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IN THE WATER COURT OF THE STATE OF MONTANA
UPPER MISSOURI DIVISION
SUN RIVER (41K)

* *

CLAYTON PERRY, TERRI PERRY, WILLIAM SPECK, JR., Petitioners, vs. MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION, An Agency of the State of Montana, Respondent, POWER-TETON WATER & SEWER DISTRICT, Applicant.	**WC-MAPA-2025-____** 41K 30150582 Petition for Review Application for Beneficial Water Use Permit No. 41K 30150582

COMES NOW, Petitioners Clayton Perry, Terri Perry, and William Speck, Jr., by and through counsel, submits this Petition for Judicial Review pursuant to the Montana Administrative Procedure Act (MAPA), Mont. Code Ann. §§ 2-4-701 through 2-4-704.

PARTIES

1. Petitioners Clayton Perry, Terri Perry, and William Speck, Jr. own nearby wells and water rights that will be negatively affected by the permit.

2. DNRC is the administrative agency that issued the Permit.

3. Power-Teton Water & Sewer District is the Applicant for the Permit.

JURISDICTION AND VENUE

DNRC issued its Final Order in the contested case regarding Application No. 41K-30150582 on October 21, 2025.

This Petition is timely filed within thirty days after service of the Final Order (Exhibit A), as required by § 2-4-702(2)(a), MCA. The matter is properly before the Montana Water Court pursuant to § 2-4-702(2)(e)(i), MCA, which provides that petitions for judicial review of DNRC water right permit and change decisions arising under Title 85, chapter 2, MCA, may be filed directly in the Water Court.

Petitioner objected to the Application and participated in the DNRC contested case hearing (Exhibit B). Petitioners' substantial rights are prejudiced by DNRC's decision because the permit was granted despite material noncompliance with governing statutes and rules under the Montana Water Use Act (MWUA), including §§ 85-2-301 through 85-2-314, MCA.

STANDARD OF REVIEW

Under § 2-4-704(2), MCA, the Court should reverse or remand because the Final Order is:

(a) the administrative findings, inferences, conclusions, or decisions are:

(i) in violation of constitutional or statutory provisions;

(ii) in excess of the statutory authority of the agency;

(iii) made upon unlawful procedure;

(iv) affected by other error of law;

(v) clearly erroneous in view of the reliable, probative, and substantial evidence on the whole record;

(vi) arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion; or

(b) findings of fact, upon issues essential to the decision, were not made although requested.

LEGAL ERROR

Petitioners are aggrieved by the Final Order because DNRC committed legal error, acted outside its statutory authority, and made findings not supported by substantial, reliable evidence as required by § 2-4-704(2), MCA. These errors include, but are not limited to:

a. DNRC approved the Application without requiring a complete 72-hour aquifer test as mandated by Admin. R. M. 36.12.1702 and DNRC's own permitting manual.

b. DNRC approved the Application based on depletion, drawdown, and capture calculations that relied on incorrect well-construction assumptions, including use of a 21-foot saturated thickness rather than the actual 15-foot producing interval.

c. DNRC granted a variance from mandatory testing requirements without written findings demonstrating compliance with Admin. R. M. 36.12.121 and without requiring substitute data of equivalent reliability.

d. DNRC accepted modeling and conclusions that did not meet the minimum standards of reasonable reliance under the MWUA and MAPA and failed to ensure that the record contained sufficient evidence to support a finding of no adverse effect and compliance with the statutory criteria.

DEMAND FOR RELIEF

WHEREFORE, Petitioner respectfully requests that the Court grant this Petition for Judicial Review and set a filing schedule as it deems appropriate.

Petitioner further requests that this Court:

a. accept jurisdiction;

b. review the administrative record;

c. reverse DNRC's Final Order; or

d. alternatively, remand the matter to DNRC with instructions to require a complete and legally compliant aquifer test, accurate modeling, and findings consistent with statutory and regulatory requirements.

DATED this 20th day of November, 2025.

JARDINE, STEPHENSON, BLEWETT & WEAVER P.C.

/S/ Julia Nordlund
Julia J. Nordlund
Attorneys for Petitioners

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the foregoing was served upon all parties listed below on this 20th day of November, 2025 by first class United States mail and/or by electronic mail (e-mail).

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EXHIBIT A

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BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

* * * * * * * * *

IN THE MATTER OF APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 41K-30150582 BY POWER-TETON COUNTY WATER & SEWER DISTRICT	))))	**FINAL ORDER**

* * * * * * * * *

On June 17, 2025, I conducted a hearing on the objection filed against the Department of Natural Resources and Conservation's ("DNRC" or "Department") Preliminary Determination to Grant ("PDG") in the above-captioned application. For the reasons set forth below, I hereby find that, notwithstanding the objections filed by Objectors William O. Speck, Jr. and Clayton and Terri Perry ("Objectors"), Power-Teton County Water & Sewer District's ("Applicant") has established by a preponderance of the evidence that the application satisfies the statutory criteria to be granted a permit.

BACKGROUND AND PROCEDURAL HISTORY

On October 4, 2023, DNRC issued the PDG regarding Application for Beneficial Water Use Permit No. 41K 30150582 ("Application") filed by Applicant. The Application seeks a new water use permit to supply water to the Power-Teton County Water and Sewer District for anticipated population growth in the future. On October 26, 2023, DNRC publicly noticed the PDG pursuant to § 85-2-307, MCA, and objections were timely filed to the Application contesting various criteria set forth in § 85-2-311, MCA, that Applicant must satisfy to be entitled to its permit. After reviewing the objections, DNRC determined that three Objectors[1] filed valid objections

1. VM Land Cattle Development Inc. submitted an objection on 12/12/2023, which the Department validated on 1/11/2024. I dismissed this objection on January 3, 2025, due to default as specified in my Order dated August 29, 2024.

contesting the criteria of adequate diversion, adverse effect, legal availability, and physical availability.

On January 19, 2024, DNRC assigned me to be the Hearing Examiner presiding over this contested case. I conducted a pre-hearing conference on January 30, 2024, after which I set a series of discovery and pre-hearings motions deadlines. Consistent with this schedule (as subsequently modified by request of the parties), the parties filed and fully briefed cross-motions for summary judgment, which I decided on May 9, 2025. In my Order of that date, I denied both Parties' motions for summary judgment. The matter eventually proceeded to a hearing in Great Falls, Montana on June 17, 2025. Upon the close of the hearing, I set a deadline of July 3, 2025, for the Parties to file closing briefs. Applicant and Objectors both timely filed closing briefs in this matter. I deemed the record closed on July 3, 2025.

APPEARANCES AND WITNESSES

At the hearing on June 17, 2025, Applicant was represented by counsel Betsy R. Story, and Objectors were represented by counsel Amber Henning. The following witnesses were called to testify at the hearing: Objector Clayton Perry; Objector William Speck, Jr.; Matt Miles, DNRC Havre Regional Manager; Evan Norman, DNRC Hydrologist and assigned Staff Expert; Nicole Rediske, Consultant; and Peter Klevberg, Consultant.

EXHIBITS

This Order cites the administrative record (AR) as it is scanned and filed by DNRC with a date of January 18, 2024. The initial citations of any document in the AR cite the name of the document then the pdf page number of the AR. Subsequent references refer to the document by name and internal page numbering only. Thus "Document title, AR at page #" followed by subsequent refences as "Document title at page #". The audio recording of the hearing is referred to as "HR" to signify "hearing recording" and noting the minute and second of the track at which the relevant evidence is presented.

In addition to the AR, and the audio recordings of the hearing, the record in this case includes the following exhibits offered by Applicant and Objectors that I admitted at the hearing:

Applicant:

1) P-025: Objectors' Responses to Discovery, September 20, 2024.

2) P-031: 41K-30127993 Post Decree Abstract (Perry Surface Right).

3) P-035: Nicole Rediske Pre-Filed Direct Expert Testimony.

4) P-036: Peter Klevberg Pre-Filed Direct Expert Testimony.

5) P-043: Matt Miles Deposition Transcript (Mini).

6) P-050: Fall 2023 Test – October 22, 2023 TD&H Memo re: Pump Tests (Excerpts).

Objectors:

1) O-E: M. Miles Exhibit 5_Email Correspondence Re: Town of Power Variances (05-26-2022).

2) O-L: Points of Diversion Map.

The pre-filed expert testimony consists of numbered questions and answers similar to an interrogatory. The pre-filed testimony is cited as [Witness name] pre-filed testimony [answer #].

MOTION TO STRIKE THE PREFILED TESTIMONY OF ALAN FROHBERG

Objectors pre-filed the expert testimony of Alan T. Frohberg on November 8, 2024. Mr. Frohberg was unable to attend the scheduled June 17, 2025 hearing and thus Applicant could not cross-examine him at the hearing. At the conclusion of the hearing Applicant moved to strike Mr. Frohberg's testimony based on Applicant's inability to cross-examine him.

I held a final pre-hearing conference with both Applicant and Objectors on May 21, 2025. The Objectors agreed to the hearing date. Applicant did not learn of Mr. Frohberg's planned absence from the hearing until June 9, 2025, eight days before the hearing. (Applicant's Post-Trial Brief at 3). Objectors did not seek to continue the hearing or propose to hold the record open for the purpose of permitting Mr. Frohberg to be cross-examined. The Applicant did not introduce Mr. Froberg's pre-filed testimony, and no other witness referenced Mr. Frohberg's pre-filed testimony.

ARM 36.12.220 requires that witnesses who submit pre-filed direct expert testimony be available for cross-examination at the hearing. (ARM. 36.12.220). I find that consideration of Mr. Frohberg's pre-filed testimony would violate the plain language of ARM 36.12.220, and accordingly I GRANT Applicant's motion to strike.

LEGAL STANDARD

Under Montana law, an applicant for a new beneficial water use permit always retains the burden of proof to demonstrate by a preponderance of evidence that the applicable criteria of § 85-2-311(1), MCA, are satisfied before DNRC may issue the permit. *Bostwick Properties v. DNRC*, 2013 MT 48, ¶ 18, 369 Mont. 150, 296 P.3d 1154 (2013). The Montana Supreme Court has defined the preponderance of the evidence standard as one that "requires proof sufficient to support a conclusion that the asserted existence, non-existence, occurrence, or non-occurrence of the subject fact or factual occurrence was, is, or will be more probable than not, i.e., more likely than not." *Breuer v. State*, 2023 MT 242, ¶ 19 at n. 14, 414 Mont. 256, 274, 539 P.3d 1147, 1160 (2023). This a "relatively modest standard" that requires a showing only that it is "more probable than not" that the statutory criteria have been met. *Hohenlohe v. DNRC*, 2010 MT 203, ¶ 33, 357 Mont. 438, 240 P.3d 628.

In this case under the criteria from Section 85-2-311(1)(a)-(e), MCA, Applicant must prove that:

1) water is physically available at the proposed point of diversion in the amount that Applicant seeks to appropriate;
2) water can reasonably be considered legally available during the period in which Applicant seeks to appropriate, in the amount requested;
3) the water rights of a prior appropriator will not be adversely affected by the proposed new use;
4) the proposed means of diversion, construction, and operation of the appropriation works are adequate;
5) the proposed use of water is a beneficial use; and
6) Applicant has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use.

Pursuant to § 85-2-307(2)(a)(ii), MCA, DNRC's PDG reflects DNRC's preliminary determination that Applicant has proven these six criteria by the requisite standard in connection with the Application[2]. This hearing provides an opportunity for the Objectors to provide argument and evidence that Applicant did not meet this standard and for Applicant to counter that argument and evidence.

2. A permit applicant need only prove that the criteria of § 85-2-311(1)(f)-(h), MCA, are satisfied if a valid objection raising those grounds is filed. Section 85-2-311(2), MCA. No valid objection was received contesting the water quality criteria; therefore, it is not at issue in this proceeding.

UNCONTESTED CRITERIA

Because no valid objections were filed challenging beneficial use or Applicant's possessory interest, and because there is no evidence in the record that would cause me to revisit DNRC's findings and conclusions in the PDG as to those two criteria, I find that Applicant has met its burden of proof in regard to those two criteria for the reasons set forth in the PDG. (PDG, ¶¶ 88-95).

THE CONTESTED CRITERIA

The remaining criteria that Applicant must satisfy under § 85-2-311(1), MCA, are contested. The criteria of legal availability, physical availability, and adequacy of diversion are all dependent on the information from the pump tests conducted by the Applicant. The criterion of adverse effect is not.

The method and duration of pump tests is dictated by the requirements in ARM 36.12.121(2018). There are two types of pump tests that the Applicant performs to satisfy the rule and the statutory criteria. Legal and physical availability and adverse effect are predicated in part on the results of the 28-hour well tests performed in accordance with ARM 36.12.121 (2018). In this case the 28-hour well tests were performed on small vertical wells drilled for this purpose. (Power Water System Improvements - Phase 4 Water Rights Application Part 1 of 2 AR at 51). The data from these well tests are analyzed in conjunction with published information on the area's hydrography and geology to produce the Aquifer Test Report (Aquifer Test Report, AR at 273). The Aquifer Test Report describes the area and makes predictions about the aquifer's ability to produce the amount of water physically requested. It also identifies a "zone of influence" and identifies other groundwater rights in that area which may be affected by the proposed appropriation. The Department also produced a Revised Groundwater Depletion and Mitigation Report (Revised Groundwater Depletion and Mitigation Report AR at 285) which identifies potentially affected surface waters and predicts the effect of the proposed appropriation.

The adequacy of diversion criterion is dependent on the second type of well test, the drawdown and yield test required by ARM 36.12.1703 (2012). This test determines whether the proposed diversion works can actually divert the requested amount of water. This test is completed on the actual production well, in this case a 500-foot-long horizontal buried perforated pipe. The results of this test are not analyzed but are a simple pass/ fail determination. The two tests may be completed at the same time using the same data or may be completed separately.

An applicant may also request a variance from the aquifer testing requirements as described in ARM 36.12.121 (2018).

The remaining criteria, adverse effect, is proven by the applicant by evaluating the predicted drawdown to other water rights within the zone of influence as identified in the Aquifer Test Report, and evaluating the impact to other surface water rights identified as affected in the Mitigation and Depletion Report.

SUMMARY OF OBJECTORS' ARGUMENTS

For the sake of clarity, this Order will summarize issues presented in this matter before presenting findings of fact and conclusions of law.

