

WATER PERMIT NO. 7966-3

Name of Applicant: **Mark & Dwight Noethlich**

Address: **41117 US Hwy 212, Doland SD 57436**

Phone: **605 460-0245**

Amount of Water Claimed: **1.78 cfs**

Total Acres: **160 acres**

Source of Water Supply: **groundwater (one well)**

Water to be used for: **irrigation**

County: **Clark**

Type of Waste Disposal System:

Location: **9 miles west of clark**

PRIORITY

Date Received: **2-10-14**

Application/License Fee: **\$ 1050**

Corrected Application Received: **2-13-14**

Period of Annual Use: **June 1 – September 30**

Remarks:

Diversion Point: **center of SE 1/4 Sec 26-T117N-R59W**

Land to be Irrigated: **SE 1/4 Sec 26-T117N-R59W**

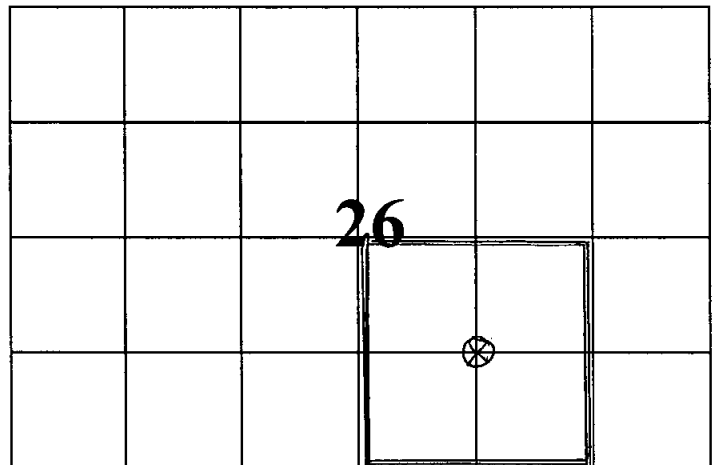
Depth of Well: **185**

Well Driller:

Remarks:

Type of Map:

Prepared by:



Reviewed and the Number Assigned on: **2-13-14**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

SD EForm - 0499LD V4

FORM 2: Application for irrigation in South Dakota
(type or print)RECEIVED
FEB 10 2014
WATER RIGHTS
PROGRAM

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7966-3</u> (office use only) Hydrologic Unit <u>10160006</u>
	Basin <u>James River</u>
	Newspaper <u>Clark Co. Courier</u>
	<u>Public Opinion</u>

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

1. Name to Appear on Irrigation Permit Marks & Dwight Noethlich
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent _____
(name and complete address if different than above name)Mailing Address 41117 US Hwy 212 Doland SD 57431
(Address) (City) (State) (Zip Code)Home Phone 605 635 6435 Cell 605 460 0245 Email noethlich@nvc.net2. Amount of water claimed 1.78*CFS or 800 **GPM ***AF Total Acreage 160
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)3. Source of water supply well4. Location of point of diversion SE 1/4 Sect 26 117-59
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)will send location when test well is drilled County Clark5. County or counties where water will be used Clark6. Annual period during which water is to be used May 1 - Sept. 307. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
NW 1/4 of SE 1/4 Sect 26 117-59	40		
SW 1/4 of SE 1/4 Sect 26 117-59	40		
NE 1/4 of SE 1/4 Sect 26 117-59	40		
SE 1/4 of SE 1/4 Sect 26 117-59	40		

8. Give a description of the project. (Attach sheet if more space is needed)

Drill 800 gpm well and install pivot system
to cover roughly 132 acres in SE 1/4 of Sect 26-117-59 Raymond township
Clark County

I, Mel Noethlich, the applicant, certify that I have read this application,
have examined the attached map, and that the matters stated are true.

Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable)

☒ Drilling new well(s) ☐ Using existing well(s)

a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many _____ Provide copy of log(s), if available. Drilled by _____

c) Well Depth 185' Depth to Top of Water Bearing Material 130' Depth to Water from Surface 50'

d) Distance to nearest existing domestic well:

On applicant's property _____ On property owned by others _____

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) _____

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

a) Surface Dimensions _____ Depth _____

b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

g) X & Y Slope (c.g. 3 to 1 is a typical slope)

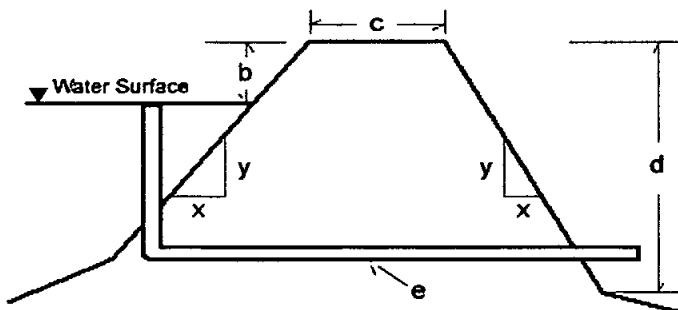
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



SOUTH DAKOTA
WATER PERMIT NO. 7966-3

Date of first receipt of application February 10, 2014.

Date of return to applicant for corrections, amendments or changes February 10, 2014.

Date of receipt of corrected application February 13, 2014.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7966-3 to Mark & Dwight Noethlich, 41117 US Hwy 212, Doland SD 57436 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 7966-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Altamont Aquifer (185 feet deep) located in the center of the SE 1/4 Section 26 for irrigation of 160 acres located in the SE 1/4 Section 26; all in T117N-R59W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is February 10, 2014.
4. The date of approval of Permit No. 7966-3 is May 5, 2014.
5. One-fifth of the construction is to be completed on or before November 5, 2016.
6. All construction is to be completed on or before May 5, 2019.
7. Water is to be put to beneficial use on or before May 5, 2023.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his 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 well authorized by Permit No. 7966-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall 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.

