

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

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| APPLICATION TO CHANGE WATER RIGHT) NO. 43B 30164489 by PARK) CONSERVATION DISTRICT) | DRAFT PRELIMINARY DETERMINATION TO GRANT CHANGE |
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On February 12, 2025, Park Conservation District (Applicant) submitted Application to Change Water Right No. 43B 30164489 (Producer- West Creek Ranch, LLC) to change Water Reservation No. 43B 10004-00 (Conservation District Record No. 43B 30164990) to the Bozeman Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the application on its website. A preapplication meeting was held between the Department and the Applicant on September 17, 2024, in which the Applicant designated that the technical analyses for this application would be completed by the Department. The Applicant returned the completed Preapplication Meeting Form on October 29, 2024. The Department delivered the Technical Analyses on December 13, 2024. The Application was determined to be correct and complete as of March 6, 2025. An Environmental Assessment for this application was completed on April 25, 2025.

INFORMATION

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

Application as filed:

- Form 606CD, Conservation District Application to Change Water Reservation
- Attachments:
 - Addendum B.1.a: Signed Copy of Conservation District Application from Producer
 - B.1.b: Amendment to Original Application
 - B.2: Signed Copy of Reserved Water Use Authorization from the Conservation District
 - B.3: Copy of the CD Public Notice from the Conservation District
 - B.4: Copy of the Affidavit of Publication from the Conservation District
 - B.5: Copy of the Public Notice Certificate of Service from the Conservation District
 - C.2: POU List
- Maps:

- E.1.a: Exhibit A-4, Updated Proposed Place of Use, base map 2021 NAIP aerial photo, produced by DMS Natural Resources LLC, dated 3/12/2024
- E.1.b: Exhibit C-4, Updated Place of Use Irrigation Type, base map 2021 NAIP aerial photo, by DMS Natural Resources LLC, dated 3/12/2024
- E.2: Exhibit B-3, Current Irrigation Water Rights, base map 2021 NAIP aerial photo, produced by DMS Natural Resources LLC, dated 11/7/2023
- Department-completed technical analyses based on information provided in the Preapplication Meeting Form, dated 12/13/2024
- Notice of Errata for technical analyses report for Change Preapplication No. 43B 30164489, dated 5/5/2025.

Information within the Department's Possession/Knowledge

- DNRC Irrigation Change Application 43B 30164489 Technical Report dated December 13, 2024.
- Water Reservation 43B 10004-00 file
- *Order of Board of Natural Resources Establishing Water Reservations* dated December 15, 1978

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, part 4, MCA).

For the purposes of this document, Department or DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet; AC means acres; and AF/YR means acre-feet per year.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

Table 1. Water right proposed for change

| WR TYPE | WR NUMBER | WR PRIORITY DATE | WR SOURCE |
|-------------------|-------------------------|--|-------------------|
| Water Reservation | 43B 10004-00 | 12/15/1978 4:18 pm | Yellowstone River |
| CD Record | 43B 30164990 PA-2301 | 11/28/2023 1:00 pm (internal priority date) | Yellowstone River |

CHANGE PROPOSAL

FINDINGS OF FACT

1. This application is to change the place of use (POU) of a portion of Park Conservation District (Park CD) Water Reservation No. 43B 10004-00 (CD Record No. 43B 30164990). No change in the point of diversion (POD), purpose, or place of storage is proposed. A flow rate of 2.6 CFS and a maximum volume of 161.2 AF/YR of the Park CD water reservation will be used for irrigation on 189.6 acres. The requested period of diversion is April 15 to October 19. The proposed place of use for irrigation is located in Sections 33 and 34, T6S, R7E, and Sections 3 and 4, T7S, R7E, all in Park County¹.

2. The proposed place of use overlaps portions of the places of use for Statements of Claim 43B 190621-00, 43B 190622-00, 43B 190623-00, 43B 190624-00, 43B 190625-00, 43B 190626-00, and 43B 190627-00 and Permits 43B 26291-00 and 43B 30041630². The supplemental water rights are diverted from Donahue Creek, West Creek, Little Donahue Creek, and the Yellowstone River to irrigate 154.6 acres of the proposed 189.6 acres. By mid-to-late June, flows in Little Donahue, Donahue, and West Creeks begins to decrease and the producer proposes to supplement the irrigation with water from the Yellowstone River. West Creek Ranch, LLC (producer) also has two reservoirs on West Creek, which store water from Little Donahue Creek and West Creek under water right permits 43B 26291-00 and 43B 30041630, which are presently used for late-season irrigation. The Conservation District Yellowstone River water will supplement the water from the tributaries as the flow in the tributaries recedes. The Applicant proposes to change Yellowstone River water to allow the producer to have a longer period of irrigation, resulting in more crop growth and production. Following the proposed change, the Applicant proposes to use water to irrigate 35 new acres and supplement 154.6 acres currently irrigated by existing water rights.