Objectors Clayton and Terri Perry and William O. Speck, Jr. had one attorney and combined their cases and arguments. Their position is referred to as Objectors' case in the remainder of this Order.

Objectors argue that the aquifer testing data Applicant provided, and the manner in which it was collected, does not satisfy the requirements described in ARM 36.12.121. The Objectors further argue that the Applicant cannot prove satisfaction of the physical availability and adverse effect criteria by a preponderance of evidence. Because these arguments are mixed questions of law and fact and not distinct to any specific water permit criteria this Order is organized by the § 85-2-311, MCA, criteria.

Timetable of Application and Testing

Applicant filed an application for a permit for the proposed appropriation on December 23, 2020. (AR at 40). Based on the permit application, the Applicant had identified how and where it sought to appropriate water but had done only a preliminary investigation to determine the feasibility of the proposed appropriation. (AR at 53). Applicant drilled four smaller wells for testing and monitoring and began preliminary testing (AR at 172). The Applicant shared this data from the initial test wells and initial pump test with the DNRC. (AR at 113). Using this information combined with other published groundwater information, hydrologist Evan Norman prepared an Aquifer Test Report, identifying the physical and hydrogeologic characteristics of the aquifer and predicting the impact of the proposed appropriation on nearby groundwater rights, and the Depletion and Mitigation Report which predicted the impact of the proposed appropriation on nearby surface water sources. (AR at 273, 285).

The Applicant then constructed a horizontal well (essentially a 500' long perforated pipe buried horizontally) and conducted drawdown and yield tests to satisfy ARM 36.12.1703 (2012) in a final test in July 2024. The Applicant's materials refer to this as the "test well" while DNRC rules would refer to it as a "production well" because it is the specific well structure which will eventually be used in the proposed appropriation. This Order refers to it as the "production well".

Applicant's consultant TD&H performed the actual pump tests and Consultant Klevberg described the testing at the hearing. (HR #09 at 13:00). The three pump tests of the production well are described in detail in the TD&H Memorandum, dated 10/22/23. (Exhibit P-050).

Ms. Rediske and Mr. Klevberg's pre-filed testimony further described the pumping of the test wells. (Rediske pre-filed testimony#4, Klevberg pre-filed testimony #5).

Testimony of Clayton Perry

Objector Clayton Perry, a retired engineer, lives adjacent to the wellsite and worked for Boland Construction who constructed the production well in 2023. Perry testified that the construction crew expected to dig 26' deep but "hit hardpan at half that". (HR #03 at 4:45). Perry testified that the test well only produced 20 gallons per minute, but the Applicant had requested 170 gallons per minute. (HR #03 at 6:17). Perry also testified that he felt the discharge pipe from the well test went back into the unnamed tributary of Muddy Creek. Perry testified that he felt this improperly affected water levels in the unnamed tributary and improperly affected the well test results. (HR #03 at 8:33).

Testimony of Matt Miles

Matt Miles, Regional Manager at the DNRC Havre Regional Office, oversaw the Applicant's application and wrote the Preliminary Determination to Grant (PDG). (HR #5 at 1:20). Miles testified that he could not find any written correspondence requesting a variance from the aquifer testing requirements, but he did remember receiving a verbal request. (HR #5 at 2:10). Miles explained that he does not generally grant variances without consulting the Water Sciences Bureau or groundwater hydrologist, and that in this case after consulting with them "they had sufficient information to complete their assessment." (HR #5 at 4:48). Miles testified that he was the individual responsible for receiving a request for a variance and issuing the variance and that the fact that there wasn't a formal written request or grant did not change the issuance of the PDG. (HR #5 at 13:36, 16:33).

In addition, Miles explained that the DNRC doesn't specifically note or differentiate between proposed appropriations that occur within or outside of an irrigation district. However, it is "pretty well known that there are considerable flows that do come off the district notably during irrigation season into the Muddy Creek drainage." (HR #05 at 10:22).

Testimony of Evan Norman

Evan Norman is a groundwater hydrologist for DNRC who prepared the Aquifer Test Report and the Mitigation and Depletion Report for the technical analysis that DNRC used in formulating the PDG. Norman also authored a Staff Expert Report dated January 24, 2025. Norman testified that though he now (at the time of the hearing) had information that the production well was 15 feet below the ground surface, "the analysis of the report was based off the design of the well and the operation and construction of the proposed well, and at the time of this report 21 feet was what I was receiving with the permit and that's how I analyzed my aquifer test report." (HR #06 at 3:21).

Norman testified that he did not issue the variance but evaluated the adequacy of the information provided and recommended that the variance be issued. (HR #06 at 12:41). Norman recommended the variance be issued because the information submitted was adequate for his technical analysis. (HR #06 at 9:16). Norman reviewed the data already collected and believed that it was adequate to analyze the DNRC criteria and to create those aquifer properties for the technical analysis. (HR #06 at 13:41).

Under questioning and cross-examination, Norman explained the aquifer boundaries. (HR #06 at 15:52). Norman noted that he had chosen to extend the zone of potential influence beyond the aquifer boundaries as a conservative measure, including in his analysis of influence a greater area (and thus more potentially affected water rights). (HR #06 at 15:52, 20:12, 21:45). Norman used the aquifer test data to model the aquifer using the Cooper-Jacobs model. (HR #06 at 29:30, 30:19; AR at 276). Among the assumptions of the Cooper-Jacobs solution are that the aquifer is unconfined, has an infinite extent, and is homogeneous and of uniform thickness. (Aquifer Test Report at 5). Norman explained that when looking at the test well data there was no information that informed him that these conditions did not exist. (HR #06 at 31:07, 31:52). Norman testified that he did know that the test wells had hit bedrock which would counter the assumptions of the model. (HR #06 at 33:13). He explained that in nature aquifers are never going to fit every assumption and that the model are "textbook examples". (HR #06 at 33:45).

Upon cross-examination Norman clarified that his modelling of aquifer properties was based on the data derived from the 28-hour test (the first pump test) and also published scientific references and data as noted in his Aquifer Test Report. (HR #06 at 39:44).

Applicant's Attorney asked Norman: "And is the purpose of the initial pump test and the form 633 to determine, generally, the aquifer properties of where that well has been drilled?"

Norman: "Yes"

Applicant's Attorney: "And is that why you establish as a condition that the Applicant do multiple other pump tests once the horizontal wells are built?"

Norman: "The recommendation to condition the permit on additional tests was to establish the adequacy of diversion and like you had said the 28-hour test fulfilled those other needs that we would use at water sciences to do those other technical analyses." (HR #06 at 40:04).

Norman also explained that a variance to the constant discharge rate is commonly granted by DNRC because it can be hard to keep a constant rate, particularly at the beginning of the test but that this variance is granted after looking at the data as a whole. (HR #06 at 41:20). In addition, although the proposed appropriation has a maximum flow rate of 172 gallons per minute the Applicant's initial pump tests never produced that flow rate because the test walls would have been incapable of producing that flow rate, as they were more similar in size to regular domestic wells that produce flow rates of 15-25 gallons per minute. (HR #06 at 41:50).

Testimony of Nicole Rediske

Nicole Rediske is a civil engineer and project manager for TD&H engineering. (HR #07 at 00:37). Rediske did not design the horizontal wells for the project, but she testified that the horizontal wells were designed to be constructed 21 feet below ground level. (HR #07 at 4:03). When the bedrock was discovered at a shallower depth the wells were installed at approximately 15 feet below ground level. (HR #07 at 4:40). Rediske testified that TD&H conducted a vertical well test in May 2019 that produced only 17 gallons per minute. (HR #07 at 5:17). In May of 2023 the first horizontal test, lasting approximately 72 hours, produced an initial flow rate of 170 gallons per minute but the flow rate had dropped to 20 gallons per minute by the end of the test. (HR #07 at 5:50). In October/November of 2023 the well test produced a continuous flow rate of 54 gallons per minute. The test was conducted specifically at that time of year so that it wouldn't be affected by the Greenfields Irrigation District. (HR #07 at 6:10). In July of 2024, Applicant conducted

another test at a time selected to coincide with peak water demands of the proposed appropriation. (HR #07 at 6:55). This test maintained an average flow rate of 151 gallons per minute over a 72-hour period. (HR #07 at 7:17). Rediske explained that the discharge from the test site was discharged into the unknown tributary approximately 200 feet away. (HR #07 at 8:09). The discharge location was the same for all the pump tests. (HR #07 at 9:33). In her Pre-filed Testimony, Ms. Rediske explained exactly why she was sure the proposed appropriation would not adversely affect the Objectors' wells. (Rediske pre-filed testimony #15). Rediske noted:

- Objector Speck's well went dry during a period (February 2024) when no water was being pumped from the test well.
- The test well did not show water level fluctuations at this same time, suggesting the wells are not hydraulically connected.
- Applicant's test wells in the vicinity of Objector Speck's well did not respond to the pump tests but seemed to respond to seasonal groundwater level fluctuations which correspond with Objector Speck's observations.
- Objector's observations did not correspond with pump test timing or the well measurements generally. (Rediske pre-filed testimony #15).

Peter Klevberg Testimony

Peter Klevberg is a geotechnical engineer with TD&H. (Klevberg pre-filed testimony #1). Klevberg explained that "the aquifer on the Greenfields bench has significant artificial recharge and the entire area was probably a sagebrush plain before the Greenfields Irrigation District." (HR #08 at 3:28). Klevberg acknowledged that groundwater wells drilled in the vicinity of the wellsite are influenced by applied irrigation water because it is a shallow aquifer, it is quite transmissive, and most of the water applied as irrigation water enters the aquifer relatively quickly. (HR #08 at 9:53).

Klevberg explained the differences between the two wells used in the pump tests. The first well used in the pump test is a vertical well less than twenty feet deep whereas the second well, referred to as the test well (labelled as "test well" on Exhibit P-050), is a horizontal well 500 feet long that mimics the eventual well to be used in the proposed appropriation. (HR #09 at 3:00). (Other testimony clarified that the "test well" Klevberg refers to is the production well, i.e. the actual well that will be used in the proposed appropriation. (*See* Aquifer Test Report and Exhibit

P-050). During the first pump test the flow rates did not remain constant because the amount of water available to the pump decreased. Klevberg explained that this was not due to the availability of water but rather the increased resistance of the water getting to the pump. (HR #09 at 6:16).

Klevberg testified that he watched the water levels in the test wells during the pump tests and had noted that wells #2 and #3 were not actually connected to the test wells and there was no evident change in the water levels of those wells. (HR #09 at 16:12). Klevberg opined that Objector Speck's well was not affected by the pump tests based on the effect of pumping on these wells and the fact that there is a hydraulic divide between the test wells and Objector Specks well. The same reasoning applies to Objector Perry's well. (HR #09 at 17:40, 18:50, 19:55). Klevberg testified that in his professional opinion monitoring well 5 is the best indicator of the effects to the unnamed tributary. (HR # 09 at 23:04). Monitoring well 5 was unaffected by the discharge. (HR #09 at 23:40). Klevberg testified that the unnamed tributary is likely to be impacted by only one one-hundredth of a foot. (HR # 09 at 25:25).

On cross-examination Klevberg agreed that he had authorized a hydrogeologic report in May of 2019, but this report was based only on the pump test data from the May 2019 test, the vertical well pump test. (HR #09 at 29:49). Klevberg agreed that the Applicant had provided Evan Norman of the DNRC only the data from the May 2019 pump test at the time of his two aquifer test reports in the summer of 2022. (HR #09 at 30:10).

Based on the aquifer properties and well locations Klevberg determined that there would be no impact to any wells in the area, including Objector Perry and Objector Speck's. (Klevberg pre-filed testimony #13 and #14). Klevberg testified that he had relied on the 2018 Preliminary Engineering Report in order to determine the rates and quantities that the well will need to produce for the proposed appropriation. (Klevberg pre-filed testimony #16). Klevberg testified that he believes that the horizontal well (production well) and diversion are adequate for the proposed appropriation but that the Montana Department of Environmental Quality regulations will require a second well (a replacement or substitute well) which will need to be tested to ensure that it can meet the proposed flow rate and volume. (Klevberg pre-filed testimony #17).

CONCLUSIONS OF LAW

Objector Perry timely filed a valid objection to the Application on the basis that the Applicant did not prove the physical availability, legal availability, adverse effect, and adequate means of diversion criteria in MCA § 85-2-311(1). (Clayton and Terri Perry Objection Validity Form

dated 1/11/2024). Objector Speck timely filed a valid objection to the Application on the basis that the Applicant did not prove the physical availability, legal availability, adverse effect, and adequate means of diversion criteria in § 85-2-311(1), MCA. (William O. Speck Validity Form dated 1/11/2024). Because Objectors have satisfied their burden of production through their arguments, testimony, and witness examination, the remaining issue to be answered is whether Applicant has proven their application satisfies the physical availability, legal availability, adverse effect, and adequate means of diversion criteria in § 85-2-311, MCA.

An applicant for a beneficial water use permit possesses the burden of proof to show by a preponderance of the evidence that the applicable criteria of § 85-2-311(1), MCA, are satisfied before DNRC may issue the applicant a new beneficial use permit. *Bostwick Properties v, DNRC*, 2013 MT 48, ¶ 18, 369 Mont., 150, 296 P.3d 1154 (2013). Consequently, at this hearing Applicant must show that:

1) there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate;
2) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested;
3) the water rights of a prior appropriator will not be adversely affected by the proposed new use; and
4) the proposed means of diversion, construction, and operation of the appropriation works are adequate.

(§ 85-2-311(1)(a)-(e), MCA).

Has Applicant proved there is water physically available at the proposed point of diversion in the amount that the Applicant seeks to appropriate by a preponderance of evidence?

Pursuant to § 85-2-311(1)(a)(i), MCA, an Applicant must prove by a preponderance of the evidence that "there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate."

The DNRC has promulgated a rule describing how it determines whether physical ground water is available during the permit application process:

(1) Applicants for groundwater must follow aquifer testing requirements and provide to the department, at minimum, information and data in conformance with ARM 36.12.121.

(4) The requirements of ARM 36.12.121 must be followed, unless a variance has been granted by the department.

(ARM 36.12.1703 (2012)).

