, Secretary, Upper Sheyenne River Joint WRB

**CALL TO ORDER**: Vice Chair Schaefer called the meeting to order @ 9:04 A.M.

**ROLL CALL**: Roll call was taken with six counties present.

**ROLL CALL**: Roll call was taken with four counties present-Jerry Heib- Barnes County, Monty Schaeffer- Eddy County, Ben Varnson-Nelson County, Tor Bergstrom-Steele County, Jerry Hieb-Barnes County, Dennis Clark-Stutsman County, Kevin Vietz- Sheridan County, Bill Deck-Pierce County.

Benson County was not present. Currently, we don’t have a representative from Griggs County.

**AGENDA REVIEW**: The Agenda was reviewed. Motion to approve the agenda was made by Manager Bergstrom. Second by Manager Varnson. Motion carried.

**MINUTES OF February 15th, 2023**: Minutes from the February 15th, 2023, meeting were emailed out. The minutes will be approved at the April meeting when a quorum is present.

**TREASURER’S REPORT**: Treasurers Report for February 15th, 2023 was reviewed. The checkbook balance as of February 15th, 2023 is $64,632.11. The deposits were ND Water Resources; $11,921.50 and February interest; $9.13 for a total of $11,930.63. The expenses were Ben Varnson; $988.87; Tasha Krueger 1,180.16; Barr Engineering; $18,988.50; and Garrison Diversion; $30.00 for a total of $21,187.53.

The current balance as of March 15th, 2023 is $55,375.21.

**BILLS FOR APPROVAL:** The following bills were presented for approval: Barr Engineering $10,785; Ben Varnson; $986.75; Tasha Krueger; $573.02; Ramkota; $28.04; Valley City Eagles; $253.40 for a total of $12,617.21.

**Dave Carlsrud-Welcome**

Dave welcomed everyone to Valley City. He introduced city administer; Gwen Crawford.

The Gwen Crawford, city administer spoke about growing businesses and attractions to the city.

Manager Varnson thanked the Valley City Mayor and Red River Basin Commission for sponsoring the meal, cookies, and coffee.

The audience introduced themselves and who they are representing.

**BALD HILL DAM -Scott Ticky**

Scott present. He will present information on the reservoir operation and Bald Hill Dam.

On October 1st the draw down for the snow run off to elevation draw down to 1,262.5 which is a 3.50 foot draw down on the reservoir. (This is done every year). There heavy snow fall in December.

On January 17th, 2023 a snow survey was conducted on the Upper Basin of the Sheyenne.

The snow water equivalent was anywhere from 2.5 to 5 inches of moisture in the basin.

On January 20th, 2023 the draw down was increased with a new elevation draw down to elevation 1,257.5 which is a 8.50 foot draw down which the target date was March 15th, 2023. The discharge from Bald Hill Dam was increase and remains the same today.

On February 21st, 2023 another snow survey was ran on the Upper and Lower Basin of the Sheyenne at that point the snow water equivalent increased anywhere from 4.2 to 6.5 snow water equivalent. This increase was a significant. It was suggested to increase the target draw down level to 1,255 which is an 11 foot draw down. The target date for that draw down is March 30th, 2023.

There was deal monitoring with heavy elevations with heavier snow impact on the lake low salt oxygen levels becoming a concern. The ND Game and Fish have some concerns about fish kill around some of the lakes around the state. There was pretty low oxygen rates. After sampling 3 different times, there was a decision made to stop at 1,257 which will be on March 17th, 2023. The draw down is the traditional 9 foot draw down. The 9 foot drawn down is normal for heavy snow fall on the lake.

On March 14th, 2023 another snow survey was conducted on the entire basin, the average was 6.48 inches of snow water equivalent across the whole basin. Which is a pretty high snow equivalent, most of the moisture is sitting in the Bald Hill Creek Basin. The higher levels are from Hannaford, McHenry, all the way up to New Rockford. The south western half of the Devils Lake Basin- Warwick, Sheyenne, up to Hamburg and Harvey also has significate levels. There is less water on the eastern half near Aneta, McVille has less water in the Sheyenne River. If all the snow melted today, all the water would be able to fill the reservoir 18 times. The fall of 2022 was dry. There is a lot of storage in the wetland area which didn’t take a lot of frost.

The weather service is predicting 50/50 for Valley City which is 13.3 foot which is 3,200-3,300 cfs. discharge at the Bald Hill Dam.

In 2009, 2010, and 2011 were heavy snow years. In 2010 was the most snow. In 2009 and 2011 were flood years. In 2010 was a nice melt so there was no flooding. The weather service is predicting colder temperatures until the beginning of April. The later into April the chances of flooding is more of a risk and precipitation on the snow packs. Scott feel comfortable with the draw down were they are currently at.

The floods on record in Valley City are 1996-1997, 2009, 2011, fall of 2019 and 2022 all of these floods have different variable that contributed to flooding. It will all depend on how the snow melt happens.