3. The Applicant proposes to divert 2.6 CFS from the Yellowstone River by a means of a stem and handwheel headgate opening into a three-foot culvert on the northwest bank of the Yellowstone River in Government Lot 10, NWSESW of Section 34, T6S, R7E, in Park County. Following the proposed change, the water right will share a POD from the Yellowstone River with Statement of Claim 43B 190625-00. From the POD, water will be conveyed through a ditch to a pump site which will pump water into pipelines to deliver water to sprinkler systems for field application.

¹ Legal land description for the place of use is as described in the Preapplication and application materials, with the Department's typographical errors corrected in the Notice of Errata for technical analyses report for Change Preapplication No. 43B 30164489, dated 5/5/2025.

² The supplemental water rights are owned by West Creek Ranch, LLC (WCR).

4. The Park Conservation District has 438.07 CFS flow rate and 63013.60 AF volume remaining in their water reservation prior to this application.
5. The Conservation District granted the producer a right to use a portion of their water reservation on 11/28/2023 under application number PA-2301.

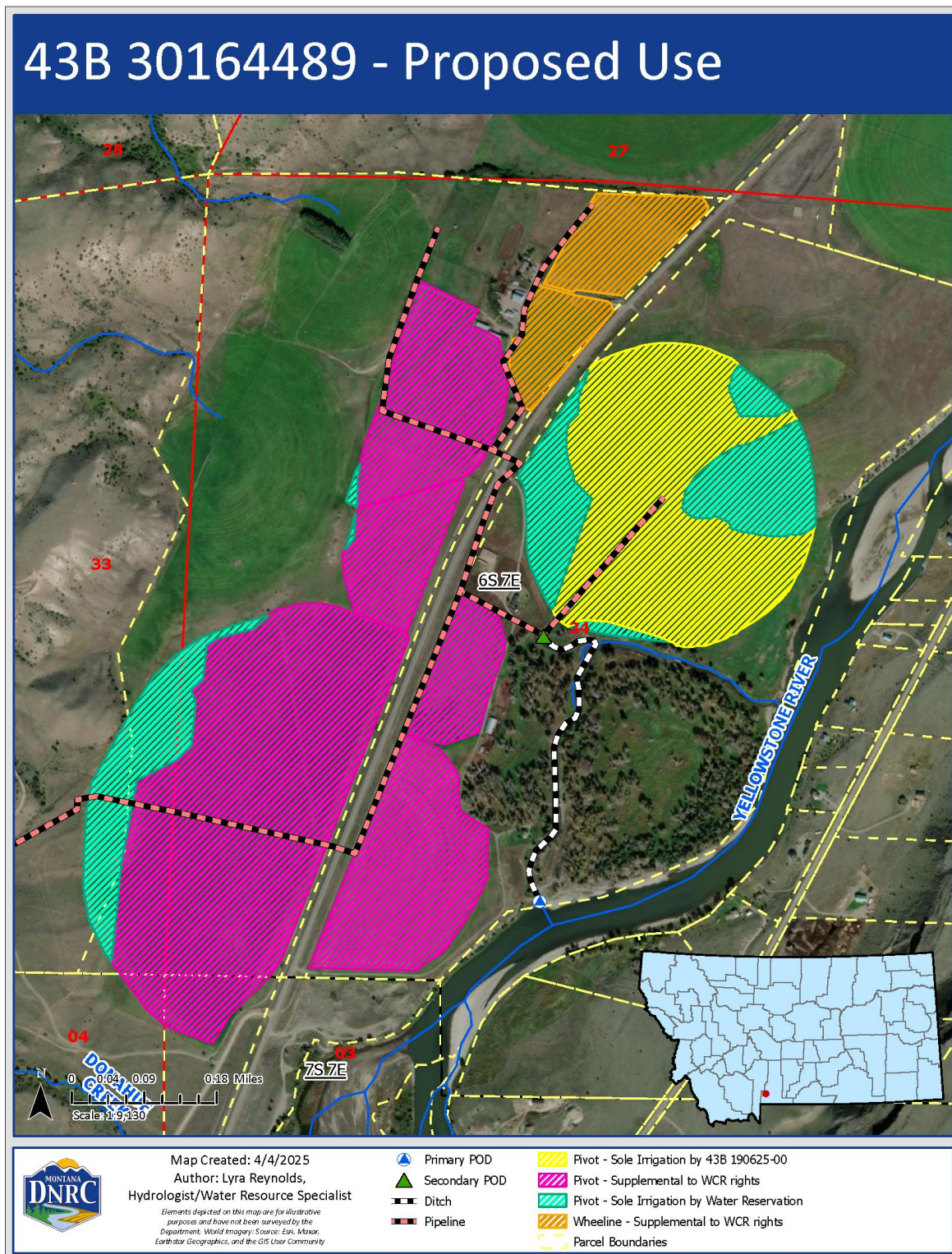


Figure 1. Proposed Use for Change Application 43B 30164489

CHANGE CRITERIA

6. The Department is authorized to approve a change if the Applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by a preponderance of the evidence. *Matter of Royston*, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); *Hohenlohe v. DNRC*, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an Applicant's burden to prove change criteria by a preponderance of evidence is "more probable than not."); *Town of Manhattan v. DNRC*, 2012 MT 81, ¶ 8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in § 85-2-402(2), MCA, are:

(2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:

(a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.

