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MINUTES OF THE 255TH MEETING
OF THE WATER MANAGEMENT BOARD
FLOYD MATTHEW TRAINING CENTER
523 EAST CAPITOL AVENUE
PIERRE, SOUTH DAKOTA
JULY 9, 2025

CALL TO ORDER AND ROLL CALL: Chairman Hutmacher called the meeting to order at 9:30 a.m. Central Time. The roll was called, and a quorum was present.

The meeting was streaming live on SD.net, a service of South Dakota Public Broadcasting.

The following attended the meeting:

Board Members: Jim Hutmacher, Chad Comes, Peggy Dixon, Rodney Freeman, Leo Holzbauer, Kelly Hepler, and William Larson.

Department of Agriculture and Natural Resources (DANR): Mark Mayer, Director of the Office of Water and Acting Chief Engineer, Ron Duvall, Amanda Dewell, Adam Mathiowetz, and Brittan Hullinger, Water Rights Program.

Attorney General's Office: David McVey, Board counsel; Jennifer Verleger, Water Rights Program counsel.

Water Permit Application No. 8903-3, City of Dell Rapids: Meredith Moore, legal counsel for petitioners; Matt Naasz, legal counsel for Dell Rapids; Steve McFarland, city of Dell Rapids; Matthew Oedekoven, DGR Engineering; Scott Buss, Minnehaha Community Water Corp (petitioner); Chris Myers, city of Sioux Falls; Jay Gilbertson, East Dakota WDD; Ryan Allen, Dell Rapids; Dean Hammer, Dell Rapids; Trent Bruce, Sioux Falls; Coel Sutten, Watertown.

Legislative Oversight Committee: Senator Jim Mehlhaff.

Court Reporter: Carla Bachand, Capital Reporting Services.

Other: Bob Mercer, Keloland.

ANNUAL ELECTION OF OFFICERS: Motion by Freeman, seconded by Holzbauer, to nominate Bill Larson for Chair. There were no other nominations. A roll call vote was taken, and the motion carried unanimously.

Motion by Freeman, seconded by Dixon, to nominate Chad Comes for Vice Chair and Leo Holzbauer for Secretary. There were no other nominations. A roll call vote was taken, and the motion carried with Comes, Dixon, Freeman, Hepler, Larson, and Hutmacher voting aye. Holzbauer abstained.

Motion by Hutmacher, seconded by Holzbauer, to appoint Rodney as Prehearing Chair. A roll call vote was taken, and the motion carried unanimously.

ADOPT FINAL AGENDA: Motion by Comes, seconded by Hutmacher, to adopt the final agenda. A roll call vote was taken, and the motion carried unanimously.

CONFLICT DISCLOSURES AND REQUESTS FOR STATE BOARD WAIVERS: None.

APPROVE MAY 7, 2025, BOARD MINUTES: Motion by Freeman, seconded by Holzbauer, to approve the minutes from the May 7, 2025, Water Management Board meeting. A roll call vote was taken, and the motion carried unanimously.

SET OCTOBER 1-2, 2025, MEETING LOCATION: Motion by Hepler, seconded by Freeman, to set the October 1-2, 2025, Board meeting location at the Matthew Environmental Training Center, 523 East Capitol, Pierre. Motion carried unanimously.

PUBLIC COMMENT PERIOD IN ACCORDANCE WITH SDCL 1-25-1: None.

UPDATE ON DANR ACTIVITIES: Mark Mayer, Director of the Office of Water and Acting Chief Engineer, reported on activities of the Office of Water. He noted that the vacant Chief Engineer position has been advertised since March. There has been one applicant who was not qualified for the position. Mr. Mayer will continue as Acting Chief Engineer until the position is filled.

STATUS AND REVIEW OF WATER RIGHTS LITIGATION: David McVey reported that the Supreme Court has not made a decision regarding the McCook Lake Recreation Area Association's declaratory ruling request and the Dakota Bay water permit.

ADMINISTER OATH TO DANR STAFF: The court reporter administered the oath to DANR staff who were present and intended to testify during the meeting.

SEVEN YEAR REVIEW OF FUTURE USE PERMITS: A table listing the future use permit for a seven-year review was included in the packet the Board members received prior to the meeting.

Certain entities such as water distribution systems, municipalities, and rural water systems can reserve water for future needs. SDCL 46-5-38.1 requires that future use permits be reviewed by the Water Management Board every seven years, and it requires the permit holder to demonstrate a reasonable need to retain the future use permit.

Amanda Dewell reported that one future use permit was up for review. The Water Rights Program contacted the city of Sisseton inquiring whether the city wanted to retain the future use permit for an additional seven years. The letter received from the city of Sisseton requesting to retain the future use permit, the Chief Engineer's recommendation, and the Affidavits of Publication showing that the hearing was public noticed was included in the Board packet.

No Petitions in opposition or comments were received in response to the public notice.

The Acting Chief Engineer recommended that the Board allow the following future use permit to remain in effect for an additional seven years, to be reviewed in 2032, as listed below.

No.	Name	Amount Remaining in Reserve	Source
4796-3	City of Sisseton	1,607 AF	Veblen Aquifer

Motion by Hutmacher, seconded Comes, to accept the Acting Chief Engineer's recommendation that the City of Sisseton's Future Use Permit remain in effect for another seven years for 1,607 acre-feet, as shown in the table. The motion carried unanimously.

CANCELLATION CONSIDERATIONS: A table listing the proposed cancellations, the notices of cancellation, and the Chief Engineer's recommendations were included in the packet the Board members received prior to the meeting.

Ms. Dewell stated that the six water rights and water permits listed in the table were scheduled for cancellation. The owners were notified of the hearing and the reasons for cancellation. The department received no comments or letters in response to the notices of cancellation.

Ms. Dewell noted that Water Right No. 5776-3 is a partial cancellation. While irrigation practices authorized under the water right have ceased, water from the dam is still being used for stock watering. Pursuant to SDCL 46-5-31.1 if permitted irrigation use from a storage dam is abandoned or forfeited, but the storage dam is used for stock watering, stock watering may be added to the license or permit retaining the priority date of the original license or permit without application or publication. Therefore, the Acting Chief Engineer recommended cancellation of the irrigation portion of the water right and adding stock watering for an authorized use.

The Acting Chief Engineer recommended cancellation of the following water rights and water permits for the reasons listed.

Number	Original Owner	Present Owner(s) and Other Persons Notified	Reason
DIVISION II WATER RIGHTS/PERMITS			
PE 2732-2	N/A	Daniel & Paulette Fanning	Non-construction/Failure to place to beneficial use
PE 2733-2	N/A	Jason & Andrea Fanning	Non-construction/Failure to place to beneficial use
RT 705-2	George Lamm	Rudy & Susan Roth	Abandonment/Forfeiture
DIVISION III WATER RIGHTS/PERMITS			
PE 2983-3	N/A	BKV Thorstenson Ranch LLLP c/o Vaughn Thorstenson	Abandonment/Forfeiture
RT 5776-3	N/A	Meyerink Farms Inc. c/o Kyle Meyerink	Abandonment/Forfeiture (Irrigation portion of the water right is cancelled. Dam still being used for stock watering.)

PE 7694-3	Joseph Plucker	Kim & Kevin Rechangel	Non-construction/Failure to place to beneficial use

Motion by Freeman, seconded by Dixon, to accept the Acting Chief Engineer's recommendations for cancellation of the six water rights and water permits for the reasons listed in the table. The motion carried unanimously.

VIOLATION OF ANNUAL WATER USE REPORTING QUALIFICATION FOR NON-IRRIGATION WATER PERMITS/RIGHTS: Ron Duvall reported that the bBoard packet included a report and a list of the permits subject to suspension. Since the notice was issued, all but four submitted their annual water use.

In early January 2025, letters were sent to water permit/right holders requesting that they report annual water for 2024. This mailing is based on a qualification on the water permit/right requiring reporting of the amount of water used during the year. The permit holders were given until January 31, 2025, to respond.

At the end of February 2025 and again on March 13, 2025, follow-up letters were sent to the permit/right holders who had not responded to the initial January request.