Aquifer Testing

ARM 36.12.121(2018) lists the requirements for the manner and scope of aquifer testing. In specific pertinent part the rule provides:

> Minimum testing procedures are as follows. (a) Pumping must be maintained at a constant discharge rate. (b) The discharge rate must be equal to or greater than the proposed rate for the entire duration of the test if the application is for one well or if the total proposed rate for multiple wells can be obtained from a single well. The discharge rate may be less than the proposed rate if the application is for multiple wells and the total proposed rate cannot be obtained from a single well, so long as the remainder can be demonstrated from the remaining wells under (f). (c) Discharge rate must be measured with a reliable measuring device and recorded with clock time according to the schedule on Form 633. (d) Minimum duration of pumping during an aquifer test must be 24 hours for a proposed use or discharge of 150 gpm or less and a proposed volume of 50 acre-feet or less. (e) Minimum duration of pumping during an aquifer test must be 72 hours for a proposed use or discharge of greater than 150 gpm and proposed volume greater than 50 acre-feet. (f) Eight-hour duration drawdown and yield tests must be conducted on additional production wells. (g) Discharged water must be conveyed a sufficient distance from the production and observation wells to prevent recharge to the aquifer during the test. Adequate water conveyance devices include pipe, large-diameter hose (e.g., fire hose), lined ditch or canal, or an existing irrigation system. (h) One or more observation wells must be completed in the same water-bearing zone(s) or aquifer as the proposed production well and close enough to the production well so that drawdown is measurable and far enough that well hydraulics do not affect the observation well. If existing wells are monitored they must not be pumped, or if pumped should be monitored at a frequency necessary

to separate the effects of the pumping. (i) Electronic pressure transducer/data logger instrumentation, electric well probes, pressure gauges on turbine pumped wells, or graduated steel tapes are acceptable methods of measuring groundwater levels. (j) Groundwater levels in the production well and observation well(s) must be monitored at frequent intervals for at least two days prior to beginning the aquifer test to evaluate background water-level trends. An applicant must evaluate and correct for background water-level trends. (k) Water levels in the production well and observation well(s) must be measured with 0.01- foot precision according to the schedule specified on Form No. 633.

(ARM 36.12.121 (2018)).

Variance to Aquifer Testing Requirements

An applicant may request a variance and be excused from the testing requirements of ARM 36.12.121 (2018). At the time of this application ARM 36.12.121 addressed variances, "Requests for variance from testing requirements must be submitted to the appropriate regional office manager." (ARM 36.12.121(1)(b) (2018)).

Matt Miles testified that he remembered discussing an aquifer testing variance with the Applicant and sharing that request with the Water Sciences Bureau. (Exhibit P-043 p. 17 line 10). An email from Evan Norman to Matt Miles recommends the following variances for the "Town of Power Application." (AR 4/10/24 Supplement at 68).

These included waiving the following requirements:

(a) Pumping must be maintained at a constant discharge rate.

(b) The discharge rate must be equal to or greater than the proposed rate for the entire duration of the test if the application is for one well or if the total proposed rate for multiple wells can be obtained from a single well. The discharge rate may be less than the proposed rate if the application is for multiple wells and the total proposed rate cannot be obtained from a single well, so long as the remainder can be demonstrated from the remaining wells under (f)

(e) Minimum duration of pumping during an aquifer test must be 72 hours for a proposed use or discharge of greater than 150 gpm and proposed volume greater than 50 acre-feet.

(j) Groundwater levels in the production well and observation well(s) must be monitored at frequent intervals for at least two days prior to beginning the aquifer test to evaluate background water-level trends. An applicant must evaluate and correct for background water-level trends.

(k) Water levels in the production well and observation well(s) must be measured with 0.01- foot precision according to the schedule specified on Form No. 633.

(Id.)

The Aquifer Test Report authored by Evan Norman also notes the Applicant had been granted variances. (Aquifer Test Report p. 1). The PDG notes that "a variance request was granted for ARM 36.12.121(3)(a), (3)(b), (3e), and (3(j) and 3(k)". (PDG FOF #22).

Matt Miles testified Applicant requested a variance and that he had issued a variance. Evan Norman testified that he approved the variance because he felt he had enough information to determine the aquifer properties. (HR #06 at 9:15). Email exchanges document the need for a variance, the Aquifer Test Report notes that Applicant received a variance, and the PD states that the Applicant received a variance.

Based on the testimony and evidence I find that the Applicant requested a variance, and the department issued a variance, in accordance with the law.

The PDG outlined the basis for its conclusion that the Applicant had fulfilled the physical availability criteria of § 85-2-311(1)(a)(i), MCA. (PDG ¶¶ 22-37). Objector did not provide any evidence on the issue of physical availability. I therefore find the Applicant has proven that water is physically available in the amount they want to appropriate.

Has Applicant proved there is water legally available at the proposed point of diversion in the amount that the Applicant seeks to appropriate by a preponderance of evidence?

Pursuant to § 85-2-311(1)(a)(ii), MCA, an applicant must prove by a preponderance of evidence that "water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department". Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands of water rights on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands of water rights, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands of water rights on the supply of water.

This statutory language is reinforced and expanded upon by rule:

> 36.12.1704 PERMIT APPLICATION - EXISTING LEGAL DEMANDS (1) Legal demands usually exist on the source of supply or its downstream tributaries and may be affected by a proposed water right application, including prior appropriations and water reservations. These existing legal demands will be senior to a new application and the senior rights must not be adversely affected: (a) an applicant may use a plan for mitigation or aquifer recharge, as generally defined in 85-2- 102, MCA, as a means of showing water is legally available. (2) The department will identify the existing legal demands on the source of supply and those waters to which it is tributary and which the department determines may be affected by the proposed appropriation. (a) For groundwater appropriations, this shall include identification of existing legal demands for any surface water source that could be depleted as a result of the groundwater appropriation. ARM 36.12.1704 (eff. 10/12/2012)

Applicant relied on aquifer and drawdown modelling presented in the Aquifer Test Report. (AR at 273). DNRC Hydrogeologist Evan Norman identified surface water subject to depletion in his Revised Groundwater Mitigation and Depletion Report, satisfying 36.12.1704(2)(a). (Revised Groundwater Mitigation and Depletion Report at 3). Objectors did not offer any alternative evidence or evidence to indicate that the Applicant's information was incorrect.

The PDG made findings relative to legal availability. (PDG ¶¶41-59). Objectors did not offer any alternative evidence or evidence to indicate that the Applicant's information was incorrect.

I find that Applicant proved there is water legally available at the proposed point of diversion in the amount that the Applicant seeks to appropriate by a preponderance of evidence.

Has Applicant proved by a preponderance of the evidence that the proposed new use will not adversely affect a prior appropriator's water right?

An applicant for a beneficial water use permit must prove by a preponderance of evidence that the proposed new use will not adversely affect a prior appropriator's water right. § 85-2-

311(1)(b), MCA. “[A]dverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied.” (*Id.)*

For groundwater applications, the department will evaluate how water levels in wells of prior water rights could be lowered and the rate, timing, and location where water flow could be reduced by any amount from hydraulically connected surface waters. (ARM 36.12.1706 (2012)).

The Department produced a list of the effects it anticipates on water rights in the area of the proposed appropriation. Both Objector Speck’s and Objector Perry’s water rights are on the list:

WR Number	Owners	Distance (ft)	Well Depth (Ft)	Static Water Level (ft)	Predicted Drawdown (ft)	Available Drawdown (ft)
41K 62706 00	PERRY	1470	26	20	3.8	2.2
41K 30127990	PERRY	1470	NA	NA	3.8	NA
41K 93585 00	SPECK	1720	27	6	3.3	17.7

(Aquifer Test Report at 10).

Objector Perry alleges that his water rights, Nos. 41K 62706 00, 41K 30127990, and 41K 30127993 were adversely affected by the test wells. (Perry Objection dated 12/07/2023). Based on the abstracts available on the DNRC Water Rights Query system (dnrc.mt.gov/water-resources/comprehensive-water-review/Water-Rights-Query-System) 41K 30127990 is a groundwater well but the abstract lists no depth presumably resulting in the “NA” fields on the list. Water right no. 41K 30127993 is for “livestock direct from source” from the unnamed tributary of Muddy Creek, which accounts for its absence from the list in the Aquifer Test Report.

Objector Speck alleges that his water right No. 41K 93585, a groundwater right from a well, will be adversely affected. (Speck Objection dated 11/22/2023).

Objector Perry alleged the predicted depletion to the unnamed tributary will dry up his well. Objector Perry presented no evidence to counter the expected change in his well water level presented in the Aquifer Test Report and instead argues that the depletion caused by the pumping tests was not measurable in his well because the pump tests discharged excess water directly

into the unnamed tributary, masking the effect of the depletion. (HR #03 at 5:58). The predicted depletion is based upon aquifer characteristics described in the Aquifer Test Report and calculated in Table 2 of the Revised Groundwater Depletion and Mitigation Report, dated August 31, 2022. (Aquifer Test Report at 10, Revised Groundwater Depletion and Mitigation Report at 5). The depletions are not dependent on Objector Perry's observations and thus discharging the pumped water into the unknown tributary is not relevant.

Objector Speck alleges that the water in his culvert well dropped about a foot during a previous well test but did not specify when this drop occurred. (HR #03 at 3:12- 7:05). Objector Speck did not provide evidence that the proposed appropriation will cause a further drop in his well water level or that this will negatively impact his use of the well.

Klevberg explained that his observation of the test wells during the pump test left him confident that the proposed appropriation would not significantly impact either the Objectors' wells or the surface water in the unnamed tributary. (Klevberg pre-filed testimony Answer 14B).

A new appropriator adversely affects a prior appropriator when the prior appropriator can no longer reasonably exercise their right as a result of the new appropriator's actions. "Priority of appropriation does not include the right to prevent changes by later appropriators in the condition of water occurrence, such as …the lowering of a water table…, or water level, if the prior appropriator can reasonably exercise the water right under the changed conditions." (§ 85-2-401(1), MCA). Reasonable exercise might include lowering one's pump or even digging a deeper well if the original well doesn't fully penetrate the aquifer. See *In the Matter of the Application for Beneficial Water Use Permit No. 42M-30064191 by Arnold Thiel (DNRC Nov 15, 2013)* and *In the Matter of the Application for Beneficial Water Use Permit No. 41H 11716500 by Lisa and Gary Perry (DNRC May 12, 2004).*

Neither Objector Speck nor Objector Perry provided evidence or testimony that contradicted the Department's calculations in the Aquifer Test Report and aquifer testing observations, nor did either Objector provide evidence or testimony that they would not be able to reasonably exercise their existing water rights.

The PDG outlined the basis for its conclusion that the Applicant had fulfilled the adverse effect criteria of § 85-2-311(1)(b), MCA. (PDG ¶¶ 65-73). I find that the Applicant has proved the water rights of a prior appropriator will not be adversely affected by the proposed new use by a preponderance of evidence.

Has Applicant proved there is an adequate means of diversion for the amount of water that the Applicant seeks to appropriate by a preponderance of evidence?

An applicant for a beneficial water use permit must prove by a preponderance of evidence that "the proposed means of diversion, construction, and operation of the appropriation works are adequate." (§85-2-311(1)(c), MCA). Rule further provides:

> 36.12.1707 PERMIT APPLICATION CRITERIA - ADEQUATE DIVERSION MEANS AND OPERATION (1) The diversion works must be capable of diverting the amount of water requested to accomplish the proposed use without unreasonable loss through design or operation. (2) The diversion works must conform to current industry design, construction, and operation standards. (3) Wells must be constructed according to ARM Title 36, chapter 21, subchapter 6. (4) The applicant shall describe how the proposed system will be operated, from point of diversion through the place of use and on through the discharge of water, if any. (5) Preliminary design plans and specifications for the diversion and conveyance facilities and the equipment used to put the water to beneficial use must be submitted including the following: (a) the proposed flow rate and volume design capacity; (b) the expected overall efficiency, including diversion, conveyance, and system efficiencies; (c) the proposed diversion schedule, such as number and timing of irrigation sets; (d) system design, construction, or operation features which are intended to reduce or eliminate adverse effects on other water rights; and (e) the flow rate and operation of diversions must be described. (6) For developed springs, an explanation of how the spring will be developed must be included.

(ARM 36.12.1707 (2005)).

In addition, the yield and drawdown test ensures that the proposed appropriation can produce the requested maximum flow rate. In pertinent part:

> (2) The department will complete an evaluation of drawdown in the applicant's production well for the maximum pumping rate and total volume requested in the permit application using the information provided from the aquifer test.
>
> (3) The department will compare the drawdown projected for the proposed period

of diversion to the height of the water column above the pump in the proposed production well to determine if the requested appropriation can be sustained.

(ARM 36.12.1703 (2012)).

Objectors' complaints relating to adequacy of diversion are two-fold, first that the PDG and the DNRC analysis cite and rely on proposed well construction that differs from the actual constructed wells, and second that the well testing as submitted and analyzed does not show that the horizontal wells described in the PDG can actually produce the requested amount of water. The actual construction of the proposed wells is a mixed question of physical availability and adequacy of diversion. At the time of this application ARM 36.12.1703 (2012) was titled "Permit Application Criteria - Physical Groundwater Availability". This Order reviews the requirements of 36.12.1703 (2012) under the adequacy of diversion section.

The Comparison of Drawdown to the Height of the Water Column

The evaluation in ARM 36.12.1703(3) could be impacted by the Objector's assertion that the Applicant incorrectly identified the depth of the Applicant's proposed well. Objectors are correct that the PDG and the Aquifer Test Report all incorrectly describe the Applicant's production well as "21 feet bgs (below ground surface)" (Aquifer Test Report at 1, Revised Groundwater Depletion and Mitigation Report at 1). The PDG described the proposed point of diversion (well) as a horizontal well approximately 21 feet below ground surface. (PDG ¶¶18, 84). In reality the production well is approximately 15 feet below ground surface.

The Department performed the evaluation and comparison required by ARM 36.12.1703 (2012) in the Aquifer Test Report, dated June 27, 2022. The Aquifer Test Report was based on the original information that the production well was 21 feet below ground surface.

> "For the adequacy of diversion, the production wells could experience 10.0 feet of drawdown, leaving approximately 3.1 feet of available water column above the installation depth assuming the wells are installed 21 feet below ground surface."

(Aquifer Test Report at 11).

Evan Norman testified that he did not recompute the aquifer properties established in the Aquifer Test Report when construction altered the production well depth. (*See* Evan Norman Testimony). Norman testified that he "stands by" his calculations and the new

information would not alter his conclusions regarding the aquifer properties that were presented in the Aquifer Test Report. Norman revisited the drawdown calculation using information provided by the Applicant regarding the actual production well construction, which indicated that the horizontal well pipe was installed at a depth of 14.86 feet below ground surface (bgs).