(b) The proposed means of diversion, construction, and operation of the appropriation works are adequate, except for: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

(c) The proposed use of water is a beneficial use.

(d) 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 change involves 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. This subsection (2)(d) does not apply to: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

7. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. *E.g.*, *Hohenlohe*, ¶¶ 29-31; *Town of Manhattan*, ¶ 8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

WATER RESERVATION CRITERIA

FINDINGS OF FACT

8. An authorization for change is required in § 85-2-316(12), MCA, because a proportion the producer's proposed place of use is outside the project areas identified in the original water reservation application's public notice.

9. The purpose for the water reservation was established by the Board of Natural Resources and the conclusions are contained in the *Order of Board of Natural Resources Establishing Water Reservations* dated December 15, 1978.

10. The need for the water reservation was established by the Board of Natural Resources and the conclusions are contained in the *Order of Board of Natural Resources Establishing Water Reservations* dated December 15, 1978.

11. The amount of water necessary for the purposes of the water reservation was established by the Board of Natural Resources and the conclusions are contained in the *Order of Board of Natural Resources Establishing Water Reservations* dated December 15, 1978.

12. That the water reservation was in the public interest was established by the Board of Natural Resources and the conclusions are contained in the *Order of Board of Natural Resources Establishing Water Reservations* dated December 15, 1978.

13. This change authorization proposal is consistent with the purpose, need, amount, and public interest established by the Board of Natural Resources.

HISTORICAL USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historical Use

14. The Board of Natural Resources granted the Park Conservation District a water reservation (No. 43B 10004-00) for 445.9 CFS and 64,125 AF for use on approximately 21,664 acres for future irrigation development out of the Yellowstone River. The Board chairman signed the *Order of Board of Natural Resources Establishing Water Reservations* and granted a priority date of December 15, 1978, at 4:18 PM to conservation districts.

15. This application is to change a portion of the water reservation not yet put to use, so no historical use exists.

ADVERSE EFFECT

FINDINGS OF FACT

16. Park Conservation District is proposing to add a new place of use to their water reservation. The new project will utilize a portion of the Park Conservation District's water reservation from the Yellowstone River to supply water for irrigation of three pivots east of

Highway 89 in Section 34, T6S, R7E, as well as for three pivots and two wheeline sprinkler systems west of Highway 89 in Sections 33 and 34, T6S, R7E, and Sections 3 and 4, T7S, R7E, all in Park County. The Applicant proposes to divert up to 2.6 CFS up to 161.2 AF for irrigation of 189.6 acres in the proposed POU.

17. Water is still available under the Park Conservation District water reservation.

18. The Conservation District published notice of the Conservation District Record PA-2301 (DNRC CD Record 43B 30164990) on January 27, 2024, in the Livingston Enterprise and set a deadline for objections.

19. The CD sent individual public notices to water users downstream of the proposed point of diversion and to the entities on the DNRC standardized list to notice. No objections were received. DNRC will also provide public notice for this change application.

20. The Park Conservation District Authorization requires the water user to keep written records of the flow rate and volume of all water diverted and to submit the report to the Conservation District annually by November 1.

21. This application represents a non-perfected portion of the Park Conservation District water reservation granted by the Order of the Board of Natural Resources Establishing Water Reservations.

22. No historical use exists for this portion of the water reservation so no comparison of historical and proposed consumptive use or return flows can be made.

Physical and Legal Availability

23. The Department analyzed physical and legal availability for this application, because the place of use is not within the original public notice area identified in the Yellowstone Reservation proceedings in July of 1977.

24. The Applicant proposes to change the POU of a non-perfected portion of the Park Conservation District Water Reservation No. 43B 10004-00 (CD Record 43B 30164990). The proposed POU was not part of the original public notice area identified in the Park Conservation District Yellowstone River water reservation. All existing water rights must be considered in order to determine whether this proposed project would adversely affect other water right holders. The Department found the physical availability of the Yellowstone River at the POD using the following gages:

USGS gage name

USGS 06192500 Yellowstone River near Livingston, MT

USGS 06191500 Yellowstone River at Corwin Springs MT

Period of record

Yellowstone River at Corwin Springs: Approved data, August 1889 – July 2024

Yellowstone River near Livingston: Approved data, May 1897 – July 2024

(Data retrieved on 12/5/2024)

25. The POD is located between the two gaging station on the Upper Yellowstone River. The POD is located approximately 11.1 miles downstream of the USGS Yellowstone River at Corwin Springs gage and approximately 26.69 miles upstream of the USGS Yellowstone River near Livingstone gage. Both stream gages have periods of record exceeding 10 years and are maintained by the USGS.