On May 23, 2025, a notice scheduling today's hearing, was sent to the permit/right holders not responding to previous attempts to obtain their annual water use. The Notice of Hearing advised the permit/right holders of the reporting qualification placed on their water permit/right pursuant to SDCL 46-1-14 and again requested their annual water use. The notice also indicated that the Water Management Board has the authority pursuant to SDCL 46-1-12, 46-2-9, 46-2-11 and 46-2-17 to suspend or cancel their permit/right in accordance with applicable provisions of SDCL46-1-12, postpone action, or take no action.

Mr. Duvall noted that in accordance with the law, for a first violation the permit/right holder is subject to suspension for a year, a second violation is subject to suspension for three years, and for a third violation the permit/right is subject to cancellation. He stated that this is the first time any non-irrigation water permit/right holders have not submitted annual water use.

The Water Rights Program recommended the Board suspend the permits/rights listed below for one-year effective August 1, 2025, unless the permit/right holders submit their 2024 annual water use prior to August 1, 2025.

Water Right No. 7969-3	Bronson Custom Farms, Inc. – Kris Bronson
Water Permit No. 2809-2	Ismore Investments LLC – Trystin Morales
Water Permit No. 1996-1	Dylan Gingras
Water Permit No. 2841-2	HWY 79 LLC – Patrick Hall

Motion by Hutmacher, seconded by Freeman, to suspend for one year the four water right/permits listed in the table above effective August 1, 2025. The motion carried unanimously.

Mr. Duvall noted that the four permit/right holders will be sent a notice via certified mail informing them of the Board's action. The notice will also note that submitting the annual water

use no later than July 31, 2025, prevents the suspension from becoming effective.

UNOPPOSED NEW WATER PERMITS ISSUED BY THE CHIEF ENGINEER WITHOUT A HEARING BEFORE THE BOARD: Prior to the meeting, the Board received a copy of the table listing the unopposed new water permits issued by the Acting Chief Engineer. (See attachment)

COMMENT RECEIVED REGARDING UNOPPOSED WATER PERMIT ISSUED BY THE CHIEF ENGINEER'S RECOMMENDATION FOR WATER PERMIT APPLICATION NO. 8942-3, PLAINVIEW DAIRY LLC: Mr. Duvall reported that in the Board packet was a table listing the unopposed new water permits issued by the Acting Chief Engineer. Following receipt of a permit application, the Acting Chief Engineer's recommendation is public noticed in a daily newspaper in the same county as the permit. If there is not a daily newspaper in the same county, the public notice is published in a weekly paper in the county the permit is located and in the nearest daily newspaper. The notice is also included on DANR's website.

Mr. Duvall reported that following the public notice a comment regarding Water Permit Application No. 8942-3, Plainview Dairy LLC, was electronically submitted to the department by Troy Lenning, Toronto, SD. By law, the Board is required to review any comments received regarding new water permit applications. Submittal of a comment does not result in a contested case hearing.

The Board packet included the Acting Chief Engineer's recommendation, the staff report on the application, the affidavits of publication, and a copy of the comments submitted by Mr. Lenning.

Application No. 8742-3 proposed to appropriate up to 100 acre-feet (ac-ft) of water annually from unnamed tributaries of Peg Munky Run at a dairy operation. Runoff will be captured in a 0.7 ac-ft capacity dugout and a 3.6 ac-ft capacity storage dam. Water will be diverted from storage at a maximum instantaneous diversion rate of 0.222 cubic feet of water per second (cfs) for commercial use at a dairy operation. This site is located in Deuel County, approximately five miles northwest of Toronto, South Dakota.

The Acting Chief Engineer recommended approval of the application with qualifications. Mr. Duvall stated that the most pertinent qualification is the low flow bypass requirement for downstream domestic uses, which speaks to Mr. Lenning's comment. This is a standard qualification for surface water permit applications, and in South Dakota domestic use takes precedence over any other use.

Regarding runoff from the drainage in question, it was expected to produce up to 1,930 acre-feet annually, which depending on the year, may be more or less than that amount. Mr. Duvall stated that this application is for 100 acre-feet annually, but it's important to realize that their ability to capture water is limited with a 0.7 acre-feet dugout and a 3.6 acre-feet dam.

In his comments Mr. Lenning mentions a stock dam on his parent's property, but no specific location is given. Mr. Duvall stated that in viewing areal imagery he found a parcel of property in the Lenning name, so he is assuming this is the location of the dam, and this dam is on a tributary to Peg Munky Run that is not below this dam and dugout; it's on another tributary. The same tributary that runs past this dam runs past Mr. Lenning's home, and there is another tributary that comes down from the north that is also not impacted by this application.

No Board action was necessary.

NEW WATER PERMIT APPLICATIONS: The pertinent qualifications attached to approved water permit applications throughout the hearings are listed below:

Well Interference Qualification
The well(s) approved under this permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

Well Construction Rule Qualification
The wells authorized by Permit No. ____ shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

Irrigation Water Use Questionnaire Qualification
This permit is approved subject to the irrigation water use questionnaire being submitted each year.

Low Flow Qualification
Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

CONSIDER WATER PERMIT APPLICATION NO. 8903-3, CITY OF DELL RAPIDS:
Chairman Larson opened the hearing.

Jennifer Verleger, Assistant Attorney General, appeared on behalf of the DANR Water Rights Program.

Matt Naasz, Attorney, appeared on behalf of the applicant, City of Dell Rapids.

Meredith Moore, Attorney, appeared on behalf of the petitioner, Scott Buss, Minnehaha Community Water Corporation (MCWC).

Ms. Verleger stated that the hearing is for Water Permit No. 8903-3. The Chief Engineer recommended approval with qualifications. This is a future use application for the City of Dell Rapids to reserve 2,092 acre-feet of water annually from the Sioux Quartzite Aquifer. The future use permit will be subject to the seven-year review period found at SDCL 46-5-38.1 and is subject to cancellation if the Board determines that the permit holder cannot demonstrate a reasonable need for a future use permit. Before the time that the holder of a future use permit initiates construction of the works and puts water to beneficial use, the holder shall file an application for a water permit pursuant to the procedure contained in SDCL 46-2A. An aquifer pump test may be required at that time.

Ms. Verleger stated that a petition in opposition was submitted by MCWC. Comments regarding the application were received from the City of Sioux Falls Water Purification Division, East Dakota Water Development District, and MCWC joining in the comments submitted by the City of Sioux Falls and East Dakota Water Development District.

Ms. Verleger offered DANR Exhibit 100 which includes the Chief Engineer's recommendation, the technical report, the Affidavit of Publication which includes the publication, the MCWC's petition in opposition, the comments submitted by the City of Sioux Falls, East Dakota Water Development District, and MCWC, and the Notice of Hearing. The parties stipulated to entering the exhibit into the record.

DANR Exhibit 100 was admitted into the record.

Ms. Verleger offered DANR Exhibit 101, the City of Dell Rapids' application for a future use permit. The parties stipulated to entering the exhibit into the record.

DANR Exhibit 101 was admitted into the record.

Matt Naasz and Meredith Moore offered opening statements.

Ms. Verleger called Adam Mathiowetz, who had previously been administered the oath. Mr. Mathiowetz offered the following testimony.

He has been with the Water Rights Program for 13 years. He is a licensed professional engineer with the State of South Dakota.

On page 10, paragraph 1 of the report 9,915 ac-ft/yr should be 10,005 ac-ft/yr. This is a typographical error and does not affect any of Mr. Mathiowetz's conclusions or analysis.

Application No. 8903-3 proposes to appropriate and reserve for future use 2,092 acre-feet of water annually (ac-ft/yr) from the Sioux Quartzite aquifer. The future use area is in Minnehaha County. The water is to be reserved as a future water supply for municipal use by the City of Dell Rapids. If approved, this application does not authorize construction of works or application of water to beneficial use. This future use area is located on the south side of Dell Rapids, SD.

The aquifer is contained within the Sioux Quartzite, which is a Precambrian aged fine to coarse grained ortho-quartzite primarily composed of pink and red quartz sand cemented into a nonporous quartzite by silica. The Sioux Quartzite underlies portions of southeastern South Dakota, southwestern Minnesota, and northwestern Iowa. Figure 1 on page 2 of the report shows the approximate extent of the Sioux Quartzite in southeastern South Dakota. The depth to the Sioux Quartzite can vary significantly over short distances with the craggy and uneven surface likely a product of pre-glacial streams as well as some glacial actions incising irregular valleys on the quartzite surface.

