

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

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 43Q 30102729 BY DIAMOND FALLS, LLC)))	PRELIMINARY DETERMINATION TO GRANT PERMIT
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On May 14, 2015, Diamond Falls, LLC (Applicant) submitted Application for Beneficial Water Use Permit No. 43Q 30102729 to the Billings Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC) for 1830 GPM (4.08 CFS) and 41.37 AF for multiple domestic and lawn and garden uses. The Department published receipt of the Application on its website. An Environmental Assessment for this Application was completed on August 27, 2015. The Application was determined to be correct and complete as of September 10, 2015. A waiver of timelines was received on December 30, 2015. An amendment to the application was received on February 29, 2016 reducing the requested flow rate to 1620 GPM (3.61 CFS) and increasing the requested volume to 117.05 AF.

INFORMATION

The Department considered the following information submitted by the Applicant.

Application as filed:

- Application for Beneficial Water Use Permit, Form 600
- Attachments
 - Well Logs
 - Aquifer Testing Addendum
 - Form 633 in electronic format
- Maps:
 - Topographical map showing points of diversion and place of use.
 - Plat map showing subdivision plan and location.

Information Received after Application Filed

- Letter from Applicant’s consultant, Christy Foster (Engineering West) requesting a variance from aquifer testing requirements (ARM 36.12.121) dated June 18, 2015.
- Letter from Regional Manager, Kimberly Overcast, to Applicant’s consultant, Christy Foster, approving variance request dated July 23, 2015.
- Spreadsheet showing calculations for domestic and lawn and garden flow and volume requests sent by email from Christy Foster to Water Resources Specialist, Christine Schweigert on August 11, 2015.
- Email from Christy Foster to Christine Schweigert changing the number of acres dated August 12, 2015.
- Email from Christy Foster to Christine Schweigert dated February 29, 2016 with attached spreadsheet showing amended number of lots, flow rate, volume and max acres.

Information within the Department’s Possession/Knowledge

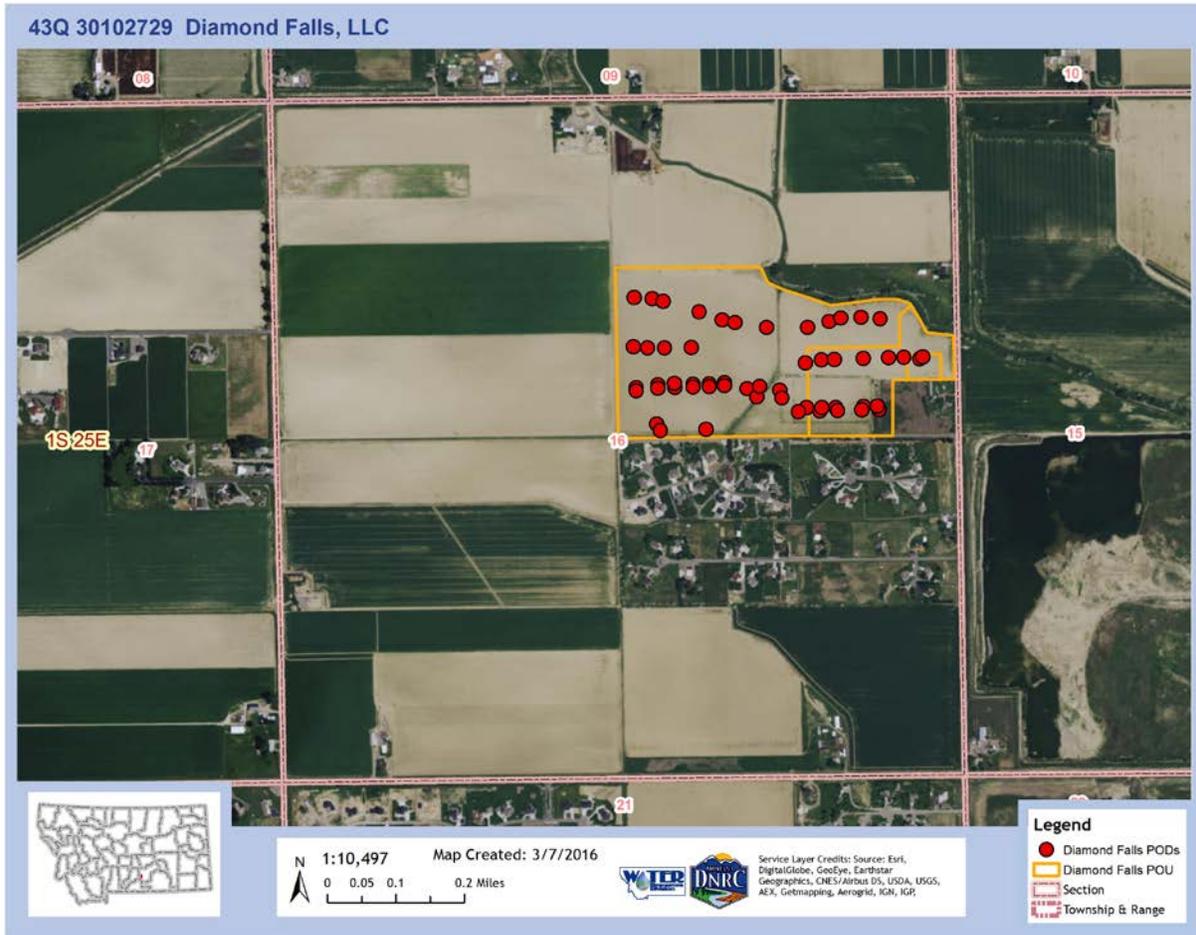
- *Hydrogeology of the West Billings Area: Impacts of Land-Use Changes on Water Resources*, Montana Bureau of Mines and Geology Report of Investigation 10, Olson and Reiten, 2002
- Aquifer Test Report by Department hydrogeologist, Attila Folnagy, July 8, 2015.
- Depletion Report by Department hydrogeologist, Attila Folnagy, July 8, 2015.
- Revised Aquifer Test Report by Department hydrogeologist, Attila Folnagy, March 3, 2016.
- Revised Depletion Report by Department hydrogeologist, Attila Folnagy, March 3, 2016.