26. The Department found the physical availability using a logarithmic interpolation method. A logarithmic interpolation is useful when the proposed POD is located between two stream gages. This method estimates a streamflow characteristic at an intermediate location based on basin drainage area at the gaged sites and the ungaged site (POD). Several assumptions must be met in order for this method to be appropriate: 1) the ratio of the contributing drainage area to the ungaged site must be within 0.5 to 1.5 of the drainage areas for the stream gages, 2) periods of record at both gages must be similar, 3) streamflow conditions must be similar at both stream gage locations. The ratio of the contributing drainage area at the proposed point of diversion is 0.80 and 1.09 to the Yellowstone River near Livingston and Yellowstone River at Corwin Springs gages respectively. Both gages have a similar period of record, beginning in 1889 for the Corwin Springs gage and 1897 for the Livingston gage. Both gages exhibit similar streamflow characteristics. As a result, the logarithmic interpolation is suitable for estimating physical water availability at the point of diversion.

27. The following equation describes the logarithmic interpolation method, described further in DNRC (2019).

$$\log Q_u = \log Q_{g1} + \left(\frac{\log Q_{g2} - \log Q_{g1}}{\log A_{g2} - \log A_{g1}} \right) (\log A_u - \log A_{g1})$$

Where: Q = streamflow characteristic

A = drainage area

Subscripts $g1$ and $g2$ are gaged sites 1 and 2 respectively

Subscript u = point of interest (proposed point of diversion)

28. Basin drainage area at the point of diversion was delineated using USGS Streamstats. Drainage area at the gage locations was retrieved from the gaging station information web page. The results are shown in Table 2 below.

Table 2. Basin drainage area at the gaged sites and ungaged site on the Yellowstone River.

| LOCATION | DRAINAGE AREA (SQUARE MILES) | DRAINAGE AREA RATIO OF UNGAGED SITE TO GAGE LOCATION |
|--|------------------------------|--|
| USGS Yellowstone River near Livingston | 3551.0 | 0.80 |
| USGS Yellowstone River at Corwin Springs | 2616.0 | 1.09 |
| Yellowstone River at the POD | 2849.6 | 1.00 |

29. The following table displays the streamflow data for the two stream gages on the Yellowstone River and the results of the interpolation analysis. The interpolated data represents the estimated streamflow rate and volume physically available at the POD on Yellowstone River in Gov't Lot 10 NWSESW Section 34, T6S, R7E, in Park County.

Table 3. Median of the mean monthly flows of the Yellowstone River. The last two columns in the table display the results of the interpolation method used to estimate physical water availability at the point of diversion.

| | <u>USGS Gage 06192500:</u> <u>Yellowstone River nr Livingston</u> MT | | <u>USGS Gage 06191500:</u> <u>Yellowstone River at Corwin</u> Springs MT | | Interpolation | |
|-----------|--|---|--|---|---|--|
| Month | Median of the Mean Monthly Flow at Gage 06192500 (CFS) | Median of the Mean Monthly Volume at Gage 06192500 (AF) | Median of the Mean Monthly Flow at Gage 06191500 (CFS) | Median of the Mean Monthly Volume at Gage 06191500 (AF) | Physically Available Water at POD (CFS) | Physically Available Water at POD (AF) |
| January | 1191 | 73103.58 | 837.3 | 51393.47 | 924.09 | 56720.63 |
| February | 1185 | 68042.70 | 813.1 | 46688.20 | 903.50 | 51878.98 |
| March | 1293 | 79364.34 | 907.8 | 55720.76 | 1002.27 | 61519.36 |
| April | 1903 | 113038.20 | 1496 | 88862.40 | 1600.23 | 95053.79 |
| May | 7207 | 442365.66 | 6145 | 377180.10 | 6425.40 | 394390.90 |
| June | 13315 | 790911.00 | 11045 | 656073.00 | 11638.22 | 691310.35 |
| July | 7408 | 454703.04 | 6418 | 393936.84 | 6680.94 | 410076.26 |
| August | 3333 | 204579.54 | 2938.5 | 180365.13 | 3043.96 | 186838.22 |
| September | 2274 | 135075.60 | 1845 | 109593.00 | 1956.18 | 116197.28 |
| October | 1916.5 | 117634.77 | 1425 | 87466.50 | 1548.23 | 95030.50 |
| November | 1637 | 97237.80 | 1158 | 68785.20 | 1275.82 | 75783.56 |
| December | 1359.5 | 83446.11 | 959.6 | 58900.25 | 1057.88 | 64932.59 |

30. The Department analyzed the legal availability of an area of potential adverse effect that spans from the POD in Gov't Lot 10 NWSESW Section 34, T6S, R7E, in Park County downstream approximately 15 miles the confluence of Mill Creek and the Yellowstone River in Gov't Lot 8

SWNESE, Section 7, T5S, R9E, in Park County. The Department quantified the flow rate and volume of junior surface water rights in the reach for the legal availability analysis. A total of seven water rights with priority dates junior to the water reservation exist in this reach, as seen in Table 4. The flow rate and volume for each water right was taken from the face value on the abstract.