There is very limited or no primary porosity for most of the Sioux Quartzite, except in areas where the silica cement is not present due to weathering or non-deposition. The Sioux Quartzite can be considered an aquifer where there is secondary porosity and permeability features such as fractures. The secondary porosity is highly variable and unpredictable, meaning the effects of it

are site-specific. This leads to difficulty in classifying any wells completed into the aquifer as confined or unconfined, and a well can behave in either manner at different depths. However, in general, the aquifer behaves most similarly to a confined aquifer under most conditions.

The Sioux Quartzite has been estimated to have a total thickness ranging from less than 1,000 feet to 3,000 feet, but most wells penetrating the Sioux Quartzite typically penetrate to a maximum depth of 200 feet or less into the Sioux Quartzite specifically plus any overlying over burden material. Within the applicant's proposed future use area, the Sioux Quartzite is likely hydrologically connected to overlying and adjacent aquifers and surface water features in direct contact with the quartzite mostly on the western and northwestern side. The two management units of the Big Sioux Aquifer in direct contact with the Sioux Quartzite are the Sioux Falls management unit and the Moody management unit, as well as the Big Sioux River. However, the extent of the hydrologic connection varies geographically and is not well documented.

There are no well completion reports on file with the Water Rights Program within the boundaries of the proposed future use area. There are several water rights/permits within the boundary for quarry dewatering and aggregate washing at the quarries that are within the future use area. Those are generally pumping from the open pit and not from dedicated wells. There are a few lithologic logs within the boundaries of the proposed future use area and within approximately one-half mile of the future use area. The logs show the Sioux Quartzite generally within 50 feet of land surface, however, there was one that showed it can be up to 200 feet below land surface. The static water level of wells on file with the Water Rights Program within five miles of the proposed future use area, three in total, ranges from 32 to 58 feet below land surface. However, based on the quarry construction and estimated water levels from areal imagery, the water level could be within 10 feet of land surface in areas, particularly closer to the Big Sioux River and the Big Sioux: Moody and Big Sioux: Sioux Falls aquifers that under lie the flood plain of the river.

SDCL 46-2A-10 states, "A reservation for a future use may be approved only if there is a reasonable probability that unappropriated water is available for appropriation, that the quantity of water reserved will be needed by the entity and that the proposed use will be a beneficial use and in the public interest." Mr. Mathiowetz's report addresses the availability of unappropriated water and if the water to be reserved will be needed by the entity. A discussion of water rights/permits and domestic wells near the proposed future use area for this application is also discussed for the benefit of the Chief Engineer and the Water Management Board.

SDCL 46-6-3.1 states, "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems."

The Greenhorn Formation is a Cretaceous aged Formation. The Sioux Quartzite is a Pre-Cambrian aged formation and thus older than the Greenhorn Formation. The applicant is a water distribution system as defined in SDCL 46-1-6(17), therefore, the balance between recharge to and withdrawals from the Sioux Quartzite aquifer need not be considered for this application.

However, for the information of the Chief Engineer and the Water Management Board, a review of information available regarding water availability is discussed in the report.

In its application the City of Dell Rapids presented the need for water. At the time the report was written the city received all of its drinking water from MCWC. The city is experiencing rapid growth as part of the City of Sioux Falls Metro area. The City of Dell Rapids currently holds Water Right No. 562-3 but only maintains the wells for standby purposes. Water Right No. 562-3 authorizes a diversion rate of 1.445 cfs. If pumped continuously, that is approximately 1,046 ac-ft/yr. Recently, the city received water service requests of approximately 1,680 ac-ft per year and are anticipating more.

ARSD 74:02:04:24.01 allows the Water Management Board at its discretion to limit the future use reservation to two times the annual amount actually put to beneficial use. Considering these factors, this request would allow the city to fulfill current requests, maintain a secure backup water supply, and allow for modest growth beyond the current requests. The request to reserve 2,092 ac-ft/yr from the Sioux Quartzite is reasonable based upon this information.

The Water Rights Program does not maintain any observation wells completed into the Sioux Quartzite. However, it is possible to consider water levels measured in wells completed into the Sioux Quartzite to determine general long-term trends of water levels in the area where there are more wells both geographically and chronologically spaced.

There are only four wells on file with the Water Rights Program within approximately five miles of the applicant's future use area that are completed into the Sioux Quartzite. The four wells are summarized in Table 1 on page 5 of the report. In general, across the entirety of the area, the Sioux Quartzite water levels do show a correlation to long-term precipitation patterns, which is common for groundwater in eastern South Dakota, particularly groundwater that is not specifically deeply buried by overburden. However, there are too few wells in very close proximity to the applicant's proposed future use area or spread across time to get a more chronological feel if the wells follow the general precipitation patterns. Analysis of well water level data for the specific local scale is not particularly reasonable.

In this area, it appears the water levels are generally similar to the water levels of the shallow unconfined Big Sioux: Moody and Big Sioux: Sioux Falls aquifers underlying the floodplain of the Big Sioux River. Both of those aquifers can be in direct contact with the Sioux Quartzite. Furthermore, Sioux Quartzite wells across southeastern South Dakota have water levels that follow the general climatic cycle of South Dakota with higher water levels during periods of greater precipitation and lower water levels during periods of lesser precipitation.

When considering the overall pattern across the entirety of southeastern South Dakota, the fact that there are two unconfined aquifers that are showing relatively stable water levels over the period of record and the hydrologic connection that appears to be between them it is apparent that Sioux Quartzite does receive recharge, while there is no quantity that has been documented or calculated at this time.

Discharge from the Sioux Quartzite is through leakage to hydrologically connected aquifers and surface water features where the potentiometric surface of the Sioux Quartzite is higher than in the connected aquifer or surface water feature and through well withdrawals. At the time the report

on the application was written, there were 70 water rights/permits authorized to withdraw water from the Sioux Quartzite of which 59 were for non-irrigation purposes. There was also one pending application, which was Water Permit No. 8894-3 that proposed to irrigate 23 acres of turf. The application has since been approved.

In general, the amount of water withdrawn for domestic uses is not a significant portion of the hydrologic budget for an aquifer. This is due to the relatively low diversion rate of domestic wells and the development of rural water systems, especially in southeastern South Dakota. This means some of the domestic wells completed into the Sioux Quartzite may no longer be in use or have even more limited use that they had previously. Therefore, the hydrologic budget will only consider appropriative usage from the aquifer.

Table 6 on page 10 of the report shows the estimated average annual appropriative uses from the Sioux Quartzite. At the time the report was written, the estimated annual use was 10,005 acre-feet per year. If this application was approved and accounted for in the estimated average annual use, the estimated average annual withdrawals become 12,143 acre-feet per year. The city of Dell Rapids holds Water Permit 562-3, which is for standby purposes, therefore for the hydrologic budget it is counted as zero since they are not pumping any water. If that permit was put to maximum use, pumped continuously at 1,046 acre-feet per year, that would bring the total of estimated average annual withdrawals to 13,189 acre-feet per year across the entirety of the Sioux Quartzite aquifer.

Recharge to the Sioux Quartzite is predominantly through the infiltration of precipitation where the Sioux Quartzite is at land surface or near land surface and overlain by permeable materials, streamflow losses where the stream flows across outcrops with secondary porosity features, and leakage from overlying and adjacent aquifers where a hydrologically connected aquifer has a higher potentiometric head than the Sioux Quartzite. There is no calculated or estimated recharge rate to the Sioux Quartzite at this time. Due to the unique aquifer characteristics of secondary porosity, it's randomness and high variability, that means recharge rates can also be site-specific. There can be some analysis as to whether the aquifer receives recharge by looking at domestic wells and water levels over chronological time and geographically to see if the water levels follow a general precipitation patterns. However, per SDCL 46-1-6(17) because the Sioux Quartzite is older than the Greenhorn Formation, the balance between recharge and withdrawals need not be considered for this application.

