DEPARTMENT of AGRICULTURE and NATURAL RESOURCES
JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

RECOMMENDATION OF ACTING CHIEF ENGINEER FOR WATER PERMIT APPLICATION NO. 8138-3, Ken and Jodi Hofer

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Acting Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8138-3, Ken and Jodi Hofer, 19343 398th Avenue, Hitchcock SD 57348.

The Acting Chief Engineer is recommending APPROVAL of Application No. 8138-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. The well approved under Water Permit No. 8138-3 is located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under this Permit must control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

2. The proposed well authorized by Permit No. 8138-3 must be constructed by a licensed well driller and construction of the well and installation of the pump must comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Adam Mathiowetz, PE
Acting Chief Engineer
March 23, 2026

Report to the Chief Engineer on
Water Permit App. Nos. 8137-3 and 8138-3
Ken and Jodi Hofer
2026 March 9

Both the applications discussed in this report have the same signatories, Ken and Jodi Hofer. In October of 2013, the Water Management Board declared the Tulare: Western Spink-Hitchcock aquifer was fully appropriated. Following legislation in 2014, a procedure was established for prioritizing held applications in aquifers that are fully appropriated. These applications have a priority date of February 25, 2015, but a separate rank assigned by lottery at the May 7, 2015, Board meeting. Figure 1 below is a map of the held applications in this report and nearby, nearby water rights [1], and Water Rights Program observation wells [2]. Table 1 provides details of the water right permits and applications in Figure 1 [1].

Water Permit Application No. 8137-3 proposes to appropriate 2.22 cubic feet of water per second (cfs) from one new well to be completed in the approximate center of the NE ¼ Section 21 for irrigation of 160 acres in the NE ¼ Section 21; all in T113N-R62W. This application is priority 3 out of 27 on the waitlist and is in Beadle County approximately 6.5 miles southeast of Hitchcock, South Dakota.

Water Permit Application No. 8138-3 proposes to appropriate 2.11 cfs from one new well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of the SE ¼ Section 31 for irrigation of 150 acres located in the SE ¼ Section 31; all in T113N-R62W. This application is priority 7 out of the 27 on the waitlist and is in Beadle County, approximately 6.5 miles southeast of Hitchcock, South Dakota.

Table 1: Water right permits and applications shown in Figure 1 [1]

File No.	Name/Business	Status	Use Type	CFS	Acres	Priority
130A-3	Eldon E Hofer	License	Irrigation	1.07	75	12/12/1953
246-3	Terry M Wieting	License	Irrigation	1.33	160	08/23/1956
2476-3	Randy R Puffer	License	Irrigation	1.00	96	12/09/1975
2976A-3	John Lovett	License	Irrigation	1.44	126	08/23/1976
3191-3	Scott A Mueller	License	Irrigation	1.69	118	10/15/1976
3192-3	Riverside Hutterian Brethren	License	Irrigation	1.88	132	10/15/1976
4308-3	Terry M Wieting	License	Irrigation	1.44	184	12/13/1976
4350-3	Randy R Puffer	License	Irrigation	1.89	132	09/03/1976
4400A-3	Huron Hutterian Brethren	License	Irrigation	1.45	102	03/09/1979
4794C-3	Terry Wieting	License	Irrigation	1.34	124	12/15/1976
6159-3	Terry M Wieting	License	Irrigation	1.67	128	12/09/1999
6240-3	Terry Wieting	License	Irrigation	1.56	132	11/09/2000
6331A-3	Oscar Inc	License	Irrigation	1.34	132	03/28/2007
7373-3	Terry M Wieting	License	Irrigation	1.78	152	06/14/2012
7572B-3	Herb Hofer	License	Irrigation	1.78	135	12/14/2012
8120-3	Martin Anderson	Hold	Irrigation	1.86	132	02/15/2015 Rank 5 of 27
8137-3	Ken And Jodi Hofer	Hold	Irrigation	2.22	160	02/15/2015 Rank 3 of 27
8138-3	Ken And Jodi Hofer	Hold	Irrigation	2.21	150	02/15/2015 Rank 7 of 27

