

Minutes of a Meeting of the Industrial Commission of North Dakota  
Held on September 27, 2018  
DMR Conference Room - 1000 East Calgary - 11:30 a.m.  
Governor's Conference Room - State Capitol - approximately 1:30 p.m.

Present: Governor Doug Burgum, Chairman  
Attorney General Wayne Stenehjem  
Agriculture Commissioner Doug Goehring

Also Present: Leslie Oliver, Governor's Office  
Reice Haase, Governor's Office  
Jessie Pfaff, Agriculture Department  
Other attendees are listed on the attendance sheet available in the Commission files  
Members of the Press

Governor Burgum called the Industrial Commission meeting to order at 11:30 a.m. at the Department of Mineral Resources Conference Room and the Commission took up Department of Mineral Resources business.

### **DEPARTMENT OF MINERAL RESOURCES**

Mr. Lynn Helms, Director of Department of Mineral Resources, presented proposed Order 29129 for Case 26584 for the Commission's consideration regarding the delineation of the Ordinary High Water Mark (OHWM) of the US Army Corps of Engineers Survey segments on the Missouri River from the northern boundary of the Fort Berthold Indian Reservation to the southern border of Sections 33 and 34, Township 153 North, Range 102 West, McKenzie, Mountrail and Williams Counties. (The proposed Order 29129 was distributed to the Commission and is available in the Commission files.)

Mr. Joel Toso, Wenck Associates, provided a presentation. (A copy of the presentation is available in Commission files.) He provided an overview of the original report that was presented to the Commission in April, 2018 along with a summary of the comments received through June 26, 2018, proposed response to those comments, and proposed amendments to the prior report.

Mr. Toso stated the project scope is to conduct an analysis of the ordinary high water mark of the historical Missouri riverbed channel. The study was initiated by State legislation (N.D.C.C. ch. 61-33). The state law (N.D.C.C. § 61-33.1-03(1)) provides that presumptive determination of the OHWM of the historical Missouri riverbed channel, subject to the review process under this statute, is the US Army Corps of Engineers (USACE) survey that is defined in N.D.C.C. § 61-33.1-01(1). The review by Wenck was to determine whether clear and convincing evidence establishes that the corps survey does not reasonably reflect the ordinary high water mark (OHWM) of the historical Missouri riverbed channel under state law. He noted that they learned early on when they queried the USACE what the corps survey was based on was the 1943 river bank so it is not necessarily what we would say would be the ordinary high mark based on the definition Wenck was directed to use. The State Engineer also pointed out that the USACE may have acquired land to the ordinary low water mark. The US Department of Interior in a letter pointed out that the USACE survey is the best map, supported by extensive available data.

In response to a question, Mr. Toso stated the corps survey is the best map which was done prior to the establishment of the Garrison Dam in the early 1950's. Mr. Toso stated that their work was done based on the parameters to be considered under N.D.C. C § 61-33.1-03(3). "The OHWM is the point at which

the presence of action of the water is so continuous as to destroy the value of the land for agricultural purposes, including hay lands.”

Mr. Toso stated that the project area is near New Town. The scope of work encompassed gathering and analyzing data along with presenting and publishing the findings and making final recommendations after a comment period. Since the last meeting in April, the findings were published. There was a 60 day comment period and a public hearing on June 26th, 2018. Since that public hearing they have addressed the comments received and are providing their recommendation. He stated there were 22 commenters submitting 1,436 pages of written comments. Fifteen commenters attended the public hearing of which four were new commenters that had not previously presented written comments. He noted:

79 total comments received:

37 comments were outside the scope of ch. 61-33.1;

20 comments on Wenck Report

- 9 - methods & analysis
- 7 - corps survey v. Wenck Study OHWM definition
- 5 - terms & definitions

22 comments on Wenck's OHWM.

In response to a question, Mr. Toso and Mr. Helms stated the comments outside the scope were in regards to the legality of the project and releasing lands outside of the OHWM which is not within the Commission's jurisdiction.

In regards to the 22 comments regarding the Wenck OHWM report, Mr. Toso stated:

- 17 comments advocated for excluding additional lands from below the OHWM -- all were investigated and 4 comments were found with merit to recommend excluding additional lands
- 2 comments advocated for moving the OHWM line inland; after investigation, no recommended change;
- 2 comments supported Wenck's OHWM.
- 1 comment noted an error related to ownership of an island. .