Locally, the locations of fractures and water in storage and water availability is challenging. It's also challenging because of that, to know if the applicant will be able to obtain their requested amount of water from within the entirety of the proposed future use area because they might not be able to pump fast enough due to limited fractures. While there are high-capacity fractures and wells, particularly the spring in the east high wall of Spencer Quarry (Water Right No. 6070-3); these are atypical. Finding a fracture or fractures of sufficient size and transmissivity may limit the ability to fully develop the proposed volume for this future use application. Quarries, such as those permitted within the proposed future use area typically pump from the pit. A pit accumulates water from direct precipitation and multiple fractures which become exposed by the footprint of the pit. Quarries within the proposed future use boundary report pumping in excess of 2,500 ac-ft/yr on average. This is shown in Table 3 on page 7.

Consideration must be given to any well that may be placed in the floodplain or adjacent to the flood plain of the Big Sioux River if this future use application is approved and eventually developed. The portions of the proposed future use area and portions of the Sioux Quartzite that directly underlie or are adjacent to the fully appropriated Big Sioux: Sioux Falls aquifer. The Big Sioux: Sioux Falls aquifer has a number of future use permits reserving water with temporary use permits placing a portion of the reserved water to beneficial use. If the permit holders are approved to develop the requested amount, those temporary use permits would eventually be cancelled. Pumping from the Sioux Quartzite in close proximity to the aquifer may induce water to move from the Big Sioux: Sioux Falls aquifer into the Sioux Quartzite.

Inducement of recharge from a fully appropriated water source was considered by Water Rights Program staff for several applications proposing to withdraw water from the Niobrara aquifer in Spink and Beadle counties. It is not directly applicable to this specific situation, because even though there are fully appropriated aquifers; the Tulare: East James and Tulare: Western Spink Hitchcock aquifers, neither of the Tulare Aquifer management units have any future use permits reserving water. All of their volume is being put to beneficial use. In that area, the Niobrara aquifer can directly underlie the fully appropriated Tulare aquifers or can be separated by a layer of impermeable Pierre Shale.

Staff engineer Kim Drennon stated in deferred Permit Application No. 8749-3, "Consequently, pumping from the Niobrara aquifer may induce inflow from a fully appropriated management unit of the Tulare aquifer. Consequently, this may pose a beneficial use and public interest consideration for the Water Management Board which is beyond the technical review provided in this report. To aid in decision-making by the Board, the applicant should conduct an aquifer performance test monitoring both the Niobrara aquifer and the Tulare: Western Spink Hitchcock aquifer prior to approval of Water Permit Application Nos. 8749-3, 8750-3, 8751-3, and 8752-3 to determine whether pumping from the Niobrara aquifer under the local hydrogeologic conditions will induce inflow from the Tulare: Western Spink Hitchcock aquifer."

The Chief Engineer's recommendation for a number of the applications was deferral because it was not clear if there was a layer of Pierre Shale separating the Niobrara aquifer from the Tulare: Western Spink Hitchcock aquifer due to not having test hole or lithologic logs in close enough proximity or based on occurrence of aquifer materials maps or bedrock maps. The deferral was for up to two years to allow the applicants to potentially conduct an aquifer performance test to determine if pumping from the Niobrara aquifer would induce recharge from the fully appropriated aquifers.

It was decided that inducement of recharge into the Niobrara aquifer from a fully appropriated aquifer should be considered under the beneficial use and public interest criteria used for evaluating whether to approve a water permit application. The same would likely hold true in this scenario if this future use application were approved and then an application filed to place the future use reservation to beneficial use.

The importance here when water is placed to beneficial use is where the well is to be located. Not all of the proposed future use area is adjacent to or underlying the Big Sioux aquifer or the Big Sioux River floodplain. Another issue that may potentially limit the ability of the City of Dell Rapids is to obtain sufficiently high-capacity wells, because of where fractures are located and if

there are concerns about the location potentially limiting use. This potentially limits the ability to use the requested volume.

There are a number of wells within the future use boundary as shown in Figure 2 on page 13 of the report and listed in Table 7 on page 12. There are several water rights within the boundaries of the proposed future use area including the applicant's own water right maintained for standby purposes and the quarry water rights as previously discussed. The nearest domestic well on file with the Water Rights Program completed into the Sioux Quartzite is located approximately 1.7 miles west of the proposed future use area. The location of well completion reports is based on the location provided by the well driller when the completion report is submitted. Not all wells have a well completion report filed with the Water Rights Program. There may be other wells completed into the Sioux Quartzite in the area that are not on file with the Water Rights Program.

When an application is filed to place water to beneficial use that is reserved by this application, if approved, an evaluation of the potential for unlawful impairment will be conducted based on the specific proposed well location. Drawdown, nearby permits, and any domestic wells can be considered. The Sioux Quartzite in general behaves similarly to a confined aquifer.

In Minnehaha County, approximately 12.4 miles south of the proposed future use area, a complaint was filed in 2018 regarding well interference that occurred starting in the late 1980's and continued until 1998. The well belonged to the Soo Dell Park-A-Home, which held Water Right No. 5944-3, and was eventually hooked up to the City of Sioux Falls water system. The complaint stated that the construction and use of the City of Sioux Falls' Big Sioux: Sioux Falls aquifer wells were affecting the Sioux Quartzite wells authorized under Water Right No. 5944-3. The complaint was not filed with the Water Rights Program during the years of the alleged interference. The 2018 complaint was primarily regarding whether Water Right No. 5944-3 was unlawfully impaired during the 1990's and was eligible to receive more preferential water rates from the City of Sioux Falls.

Another complaint was filed in 2021 regarding possible well interference caused by pumping under Water Permit No. 8426-3. This site is located approximately 22 miles southwest of the proposed future use area. However, the complainant did not provide enough information regarding their own well to determine if there was any well interference or unlawful impairment of their well.

Mr. Mathiowetz had the following conclusions:

1. Application No. 8903-3 proposes to appropriate and reserve for future use 2,092 acre-feet of water annually (ac-ft/yr) from the Sioux Quartzite aquifer. The future use area is within the S ½ Section 9, S ½ Section 10, Sections 15 and 16, N ½ Section 21, and N ½ Section 22; all in T104N-R49W in Minnehaha County. The water is to be reserved as a future water supply for municipal use by the City of Dell Rapids. If approved, this application does not authorize construction of works or application of water to beneficial use. This future use area is located on the south side of Dell Rapids, SD.

2. The request to reserve 2,092 ac-ft/yr year is reasonable based on recent water requests and the city's current water rights.

3. Pursuant to SDCL 46-6-3.1 it is not necessary to determine if approval of this application will cause withdrawals to be in excess of average estimated annual recharge because the groundwater formation is older than the Greenhorn Formation and the applicant is a water distribution system pursuant to SDCL 46-1-6(17).

4. Review of the available hydrologic budget information indicates that recharge to the Sioux Quartzite is in excess of withdrawals on the regional scale and likely on the localized scale of the proposed future use area.

The Chief Engineer recommended approval of Application No. 8903-3 with the following qualifications:

1. Future Use Permit No. 8903-3 reserves 2,092 acre-feet of water annually from the Sioux Quartzite Aquifer.

2. Future Use Permit No. 8903-3 is approved with the stipulation that this Permit is subject to review by the Water Management Board as to accomplishment in developing reserved water upon expiration of seven (7) years. This Permit shall be subject to cancellation if the Water Management Board determines during the review that the holder cannot demonstrate a reasonable need for the Permit.

3. At such time as definite plans are made to construct works and put the water reserved by this permit to beneficial use, specific application for all or any part of the reserved water must be submitted prior to construction of facilities pursuant to SDCL 46-5-38.1.

The Chief Engineer also included the following note at the bottom of his written recommendation:

> NOTE: Any application to place water to beneficial use reserved by this Future Use Permit may be subject to the City of Dell Rapids retaining a hydrogeologist or other qualified consultant to conduct a suitable aquifer performance test with analysis to determine if pumping from the Sioux Quartzite Aquifer will induce recharge from nearby aquifers that may be hydrologically connected to the Sioux Quartzite Aquifer. Inducing inflow from a hydrologically connected aquifer presents beneficial use and public interest concerns for consideration by the Water Management Board.