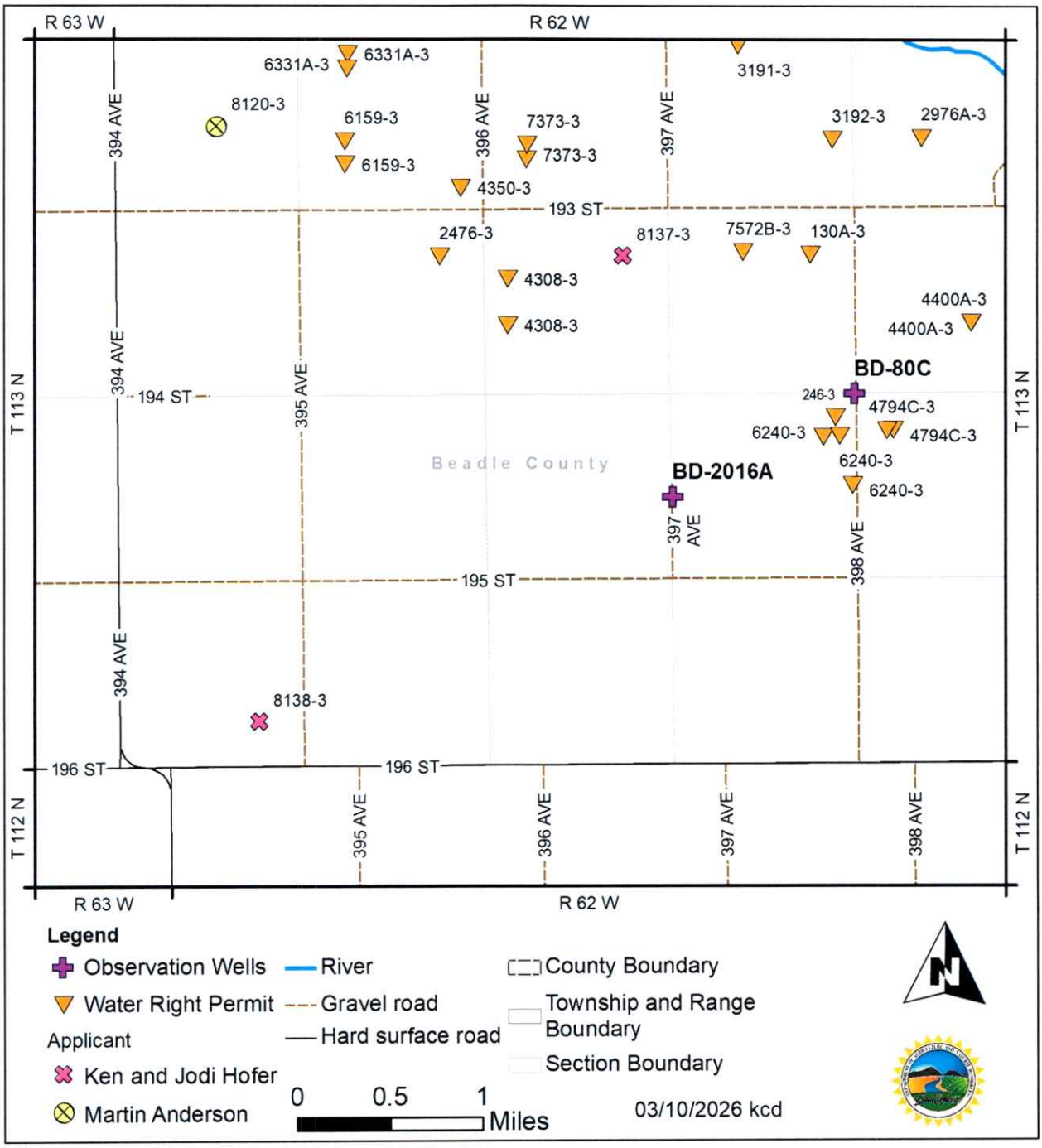

Figure 1: Observation wells, held applications, and water right permits near these applications. [1] [2]