(Staff Expert Report p. 5).

Norman first summarized the initial information:

> As part of the application, a 28-hour aquifer test was submitted pursuant to ARM 36.12.121 to provide a basis for modeling, including the adequacy of diversion criteria. In the Aquifer Test Report, dated June 27, 2022, a Cooper-Jacob (1946) solution was fit to the Observation Well, GWIC ID 301853 drawdown data to generate an estimate of aquifer properties for forward modeling. The adequacy of diversion forward modeling showed that a maximum drawdown of 7.1 ft would occur in each of the production wells with interference drawdown of an additional 2.9 ft for a total of 10 ft of drawdown. Based on the data available regarding assumed well completions, the available water column minus the total modeled drawdown equaled 3.1 ft of remaining available water column.

Next Norman adds more recent information:

> The depth to water measurements collected in the 36-inch vertical manhole between July 3, 2023, and July 30, 2024, show waters levels between 2.61 ft and 6.54 ft, below the top of casing, with an average of 5.41 ft. This data shows there would be an average of 12.45 ft of available drawdown in the vertical manhole. The available drawdown above the bottom of the modeled horizontal wells of 13.1 ft in the Aquifer Test Report, dated June 27, 2022, is comparable to actual conditions.
>
> In addition to the two tests dated May 2023 and November 2023, the Applicant performed a pump test July 17, 2024. The field notes from the pump test performed July 17, 2024, indicate that the proposed well maintained a flow rate of 170 gpm between the beginning of the pump test on July 17, 2024, at 1:27 p.m. to July 19, 2024, at 11:00 a.m. The duration of pumping at 170 gpm was 45.5 hrs. At the end of the 71.5-hour pump test on July 17, 2024, the pumping rate was reduced to 95 gpm and the total drawdown in the pumping well was 11.61 ft leaving 2.73 ft of water above the transducer.

(Staff Expert Report at 5,6).

The rule requires that DNRC evaluate the drawdown to determine if the proposed appropriation can be sustained. Norman performed that evaluation and specifically addressed it in the Staff Expert Report.

Maximum Pumping Rate and Volume

The second section of the ARM 36.12.1703(2) (2012) requires that the DNRC evaluate the drawdown to determine if the proposed appropriation can be sustained from the production well. (ARM 36.12.1703(2) (2012)).

The yield and drawdown test described in ARM 36.12.1703 (2012) is specifically disputed by Objectors who assert that the production well has never produced the requisite flow rate or volume. The pump test described in ARM 36.12.121 provides data that DNRC and Applicant use to determine aquifer characteristics and in turn describe expected depletions. In this case the tests analyzed to produce Evan Norman's Aquifer Test Report and Revised Depletion and Mitigation Report were performed on test wells. However, ARM 36.12.1703 (2012) provides that the department will analyze the drawdown in the production well for the maximum drawdown and requested volume.

At the time of the Aquifer Test Report, dated June 27, 2022, and the Revised Depletion and Mitigation Report, dated August 31, 2022, the production well had not been tested.

Evan Norman emailed Matt Miles on May 26, 2022 with the following statement:

> "I have information to evaluate adequacy of diversion for the well(s) that are currently installed but not the two proposed horizontal wells with a storage component. I recommend a condition that once the wells are drilled, to perform an 8-hour drawdown and yield tests on the wells to prove the requested flow rate. Have you put this condition (or something similar) on permits in the past? ***The provided Form 633 does give adequate information to evaluate physical availability and adverse affect for the proposed groundwater diversion***." (emphasis added). Exhibit O-E.

DNRC issued the Draft Preliminary Determination to Deny on September 15, 2022. FOF #85 stated:

"The average flow rate of 20 gpm for the 28-hour aquifer test did not exceed the requested maximum flow rate, however, an 8-hour drawdown and yield test are a condition to establish proof of adequacy of diversion once the horizontal wells are installed."

By July of 2024, Applicant completed three well tests on the production well and provided DNRC this test data. This includes the folder of raw data titled "2024-12-18 Staff Expert Production".

The following table describes the tests as related in the TD&H Memorandum, dated 10/22/23. (Exhibit P-050).

PRODUCTION WELL PUMP TESTS				
Date	**Well**	**Duration**	**Flow rate**	**Notes**
May 2023	Horizontal "Test Well"	3 hours	170 gpm	After 3 hours flow rate was unsustainable and test ended.
November 2023	Horizontal "Test Well"	73.5 hours	54 gpm	N/A
July 2024	Horizontal "Test Well"	47.5 hours 72 hours	170 gpm 151 gpm average	Flow meter seems to have read low. Bucket measurement indicated 200 gpm and 171 gpm respectively.

Evan Norman summarized this data in the Staff Expert Report with the following statements:

> In addition to the two tests dated May 2023 and November 2023, the Applicant performed a pump test July 17, 2024. The field notes from the pump test performed July 17, 2024, indicate that the proposed well maintained a flow rate of 170 gpm between the beginning of the pump test on July 17, 2024, at 1:27 p.m. to July 19, 2024, at 11:00 a.m. The duration of pumping at 170 gpm was 45.5 hrs. At the end of the 71.5-hour pump test on July 17, 2024, the pumping rate was reduced to 95 gpm and the total drawdown in the pumping well was 11.61 ft leaving 2.73 ft of water above the transducer.
>
> The multiple tests performed on the installed horizontal well *meet the requirements in ARM 36.12.12* for an eight-hour duration drawdown and yield test and the variance recommendation. (emphasis added).

(Staff Expert Report p.6).

By the time the final PD to Grant was issued in October 2024, Applicant had performed all required pump tests and rendered the proposed condition moot. However, the proposed language remained in the PDG:

> GWTC ID 301863 was evaluated by the Department's groundwater hydrologist with a 28- hour aquifer test at an average pumping rate of 20.0 GPM and a maximum drawdown of 5.36 feet below the static water level (swl) of 7.89 feet below top of the well casing (btc). This measured maximum drawdown leaves 0.8 feet above the well bottom. The average flow rate of 20.0 GPM for the 28-hour aquifer test did not exceed the requested maximum flow rate, however, ***an 8-hour drawdown and yield test are a condition to establish proof of adequacy of diversion once the horizontal wells are installed***. (emphasis added).

(PDG FOF #85).

I find that based on the evidence and testimony the Applicant has proven that there is an adequate means of diversion for the amount that the Applicant seeks to appropriate by a preponderance of evidence. Further, I find that the drawdown and yield test condition found in the PDG at Finding of Fact #85 is meant for the production well and the PDG should be corrected to reflect this change***.***

OBJECTORS' CLOSING BRIEF

Objector's closing brief draws parallels between the fact and legal patterns in this case and *Flathead Lakers Inc. v. DNRC*. 2023 MT 85, 412 Mont. 225, 530 P.3d 769.

In *Flathead Lakers,* Objectors took issue with DNRC's grant of a groundwater permit on the basis that the Applicant had significant omissions in the aquifer testing procedure and that the Department had failed to analyze hydraulically connected surface waters as rule required. The Court found that DNRC had erred in analyzing incomplete aquifer testing data without a variance and in relying on an internal memo to justify limiting the scope of surface water analysis for adverse effect.

In this case both DNRC and the Applicant agree that they did receive a variance and the DNRC hydrogeologist testified that he performed his analyses with the understanding that the Applicant had been excused from certain aquifer testing provisions. He also credibly testified that he was able to perform adequate and reliable calculations despite the missing information. The Objectors in this case did not provide any contrary evidence or point to specific conclusions which were tainted by the lack of aquifer testing data. Conversely, the Court in *Flathead Lakers* noted

that DNRC proceeded improperly without a request or grant of a variance from aquifer testing requirements and the Objectors produced evidence that the resultant analysis itself was faulty.

Here the Objectors argue that Objectors' water rights will be adversely affected by the proposed appropriation, but they produced no evidence to refute the Department's analysis of depletions. Conversely, in *Flathead Lakers* the Objectors produced evidence that the Department had not performed legally required analysis of all hydraulically connected surface waters and therefore could not have performed an adequate analysis of adverse effect. *Flathead Lakers* stands in part with the proposition that the Department must follow its own statutes and rules in analyzing a water permit application. In this case the Objectors presented no evidence that the Department did not do so.

CONCLUSION

Objectors have failed to bear their burden of production regarding the criteria of adequate diversion, adverse effect, legal availability, and physical availability put at issue by the valid objections they filed to the PDG. Applicants have met its burden of proof to show by a preponderance of evidence that it has satisfied all the applicable criteria necessary to warrant a grant of the Application.

FINAL ORDER

Beneficial Water Use Permit No. 41K-30150582 is hereby GRANTED for the reasons set forth in this Final Order and for the reasons set forth in the PDG as to the other applicable criteria of § 85-2-311(1), MCA, with the modifications listed below.

PDG FOF #18, #22, #43, and #85 are corrected to read as follows, new matter underlined, and stricken matter interlined:

> 18. The Application materials and information incorporated in the Department's Technical Report including Groundwater Depletion and Aquifer Testing Report describe the proposed wells that will be completed horizontally in a shallow sand and gravel aquifer at approximately ~~21~~ 15 feet below the ground surface; and an Unnamed Tributary of Muddy Creek is the hydraulically connected surface water source that will experience net depletion.
>
> 22. A 28-hour aquifer test was conducted by Boland Drilling and TD&H Engineering for the Town of Power located in Teton County. The applicant requests two points of diversion (wells), a total maximum flow rate of 170 gallons

per minute (GPM) and 91 acre-ft (AF) for year-round municipal use. The proposed wells will be completed horizontally in a shallow sand and gravel aquifer at approximately ~~21~~ 15 feet below the ground surface and will convey water to an existing distribution system. A variance request was granted by the Havre Regional Office for the following variances related to ARM 36.12.121(3)(a), 3(b), 3(e) and 3(j) and 3(k).

43. The physical amount of groundwater available within the zone of influence is the estimated groundwater flux of 3,653 AF/year. The existing legal demand for groundwater within the zone of influence is 513.6 AF. The amount of water legally available is the difference between physical water availability (3,653 AF/year) and existing legal demand (513.6 AF/year) equal to ~~73,39.4~~ 3,139.4 AF/year. The Applicant requested a maximum flow rate of 170 GPM and diverted volume of 91.0 AF. Groundwater is legally available in the amount requested.

85. GWIC ID 301863 was evaluated by the Department's groundwater hydrologist with a 28-hour aquifer test at an average pumping rate of 20.0 GPM and a maximum drawdown of 5.36 feet below the static water level (swl) of 7.89 feet below top of the well casing (btc). This measured maximum drawdown leaves 0.8 feet above the well bottom. ~~The average flow rate of 20.0 GPM for the 28-hour aquifer test did not exceed the requested maximum flow rate, however, an 8-hour drawdown and yield test are a condition to establish proof of adequacy of diversion once the horizontal wells are installed.~~

NOTICE

This Final Order is the Department's final decision in this matter. A final order may be appealed by a party who has exhausted all administrative remedies before the Department in accordance with the Montana Administrative Procedure Act (Title 2, Chapter 4, MCA) by filing a petition in the appropriate court within 30 days after service of the order.

If a petition for judicial review is filed and a party to the proceeding elects to have a written transcript prepared as part of the record of the administrative hearing for certification to the reviewing court, the requesting party must make arrangements for preparation and payment of the written transcript. If no request is made, the Department will transmit only a copy of the audio recording of the oral proceedings to the reviewing court.

Dated this 21st day of October 2025.

/s/ Martin Balukas
Martin Balukas, Hearing Examiner
Department of Natural Resources
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Office of Administrative Hearings
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CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the foregoing was served upon all parties listed below on this 21st day of October 2025 by first class United States mail and/or by electronic mail (e-mail).

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EXHIBIT B

BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

*** * * * * * ***

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 41K 30150582 BY POWER-TETON COUNTY WATER & SEWER DISTRICT	)))))	**PRELIMINARY DETERMINATION TO GRANT APPLICATION**

On 12/23/2020, Power-Teton Water & Sewer District (Applicant) submitted an Application for Beneficial Water Use Permit No. 41K 30150582(Application) to the Havre Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC). The Permit (41K 30150582) is for Municipal use from a groundwater source; The Department published receipt of the Application on its website. The Department sent Applicant a deficiency letter under § 85-2-302, Montana Code Annotated (MCA), dated 05/20/2021. The Applicant responded with information dated 09/17/2021. The Applicant provided clarifications and additional information regarding specific basin closure exceptions on 02/14/2022. The Application was determined to be correct and complete as of 08/05/2022. An Environmental Assessment was completed on 09/06/2022. A waiver of 120-day statutory deadline to issue a preliminary determination was signed by the Applicant on 12/02/2022.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application for Beneficial Water Use Permit, Form 600-GW
- Form 633, Aquifer Test Data
- Aquifer Testing Addendum
- Basin Closure Addendum & Hydrogeologic Assessment
- Maps: Map depicting the proposed point of diversion, conveyance, and municipal place of use

Information Received after Application Filed

- Deficiency Letter Response dated January 19, 2021. Received by DNRC on September 17, 2021
- Additional Basin Closure Information dated February 14, 2022
- Aquifer Testing Variance Request and Grant dated June 06, 2022
- Waiver of 120-day statutory deadline to issue a preliminary determination dated 12/02/2022.

Information within the Department's Possession/Knowledge

- Department Technical Report August 5, 2022, including Revised Groundwater Depletion and Aquifer Testing Report dated August 31, 2022 (Department Technical Report)

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, MCA).

BASIN CLOSURE

FINDINGS OF FACT

1. This permit application seeks to appropriate groundwater for Municipal use. This application is located within the Upper Missouri River Basin Legislative Closure, which was closed effective April 16, 1993.

2. The Applicant submitted a hydrogeologic assessment with the original application materials. A variance request from aquifer testing requirements ARM 36.12.121(3)(b), 3(f), 3(e), 3(j) and 3(k) was submitted on June 6, 2022. The variance request was granted on June 06, 2022, because the Department determined it had sufficient information to determine aquifer characteristics from available data.

3. The Applicant submitted revised basin closure exception information on February 14, 2022 as supporting evidence as to how the Application(s) can be processed as exceptions to the basin closure exceptions set forth in §85-2-343.