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). **NOTE:** Department or DNRC means the Department of Natural Resources and Conservation; CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet; AC means acres; AF/YR means acre-feet per year; IWR mean Irrigation Water Requirements; and POD means point of diversion.

PROPOSED APPROPRIATION

FINDINGS OF FACT

1. The Applicant proposes to divert groundwater, by means of 54 wells, from January 1 through December 31 at 1620 GPM (3.61 CFS) up to 117.05 AF, from the S2NE Section 16, T1S, R25E, Yellowstone County. Water will be used for multiple domestic use, (21.17 AF) from January 1 through December 31 and lawn and garden use (95.88 AF) from May 1 through September 30. The Applicant proposes a subdivision with 54 residential lots and 38.35 acres of lawn and garden. Each lot will be served by an individual well. The place of use is generally located on Billings West End on South 48th Street West, approximately ¼ to ½ mile south of King Ave West, in the S2NE Section 16, T1S, R25E, Yellowstone County.
2. The Applicant's wells will be approximately 140 to 1,500 feet south and west of Hogan's Slough.
3. Department hydrogeologists have estimated that 79.6 AF of water will be consumed. Given a diverted volume of 117.05 AF, 37.45 AF of water would return to the source aquifer and Hogan's Slough.



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

GENERAL CONCLUSIONS OF LAW

4. 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 . . .

5. 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 permit holder 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 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.

6. 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 it 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.

7. 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, 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).

8. 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.

9. 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).

Physical Availability

FINDINGS OF FACT

10. The Applicant proposes to divert groundwater using 54 wells at 30 GPM per well for a total of 1620 GPM (3.61 CFS) up to 117.05 AF/YR. The test wells, referred to as Block 3 – Lot 4 Well which is the pumping well (GWIC # 281919) and Block 3 – Lot 3 Well which is the observation well (GWIC # 281916) are 37' and 37.5' deep respectively. They are in the S2NE of Section 16, T1S, R25E. The application proposes one well on each of the 54 residential lots for domestic and lawn and garden uses.

11. The Applicant submitted a request for a variance from ARM 36.12.121 (3)(a) which states: "Pumping must be maintained at a constant discharge rate equal to or greater than the proposed pumping rate for the duration of the test.". A variance was granted that allowed the Applicant to test at a rate less than requested because the total flow rate of 54 wells could not be obtained in a single test and because Department hydrologists determined the proposed testing is sufficient to yield the data needed to evaluate physical and legal availability.

12. Background monitoring of static water levels was performed on the pumping well (Block 3 – Lot 4 Well) from March 16, 2015 to March 20, 2015 and in the observation well (Block 3 – Lot 3 Well) from March 19, 2015 to March 20, 2015.
13. A 72-hour aquifer test using the Block 3 – Lot 4 Well as the pumping well and the Block 3 – Lot 3 Well as the observation well started on March 20, 2015 at 2:00 PM and this is considered to be time zero ($t=0$) for the computation of drawdown. The test continued without interruption until 2:00 PM on March 23, 2015 at an average flow rate of 112 GPM. The discharge was measured using a totalizing flow meter and was disposed into a lateral irrigation ditch that discharged into Hogan's Slough.
14. The maximum drawdown in the pumping well was 1.65 feet below the static water level of 13.1 feet below ground surface (bgs). The observation well is 23 feet from the pumping well and had a maximum drawdown of 1.18 feet from the static water level of 12.59 feet bgs.
15. A Department hydrogeologist modeled drawdown from the proposed appropriation by modeling the period of diversion for 15 wells that were evenly spaced across the place of use. The hydrogeologist used 15 wells because that would be the minimum needed to achieve the requested flow rate of 1620 GPM using the aquifer testing rate of 112 GPM.
16. The monthly pumping schedule was obtained by evenly distributing the requested domestic volume throughout the year and apportioning the requested irrigation volume based on the net irrigation requirement from the Billings Station in the IWR program. Drawdown was modeled in the proposed wells after one year of pumping each well at 1/15 the monthly pumping schedule. The total maximum drawdown after one year of pumping is predicted to be 2.5 feet at the end of July. This would leave 21.4 feet of available drawdown above the bottom of the proposed wells, assuming all wells will be completed to a similar depth.
17. A second analysis was performed by generating a semi-logarithmic graph of drawdown during the 72 hour aquifer test at a pumping rate of 112 GPM. The graph showed that the well continued to drawdown following a semi-log straight line. A best fit trendline was applied to the drawdown data and extrapolated to a period of one year assuming continuous pumping. The predicted pumping drawdown after one year is 1.8 feet. A modeled interference drawdown of