Aquifer: Tulare: Western Spink-Hitchcock

Hydrogeologic Characteristics

The Tulare aquifer is a Quaternary-aged system of sand and gravel layers that were deposited as outwash by meltwater from receding glaciers. The Western Spink-Hitchcock management unit of the Tulare aquifer is a buried aquifer generally lying immediately above the bedrock (a.k.a. basal) [3] [4]. The bedrock is composed of an erosional surface of exposed Cretaceous-aged Pierre Shale and Niobrara Formation, with the lowest erosional surface possibly incising into the Carlile Shale, which contains the Codell Sandstone member [5]. The Niobrara Formation and Codell Sandstone can also be aquifers in portions of South Dakota [2] [1]. The Tulare: Western Spink-Hitchcock aquifer underlies approximately 260,000 acres of Hand, Spink, and Beadle Counties [6] [7]. The Tulare aquifer has an average thickness of 37 feet [8]. Assuming a porosity of 0.15 [9], the estimated recoverable water in storage in the Tulare: Western Spink-Hitchcock aquifer is approximately 1.4 million acre-feet. The Tulare: Western Spink-Hitchcock aquifer is hydrologically connected to several Quaternary and Cretaceous aged aquifers in physical contact with it. Buhler [10] estimated that approximately 77,000 acres of the Tulare: Western Spink-Hitchcock aquifer were under unconfined conditions in October 2012, and showed that at the time, a majority of the aquifer was under confined conditions. The area of the aquifer under confined conditions fluctuates with the amount of water in the aquifer. Since water is essentially incompressible, when the aquifer has more water in storage, more area becomes confined and vice-versa for when there is less water in the aquifer.

The applicants did not submit any well completion reports with these applications, but sufficient information is available to complete the technical review. A well completion report approximately 0.4 miles west of Application No. 8137-3 in the NE ¼ NW ¼ Section 21 T113N-R62W dated March 30, 1976, indicates the driller encountered sand from 25 to 61 feet below grade. The static water level was 25 feet below grade at the time the well was completed. A well completion report approximately 0.4 miles west of Application No. 8138-3 in the SE ¼ SW ¼ Section 31 T113N-R62W dated February 28, 1989, indicates the driller encountered fine sand from 70-95 feet below grade, clay from 85 to 100 feet, medium sand from 115 to 140 feet, and clay and shale to the total depth of 160 feet. The static water level at the time that well was completed was 35 feet below grade.

Applicable South Dakota Codified Law (SDCL)

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, and that the proposed use is a beneficial use and in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board. This report will only assess the availability of water and possibility of developing these applications without unlawful impairment of existing domestic water uses and water rights.

Pursuant to SDCL 46-6-3.1, no application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated

annual recharge of the water to the groundwater source. An exception allows water distribution systems to withdraw from groundwater sources older or stratigraphically lower than the Greenhorn Formation regardless of the results of a hydrologic budget. The applicant is not a water distribution system as defined in SDCL 46-1-6(17) and the Tulare: Western Spink-Hitchcock aquifer is younger and stratigraphically higher than the Greenhorn Formation [11]. Therefore, the Water Management Board must find that recharge to the aquifer exceeds withdrawals to approve these applications.

Following the October 2013 Board hearing, the Board determined that the Tulare: Western Spink-Hitchcock aquifer was fully appropriated. In 2014, the South Dakota Legislature established procedure in SDCL 46-2A-7 through 7.1 for holding applications and establishing priority when the Water Management Board declares an aquifer is fully appropriated. These applications were submitted prior to February 25, 2015, pursuant to that procedure. The applicant retained eligibility through the first and second five-year reviews. After the second five-year review on December 3, 2025, the Board determined that unappropriated water was available and the permits on hold were to be processed as established by State administrative rule and State law.