Mr. Mathiowetz stated that currently there is no proposed well location; just the future use area. When the City of Dell Rapids applies for the beneficial use, the location of a proposed well, or multiple wells, will be part of the application. A determination as to whether it is likely to induce recharge will be made based on the proposed location of the proposed well(s). At that time, the Water Rights Program would determine whether an aquifer performance test is needed, and the Chief Engineer may recommend deferral until such time that the test is conducted, or the city may conduct the test ahead of time and provide it as part of the application. It would be evaluated by Water Rights staff to determine whether the test was valid and appropriately assessed and whether the assessment determines the potential for inducing recharge, particularly from the fully appropriated Big Sioux: Sioux Falls Aquifer.

The Water Rights Program received comments on this application from Scott Buss, MCWC; Chris Myers, City of Sioux Falls Water Purification Division; and Jay Gilbertson, East Dakota Water Development District.

MCWC's water appropriation concerns were the potential for detrimental effects on their existing permitted wells and the recharge of the Sioux Falls Management Unit of the Big Sioux Aquifer. MCWC wants to ensure it does not waive its ability to challenge any reservation or use, particularly given that the future use reservation is based on statements that lack foundation, as noted by MCWC, East Dakota Water Development District, and the City of Sioux Falls in their comments. MCWC may withdraw its petition, or agree to hold it in abeyance, pending a more thorough investigation if the Water Management Board defers action on the application.

The City of Sioux Falls' concerns included potential impacts to the fully appropriation Big Sioux: Sioux Falls Aquifer and the city's future use permits from that aquifer and that they intend to use as the city continues to grow. The city was concerned about inducement of flow and specified the potential for impact and stated other downstream public water systems who rely on the Big Sioux Aquifer as their water source. The city agreed to with the Chief Engineer's recommendation that the City of Dell Rapids is likely to hire a hydrogeologist to conduct an aquifer performance test to determine the potential for inducement.

East Dakota Water Development District reviewed the water availability and stated the assertion that long-term trends of water levels can be gleaned from existing information is not supported. Mr. Gilbertson requested that the Water Management Board defer action until a more thorough investigation of the hydrogeologic conditions can be conducted.

The petition submitted by MCWC echoes the comments submitted by MCWC. The petition specifically mentions their existing wells 1,300 feet west of the proposed future use area. They are concerned about recharge to the Big Sioux: Sioux Falls Aquifer and they believe insufficient evidence was presented.

Ms. Verleger stated that she needed to correct the record. Early in the hearing she referred to East Dakota Water Development as West Dakota Water Development.

In response to questions from Mr. Naasz, Mr. Mathiowetz stated that Water Permit No. 8894-3 has been approved for an appropriation from the Sioux Quartzite Aquifer. (Page 5 of the report.) Regarding the deferred permit applications discussed on page 11, the applications were for appropriative permits to place water to beneficial use for irrigation, they were not future use permits and not for water distribution system. For the permit applications that were deferred, the applicants are responsible for paying for an aquifer performance test. Mr. Mathiowetz recommended to the Chief Engineer that if the water would be placed to beneficial use, depending on the location of the well, that an aquifer performance test would likely be prudent or needed. Mr. Mathiowetz stated that because he is not within the administration of the program he does not know if the note at the bottom of the Chief Engineer's recommendations is always included for the potential need for an aquifer performance tests.

Ms. Moore said in his testimony Mr. Mathiowetz talked about the efforts he made to essentially evaluate the water level trends. She asked if it is fair to state that this is a unique area and that the amount of current information available to evaluate those trends is quite limited?

Mr. Mathiowetz answered that in terms of limited localized information, yes, in part because there are no observation wells in the future use area or nearby and limited domestic wells completed in the very immediate vicinity. Table 1 on page 5 of the report shows the static water level recorded by the well driller at the time of well completion.

Ms. Moore asked if it's true that there is not any information today that would be reflective of 2025 trends.

Mr. Mathiowetz answered that specific to 2025 no, but the Water Rights Program does have recent information by the virtue that quarries are operating and pumping water but nothing specific to water level trends

Ms. Moore said Mr. Mathiowetz talked about the Big Sioux Aquifer Sioux Falls and Moody units, and there is discussion in his report that with the unique porosity issues related to the Sioux Quartzite there would be a question as to whether that can even be considered.

Mr. Mathiowetz answered that phrase would probably not be accurate. It is the primary volume of the Sioux Quartzite because of its primarily cemented nature does not have primary porosity. The Sioux Quartzite, for the most part, especially where it is cemented by silica, which in the area of future use it is primarily cemented as secondary porosity through fractures.

Ms. Moore asked if it is a complicated area and is it somewhat complicated in determining whether it is a confined or unconfined aquifer area.

Mr. Mathiowetz answered that in terms of the specifics, yes. In terms of how it broadly behaves, no. The Water Rights Program has enough information over time from various wells and the reports and studies that have been done throughout the country and internationally of how crystalline type rocks behave when pumped. He said that is how he can state that broadly it is going to most generally act like a confined aquifer.

Ms. Moore asked whether the Sioux Quartzite is connected, in this particular case, to the Big Sioux Aquifer in Sioux Falls.

Mr. Mathiowetz answered that it is likely.

Ms. Moore if it is correct that to the extent that we aren't able to determine actual recharge levels today, we don't know whether recharge could be coming from that fully allocated Big Sioux Aquifer in Sioux Falls.

Mr. Mathiowetz answered that we do not know with absolute certainty.

Ms. Moore asked if it is fair to say that much of the analysis done by Mr. Mathiowetz related to the reasonable probability of unappropriated water is relying on that Greenhorn exception encompassed in South Dakota statute.

Mr. Mathiowetz said that is not a fair statement. He did not actually make an analysis of reasonable probability. He included an analysis of what is occurring. Because of, specifically that regulation in relation to the Sioux Quartzite being older than the Greenhorn Formation.

Ms. Moore asked if it is fair to state that in terms of not having to actually determine whether recharge would be sufficient to allow for future use, Mr. Mathiowetz is relying on the Greenhorn section now.

Mr. Mathiowetz said not entirely. The quarries continue to pump and dewater. That would likely be available for the city to capture because then they don't have to pump and saving a dollar is great for business, usually.

Ms. Moore asked if Mr. Mathiowetz is aware that some of the quarries get their water from MCWC for the purpose of watering efforts.

Mr. Mathiowetz said he is not aware of that.

Ms. Moore asked Mr. Mathiowetz if, in his tenure with DANR, he has ever recommended denial of a future use permit or deferral of a future use permit.

Mr. Mathiowetz answered that he, as the author of the report, has not. He does not recall whether the Chief Engineer, based on someone else's report, has.

Ms. Moore asked if Mr. Mathiowetz is able to envision a set of circumstances where he might recommend denial of a future use permit.

Mr. Mathiowetz said maybe, if the application is for water from a fully appropriated aquifer. For example, if the City of Sioux Falls submitted an application for another future use permit out of the Big Sioux: Sioux Falls aquifer that would be a denial recommendation because the aquifer is considered fully appropriated.

Ms. Moore asked Mr. Mathiowetz if it is fair to state future use permits are generally granted.

Mr. Mathiowetz answered they are generally recommended for approval.

Mr. Hutmacher asked if MCWC could also request a future use permit.

Mr. Mathiowetz answered that is correct.

Mr. Comes asked Mr. Mathiowetz if there have been any recommendations for a pump test on future use permits from any of his reports or by the Chief Engineer.

Mr. Mathiowetz answered that he has not recommended a pump test, but predating him, due to concerns from the US Forest Service or National Park Service for water levels in Wind Cave, the Southern Black Hills Water System application from the Madison Aquifer is in deferred status, but he does not believe a pump test was recommended just an analysis of the potential effects.

Mr. Naasz called Steve McFarland, Dell Rapids city administrator who was sworn by the court reporter.

In response to questions from Mr. Naasz, Mr. McFarland said he has been the city administrator since January 2024. The City of Dell Rapids uses approximately 240,000 gallons to 450,00 gallons a day. In the summertime, there is heavier use. In 2023 there were at least 30 instances that 500,000 to 650,000 gallons were used, and it peaked at 850,000 gallons in one day. The water is currently supplied by MCWC. The current limit on the water available through the MCWC through the existing contract is 1,000,000 gallons per day. Dell Rapids has never had any issues with MCWC's ability to supply the water. Dell Rapid did ask for some additional usage in 2024 and was told they were at their limit for providing more at that time.