Mr. Toso presented a series of maps showing what areas they received the comments on, who made the comments and what Wenck's recommendation is regarding each of the comments. The maps depicted the OHWM and the areas where they proposed changes from their April report. He noted what the colored lines on the maps indicated and in response to a question stated that the black lines noted the BLM quarter quarter survey (1951 era) which they were directed by the legislation to include. He stated there were comments regarding the mapping--what would be preferred is put this in the GLO maps government land maps with government lots, etc.

In response to a question, Mr. Toso stated the aerial photography presented is from a 1951 photo and depicts lands which are now all under the lake. The corps survey was based on the 1943 topographic information. The Wenck report is consistent along the 83 miles in trying to establish effectively a 1952 era OHWM.

Mr. Toso noted that when a reference is made to erosion, it relates to erosion that occurred between the 1943 original USACE evaluations and the 1952 point which the Wenck study is marking. The river had moved during that time. Based on the comments received, all of the lines were reviewed for consistency.

In response to a question, Oxbow Lake is disconnected from the main stem of the river and not part of a navigable channel.

In April, results showed the Corps survey had 16,687 acres and Project OHWM had 27,089 acres. Currently, the Project OHWM has 26,194 with a difference of 900 acres taken from below the OHWM.

In response to a question, Mr. Toso stated that in response to the comments that had been made, the study reduced the number of acres by about 900. It was noted that the corps survey is based on 1943 information which may have gone to the low water marks. Governor Burgum noted that the project in April was pursuing the definitions as prescribed in law. The current Project OHWM is adjustments based on comments from the public. It was stated that all the adjustments were made based on the same standard of clear and convincing evidence.

Mr. Toso stated the proposed report amendments were:

- Include edits based on comments from the State Engineer;
- Clarify corps Survey - may not be to the low water mark;
- Edit mapping areas;
- Include coordinates of OHWM and corps survey for use by Professional Land Surveyors.
- The OHWM line will provide coordinates both in digital form and included in the report. A professional land surveyor will be able to use the digital information in conjunction with CAD drawings. Analysis will consist of incorporating the OHWM line, Corps line, and line established by the surveyor for comparative purposes. The goal is to make the information more user friendly for the public.

In response to a question, Mr. Toso stated all data will be made available to the public in the published report. Mr. Helms stated that should the Commission approve the Order the Department of Mineral Resources staff will publish the Wenck Report digital line on the DMR website so companies and their professional land surveyor will be able to import that line very quickly, make the calculation adjusting all the property ownership acres. Because there are a number of wells along the river, the area has been surveyed extensively and through this process will be able to update their survey with this digital line.

Mr. Helms provided a revised report that includes:

- the updates that Mr. Toso has indicated in his PowerPoint;
- revised definitions according to the suggestions of the State Engineer which helps everyone to understand the difference between the 1953 Corps survey and the historical ordinary high water mark that is being established in this report.

Mr. Helms noted that the contract with Wenck will have to be amended to include provisions for producing the OHWM lines and putting them on the DMR website. He stated there was sufficient money in the appropriation to deal with those costs. Mr. Helms stated that the standard commission order has 30 findings, it goes through all the comments and information that were received and processed to arrive at Wenck's recommendation. It puts comments together under things like property apportionment, terms and definitions, and lays out in those findings what action should be taken as a result of the comments received. It also contains findings on all 12 segments;

In response to a question, Mr. Helms stated Fort Peck Dam was constructed in 1938 and was completed prior to either survey being conducted. Commissioner Goehring stated that the Yellowstone and Milk Rivers also flow into Lake Sakakawea so the Fort Peck Dam is only one element of what happened to the river during the time frame between 1943 and 1951. All 12 segments of the river were reviewed with comments received on ten of the segments and changes were made on two, segments Z and AA based on historical photos and physical observations.

Mr. Helms stated that if the final Order is approved, it would start the "clock" as outlined in Sections 4 and 5 of the law (SB 2134) Attorney General Stenehjem stated that if the Order is adopted, this

represents the best judgement of Wenck of where the OHWM of the historical Missouri riverbed channel before the closure of Garrison Dam and Lake inundated the area but does not preclude someone from seeking judiciary relief. It would also start the time to allow the decision to be challenged judicially until September 27, 2020.