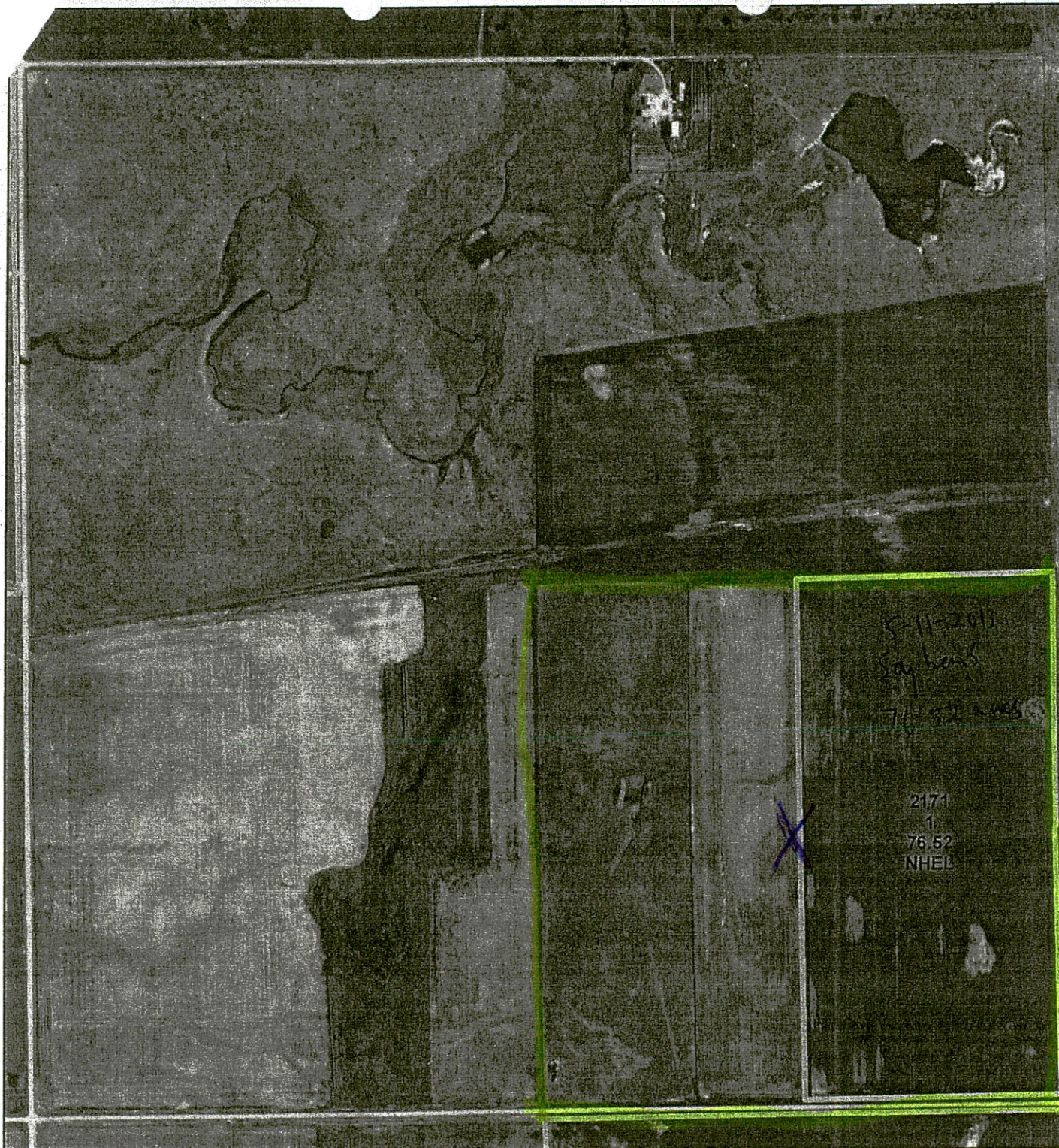
WATER MANAGEMENT BOARD

By: *Jeanne Goodman*
Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAY 16 2014

date





United States Department of Agriculture
Farm Service Agency

2

Clark County, SD

1:8,231

2013

PLSS: 26_117_59
Farm: 4366

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FEB 10 2014

WATER RIGHTS
PROGRAM

Wetland Determination Identifiers
& Restricted Use

* Limited Restrictions
) Exempt from Conservation Compliance Provisions

Common Land Units

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area.
Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 2/10, 20 14

RECEIVED OF Noethlich Bros 41117 US Hwy 212 Doland SD 57436

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>29666-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>29666-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	1050 00

No. **06737**

By Jearme Goodman
Chief Engineer



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



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FEB 13 2014

WATER RIGHTS
PROGRAM

February 10, 2014

Mark & Dwight Noethlich
41117 US Hwy 212
Doland SD 57436

Dear Sirs:

Thank you for submitting the four *Applications for a Permit to Appropriate Water* for irrigation in Clark County. In order to complete the applications, the following is required.

- Enclosed are the aerial photo maps submitted with the application. Please mark each proposed well location with an "X".
- Enclosed are the Form 2As, Supplemental Information. On Item No. 1 regarding the Well Information, please complete c) Well Depth with the proposed well depth for each well. Your well driller should be able to give you an estimate depth for each proposed well location.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

enclosures



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7966-3, Mark and Dwight Noethlich**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 7966-3, Mark and Dwight Noethlich, 41117 US Hwy 212, Doland SD 57436.

The Chief Engineer is recommending APPROVAL of Application No. 7966-3 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 rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his 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 wells authorized by Permit No. 7966-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall 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.

Jeanne Goodman, Chief Engineer
April 11, 2014

REPORT TO THE CHIEF ENGINEER
WATER PERMIT APPLICATION NOS. 7965-3, 7966-3, 7967-3, and 7968-3
Mark & Dwight Noethlich
March 26, 2014

Water Permit Application No. 7965-3 proposes to divert water at a maximum rate of 1.78 cubic feet per second (cfs) from one well completed into the Altamont aquifer at a depth of approximately 185 feet below ground surface. The well is expected to be located in the center of the SW $\frac{1}{4}$ of Section 34, T117N-R59W and will be used to irrigate 160 acres of the SW $\frac{1}{4}$ Section 34, T117N-R59W in Clark County.

Water Permit Application No. 7966-3 proposes to divert water at a maximum rate of 1.78 cfs from one well completed into the Altamont aquifer at a depth of approximately 185 feet below ground surface. The well is expected to be located in the center of the SE $\frac{1}{4}$ of Section 26, T117N-R59W and will be used to irrigate 160 acres of the SE $\frac{1}{4}$ of Section 26, T117N-R59W in Clark County.

Water Permit Application No. 7967-3 proposes to divert water at a maximum rate of 3.56 cfs from two wells completed into the Altamont aquifer at a depth of approximately 180 feet below ground surface. The wells are expected to be located in the center of the NE $\frac{1}{4}$ and NW $\frac{1}{4}$ of Section 3, T116N-R59W and will be used to irrigate 320 acres of the NE $\frac{1}{4}$ and NW $\frac{1}{4}$ of Section 3, T116N-R59W in Clark County.