0.7 feet was added to the predicted pumping drawdown for a total of 2.5 feet, this would leave 21.4 feet of available drawdown above the bottom of the well.

18. The Dept. used AQTESOLV® (HydroSOLVE, Inc. 2007) to analyze drawdown from the aquifer test and obtain estimates of aquifer properties including transmissivity (T) and storativity (S). The aquifer transmissivity determined by the Neuman (1974) solution is 7,606 ft²/day and storativity is 0.017.

19. Physical Availability is analyzed by calculating groundwater flux through a zone of influence, which is determined by the 0.01 foot drawdown contour. The 0.01 foot drawdown contour modeled by the Department occurs at 6,100 feet from the Diamond Falls wells. The total volume of aquifer flux each year within the zone of influence can be calculated as TW_i, where T is transmissivity (ft²/day), W is the width of the zone of influence (ft.), and i is the hydraulic gradient (ft. /ft.). Using values of transmissivity of 7,606 ft²/day, width of zone of influence of 12,200 ft., and a hydraulic gradient of 0.006 ft./ft. (Olson, 2005), the aquifer flux through the zone of influence is 556,759 ft³/day or 4,665 AF/year. The Applicant is requesting 117.05 AF/YR.

20. The surface water depletion report from a Dept. hydrogeologist indicated the proposed appropriation would deplete Hogan’s Slough. Hogan’s Slough was identified as the only affected surface water source and is hydraulically connected to the source aquifer in Sections 15 and 16, T1S, R25E.

21. There are no gages on Hogan’s Slough, however, the physical availability of water was estimated in the SWSWNE Section 15, T1S, R25E, for Application 43Q 30068497 (City of Billings) using the lowest available monthly measurements (bold numbers in the table below) and interpolating between the points.

Table 1. Physically Available Water in Hogan’s Slough

Month	<i>Jan</i>	<i>Feb</i>	<i>Mar</i>	<i>Apr</i>	<i>May</i>	<i>Jun</i>	<i>Jul</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>
Flow rate (CFS)	1.2	1.1	0.97	0.9	16.7	9.0	25.1	21.1	15.1	3.0	1.8	1.43
Volume (AF)	73.7	61.0	59.5	53.3	1025	535	1541	1295	897	184	108	87.8

22. There is one groundwater application that was granted after the measurements were made that is expected to deplete Hogan’s Slough. That application is Blackrock Estates Subdivision

Provisional Permit No. 43Q 30069789. Below is an estimation of the flow rate and volume physically available in Hogan’s Slough after the depletions from the Blackrock groundwater appropriation.

Table 2. Physically Available Water in Hogan’s Slough – estimated after depletions

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flow rate (CFS)	1.2	1.1	0.97	0.9	16.7	9.0	25.1	21.1	15.1	3.0	1.8	1.43
Depletion from 43Q 30069789 (CFS)	.01	.01	.01	.03	.13	.23	.29	.27	.14	.05	.01	.01
Remaining Flow rate (CFS)	1.19	1.09	0.96	.87	16.57	8.77	24.81	20.83	14.96	2.95	1.79	1.42
Volume (AF)	73.7	61.0	59.5	53.3	1025	535	1541	1295	897	184	108	87.8
Depletion from 43Q 30069789 (AF)	.78	.78	.78	1.80	7.97	13.45	18.10	16.39	8.47	2.88	.78	.78
Remaining Volume (AF)	72.92	60.22	58.72	51.5	1017.03	521.55	1522.9	1278.61	888.53	181.12	107.22	87.02

CONCLUSIONS OF LAW

23. 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.”

24. It is the applicant’s burden to produce the required evidence. *In the Matter of Application for Beneficial Water Use Permit No. 27665-411 by Anson* (DNRC Final Order 1987)(applicant produced no flow measurements or any other information to show the availability of water; permit denied); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

25. 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).

26. 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 10- 22)

Legal Availability

AREA OF AFFECT

The area of affect or zone of influence for a groundwater appropriation is determined by the 0.01 foot drawdown contour. Modeling by a Dept. hydrologist determined the 0.01 foot drawdown contour, after one year of pumping, would occur at 6,100 feet from the Diamond Falls wells. Hogan’s Slough is approximately 1,000 feet from the Diamond Falls wells and is considered hydraulically connected to the source aquifer.