Dell Rapids is located about 20 miles north of Sioux Falls, and as Sioux Falls grows, several of the towns around the area also grow. There have been steady increases in population recently. There is interest from industrial users to the west of the city requesting higher capacity of water usage, and the city will be looking for a place for a new industrial park area in the near future. The city is considering annexation of a development to the west. There is also new development to the north and west that will be annexed.

The city applied for the future use permit for future development for the next 30 years. It is important for the city to have flexibility regarding its water use in the future because Mr. McFarland believes there will be limited resources and increasing demand for water. Dell Rapids enjoys its relationship with MCWC, but they may be unable to provide additional capacity in the future.

Some of the city's previous water rights were transferred to MCWC, and it is possible that moving forward either this future use permit or appropriative rights for beneficial use would be dealt with in the same manner.

Mr. McFarland has read the note regarding an aquifer performance test on the Chief Engineer's recommendation for approval of the future use permit. The city would be happy to comply with any reasonable requirements of the Water Rights Program or Water Management Board at the time an application for a water permit is made.

In response to questions from Ms. Moore, Mr. McFarland stated that the City of Delly Rapids currently receives all of its drinking water from MCWC. The city is experiencing growth of approximately three percent a year. In addition to working with MCWC to increase the potential for water usage in the future, the city has also been in discussions with Shared Resources regarding providing water. The city also participates in Dakota Mainstem Board meetings on a regular basis. The city is willing provide for an aquifer performance test if necessary.

In response to a question from Mr. Comes, Mr. McFarland stated that it is his understanding that it could be 30-40 years before water would be available from Dakota Mainstem. He is not sure when water would be available from Shared Resources. Dell Rapids has had preliminary discussions regarding increasing its allocation with the joint venture between MCWC and Big Sioux Community Water System.

Mr. Naasz called Matt Oedekoven, DGR engineering, who was administered the oath by the court reporter.

Responding to questions from Mr. Naasz, Mr. Oedekoven stated that he is from Rock Rapids Iowa. He has a Bachelor of Science degree in civil and environmental engineering from South Dakota State University, a Master of Science degree in environmental science and engineering from Colorado School of Mines, and he is a professional engineer.

Exhibit 1 is Mr. Oedekoven's curriculum vitae.

Mr. Naasz offered Exhibit 1. The exhibit was admitted into the record.

Mr. Oedekoven assisted in preparing the City of Dell Rapids future use permit application. The city's current Water Right No. 562-3 is for 1,046 acre-feet per year, and the future use permit application requests twice that amount, 2,092 acre-feet per year, which matches the projected water needs. Mr. Oedekoven's understanding about the city's need for this future reservation is that they need the additional water capacity because there are times when they use 850,000 gallons per day and the current contract with MCWC is for 1,000,000 gallons per day. He believes it's good timing for the city to start planning for water for the future growth. The city is currently working through several options, including requesting more water from the current provider, continuing participation with Dakota Mainstem, and developing local groundwater.

Mr. Naasz provided Mr. Oedekoven with a map, which was part of Exhibit 101. Mr. Oedekoven stated that this is a map of the future use area for the City of Dell Rapids. He assisted in preparing the map. The map does not include future well locations because there is not a specific well site in mind at this time. The city intends to reserve this area as a future use area to begin the investigation part when it is needed. Mr. Oedekoven agrees with Mr. Mathiowetz's testimony regarding the water availability from the Sioux Quartzite Aquifer. It is important to note that while the Sioux Quartzite might be a hard rock aquifer and while it might be common that we see sand and gravels in alluvial aquifers in eastern South Dakota, hard rock aquifers are common for potable water supplies. Mr. Oedekoven is familiar with rock quarries in the area, and he agrees with Mr. Mathiowetz's testimony regarding dewatering activities in rock quarries. In his professional opinion, it is reasonably probable that water is available from the Sioux Quartzite Aquifer. The Greenhorn Formation is a shale formation that is used in South Dakota as a benchmark designating younger and older geologic formations. The Sioux Quartzite is older than Greenhorn Formation and is a specific exclusion for water distribution systems to be able to pump from those aquifers regardless of the water balance. The City of Dell Rapids is a water distribution system.

An aquifer performance test is a constant rate test where a test well is drilled along with observation wells or neighboring wells. A pump is set in the well, and the well is pumped for an extended period of time, maybe one to three days depending on data collected. The test shows an estimated of the aquifer characteristics and the extent of impacts to surrounding wells and aquifers. The appropriate time to conduct an aquifer performance test is when a well site is selected. At this time, the City of Dell Rapids is not ready to choose a well site. Particularly in case with the secondary porosity and fissures, a well test will only be relevant to that well. The investigation process for selecting a well site will likely be significant. Mr. Oedekoven explained

the process for locating a site for a well. Consideration of other existing wells and water rights will be a part of the process.

It is important for the city to have flexibility regarding available water resources moving into the future particularly because there are neighboring aquifers that are fully allocated, so it's important for the city to have a portfolio of water sources at their disposal. MCWC's response to the city's request to for an additional 1,500,000 gallons per day was that they would go up to an additional 1,000,000 gallons per day, but they would like the city's current water rights transferred to MCWC in order to get to the additional 500,000 gallons per day in order to meet the full request. Mr. McFarland previously suggested that the city would be open to that in the future. As these regional systems developed, it is also important for the city to have rights to its localized groundwater sources. Working with regional water systems also makes sense.

In response to questions from Ms. Moore, Mr. Oedekoven stated that he has been very involved in helping the city plan for future water. There is a significant cost associated with planning and developing a water source. There is also significant cost involved in doing an aquifer performance constant rate test. If after doing all the work, then do the initial drilling, and there is not adequate water available, the process would have to start over in a different area, but hopefully you would learn things along the way.

Ms. Moore asked if it is Mr. Oedekoven's opinion that there is no value in doing any of that testing at this time to better help the city plan for those future needs. Mr. Oedekoven said he believes you have to decide when to stop or when you've done enough, and they look at the various options they have. It is possible, as an example transferring those water rights to MCWC, that developing a well where it makes sense for the city would be different than developing a well where it makes sense for MCWC. In that case there would be no value in doing the testing.

Mr. Comes said he would like a frame of reference for the significant cost in larger scales. If the pump test is done, whether it's before the future use permit is granted or before an appropriative permit is issued, there would be cost. Assuming the test is done, and it is discovered that there is a hydraulic connection and it's not able to proceed, what are the costs for the work leading up to that.

Mr. Oedekoven said that is a hard question to answer because it's not just an engineering question. He believes land access and negotiations with landowners would dictate some of that cost. As an example, if the city started with some sort of ariel geophysical survey to do a broad area, that is going to cost approximately $50,000. Not all of that becomes valueless because that information you have is for a broad area. Other costs include options to purchase, testing, surveying, easements, drilling an observation well and testing. The testing and observation well will cost approximately $100,000.

Mr. Comes said in his testimony Mr. Oedekoven stated that he agreed that water is available. The report on the application states that there is an apparent hydraulic connection to the Big Sioux: Moody and the Big Sioux: Sioux Falls Aquifers. He asked Mr. Oedekoven if he were to confirm that there is no connection would water still be available, in his opinion.

Mr. Oedekoven answered yes. He believes Mr. Comes is asking if it his opinion that there is recharge not from connected aquifers into the Quartzite. Mr. Oedekoven said there is recharge to

the Sioux Quartzite other than through a connected aquifer rather than through a fully allocated aquifer. He said he would also point out the Greenhorn exclusion.

Ms. Moore called Scott Buss who was administered the oath by the court reporter.