Water Permit Application No. 7968-3 proposes to divert water at a maximum rate of 1.78 cfs from one well completed into the Altamont aquifer at a depth of approximately 180 feet below ground surface. The well is expected to be located in the center of the NE $\frac{1}{4}$ of Section 35, T117N-R59W and will be used to irrigate 160 acres of the NE $\frac{1}{4}$ of Section 35, T117N-R59W in Clark County.

AQUIFER: Altamont aquifer (A)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Altamont aquifer is estimated to underlie 1.7 million acres and contain 7.2 million acre feet (ac-ft) of recoverable water in storage in South Dakota. The aquifer underlies portions of Clark, Day, Deuel and Hamlin Counties (Hedges, Burch, Barari, Schoon, 1982). In Clark County the aquifer is estimated to underlie 652,800 acres, and contains 4,730,000 ac-ft of recoverable water in storage and consists of three hydraulically connected units (Hamilton, 1986). Hamilton (1986) defines the Altamont as consisting of three separate management units in Clark County. Of the units, the proposed well site is located in the area of the 'Altamont 2.' The Altamont 2 is a buried glacial outwash consisting of unconsolidated fine to very coarse sand and gravel and silt. This unit underlies approximately 630 square miles (Hamilton, 1986).

The Altamont aquifer in the area of the proposed well site is under confined conditions and groundwater movement is generally toward the west (Hamilton, 1986). The aquifer is expected to be between 100-130 feet below ground surface with a thickness of approximately 30 feet (SD Geological Survey, 2013; Hamilton, 1986). No test-hole logs were submitted with the

application. However, local lithological records confirm the conditions described with static water levels of approximately 60-70 feet below ground surface (Water Rights, 2014a).

SDCL 46-2A-9:

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicants proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water from the aquifer and the potential for impairment of existing rights.

WATER AVAILABILITY:

If this application is approved, the actual water use will likely be less than 320 ac-ft/yr. The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.” If the source of the water is older or lower than the Greenhorn Formation and a public water system has applied for the permit, the Board need not consider the recharge/withdrawal issue. Here, a public water system is not involved and the aquifer is not older or lower than the Greenhorn Formation, therefore withdrawal/recharge must be considered.

Hydrologic Budget:

Recharge:

Recharge to the Altamont aquifer in Clark County is through infiltration of precipitation and lateral inflow from other counties (Hamilton, 1986). Hamilton (1986) estimated that recharge due to precipitation to the Altamont 2 is 1.5 inches per year, which equates to 50,400 ac-ft/yr in Clark County.

Discharge:

Discharge from the Altamont aquifer in Clark County occurs primarily by well withdrawals and outflow to other counties (Hamilton, 1986). The SD DENR-Water Rights Program and Water Management Board consider the Altamont aquifer to be a single management unit. There are currently 72 water rights/permits appropriating water and one future use permit reserving water from the Altamont aquifer in South Dakota (Water Rights, 2014b).

In addition, there are many well completion reports on file with the SD DENR-Water Rights Program for domestic wells that appear to be completed into the Altamont aquifer (Water Rights, 2014c). The annual withdrawal by domestic wells is not considered significant to the hydrologic budget of the aquifer.

The amount of water that can be expected to be withdrawn by non-irrigation use water rights/permits can be estimated by assuming the water rights/permits which are limited by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time. Using

this assumption, the total annual withdrawal from the Altamont aquifer by non-irrigation use is expected to be less than 3,793 ac-ft/yr (Water Rights, 2014b).

The future use permit, No. 4052-3, Town of Henry, reserves 869 ac-ft/yr (Water Rights, 2014b). Full development of this future use permit is assumed regardless of likelihood.

The primary use of water from the Altamont aquifer is irrigation. The irrigation development of the Altamont aquifer has remained fairly steady over the period of record, 1979-2012. Fluctuations in the annual withdrawals are assumed to be the result of varied climatic conditions from year to year. Figure 1 shows the total annual withdrawal for irrigation purposes reported from the aquifer over the period of record. The average withdrawal over this period is 2,331 ac-ft/yr.

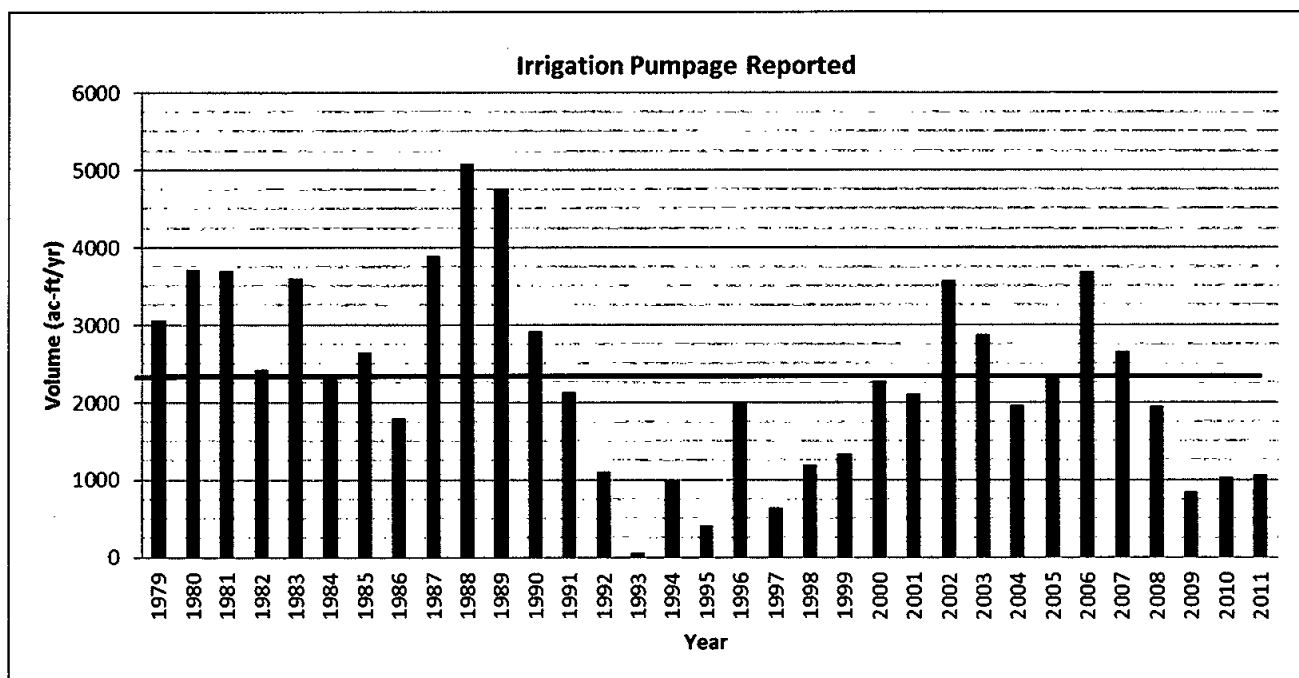


Figure 1: Annual sum of irrigation questionnaires for diversion from the Altamont. (Water Rights, 1979-2011)

Water Balance:

The average annual withdrawal from the entire Altamont in South Dakota is estimated to be less than 6,968 ac-ft/yr, which is much lower than the recharge rate of 54,000 ac-ft/yr of the Altamont 2 unit of the Altamont aquifer alone. Consequently, there is a reasonable probability that unappropriated water is available from the Altamont aquifer for the proposed appropriation.