Availability of Water

Hydrologic Budget

The current hydrologic budget of the Tulare: Western Spink-Hitchcock aquifer was presented before the Water Management Board in December 2025 [12] and is summarized below. The estimated average annual recharge to the aquifer is approximately 0.83 inches per acre [13], which equates to 18,000 ac-ft/yr over the currently estimated extent of the aquifer. Withdrawals from the aquifer are mainly by irrigation from appropriative users. By taking the sum of the average irrigation reported for each permit, Drennon [12] estimated the average annual withdrawal from the aquifer was between 12,000 and 13,000 ac-ft/yr depending on the range of data used. Irrigators have been applying fewer inches per acre as time goes on but irrigating a higher proportion of their permitted acreage in any given year. The estimated average annual withdrawal from irrigation was approximately 12,000 ac-ft/yr for the period of record of 2015 through 2024, which is the last ten years of reports. Based on this hydrologic budget, there is approximately 6,000 ac-ft/yr of unappropriated water available. At the meeting, members of the Water Management Board expressed discomfort at approving the entire 6,000 acre-feet of unappropriated water but did not issue an order specifying an exact amount to which they would limit withdrawals.

For the last ten years of record, the average irrigation per reported acre was 6.63 inches per year and permit holders irrigated 79% of their permitted acres [12]. For the period of record of 1979 through 2024, the average irrigation per reported acre was 8.89 inches per year and permit holders irrigated on average 65% of their permitted acres [12]. The applications in this report request a combined total appropriation of 4.33 cfs for 310 acres of irrigation. Using the above values, their estimated average annual withdrawal is likely to be between 135 and 149 ac-ft/yr. The total withdrawal of the 27 held applications is likely to range between approximately 2,300

and 2,500 ac-ft/yr. Therefore, based on the hydrologic budget, there is reasonable probability that unappropriated water is available for both of these applications.

Table 2: Estimated withdrawals for the 27 held applications. Several applicants hold multiple applications [12].

Applicant with Held Permit(s)	Total Requested CFS	Total Requested Acres	Est. Withdrawal (ac-ft/yr)	
			6.63 in/yr @ 79% acreage utilization	8.89 in/yr @ 65% acreage utilization
Allen and Jeffrey Gatzke	2.67	110	48	53
Bixler Farms or Bixler Land	16.02	1,450	633	698
Hamilton Family LLC	2.00	145	63	70
Jeff Hamilton	4.00	290	127	140
Ken and Jodi Hofer	4.33	310	135	149
Loren or Cynthia Marzahn	2.22	160	70	77
Martin Anderson	1.86	132	58	64
Riverside Hutterian Brethren	7.70	384	168	185
Scott Hamilton	4.00	435	190	209
Van Buskirk Farms, LLP	25.65	1,798	785	866
Total	**70.45**	**5,214**	**2,276**	**2,511**

Observation Wells

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires the Water Management Board to rely upon the record of observation well analysis in addition to other information to ensure that recharge to the aquifer exceeds withdrawals. The Water Rights Program maintains 55 observation wells completed into the Tulare: Western Spink-Hitchcock aquifer. The nearest observation wells to the proposed wells for these applications are Observation Wells BD-80C, and BD-2016A [2]. The location of those wells with respect to these applications is shown in Figure 1 (page 2). Observation Well BD-80C is approximately 1.5 miles southeast of App. No. 8137-3 and 3.7 miles northeast of App. No. 8138-3. Observation Well BD-2016A is approximately 1.3 miles south of App. No. 8137-3 and 2.5 miles northeast of App. No. 8138-3. Both wells are representative of the general conditions in the aquifer [2]. Figure 2 shows the water elevations in the two nearest observation wells to these applications. In general, water levels rise during periods of higher-than-average precipitation and decline during periods of lower-than average precipitation [14]. There is a slight trend of springtime water levels to be increasing with time, consistent with the increased precipitation over time in the area. There are also seasonal declines during the irrigation season. The tendency of the water levels in the aquifer to be primarily influenced by climate and precipitation rather than well withdrawals indicates natural discharge is occurring, which the Water Management Board considers available for capture. Therefore, based on the record of observation wells, there is reasonable probability that unappropriated water is available for these applications.

