

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

GOVERNOR GREG GIANFORTE



DNRC DIRECTOR AMANDA KASTER

October 17, 2025

Sweet Grass County Conservation District
PO Box 749
Big Timber, MT 59011

Subject: Updated Draft Preliminary Determination to Grant Conservation District Application to Change Water Reservation Application No. 43B 30164777

Dear Applicant,

The Department of Natural Resources and Conservation (Department or DNRC) has reviewed any information submitted to your application during the granted extension. This review consists of an updated evaluation of the criteria for issuance of a change authorization found in §85-2-402, MCA. The Department has preliminarily determined that the criteria are met, and this application should be granted. A copy of the updated Draft Preliminary Determination (PD) to Grant your application is attached.

The Department will prepare a notice of opportunity to provide public comment per §85-2-307(4), MCA. If no public comments are received, the Department will issue the updated Draft PD as final pursuant to §85-2-307(5)(c), MCA. If public comments are received, the Department will consider the public comments and issue a non-draft PD within 30 days of the closing date of the public comment period.

Please let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Christine Schweigert".

Christine Schweigert
Hydrologist
Billings Regional Office
cschweigert@mt.gov
406-247-4419
1371 Rimtop Drive, Billings, MT 59105

Cc: 44 Big Sky Farms, LLC
Confluence Consulting
DMS Natural Resource, LLC



DNRC.MT.GOV

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

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APPLICATION TO CHANGE WATER RIGHT) NO. 43B 30164777 BY SWEET GRASS) COUNTY CONSERVATION DISTRICT)	UPDATED DRAFT PRELIMINARY DETERMINATION TO GRANT CHANGE
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On June 5, 2025, Sweet Grass County Conservation District (Applicant) submitted Application to Change Water Right No. 43B 30164777 to change Water Reservation Number 43B 9948-00 (CD Record Number 43B 30164764) to the Billings 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 October 28, 2024, in which the Applicant designated that the technical analyses for this application would be completed by the Department. The preapplication meeting attendees were Sandi Lavoy for the Applicant; Mike Sanctuary and Hannah Cantu of Confluence Inc, consultants for the Applicant; Mark Elison, DNRC Billings Regional Manager; Christine Schweigert, DNRC Billings Regional Hydrologist; Veronica Corbett, and Cassey Strebeck, DNRC Billings Water Resource Specialists; Jay Smith, DNRC Helena Central Office; and Deb Stephenson of DMS Natural Resources, LLC for 44 Big Sky Farms LLC (Producer – Applicant to Sweet Grass County Conservation District). The Applicant returned the completed Preapplication Checklist on November 4, 2024. The Department delivered the Department-completed Technical Analyses on December 16, 2024. The Application was determined to be correct and complete as of June 26, 2025. An Environmental Assessment for this application was completed on August 19, 2025. The Draft Preliminary Determination to Grant Change was sent to the Applicant on August 25, 2025. The Applicant submitted a request for extension of time per § 85-2-307(3), MCA on September 8, 2025, to which the Department granted three days to submit additional information. The Applicant submitted additional information on September 9, 2025.

INFORMATION

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

Application as filed:

- Conservation District Application to Change a Water Reservation, Form 606-CD
- Attachments:

- *B.1.a Signed Copy of Conservation District Application from Producer to Sweet Grass Conservation District* dated September 6, 2023
- *B.1.b Signed Copy of Conservation District Application from the Producer ADDENDUMS (4/29/2024 and 4/30/2024)* dated April 29, 2024, amending the flow rate requested from 1,500 GPM to 2,360 GPM and providing supporting documentation for the requested amendment.
- *B.2 Signed Copy of Reserved Water Use Authorization from the Conservation District* dated September 19, 2024
- *B.3 Copy of CD Public Notice from the Conservation District* dated July 25, 2024
- *B.4 Copy of the Affidavit of Publication from the Conservation District* dated March 13, 2025
- *B.5 Copy of the Public Notice Certificate of Service from the Conservation District* dated December 26, 2024
- *C.2 Place of Use List* undated
- *E.1/E.2 Aerial Map of Proposed Reserved POU* map creation dated April 29, 2024, aerial imagery is 2019 NAIP
- *Exhibit B* Affidavits of Marlis A Arneson dated May 10, 2023, and Eric M Arneson dated May 17, 2023, with matching Exhibits A, B, and C, which are maps of property overviews created March 21, 2022, showing property boundaries and pre-1973 historical places of use and 2001-2006 places of use for existing supplemental water rights overlaying August 21, 2019, NAIP imagery
- *Exhibit C* NRCS File for Arneson Ranch consisting of 338 pages of various information including irrigation efficiency estimates, maps of pivots, pivot specifications, pump curves for primary and secondary diversions, diversion design drawings, irrigation water requirement (IWR) considerations, pivot design flow calculations, ditch profile survey documentation and drawings, a note on ditch flow capacity, a pipeline profile drawing, and an invoice for irrigation equipment.
- Maps:
 - *Exhibit A.* Map of proposed use created May 9, 2023, overlaying aerial imagery from August 21, 2019, NAIP
- Department-completed technical analyses based on information provided in the Preapplication Checklist, dated December 16, 2024