OBSERVATION WELL DATA:

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the Water Management Board shall rely upon the record of observation well measurements to determine the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

The SD-DENR Water Rights Program monitors 29 observation wells completed into the Altamont aquifer. The closest observation wells to the proposed diversion sites are CK-78E and CK-78F. CK-78E is located approximately 1.5 miles to the northwest of the proposed well location for Water Permit Application No. 7968-3 and CK-78F is located approximately 1.4 miles to the southeast of the easternmost well location proposed in Water Permit Application No. 7967-3. The hydrographs for these wells are shown below in Figures 2 and 3. Both observation wells show climatically controlled water levels which recharge in wet years and decline in dry years. Since temporal well withdrawal is masked by climatic conditions, it can be inferred that recharge to and natural discharge from the aquifer greatly exceeds well withdrawal. Therefore, unappropriated water is available in the Altamont aquifer to supply the proposed appropriations.

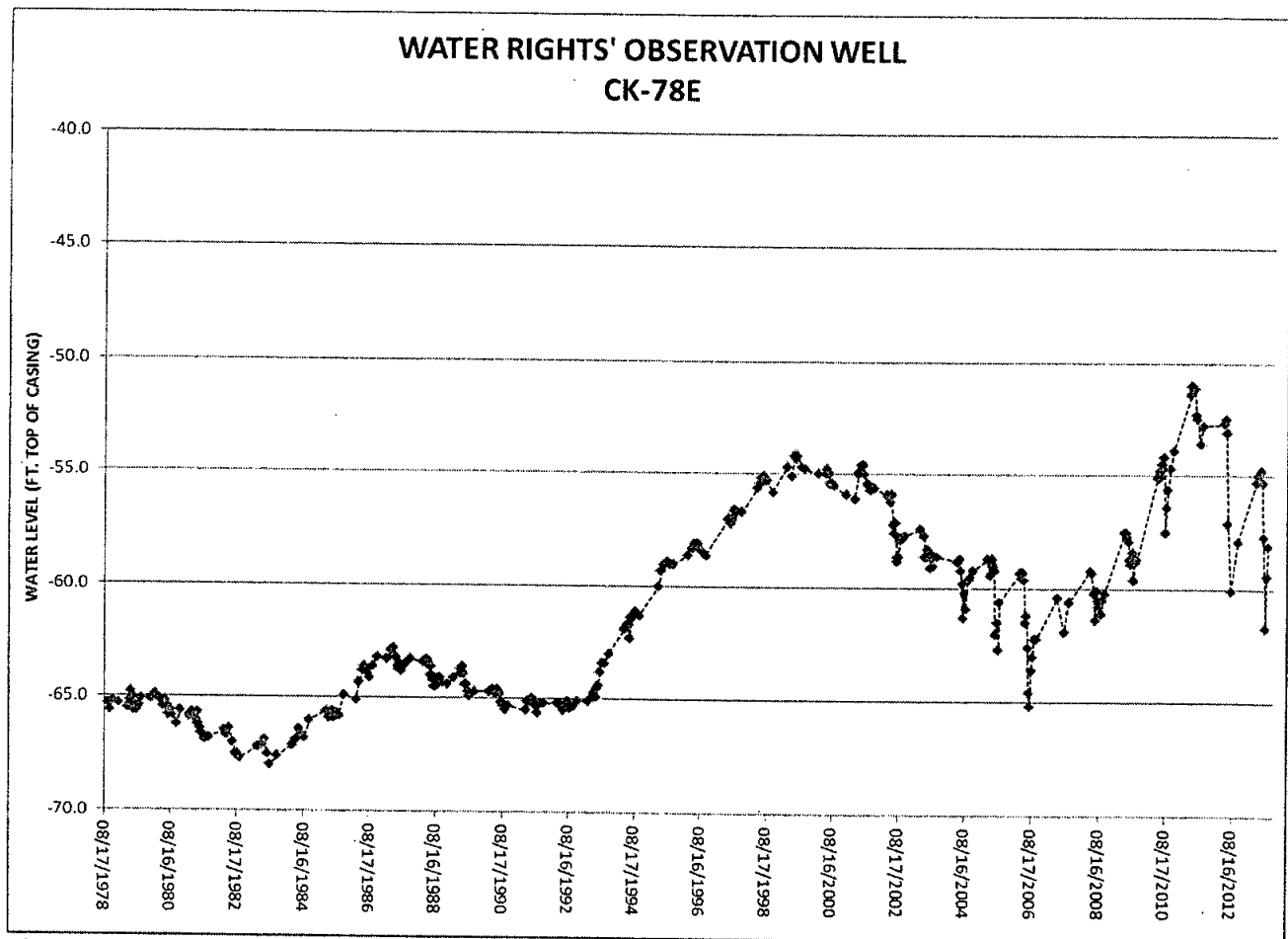


Figure 2: Historic water levels in Observation Well CK-78E (Water Rights, 2014a)