Table 4. Junior water rights in reach

| WATER RIGHT NUMBER | ALL OWNERS | MEANS OF DIVERSION | FLOW RATE (GPM) | FLOW RATE (CFS) | VOLUME (AF) | ACRES | PRIORTIY DATE |
|--------------------|-----------------------------------|--------------------|-----------------|-----------------|-------------|-------|---------------|
| 43B 52998-00 | CLAIR A ROBERTS | PUMP | 50.00 | 0.11 | 2.70 | 1.50 | 4/20/1983 |
| 43B 30001745 | JUDITH PWELL; TIMOTHY POWELL | PUMP | 15.00 | 0.03 | 2.50 | 1.00 | 4/11/1989 |
| 43B 70900-00 | ADAM BRITTON; AMBER MARBLE | PUMP | 15.00 | 0.03 | 1.15 | 0.07 | 4/11/1989 |
| 43B 74927-00 | BILLIE I KRENZLER; DAN L KRENZLER | PUMP | 50.00 | 0.11 | 1.25 | 0.50 | 7/13/1990 |
| 43B 108829-00 | YELLOW RIVER LLC | PUMP | 15.00 | 0.03 | 1.24 | 1.00 | 7/16/1999 |
| 43B 30045005 | JOHN L LAKE | PUMP | 2001.64 | 4.46 | 198.50 | 95.90 | 5/7/2009 |
| 43B 30152558 | JEFFERY C HENRY; JENNY WOLFE | PUMP | 30.00 | 0.06 | 0.55 | 0.22 | 6/24/2021 |

31. To find legal availability the legal demands of the downstream junior water users were subtracted from the physical availability of the source at the POD. The legal availability is shown in Table 5.

Table 5. Comparison of physical availability and legal demand

| Physical Availability | | | <u>Downstream Junior Legal Demands</u> | | <u>Legal Availability</u> | |
|------------------------------|--|---|---|------------------------|----------------------------------|------------------------|
| Month | Physically Available Water at POD (CFS) | Physically Available Water at POD (AF) | Flow (CFS) | Volume (AF) | Flow (CFS) | Volume (AF) |
| JAN | 924.09 | 56720.63 | 0.00 | 0.00 | 924.09 | 56720.63 |
| FEB | 903.50 | 51878.98 | 0.00 | 0.00 | 903.50 | 51878.98 |
| MAR | 1002.27 | 61519.36 | 0.00 | 0.00 | 1002.27 | 61519.36 |
| APR | 1600.23 | 95053.79 | 0.11 | 13.36 | 1600.12 | 95040.43 |
| MAY | 6425.40 | 394390.90 | 4.77 | 36.85 | 6420.63 | 394354.05 |
| JUNE | 11638.22 | 691310.35 | 4.83 | 35.80 | 11633.39 | 691274.55 |
| JULY | 6680.94 | 410076.26 | 4.83 | 36.99 | 6676.11 | 410039.27 |
| AUG | 3043.96 | 186838.22 | 4.83 | 36.99 | 3039.13 | 186801.23 |
| SEPT | 1956.18 | 116197.28 | 4.83 | 35.80 | 1951.35 | 116161.48 |
| OCT | 1548.23 | 95030.50 | 4.63 | 12.10 | 1543.60 | 95018.40 |
| NOV | 1275.82 | 75783.56 | 0.00 | 0.00 | 1275.82 | 75783.56 |
| DEC | 1057.88 | 64932.59 | 0.00 | 0.00 | 1057.88 | 64932.59 |

32. The Department finds that water is legally available in the months of the requested period of diversion.

33. The Department finds that the proposed change to the portion of the water reservation (CD Record 43B 30164990) will not create an adverse effect.

34. The Conservation District granted the approval subject to the installation of a measurement device to satisfy any measurement conditions resulting from this application. As such, the Department will add the following condition if the proposal is granted:

WATER MEASUREMENT – MEETS CONSERVATION DISTRICT REQUIREMENT

THIS RIGHT IS SUBJECT TO THE TYPE OF WATER USE MEASURING DEVICE OR WATER USE ESTIMATION TECHNIQUE REQUIRED BY THE CONSERVATION DISTRICT. THE APPROPRIATOR SHALL KEEP WRITTEN RECORDS OF THE FLOW RATE AND VOLUME OF WATER USED. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THE CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE WATER USER SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACURATELY.

BENEFICIAL USE

FINDINGS OF FACT

35. The Applicant proposes to use water for irrigation of 189.6 acres. Of these 189.6 acres, 35 acres are new pivot irrigation, 138.1 acres are pivot irrigation supplemental with West Creek Ranch, LLC's existing water rights, and 16.5 acres are wheeline irrigation supplemental with West Creek Ranch, LLC's existing water rights. Irrigation is recognized as beneficial use under the Montana Water Use Act. §85-2-102, MCA.

36. The Yellowstone River water will be used to supplement Donahue Creek claims (43B 190622-00 and 43B 190623-00), Little Donahue Creek claims (43B 190621-00, 43B 26291-00, and 43B 30041630), and West Creek claims (43B 190624-00, 43B 190626-00, and 43B 190627-00) on 138.1 acres of pivot irrigation, shown in pink in Figure 1. A portion of the Yellowstone River water is proposed to be used to supplement Donahue Creek claims (43B 190622-00 and 43B 190623-00), Little Donahue Creek claims (43B 190621-00, 43B 26291-00, and 43B 30041630), and West Creek claims (43B 190624-00, 43B 190626-00, and 43B 190627-00) on 16.5 acres of wheeline irrigation, shown in orange in Figure 1. The Yellowstone River water is proposed to solely irrigate 35 acres of pivot irrigation, shown in green in Figure 1.