Information Received after Application filed

- Applicant submitted additional information within 15 business days of the issuance of the Draft Preliminary Determination: email chain dated August 29, 2025, through September 9, 2025 between Deborah Stephenson, consultant for the producer; 44 Big Sky Farms, LLC, producer; Sandi LaVoy, administrator for the Sweet Grass Conservation District (SGCD); Hannah Cantu, consultant for the SGCD; and Christine Schweigert for the Department, discussing a typographical error found in Table 1 of the Draft Preliminary Determination. The period of use for 43B 30164764 should be April 1 to November 1, not April 15 to October 15.

Information within the Department's Possession/Knowledge

- Order of the Board of Natural Resources Establishing Water Reservations dated December 1978
- USGS Scientific Investigations Report 2015-5019-G. Methods for estimating streamflow characteristics at ungaged sites in western Montana based on data through water year 2009: Chapter G in Montana StreamStats
- USGS Gage 06192500 Yellowstone River near Livingston, MT, period of record from May 1, 1897, through June 30, 2024
- USGS Gage 06214500 Yellowstone River at Billings, MT, period of record from October 1, 1928, through July 31, 2024
- DNRC Water Right Information System (WRIS)
- DNRC Standard Public Notice List
- The Department also routinely considers the following information. The following information is not included in the administrative file for this Application but is available upon request. Please contact the Billings Regional Office at 406-247-4415 to request copies of the following documents.
 - Department Standard Practice Technical Memorandum: Physical Availability of Surface Water with Gage Data; Between Gages: Interpolation Method
 - Department Change Manual

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, "AC" means acres; "AF" means acre-feet; "AF/YR" means acre-feet per year; "CD" means Conservation District; "SGCD" means Sweet Grass County Conservation District; "Department" or "DNRC" means the Montana Department of Natural Resources & Conservation; "USDA NRCS" means US Department of Agriculture Natural Resources Conservation Service; "USGS" means US

Geological Survey; “CFS” means cubic feet per second; “GPM” means gallons per minute; “POD” means point of diversion; and “POU” means place of use.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. The Applicant seeks to add a point of diversion and place of use to Water Reservation (43B 9948-00) that were not included in the original water reservation public notice. The SGCD authorized the producer, Big Sky Farms, LLC, to use an unperfected portion of their water reservation. The portion authorized is shown in CD Record, 43B 30164764, and is for 5.26 CFS up to 139 acre-feet (AF) from the Yellowstone River by means of a pump for sprinkler irrigation of up to 51.6 acres (AC). The period of diversion and period of use are from April 1 to November 1 each year. The proposed POD is located in the SESWSW Sec. 11, T1N, R14E, Sweet Grass County and water is conveyed to the place of use by a pipeline. The proposed POU is located in the N2SE and S2NE Sec. 10, and S2NW Sec. 11, T1N, R14E, Sweet Grass County. The Draft Preliminary Determination sent to the Applicant on August 25, 2025, had a typographical error in Table 1. The Period of Use for CD Record 43B 30164764 was listed as 4/15-10/15. The Period of Use has been corrected to 4/1 -11/1.

Table 1: Water right proposed for change

Water Right Number	Flow Rate	Volume	Purpose	Period Of Use	Place Of Use	Points of Diversion	Priority Date
Water Reservation 43B 9948-00	363.4 CFS	46,245.0 AF	Irrigation	Not assigned	Various (T1N and T1S; R12E – R17E)	Various (T1N and T1S; R12E – R17E)	12/15/1978
CD Record (Portion of Water Reservation) 43B 30164764	5.26 CFS	139.0 AF	Irrigation	4/1-11/1	N2SE Sec. 10, S2NE and S2NW Sec. 11, T1N, R14E, Sweet Grass County	SESWSW Sec. 11, T1N, R14E, Sweet Grass County	12/15/1978

2. There is no historical use for CD Record 43B 30164764, therefore there are no water rights that were historically supplemental.