The Commission members stated their appreciation for the work done on the Wenck report and the willingness to make modifications when data supported deviations from the Corps survey.

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that Order No. 29129 issued in Case 26584**

- a) **approving the Final Report on the delineation of the Ordinary High Watermark of the US Army Corps of Engineers Survey segments from the northern boundary of the Fort Berthold Indian Reservation to the southern border of Sections 33 and 34, Township 153 North, Range 102 West, and**
- b) **directing the Department of Mineral Resources to amend the contract with Wenck Associates to provide the NAD83 North Dakota North Zone State Plane Coordinates for the OHWM line and the presumptive corps survey OHWM in an appendix format in order to perpetuate the line for use by affected parties in future land and mineral surveys and land right transfers**

**be approved this 27<sup>th</sup> day of September, 2018.**

Mr. Helms stated the property apportionment issue is outside the scope of the Industrial Commission, but they are recommending that the Wenck contract be amended to spend some additional funds (approximately \$150,000) from the appropriation to provide the digital line which will allow the land surveyors to make those property apportionment calculations for their clients. It was stated that the digital availability will be an investment in clarity because it could reduce workload and number of inquiries, speed up transparency, and reduce legal proceedings.

The mineral owners can choose if there are disagreements with the survey to hire a surveyor or do a review, but there will not be dual effort if the owners agree with the survey which will save both time and money.

In response to a question, Mr. Helms stated the appropriation was \$800,000 and approximately 50% will be spent and the remainder will be turned back.

In response to a question, Mr. Helms stated that there is a provision within the contract that provides for hourly payments if Wenck representatives need to testify as an expert witness in litigation. The Order, if approved, completes the work of the Wenck and the Industrial Commission and satisfies the requirements of the law. If there is litigation then Wenck will need to be compensated for any expert testimony.

Governor Burgum thanked Mr. Garland Erbele and the State Water Commission team for the close attention paid to the process and detailed editing work on this project, which was very valuable.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem, and Commissioner Goehring voted aye. The motion carried unanimously.**

Mr. Helms provided a proposed Order 29315 for Case 26494 which relates to an application of XTO for unitization of Hofflund-Bakken Unit Area. He provided a map displaying the aerial extent of this application, fields impacted by the unit, and an inset map which showed the location within North Dakota. The unit is located at the congruence of Mountrail, Williams, and McKenzie Counties. He distributed exhibits from the record on this case. Those exhibits are available in the Commission files.

Mr. Helms noted that this unit development involves drilling under Lake Sakakawea and the Missouri River. It is a large land mass with complicated topography. The goal is to maximize both the number and length of wellbores (3-mile+ laterals), move wells back from the lake shore, and minimize the number of tank batteries and well sites. The existing older wells will then be plugged. Without a unit, there would be more wells and well pads closer to the lake shore with multiple tank batteries. With a unit, there would be fewer wells and well pads with longer laterals set back from the lake. The goal is to maximize the recovery from these lands and minimize the number of wells needed and the well pads. Currently, it is a primary unit. It does not anticipate enhanced oil recovery but it leaves the door open for that.

Mr. Helms indicated the issues involved in the unit development include the following:

1. There are significant geological differences between the east and west half of the unit. It will take less wells to develop the east half versus the west half.
2. Calculations of original oil in place is a major factor in the unit formula. The Three Forks 3 bench is based on water saturations and log calculations and the Commission's staff geologists question the credibility of these calculations. The Three Forks 3 and 4 benches should be included in the unit because at some point in time they may be drilled but as it stands right now XTO has no plans to drill wells into those formations.
3. Current development consists of one well on each tract and using a single-phased formula does not protect the correlative rights of those existing well owners and operators. Based on those factors the staff is proposing that this unit implement a two-phase formula. The first phase would set equity to keep the existing well owners whole until the estimated ultimate recovery of the wells is met. The second phase would involve everyone.

Mr. Helms stated that the staff recommendation is to approve the proposed unit, but as two units or one on the East and one on the West side with a two phase formula and that the original oil in place of the lower Three Forks 3 bench be left out of the equity formula.

Commissioner Goehring stated his appreciation that this unit will lessen the footprint. Moving the wells back from the lake shore is another positive aspect to unitization of the project.