4. As requested under ARM 36.12.120(2), the Applicant asserts that the following information explains how the Power-Teton beneficial use permit application meets the "basin closure" exceptions and why the application may be processed. First the application is for an appropriation of groundwater which is an express exception to the "closure" under §85-2-343(2)(a). Second, even if surface water is implicated under the application, the Applicant asserts that under the closure statute use of surface water by a municipality is still authorized under §85-2-343 (2)(c)(iii). Finally, specific to Muddy Creek, the Applicant asserts that depletions to that specific source are exempted under both the above section (§85-2-343(2)(c)) and §85-2-343(2)(e). As such under these several exceptions, the Power-Teton application meets the terms of the basin closure statutory exceptions and may be processed by DNRC. Further, under 85-2-360(1) not all groundwater applications are required to have mitigation plans or aquifer recharge plans. Mitigation or recharge is only necessary with a groundwater application if required to address adverse effect to surface water rights. In the instance of Muddy Creek, as noted above, depletions of surface water are authorized by statute. As such, it cannot be presumed by DNRC that any depletions calculable by groundwater pumping will automatically require mitigation. Accordingly, the Applicant asserts that Application may be processed by DNRC without a presumption that a mitigation plan is required.

5. The Department findings regarding the applicability of the various basin closure exceptions are found in the Legal Availability section of this Preliminary Determination document.

CONCLUSIONS OF LAW

6. DNRC cannot grant an application for a permit to appropriate water within the Upper Missouri River Basin until final decrees have been issued in accordance with Title 85, chapter 2, part 2, MCA, for all the sub-basins of the upper Missouri River basin. §85-2-343(1), MCA. The Upper Missouri River Basin consists of the drainage area of the Missouri River and its tributaries above Morony Dam. (§ 85-2-342(4), MCA). In this case, the Application is for the use of Groundwater located within the upper Missouri River basin.

7. Pursuant to § 85-2-362, MCA, an application for new appropriations of groundwater in a closed basin shall consist of a hydrogeologic assessment with an analysis of net depletion, a mitigation plan or aquifer recharge plan if required, an application for a beneficial water use permit or permits, and an application for a change in appropriation right or rights if necessary. A combined application must be reviewed as a single unit. A beneficial water use permit may not be granted unless the accompanying application for a change in water right is also granted. A denial of either results in a denial of the combined application. § 85-2-363, MCA. ARM 36.12.120. E.g., *In the Matter of Application No. 76H-30046211 for a Beneficial Water Use Permit and Application No.76H-30046210 to Change a Non-filed Water Right by Patricia Skergan and Jim Helmer* (DNRC Final Order 2010, Combined Application)(combined application under §85-2-363, MCA, reviewed as a single unit).

8. In reviewing an application for groundwater in a closed basin, the District Court in Sitz Ranch v. DNRC observed:

> The basin from which applicants wish to pump water is closed to further appropriations by the legislature. The tasks before an applicant to become eligible for an exception are daunting. The legislature set out the criteria discussed above (§ 85-2-311, MCA) and placed the burden of proof squarely on the applicant. The Supreme Court has instructed that those burdens are exacting. It is inescapable that an applicant to appropriate water in a closed basin must withstand strict scrutiny of each of the legislatively required factors.

Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7.

9. A basin closure exception does not relieve the Department of analyzing § 85-2-311, MCA criteria. Qualification under a basin closure exception allows the Department to accept an application for processing. The Applicant must still prove the requisite criteria. E.g., *In The Matter of Application for Beneficial Water Use Permit No. 41K-30043385 by Marc E. Lee* (DNRC Final Order 2011); *In The Matter of Application for Beneficial Water Use Permit No. 41K-30045713 by Nicholas D. Konen*, (DNRC Final Order 2011)

§ 85-2-311, MCA, BENEFICIAL WATER USE PERMIT CRITERIA

GENERAL CONCLUSIONS OF LAW

10. The Montana Constitution expressly recognizes in relevant part that:

> (1) All existing rights to the use of any waters for any useful or beneficial purpose are hereby recognized and confirmed.
> (2) The use of all water that is now or may hereafter be appropriated for sale, rent, distribution, or other beneficial use . . . shall be held to be a public use.
> (3) All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.

Mont. Const. Art. IX, §3. While the Montana Constitution recognizes the need to protect senior appropriators, it also recognizes a policy to promote the development and use of the waters of the state by the public. This policy is further expressly recognized in the water policy adopted by the Legislature codified at § 85-2-102, MCA, which states in relevant part:

> (1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .
> (3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .

11. Pursuant to § 85-2-302(1), MCA, except as provided in §§ 85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. See § 85-2-102(1), MCA. An applicant in a beneficial water use permit proceeding must affirmatively prove all of the applicable criteria in § 85-2-311, MCA. Section § 85-2-311(1) states in relevant part:

> … the department shall issue a permit if the applicant proves by a preponderance of evidence that the following criteria are met:
> (a) (i) there is water physically available at the proposed point of diversion in the

amount that the applicant seeks to appropriate; and

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

(b) the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied;

(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;

(d) the proposed use of water is a beneficial use;

(e) the applicant has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit;

(f) the water quality of a prior appropriator will not be adversely affected;

(g) the proposed use will be substantially in accordance with the classification of water set for the source of supply pursuant to 75-5-301(1); and

(h) the ability of a discharge permitholder to satisfy effluent limitations of a permit issued in accordance with Title 75, chapter 5, part 4, will not be adversely affected.

(2) The applicant is required to prove that the criteria in subsections (1)(f) through (1)(h) have been met only if a valid objection is filed. A valid objection must contain substantial credible information establishing to the satisfaction of the department that the criteria in subsection (1)(f), (1)(g), or (1)(h), as applicable, may not be met. For the criteria set forth in subsection (1)(g), only the department of environmental quality or a local water quality district established under Title 7, chapter 13, part 45, may file a valid objection.

To meet the preponderance of evidence standard, "the applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other evidence, including but not limited to water supply data, field reports, and other information

developed by the applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies." § 85-2-311(5), MCA (emphasis added). The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation, 2009 MT 181, ¶ 21. The Department is required to grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Id. A preponderance of evidence is "more probably than not." Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35.

12. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria:

> (1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. The department may require modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.

E.g., Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339 (requirement to grant applications as applied for, would result in, "uncontrolled development of a valuable natural resource" which "contradicts the spirit and purpose underlying the Water Use Act."); see also, *In the Matter of Application for Beneficial Water Use Permit No. 65779-76M by Barbara L. Sowers* (DNRC Final Order 1988)(conditions in stipulations may be included if in further compliance with statutory criteria); *In the Matter of Application for Beneficial Water Use Permit No. 42M-80600 and Application for Change of Appropriation Water Right No. 42M-036242 by Donald H. Wyrick* (DNRC Final Order 1994); Admin R. Mont. (ARM) 36.12.207.

13. The Montana Supreme Court further recognized in Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starner (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, *superseded by legislation on another issue*:

> Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

See also, Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order* (2011). The Supreme Court likewise explained that:

> .... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co., 211 Mont. at 97-98, 685 P.2d at 340; see also Mont. Const. art. IX §3(1).

14. An appropriation, diversion, impoundment, use, restraint, or attempted appropriation, diversion, impoundment, use, or restraint contrary to the provisions of § 85-2-311, MCA is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized appropriation, diversion, impoundment, use, or other restraint. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, use, or otherwise restrain or control waters within the boundaries of this state except in accordance with this § 85-2-311, MCA. § 85-2-311(6), MCA.

15. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge, as specifically identified in this document. ARM 36.12.221(4).

PROPOSED APPROPRIATION

BENEFICIAL WATER USE PERMIT NO. 41K 30150582

FINDINGS OF FACT

16. Through this Application, the Applicant proposes to appropriate groundwater from two wells located in the NWSESE and the NESESE of Sec. 4, Twp. 22 North, Rge.1 West,

approximately 3.0 miles southwest of Power, Montana, Teton County. The proposed purpose is Municipal use. The flow rate requested is 170 Gallons per Minute (GPM) up to a maximum diverted volume of 91 Acre Feet (AF) per year. The Period of Diversion and period of use requested is January 1 to December 31. The Place of Use is to be in the SW of Section 25, Twp. 23N, Rge.1W, Teton County and commonly referred to as the Town of Power.

17. The Applicant currently has an unperfected Provisional Permit No. 41K 30049120 with a Maximum Flow Rate of 70 GPM up to 40.0 AF for municipal use from Muddy Creek.

18. The Application materials and information incorporated in the Department's Technical Report including Groundwater Depletion and Aquifer Testing Report describe the proposed wells that will be completed horizontally in a shallow sand and gravel aquifer at approximately 21 feet below the ground surface; and an Unnamed Tributary of Muddy Creek is the hydraulically connected surface water source that will experience net depletion.

19. The proposed wells are approximately 500 feet from an unnamed tributary of Muddy Creek. The water levels in the source aquifer are similar to the surface elevation of the unnamed tributary and this suggests the source aquifer is hydraulically connected to the unnamed tributary when it is flowing. A pre-application report by TD&H Engineering as part of this Application, states that the tributary flows year-round (according to local landowners) and therefore the tributary is assumed to be perennial and the potentially affected surface water. The Department finds that the UT of Muddy Creek is the hydraulically connected surface water source.

20. Information brought forth by the Applicant regarding the proposed consumption and return flows describe water diverted from the new groundwater wells will be pumped to the Municipal place of use. No conveyance losses are anticipated between the well site and the proposed Place of Use. The Applicant states that once the water reaches the Place of Use, in this case, the Town of Power, the water is distributed to the community and there are losses and uses that decrease consumption below 100%, resulting in return flows to an unnamed tributary and Muddy Creek.

21. The Department finds that for the purposes of the depletion analysis, it is assumed that the proposed appropriation is for Municipal use. In this case, wastewater will be collected and sent to a centralized wastewater treatment plant with an evaporation basin. Therefore, the

consumption is expected to be 100 % for the Town of Power's proposed wells and is equal to the requested appropriation of 91.0 AF per annum.

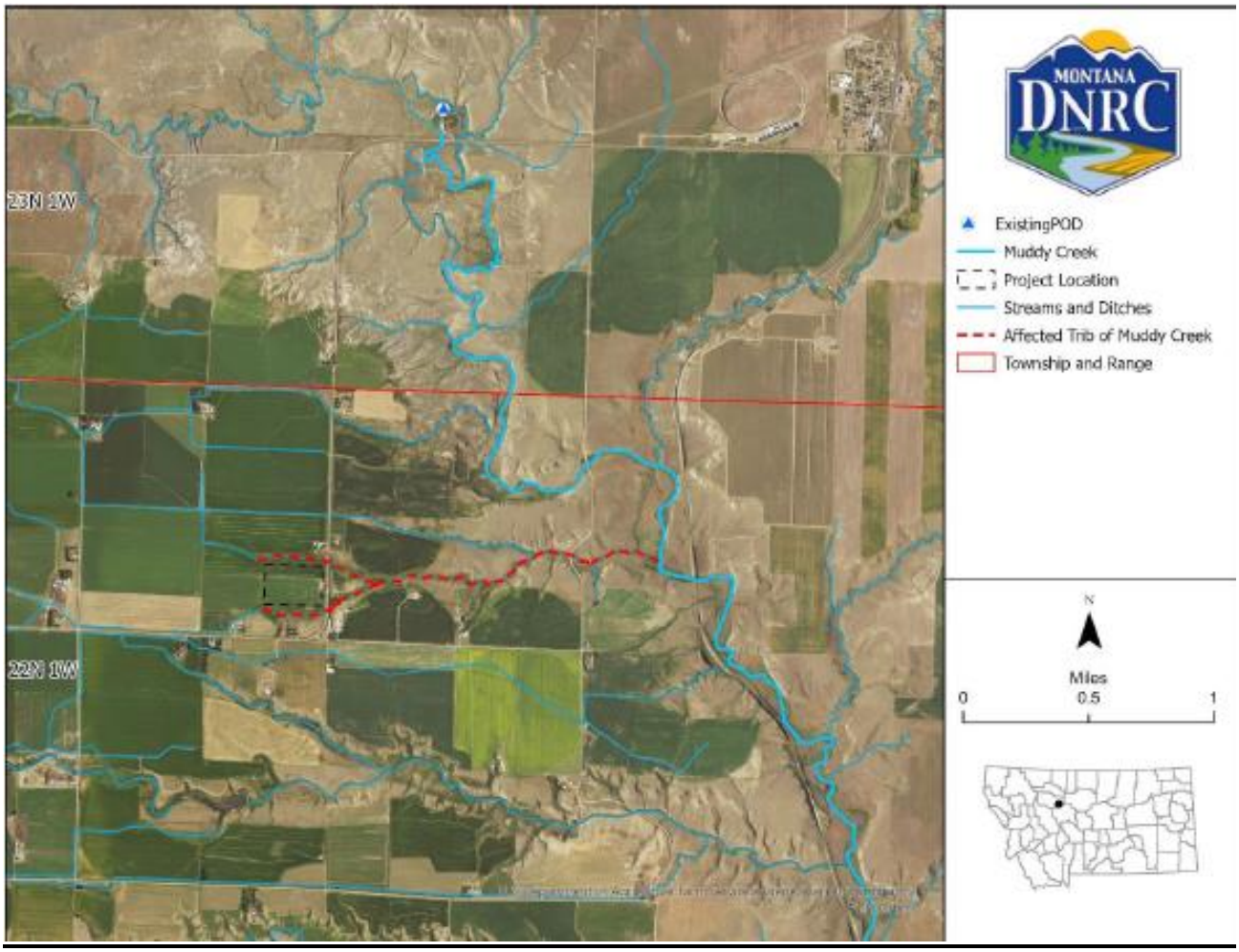

Figure 1: *Potentially affected reach of unnamed tributary to Muddy Creek and mitigated reach of Muddy Creek.*

Physical Availability
FINDINGS OF FACT

Groundwater

22. A 28-hour aquifer test was conducted by Boland Drilling and TD&H Engineering for the Town of Power located in Teton County. The applicant requests two points of diversion (wells), a total maximum flow rate of 170 gallons per minute (GPM) and 91 acre-ft (AF) for year-round

municipal use. The proposed wells will be completed horizontally in a shallow sand and gravel aquifer at approximately 21 feet below the ground surface and will convey water to an existing distribution system. A variance request was granted by the Havre Regional Office for the following variances related to ARM 36.12.121(3)(a), 3(b), 3(e) and 3(j) and 3(k).