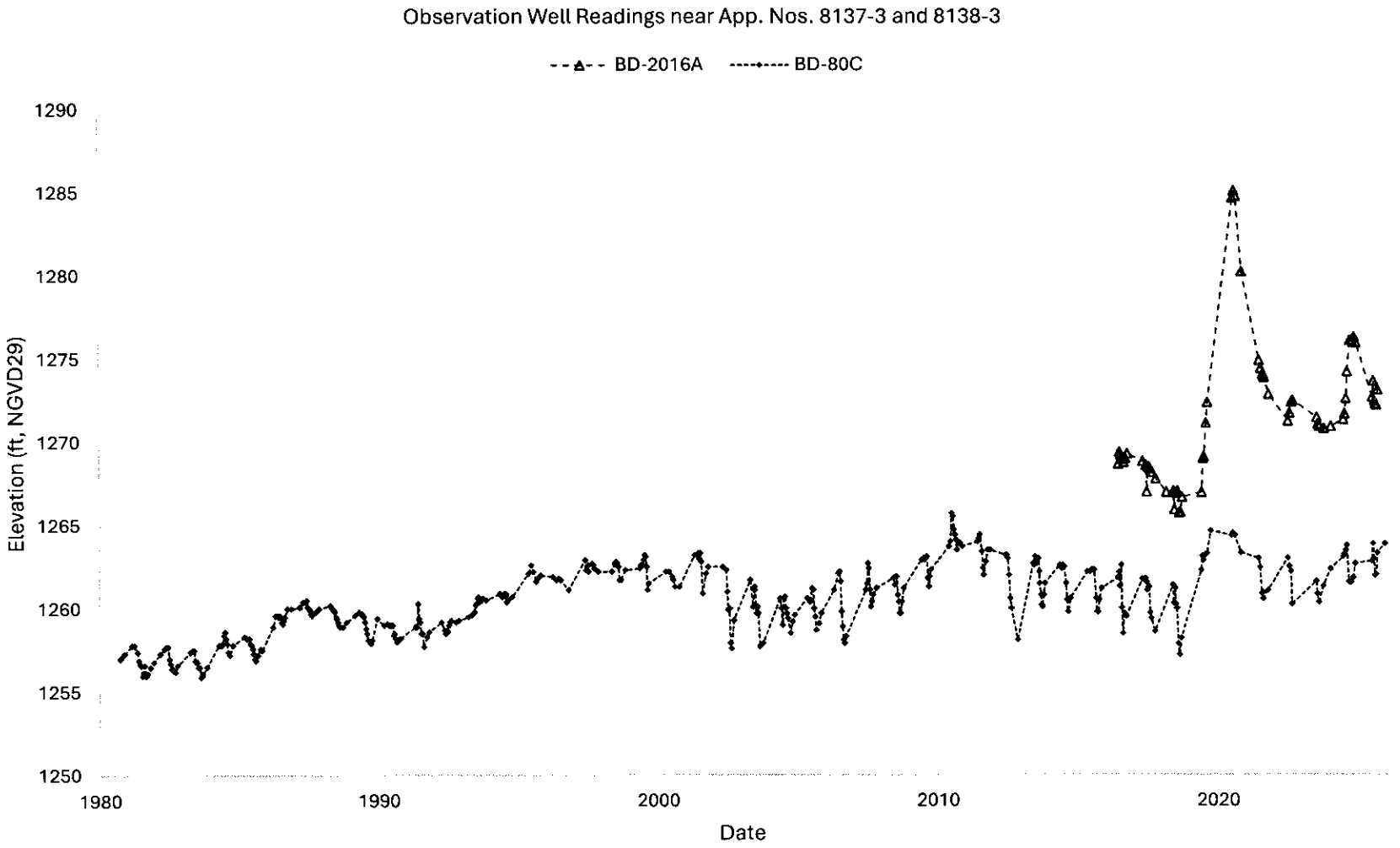

Figure 2: Observation well readings near these applications [2]

Possibility of Unlawful Impairment of Existing Water Rights

The nearest water right permit in the same aquifer to App No. 8137-3 is Water Right No. 4308-3, 0.6 miles west of the proposed well for that application. The nearest domestic well on file with the Water Rights Program is approximately 1.6 miles south of this application based on the location provided by the well driller.