In response to a question regarding a timeline for the first and second phase, Mr. Helms stated there is a six month timeline to get the project ratified. Mr. Hicks stated the timeline will depend on the development speed and crude oil prices. It could take up to 2-3 years to hit the estimated oil recovery of the existing wells. How much oil is going to be produced from the current wells is the determining factor in going from Phase 1 to Phase 2. There will be a number of infill wells that will accelerate production in the unit. All of the tracts have been drilled except for one.

**Case 26494 & Case 26495: It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that Order No. 29315 issued in Case 26494 establishing two units, creating a two-phase unit formula, addressing estimated ultimate recoveries, addressing original oil in place calculations and vacating applicable spacing orders for the further development of the Alkali Creek Field, Capa Field, Charlson Field, Grinnell Field, Hofflund Field and West Capa Field in Williams and McKenzie Counties be approved this 27<sup>th</sup> day of September, 2018 and that the Department of Mineral Resources Director be authorized to sign Order 29316 for Case 26495 regarding the establishment of two units upon receipt of unit agreements and when sufficient ratifications are submitted.**

In response to a question, Mr. Helms stated the formula is based on remaining recoverable reserves and placing oil that will not be drilled into the denominator skews the equity towards those tracts where oil production will not be produced.

In response to a question, the staff showed on the map where the dividing line was between the two units as proposed in the Order.

In response to a question, Mr. Helms confirmed that the line was determined by the assessment of geology and the owners in the larger unit will have the option to vote for or against the unit during the ratification process. Governor Burgum asked if the math on the reserves was part of the ratification process as proposed in this Order. Mr. Helms stated it does enter in because the ratification is 60% of the mineral ownership and 60% of the working interest ownership.

It was noted that Petro Gulf went through all the calculations completed by XTO and several errors were noted. DMR went through and recalculated the numbers so now everything is correct.

Mr. Helms stated it would be beneficial to have a single operator of both units. XTO has its own gas plant which enables a smaller footprint and to control the process from permitting, to production and processing.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Case 26800, Order 29240 - application for suspension and revocation of drilling permits (A copy of the handout is available in the Commission files.)

Mr. Helms stated that the location of this application is in the North Fork Field located on the McKenzie/Dunn County border in the core of the Bakken. The issue involves a dispute over operatorship of a spacing unit. Burlington and its supporter have 50.191% and PetroShale and its supporter have 49.809%. The Commission's rules regarding revocation of permits would say that the presumption would be that the permits would be revoked.

PetroShale has both significant and non-significant obligations. PetroShale did not understand when they took an assignment of some federal leases with a five year term that they expire September 1, 2019. PetroShale would experience substantial harm from the non-development of these leases and the leases expire. It is federal surface; and federal minerals and the timeline and complications of getting things approved and permitted is long. This was not a priority on Burlington's drilling schedule, but is on PetroShale's drilling schedule.

Mr. Helms stated that it is the staff recommendation in the proposed order to suspend Petroshale's permits through May 31, 2019 to allow Burlington the opportunity to obtain a Federal permit and drill a well to put the unit into production by June 1, 2019. If they are unable to get the permit and drill a well, Mr. Helms would be delegated the authority to issue an Administrative Order in June reinstating the PetroShale permits and allowing them to move ahead to protect their leasehold position.

**Case 26800: It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that Order 29240 issued in Case 26800 suspending certain PetroShale permits and authorizing Burlington Resources to permit and drill up to six wells if first well is spud by 6/01/2019 and authorizing the Department of Mineral Resources Director to sign an administrative order to accommodate permitting issues that may**

**arise or if found necessary to protect correlative rights, be approved this 27<sup>th</sup> day of September, 2018.**

In response to questions, Mr. Helms stated that all four parties involved are unaware of the recommendations being proposed. He indicated that under the Commission's rules the Commission can limit the life of a permit.