23. Evan Norman, DNRC Water Management Bureau groundwater hydrologist, reviewed the Applicant's aquifer test results and produced a Groundwater Depletion and Aquifer Testing Report included in the Department's Technical Report dated August 5, 2022, and Revised Groundwater Depletion and Mitigation Report dated August 31, 2022.

24. The wellfield is situated on a portion of the Greenfields Bench located between two unnamed tributaries of Muddy Creek. The Greenfields Bench is an erosion surface capped with coarse gravel composed of lithologies found in the Rocky Mountains to the southwest (TD&H Engineering).

25. The wells are completed in the Alluvial Terrace Deposit of Greenfield Bench (QTatg) that is underlain by shale and its aerial extent is mapped by Vuke et al. (2002). The aquifer in the Alluvial Terrace Deposit of Greenfield Bench is the most productive in this area and serves as the sole source of drinking water for three public water supplies and more than 400 private wells (Miller et al., 2002).

26. Drawdown from the proposed well field will propagate to the nearest hydraulically connected surface water prior to the source aquifer pinching out to the east. Groundwater flow paths converge at the coulees, drains, springs, and seeps that constitute groundwater discharge areas (Miller et al., 2002). The source aquifer is recharged by ditch and stream losses, leakage from irrigation practices, and precipitation.

27. A well efficiency of 100% was assigned to the production wells considering the large radius and area of exposed perforations cause low inflow velocities and minimize turbulent flow (Todd, 1980). The last row in Table 1. below gives the remaining available water column for the production wells equal to the available drawdown above the bottom of the wells minus total

actual drawdown and well interference drawdown.

Month	Diverted Volume (AF)	Total Diverted Flow Rate (gpm)	Diverted Flow Rate per well (gpm)
January	6.0	44.1	22.0
February	5.5	44.1	22.0
March	6.0	44.1	22.0
April	5.8	44.1	22.0
May	6.0	44.1	22.0
June	10.7	81.0	40.5
July	11.1	81.0	40.5
August	11.1	81.0	40.5
September	10.7	81.0	40.5
October	6.0	44.1	22.0
November	5.8	44.1	22.0
December	6.0	44.1	22.0
Total	91.0		

Table 1: *Assumed monthly pumping schedule for the infiltration gallery*

28. An evaluation of physical groundwater availability for evaluating legal availability was done by calculating groundwater flow through a Zone of Influence (ZOI) corresponding to the 0.01-foot drawdown contour using the Theis (1935) solution, a T= 1,000 ft2/day, Sy = 0.1 and a constant pumping rate of 56.4 GPM for one year. The horizontal wells are modeled as one well to due to the estimated proximity of the two production wells. The groundwater gradient of the source aquifer was determined from a water surface elevation map in a hydrogeologic report completed by TD&H Engineering. The 0.01-foot drawdown extends 20,000 feet from the proposed production wells.

29. The calculation for groundwater flow (Q) through the delineated area is given by the following Equation 1 and is 436,000 ft3/day or 3,653 AF/year.

Equation 1.

Q = TWi Equation 1

where:

T = Transmissivity = 1,000 ft2/day

W = Width of Zone of Influence = 40,000 ft

i = Groundwater gradient (TD&H Engineering) = 0.0109 ft/ft

Surface Water

30. The proposed wells are approximately 500 feet from an unnamed tributary of Muddy Creek. The water levels in the source aquifer are similar to the surface elevation of the unnamed tributary and this suggests the source aquifer is hydraulically connected to the unnamed tributary when it is flowing. A pre-application report by TD&H Engineering as part of the permit application, states that the tributary flows year-round (local landowners) and therefore the Unnamed Tributary of Muddy Creek is determined to be the potentially affected surface water source.

31. The Applicant is not aware of any streamflow data for the Unnamed Tributary. The Applicant reviewed the hydrology of the tributary to estimate flows to supplement the availability review. The Applicant states that according to local landowners, the Unnamed Tributary flows all year and may be perennial. At the well site, the tributary is split into a reach north and south of the Applicant's property where the wells are located.

32. The following Figure 2. identifies the various reaches of both the tributary and Muddy Creek in the project vicinity.

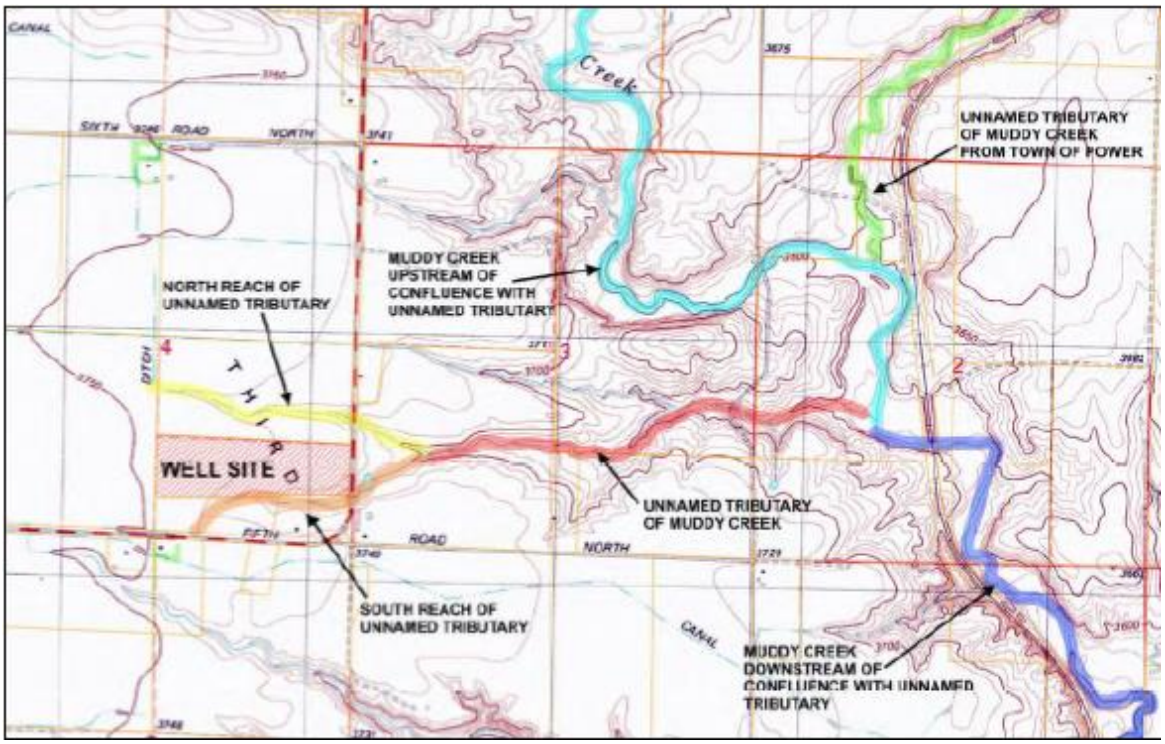

Figure 2. *Note: Unnamed tributary highlighted in red (plus the north and south reaches in its headwaters) is the tributary affected by net depletion, as identified by the Department*

33. The Applicant found that the north reach of the Unnamed Tributary has a significantly larger drainage basin than the south reach; the south reach appears to be largely fed by field irrigation and stormwater runoff. The north reach accounts for 86% of the drainage basin with approximately 1.9 square miles where the reach crosses Highway 431. There is a reservoir on the south reach just east of Highway 431. Basins were delineated using the USGS StreamStats tool; the reports are included in the Application materials. The following Table 2. presents the Applicant's StreamStats results and the calculations.

USGS StreamStats Results								
Location	Basin Area (sq. miles)	Peak Flow (cfs) at Selected Return Intervals						
		1.5-year	2-year	5-year	10-year	25-year	50-year	100-year
Muddy Creek at Power WTP Diversion	99.5	66.8	116	381	706	1,400	2,200	3,240
Muddy Creek at Benton Lake Diversion	119.1	72.1	125	409	758	1,510	2,380	3,520
Muddy Creek at Unnamed Tributary Confluence	122.1	73	126	413	766	1,530	2,410	3,570
North Reach of Unnamed Tributary at Highway 431	1.9	9.7	19	67.5	123	229	336	462
Unnamed Tributary East of Highway 431 at North and South Reach Confluence	2.2	10.4	20.3	71.7	131	244	359	496
Unnamed Tributary at Muddy Creek Confluence	2.9	11.8	22.8	80.4	147	276	408	566

Table 2. *Note: Unnamed Tributary at Muddy Creek Confluence is the Stream of Interest*

34. The Applicant provided flow estimates for surface water which were calculated for the Unnamed Tributary of Muddy Creek to predict the more common and frequent base flow rates. USGS publication Estimates of Monthly Streamflow Characteristics at Selected Sites in the Upper Missouri River Basin, Montana, Base Period Water Years 1937-86 (WRIR 89-4082) was referenced to estimate mean monthly streamflow. Estimates were completed at two locations on the Unnamed Tributary: at the confluence of the north and south reaches and at the tributary's confluence with Muddy Creek.

35. Table 3 presents the results and the calculations used to derive estimates of physical availability of surface water on the affected Unnamed Tributary of Muddy Creek.

Mean Monthly Streamflow				
Month	Unnamed Tributary East of Highway 431 (Confluence of North and South Reaches)		Unnamed Tributary at Muddy Creek Confluence	
	Mean Annual Precip. = 12.51"		Mean Annual Precip. = 12.48"	
	Drainage Area = 2.2 sq. mi.		Drainage Area = 2.9 sq. mi.	
	Mean Monthly Streamflow			
October	0.22 cfs	13.5 AF	0.29 cfs	17.8 AF
November	0.16 cfs	9.5 AF	0.21 cfs	12.5 AF
December	1.18 cfs	72.6 AF	1.53 cfs	94.1 AF
January	0.11 cfs	6.8 AF	0.14 cfs	8.6 AF
February	0.12 cfs	6.7 AF	0.16 cfs	8.9 AF
March	0.18 cfs	11.1 AF	0.23 cfs	14.1 AF
April	0.56 cfs	33.3 AF	0.71 cfs	42.2 AF
May	1.48 cfs	91.0 AF	1.86 cfs	114.4 AF
June	1.27 cfs	75.6 AF	1.62 cfs	96.4 AF
July	0.44 cfs	27.1 AF	0.56 cfs	34.4 AF
August	0.32 cfs	19.7 AF	0.41 cfs	25.2 AF
September	0.25 cfs	14.9 AF	0.32 cfs	19.0 AF
Minimum	0.11 cfs	6.7 AF	0.14 cfs	8.6 AF
Maximum	1.48 cfs	91.0 AF	1.86 cfs	114.4 AF
Average	0.52 cfs	31.8 AF	0.67 cfs	40.6 AF

Table 3.

36. The Department finds that the Applicant's estimate is generally credible thought it is worth noting that the flow estimates are understated as there are artificial flows with the Muddy Creek drainage that originated form the operations of the Greenfields Irrigation District.

37. The Department finds that the depletions of surface water extend to Muddy Creek from the confluence of the unnamed tributary as previously in Findings of Fact 12-17 to the confluence of the Sun River. The USGS has operated a stream flow gage on Muddy Creek near the confluence of the Sun River (Gage No. 06088500). The flowing is the median of the mean monthly flow expressed in cubic feet per second (CFS) for each month of the year for the period of 1925 to 2023 (Table 4).

Jan	Feb	Mar	Apr	May	June	July	Augst	Sept	Oct	Nov	Dec

34.7	33.6	39.8	36.95	129.2	225	277.8	321.9	190.85	106.95	64	44

Table 4.

CONCLUSIONS OF LAW

38. Pursuant to § 85-2-311(1)(a) (i), MCA, an applicant must prove by a preponderance of the evidence that "there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate."

39. An applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the applicant seeks to appropriate. *In the Matter of Application for Beneficial Water Use Permit No. 72662s76G by John Fee and Don Carlson* (DNRC Final Order 1990); *In the Matter of Application for Beneficial Water Use Permit No. 85184s76F by Wills Cattle Co. and Ed McLean* (DNRC Final Order 1994).

40. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. § 85-2-311(1)(a)(i), MCA. (FOF Nos. 22-37)

Legal Availability:

FINDINGS OF FACT

Legal Availability of Groundwater

41. Modeling indicates that the 0.01 foot drawdown contour extends a distance of 20,000 feet from the proposed points of diversion. The annual flux through the zone of influence was estimated to be 3,653 AF/year (Department Aquifer Test Report, 2022).

42. The Department's Groundwater Permit Technical Report identified 71 active groundwater rights within the zone of influence for purposes of evaluating legal water availability (Department Technical Report Appendix A).Currently, under § 85-2-306(3)(a)(iii), MCA, the maximum volume allowed under a Ground Water Certificate is 10 AF, so each of the 28 Certificates within the ZOI was assigned a volume of 10 AF for those Groundwater Certificates rights without specific volumes, to conduct a conservative analysis. The remaining 42 water rights are Statements of Claim. Volumes were assigned to these rights using Department

standards in ARM 36.12.115 based on their purposes. Irrigation rights without a volume decreed on the face of the water right abstract were assigned a volume of 2.5 acre-feet per acre, which is the upper end of the Department's standard for diverted volume in Climatic Area III: Moderate Consumptive Use, per ARM 36.12.115. SOCs for stock use that do not have volumes assigned where calculated using the number of animal units served times 30 gallons per day. The existing legal demand within the zone of influence is 513.6 AF per year.

43. The physical amount of groundwater available within the zone of influence is the estimated groundwater flux of 3,653 AF/year. The existing legal demand for groundwater within the zone of influence is 513.6 AF. The amount of water legally available is the difference between physical water availability (3,653 AF/year) and existing legal demand (513.6 AF/year) equal to 73,39.4 AF/year. The Applicant requested a maximum flow rate of 170 GPM and diverted volume of 91.0 AF. Groundwater is legally available in the amount requested.

Legal Availability of Surface Water

44. The Applicant asserts that this Application is for an appropriation of groundwater which is an exception to the "closure" under §85-2-343(2)(a). The Department finds this assertion to be factual.

45. The Applicant further argues even if surface water is implicated under the application, under the closure statute, use of surface water by a municipality is still authorized under §85-2-343(2)(c)(iii). The Department finds that this Application is proposing to appropriate groundwater for municipal use. As such, the exception to utilize surface water for municipal use does not apply to this Application.