3. No previous changes have been authorized for this portion of the SGCD Water Reservation.

CHANGE PROPOSAL

FINDINGS OF FACT

4. The Applicant proposes to change the POD and POU for a portion of SGCD Water Reservation 43B 9948-00 as authorized by the CD and as shown on SGCD Record 43B 30164764. The change will result in an additional POD in the SESWSW Sec. 11, T1N, R14E, Sweet Grass County, and an additional POU consisting of 51.6 acres of sprinkler irrigation in the N2SE Sec. 10, S2NE and S2NW Sec. 11, T1N, R14E, Sweet Grass County, as shown in Table 2, authorized under the SGCD Water Reservation. No

change in purpose or place of storage is proposed. After this change, the Applicant's producer will appropriate up to 139 AF at a flow rate of 5.26 CFS from the Yellowstone River. The proposed period of diversion and period of use are from April 1 to November 1 each year. Figure 1 shows the elements of the proposed change.

Table 2: Proposed place of use for CD Record 43B 30164764

Acres	Quarter Section	Section	Township	Range
10.3	S2NE	10	1N	14E
9.10	S2NW	11	1N	14E
32.2	N2SE	10	1N	14E
Total 51.6				

CHG 43B 3064777 - Sweet Grass Conservation District

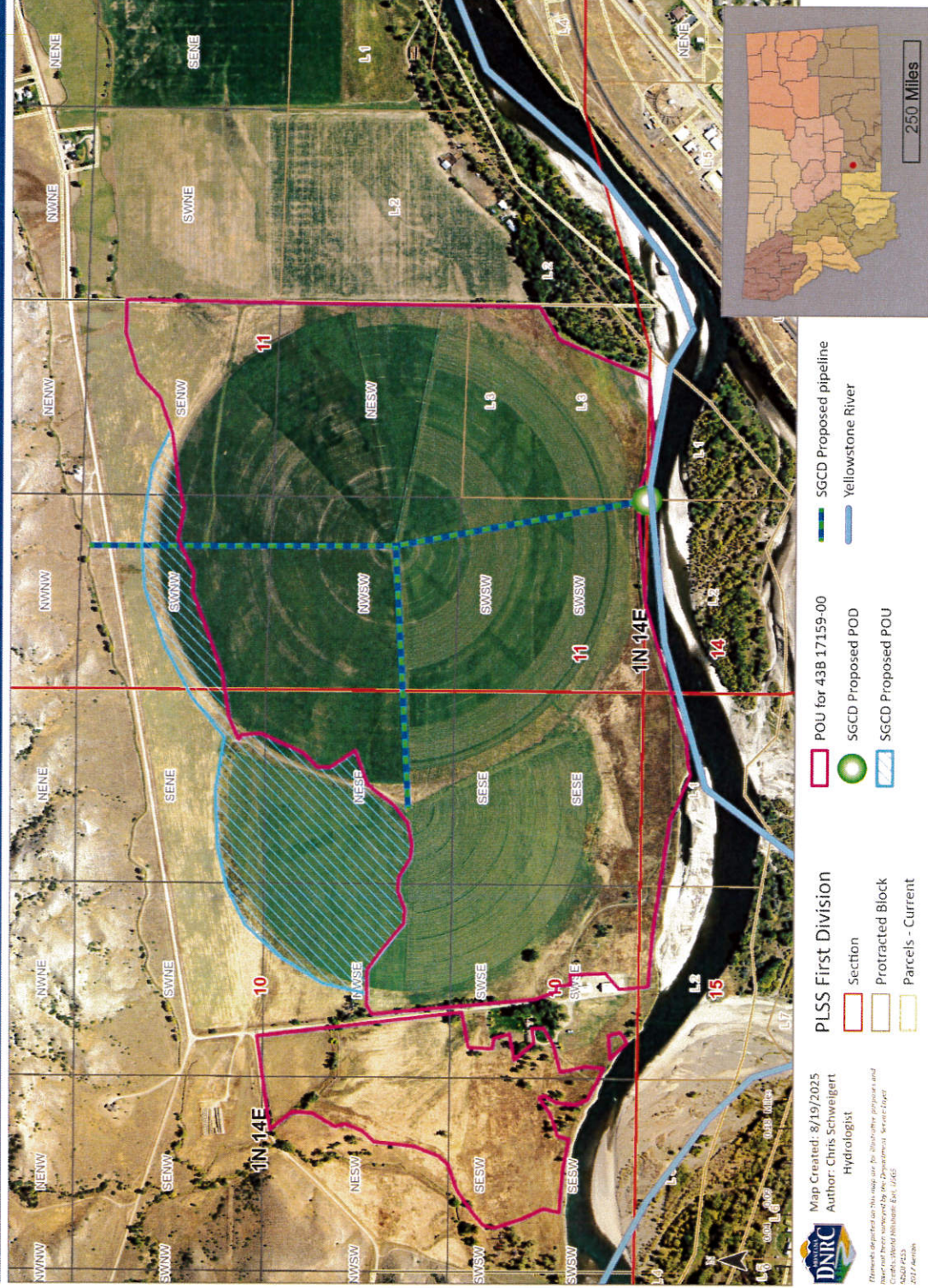


Figure 1. Proposed Project

5. There are two existing water rights that cover the proposed place of use, which are supplemental to each other and will be supplemental to the CD right if the proposed change is granted. Those rights are Statement of Claim numbers 43B 17157-00 and 43B 17158-00. Both supplemental rights are diverted from Big Timber Creek via the Arneson Ditch with a headgate in the NWSWNE Sec. 2, T1N, R14E, Sweet Grass County. Both water rights are for 13.75 CFS diverted from April 1 to November 1 each year to irrigate the same 447.5 acres in Sections 10, 11, 14, and 15, T1N, R14E, Sweet Grass County. Statement of Claim 43B 17157-00 has a priority date of March 14, 1902. Statement of Claim 43B 17158-00 has a priority date of May 10, 1918. Big Timber Creek is not always available at the times it is needed and/or in the amounts needed to irrigate the proposed place of use. The producer for the Applicants, 44 Big Sky Farms, LLC, proposes to use the Yellowstone River water at times when Big Timber Creek is not available or when the Arneson Ditch is not operating. 