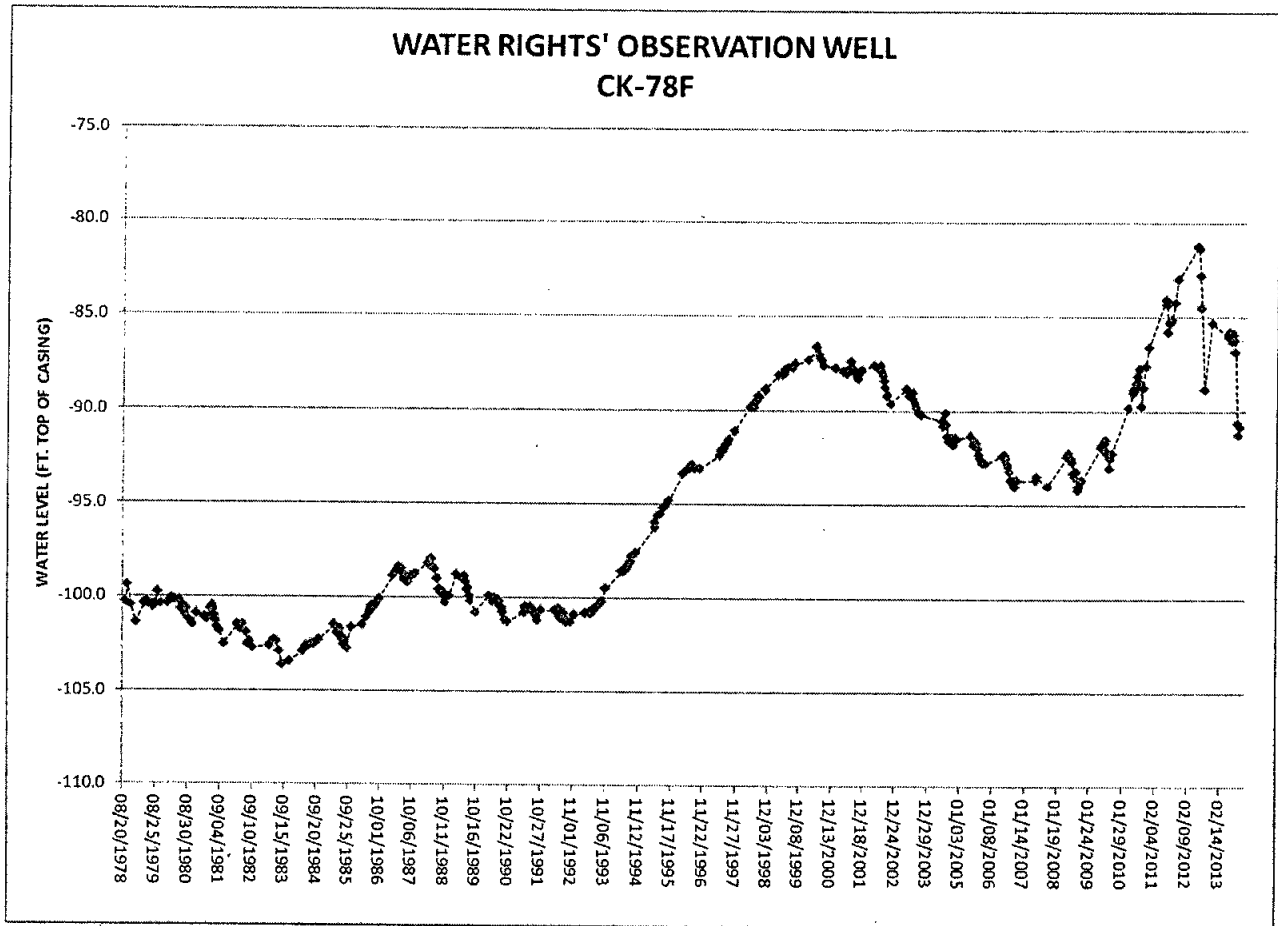


Figure 3: Historic water levels in Observation Well CK-78F (Water Rights, 2014a)

EXISTING WATER RIGHTS:

The well sites in this application will be located near other water rights in the area which are diverting from the Altamont aquifer. Each water permit application and adjacent water rights has been considered separately below.

For the purpose of calculating drawdown in nearby wells, distances and pump rates from Water Permit No. 7967-3 were used. Water Permit No. 7967-3 has the highest proposed pump rate (3.56 cfs) and is the closest to nearby wells (0.5 miles) of any of the four water permit applications. Under these conditions, the Theis Equation calculates that drawdown in the next nearest well (0.5 miles away) as a result of seven days of pumping at 3.56 cfs is approximately seven feet. Given that the Altamont aquifer is under confined conditions with water tables being 40-50 feet above the water bearing formation, it is not expected that pumping will deplete aquifer levels to below the top of the formation.

Water Permit Application No. 7965-3:

Water Permit Application No. 7965-3 proposes to construct a single well in the SW ¼ of Section 34, T117N-R59W. This location is approximately 1.6 miles to the south of Water Right No. 6761-3 and 1.6 miles to the northwest of Water Right No. 7371-3. Interference at these distances is not expected to occur. The nearest known domestic well to the proposed well site is located

approximately 0.5 miles to the east. Similarly, at this distance, interference is not expected to occur.

Water Permit Application No. 7966-3:

Water Permit Application No. 7966-3 proposes to construct a single well in the SE ¼ of Section 26, T117N-R59W. This location is approximately 1.1 miles to the southeast of Water Right No. 6761-3. Interference at this distance is not expected to occur. The nearest known domestic well to the proposed well site is located approximately 1.4 miles to the southwest. Interference is not expected to occur at this distance.

Water Permit Application No. 7967-3:

Water Permit Application No. 7967-3 proposes to construct two wells in the NW ¼ and NE ¼ of Section 3, T116N-R59W. The northwest location is approximately 1.1 miles to the northwest from Water Right No. 7371-3 while the northeast location is approximately 0.7 miles to the northwest of the same water right. Interference at these distances is not expected to occur. The nearest known domestic well to the proposed well sites is equidistant from the two and is located approximately 0.5 miles to the northeast and northwest. Interference is not expected to occur at this distance.

Water Permit Application No. 7968-3:

Water Permit Application No. 7968-3 proposes to construct a single well in the NE ¼ of Section 35, T117N-R59W. This location is approximately 1.4 miles to the southeast of Water Right No. 6761-3. Interference at this distance is not expected to occur. The nearest known domestic well to the proposed well site is located approximately 1.1 miles to the southwest. Interference is not expected to occur at this distance.

ARTESIAN SPRINGS:

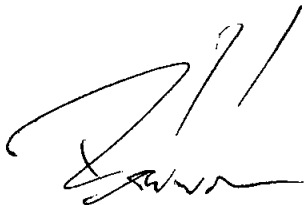
Historically, there have been a number of controversies regarding water rights/permits appropriating water from the Altamont aquifer and their effects on springs in the general area of the proposed well sites. Several of these controversies are summarized in Buhler (2012). Most of these concerns have been unsubstantiated.

The only protection of flow from an artesian spring is under the public interest criteria. The springs in this area are likely not 'artesian springs,' but springs originating due to the geography of the area. The terrain slopes downward, which eventually incises the water table of the Altamont aquifer. Small fluctuations in water levels could affect discharge from these springs. However, there has been no documentation of this. As previously discussed, well withdrawals are masked by natural water level fluctuations.

The proposed appropriation, annual volume and diversion rate, are not likely to have a measurable impact on spring discharges. Only springs located within the cone of influence of a well are expected to be impacted, as was the case in a 1975 complaint (Buhler, 2012). Nearby observation wells will document the effects of pumping due to the proposed diversion.