In response to a question, Mr. Helms and Mr. Hicks discussed the various deadline dates they had considered. The June 1, 2019 date was chosen because it allows enough time for Burlington to contract a rig and execute the permits. Also, because the lease involves federal lands and permits, there needs to be time to allow PetroShale to act. This allows PetroShale a full three months to preserve its leases.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem, and Commissioner Goehring voted aye. The motion carried unanimously.**

Case 26825, Order 29265 - determination of bond amounts. Mr. Helms distributed a handout. A copy is available in the Commission files. Mr. Helms explained that this matter involves a small Mission Canyon Madison unit that has been in place for a number of years. The unit was under water flood and is located in Renville County. The unit switched operators and Scout took the unit over on December 19, 2016. The wells had stopped producing when Scout took the unit over and it was part of a larger acquisition package. Scout was requested to start producing or plug the wells. The staff looked at the State's potential liability with seven abandoned wells that have not produced since December of 2015 and decided that the State needed to do something to reduce the State's liability. There is a \$100,000 unit bond in place. Scout proposed the bond stay at \$100,000 and that Scout be allowed a timeframe of September 1, 2019 to make a decision on what to do with the wells. During the hearing it was indicated that it would cost approximately \$100,000 to plug and reclaim each of the abandoned wells. The proposed order recommends increasing the required bond amount from \$100,000 to \$700,000. It is a surety bond that will cost more in annual premiums to the operator. However, the State needs to protect itself because the wells have been abandoned for over two years.

In response to questions, Mr. Helms stated that Scout is required to obtain the bond immediately so with the ability to request a reconsideration of an order within 30 days they have 30 days to increase the bond. The surety bond is through an insurance company at \$100,000 so increasing the bond would consist of increasing premiums. Surety bonds have actuaries that can evaluate Scout's financial statements to determine the risk. Mr. Helms stated he is comfortable with the wording of immediate for action and the term will be readdressed at the next meeting if no action has transpired.

The Commission and Mr. Helms discussed what the options were for Scout to relieve itself of the bonding requirement. Scout is currently completing an engineering study and if that study shows the wells should be put back into production and Scout does that, then they could come to the Commission for a change in the bonding amount. However, if the engineering study shows that the wells cannot be produced, then Scout would need to plug the wells and reclaim the well sites and then after inspection and approval by the Commission, the bonds would be released on the wells.

**Case 26825: It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that Order 29265 issued in Case 26825 establishing the bond amount of \$700,000 for the wells operated by Scout Energy Management LLC in the Northeast Foothills-Madison Unit, Burke County, North Dakota, be approved this 27th day of September 2018.**

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Mr. Bruce Hicks, Assistant Director, presented the second quarter Oil and Gas Division Report for 2018. A copy of the report is available in Commission files. The report included the following topics:

- Statistics for permitting, drilling, well count, production, prices, geophysical, inspection and enforcement were presented.
- Gas Flaring
- Drilling Permit Review
- Complaints

In response to a question, Mr. Hicks stated that the waiting on completion number is at a record high primarily due to lack of workforce. Fracking companies are continually holding job fairs trying to find qualified workers. The current 41 fracking crews are only capable of keeping up with the 65 rigs so no headway is able to be made on the 993 wells awaiting completion.

Under Gas Capture, Mr. Hicks provided a graph showing the curves for gas capture. In November, the Bakken gas capture requirements increase to 88%. The industry may get below the goal, but are still meeting it due to some allowances. In both June and July, the gross capture amount decreased to 84% which does not include any incentives. Any flow back that goes to flare is counted in the flared numbers even through it can be removed from the calculation for compliance with gas capture goal. The DMR wants to be as transparent as possible.

Mr. Hicks provided a map showing all the gas plants. The addition, all these projects are adding over one billion cubic feet of gas processing per day and over \$1.5 billion in investment. The Oasis plant should help cut down flaring. Some companies have increased production which has also increased gas.

Governor Burgum stated if record amounts are sold, record amounts are captured. The \$1.5 billion in capital investment is impressive. As a State, the Commission needs to ensure nothing is done to discourage capital investment. With the current status of the oil/gas ratio, profits need to be invested in large amounts of capital. Private capital is one of the key solutions to the issue. Production volumes have increased seven fold and there needs to be continued investment by industry. As a State, there needs to be more potential uses for the gas and people need to be aware of the business opportunity to invest in ND and utilize gas. With more gas processed in ND, more pipelines need to be built. The three-fold approach involves more gas processing plants, more value-added investments, and storage potential. The industry should be recognized for capturing record amounts of gas. Some plants are suffering from workforce shortages and as a State, these needs must be addressed. Capital will flow to places that enable a return and where workers are available to complete projects.

Mr. Hicks stated discussions have occurred with the industry regarding innovative techniques. Currently, there is not a slow down on the gas that is being processed.

