

# ENVIRONMENTAL PROTECTION COMMISSION[567]

## Regulatory Analysis

Notice of Intended Action to be published: Iowa Administrative Code 567—Chapters 50 through 52  
“Water Use, Withdrawals, and Diversions; Water Permit or Registration—When Required; and  
Criteria and Conditions for Authorizing Withdrawal, Diversion, and Storage of Water”

Iowa Code section(s) or chapter(s) authorizing rulemaking: 455B.103(2), 455B.105(3),  
455B.105(11), 455B.263(8) and 455B.265(4)

State or federal law(s) implemented by the rulemaking: Iowa Code sections 17A.3, 455B.105,  
455B.171, 455B.190, 455B.264, 455B.268, and 455B.278, and chapter 460.

## *Public Hearing*

A public hearing at which persons may present their views orally or in writing will be held as follows:

September 24, 2024  
1 to 2 p.m.

Virtual via Zoom – see [www.iowadnr.gov/  
Environmental-Protection/Water-Quality/Water-  
Quality-Rulemaking](http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Water-Quality-Rulemaking) for meeting information

## *Public Comment*

Any interested person may submit written comments concerning this Regulatory Analysis. Written comments in response to this Regulatory Analysis must be received by the Department of Natural Resources (Department) no later than 4:30 p.m. on the date of the public hearing. Comments should be directed to:

Chad Fields  
6200 Park Avenue, Suite 200  
Des Moines, Iowa 50321  
Email: [Chad.Fields@dnr.iowa.gov](mailto:Chad.Fields@dnr.iowa.gov)

## *Purpose and Summary*

Proposed Chapter 50 establishes a water use and allocation program as authorized by Iowa law. This chapter will ensure ground and surface waters of the state are put to beneficial use, prevent waste or unreasonable use of water, prevent unreasonable methods of water use, and conserve and protect the state’s water resources in the interest of the people. Additionally, proposed Chapter 50 clarifies when a water use permit or registration is required for the withdrawal, diversion, and use of water, and establishes criteria for issuance of water permits, permit conditions, and conditions under which the Department may modify, terminate, or suspend permits. Finally, proposed Chapter 50 includes special criteria applicable to particular types of water uses, such as irrigation and criteria applicable to particular types of sources of water such as surface waters and groundwater sources.

Existing Chapters 50, 51, and 52 were reviewed consistent with Executive Order 10. Consequently, Chapters 51 and 52 are being rescinded and merged into the new Chapter 50. The content of existing Chapters 50, 51, and 52 are closely related, and efficiencies in rule language are produced from this consolidation.

## *Analysis of Impact*

1. Persons affected by the proposed rulemaking:
  - Classes of persons that will bear the costs of the proposed rulemaking:  
Water use permit holders (the entities or persons diverting, withdrawing, or using over 25,000 gallons of water per day any single day of the year) will bear the costs.

- Classes of persons that will benefit from the proposed rulemaking:  
Water use permit holders, public water supplies, private well owners, irrigators, golf courses, citizens, businesses and industries of Iowa will benefit.

2. Impact of the proposed rulemaking, economic or otherwise, including the nature and amount of all the different kinds of costs that would be incurred:

- Quantitative description of impact:

State law (Iowa Code sections 455B.265 and 455B.265A) authorizes the collection of fees as specified in Chapter 50. Application fees range from \$0 to \$700, depending on the application type. Annual permit fees only apply to active water use permit holders, and the fee is calculated based on the costs to administer the water use program for the previous calendar years and on the anticipated expenses for succeeding years. The fee undergoes public comment and approval through the Environmental Protection Commission. The annual permit fee amount is reviewed each year and either increased or decreased as necessary. From 2020 through 2024, the water use annual permit fees ranged as low as \$95 per year and as high as \$115 per year, averaging \$103 per year per water use permit holder. There is a \$100 late fee assessed for annual permit fees not paid by the annual deadline.

- Qualitative description of impact:

The new Chapter 50 is expected to have a neutral impact since the state has implemented a water use and allocation program since the 1950s. The water use and allocation program will ensure ground and surface waters of the state are put to beneficial use, prevent waste or unreasonable use, prevent unreasonable methods of use, and conserve and protect water resources in the interest of the citizens of Iowa. This is accomplished through water use permitting and registration, annual water use reporting requirements, enforcement of protected stream levels, and implementation of conservation requirements when necessary.