CONCLUSIONS:

- 1) Water Permit Application Nos. 7965-3, 7966-3, and 7968-3 propose to divert 1.78 cfs each and Water Permit Application No. 7967-3 proposes to divert 3.56 cfs for a total of 8.9 cfs diverted from the Altamont aquifer from five wells in order to irrigate 800 acres.
- 2) There is a reasonable probability that unappropriated water is available from the Altamont aquifer to supply the proposed appropriations.
- 3) It is not expected that nearby domestic wells and water rights will be adversely affected if these water permit applications are approved.



Bracken Capen
SD DENR-Water Rights Program

Approved by,



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Buhler, K.A. 2012, Report to the Chief Engineer, Water Permit Application No. 7419-3, James R Orris, October 26, 2012, SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.
- Hamilton, L.J., 1986, Geology and Water Resources of Clark County, South Dakota; Part II: Water Resources: South Dakota Geological Survey Bulletin 29, 62 p. Vermillion, South Dakota.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., Schoon, R.A., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185
- SD Geological Survey. 2013. Lithologic Logs Database, South Dakota Department of Environment & Natural Resources Geological Survey, Vermillion, South Dakota.
- Water Rights, 1979-2012. "Irrigation Report Summaries." SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2014a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2014b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2014c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

NOTICE OF APPLICATION NOS.

7965-3, 7966-3, 7967-3 and 7968-3 to Appropriate Water

Notice is given that Mark & Dwight Noethlich, 41117 US Hwy 212, Doland SD 57436 have filed the following applications for a water permit.

Application No. 7965-3 proposes to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Altamont Aquifer (180 feet deep) located in the center of the SW 1/4 Section 34 for irrigation of 160 acres located in the SW 1/4 Section 34; all in T117N-R59W.

Application No. 7966-3 proposes to appropriate 1.78 cfs from one well to be completed into the Altamont Aquifer (185 feet deep) located in the center of the SE 1/4 Section 26 for irrigation of 160 acres located in the SE 1/4 Section 26; all in T117N-R59W.

Application No. 7967-3 proposes to appropriate 3.56 cfs from two wells to be completed into the Altamont Aquifer (180 feet deep) located in the centers of the NW 1/4 and NE 1/4 Section 3 for irrigation of 320 acres located in the N 1/2 Section 3; all in T116N-R59W.

Application No. 7968-3 proposes to appropriate 1.78 cfs from one well to be completed into the Altamont Aquifer (180 feet deep) located in the center of the NE 1/4 Section 35 for irrigation of 160 acres located in the NE 1/4 Section 35; all in T117N-R59W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7965-3, 7966-3, 7967-3 and 7968-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on these applications, as recommended,

unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendations. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by May 5, 2014.

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to these applications.

Steven M. Pirner, Secretary,
Department of Environment and
Natural Resources.

Published once at the total
approximate cost of \$33.22.

4-23-1t

Affidavit of Publication

State of South Dakota

§

County of Clark

William J. Krikac of said county, being first duly sworn, on oath says that he is the publisher of the **Clark County Courier**, a weekly newspaper printed and published in Clark in said County of Clark and has a full and personal knowledge of all the facts therein stated; that said newspaper is a legal newspaper and has a bona-fide circulation of at least two hundred copies weekly, and has been published within said County for fifty-two successive weeks next prior to the publication of the notice herein mentioned, and was and is printed wholly or in part in an office maintained at said place of publication; that the

Water Rights Program: MARK & DWIGHT NOETHLICH

a printed copy of which taken from the paper in which same was published, is attached to this sheet, and is made a part of this Affidavit, was published in said newspaper at least once in each week for

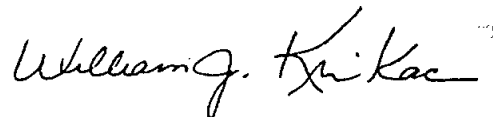
ONE

successive weeks, on the day of each week on which said newspaper was regularly published, to wit:

April 23, 2014

that the full amount of the fees for the publication of the annexed notice is

33.22



Subscribed and sworn to before me this

23rd day of April, 2014



Notary Public
Clark County, South Dakota

My Commission expires: 06/04/2019

RECEIVED

APR 24 2014

WATER RIGHTS
PROGRAM

RECEIVED

APR 30 2014

WATER RIGHTS
PROGRAM

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) SS
County of Codington)

I, Monica K. Saathoff

certify that the attached printed Notice was
taken

from the Watertown Public Opinion

printed and published in Watertown

County of Codington and

state of South Dakota. The notice was
published

in the newspaper on the following date:

April 23rd, 2014

Cost of Printing 79.08

Monica K. Saathoff
(Signature)

Bookkeeper

(Title)

April 23rd, 2014

(Date Signed)

DENR

NOTICE OF APPLICATION

Nos. 7965-3, 7966-3,
7967-3 and 7968-3 to
Appropriate Water

Notice is given that Mark &
Dwight Noethlich, 41117 US
Hwy 212, Doland SD 57436
have filed the following
applications for a water
permit.

Application No. 7965-3
proposes to appropriate
1.78 cubic feet of water
per second (cfs) from
one well to be completed
into the Altamont Aquifer
(180 feet deep) located in
the center of the SW 1/4
Section 34 for irrigation of
160 acres located in the SW
1/4 Section 34; all in T117N-
R59W.

Application No. 7966-3
proposes to appropriate
1.78 cfs from one well to be
completed into the Altamont
Aquifer (185 feet deep)
located in the center of
the SE 1/4 Section 26
for irrigation of 160 acres
located in the SE 1/4 Section
26; all in T117N-R59W.

Application No. 7967-3
proposes to appropriate
3.56 cfs from two wells to be
completed into the Altamont
Aquifer (180 feet deep)
located in the centers of the
NW 1/4 and NE 1/4 Section
3 for irrigation of 320 acres
located in the N 1/2 Section
3; all in T116N-R59W.

Application No. 7968-3
proposes to appropriate
1.78 cfs from one well to be
completed into the Altamont
Aquifer (180 feet deep)
located in the center of
the NE 1/4 Section 35
for irrigation of 160 acres
located in the NE 1/4 Section
35; all in T117N-R59W.

Pursuant to SDCL 46-
2A-2, the Chief Engineer
recommends APPROVAL
of Application Nos. 7965-3,
7966-3, 7967-3 and 7968-3
because 1) unappropriated
water is available, 2) existing
rights will not be unlawfully
impaired, 3) it is a beneficial
use of water, and 4) it is
in the public interest. In
accordance with SDCL 46-
2A-23, the Chief Engineer
will act on these applications,
as recommended, unless a
petition is filed opposing the
applications or the applicant
files a petition contesting
the Chief Engineer's
recommendations.