Governor Burgum stated that some of the new wells coming on line have enormous oil and gas production. The State needs to be aware not to create disincentives or penalize producers with wells not producing as high which then results in getting pushed off the line creating flaring and thus, non-compliance.

Commissioner Goehring stated percentages have led to an overall increase due to unanticipated natural gas production. Several contributing factors include: workforce shortages, weather, equipment delays, production, and commodities. November 1<sup>st</sup> is an arbitrary date. The Commission is working with companies to incentivize the process because billions of capital investment will be needed going forward.



Governor Burgum stated there are operators that want to be in compliance, but there are issues such as waiting for federal approval on gas gathering permits. If the goal is trying to create incentives or penalties, it should be applied in a way that changes behavior. There needs to be more geographical analysis of the areas where there are capture issues--what percentage is due to inability to get gathering lines, plant is coming on line late because of workforce issue--so there is a better understanding of what can be done to solve the problem. The regulatory framework should solve and not exacerbate problems.

Mr. Hicks stated the gas capture goals passed in April allow the Commission to issue temporary exemptions. Although there have been none, exemptions will be considered in the future.

Commissioner Goehring requested updated information on right of way issues at a future meeting.

Governor Burgum requested that when data is provided on gas flaring both the gross and net calculations be made available with net meaning after the allowances are included.

Mr. Hicks noted that temporary flaring exemptions will be monitored, but no exemptions have been issued. He also indicated that no permits have been requested in the Areas of Interest. He stated the number of complaint cases has decreased.

With no further business at this location, the meeting went into recess at 1:18 p.m. Governor Burgum stated the meeting would reconvene at 1:40 p.m.

### **BANK OF NORTH DAKOTA**

The Industrial Commission relocated the meeting to the Governor's Conference Room at the State Capitol. Pursuant to N.D.C.C. 6-09-35, the Industrial Commission entered into executive session. Governor Burgum reminded the Commission members and those present in the executive session that the discussion during executive session must be limited to those items listed on the agenda which is anticipated to last between 15 and 30 minutes. It was noted that any formal action by the Commission would occur after it reconvened in open session. Commission members, their staff, and BND staff remained but the public was asked to leave the room. Governor Burgum closed the meeting at 1:40 p.m. pursuant to N.D.C.C. 6-09-35 to discuss the following items:

- Consideration of Bank of North Dakota loan applications
- Concentrations of Credit as of June 30, 2018
- Problem Loans Update
- Other Bank of North Dakota confidential business (as defined under N.D.C.C. 6-09-35)

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### **BND EXECUTIVE SESSION**

**Members Present:**

Governor Doug Burgum  
Attorney General Wayne Stenehjem  
Agriculture Commissioner Doug Goehring

**Bank of North Dakota Personnel Present:**

Eric Hardmeyer           Bank of North Dakota  
Ty Zeltinger             Bank of North Dakota (by phone)  
Kaylen Hausauer        Bank of North Dakota

**Others in Attendance:**

Lt. Governor Brent Sanford  
Leslie Oliver                      Governor's Office  
Reice Haase                        Governor's Office  
Jessie Pfaff                        Agriculture Department  
Andrea Pfennig                    Industrial Commission Office  
Karlene Fine                        Industrial Commission Office

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The meeting reconvened in open session at 2:20 p.m. Governor Burgum invited the public to return to the meeting room. He noted that during its executive session, the Commission made a motion regarding two Bank of North Dakota loan applications.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

### **WESTERN AREA WATER SUPPLY AUTHORITY (WAWS)**

The Commission welcomed Curtis Wilson, the new WAWS Executive Director. Mr. Wilson provided the Commission with information on his background and the work he has done with water in Texas.

Mr. Wilson provided the update on sales and current activity through August. (Copies of the graphs and chart are available in the Commission files.) The breakeven point for annual operations was almost obtained in August. The new projection is to be between 30-35% over what had been budgeted for the year and over one billion gallons of water being provided for industrial sales. Sales have been above budget for nearly the entire year.

Mr. Wilson presented maps that had been requested by the Commission at a prior meeting showing the infrastructure for the domestic distribution and industrial services. (Copies of the maps are available in the Commission files.) He reviewed and responded to questions regarding the WAWS distribution system.