FINDINGS OF FACT

27. There are 168 existing legal demands for groundwater (water rights) within the zone of influence which total 558.78 AF/YR. Below is a comparison the water supply and existing legal demands for groundwater within the zone of influence. Subtracting legal demands from the calculated groundwater flux (4,665 AF/YR) leaves 4,106.22 AF/YR. The Applicant is requesting 117.5 AF/YR.

Table 3. Comparison of Physically Available Groundwater to Legal Demands

Groundwater Physical Availability (AF/YR)	Existing Legal Demands (AF/YR)	Physical Availability minus Existing Legal Demands (AF/YR)
4,665	558.78	4106.22

28. In order to evaluate hydraulic connection to Hogan’s Slough, wells less than 50 feet deep with reported static water levels of less than 15 feet below ground surface and located within 500 feet of the slough were selected in an ArcMap project. The shallow wells that were used to infer hydraulic connection are located along the section of the slough that flows southeast of the proposed place of use. Data from these wells and groundwater level contour maps by Gosling and Pashley (1973) and Olson (2005) suggest Hogan’s Slough is hydraulically connected to the source aquifer in Sections 15 and 16 in Township 1 South, Range 25 East. This is the depleted reach for calculation of stream depletion.

29. Based on Dept. standards for domestic systems using drainfields, consumption is estimated to be 10% of the total demand (21.17 AF/YR) or 2.1 AF/YR. Annual consumption for the 38.35 irrigated acres is estimated to be 77.5 AF based on net irrigation requirement for pasture grass of 24.24 inches (2.02 feet) obtained from the Billings Water Plant, Montana station in IWR. Total annual consumption for domestic and irrigation uses is calculated to be 79.6 AF.

30. Modeling by a Dept. hydrogeologist indicated Hogan’s Slough would be the only affected surface water and that depletions to Hogan’s Slough would be simultaneous with pumping.

Below is a summary of monthly net depletions (flow rate and volume) to Hogan’s Slough from the proposed groundwater appropriation:

Table 4. Estimated Net Depletions to Hogan’s Slough from the Proposed Appropriation

Month	Depletion (GPM)	Depletion (CFS)	Depletion (AF)	Total Consumption (AF)
January	18.9	0.04	2.6	0.2
February	17.8	0.04	2.2	0.2
March	14.2	0.03	1.9	0.2
April	16.6	0.04	2.2	1.4
May	36.4	0.08	5.0	8.9
June	70.5	0.16	9.3	15.6
July	98.7	0.22	13.5	21.3
August	109.4	0.24	15.0	19.2
September	91.8	0.20	12.2	9.5
October	56.8	0.13	7.8	2.7
November	35.1	0.08	4.6	0.2
December	23.5	0.05	3.2	0.2
TOTAL*			79.6	79.6

*differences in tenths due to rounding, numbers generated by AWAS model run by Dept. hydrogeologist

31. The affected reach on Hogan’s Slough is expected to begin approximately 6,000 feet upstream from the point that is nearest to the Applicant’s wells. The end of the affected reach is interpreted to be approximately 5,000 feet downstream from the point that is nearest to the Applicant’s wells. This is the reach of Hogan’s Slough that falls within the zone of influence.

32. The Shiloh Drain enters Hogan's Slough at the eastern edge of Section 15, T1S, R25E, and more than doubles the flow in the slough. All water rights below the confluence of Hogan's Slough and the Shiloh Drain are met with the exception of 43Q 29373-00 for 8.00 CFS and 362 acres from April 1 through October 31 of each year. The primary diversion for this water right is a ditch cut high in the side of the slough. Measurements during site visits by the Department and engineering consultants show that this ditch lies 2 to 3 feet above the bed of the slough. This ditch cannot divert water from Hogan's Slough unless the slough is running full. At flow rates of 7 to 8 CFS in Hogan's Slough in January, the diversion ditch was 1.5 to 2.0 feet above the water level. When major irrigation ditches in the Billings area are active, Hogan's Slough flows at more than 30 CFS and the diversion can be used. Prior to irrigation ditch activity and after ditch operations cease, low flows in Hogan's Slough make it impossible to divert water with this ditch. The primary diversion requires irrigation season flows in Hogan's Slough and during irrigation season there is available water above the amounts legally allocated. Therefore, all water rights on Hogan's Slough below its confluence with the Shiloh Drain can be exercised.

33. There are two water rights on Hogan's Slough within the reach that would be depleted (which is above the confluence with Shiloh Drain). One is Statement of Claim number 43Q 184007-00 for 255 GPM (0.57 CFS) for irrigation of 15 acres, which would divert 4.1 AF per acre or 61.5 AF according to Dept. adjudication standards for irrigation claims in Climate area 1. The other is Provisional Permit number 43Q 30068497 (City of Billings) for 359 GPM (0.8 CFS) and 201 AF for a wetland and fishery. Below is a comparison of physically available water in Hogan's Slough to existing legal demands.