The nearest water right permit in the same aquifer to App. No. 8138-3 is Water Right No. 4308-3, approximately 2.5 miles north-northeast of the proposed well for that application. The nearest domestic well on file with the Water Rights program is approximately 0.4 miles west of this application based on the location provided by the well driller.

The Water Rights Program has historically interpreted an unlawful impairment of existing water rights to occur if a junior water right/permit causes a nearby adequate well with a senior water right/permit to become unable to withdraw at the rate it is entitled to or, if a domestic well is impacted, a water right/permit causes an adequate domestic well to be unable to withdraw at the rate needed to supply reasonable domestic use of water. ARSD 74:02:04:20(6) defines an adequate well as:

> *...a well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet*

There are no complaints on file with the Water Rights Program involving possible well interference in the Tulare: Western Spink-Hitchcock aquifer in Beadle County despite the large number of wells in relatively close proximity throughout the Tulare: Western Spink-Hitchcock aquifer [15]. Therefore, based on the lack of complaints, there is reasonable probability these applications can be developed without unlawful impairment of existing domestic wells or senior water rights.

Conclusions

1. Water Permit Application No. 8137-3 proposes to appropriate 2.22 cubic feet of water per second (cfs) from one new well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of the NE ¼ Section 21 for irrigation of 160 acres in the NE ¼ Section 21; all in T113N-R62W. This application is priority of 3 out of 27 applications held in 2015.
2. Water Permit Application No. 8138-3 proposes to appropriate 2.11 cfs from one new well to be completed into the Tulare: Western Spink-Hitchcock aquifer in the approximate center of the SE ¼ Section 31 for irrigation of 150 acres located in the SE ¼ Section 31; all in T113N-R62W. This application is priority of 7 out of the 27 applications held in 2015.
3. The Water Management Board determined in December of 2025 that based on the hydrologic budget and observation well analysis, there is reasonable probability unappropriated water is available for both of these applications.

4. There is reasonable probability these applications can be developed without unlawful impairment of existing water rights and domestic uses.

Kimberly C. Drennon, E.I.
Engineer III – DANR Water Rights Program

References

[1] Water Rights Program, "Water Right Permit Files," S.D. Dept. of Ag. and Nat. Resources, Pierre, South Dakota, 2026.

[2] Water Rights Program, "Observation Wells," S.D. Dept. of Ag. and Nat. Resources, Pierre, South Dakota, 2026.

[3] SD DANR Geological Survey Program, "Lithologic Logs," Vermillion, South Dakota, 2025.

[4] Water Rights Program, "Well Completion Reports," S.D. Dept. of Ag. and Nat. Resources, Pierre, South Dakota, 2026.

[5] D. W. Tomhave and L. D. Schulz, "Bedrock geologoic map showing configuration of the bedrock surface in South Dakota east of the Missouri River," DANR Geological Survey Program, Vermillion, SD, 2004.

[6] J. Farmer, "First Report on the Five Year Review of Water Availability Western Spink Hitchcock Management Unit of the Tulare Aquifer," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, South Dakota, 2020.

[7] T. Jensen and A. Mathiowetz, "Report to the Chief Engineer on Water Permit Application Nos. 8949-3 & 8950-3 Tom Tuhsbaumer & 8951-3 Tyson Nuhsbaumer," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, SD., 2025.

[8] R. D. Benson, "Major aquifers in Spink County, South Dakota," SD DANR Geological Survey Program, Vermillion, South Dakota, 1997.

[9] L. S. Hedges, S. L. Burch, D. L. Iles, R. A. Barari and R. A. Schoon, "Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa Tasks 1-4," US Army Corps of Engineers, Omaha, Nebraska, 1982.

[10] K. Buhler, "Report to the Chief Engineer on Water Permit Application Nos. 7858-3, 7859-3, 7860-3, 7861-3, 7863-3 through 7872-3, 7885-3, 7894-3," SD DANR Water Rights Program, Joe Foss Bldg. Pierre, South Dakota, 2013.

[11] M. D. Fahrenbach, F. V. Steece, J. F. Sawyer, K. A. McCormick, G. L. McGillivray, L. D. Schulz and J. A. Redden, "South Dakota Stratigraphic Correlation Chart," SD Dept. of Ag. and Nat. Res. Geologic Survey Program, Vermillion, SD, 2010.