In response to a question, Mr. Wilson stated a permanent direct connection depends on the amount of water intake and length of contract. Mr. Todd Pokrzywinski, WAWS, stated all contracts have an option for an annual review, but the longest contract is five years. Mr. Chorne stated the permanence designation depends on how the pipe was connected to the system, such as a buried pipeline connected to the system versus temporary surface (lay flat pipe) fracking connections.

In response to a question, Mr. Pokrzywinski explained the process for connecting a new pipeline to the existing infrastructure.

In response to a question, Mr. Wilson stated the next phase of mapping is to acquire all of the distribution systems from the member entities and distinguish those lines from the ones implemented by WAWS. WAWS does not have access to specific information on the pipelines owned and operated by private water providers--that information is proprietary information.

Governor Burgum stated his appreciation for the maps and the fact that more mapping is planned. Governor Burgum stated water usage has increased and the inability to provide water to specific areas could be a negating factor in the growth of this industry. The State needs to keep working to establish water rights across the State and needs to determine if there has been enough investment of capital by the State in water infrastructure for the Bakken. The State needs to ensure there is enough water for utilization in the right places.

Mr. Wilson stated it takes approximately 1/2 gallon per minute for maintenance water for each well that already has been drilled. This does not include the water used in the fracking process. Total service on the wells drilled today consists of approximately 5,000 gallons per minute for the maintenance of those wells.

Mr. Wilson stated water rights consist of approximately 44,000 acre feet from the Missouri so there is enough water available. In response to a question, Mr. Wilson stated the process to secure more water rights would involve an interstate agreement in terms of release rights to determine what is available on the Missouri River at the Williston point.

In response to a question regarding a long range capital plan, Mr. Wilson stated he has proposed a meeting with all of the industrial users to conduct proper planning of needs. In the future, plant improvements will need to be addressed which involve a new intake structure in the Missouri River. The structure will take approximately two years to complete.

In response to a question regarding the current structure only running at half capacity, Mr. Wilson stated the plant is running on an average of 9-10 million gallons per day (MGD), but is built for between 21-23 MGD on an average day. Once the fracking starts, the structure has been redlined for 23 MGD per day. There needs to be more communication with oil companies so their water needs can be better timed.

Commissioner Goehring stated the private sector can also help with delivery. Mr. Wilson stated that maintenance water is the issue. After the fracking occurs, WAWS supplies the maintenance water. Mr. Wilson stated the largest hurdle for WAWS to overcome to provide the needed maintenance water is a water plant upgrade and expansion.

In response to a question regarding the average gallon usage of the super fracks, Mr. Wilson stated some wells used approximately 16 million gallons. Mr. Pokrzywinski stated the first stage may need anywhere between 800,000 to 1.3 million barrels per stage. Oil companies are disappointed when only 1,500 to 2,000 gallons are delivered per minute. The most problematic issue is flow.

The Commission, WAWS staff, Mr. Garland Erberle, State Engineer, and Mr. Helms discussed:

- Current water needs for fracks and forecasted need,
- Current water needs for maintenance water and forecasted,
- Construction of water reservoirs by the private sector (oil companies and water providers),
- Permitting process and development of a map showing the location of the reservoirs,
- Appropriate size of the pipelines and what has to be considered when making that determination.

Mr. Helms indicated that Justin Kringstad with the Pipeline Authority has developed projections on the number of wells to be drilled and how they will be distributed geographically based on decades of drilling. This information will be critical in determining maintenance and fracking water needs. Even though private water lines are not regulated and the locations are unknown the location of the holding ponds is known. The current trend is that private suppliers are building large containment structures and using lay flat lines to deliver frack water. That is a temporary structure but at some point those wells will require maintenance water. The goal is to plan smart according to the maintenance water needs. It would be beneficial to tie Mr. Kringstad's projections for the drilling of 50,000 wells and geographically where they are located so the infrastructure can be built to meet those maintenance water needs. Mr. Helms stated on the frack water side, volumes will rise and fall based on activity and workforce.