44 Big Sky Farms, LLC is requesting full-service irrigation from the CD Water Reservation to provide adequate water in years when Big Timber Creek is not available.

6. Statement of Claim 43B 17159-00 is for 12.5 CFS from the Yellowstone River from April 1 to November 1 each year to irrigate 345.8 acres in Sections 10, 11, 14, and 15, T1N, R14E, Sweet Grass County. This claim has a priority date of July 15, 1962, and was historically diverted using a pump in the SWSESW Sec. 10, T1N, R14E, Sweet Grass County. The historical pump site was washed away by floodwater in 1996 or 1997. Pending Application to Change an Existing Irrigation Water Right No. 43B 30160517 from 44 Big Sky Farms, LLC is being processed concurrently and seeks to change the POD for Statement of Claim 43B 17159-00 to the SESWSW Sec. 11, T1N, R14E, Sweet Grass County, where this CD Water Reservation would also be diverted from if the change is granted. Statement of Claim 43B 17159-00 is not supplemental to the CD record because the acres irrigated do not overlap, but it will be associated if the change is granted because it will utilize the same POD, pipeline, and center pivot irrigation system as the proposed CD Reserved Water use. Because the acres are adjacent and not overlapping, because the producer proposes to comingle water with two different priority dates, and because the CD Water Reservation is junior to Statement of Claim 43B 17159-00, if this change were authorized, it would be conditioned so that the center pivots would be required to shut down if call is made on the CD Water Reservation. The proposed condition is shown in FOF 28. This claim has historically diverted water from the Yellowstone River and piped it up to the Arneson Ditch. From the Arneson Ditch, water was used to flood irrigate the acres below the ditch. The proposed appropriation will be used to irrigate acres above the Arneson Ditch by piping it into a center pivot irrigation system.

