

**NOTICE OF INTENT TO GRANT A PERMIT AUTHORIZING THE USE OF WATER FOR
GENERAL CROP IRRIGATION IN FREMONT COUNTY, IOWA**

Notice is hereby given that pursuant to Iowa Code Chapter 455B, there is now on file with the Iowa Department of Natural Resources, Water Supply Engineering Section, 6200 Park Ave. Suite 200, Des Moines, IA 50321, an application as described below.

Tyler Binder, Iowa DNR Log Number 34,249, requests to withdraw water from one "Fremont Channel" buried sand and gravel aquifer well, approximately 200 feet deep, located on land generally described as the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 12, T69N, R41W, Fremont County, Iowa for the withdrawals of up to 184 acre-feet of water per year at a pumping rate of 500 gallons per minute, from April 1 through September 31 of each year for irrigation of up to 276 acres of general farm crops located in the NW $\frac{1}{4}$ of Section 13, T69N, R41W, Fremont County, Iowa.

The Department has determined that this use of water conforms to the relevant criteria (Iowa Code Chapter 455B and Iowa Administrative Code 567) and recommends the permit be granted. A copy of the summary report for the application is available upon request to the Department at the address listed above. Comments on the report and on this use of water must be received by March 25, 2026, and should be addressed "ATTN: Chad Fields" and should specify the applicants log number (Log Number 34,249).

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER USE PERMIT SUMMARY REPORT**

Applicant: Tyler Binder
71397 624 Blvd.
Table Rock, NE 68447

Application Log No.: 34,249

Permit Request

Tyler Binder, Iowa DNR Log #34,249, requests a water use permit authorizing withdrawal of up to 184 acre-feet of water per year from one well in the “Fremont Channel” buried sand and gravel aquifer. The well is expected to be approximately 200 feet deep and located in the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 12, T69N, R41W, Fremont County, Iowa. The requested pumping rate is 1,000 gallons per minute (gpm), from April 1 through September 31 each year for irrigation of up to 276 acres of general farm crops (e.g., corn and soybeans) located in the NW $\frac{1}{4}$ of Section 13, T69N, R41W, Fremont County, Iowa.

Iowa Code 455B.266 identifies irrigation of crops like corn and soybeans as a priority beneficial use.

Source Details

The water source for this well and permit is the “Fremont Channel” buried sand and gravel aquifer. This aquifer:

- Lies beneath 100 feet of clay and other confining and semi-confining layers.
- Typically averages 70–100 feet in thickness.
- Is generally under high pressure; most wells initially flow artesian when first drilled.
- Remains largely unexplored and uncharacterized in southwestern Iowa.

The water use program’s current understanding suggests the aquifer aligns roughly with the Nishnabotna River valley and is largely disconnected from surface-water recharge in this region.

Nearby Fremont Channel wells show high specific capacities for the aquifer. For example:

- City of Sidney Well #1: pumped at 2,500 gpm, drawdown 96 feet → specific capacity ~26 gpm/ft.
- City of Sidney Well #2: pumped at 1,000 gpm, drawdown 58 feet → specific capacity ~17 gpm/ft.

Nearby Wells and Potential Interference

Several other anticipated Fremont Channel wells are within two miles of the proposed well (see Map 1). Most are between 120-200 feet deep. The nearest well that could be hydrologically connected is a water use irrigation well for Permit #10,109, Nathan Whitehead, located approximately one mile to the south of the proposed well. The well is approximately 336 feet deep, which is likely a different source aquifer than the proposed well. However, there could be hydrologic connection between the two wells. There’ is currently no driller’s log available for the well or aquifer characterization. The well for permit 10,109 is allocated 263 acre-feet per year at 600 gallons per minute, and has been active since 2015.

Another water use irrigation well is located 1.5 miles to the west of the proposed well (Map 1). At 189 feet deep, this well is highly likely in the same aquifer as the proposed well. The well is for permit #10,108, Nathan Whitehead, and is for irrigation of up to 100 acre-feet per year at 600 gpm. The well has been used since 2015. Static water levels in the well, submitted to the water use program in the annual reports, show the water level(s) fluctuate between 16 and 9 feet deep in the well. There is no clear direction in water level rise or decline from the submitted annual measurements. The aquifer appears to be relatively static and stable in the area of the proposed irrigation well.

A few private household wells, all over 120 feet deep, are assumed to withdraw from the Fremont Channel aquifer (Map 1). These wells are also all over or nearly one mile away from the proposed well location. These wells are all anticipated to be private household water, providing water to the house, pumps, etc., at rates lower than the water use program regulates. No annual water level measurements exist for these wells.