Fall of 2022, there was a study conducted. There was an additional 300,000 in the budget to put new interpretation on buffer of the west side of the Bald Hill Dam. There was sluffing in the past. There was slope indicators installed and 20 new barometers all the work wasn’t completed. This will help with modeling on Dam.

The OT crest where the Dam Gates come out by the apron. There is some concrete issues, spooling and seeping issues on the upstream side. There is an engineering solution has been conducted. There will be some thermal imaging this year to figure out quantities for how much concreate is needed for the repair. The funding should be available in 2025 to complete the repair.

**RED RIVER BASIN COMMISSION – TED PRIESTER**

Ted Priester reported.

On January 17th-19th 2023, the Red River Basins 40th annual conference in Winnipeg will be held. A presentation featuring big picture progress across the Red River Basin will be presented at the conference.

One of the main focus that the Red River Basin has been working on is Cyber Security.

One of the projects being worked on is the long time flood solution has been updated. The last few appendices are being finalized. The report will be available around June. It will include all the new flood control projects from 2007 to an updated modeling on the 200 and 500 year floods. It is tied in with the lower red basin retention modeling. It describes what flooding would look like below Halstad with the proposed projects.

In Manitoba, the marsh restoration on the mouth of the Red River. There was funding of $800 thousand Canadian dollars to work over the next 3 years on improvement of the marsh. Specifically, focused on water quality and habit

The International Joint Commission is doing waste water workshops.

The Red River Basin is hosting 2 meetings in the upcoming months.

**LEGISLATIVE UPDATE – Dani Hanson:**

Dani Hanson presented. The legislative session is at the half way point.

**SB 2020 DWR/SWC Funding**: The bills passed the senate and is in the house. This bill came from the Senate with a 114.6 million dollars in the flood control bucket. 5 million is allocated for other flood control, rural flood control and Conveyance. 12 million in the General Water bucket this would be for Dam repair/replacement. There is a pilot project in the works for the Red River Joint Board which will be built off the Upper Sheyenne River Pilot Project. This bill itself is a total of 652.9 Million dollars.

**HB 1239 Subsurface Drainage Notification:** This bill would require small drainage projects under 80 acres threshold would still need to file an information drain tile permit and submit to the water resource district. This is the same bill that was passed last session. This bill would renew the same notification requirement that is currently in place.

**SB 2036 Drainage Statute Clean Up:** This is a clean-up bill that would combine two chapters of assessment code into one chapter of code and make updates to the assessment process. This bill passed the Senate and is in the house committee. The current requirement regarding stream crossings whether it’s a bridge or culvert would still be split between the County and Water Boards. This is a long standing practice.

**SB 2037 Parcel by Parcel Economic Analysis:** This bill would require parcel by parcel economical analysis on drainage projects. This bill was defeated in the Senate.

**HB 1391 Assessment Authorities:** This bill would require water boards to post minutes either on the website or local newspapers within 10 days after a meeting. The committee is looking into other requirement for other political sub division. This bill is the preferable bill.

**HB 1462 Appeals from a Local Governing Body:** This bill would require boards to personally serve notice on every entity impacted by the decision. The committee opposes this bill. Before this decision is made, they are waiting to see how HB 1391 turns out before making a decision on HB 1462.

**SB 2326 Economic Analysis Threshold for SWC Cost-Share:** This bill would require the statutory threshold for an economic analysis on flood control and water conveyance project above $1 million.

The State Water Commission and Policy has lowered that threshold to $200,000 this bill would require the agency doesn’t have the authority to lower that threshold. This bill would require the threshold of $1 million dollars and can’t require an economic analysis unless it’s over the $1 million dollars.

**SB 2372 Watershed Districts:**  This bill would require water resources to establish boundaries for watershed districts and then require counties to appoint manager to the watershed districts. The County water board would be required to be part of a joint water board this would give the joint board the ability to establish and work on projects if there is a dispute between counties.

**US Fish and Wildlife- Dave Azure**

Dave present. Dave spoke on the Road Right-Away wetland easements. Every easement the Fish and Wildlife purchases is subject existing right away this includes road road, pipelines, highways, power lines, etc. The right away is 33 feet on each side of the section line. Every political subject division is required to improved or maintenance the right away. If there is any questions, contact the Regional Manager.

**Red River Joint Retention- Keith Weston**

The Red River Joint Retention Authority is made up of a Joint Powers agreement with Minnesota and North Dakota. It started in May of 2010. It was started as a result of the 2009 flood. The authority represent 7 watershed districts in Minnesota and 14 counties on the North Dakota side. There is a lot of advocating for flood retention up and down the basin in both states. Roughly 7 years ago, funding from USDA and NRCS was available through their regional conservation program to start watershed planning. At the time, NRSC didn’t have any BL566 or small watersheds planning program funding. The newer program called the RCPP program was used instead. They are in the process of developing 8 watershed plans in North Dakota. A few are in the final stages of approval.