37. The Applicant stated flows in Donahue, Little Donahue, and West Creeks begin to decrease by mid-to-late June. By using Yellowstone River to irrigate the producer's property, the Applicant will have more flexibility for irrigation and will be able to irrigate further into the season. The Yellowstone River is a more reliable source of supply, so the Applicant proposes to utilize the water reservation as a supplemental water supply for a total 154.6 acres and sole supply for 35 acres. The total proposed acres used for irrigation in this change are 189.6 acres.

38. This change will benefit the CD by allowing them to authorize use of a portion of their water reservation. The Park County Conservation District must authorize projects to fulfill the purpose of the reservation.

39. The Applicant proposes to use 2.6 CFS up to 161.2 AF for irrigation of 189.6 acres. This flow rate and volume were agreed upon by the Conservation District and the producer. The volume requested is 161.2 AF. The requested volume was determined by the producer based on the water use standards found in ARM 36.12.115 for Climatic Area IV³ (Addendum B.1.b in

³ The producer's property appears to be located on the border of Climatic Areas IC (moderately low consumptive use) and VI (mountain areas). Because the proposed POU is located along the river bottom and as there are no standards proposed in ARM 36.12.115 for Climatic Region VI, the volume for the use assumes the POU is within Climatic Area IV. Calculations are based on sprinkler irrigation standards of 2.07 AF/acre in Climatic Area IV.

application materials). Following the proposed change, water will be used to provide full-service irrigation on 35 acres and supplement 154.6 acres. The requested flow rate, 2.6 CFS, was based upon the capacities of the two pumps at the secondary POD.

40. The Department finds the proposed change in place of use for a portion of Water Reservation No. 43B 10004-00 is a beneficial use of water.

ADEQUATE DIVERSION

FINDINGS OF FACT

41. The Applicant proposes to divert water from the Yellowstone River by means of a stem and handwheel headgate opening into a three-foot culvert on the northwest bank of the Yellowstone River in Gov't Lot 10 NWSESW of Section of 34, T6S, R7E, in Park County. The diversion is currently in use under the West Creek Ranch, LLC's irrigation Statement of Claim 43B 190625-00. Water is conveyed from the POD through a ditch to a pump site in the SW of Section 34, T6S, R7E, within parcels 4 and 4A of Certificate of Survey 1400. At the pump site there are two separate pumps. Both pumps were installed between 1998 and 2004. From each of the pumps, water is pumped from the ditch into a system of pipelines, which supplies water to the various pivots and sprinkler systems across the POU. Excess water not diverted at the pumping site is returned to the Yellowstone River via a natural channel/ditch.

42. Statement of Claim 43B 190625-00 also utilizes the POD. The Department determined the capacity of the diversion structure based on the three-foot culvert at the headgate. The capacity of the culvert structure was found to be greater than the total flow rate diverted through the headgate (9.3 CFS), based on provided dimensions of the culvert and channel slope estimated using Google Earth Pro. Claim 43B 190625-00 uses the same POD and side channel as the proposed use. The headgate and side channel are sufficiently sized to convey 43B 190625-00 plus the proposed use of a portion of the CD water right proposed to change. While the two pumps are shared with other water rights, the Applicant plans that the CD water reservation could be used solely at times. With this in mind, the two pumps together can pump 2.6 CFS, and this is the basis for the flow rate in this application. The western pump is bigger, pumping 1.4 CFS, while the eastern pump has a 1.2 CFS capacity.

43. The eastern pump is a WEG Electric Motors Corporation 25 HP electric pump. This pump supplies water to the two half pivots in the SW of Section 34, T6S, R7E, Park County as well as wheelines and the Section 33, T6S, R7E, Park County half pivot to the west of the highway. The western pump is a General Electric 15 HP, 1,760 RPM electric pump. This pump supplies water to the full pivot in the NW of Section 34, T6S, R7E, in Park County. The pump flow capacity is

capable of diverting the water proposed for change by itself or the private right along with a portion of the proposed change flow rate. The entire system does not operate at the same time; the Applicant will rotate which pivot or wheel line is running at any given time.

44. The Applicant will install flow meters in the system to satisfy the measurement conditions resulting from this application.

45. The Department determines the diversion and conveyance infrastructure is adequate for the proposed change in POU to a portion of Water Reservation No. 43B 10004-00.

POSSESSORY INTEREST

FINDINGS OF FACT

46. The affidavit on the Application to Change a Water Right form was signed by Ned Zimmerman, Conservation District chairman, for the Park Conservation District. The submission of the Application for Reserved Water (Form 500) was signed by the producer, Jon Martin, and implies written consent.