[12] K. C. Drennon, "Second Report on the Five-Year Review of Water Availablility in the Western Spink-Hitchcock Management Unit of the Tulare Aquifer," SD DANR Water Rights Program, 3 December 2025. [Online]. Available: https://danr.sd.gov/wrimage/pub/2025_TWSH_5YR.pdf. [Accessed 19 February 2026].

[13] L. K. Kuiper, "Appraisal of the Water Resources of the Eastern Part of the Tulare Aquifer, Beadle, Hand, and Spink Counties, South Dakota," US Geological Survey, Huron, South Dakota, 1984.

[14] NOAA National Centers for Environmental Information, "Climate at a Glance: Divisional Time Series," U. S. National Oceanic and Atmospheric Administration, 1 March 2026. [Online]. Available: https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/divisional/time-series. [Accessed 19 March 2026].

[15] Water Rights Program, "Complaints Database," S.D. Dept. of Ag. and Nat. Resources, Joe Foss Building, Pierre, SD, 2025.

Appendix: Table of Held Permits

Table 3: All 27 held permits from the Tulare: Western Spink-Hitchcock aquifer

App No.	Name	Priority	New CFS	New Acres	Existing associated permit	Existing CFS	Existing Acres	Total CFS	Total Acres	No. New Wells	No. Existing Wells	Description of Diversion Points	Lands Irrigated
8128-3	Riverside Hutterian Brethren	1	2.22	0	2078-3	7.25	792	9.47	792	0	5	Approx. ctrs of NW 1/4, NE 1/4, SW 1/4, SE 1/4 Sec. 28, W 1/2 W 1/2 Sec. 21; all in T112N-R61W	4 @ 132 acres for 528 acres in Sec. 28; 132 acres in NW 1/4 Sec. 21
8101-3	Bixler Farms	2	1.78	150	N/A	N/A	N/A	1.78	150	1	0	Approx. ctr of SW 1/4 Sec. 18 T114N-R62W	150 acres SW 1/4 Sec. 18
8137-3	Ken and Jodi Hofer	3	2.22	160	N/A	N/A	N/A	2.22	160	1	0	Approx. ctr of NE 1/4 Sec. 21 T113N-R62W	160 acres NE 1/4 Sec. 21
8085-3	Riverside Hutterian Brethren	4	1.71	120	N/A	N/A	N/A	1.71	120	1	0	Approx. ctr of NW 1/4 Sec. 20 T112N-R61W	160 acres in NW 1/4 Sec. 20
8120-3	Martin Anderson	5	1.86	132	N/A	N/A	N/A	1.86	132	1	or 1	Approx. ctr of Sec. 18 T113N-R62W	132 acres S 1/2 Sec. 18
8131-3	Scott Hamilton	6	2.00	290	N/A	N/A	N/A	2.00	290	1	0	Approx. ctr of SE 1/4 Sec. 10 T113N-R65W	290 acres E 1/2 Sec. 10
8138-3	Ken and Jodi Hofer	7	2.11	150	N/A	N/A	N/A	2.11	150	1	0	Approx. ctr of SE 1/4 Sec. 31 T113N-R62W	150 acres SE 1/4 Sec. 31
8106-3	Bixler Land	8	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of NE 1/4 Sec. 24 T114N-R63W	160 acres NE 1/4 Sec. 24
8103-3	Bixler Land	9	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of SW 1/4 Sec. 23	160 acres SW 1/4 Sec. 23
8084-3	Riverside Hutterian Brethren	10	3.77	264	N/A	N/A	N/A	3.77	264	2	0	Approx. ctrs of NW 1/4, NE 1/4 Sec. 29 T112N-R61W	2 @ 132 acres for 268 acres in N 1/2 Sec. 29
8105-3	Bixler Land	11	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of SE 1/4 Sec. 24 T114N-R63W	160 acres SE 1/4 Sec. 24
8129-3	Jeff Hamilton	12	2.00	145	N/A	N/A	N/A	2.00	145	up to 2	0	E 1/2 NW 1/4 Sec. 6 T113N-R64W	145 acres NW 1/4 Sec. 6
8099-3	Bixler Farms	13	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of NW 1/4 Sec. 3 T114N-R63W	160 acres NW 1/4 Sec. 3
8111-3	Van Buskirk Farms, LLP	14	1.94	136	N/A	N/A	N/A	1.94	136	1	0	Approx. ctr of NE 1/4 Sec. 36 T113N-R64W	136 acres NE 1/4 Sec. 36
8133-3	Scott Hamilton	15	2.00	145	N/A	N/A	N/A	2.00	145	up to 2	0	NE 1/4 NE 1/4 Sec. 11 T113N-R65W	140 acres NE 1/4 Sec. 11
8102-3	Bixler Land	16	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of SE 1/4 Sec. 22 T114N-63W	160 acres SE 1/4 Sec. 22