Table 3: Water rights that will be supplemental to CD Record 43B 30164764 if the change is authorized

WR Number (Purpose)	Flow Rate	Period of Use	Point of diversion	Place of use	Priority date	Acres
43B 17157-00 (Irrigation)	13.75 CFS	4/1 – 11/1	NWSWNE Sec. 2, T1N, R14E, Sweet Grass County	E2, E2SW Sec. 10, N2NW Sec. 14; W2 Sec. 11; N2 Sec.	March 14, 1902	447.5

				15, T1N R14E, Sweet Grass County		
43B 17158-00 (Irrigation)	13.75 CFS	4/1 – 11/1	NWSWNE Sec. 2, T1N, R14E, Sweet Grass County	E2, E2SW Sec. 10, N2NW Sec. 14; W2 Sec. 11; N2 Sec. 15, T1N R14E, Sweet Grass County	May 10, 1918	447.5

7. The proposed POU overlaps the POU for Statement of Claim 43B 17157-00 and Statement of Claim 43B 17158-00. The proposed POD, pipeline, and center pivot irrigation system would be shared with Statement of Claim 43B 17159-00. Historically, the proposed POU has been flood irrigated using water from Big Timber Creek conveyed by the Arneson Ditch with a headgate in the NWSWNE Sec. 2, T1N, R14E, Sweet Grass County. If the change is authorized, 44 Big Sky Farms, LLC will be able to alternate between Big Timber Creek and the Yellowstone River as needed for full-service irrigation.

8. The SGCD Water Reservation was set aside for future irrigation by the *Order of Board of Natural Resources Establishing Water Reservations* with a priority date of December 15, 1978, at 4:18 PM. Figure 1 (FOF 4) shows the proposed POD and POU as well as the existing POU for Statement of Claim 43B 17159-00, which will be used under the same center pivot irrigation system as the unperfected portion of the SGCD water reservation that was authorized for use by 44 Big Sky Farms, LLC in CD Record 43B 30164764.

9. The CD has 302.95 CFS flow rate and 40,296.5 AF volume remaining in their water reservation after this application.

10. The CD granted this producer, 44 Big Sky Farms, LLC the right to use a portion of their water reservation on September 19, 2024, under application number SG-2301 (CD Record 43B 30164764). The CD granted the authorization subject to the installation of a water measuring device. As such, the Department will add the following condition if the change 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 ACCURATELY.

CHANGE CRITERIA

11. 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.

12. 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

13. An authorization for change is required in § 85-2-316(12), MCA, because the producer's proposed point of diversion and place of use are outside the project areas identified in the original Water Reservation application's public notice.

14. 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.

15. 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.

16. 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.

17. 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.

18. 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

19. The Board of Natural Resources granted the SGCD a water reservation, number 43B 9948-00, for 363.4 CFS and 46,245.0 AF for use on approximately 15,313 AC for future irrigation development out of the Yellowstone River. The Board Chairman signed the Order of the Board of Natural Resources Establishing Water Reservations and granted a priority date of December 15, 1978, at 4:18 PM for conservation districts on the Yellowstone River.

20. This application is to change a portion of the water reservation not yet put to use, and therefore, there is no historical use.

ADVERSE EFFECT

FINDINGS OF FACT

21. SGCD is proposing to add a point of diversion and a place of use to their water reservation. The proposed appropriation will use a portion of the SGCD water reservation from the Yellowstone River to supply water for center pivot irrigation of 51.6 AC in Sections 10 and 11, T1N, R14E, Sweet Grass County. The producer, 44 Big Sky Farms, LLC, proposes to divert up to 5.26 CFS up to 139 AF.

22. Water is still available under the SGCD water reservation.

23. The CD published notice of the Conservation District Record SG-2301 (DNRC CD Record 30164764) on July 25, 2024, in the Big Timber Pioneer and set a deadline for objections.

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

25. The Sweet Grass CD 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 CD annually by November 1.

26. This application proposes to use a non-perfected portion of the SGCD water reservation granted by the Order of the Board of Natural Resources Establishing Water Reservations.

27. 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.