In response to questions from Mr. Moore, Mr. Buss stated that he is employed by MCWC. He has a background in chemical engineering. He received a BS degree from South Dakota School of Mines in 1989. He has been with Minnehaha Community Water for 23 years. He is responsible for managing the construction and the office, working with the engineers on planning for future needs, looking for water, overseeing the treatment plant, and he is also a Board member of the Lewis and Clark Regional Water System and Dakota Mainstem Boards. MCWC is a non-profit corporation and serves water to the areas in Minnehaha County outside of the City of Sioux Falls and the City of Brandon. It currently serves Dell Rapids. The agreement started in 1989 with the addition to the treatment plant.

Ms. Moore asked Mr. Buss, in his tenure with MCWC, how the Dell Rapids allocation compares to other communities.

Mr. Buss answered that currently MCWC can supply up to 1,000,000 gallons per day to Dell Rapids. They are using 60 to 75 percent of that amount on a summer day. The City of Hartford has about the same water use but twice the water. Other smaller towns like Baltic and Crooks are closer to using up their total capacity.

Ms. Moore asked if Mr. Buss has personally been involved in discussions regarding Dell Rapids' future needs for water.

Mr. Buss said Dell Rapids has received repeated requests from the Governor's Office of Economic Development for the area at the interstate exit, which is currently MCWC's service territory but in the area that the City of Dell Rapids wants to move into, and MCWC and Dell Rapids worked out an agreement for them to do that. The amount of water the MCWC keeps getting requests for are in the 1,000,000, 1,500,000, and 2,000,000 gallons, and those are the discussions MCWC has had with the city where the MCWC has not been able to provide water because MCWC is out of water rights in the Big Sioux: Sioux Falls unit.

Ms. Moore asked Mr. Buss if he knows if Dell Rapids has made requests for water from other sources.

Mr. Buss answered that MCWC is also working together with Shared Resources. A comprehensive study was done of where water rights are available and found that the next group of water rights are up in Moody County, so MCWC is working with them. The total amount would be about 8,000,000 gallons and it would be divided; 3,000,000 for Big Sioux and 5,000,000 for MCWC, a future use permit was requested, and that basically fully allocated the Big Sioux: Moody unit, except for 500,000 gallons.

Ms. Moore asked why MCWC is involved in Shared Resources.

Mr. Buss said it is critical to MCWC to be involved in Shared Resources because MCWC serves all the rural residents and the towns, so MCWC is experiencing growth on its behalf as well as growth within the towns they serve.

Ms. Moore asked what the project cost is for Shared Resources.

Mr. Buss said the total cost of the project between the two groups is about $175,000,000, and that includes the treatment plant, two storage facilities, and lines to get that from the central location back into each system. The project is being paid for with an ARPA grant and through the rates for MCWC and Big Sioux Community Water.

Ms. Moore asked Mr. Buss if MCWC has applied for a future use permit.

Mr. Buss answered that MCWC has done that for all of its water rights in the Big Sioux: Sioux Falls unit. MCWC has also applied for future use permits for the Moody County unit in conjunction with Big Sioux. MCWC knows there are no more water rights in the Sioux Falls Management Unit because in the 1990's the Water Management Board decided that what was in the water budget would be divided between Sioux Falls and MCWC. This is the reason MCWC looked to Moody County for purposes of future water.

Ms. Moore asked Mr. Buss if he has reason to believe that, with his experience as an engineer and with MCWC, that there is not sufficient water in the Quartzite in this particular area for proposed use.

Mr. Buss answered there was testimony that there are no monitoring wells and no well logs. There was also testimony that there is water coming into the quarries, both east and west of the City of Dell Rapids, and that was provided in the report on page 7. MCWC is currently providing all the wash water, except for the rain water that falls into that quarry, to the west quarry and that amount has been 11,000,000 to 12,000,000 gallons in the last two years. This is significant because it speaks against a lot of water running from the cracks and fissures in the Sioux Quartzite into the quarry.

Ms. Moore asked if Mr. Buss supports Dell Rapids' application.

Mr. Buss said MCWC feels that more information needs to be studied to see how it impacts the two local glacial aquifers and where the water is coming from, so MCWC does not support the future use permit application in its current form. MCWC would have the same opinion regardless of the identity of the applicant if the application was for this particular area.

In response to a question from Ms. Moore, Mr. Buss stated that identifying sources of water, working with communities, and managing competing interests between existing communities, businesses, and domestic resources has become more difficult in the last decade. MCWC knows that its allocation of Lewis and Clark water and MCWC's water rights in the Big Sioux: Sioux Falls Management Unit are used up. MCWC knows that there is only water available in the Moody County unit to get 5,000,000 gallons per day, and when MCWC looked at how much water they are currently sending to rural customers versus the cities, of that 5,000,000 gallons approximately 30 percent of the water currently goes to the cities. The big thing is MCWC does not know where the growth is going to be or how much it's going to be. MCWC has had to play

defense on some of the requests they have received. MCWC has received requests from a cheese plant, ethanol plants, hog processing plants, the new prison, and MCWC has reluctantly had to tell them they don't have the water rights to serve them. There will be some limited availability when Shared Resources plant is done in approximately two to two and a half years.

Ms. Moore asked how MCWC prioritizes the requests for water that are made.

Mr. Buss answered that for large customers that request water, MCWC has to tell them they are not able to provide water. There will probably only be 1,500,000 gallons of the water from Shared Resources that will be available to the towns based on the current percentages.

Ms. Moore asked what the harm is of granting a future use permit in this area if essentially there are conditions placed on it that will later allow for a determination of available water and use.

Mr. Buss said an example is the Governor's Office of Economic Development wanting to develop on the interstate exit to Dell Rapids. One of the risks is Dell Rapids saying they have future use rights, but don't know enough about them, then that gets used as a carrot to bring economic development to the area without knowing if water is available in the future use area.

Ms. Moore asked if Mr. Buss believes granting a future use permit in this particular area, given some of his concerns, is consistent with how water was allocated for Minnehaha County and Sioux Falls in the 1990s.

Mr. Buss said he believes it is consistent, but the big concern is if it's pulling from the Big Sioux River. Approximately half of the recharge for the Big Sioux Aquifer comes from rainfall and half of it comes from the river. If we mis-guess on whether there's a link between the river and the Sioux Quartzite it has the possibility of running the City of Sioux Falls out of recharge, which then affects MCWC's ability to use the water rights they currently have. Typically, when MCWC has done its own future use rights, there's a water budget. Because of the Greenhorn regulation there doesn't have to be a water budget. We don't really know how much water is there. We know that the rock is not porous so it's not a big pool of water. There is a greater risk because of that. This is in the area that MCWC and the City of Sioux Falls use and may affect recharge. MCWC doesn't have concerns about other aquifer areas. MCWC and the City of Sioux Falls talked with the dairy that is two miles south and east of Baltic. They were looking for the Big Sioux Aquifer water, and the City of Sioux helped them find water further east, which is outside the Big Sioux Aquifer.

Mr. Buss requested that the Board defer approval of the future use permit for the City of Dell Rapids until more information is available. Mr. Buss believes there is value in doing the aquifer performance test now. This is a high-risk area MCWC needs to know what's there and if a wrong guess is made it affects the ability to serve a quarter of the residences of South Dakota.

In response to a question from Ms. Verleger regarding Table 3 on page 7 of the report, Mr. Buss stated that the permit numbers in the middle column match up with the map on page 13 of the report. Those numbers match up with the west quarry and were used for pumping out water that infiltrated the quarry as precipitation. Mr. Buss believes what they are reporting is in addition to the amount of water MCWC supplies for the rack washing.

In response to questions from Mr. Naasz regarding Table 3 on page 7, Mr. Buss said 11,000,000 to 12,000,000 gallons of water is approximately 36 acre-feet over two years. The amounts of dewatering from the quarry are in excess of 36 acre-feet. The water is coming from MCWC and precipitation.

Mr. Naasz said in his testimony Mr. Buss stated that Dell Rapids had requested water and MCWC didn't have enough to fully satisfy the request. He asked if it is correct that historically, the City of Dell Rapids has provided portions of its water rights to MCWC. Mr. Buss stated that was done for the building of the treatment plant.

Mr. Naasz asked if that same scenario could take place with water rights associated with this future use permit. Mr. Buss answered yes.