Table 5. Physically Available Minus Legal Demands – Flow Rate (CFS)

Month	Physical Availability (CFS)	Depletions from 43Q 30069789 (CFS)	Existing Legal Demands (CFS)	Physical minus depletions and legal demands (CFS)
January	1.2	.01	.8	.39
February	1.1	.01	.8	.29
March	.97	.01	.8	.16
April	.9	.03	.8	.07
May	16.7	.13	1.37	15.2
June	9	.23	1.37	7.4
July	25.1	.29	1.37	23.44
August	21.1	.27	1.37	19.46
September	15.1	.14	1.37	13.59
October	3	.05	.8	2.15
November	1.8	.01	.8	.99
December	1.43	.01	.8	.62

Table 6. Physically Available Minus Legal Demands – Volume (AF)

Month	Physical Availability (AF)	Depletions from 43Q 30069789 (AF)	Existing Legal Demands (AF)	Physical minus depletions and legal demands (AF)
January	73.7	.78	16.75	56.17
February	61	.78	16.75	43.47
March	59.5	.78	16.75	41.97
April	53.3	1.8	16.75	34.75
May	1025	7.97	29.05	987.98
June	535	13.45	29.05	492.5
July	1541	18.1	29.05	1493.85
August	1295	16.39	29.05	1249.56

September	897	8.47	29.05	859.48
October	184	2.88	16.75	164.37
November	108	.78	16.75	90.47
December	87.8	.78	16.75	70.27

34. Physical availability minus legal demands on Hogan’s Slough above the Shiloh Drain exceeds the modeled depletion in both flow rate and volume for all months.

CONCLUSIONS OF LAW

35. Pursuant to § 85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that:

(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.

E.g., ARM 36.12.101 and 36.12.120; Montana Power Co., 211 Mont. 91, 685 P.2d 336 (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).

36. It is the applicant’s burden to present evidence to prove water can be reasonably considered legally available. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (the legislature set out the criteria (§ 85-2-311, MCA) and placed the burden of proof squarely on the applicant. The Supreme Court has instructed that those burdens are exacting.); see also Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054 (burden of proof on applicant in a change proceeding to prove required criteria); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order

2005))(it is the applicant's burden to produce the required evidence.); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC* (DNRC Final Order 2007)(permit denied for failure to prove legal availability); see also ARM 36.12.1705.

37. Pursuant to Montana Trout Unlimited v. DNRC, 2006 MT 72, 331 Mont. 483, 133 P.3d 224, the Department recognizes the connectivity between surface water and ground water and the effect of pre-stream capture on surface water. E.g., Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 7-8; *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006)(mitigation of depletion required), *affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); see also 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* Smith v. Duff, 39 Mont. 382, 102 P. 984 (1909), and Perkins v. Kramer, 148 Mont. 355, 423 P.2d 587 (1966)); *In the Matter of Beneficial Water Use Permit No. 80175-s76H by Tintzman* (DNRC Final Order 1993)(prior appropriators on a stream gain right to natural flows of all tributaries in so far as may be necessary to afford the amount of water to which they are entitled, *citing* Loyning v. Rankin (1946), 118 Mont. 235, 165 P.2d 1006; Granite Ditch Co. v. Anderson (1983), 204 Mont. 10, 662 P.2d 1312; Beaverhead Canal Co. v. Dillon Electric Light & Power Co. (1906), 34 Mont. 135, 85 P. 880); *In the Matter of Beneficial Water Use Permit No. 63997-42M by Joseph F. Crisafulli* (DNRC Final Order 1990)(since there is a relationship between surface flows and the ground water source proposed for appropriation, and since diversion by applicant's well appears to influence surface flows, the ranking of the proposed appropriation in priority must be as against all rights to surface water as well as against all groundwater rights in the drainage.) Because the applicant bears the burden of proof as to legal availability, the applicant must prove that the proposed appropriation will not result in prestream

capture or induced infiltration and cannot limit its analysis to ground water. § 85-2-311(a)(ii), MCA. Absent such proof, the applicant must analyze the legal availability of surface water in light of the proposed ground water appropriation. *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 By Utility Solutions LLC* (DNRC Final Order 2007) (permit denied); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009); Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 ; Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12.

38. 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 by analysis of the legal demands on, and availability of, water in the surface water source. 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); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006)(permits granted), *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)(permit granted), *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 30023457 by Utility Solutions LLC* (DNRC Final Order 2007) (permit denied for failure to analyze legal availability outside of irrigation season (where mitigation applied)); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009)(permit denied in part for failure to analyze legal availability for surface water depletion); 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); Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12 (“DNRC properly determined that Wesmont 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); *In the Matter of Application for Beneficial Water Use Permit No. 76D-30045578 by GBCI Other Real Estate, LLC* (DNRC Final Order 2011) (in an open basin, applicant for a new water right can show legal availability by using a mitigation/aquifer recharge plan or by showing that any depletion to surface water by groundwater pumping will not take water already appropriated; development next to Lake Koocanusa will not take previously appropriated water). Applicant may use water right claims of potentially affected appropriators as a substitute for “historic beneficial use” in analyzing legal availability of surface water under § 85-2-360(5), MCA. Royston, *supra*.