App No.	Name	Priority	New CFS	New Acres	Existing associated permit	Existing CFS	Existing Acres	Total CFS	Total Acres	No. New Wells	No. Existing Wells	Description of Diversion Points	Lands Irrigated
8108-3	Van Buskirk Farms, LLP	17	14.00	982	N/A	N/A	N/A	14.00	982	4	0	Approx. ctrs of Sec. 31, SW 1/4 Sec. 30, NE 1/4 Sec. 32 T114N-R63W; NE 1/4 Sec. 36 T114N-R64W	574 acres Sec. 31, 136 each SW 1/4 Sec 30, NW 1/4 Sec 32, NE 1/4 Sec. 36
8110-3	Van Buskirk Farms, LLP	18	1.94	136	N/A	N/A	N/A	1.94	136	1	0	Approx. ctr of NW 1/4 Sec. 33 T114N-R63W	136 acres Sec. 33
8100-3	Bixler Farms	19	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of SW 1/4 Sec. 24 T115N-R63W	160 acres SW 1/4 Sec. 24
8121-3	Allen and Jeffrey Gatzke	20	0.89	40	N/A	N/A	N/A	0.89	40	1	0	Approx. ctr of NW 1/4 SW 1/4 Sec. 13 T114N-R63W	40 acres SW 1/4 Sec. 13
8130-3	Jeff Hamilton	21	2.00	145	N/A	N/A	N/A	2.00	145	up to 2	0	W 1/2 NE 1/4 Sec. 6 T113N-R64W	145 acres NE 1/4 Sec. 6
8107-3	Bixler Farms	22	1.78	180	3052-3	1.88	140	3.66	320	1	1	new well in NW 1/4 Sec. 6, existing well in NE 1/4 SW 1/4 Sec. 6 T114N-R62W	180 additional acres in Sec. 6
8122-3	Allen and Jeffrey Gatzke	23	1.78	70	N/A	N/A	N/A	1.78	70	1	0	Approx. ctr of SE 1/4 Sec. 13 T114N-R63W	70 acres E 1/2 SE 1/4 Sec. 13
8109-3	Van Buskirk Farms, LLP	24	7.77	544	N/A	N/A	N/A	7.77	544	4	0	Approx. ctrs of SE 1/4, SW 1/4 Sec. 4, NE 1/4 SE 1/4 Sec. 5; all in T113N-R63W	4 @ 136 acres in S 1/2 Sec. 4, E 1/2 Sec. 5
8135-3	Loren or Cynthia Marzahn	25	2.22	160	N/A	N/A	N/A	2.22	160	1	0	Approx. ctr of NE 1/4 Sec. 28 T115N-R63W	160 acres NE 1/4 Sec. 28
8104-3	Bixler Farms	26	1.78	160	N/A	N/A	N/A	1.78	160	1	0	Approx. ctr of SE 1/4 Sec. 35 T115N-R63W	160 acres SE 1/4 Sec. 35
8132-3	Hamilton Family LLC	27	2.00	145	N/A	N/A	N/A	2.00	145	up to 2	0	Approx. ctr of the SW 1/4 Sec. 15 T113N-R65W	145 acres SW 1/4 Sec. 15