If
a petition opposing the
applications or contesting
the recommendations is
filed, then a hearing will be
scheduled and the Water
Management Board will
consider these applications.
Notice of the hearing will be
given to the applicant and
any person filing a petition.

Any person interested
in opposing or supporting
these applications or
recommendations must file
a written petition with BOTH
the applicant and Chief
Engineer. The applicant must
file a petition if contesting
the Chief Engineer's
recommendations. The
Chief Engineer's address is
"Water Rights Program,
Foss Building, 523 E
Capitol, Pierre SD 57501
(605 773-3352)" and the
applicant's mailing address
is given above. A petition
filed by either an interested
person or the applicant must
be filed by May 5, 2014.

The petition may be
informal, but must include
a statement describing the
petitioner's interest in the
applications, the petitioner's
reasons for opposing or
supporting the applications,
and the signature and
mailing address of the
petitioner or the petitioner's
legal counsel, if legal
counsel is obtained. Contact
Eric Gronlund at the above
Water Rights Program
address to request copies
of information pertaining to
these applications. Steven
M. Pirner, Secretary,
Department of Environment
and Natural Resources.
Published once at the total
approximate cost of \$74.07.
(April 23, 2014)

All legal notices in the Public
Opinion and other South
Dakota newspapers can be
found at
www.sdpublicnotices.com



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



April 11, 2014

Clark County Courier
119 1st Ave E
Clark SD 57225

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application Nos. 7965-3, 7966-3, 7967-3 and 7968-3 to Appropriate Water. Please publish the notice once on April 23, 2014. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Mark & Dwight Noethlich, 41117 US Hwy 212, Doland SD 57436 (Ph # 605-635-6435).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



April 11, 2014

Public Opinion
PO Box 10
Watertown SD 57201

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application Nos. 7965-3, 7966-3, 7967-3 and 7968-3 to Appropriate Water. Please publish the notice once on April 23, 2014. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Mark & Dwight Noethlich, 41117 US Hwy 212, Doland SD 57436 (Ph # 605-635-6435).

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Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATE, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.

April 11, 2014

Mark & Dwight Noethlich
41117 US Hwy 212
Doland SD 57436

Dear Sirs:

Water Permit Application Nos. 7965-3, 7966-3, 7967-3 and 7968-3 for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Clark County Courier printed at Clark SD (Ph # 605-532-3654) and the Public Opinion printed at Watertown SD (Ph # 605-886-6901). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendations of the Chief Engineer and reports on the applications are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper(s) has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the applications.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the applications.

Instruction to Newspaper - Publish the Notice on April 23, 2014. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION Nos. 7965-3, 7966-3, 7967-3 and 7968-3 to Appropriate Water

Notice is given that Mark & Dwight Noethlich, 41117 US Hwy 212, Doland SD 57436 have filed the following applications for a water permit.

Application No. 7965-3 proposes to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Altamont Aquifer (180 feet deep) located in the center of the SW 1/4 Section 34 for irrigation of 160 acres located in the SW 1/4 Section 34; all in T117N-R59W.

Application No. 7966-3 proposes to appropriate 1.78 cfs from one well to be completed into the Altamont Aquifer (185 feet deep) located in the center of the SE 1/4 Section 26 for irrigation of 160 acres located in the SE 1/4 Section 26; all in T117N-R59W.

Application No. 7967-3 proposes to appropriate 3.56 cfs from two wells to be completed into the Altamont Aquifer (180 feet deep) located in the centers of the NW 1/4 and NE 1/4 Section 3 for irrigation of 320 acres located in the N 1/2 Section 3; all in T116N-R59W.

Application No. 7968-3 proposes to appropriate 1.78 cfs from one well to be completed into the Altamont Aquifer (180 feet deep) located in the center of the NE 1/4 Section 35 for irrigation of 160 acres located in the NE 1/4 Section 35; all in T117N-R59W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7965-3, 7966-3, 7967-3 and 7968-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

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The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to these applications. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.
Published once at the total approximate cost of _____.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



MAY 16 2014

Mark & Dwight Noethlich
41117 US Hwy 212
Doland SD 57436

Dear Sirs:

Enclosed are Water Permit Nos. 7965-3, 7966-3, 7967-3 and 7968-3 authorizing construction of your water diversion systems and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

Form 10's, *Notice of Completion of Works and Application of Water to Beneficial Use*, are enclosed. Please return the completed forms after you have finished the systems and have put the water to beneficial use. An investigation can then be scheduled so the water licenses may be issued, thus completing the acquisition of a water right.

An informational sheet ? *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

7966-3

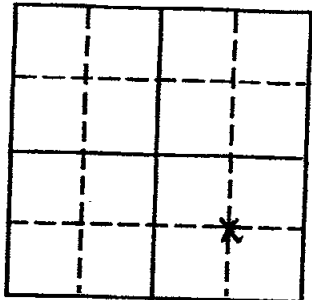
11-02

Location Custer 1/4 SE 1/4 Sec 26 Twp 117N Rg 59W

County

Clark

North



Please mark well location with an "X"

Well completion Date

2-10-15

1 Mile

Distance from nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.)

1400 ft. from stock yard (identify source)

PROPOSED USE:

- ☐ Domestic/Stock
☒ Irrigation
☐ Municipal
☐ Industrial
☐ Business
☐ Institutional
☐ Test Holes
☐ Monitoring well

METHOD OF DRILLING:

Forward Rotary

CASING DATA:

- ☐ Steel
☒ Plastic
☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>SPR 21</u> LB/FT	<u>12</u> IN	<u>12</u> FT	<u>166</u> FT	<u>17 1/2</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Portland Cement</u>	<u>36</u>	<u>9.5</u> Lb/gal	<u>0</u> FT	<u>158</u> FT
		Lb/gal	FT	FT
Describe grouting procedure <u> tremie line from 153 feet to top surface</u>				

SCREEN:

- ☐ Perforated pipe
☒ Manufactured

Diameter 12 inches Length 30 Feet

Material stainless steel

Slot Size 1060 Set From 166 Feet to 196 Feet

Other information plastic cap bottom of screen
Gravel packed top Rock

WAS A PACKER OR SEAL USED? ☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

- ☒ Yes, Howellhouse solution
☐ No, Why Not?