Figure 1: Map of applicant's well and water use area with area private and water use wells. Water Use well location are derived from the WACOP online database, managed by the program. Private wells are derived from GeoSam and Iowa Well Information System (IWIS) databases.

Significant interference has been documented among high-capacity wells utilizing the Fremont Channel in the area. For example, the City of Sidney's two wells have experienced notable drawdowns during irrigation seasons. From late June through October 2024, water levels in the city's wells dropped over 31 feet due to regional irrigation and wetland withdrawals (Figure 2). Average daily water level decline during this period was estimated at 1.1 feet per day. Irrigation wells in the area typically pump at up to 1,000 gpm.

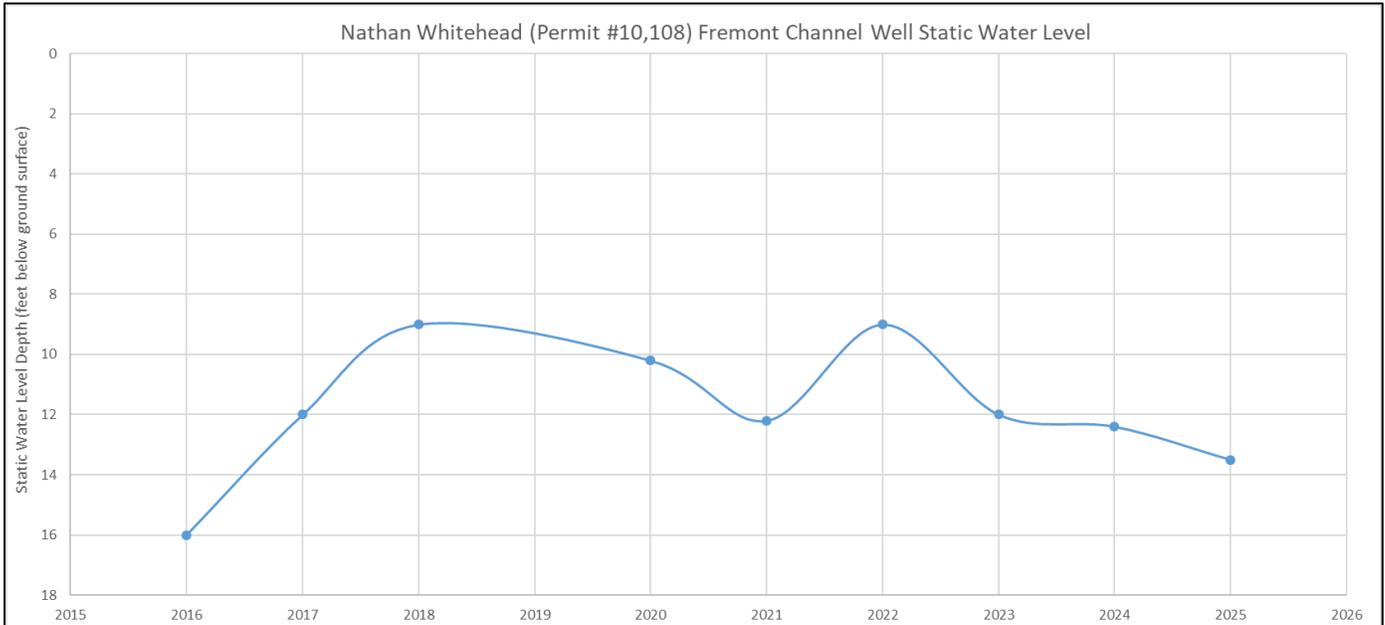


Figure 2 Water level readings submitted annually to the water use program from Fremont Channel permit #10,108. Water levels are in 'feet below ground surface' datum.