28. The Applicant's producer, 44 Big Sky Farms, LLC, proposes to irrigate using a center pivot irrigation system which will comingle water from the SGCD Water Reservation with a December 15, 1978, priority date with water diverted from the Yellowstone River under Statement of Claim 43B 17159-00 with a July 15, 1962, priority date. The Applicant's producer is not proposing to change the place of use of their existing Statement of Claim 43B 17159-00 to include the acres authorized by SGCD and the producer has not requested use of the SGCD Water Reservation on the entire area under the center pivot irrigation system. These conditions make the use of the center pivot irrigation system dependent on both rights being available. If a valid call is made on either the SGCD Water Reservation or the producer's existing Statement of claim 43B 17159-00, the Applicant's producer, 44 Big Sky Farms, LLC will be required to shut down the center pivot irrigation system to prevent expansion of either water right. If the change is authorized the following condition will be added to the change authorization in order to prevent adverse effect:

IMPORTANT INFORMATION

IN THE EVENT A VALID CALL IS MADE FOR EITHER CD RECORD 43B 30164764 OR STATEMENT OF CLAIM 43B 17159-00 TO CEASE DIVERSION, THE APPROPRIATOR MUST CEASE THE USE OF YELLOWSTONE RIVER WATER IN THE CENTER PIVOT IRRIGATION SYSTEM.

Physical and Legal Availability

29. For the purposes of assessing adverse effect, the Department analyzed the physical and legal availability of water for this application because the POD and POU are not within the original public notice area identified in the Board of Natural Resources Yellowstone Reservation proceedings in July of 1977.

30. The Applicant proposes to change the POD and POU of a non-perfected portion of the SGCD Water Reservation No. 43B 9948-00 (CD Record 43B 30164764). The proposed POD and POU were not

part of the original public notice area identified in the SGCD 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 06214500 Yellowstone River at Billings, MT

Period of record

Yellowstone River near Livingston, MT: Approved data, May 1, 1897 – June 30, 2024

Yellowstone River at Billings, MT: Approved data, October 1, 1928 – July 31, 2024

(Data retrieved November 26, 2024)

31. The POD is located between the two gaging stations on the Yellowstone River. The POD is located approximately 41 miles downstream of USGS gage 06192500 Yellowstone River near Livingston, MT, and approximately 86 miles upstream of USGS gage 06214500 Yellowstone River at Billings, MT. Both stream gages have periods of record exceeding 10 years, both are maintained by the USGS, and both have data sufficient to calculate the median of the mean monthly flow.

32. The Department found physical availability using a logarithmic interpolation method. A logarithmic interpolation is used when the proposed POD is located between two stream gages. This method estimates a streamflow characteristic at an intermediate location based on the 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 POD is 1.39 to the Yellowstone River near Livingston and 0.43 to the Yellowstone River at Billings gages. The estimation technique was reviewed by the DNRC Water Science Bureau because the drainage area for the Billings gage (0.43) is outside the parameters (0.5 to 1.5) of the interpolation method. The DNRC Water Science Bureau determined that despite being outside the parameters, this method is the best estimation technique available (Department File). Both gages have a similar period of record. Both gages exhibit similar streamflow characteristics. As a result, the logarithmic interpolation is suitable for estimating physical water availability at the POD.

33. 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 = ungaged site (proposed point of diversion)

34. Basin drainage area at the POD was delineated using USGS StreamStats. Drainage area at the gage locations was taken from the USGS gaging station information web page.

35. The median of the mean monthly flow was calculated using the period of record for each gage. The median of the mean monthly flow was then used to estimate the mean monthly volume by multiplying the median of the mean monthly flow by 1.98 (the number of AF per day per CFS) and the number of days each month. Table 4 shows the median of the mean monthly flows at the Livingston and Billings gages, as well as the interpolated flow and volume at the ungaged location (proposed POD). The interpolated data represents the estimated flow rate and volume physically available at the proposed POD on the Yellowstone River in the SESWSW Sec. 11, T1N, R14E, Sweet Grass County.

Table 4. Interpolated flow rate and volume at proposed POD using USGS gages at Livingston and Billings, MT

Month	Median of the Mean Monthly Flow at the Livingston Gage (Gage 1) (CFS)	Median of the Mean Monthly Flow at the Billings Gage (Gage 2) (CFS)	Interpolated Monthly Flow at the Ungaged Site (Proposed POD) (CFS)	Interpolated Monthly Volume at the Ungaged Site (Proposed POD) (AF)
April	1,903	3,972	2,346.9	139,408.2
May	7,207	12,885	8,504.7	522,016.3
June	13,315	24,270	15,799.3	938,476.7
July	7,408	12,405	8,580.3	526,657.2
August	3,333	4,578	3,648.5	223,944.6
September	2,274	3,721	2,616.6	155,424.7
October	1,917	3,917	2,349.9	144,237.9
November	1,637	3,572	2,044.6	121,449.5

36. The Department analyzed the legal availability of water in an area of potential impact that spans from the proposed point of diversion in SESWSW Sec. 11, T1N, R14E, Sweet Grass County, downstream approximately 1.7 miles, to the confluence of the Boulder River and Yellowstone River in the NE Sec. 12, T1N, R14E, Sweet Grass County. The Boulder River is a significant hydrological boundary and adds approximately 530 square miles of drainage area. There are six water rights within the reach, as illustrated in Table 5. There are no known water availability issues in this area.