In response to a question from Mr. Naasz regarding his testimony about a dairy, Mr. Buss stated that the permit application submitted by the dairy he talked about earlier in his testimony was not deferred. The entire Sioux Falls Management Unit is fully allocated, so the City of Sioux Falls worked with the dairy to help find water further east to the Pipestone or Split Rock Creek area. The dairy, as a private entity, couldn't apply for a future use permit like the City of Dell Rapid.

Mr. Naasz asked if the large economic development project that wants to locate near Dell Rapids in the future can apply for a future use permit as a private entity. Mr. Buss answered no.

Mr. Naasz asked, if in a situation like that with future use permits provided to the City of Dell Rapids, could the city shift the cost of the necessary aquifer performance tests to that applicant to demonstrate the lack of connectivity, the lack of impairment, the availability of water. Mr. Buss answered yes.

Mr. Naasz asked if Mr. Buss understands that this is a future use permit that the City of Dell Rapids has applied for, in order to put any of this water to beneficial use, the city would need to file an application with the Water Rights Program in the same process as any other beneficial use permits would, and if MCWC, the City of Sioux Falls, or whomever, had an issue with the information provided in connection with the application, they could intervene in that application and ask that the application be deferred until such time as additional information is provided. Mr. Buss said he understands that.

Ms. Moore said Mr. Naasz asked Mr. Buss questions about potential private entities approaching Dell Rapids about using its water. She asked if it is fair to say that regardless of whether Dell Rapids or the private entity pays for the testing, the testing needs to be done to determine whether there is sufficient water available to meet the needs. Mr. Buss answered yes.

Mr. Naasz asked why MCWC hasn't put its future use permits to beneficial use. Mr. Buss answered that MCWC has approximately 1.15 acre-feet of future use permit and they know that is not enough to be able to fully build a new treatment plant and it's not enough for the 20-year growth.

Mr. Hutmacher asked if MCWC has approached the City of Dell Rapids about a joint effort since Dell Rapids and MCWC both have a vested interest in this aquifer. Mr. Buss said MCWC has

been talking to the City of Dell Rapids for multiple years about running a line and allocating some water from the Shared Resources plant to the city. MCWC does not believe water is available in the Sioux Quartzite, which is one of the reasons MCWC hasn't applied for future use. MCWC's concern is that there is a link between the Big Sioux unit and the Quartzite that goes under it, and all the recharge is going to come from the river. MCWC is requesting deferral of the application so Dell Rapids can do the aquifer test.

This concluded testimony.

The parties offered closing statements.

Motion by Freeman, seconded by Hutmacher, to approve Future Use Water Permit Application No. 8903-3, City of Dell Rapids subject to the qualifications set forth by the Chief Engineer.

Board discussion took place.

A roll call vote was taken, and the motion carried with Comes, Dixon, Freeman, Hepler, Hutmacher, and Larson voting aye. Holzbauer did not vote.

The parties waived Findings of Fact and Conclusions of Law.

ADJOURN: Motion by Hutmacher, seconded by Hepler, to adjourn. Motion carried unanimously.

A court reporter was present, and a transcript of the proceedings may be obtained by contacting Carla Bachand, Capital Reporting Services, PO Box 903, Pierre SD 57501, telephone number (605) 222-4235.

An audio recording of the meeting is available on the South Dakota Boards and Commissions Portal at https://boardsandcommissions.sd.gov/Meetings.aspx?BoardID=106.

Approved October 1, 2025.

Rodney Freeman, Jr
Rodney Freeman, Jr (Oct 1, 2025 16:05:20 CDT)

Water Management Board

WATER MANAGEMENT BOARD MEETING
July 9, 2025

Qualifications:
wi - well interference
wcr -well construction rules
iq - irrigation questionnaire
lf - low flow

Unopposed New Water Permit Applications Issued Based on the Chief Engineer Recommendations

No.	Name	Address	County	Amount	Use	Source	Qualifications
1876A-3	Glendale Hutterian Brethren	Frankfort	SP	No Add'l	IRR (272 acres)	1 well – Tulare: East James	wi, wcr, iq
2043-1	Leon Minor	Nisland	BU	No Add'l	IRR (110 acres)	Belle Fourche	lf, iq
2044-1	H20 Clear Solutions, LLC.	Flower Mound	TX	270 AF	WDS/COM	1 well – Madison	wi, wcr, 3 special
2886-2	Angostura Resort, LLC.	Rapid City	FR	149 AF	COM	3 wells – Madison	wi, wcr, 3 special
2887-2	Vintage Square Estates	Ft. Pierre	ST	0.78 cfs	IRR (30 acres)	1 well – Quaternary aged Alluvium	wi, wcr, iq, 1 special
3748A-3	Glendale Hutterian Brethren	Frankfort	SP	No Add'l	IRR (102 acres)	1 well – Tulare: East James	wi, iq
5601A-3	Matthew Van Buskirk	Hitchcock	BD	No Add'l	IRR (5 acres)	1 well – Tulare: Western Spink Hitchcock	wi, iq
5689A-3	Big Sioux Community Water System	Egan	LK	360 AF	RWS	1 well – Big Sioux: Northern Skunk Creek	wi, wcr, 2 special
8919-3	Tom Nuhsbaumer	Zell	HD	2.28 cfs	IRR (190.5 acres)	4 wells – Quaternary aged Alluvium	wi, wcr, iq
8922-3	Joint Well Field, Inc.	Toronto	BG	1500 AF	RWS	3 wells – Big Sioux: Brookings	wi, wcr, 2 special
8923-3	Jon Bunkers	Chester	LK	No Add'l	IRR (80 acres)	2 wells – Big Sioux: Northern Skunk Creek	wi, iq, 1 special
8925-3	Double Down Farm	Sarasota	CL	2.35 cfs	IRR (165 acres)	1 well – Missouri: Elk Point	wi, iq
8926-3	Timothy Sorensen	Vermillion	CL	2.11 cfs	IRR (80 acres)	1 well – Missouri: Elk Point	wi, wcr, iq, 1 special
8927-3	Justin Thompson	Beresford	LN	1.56 cfs	IRR (80 acres)	2 wells – Brule Creek	wi, iq, 1 special
8928-3	Promises Kept	Sioux Falls	HM	1.97 cfs	IRR (240 acres)	1 well – Prairie Coteau	wi, iq, 1 special
8929-3	Olsen Family Farm	Beresford	UN	1.78 cfs	IRR (185 acres)	1 well – Brule Creek	wi, wcr, iq
8932-3	Nicholas Blake	Centerville	TU	1.78 cfs	IRR (120 acres)	1 well – Parker Centerville	wi, wcr, iq, 1 special
8933-3	Nicholas Blake	Centerville	LN	1.78 cfs	IRR (120 acres)	1 well – Upper Vermillion Missouri: South	wi, wcr, iq, 1 special
8934-3	Bluegill Inc.	Brookings	BG	0.10 cfs	COM	1 well – Big Sioux: Aurora	wi, wcr, 2 special
8935-3	Richard Hybertson	Beresford	TU	1.78 cfs	IRR (140 acres)	1 well – Upper Vermillion Missouri: South	wi, wcr, iq
8936-3	Nicholas Hybertson	Centerville	TU	1.34 cfs	IRR (45 acres)	1 well – Upper Vermillion Missouri: South	wi, wcr, iq, 1 special
8937-3	Thomas Wheeler	Raymond	CK	No Add'l	IRR (40 acres)	1 well – Altamont	wi, iq

8938-3	Alex & Ann Faulk	Aberdeen	HU	8.02 cfs	IRR (640 acres)	Missouri River	iq, 1 special
8939-3	Brandon Ritter	Mound City	CA	1.78 cfs	IRR (280 acres)	1 well – Grand	wi, wcr, iq
8940-3	Brandon Ritter	Mound City	CA	1.78 cfs	IRR (280 acres)	1 well – Grand	wi, wcr, iq
8941-3	Gary Jepsen	Gayville	YA	1.78 cfs	IRR (160 acres)	1 well – Missouri: Elk Point	wi, wcr, iq
8942-3	Plainview Dairy, LLC.	Toronto	DU	100 AF	COM	Peg Munky Run	lf, 5 special
8945-3	James Minor	Brookings	BG	No Add'l	IRR (80 acres)	1 well -Big Sioux: Brookings	wi, wcr, iq