Lab sample sent to for water quality analysis

Well Owner:

Louie Noethlich

Business Name:

Address1:

4117 US Hwy 212

Address2:

Doland, SD 57436

City, State, Zip:

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top Soil</u>	<u>0</u>	<u>2</u>
<u>Yellow Clay</u>	<u>2</u>	<u>28</u>
<u>Blue Clay Till</u>	<u>28</u>	<u>158</u>
<u>Medium to Coarse Sand</u>	<u>158</u>	<u>197</u>
<u>(some quersided gravel)</u>		
<u>Shale</u>	<u>197</u>	<u>200</u>

STATIC WATER LEVEL

79.25

FEET

If flowing: closed in pressure

PSI

GPM flow

through

inch pipe

Controlled by

☐ Valve

☐ Reducers

☐ Other

Reduced flow rate

GPM

Can well be completely shut in?

WELL TEST DATA:

☐ Pumped

Describe:

Pumped with 40 HP sub

☐ Bailed

☐ Other

Pumping Level Below Land Surface

93

Feet After

3

Hrs. pumped

750

GPM

Feet After

Hrs. pumped

GPM

If pump installed, pump rate:

GPM

REMARKS

RECEIVED

MAR 23 2015

WATER RIGHTS PROGRAM

This well was drilled under license #

285

And this report is true and accurate.

Drilling firm:

Manikowski Well Drilling, Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder

Date:

2-10-15

523 E. Capitol Ave., Pierre SD 57501

Please return White Copy to DENR Water Rights

7966-3



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

JUN 07 2023

Mark & Dwight Noethlich
41117 US Hwy 212
Doland SD 57436

7966-3

Dear Sirs:

Enclosed is Water License No. 7966-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if in the future, the owners of an existing well, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

Eric Gronlund, Chief Engineer
Water Rights Program
(605) 773-3352

NOTE: The investigation found your irrigation system is capable of diverting 1.89 cubic feet of water per second (cfs) which is equivalent to approximately 850 gallons per minute.

Water Permit No. 7966-3 was issued for 1.78 cfs (equivalent to 800 gpm) therefore the diversion of water under this water license is limited to 1.78 cfs.

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 7966-3

(1) Mark and Dwight Noethlich; 41117 US Hwy 212, Doland, SD 57436, made Application No. 7966-3, February 10, 2014 for a water permit to divert 1.78 cubic feet of water per second (cfs) from groundwater, one well (Altamont Aquifer), Clark County, South Dakota for irrigation purposes. Permit No. 7966-3, with a priority date of February 10, 2014 was approved May 5, 2014 and issued to the applicants for diversion of water with construction of the described water supply system to be completed on or before May 5, 2019 and for the application to beneficial use of water on or before May 5, 2023.

(2) It is certified that the permit holders have complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.78 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 1,320 ft N & 1,310 ft W of the SE corner of Section 26, T117N, R59W (SE ¼ SE ¼)
(Latitude 44.91021 Longitude -97.88626)

(3) The permit holders have complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land:

Section 26, T117N, R59W
NW ¼ SE ¼ 33.4 acres
NE ¼ SE ¼ 32.0 acres
SE ¼ SE ¼ 32.2 acres
SW ¼ SE ¼ 33.2 acres
TOTAL 130.8 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Mark and Dwight Noethlich, the holders and/or owners of Water Right No. 7966-3 are issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from groundwater, one well (Altamont Aquifer), with a priority date of February 10, 2014 from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7966-3 and subject to the following qualifications:

1. The well approved under this water right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owners under this water right shall control their 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 well authorized by Permit No. 7966-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the 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. *(The well was drilled by Manikowski Well Drilling Inc. in 2015. A copy of the well completion report is on file with the Water Rights Program)*

continued

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

Eric Gronlund

Eric Gronlund, Chief Engineer
Water Rights Program
Department of Agriculture and Natural Resources

JUN 07 2023

date



Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7966-3

I have this day, May 24, 2023, made a thorough examination of the water use system constructed by Mark & Dwight Noethlich, 41117 US Hwy 212, Doland, SD 57436 of Permit No. 7966-3, bearing the priority of February 10, 2014 authorizing the diversion of 1.78 cu. ft. per second of the waters of the Altamont Aquifer for irrigation purposes, in Clark County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Manikowski Well Drilling
- 2) No. of Wells 1
- 3) Depth(s) 200 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 12 inches
- 2) Length 166 feet
- 3) Type Plastic

Screen:

- 1) Type Stainless steel
- 2) Length 30 feet
- 3) Static water level 79 feet

Pump:

- 1) Make Submersible
- 2) Model Unknown
- 3) Size Unknown
- 4) Capacity 850 GPM

Motor:

- 1) Make Unknown
- 2) Model No. Unknown
- 3) Horsepower rating Unknown hp

B. Works used to transport water to place of use:

- 1) Type steel - above ground
- 2) Size 8 inches
- 3) Length 15 feet

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley
- 2) Overall length 1300 feet
- 3) Number of towers 7
- 4) End gun Y
- 5) Capacity 850 GPM

Chemigation Equipment:

- 1) Does chemigate N

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by N

If no, describe: **Pumping 1.89 cfs – authorized 1.78 cfs**

- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y
- 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows: **WELL LOCATION**
From the SE corner Sec 26 T117N R59W, NORTH WELL: 1,320 ft N & 1,310 ft W, Lat 44.91021
Long -97.88626 (SW ¼ SE ¼)
2. The works are capable of diverting and conveying to the place of use 1.89 cu. ft. per second of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

legal description/acreage

All land in Sec 26 T117N R59W

NW ¼ SE ¼ – 33.4 acres

NE ¼ SE ¼ – 32.0 acres

SE ¼ SE ¼ – 32.2 acres

SW ¼ SE ¼ – 33.2 acres

comprising a total of 130.8 acres of land and the license should be issued for 1.78 cfs

3. All structures, wells and lands on map Y

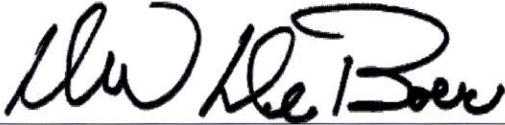
F. Comments or other permit(s) associated with the project:

The irrigated acreage was determined with the aid of FSA imagery and ArcMAPS software.

The pump rate reported in a recent Irrigation Questionnaire was used to establish the system flow capacity.

The mailing address and the telephone number in the permit materials are current

I talked to Mark Noethlich by phone during the field inspection visit.

A handwritten signature in black ink, appearing to read "Darrell W DeBoer", written over a horizontal line.

Darrell W DeBoer

Water Rights Inspector

DANR, Water Rights Program

Date report completed: June 5, 2023