Table 5. Legal demands in the affected reach

Water Right No.	Owner(s)	Flow Rate (CFS)	Period of Diversion	Volume (AF)
43B 107224-00	Norem Farms; Wilson Trust	0.08*	01/01-12/31	3.94
43B 194349-00	Montana Dept. of Fish, Wildlife, and Parks	1,200	11/01-04/15	395,014
43B 194350-00	Montana Dept. of Fish, Wildlife, and Parks	2,000	04/16-10/31	789,234
43B 30132359	44 Big Sky Farms LLC	0.00*	01/01-12/31	15.3
43B 56225-00	Sweet Grass CD; David & Carmen Hodges	4	05/15-10/15	428
43B 7298-00	Starr-Moore LLLP	2.11	05/01-10/01	116.6

*DNRC Standard practice, flow rate taken as 35 GPM (0.08 CFS) for the first livestock direct right and all others are taken as zero.

37. To find legal availability, the legal demands of the downstream water users were subtracted from the physical availability of the source at the proposed POD. The legal availability analysis is shown in Table 6.

Table 6. Comparison of physical and legal availability by flow rate (CFS)

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Interpolated Flow at POD	2,346.9	8,504.7	15,799.3	8,580.3	3,648.5	2,616.6	2,349.9	2,044.6
Legal Demands in APOI	2,000.1	2,006.2	2,006.2	2,006.2	2,006.2	2,006.2	2,006.2	1,200.1
Physical minus Legal	346.9	6,498.5	13,793.1	6,574.1	1,642.3	610.4	343.7	844.5

Table 7. Comparison of physical and legal availability by volume (AF)

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Interpolated Volume at POD	139,408.2	522,016.3	938,476.7	526,657.2	223,944.6	155,424.7	144,237.9	121,449.5
Legal Demands in APOI	59,490.8	123,012.8	119,087.7	123,057.3	123,057.3	119,087.7	123,012.5	111,797.7
Physical minus Legal	79,917.4	399,003.5	819,389.0	403,600.0	100,887.3	36,337.0	21,225.5	9,651.8

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

39. The Department finds that the proposed change to the unperfected portion of the water reservation (CD Record 43B 30164764) will not create an adverse effect.

40. 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 ACCURATELY.

BENEFICIAL USE

FINDINGS OF FACT

41. The Applicant proposes to use 5.26 CFS up to 139 AF for irrigation of 51.6 AC. All 51.6 AC are supplemental to Statement of Claim 43B 17157-00 and Statement of Claim 43B 17158-00. Irrigation is recognized as a beneficial use under the Montana Water Use Act §85-2-102, MCA.

42. The Yellowstone River water will be used to supplement Big Timber Creek Claims 43B 17157-00 and 43B 17158-00. The Applicant's producer stated that Big Timber Creek water is not always available. The Yellowstone River is a more reliable source of supply. The Applicant proposes to use the Yellowstone River water when Big Timber Creek is not available.

43. This change will benefit the SGCD by allowing them to authorize use of a portion of their water reservation. SGCD must authorize projects to fulfill the purpose of the water reservation.

44. The flow rate and volume were agreed upon by the CD and the producer. The requested flow rate of 5.26 was determined by Aquatech, the irrigation system designer, and is supported by a pump curve provided by the producer. The requested volume was determined using the DNRC standards in ARM 36.12.115. The flow rate and volume were approved by the CD.

45. The Department finds the proposed change in POD and POU for a portion of Water Reservation 43B 9948-00 is a beneficial use of water.

ADEQUATE DIVERSION

FINDINGS OF FACT

46. The Applicant's producer proposes to divert water from the Yellowstone River by means of a diesel-powered Cornell 5RB pump with a 13.5-inch impeller capable of diverting 5.26 CFS in the SESWSW Sec. 11, T1N, R14E, Sweet Grass County. The pump is connected to a 16-inch pipeline that

will convey the water to one full circle center pivot and one ¾ circle pivot located in the S2NE and N2SE Sec. 10 and the S2NW Sec. 11, T1N, R14E, Sweet Grass County. The irrigation system was designed by AquaTech, an irrigation system design and equipment supplier.