CONCLUSIONS OF LAW

WATER RESERVATION CRITERIA

47. The Applicant has proven by a preponderance of the evidence that the purpose, need, amount, and public interest are consistent with the 1978 *Order of Board of Natural Resources Establishing Water Reservations*. Sections 85-2-316(12), 85-2-402(2)(d), MCA (FOF 8-13).

HISTORICAL USE AND ADVERSE EFFECT

48. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. *McDonald v. State*, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986) (beneficial use constitutes the basis, measure, and limit of a water right); *Featherman v. Hennessy*, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911) (increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); *Quigley v. McIntosh*, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940) (appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a

new priority date junior to intervening water uses); *Allen v. Petrick*, 69 Mont. 373, 222 P. 451(1924) (“quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only”); *Town of Manhattan*, ¶ 10 (an appropriator’s right only attaches to the amount of water actually taken and beneficially applied).⁴

49. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. *Spokane Ranch & Water Co. v. Beatty*, 37 Mont. 342, 96 P. 727, 731 (1908); *Quigley*, 110 Mont. at 505-11, 103 P.2d at 1072-74; *Matter of Royston*, 249 Mont. at 429, 816 P.2d at 1057; *Hohenlohe*, ¶¶ 43-45.⁵

50. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the “historic use” of the water right being changed. *Town of Manhattan*, ¶10 (recognizing that the Department’s obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change Applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a Statement of Claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.⁶ A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the

⁴ DNRC decisions are available at: <https://dnrc.mt.gov/Directors-Office/HearingOrders>

⁵ See also *Holmstrom Land Co., Inc., v. Newlan Creek Water District*, 185 Mont. 409, 605 P.2d 1060 (1979); *Lokowich v. Helena*, 46 Mont. 575, 129 P. 1063 (1913); *Thompson v. Harvey*, 164 Mont. 133, 519 P.2d 963 (1974) (plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); *McIntosh v. Graveley*, 159 Mont. 72, 495 P.2d 186 (1972) (appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); *Head v. Hale*, 38 Mont. 302, 100 P. 222 (1909) (successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, *Gassert v. Noyes*, 18 Mont. 216, 44 P. 959 (1896) (change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff’s subsequent right).

⁶A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under § 85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. Section 85-2-234, MCA

original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. *Quigley*, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); *Royston*, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the Applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); *Hohenlohe*, ¶ 44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9, 1985)(evidence of historic use must be compared to the proposed change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).⁷

51. An Applicant must also analyze the extent to which a proposed change may alter historic return flows for purposes of establishing that the proposed change will not result in adverse effect.

⁷ Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)("[O]nce an appropriator exercises his or her privilege to change a water right ... the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right ... which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right."); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo., 1999); Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation"); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right ... he shall file a petition requesting permission to make such a change The change ... may be allowed provided that the quantity of water transferred ... shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo., 1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its use and the water is subject to appropriation by others. *E.g., Hohenlohe*, ¶ 44; *Rock Creek Ditch & Flume Co. v. Miller*, 93 Mont. 248, 17 P.2d 1074, 1077 (1933); *Newton v. Weiler*, 87 Mont. 164, 286 P. 133 (1930); *Popham v. Holloron*, 84 Mont. 442, 275 P. 1099, 1102 (1929); *Galiger v. McNulty*, 80 Mont. 339, 260 P. 401 (1927); *Head v. Hale*, 38 Mont. 302, 100 P. 222 (1909); *Spokane Ranch & Water Co.*, 37 Mont. at 351-52, 96 P. at 731; *Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; ARM 36.12.101(56) (Return flow - that part of a diverted flow which is not consumed by the appropriator and returns underground to its original source or another source of water - is not part of a water right and is subject to appropriation by subsequent water users).⁸

52. Although the level of analysis may vary, analysis of the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. *Royston*, 249 Mont. at 431, 816 P.2d at 1059-60; *Hohenlohe*, at ¶¶ 45-46 and 55-6; *Spokane Ranch & Water Co.*, 37 Mont. at 351-52, 96 P. at 731.

53. In *Royston*, the Montana Supreme Court confirmed that an Applicant is required to prove lack of adverse effect through comparison of the proposed change to the historic use, historic consumption, and historic return flows of the original right. 249 Mont. at 431, 816 P.2d at 1059-60. More recently, the Montana Supreme Court explained the relationship between the fundamental principles of historic beneficial use, return flow, and the rights of subsequent appropriators as they relate to the adverse effect analysis in a change proceeding in the following manner:

The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the “amount historically consumed” and the water that re-enters the stream as return flow. . . .

An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each

⁸ The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana’s water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell’s flows are fed by irrigation return flows available for appropriation. *Bitterroot River Protective Ass’n, Inc. v. Bitterroot Conservation Dist.*, 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, 198 P.3d 219, (citing *Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

subsequent appropriator “is entitled to have the water flow in the same manner as when he located,” and the appropriator may insist that prior appropriators do not affect adversely his rights.

This fundamental rule of Montana water law has dictated the Department’s determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis, represents a key element of proving historic beneficial use.