46. The Applicant contends that specific to Muddy Creek, depletions to that specific source are exempted under both the above section (§85-2-343(2)(c)) and §85-2-343(2)(e).

47. The Department finds that this Application meets the basin closure exception as described in Finding of Fact 26. above. The Department therefore finds that the Applicant's assertion referring to the remaining basin closure exceptions described in Findings of Fact 27. and 28. and their applicability are not necessary and therefore moot.

48. The Department finds that net depletion caused by the proposed groundwater wells will occur in an Unnamed Tributary of Muddy Creek identified in Figure 1. Depletions to the

unnamed tributary of Muddy Creek by groundwater pumping from the two proposed wells were determined by the Department and are presented in the following Table 4.

Month	Consumption (AF)	Depletion (AF)	Depletion (gpm)
January	6.0	6.7	48.5
February	5.5	6.4	51.4
March	6.0	6.3	46.1
April	5.8	6.3	47.7
May	6.0	6.3	46.1
June	10.7	7.8	59.1
July	11.1	9.2	67.4
August	11.1	9.7	71.1
September	10.7	9.9	74.4
October	6.0	8.4	61.5
November	5.8	7.1	53.8
December	6.0	6.8	49.5
Total	91.0	91.0	

Table 4. Net Depletion to Unnamed Tributary of Muddy Creek

49. Information in the Application indicates that return flows from the Applicant's municipal system consist of system leakage and lawn irrigation which infiltrate and eventually flow into an unnamed tributary of Muddy Creek located south of Power. This unnamed tributary of Muddy Creek is separate from the tributary where the proposed wells are located nearby. Leakage is an inherent part of all municipal distribution systems and was estimated by the Applicant using District flow distribution data. The Applicant determined that return flows are expected to average 3.3 acre-feet per month since they must infiltrate and then travel to the unnamed tributary through the aquifer. This equates to a total of 39.7 AF of volume over the course of a year.

50. The Department finds that the Applicant's return flow analysis does not account for any water returning to the groundwater source where water is diverted at the proposed well locations. Additionally, the estimate of return flows the Applicant provided does not contemplate any future efficiency improvements to the Applicant's municipal water distribution system. There is no information in the Application regarding how such efficiency improvement would affect the amounts of water that would continue to return to surface water in the Muddy Creek drainage.

51. The Department, as a matter of policy, assumes that municipal systems are 100% consumed from the groundwater source.

52. Therefore, the Department finds that the proposed municipal to be 100% consumptive for the purposes of making a finding of the amount of water depleted from surface water, in this case 91.0 AF.

53. The Department finds that surface water in the amount of 91.0 AF annually would have to be considered legally available in Muddy Creek throughout the entire year when depletions to surface water are occurring.

54. To determine if water is legally available in the identified depleted surface water sources, and assessment of each source water conducted by using the amounts previously found physically available in in both the unnamed tributary of Muddy Creek and the affected reach of the mainstem of Muddy Creek.

Unnamed Tributary of Muddy Creek Legal Availability

55. There is one water right of record which is in the depleted reach of the unnamed tributary of Muddy Creek. That water right is Statement of Claim 41K 30127993 which is a year-round instream stock use for 188 animal units. Using Department standards of 30 gallons per day per animal unit equals 3.5 AF. This would require 2.2 gallons per minute or 0.005 CFS to meet this legal demand (Information included in the Application File).

56. The Department found the following amounts to be legally available in the unnamed tributary of Muddy Creek at the confluence with the mainstem of Muddy Creek by subtracting legal demands from the amounts previously found to be physical available located within the depleted reach.

Month	Jan	Feb	Mar	Apr	May	June	July	Augst	Sept	Oct	Nov	Dec
Physically Available	0.14	0.16	0.23	0.71	1.86	1.62	0.56	0.41	0.32	0.29	0.21	1.53
Legal Demands	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.0005
Legally Available	0.14	0.16	0.23	0.71	1.86	1.62	0.56	0.41	0.32	0.29	0.21	1.53

Table 5.

57. The Department finds that the flows physically available are more than the legals demands on the unnamed tributary of Muddy Creek.

Muddy Creek

58. There are 16 water rights of record located within the depleted reach of Muddy Creek. An index of these water rights is included in the Application file for references purposes.

59. The Department found the following amounts to be legally available in the depleted reach of Muddy Creek from the confluence of the unnamed tributary to near the confluence of the Sun River by subtracting legal demands from the amounts previously found to be physical available located within the depleted reach. The following Table 6 summarizes the amounts found to be legally available by subtracting the legal demands previously identified in Finding of Fact 40. with the amounts the department found to be physically available.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Physically Available	34.7	33.6	39.8	36.95	129.2	225	277.8	321.9	190.85	106.95	64	44
Legal Demands	13.03	13.03	13.03	14.09	23.88	24.51	24.51	24.51	20.61	20.08	13.03	13.03
Legally Available	21.67	20.57	26.77	22.86	105.32	200.49	253.29	297.39	170.24	86.87	50.97	30.97

Table 6.

CONCLUSIONS OF LAW

60. Pursuant to § 85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that water is legally available during the period in which the applicant seeks to appropriate, in the amount requested based upon a comparative analysis of physical availability of water to the legal demands on the sources impacted by the proposed use. See also ARM 36.12.1704 and 36.12.1705; Montana Power Co., 211 Mont. at 99, 685 P.2d at 340 (Permit granted to include only early irrigation season because no water legally available in late irrigation season); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992).

61. Montana water law recognizes the that due to the connectivity between surface water and ground water, except for in unique circumstances, the appropriation of groundwater results in the

depletion of surface water through induced infiltration and/or pre-stream capture. Accordingly, an application for applicant groundwater appropriation must prove that the proposed appropriation will not result in surface water depletions or analyze the legal availability of surface water in light of the proposed ground water appropriation. Where a proposed ground water appropriation depletes surface water, applicant must prove legal availability of amount of depletion of surface water throughout the period of diversion either through a mitigation /aquifer recharge plan to offset depletions or through a comparative analysis of the legal demands and physical availability of water in the impacted surface water sources. Montana Trout Unlimited v. DNRC, 2006 MT 72, 331 Mont. 483, 133 P.3d 224; Westmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order,* (2011) Pgs. 7-8("DNRC properly determined that Westmont cannot be authorized to divert, either directly or indirectly, 205.09 acre-feet from the Bitterroot River without establishing that the water does not belong to a senior appropriator"; applicant failed to analyze legal availability of surface water where projected surface water depletion from groundwater pumping); Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 (Court affirmed denial of permit in part for failure to prove legal availability of stream depletion to slough and Beaverhead River); Robert and Marlene Takle v. DNRC *et al.*, Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994)(affirming DNRC denial of Applications for Beneficial Water Use Permit Nos. 76691-76H, 72842-76H, 76692-76H and 76070-76H; underground tributary flow cannot be taken to the detriment of other appropriators including surface appropriators and ground water appropriators must prove unappropriated surface water)(citing Perkins v. Kramer, 148 Mont. 355, 423 P.2d 587 (1966)).

62. A flow of water on a given date does not show that water is legally available without showing that all prior appropriators were diverting all claimed water at that moment. Sitz Ranch, *Order Affirming DNRC Decision,* Pgs. 5-6. A flow of water past a point on a particular date or dates does not demonstrate that water is legally available. Id.

63. In analyzing legal availability for surface water, applicant is required to evaluate legal demands on the source of supply throughout the "area of potential impact" by the proposed use

under § 85-2-311(1)(a)(ii), MCA, not just within the "zone of influence." Sitz Ranch, *Order Affirming DNRC Decision*, (2011) Pg. 6. The Applicant has proven by a preponderance of the evidence that groundwater can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the Department and other evidence provided to the Department. §85-2-311(1)(a)(ii), MCA. (FOF Nos. 41-43)

64. The Department finds surface water is legally available in the Unnamed Tributary of Muddy Creek between January and December (year-round) when depletions to the creek occur from the proposed groundwater pumping, and surface water is legally available in the Muddy Creek between January and December (year-round) when depletions of surface water occur. §85-2-311(1)(a)(ii), MCA. (FOF Nos. 44-59)

Adverse Effect

FINDINGS OF FACT

65. The Department modeled drawdown in existing wells in the source aquifer using the Theis (1935) solution, T= 1,000 ft2/day, Sy= 0.1 and an assumed monthly pumping schedule for a period of five years. Drawdown is largest at the end of September of the fifth year of the assumed monthly pumping schedule. Drawdown more than 1-foot occurs within 3,800 feet of the proposed wells (Table 6.). There are five water rights in the source aquifer, shown in Figure 8., that are predicted to experience drawdown greater than 1-foot.

WR Number	Owners	Distance (ft)	Well Depth (ft)	Static Water Level (ft)	Predicted Drawdown (ft)	Available Drawdown (ft)
41K 62706 00	CLAYTON PERRY; TERRI PERRY	1470	26	20	3.8	2.2
41K 30127990	CLAYTON PERRY; TERRI PERRY	1470	NA	NA	3.8	NA
41K 93585 00	DIANE K SPECK; WILLIAM O SPECK	1720	27	6	3.3	17.7
41K 22254 00	SHERRY DERMOTT	1910	30	19	3.0	8.0
41K 45517 00	CHERIENE JOHNSON	1980	17	NA	2.9	NA

Table 6. *Table of existing water rights experiencing drawdown greater than 1-foot.*

66. The Groundwater Permit Technical Report calculated that groundwater was legally available within the modeled 0.01-foot zone of influence. The Applicant provided information showing that the wellfield can be controlled to prevent adverse effect to prior groundwater appropriators by shutting off the pumps located in the proposed wells.

67. The Department finds that the proposed use of groundwater will not adversely affect other groundwater appropriators.

68. As described previously in this document, the proposed wells are approximately 500 feet from an unnamed tributary of Muddy Creek. The water levels in the source aquifer are similar to the surface elevation of the unnamed tributary and this suggests the source aquifer is hydraulically connected to the unnamed tributary when it is flowing. The total consumption from the proposed use is 91.0 AF per year.

69. The Department has found that of the 91.0 AF of water projected to be consumed by the proposed groundwater appropriation.

70. The Department found that sufficient amounts of surface water are legally available to offset depletions in Muddy Creek and the Unnamed Tributary of Muddy Creek. Legally

available water in this case, would prevent adverse effect to existing water rights located in the depleted reaches of both surface water sources as evidenced in the following Table 7 depicting remaining flows in the unnamed tributary of Muddy Creek and the mainstem of Muddy Creek in Table 8.

Legally Available	0.14	0.16	0.23	0.71	1.86	1.62	0.56	0.41	0.32	0.29	0.21	1.53
Depletions (GPM)	48.5	51.4	46.1	47.7	46.1	59.1	67.4	71.1	74.4	61.5	53.8	49.5
Depletions (CFS)	0.11	0.11	0.10	0.11	0.10	0.13	0.15	0.16	0.17	0.14	0.12	0.11
Remaing Flow	0.03	0.04	0.12	0.60	1.75	1.48	0.40	0.25	0.15	0.15	0.09	1.42

Table 7. Unnamed Tributary of Muddy Creek

Legally Available	21.67	20.57	26.77	22.86	105.32	200.49	253.29	297.39	170.24	86.87	50.97	30.97
Depletions (GPM)	48.5	51.4	46.1	47.7	46.1	59.1	67.4	71.1	74.4	61.5	53.8	49.5
Depletions (CFS)	0.11	0.11	0.10	0.11	0.10	0.13	0.15	0.16	0.17	0.14	0.12	0.11
Remaing Flow	21.56	20.46	26.67	22.75	105.22	200.36	253.14	297.23	170.07	86.73	50.85	30.86

Table 8. Muddy Creek Mainstem.

71. In addition to the depleted reaches located in the Muddy Creek drainage, Northwestern Energy has large senior water rights on the mainstem of the Missouri River near Great Falls which are only rarely satisfied. These rights constitute a legal demand upon which the Department must consider making a finding of no adverse effect.

72. The Applicant's plan includes offsetting impacts to the Missouri River caused by the proposed Muddy Creek depletion by purchasing a water service contract from the Bureau of Reclamation at Canyon Ferry Dam as a condition of granting this Application. The Department concurs that the applicant's plan to offset reductions in flows is necessary because of depletions in the Muddy Creek drainage. The Applicant shall secure a contract with BOR for 91 AF per year to mitigate or offset the total annual volume reduction from the Missouri River a result of the Applicant's proposed groundwater appropriation as a condition of permit issuance.

73. The Department finds that the Applicant has proved by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. When the following condition is met:

MISSOURI RIVER MITIGATION PLAN

PRIOR TO COMMENCING DIVERSIONS UNDER THIS PERMIT THE APPROPRIATOR SHALL MAKE PROVISION TO MITIGATE ADVERSE EFFECT TO SURFACE WATER RIGHTS BY REPLACING THE FULL VOLUME OF NET DEPLETION OF THE APPROPRIATION. THE APPROPRIATOR SHALL REPLACE AN EQUIVALENT AMOUNT OF WATER TO THE MAINSTEM OF THE MISSOURI RIVER ABOVE RAINBOW DAM IN THE FOLLOWING MANNER: THE APPROPRIATOR SHALL MITIGATE DEPLETIONS TO SURFACE WATER AND PROVIDE FOR LEGAL AVAILABILITY OF SURFACE WATER UNDER THIS PERMIT THROUGH THE PURCHASE OF A U.S. BUREAU OF RECLAMATION (BOR) WATER SERVICE CONTRACT FROM CANYON FERRY RESERVOIR. THE VOLUME OF WATER STATED ON THE CONTRACT MUST BE EQUAL TO THE VOLUME THAT IS DEPLETED FROM THE MUDDY CREEK DRAINAGE IN THIS CASE 91 ACRE FEET ON AN ANNUAL BASIS. DELIVERIES OF WATER UNDER SUCH CONTRACT MUST BE COMMENCED THE CALENDAR YEAR AFTER DIVERSIONS UNDER THIS PERMIT COMMENCE. APPROPRIATORS CONTRACT WITH THE BOR MAY PROVIDE THAT IN THE CALENDAR YEARS SUBSEQUENT TO THE FIRST CALENDAR YEAR IN WHICH WATER IS TO BE PUT TO BENEFICIAL USE, THE CONTRACT VOLUME DELIVERED MAY BE EQUAL TO BUT NOT LESS THAN THE VOLUME OF WATER ACTUALLY DIVERTED BY THE APPROPRIATOR IN THE PREVIOUS CALENDAR YEAR. A DELIVERY SCHEDULE ALLOWED BY THE BOR AND WHICH RESULTS IN THE FULL REPLACEMENT OF THE PRIOR CALENDAR YEARS DIVERSION VOLUME DURING THE FOLLOWING CALENDAR YEAR SHALL BE DEEMED SUFFICIENT UNDER THIS PERMIT. APPROPRIATOR SHALL SUBMIT TO THE HAVRE REGIONAL OFFICE WITH ITS WATER MEASUREMENT RECORDS ON JANUARY 30th OF EACH YEAR PROOF OF THE WATER SERVICE CONTRACT WITH BOR AS DESCRIBED ABOVE. DIVERSION UNDER THIS PERMIT MUST STOP IF ANY PART OF THE REQUIRED MITIGATION CEASES.