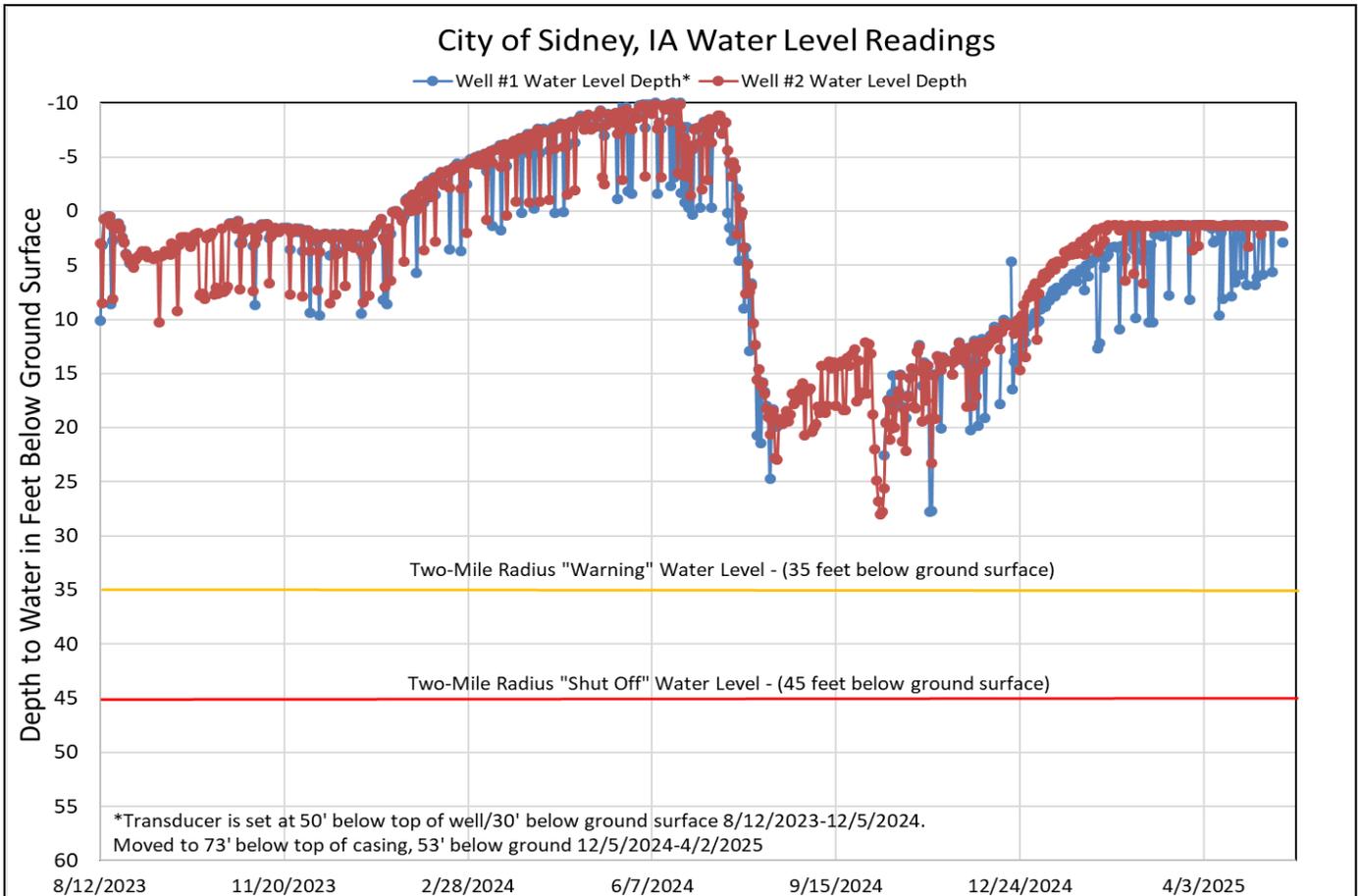


Figure 3 Water level readings from the City of Sidney, Iowa, set to 'feet below ground surface' datum. Water levels show significant interference with area 'Fremont Channel' wells.

Fremont Channel Aquifer 2025 Mitigation Measures and Special Permit Conditions

To protect the Fremont Channel aquifer and current wells utilizing it as a source of water, the Iowa Water Use program has established the following general restrictions on all water use wells permitted since 2025:

- All Fremont Channel wells have a 500 gpm restriction
- All Fremont Channel permits have a 100 million gallons per year (307 acre-feet per year) annual allocation limit
- A continuous pump/recovery tests are required for all new wells
 - 24-hours for single well
 - 72-hours for multiple wells

Individuals relying on wells utilizing the same water for domestic purposes remain protected under Section 455B.271 of the Iowa Code in the event of substantial injury.

Long-Term Considerations

In addition to immediate interference concerns, the region may experience long-term declines in aquifer levels due to cumulative withdrawals from multiple high-capacity wells. Annual static water level measurements are required for all Fremont Channel wells before each irrigation season.

Findings

The applicant has demonstrated the ability and intent to use a reasonable quantity of water for beneficial purposes. No evidence suggests the proposed use would:

- Waste water resources.
 - Conflict with Iowa's comprehensive water resource plan.
 - Interfere with pollution control laws.
 - Harm public interests or property owners with prior or superior water rights.
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THEREFORE:

The requested water use conforms to Division III, Part 4, Chapter 455B of the Iowa Code and Chapter 50 of Part 567 of the Iowa Administrative Code. No adverse impacts on other water users are anticipated at this time. Subject to public notice and potential revisions based on comments received, a draft permit should be issued for a term of ten years

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER USE PERMIT**

Permit issued to:

TYLER BINDER
71397 624 BLVD.
TABLE ROCK, NE 68447

Permit Number: xxxxxx

Effective: xx/xx/2026

Expires: xx/xx/2036

The Permittee is authorized to:

withdraw water from one "Fremont Channel" buried sand and gravel aquifer well, approximately 200 feet deep, located on land generally described as the SW ¼ of the SW ¼ of Section 12, T69N, R41W, Fremont County, Iowa for the withdrawals of up to 184 acre-feet of water per year at a pumping rate of 500 gallons per minute, from April 1 through September 31 of each year for irrigation of up to 276 acres of general farm crops located in the NW ¼ of Section 13, T69N, R41W, Fremont County, Iowa.