Governor Burgum stated between WAWS, DMR, Pipeline Authority, and the State Water Commission, there needs to be a comprehensive capital plan--10 and 20 year plan. Enough information is available to understand that the State is moving toward being behind on water just like the State is behind on gas processing. From a strategic stand point, we need to separate capital investment from operating

investment. As a State, the tax money received from additional wells could cover the costs for water infrastructure. The State does have the ability to bond based on its strong balance sheet and could justify the return on investment (ROI) on numerous capital projects. Without the water, there is no tax revenue. The Commission needs to be sophisticated in its argument that spending money where the return is higher is a better investment for the State.

Lt. Governor Sanford stated that since the WAWS Study was completed earlier this year the Industrial Commission has allowed the wholesale of water and criticisms against WAWS for competing against private businesses have decreased. Regarding WAWS, the first priority is domestic and the second priority is to ensure there is enough infrastructure. Upon review of the map, there is not enough water infrastructure. The pipeline system needs to be extended, and even though there is private investment currently going on it may not be enough. The Commission is stressing to the WAWS management team and Board the importance of future planning. Expanding the system to meet these needs would be a change in policy. Mr. Wilson stated that is where the Board needs direction from the Industrial Commission as to how they should plan for expanding their system.

Governor Burgum stated building out the water infrastructure to the south could reduce the pressure on permits for water from the Little Missouri. The strategic plan should involve moving the water from the Missouri River delivered through State owned infrastructure that enhances the business model for private entities which then takes pressure off the temporary permits on the Little Missouri.

Lt. Governor Sanford stated in the beginning it was either frack or domestic water. Once the wells are in the ground, it will provide more permanent employment versus fracking which consists of temporary man camps. Currently, maintenance water contracts are an increasing trend and building a water system for the maintenance contracts is a possibility. Mr. Helms stated that the WAWS study indicated WAWS should target the domestic and maintenance supply along with being the wholesaler for the frack water in addition to having the private sector build the riskier holding ponds to ensure the necessary amount of infrastructure. Lt. Governor Sanford stated the new concept involves moving the bell curve up for maintenance versus domestic water.

In regards to a question on the maintenance per well, Mr. Helms indicated there is a constant volume going in daily to dissolve salt. Maintenance water is purchased because of the chemistry -- it is clean and bacteria free with low salinity and WAWS has the lock on that market.

Governor Burgum asked that WAWS staff, Mr. Helms, Mr. Erberle and Mr. Kringstad work on a capital plan request in time for this upcoming legislative session. This plan would be different than the long range plan in that it needs to focus on the immediate needs. Governor Burgum stated there needs to be a plan to obtain an Army Corps permit and a new intake on the Missouri River which will take between 2-3 years. In the interim, there needs to be a list of solutions that can be implemented immediately while building towards the long-term plan.

Ms. Karlene Fine noted the Western Area Water Supply Authority July and August Financial Report and Debt Reduction Report was available in the Commission's meeting books as Attachment 7. (A copy of the report is available in the Commission files.)

### **LIGNITE RESEARCH, DEVELOPMENT & MARKETING PROGRAM BUSINESS**

Ms. Fine presented a request for the Commission's consideration from the Energy and Environmental Research Center for a special Lignite Research Program grant round with an application submission deadline of November 1, 2018.

**It was moved by Attorney General Stenehjem and seconded by Commissioner Goehring that the Industrial Commission establishes an additional grant round for the Lignite Research Program with an application deadline of November 1, 2018. On a roll call vote, Governor Burgum, Attorney General Stenehjem, and Commissioner Goehring voted aye. The motion carried unanimously.**

#### INDUSTRIAL COMMISSION ADMINISTRATION

**It was moved by Attorney General Stenehjem and seconded by Commissioner Goehring that the Industrial Commission September 14, 2018 non-confidential meeting minutes be approved as distributed. On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Governor Burgum presented a proposal regarding an adjustment in compensation for Ms. Fine. There was discussion by the Commission regarding the Executive Director's responsibilities and the workload.

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that Karlene Fine's compensation be increased effective October 1, 2018 establishing her annual salary at \$121,473.60 and that she work with HRMS on doing a market assessment of the Executive Director and Secretary position. On a roll call vote, Governor Burgum, Attorney General Stenehjem, and Commissioner Goehring voted aye. The motion carried unanimously.** Ms. Fine thanked the Commission for the salary increase.

With no further Industrial Commission business, Governor Burgum adjourned the meeting at 3:13 p.m.

INDUSTRIAL COMMISSION OF NORTH DAKOTA



Karlene Fine, Executive Director and Secretary