We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe, at ¶¶ 42-45 (internal citations omitted).

54. The Department’s rules reflect the above fundamental principles of Montana water law and are designed to itemize the type evidence and analysis required for an Applicant to meet its burden of proof. ARM 36.12.1901 through 1903. These rules forth specific evidence and analysis required to establish the parameters of historic use of the water right being changed. ARM 36.12.1901 and 1902. The rules also outline the analysis required to establish a lack of adverse effect based upon a comparison of historic use of the water rights being changed to the proposed use under the changed conditions along with evaluation of the potential impacts of the change on other water users caused by changes in the amount, timing, or location of historic diversions and return flows. ARM 36.12.1901 and 1903.

55. There is no historical use because the water being changed in this application is for future irrigation development pursuant to § 85-2-316, MCA. (FOF Nos. 14-15)

56. The Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. §85-2-402(2)(b), MCA. (FOF Nos. 16-34)

BENEFICIAL USE

57. A change Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. Sections 85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: “[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . .” McDonald, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under §85-2-402, MCA, and new beneficial permits under §85-2-311, MCA. ARM 36.12.1801. The amount of water that may be authorized for change 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 (Mont. 1st Jud. Dist. Ct.) (2003) (*affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518); *Worden v. Alexander*, 108 Mont. 208, 90 P.2d 160 (1939); *Allen v. Petrick*, 69 Mont. 373, 222 P. 451(1924); *Sitz Ranch v. DNRC*, DV-10-13390,, *Order Affirming DNRC Decision*, Pg. 3 (Mont. 5th Jud. Dist. Ct.) (2011) (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); *Toohey v. Campbell*, 24 Mont. 13, 60 P. 396 (1900) ("The policy of the law is to prevent a person from acquiring exclusive control of a stream, or any part thereof, not for present and actual beneficial use, but for mere future speculative profit or advantage, without regard to existing or contemplated beneficial uses. He is restricted in the amount that he can appropriate to the quantity needed for such beneficial purposes."); § 85-2-312(1)(a), MCA (DNRC is statutorily prohibited from issuing a permit for more water than can be beneficially used).

58. Applicant proposes to use water for irrigation which is a recognized beneficial use. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence irrigation is a beneficial use and that 161.2 acre-feet of diverted volume and 2.6 CFS flow rate of water requested is the amount needed to sustain the beneficial use. Section 85-2-402(2)(c), MCA (FOF Nos. 35-40).

ADEQUATE MEANS OF DIVERSION

59. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. This codifies the prior appropriation principle that the means of diversion must be reasonably effective for the contemplated use and may not result in a waste of the resource. *Crowley v. 6th Judicial District Court*, 108 Mont. 89, 88 P.2d 23 (1939); *In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC* (DNRC Final Order 2002) (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).

60. Pursuant to § 85-2-402 (2)(b), MCA, 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. (FOF Nos. 41-45)

POSSESSORY INTEREST

61. Pursuant to § 85-2-402(2)(d), MCA, the 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. See also ARM 36.12.1802.

62. 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. (FOF No. 46)

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 43B 30164489 should be GRANTED subject to the following.

The Applicant is authorized to change the place of use of the Park Conservation District Water Reservation No. 43B 10004-00 (Conservation District Record No. 43B 30164990). A flow rate of 2.6 CFS and a maximum volume of 161.2 AF/YR shall be diverted from the Yellowstone River from a headgate in Gov't Lot 10, NWSESW Section 34, T6S, R7E, Park County from April 15 to October 19 for irrigation of 189.6 acres. Under Conservation District Record No. 43B 30164990, the Applicant is authorized to irrigate 21.1 acres in Section 33, 162.5 acres in Section 34, T6S, R7E, 4.8 acres in Section 3, and 1.2 acres in Section 4, T7S, R7E, all in Park County. The maximum flow rate and volume that will be diverted from the Yellowstone River by the water right proposed for change cannot exceed 2.6 CFS and 161.2 AF.

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

WATER MEASUREMENT – MEETS CONSERVATION DISTRICT REQUIREMENT

THIS RIGHT IS SUBJECT TO THE TYPE OF WATER USE MEASURING DEVICE OR WATER USE ESTIMATION TECHNIQUE REQUIRED BY THE CONSERVATION DISTRICT. THE APPROPRIATOR SHALL KEEP WRITTEN RECORDS OF THE FLOW RATE AND VOLUME OF WATER USED. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THE CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE WATER USER SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

NOTICE

The Department will provide a notice of opportunity for public comment on this Application and the Department's Draft Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for public comments to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives public comment, the Department shall consider the public comments, respond to the public comments, and issue a preliminary determination to grant the application, grant the application in modified form, or deny the application. If no public comments are received pursuant to § 85-2-307(4), MCA, the Department's preliminary determination will be adopted as the final determination.

Dated this 5 day of May 2025.

/Original signed by Kerri Strasheim/

Kerri Strasheim, Manager
Bozeman Regional Office
Montana Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the DRAFT PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 5 day of May, 2025, by first class United States mail.

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