This authorization to withdraw water has been granted pursuant to the provisions of Part 4 of Division III of Chapter 455B, Code of Iowa, and Chapter 50, Part 567, Iowa Administrative Code, and is further subject to the general permit conditions within this permit.

Conditions of this permit may be appealed as provided in rule 567--50.8(3), Iowa Administrative Code. Appeal must be in writing and must be received at the Iowa Department of Natural Resources, Water Supply Engineering Section, 6200 Park Ave. Suite 200, Des Moines, Iowa 50321-1371 within thirty days of the date of the certification of the mailing of the permit.

FOR THE DIRECTOR:

By: _____ Date Executed: xxxxxxxxxxx, 2026
cc: Permit File

CERTIFICATE OF MAILING

On the date shown below, a copy of the foregoing permit was mailed to the Permittee and to each person entitled to receive a copy as provided by rule 567--50.8(2), Iowa Administrative Code.

Certified by (initials): _____ Date: _____

GENERAL PERMIT CONDITIONS

1. Permittee shall maintain accurate and up-to-date records of monthly water use from each authorized source and submit them annually to the Department.
2. Permittee may be required to submit other information related to the regulation of this use of water as directed by the Department.
3. This Permit is issued pursuant to Iowa Code chapter 455B.265(1) to authorize the withdrawal and use of water by the permittee, subject to the terms contained herein and to the laws and rules of the Department that regulate the withdrawal and use of water. Issuance of this permit does not relieve the permittee of the responsibility to comply with applicable local, state and federal laws, ordinances, regulations or other legal requirements.
4. Permittee shall be responsible for notifying the Department when there are changes to any conditions and authorizations given in this permit, including additional water source(s), well(s), intake(s), an expansion of the facility, or any other listed condition.
5. Permittee shall construct, maintain, and monitor observation wells as directed by the Department to define the effects of Permittee's water withdrawals on groundwater resources or on other water users who might be affected by the withdrawals authorized herein.
6. Each well authorized as a source of water in this permit must be constructed to allow for accurate measurement of water levels.
7. Withdrawals from permitted wells may be made only after the Permittee has made the following information available to the Department: well location(s), well log(s), and results of yield tests. Required chip samples shall be submitted to the Iowa Geological Survey.
8. Prior to April 1 each year, the Permittee shall be responsible for accurately measuring the distance to water (static water level) in the permitted well(s). These records shall be submitted annually to the Department.
9. Permittee shall not apply fertilizers, pesticides or other materials through any irrigation system unless the system is equipped with an automatic check valve or comparable device, to prevent such materials from entering the source of irrigation water. Permittee shall conduct frequent inspections for the proper functioning of the check valve to prevent back siphoning of contaminants into the water source as required in Chapter 50.9(1)"e" of Part 567, Iowa Administrative Code.
10. Irrigation shall not be allowed on those areas with slopes greater than six (6) percent until a soil-conservation plan is prepared with the assistance of the Natural Resource Conservation Service. The plan shall be accompanied by the applicant's written statement, explaining how the plan and the operation of the irrigation system are compatible. After its submission, irrigation under this permit is contingent upon Permittee's compliance with the soil conservation plan.
11. Permittee must apply to renew this water use permit using the appropriate DNR form prior to the expiration date of the current permit version.
12. Permittee shall submit to the Department within 90 days of being notified by the Department or no later than the expiration date of this permit, whichever first occurs, a plan for implementing routine day-to-day water conservation measures and for implementing emergency water conservation measures during periods of water shortage. Until such a plan has been submitted to and approved by the Department, Permittee shall implement

those emergency water conservation measures determined to be necessary by the Department pursuant to Iowa Code Sections 455B.265 and 455B.266.

CAVEAT

Permittee is advised that pursuant to Section 455B.271, Code of Iowa, the authority to withdraw water provided by this permit may be modified, canceled or suspended in case of any breach of the terms or conditions herein, in case of any violation of state law pertaining to the permit, or if found necessary to prevent substantial injury to private or public interests.