39. In analyzing legal availability for surface water, applicant was 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 v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 6.

40. Applicant has proven by a preponderance of the 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. § 85-2-311(1)(a)(ii), MCA (FOF 27-34)

Adverse Effect

FINDINGS OF FACT

41. The Applicant’s plan to prevent adverse effect is to limit lawn and garden watering. In times of water shortage, even numbered lots will be allowed to use lawn and garden water Mondays, Wednesdays and Fridays, odd numbered lots will be allowed to use lawn and garden water on Tuesdays, Thursdays and Saturdays during the duration of the shortage. In the case of severe shortages, all residences will be instructed to cease lawn and garden irrigation for the

duration of the shortage. Notes will be added to the final plat indicating the potential for water restrictions.

42. The evaluation of drawdown in other wells was done by a Dept. hydrogeologist using the aquifer properties cited above and a monthly pumping schedule that accounts for domestic use and lawn and garden irrigation. Modeled drawdown is the largest at the end of July in the fifth year of pumping. Modeled drawdown in excess of 1 foot occurs in wells that are 680 feet from the proposed wells. There are 8 water rights in the source aquifer that are predicted to experience drawdown greater than 1 foot.

43. The physically and legally available water in Hogan's Slough exceeds the predicted net depletion each month of the year.

44. To prevent adverse effect to the alluvial aquifer and to Hogan's Slough, the Department is adding a requirement to measure the flow rate and volume diverted annually. Because of the number of wells being proposed to be drilled by individual property owners, the Department is adding a requirement that the water right be in the name of the home owners association and that well logs for all diversions be submitted to the Department upon completion of the permit. The well logs will verify that wells were only completed the alluvial aquifer analyzed under this application. A remark will be added to the permit, if authorized, clarifying the source as the alluvial aquifer with depth up to 120 ft. The following conditions will be added to the permit:

IMPORTANT INFORMATION

NOTIFICATION REQUIREMENT: THE APPROPRIATOR SHALL RECORD A DOCUMENT IN THE COURTHOUSE THAT SHALL NOTIFY ALL CURRENT AND FUTURE LAND OWNERS ON BLOCK 1 LOTS 1 THROUGH 5, BLOCK 2 LOTS 1 THROUGH 10, BLOCK 4 LOTS 1 AND 2, BLOCK 5 LOTS 1 THROUGH 7, BLOCK 6 LOTS 1 THROUGH 7 AND BLOCK 7 LOTS 4 THROUGH 23 THAT 1) ONLY ONE WELL MAY BE DRILLED ON EACH LOT; 2) THE WELL MUST BE NO DEEPER THAN 120 FEET BELOW GROUND SURFACE; 3) THAT WATER USE MUST BE MEASURED AND RECORDED AS DESCRIBED IN THIS PERMIT; 4) A COPY OF THE WELL LOG MUST BE SUBMITTED TO THE APPROPRIATOR; AND 5) A WATER RIGHT CANNOT BE OWNED BY A PRIVATE INDIVIDUAL, BUT MUST BE HELD IN THE NAME OF THE HOME OWNERS ASSOCIATION. THE APPROPRIATOR SHALL PROVIDE A COPY OF THE RECORDED DOCUMENT IDENTIFYING THESE RESTRICTIONS, FOR EACH

LAND OWNER, TO THE WATER RESOURCES REGIONAL OFFICE BY JANUARY 31 OF EACH YEAR.

WATER USE MEASUREMENT

THE APPROPRIATOR SHALL REQUIRE LAND OWNERS OF BLOCK 1 LOTS 1 THROUGH 5, BLOCK 2 LOTS 1 THROUGH 10, BLOCK 4 LOTS 1 AND 2, BLOCK 5 LOTS 1 THROUGH 7, BLOCK 6 LOTS 1 THROUGH 7 AND BLOCK 7 LOTS 4 THROUGH 23 TO INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE. WATER MUST NOT BE DIVERTED FROM THE WELL UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. THE APPROPRIATOR SHALL REQUIRE THE LAND OWNER KEEP YEARLY WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED FROM JANUARY 1 THROUGH DECEMBER 31. THE LAND OWNER WATER USE RECORDS SHALL BE COMPILED AND SUBMITTED TO THE DEPARTMENT BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR.

FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BILLINGS WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL ENSURE EACH MEASURING DEVICE IS MAINTAINED SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

IMPORTANT INFORMATION

WELL LOGS: THE APPROPRIATOR SHALL REQUIRE THE LAND OWNER PROVIDE A COPY OF THE WELL LOG TO THE APPROPRIATOR WITHIN 90 DAYS OF COMPLETION OF THE WELL. THE APPROPRIATOR SHALL PROVIDE A COPY OF THE WELL LOG TO THE WATER RESOURCES REGIONAL OFFICE BY JANUARY 31 OF EACH YEAR.

CONCLUSIONS OF LAW

45. 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. (1984), 211 Mont. 91, 685 P.2d 336 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); Bostwick Properties, Inc. ¶ 21.

46. 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).

47. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 4.

48. 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 (1991), 249 Mont. 425, 816 P.2d 1054.

49. It is the applicant’s burden to produce the required evidence. E.g., Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (legislature has placed the burden of proof squarely on the applicant); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005). (DNRC Final Order 2005). 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. Bostwick Properties, Inc. ¶ 21.

50. Section 85-2-311 (1)(b) of the Water Use Act does not contemplate a de minimis level of adverse effect on prior appropriators. Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pg. 8.

51. Adverse effect not required to be measurable but must be calculable. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (DNRC permit denial affirmed; 3 gpm and 9 gpm depletion to surface water not addressed in legal availability or mitigation plan.); Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pg. 12 (“DNRC properly determined that Wesmont 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 depletion from groundwater pumping); *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006); see also Robert and Marlene Tackle v. DNRC et al., Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994). Artesian pressure is not protectable and a reduction by a junior appropriator is not considered an adverse effect. See In re Application No. 72948-G76L by Cross, (DNRC Final Order 1991); see also In re Application No. 75997-G76L by Carr, (DNRC Final Order 1991).

52. 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. § 85-2-311(1)(b) , MCA (FOF 41-44)

Adequate Diversion

FINDINGS OF FACT

53. Each of 60 residential lots and 1 landscaped entrance would be served by individual wells completed in a sand and gravel terrace deposit of the Yellowstone River. The wells would be drilled by a licensed Montana water well contractor.

54. The test well and observation well are 37 and 37.5 feet deep, respectively, with screened intervals approximately 30-35.5 feet deep. The maximum drawdown in the test well after 72 hours of pumping at 112 GPM was 1.65 feet below the static water level of 13.10 leaving 22.25 feet of available drawdown above the bottom of the well. Dept. modeling of the proposed diversion by all 54 wells is described above in FOF 15-17. The total maximum drawdown of 2.5 feet would leave 21.4 feet of available drawdown above the bottom of the proposed wells

assuming all wells are completed to a similar depth. The water would be diverted up to 30 GPM up to 0.39 AF per household for domestic use and up to 0.63 AF per 0.25 AC lawn and garden for 54 residences using 1HP 4” Series V Franklin Electric (or equivalent) submersible pumps. Water will be piped into the homes using accepted building standards. Irrigation for lawn and garden use would be connected to the 1 inch pipeline from the well.

CONCLUSIONS OF LAW

55. 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.

56. The adequate means of diversion statutory test merely codifies and encapsulates the case 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.

57. Water wells must be constructed according to the laws, rules, and standards of the Board of Water Well Contractors to prevent contamination of the aquifer. *In the Matter of Application for Beneficial Water Use Permit No. 41I-105511 by Flying J Inc.* (DNRC Final Order 1999).

58. Information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies, based upon project complexity design by licensed engineer adequate. *In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC* (DNRC Final Order 2002).

59. 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 53-54)

Beneficial Use

FINDINGS OF FACT

60. The Applicant proposes to use water for domestic and irrigation which are recognized beneficial uses under § 85-2-102(4), MCA.

61. The requested flow rate of 1620 GPM is based on 30 GPM per well for 54 wells. The 30 GPM per well is based on the GPM necessary to run a typical house potable water system and lawn irrigation system.

62. The requested volume of 117.05 AF includes 21.17 AF for multiple domestic and 95.88 AF for lawn and garden. The domestic volume is based on 350 gallons per day per house for 54 homes. This amount is from Montana DEQ-4 rules regarding the amount per day of wastewater disposed in a septic system for a 4 bedroom home. The lawn and garden volume was calculated using the DNRC standard 2.5 AF/AC for 38.35 acres ($38.35 \times 2.5 = 95.88$ AF).

CONCLUSIONS OF LAW

63. Under § 85-2-311(1)(d), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use.

64. An appropriator may appropriate water only for a beneficial use. See also, § 85-2-301 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; *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 by Dee Deaterly* (DNRC Final Order), *affirmed other grounds, Dee Deaterly v. DNRC et al*, Cause No. 2007-186, Montana First Judicial District, *Order Nunc Pro Tunc on Petition for Judicial Review* (2009); 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).

Amount of water to be diverted must be shown precisely. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) 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).

65. It is the applicant's burden to produce the required evidence. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7; *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005); see also Royston; Ciotti.