CONCLUSIONS OF LAW

74. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. See Montana Power Co., 211 Mont. at 96, 685 P.2d at 331 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); Bostwick I. ¶ 21; Bostwick Properties Inc. v DNRC, 2013 MT 48, ¶¶ 25, 38, 43, 369 Mont. 150, 296 P.3d 1154 (Bostwick II).

75. An applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries expressly required for compliance with the hydrogeologic assessment requirement, an applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. Id. ARM 36.12.120(8).

76. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. Sitz Ranch, Pg. 4.

77. Simply asserting that an acknowledged reduction, however small, would not affect those with a prior right does not constitute the preponderance of the evidence necessary to sustain applicant's burden of proof. Wesmont Developers, *Memorandum and Order*, Pg. 11 (Court rejected applicant's argument that net depletion of .15 millimeters in the level of the Bitterroot River could not be adverse effect.); Sitz Ranch, DV-10-13390, *Order Affirming DNRC Decision*, Pgs. 3-4 (Court rejected applicant's arguments that its net depletion (3 and 9 gpm, respectively to Black Slough and Beaverhead River) was "not an adverse effect because it's not measureable," and that the depletion "won't change how things are administered on the source."); *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company (DNRC Final Order 2006*)(adverse effect not required to be measureable but must be calculable)*;* After calculating the projected depletion for the irrigation season, the District Court in Sitz Ranch v. DNRC explained:

> Section 85-2-363(3)(d) MCA requires analysis whether net depletion will adversely affect prior appropriators. Many appropriators are those who use surface water. Thus, surface water must be analyzed to determine if there is a net depletion to that resource. Sitz's own evidence demonstrates that about 8 acre-feet of water will be consumed each irrigation season. Both Sitz and any other irrigator would claim harm if a third party were allowed to remove 8 acre-feet of water each season from the source upon which they rely.

Sitz Ranch, *Order Affirming DNRC Decision*, Pgs. 3-4.

78. The Department can and routinely does, condition a new permit's use on use of that special management, technology or measurement such as augmentation now generally known as mitigation and aquifer recharge. See § 85-2-312; § 85-2-360 et seq., MCA; see, e.g., *In the Matter of Beneficial Water Use Permit No. 107-41I by Diehl Development* (DNRC Final Order 1974) (No adverse effect if permit conditions to allow specific flow past point of diversion.); *In the Matter of Combined Application for Beneficial Water Use Permit No. 76H- 30043133 and Application No. 76H-30043132 to Change Water Right Nos. 76H-121640-00, 76H-131641-00 and 76H-131642-00 by the Town of Stevensville* (DNRC Final Order 2011).

The requirement for mitigation in closed basins has been codified in § 85-2-360, *et seq.*, MCA. Section 85-2-360(5), MCA provides in relevant part:

> A determination of whether or not there is an adverse effect on a prior appropriator as the result of a new appropriation right is a determination that must be made by the department based on the amount, location, and duration of the amount of net depletion that causes the adverse effect relative to the historic beneficial use of the appropriation right that may be adversely affected.

E.g., *Combined Application for Beneficial Water Use Permit No. 76G-30050801 and Change Authorization 76G-30050805 by Missoula County* (DNRC Final Order 2012)(permit granted conditioned on mitigation of depletion ranging .8 to 7.4 gpm); *In the Matter of Application No. 76H-30046211 for a Beneficial Water Use Permit and Application No.76H-30046210 to Change a Non-filed Water Right by Patricia Skergan and Jim Helmer* (DNRC Final Order 2010, Combined Application)(permit granted conditioned on mitigation).

79. In analyzing adverse effect to other appropriators, an applicant may use the water rights claims of potentially affected appropriators as evidence of their "historic beneficial use." See Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston, 249 Mont. 425, 816 P.2d 1054(1991).

80. For a permit with mitigation: The Department will evaluate whether an applicant's proposed plan, i.e. mitigation or aquifer recharge, will offset depletions so as to meet § 85-2-311(1)(b), MCA, in the permit proceeding. The applicant's authority to use the water as proposed is assumed for the purposes of the analysis. The authority of the applicant to use the offset water as proposed for the plan is not determined in the permit proceeding but is determined in any required application for change in appropriation. Whether the applicant proves by a preponderance of the evidence that the mitigation/aquifer recharge plan will be effective is determined in the permit proceeding. Thus, the applicant must accurately convey to the Department exactly what it proposes for a mitigation/aquifer recharge plan. E.g., Wesmont Developers, *Memorandum and Order*, Pg. 10 (it was within the discretion of the Department to decline to consider an undeveloped mitigation proposal as mitigation for adverse effect in a permit proceeding); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 By Utility Solutions LLC* (DNRC Final Order 2006), *affirmed*, Faust v. DNRC *et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007) , *affirmed*, Montana River Action Network *et al*. v. DNRC *et al.*, Cause No. CDV-2007-602, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008); § 85-2-360 *et seq.*

81. Pursuant to § 85-2-363, MCA, an applicant whose hydrogeologic assessment conducted pursuant to § 85-2-361, MCA, predicts that there will be a net depletion of surface water shall offset the net depletion that results in the adverse effect through a mitigation plan or an aquifer recharge plan.

82. Pursuant to § 85-2-362, MCA, an aquifer recharge plan must include: evidence that the any required water quality related permits have been granted pursuant to Title 75, chapter 5, and

pursuant to §§75-5-410 and 85-2-364, MCA; where and how the water in the plan will be put to beneficial use when and where, generally, water reallocated through exchange or substitution will be required; the amount of water reallocated through exchange or substitution that is required; how the proposed project or beneficial use for which the aquifer recharge plan is required will be operated; evidence that an application for a change in appropriation right, if necessary, has been submitted; a description of the process by which water will be reintroduced to the aquifer; evidence of water availability; and evidence of how the aquifer recharge plan will offset the required amount of net depletion of surface water in a manner that will offset any adverse effect on a prior appropriator.

83. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected by the proposed appropriation. The Applicant has proven by a preponderance of the evidence that the mitigation plan is adequate to prevent adverse effect to prior appropriators caused by depletion of hydraulically connected surface waters. § 85-2-311(d), MCA. (FOF Nos. 65-73)

Adequate Diversion

FINDINGS OF FACT

84. The new groundwater wells will consist of two infiltration galleries (horizontal wells) consisting of perforated piping with a geotextile-enclosed gravel envelope. Water will be collected in the piping and gravel and then conveyed to a buried caisson. Two submersible pumps in the caisson will convey the water through approximately 12,200 linear feet of new 6-inch PVC water main to the existing distribution system. A pump house at the well site will contain the well controls, flow meter, and all appurtenant piping and valves.

85. GWIC ID 301863 was evaluated by the Department's groundwater hydrologist with a 28-hour aquifer test at an average pumping rate of 20.0 GPM and a maximum drawdown of 5.36 feet below the static water level (swl) of 7.89 feet below top of the well casing (btc). This measured maximum drawdown leaves 0.8 feet above the well bottom. The average flow rate of 20.0 GPM for the 28-hour aquifer test did not exceed the requested maximum flow rate,

however, an 8-hour drawdown and yield test are a condition to establish proof of adequacy of diversion once the horizontal wells are installed.

CONCLUSIONS OF LAW

86. Pursuant to § 85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate. The adequate means of diversion statutory test merely codifies and encapsulates the common law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.

87. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. § 85-2-311(1)(c), MCA. (FOF Nos. 84-85)

Beneficial Use

FINDINGS OF FACT

88. The Applicant proposes to use water for municipal use. Municipal use is defined as a beneficial use of water pursuant to §85-2-102(5)(a), MCA.

89. A Preliminary Engineering Report (PER) has been completed that analyzes the Applicant's current and the projected future 20-year anticipated water needs. Based on the historic population data presented in the PER, annual growth has increased by 0.46% from 2000 to 2010 and decreased by 0.28% from 2010 to 2015. The Applicant expects rapid growth once a suitable and reliable water supply is available; they anticipate an additional 180 persons by the year 2040.

90. The PER therefore projects a 2040 population in Power of 359 people, Average Day Demand of 80,400 gallons per day (gpd), and Maximum Day Demand of 241,200 gpd. Water usage will be for domestic and commercial needs. The volume requested, 91.0 AF, corresponds to the projected Average Day Demand and the requested flow rate of 170 GPM corresponds to the Maximum Day Demand.

CONCLUSIONS OF LAW

91. Under § 85-2-311(1)(d), MCA, an applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. An appropriator may appropriate water only for a beneficial use. See also, §§ 85-2-301 and 402(2)(c), MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. E.g., McDonald, supra; Toohey v. Campbell (1900), 24 Mont. 13, 60 P. 396.

The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518;Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451; *In the Matter of Application for Beneficial Water Use Permit No. 41S-105823 by French* (DNRC Final Order 2000). Sitz Ranch, *Order Affirming DNRC Decision*, Pg. 3 (citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).

92. Applicant proposes to use water for Municipal use which is a recognized beneficial use. § 85-2-102(5), MCA. The Applicant has proven by a preponderance of the evidence that Municipal use is a beneficial use and that 91.0 AF of diverted volume, and 170 GPM of water requested is the amount needed to sustain the beneficial use. (FOF Nos. 88-90)

Possessory Interest

FINDINGS OF FACT

93. This application is for a municipal use. It is clear that the ultimate user will not accept the supply without consenting to the use of water. The Applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

CONCLUSIONS OF LAW

94. Pursuant to § 85-2-311(1)(e), MCA, an applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property. For municipal uses, the possessory interest criterion is satisfied does not requiring written consent at the time of application where it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use. ARM 36.12.1802(b).

95. The Applicant has proven by a preponderance of the evidence that this permit is for municipal use and the ultimate user will not accept the supply without consenting to the use of water at the place of use. Accordingly, the possessory interest criterion is satisfied. (FOF 93)

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Order, the Department preliminarily determines that this Application for Beneficial Water Use Permit No. 41K 30150582 should be **GRANTED.** The Applicant has proven by a preponderance of the evidence that net depletion of surface water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount necessary, in the Muddy Creek drainage where depletions will occur. The Applicant has proven by a preponderance of the evidence that unmitigated net depletion that will accumulate in Muddy Creek are legally available year-round. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected by the proposed appropriation when the following condition is met:

MISSOURI RIVER MITIGATION PLAN

PRIOR TO COMMENCING DIVERSIONS UNDER THIS PERMIT THE APPROPRIATOR SHALL MAKE PROVISION TO MITIGATE ADVERSE EFFECT TO SURFACE WATER RIGHTS BY REPLACING THE FULL VOLUME OF NET DEPLETION OF THE APPROPRIATION. THE APPROPRIATOR SHALL REPLACE AN EQUIVALENT AMOUNT OF WATER TO THE MAINSTEM OF THE MISSOURI RIVER ABOVE RAINBOW DAM IN THE FOLLOWING MANNER: THE APPROPRIATOR SHALL

MITIGATE DEPLETIONS TO SURFACE WATER AND PROVIDE FOR LEGAL AVAILABILITY OF SURFACE WATER UNDER THIS PERMIT THROUGH THE PURCHASE OF A U.S. BUREAU OF RECLAMATION (BOR) WATER SERVICE CONTRACT FROM CANYON FERRY RESERVOIR. THE VOLUME OF WATER STATED ON THE CONTRACT MUST BE EQUAL TO THE VOLUME THAT IS DEPLETED FROM THE MUDDY CREEK DRAINAGE IN THIS CASE 91 ACRE FEET ON AN ANNUAL BASIS. DELIVERIES OF WATER UNDER SUCH CONTRACT MUST BE COMMENCED THE CALENDAR YEAR AFTER DIVERSIONS UNDER THIS PERMIT COMMENCE. APPROPRIATORS CONTRACT WITH THE BOR MAY PROVIDE THAT IN THE CALENDAR YEARS SUBSEQUENT TO THE FIRST CALENDAR YEAR IN WHICH WATER IS TO BE PUT TO BENEFICIAL USE, THE CONTRACT VOLUME DELIVERED MAY BE EQUAL TO BUT NOT LESS THAN THE VOLUME OF WATER ACTUALLY DIVERTED BY THE APPROPRIATOR IN THE PREVIOUS CALENDAR YEAR. A DELIVERY SCHEDULE ALLOWED BY THE BOR AND WHICH RESULTS IN THE FULL REPLACEMENT OF THE PRIOR CALENDAR YEARS DIVERSION VOLUME DURING THE FOLLOWING CALENDAR YEAR SHALL BE DEEMED SUFFICIENT UNDER THIS PERMIT. APPROPRIATOR SHALL SUBMIT TO THE HAVRE REGIONAL OFFICE WITH ITS WATER MEASUREMENT RECORDS ON JANUARY 30th OF EACH YEAR PROOF OF THE WATER SERVICE CONTRACT WITH BOR AS DESCRIBED ABOVE. DIVERSION UNDER THIS PERMIT MUST STOP IF ANY PART OF THE REQUIRED MITIGATION CEASES.

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to §§ 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid

objection, the Application and objection will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If valid objections to an Application are received and withdrawn with stipulated conditions and the Department preliminarily determined to grant the Application, the Department will grant the Application subject to conditions necessary to satisfy applicable criteria based on the preliminary determination.

DATED this 4th day of October 2023.

/Original signed by Matt Miles/
Matt Miles, Manager
Havre Regional Office
Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 5th Day of October 2023, by first class United States mail.

POWER-TETON COUNTY WATER & SEWER DISTRICT; ROSS H. FITZGERALD, PRESIDENT
P.O. BOX 176
POWER, MT 59468

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KAILEE INGALLS