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

48. The Department finds that the diversion and conveyance infrastructure is adequate for the proposed change in POD and POU of Water Reservation 43B 9948-00.

POSSESSORY INTEREST

FINDINGS OF FACT

49. The affidavit on the Conservation District Application to Change Water Reservation form was signed by Mark Thompson, Conservation District Board Chairman, for the Sweet Grass Conservation District. The submission of the Application for Reserved Water (Form 102) was signed by the producer, Robert McClaren, President, of 44 Big Sky Farms, LLC, and implies written consent.

CONCLUSIONS OF LAW

WATER RESERVATION CRITERIA

50. 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 13-18).

HISTORICAL USE AND ADVERSE EFFECT

51. 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).¹

52. 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*, ¶¶ 43-45.²

53. 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.³ 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 original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on

¹ DNRC decisions are available at: <https://dnrc.mt.gov/Directors-Office/HearingOrders>

² 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).

³ A 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

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).⁴

54. 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. 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*

⁴ 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.)

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).⁵

55. 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.

56. 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 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).

⁵ 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).

57. The Department's rules reflect the above fundamental principles of Montana water law and are designed to itemize the type of 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.

58. 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 19-20)

59. 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. Section 85-2-402(2)(a), MCA. (FOF 21-40)

BENEFICIAL USE

60. 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).

61. The 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 139 acre-feet of diverted volume and 5.26 CFS flow rate of water requested is the amount needed to sustain the beneficial use and is within the standards set by DNRC Rule/other standard. Section 85-2-402(2)(c), MCA (FOF 41-45).

ADEQUATE MEANS OF DIVERSION

62. 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).

63. 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 46-48)

POSSESSORY INTEREST

64. 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.

65. 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 49).

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 30164777 should be GRANTED subject to the following.

The Applicant's producer may divert up to 5.26 CFS up to 139 AF per year from a point in the SESWSW Sec. 11, T1N, R14E, Sweet Grass County, to irrigate 51.6 AC. The period of diversion and period of use will be from April 1 to November 1 each year. The place of use will be 10.3 AC in the S2NE and 32.2 AC in the N2SE Sec. 10, and 9.1 AC in the S2NW Sec. 11, all in T1N, R14E, Sweet Grass County. If the application is granted, it will be subject to the following conditions.

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.

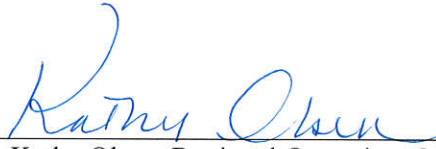
IMPORTANT INFORMATION

IN THE EVENT A VALID CALL IS MADE FOR EITHER CD RECORD 43B 30164764 OR STATEMENT OF CLAIM 43B 17159-00 TO CEASE DIVERSION, THE APPROPRIATOR MUST CEASE THE USE OF YELLOWSTONE RIVER WATER IN THE CENTER PIVOT IRRIGATION SYSTEM.

NOTICE

The Department will provide a notice of opportunity for public comment on this Application and the Department's Updated 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 17th day of October 2025.



Kathy Olsen, Regional Operations Manager
Billings Regional Office

Montana Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

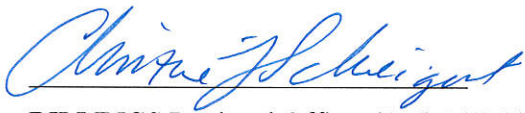
This certifies that a true and correct copy of the UPDATED DRAFT PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 17th day of October 2025, by first class United States mail.

SWEET GRASS COUNTY CONSERVATION DISTRICT
PO BOX 749
BIG TIMBER, MT 59011

CONFLUENCE CONSULTING
1289 STONERIDGE DR.
BOZEMAN, MT 59718

44 BIG SKY FARMS
101 N. HOUSTON AVE.
CAMERON, TX 76520-3322

DMS NATURAL RESOURCES, LLC
602 S. FERGUSON AVE., STE 2
BOZEMAN, MT 59718

A handwritten signature in blue ink, appearing to read "Christine Schiegent", is written over a horizontal line.

BILLINGS Regional Office, (406) 247-4415