66. Applicant proposes to use water for multiple domestic and lawn and garden which are a recognized beneficial uses. § 85-2-102(4), MCA. Applicant has proven by a preponderance of the evidence multiple domestic and lawn and garden are beneficial uses and that the 1620 GPM up to a diverted volume of 117.05 AF of water requested is the amount needed to sustain the beneficial use. § 85-2-311(1)(d), MCA (FOF 60-62)

Possessory Interest

FINDINGS OF FACT

67. The applicant signed and had the affidavit on the application form notarized affirming the applicant has 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.

CONCLUSIONS OF LAW

68. 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 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.

69. Pursuant to ARM 36.12.1802:

(1) An applicant or a representative shall sign the application affidavit to affirm the following:

(a) the statements on the application and all information submitted with the application are true and correct and

(b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and 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, 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.

(2) If a representative of the applicant signs the application form affidavit, the representative shall state the relationship of the representative to the applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.

(3) The department may require a copy of the written consent of the person having the possessory interest.

70. The Applicant has proven 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 where the water is to be put to beneficial use. § 85-2-311(1)(e), MCA. (FOF 67)

PRELIMINARY DETERMINATION

Subject to the terms, analysis, and conditions in this Order, the Department preliminarily determines that this Application for Beneficial Water Use Permit No. 43Q 30102729 should be GRANTED.

The Department determines the applicant may divert groundwater, by means of 54 wells, from January 1 through December 31 at 1620 GPM up to 117.05 AF, from a point in the S2NE Section 16, T1S, R25E, for multiple domestic use (21.17 AF) January 1 through December 31 and 38.35 AC of lawn and garden use (95.88 AF) from May 1 through September 30. The place of use is located in the Diamond Falls Subdivision, S2NE Section 16, T1S, R25E, Yellowstone County.

The application will be subject to the following conditions, limitations or restrictions.

IMPORTANT INFORMATION

NOTIFICATION REQUIRED: THE APPROPRIATOR SHALL RECORD A DOCUMENT IN THE COURTHOUSE THAT SHALL NOTIFY ALL CURRENT AND FUTURE LAND OWNERS ON BLOCK 1 LOTS 1 THROUGH 5, BLOCK 2 LOTS 1 THROUGH 10, BLOCK 4 LOTS 1 AND 2, BLOCK 5 LOTS 1 THROUGH 7, BLOCK 6 LOTS 1 THROUGH 7 AND BLOCK 7 LOTS 4

THROUGH 23 THAT 1) ONLY ONE WELL MAY BE DRILLED ON EACH LOT; 2) THE WELL MUST BE NO DEEPER THAN 120 FEET BELOW GROUND SURFACE; 3) THAT WATER USE MUST BE MEASURED AND RECORDED AS DESCRIBED IN THIS PERMIT; 4) A COPY OF THE WELL LOG MUST BE SUBMITTED TO THE APPROPRIATOR; AND 5) A WATER RIGHT CANNOT BE OWNED BY A PRIVATE INDIVIDUAL, BUT MUST BE HELD IN THE NAME OF THE HOME OWNERS ASSOCIATION. THE APPROPRIATOR SHALL PROVIDE A COPY OF THE RECORDED DOCUMENT IDENTIFYING THESE RESTRICTIONS, FOR EACH LAND OWNER, TO THE WATER RESOURCES REGIONAL OFFICE BY JANUARY 31 OF EACH YEAR.

WATER USE MEASUREMENT

THE APPROPRIATOR SHALL REQUIRE LAND OWNERS OF BLOCK 1 LOTS 1 THROUGH 5, BLOCK 2 LOTS 1 THROUGH 10, BLOCK 4 LOTS 1 AND 2, BLOCK 5 LOTS 1 THROUGH 7, BLOCK 6 LOTS 1 THROUGH 7 AND BLOCK 7 LOTS 4 THROUGH 23 TO INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE. WATER MUST NOT BE DIVERTED FROM THE WELL UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. THE APPROPRIATOR SHALL REQUIRE THE LAND OWNER KEEP YEARLY WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED FROM JANUARY 1 THROUGH DECEMBER 31. THE LAND OWNER WATER USE RECORDS SHALL BE COMPILED AND SUBMITTED TO THE DEPARTMENT BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR.

FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BILLINGS WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL ENSURE EACH MEASURING DEVICE IS MAINTAINED SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

IMPORTANT INFORMATION

WELL LOGS: THE APPROPRIATOR SHALL REQUIRE THE LAND OWNER PROVIDE A COPY OF THE WELL LOG TO THE APPROPRIATOR WITHIN 90 DAYS OF COMPLETION

OF THE WELL. THE APPROPRIATOR SHALL PROVIDE A COPY OF THE WELL LOG TO THE WATER RESOURCES REGIONAL OFFICE BY JANUARY 31 OF EACH YEAR.

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 permit or change in appropriation right, the department will grant the permit or change subject to conditions necessary to satisfy applicable criteria.

DATED this 23rd day of March 2016.

/Original signed by Kimberly Overcast/
Kimberly Overcast, Manager
Billings Water Resources Regional Office
Department of Natural Resources and Conservation