**ND Department of Water Resource-Chris Bader/Steve Best**

Steve Best presented. The annual meeting date or location hasn’t been determined yet. Steve will keep everyone updated on the information.

Chris Bader presented. Chris discussed the PRESENS-data collections and management of Water Resources.

The data collection was performed by the General Land Office as a peripheral function of the development of the Public Lake Survey in the late 1800’s. The USGS began collecting stage data for major lakes and river in North Dakota in the late 1800’s. The USGS in cooperation with the State Geological Survey began the process of quantifying North Dakota ground water resources in the early 1910’s. During the 1970s & 1980’s the Water Commission completed between 80,000 and 100,000 feet of drilling annually. The ground water data collection includes site information, subsurface information, water levels and water chemistry. There is nearly 39,000 sites consisting of test holes, observation wells, domestic wells, and surface water gaging stations. In 2014-2015, started with available commercial components. It is controlled by the web, marine, batteries, and novatel communications.

One of the major advantages of the PRESENS platform is the scalability that it brings to North Dakota. When it was started with the PRESENS design, comparable commercial solutions including costs ranging from $800-$2,500 per site. By designing and building PRESENS entirely in-house the data logger cost went down to approximately $300 per site. PRESENS data can now deploy for Water levels, barometric pressure, temperature, soil moisture, soil temperature, and precipitation. The role can deploy for regulatory compliance for flow meter reporting. It is anticipated the deployment of 1,000 to 2,000 PRESENS over the next 5 years. The average cost for commercial loggers of $1,500, translates to savings of more than $1.4 million.

**Upper Sheyenne Pilot Project Update-Mandar Nangare**

Mandar presented. The current status of the pilot project. The applications are ready for the following 3 sites:

**Site 3; Eddy County**- remove crossing, narrow channel and stabilize downstream bend with native vegetation and live stakes

**Site 5; Nelson County**-bank grading, vegetation establishment.

**Site Alt. B-Sheridan County**-Replace culvert (enhance channel stability and fish passage), narrow channel, install bank protection practices.

The 2 new sites in Sheridan County and Steele County hasn’t been survey yet due to excessive snow fall.

**Site Alt. A-Sheridan County**-Culvert replacement for bank stability, fish passage, and cattle exclusion fencing.

**Site Alt. E- Steele County-**Toe wood with top at bank full elevation.

The sites should be up for construction late fall of 2023. The 404 permits will be submitted.   
The 3 sites should be ready for the RCPP project.

**ND Department of Environmental Quality: Emily Lachenmeier**

Emily presented. The 319 project with the Upper Sheyenne River Pilot Project. There will be preliminary and post water sampling that will need to be completed on those sites. The sampling will determine the water quality and provide education as to how the work that is be completed is beneficial.

The 319 project requires sampling to be completed. The sponsor is responsible for the water sampling.

The water sampling will be completed by Barr Engineering. The DQ will provide training to Barr on how to collect the water samples, when to collect the samples, and where to collect the samples. The DQ will run all the lab analysis and provide all the supplies for the sampling. The sample timing will need to be shipped to the lab within 48 hours.

**Devils Lake Joint Board-Jeff Frith**

Jeff presented. The weather service is predicting a 95% chance of the lake rising ½ foot to foot. The lake level will increase to roughly 1450.50 feet. They aren’t predicting a high increase.

The Devils Lake water tour will be held June 22nd, 2023.

**County Reports**

Barnes – Drain tile projects, replace little dam and Valley City will take over ownership.

Benson – Not much going on. Lots of snow.

Eddy – Snagging and Clearing Project, and Garrison Diversion channel project.

Griggs – No report. Not Present

Nelson – No Report.

Pierce – No Present.

Sheridan – Not a lot going on. A complaint about a landowner building a dike. Barr Engineering is working on the hydraulic study.

Steele – FEMA projects, snow removal on the drains.

Stutsman – Spirit wood draw down, cattails problems.

**MANAGERS REPORT – BEN VARNSON**

Mary Podoll retired. Nathan Jones is the acting State Conservationist for 120 days.

RCPP meeting will be held on Wednesday, March 22nd, 2023 at 9 a.m. The agreement was signed by NRCS.

**Bald Hill Dam-Scott Ticky**

There is 41 recreational sites being added up and down the Sheyenne River starting at the north end of Ashtabula and ends near the byways near Lisbon.

**Red River Joint- Randy Gestvig**

There are 22 applications for projects that have been submitted to the Red River Joint Board. The lidar is currently being worked on.

**NEXT MEETING** – April 19th 2023, at 9:00 am, Garrison Diversion, Carrington, ND

**ADJOURNMENT** – A Motion to Adjourn was made by Manager Heib at 11:53 A.M. Chair Varnson adjourned the meeting.

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Ben Varnson, Chair Tasha Krueger, Secretary