3. Costs to the State:

- Implementation and enforcement costs borne by the agency or any other agency:

Agency costs are limited to staff time required to implement the water use and allocation programs. The costs incurred are offset by the general funds and by fees collected through the water use and allocation programs.

- Anticipated effect on state revenues:

A neutral impact on state revenues is expected since this rule was previously in effect. The fees collected through these rules are used for the administration of the water use and allocation programs.

4. Comparison of the costs and benefits of the proposed rulemaking to the costs and benefits of inaction:

Costs of the proposed rulemaking are not new costs and are limited to costs necessary to administer a water use and allocation program. Fees are evaluated on an annual basis and are adjusted to fit the costs to administer the water use and allocation program accordingly.

Benefits of proposed new Chapter 50 include benefits associated with continuing to administer water use and allocation programs in the state. These benefits include that the ground and surface water resources of the state are put to beneficial use to the fullest extent possible, that there is adequate supply of water for existing water users, that the waste or unreasonable use, or unreasonable methods of use of water are prevented, and that the conservation and protection of water resources are required with the view to their reasonable and beneficial use in the interest of the people. These programs allow for the public to have access to the quantity and quality of ground and surface water sources to live, work, and play and allows businesses and industries in the state to operate and provide long-term benefits to the public, including jobs, services, and products.

Failure to re promulgate Chapter 50 would result in the loss of long-standing programs that provide an immense benefit to the people. Without these rules implementing Iowa laws related to water use in the state, there would be no way for the state to understand how, when, where, and in what quantities surface and ground water resources are being used. The Department's ability to implement priority

uses as determined in the Iowa Code, effectively respond during low stream levels, and react effectively to drought conditions would be hindered.

5. Determination whether less costly methods or less intrusive methods exist for achieving the purpose of the proposed rulemaking:

There are no less costly or intrusive methods to accomplish the benefit. The regulations included in these rules implement state law.

6. Alternative methods considered by the agency:

- Description of any alternative methods that were seriously considered by the agency:

No alternative methods were considered.

- Reasons why alternative methods were rejected in favor of the proposed rulemaking:

As proposed, the new Chapter 50 implements water use and allocation programs in the state for a reasonable and minimal cost to the people. These programs are established in the Iowa Code and are administered and implemented through these proposed rules. The proposed Chapter 50 includes efficiencies in the rule language since it will include content previously in Chapters 51 and 52. Chapters 51 and 52 will not be repromulgated after rescission.

*Small Business Impact*

If the rulemaking will have a substantial impact on small business, include a discussion of whether it would be feasible and practicable to do any of the following to reduce the impact of the rulemaking on small business:

- Establish less stringent compliance or reporting requirements in the rulemaking for small business.
- Establish less stringent schedules or deadlines in the rulemaking for compliance or reporting requirements for small business.
- Consolidate or simplify the rulemaking’s compliance or reporting requirements for small business.
- Establish performance standards to replace design or operational standards in the rulemaking for small business.
- Exempt small business from any or all requirements of the rulemaking.

If legal and feasible, how does the rulemaking use a method discussed above to reduce the substantial impact on small business?

This rulemaking will not have a substantial impact on small business since the current rules have been in place for a substantial period of time.

*Text of Proposed Rulemaking*

ITEM 1. Rescind 567—Chapter 50 and adopt the following **new** chapter in lieu thereof:

WITHDRAWAL, DIVERSION AND STORAGE  
 OF WATER: WATER RIGHTS ALLOCATION  
 DIVISION C  
 CHAPTER 50  
 WATER USE, WITHDRAWALS, AND DIVERSIONS

**567—50.1(455B) Scope of division.** The department has jurisdiction over the surface and groundwater of the state to establish and administer a comprehensive program to ensure that the water resources of the state be put to beneficial use to the fullest extent possible, that the waste or unreasonable use or unreasonable methods of use of water be prevented, and that the conservation and protection of water resources be required with the view to their reasonable and beneficial use in the interest of the people.

Any person who proposes to pump or divert by gravity more than 25,000 gallons of water during a period of 24 hours or less from any source of groundwater or surface water, including streams bordering the state; impound surface water; divert surface runoff into a well, sinkhole or excavation; or inject water or any material into a well has a duty to review the thresholds in this chapter and contact the department to resolve any doubt concerning whether a permit is required.

Chapter 50 explains when approval is required for withdrawal, diversion, or storage of water and the criteria for permitting the withdrawal or diversion of water. Chapter 53 sets forth the procedure for designating certain ground and surface water sources as protected sources and explains special criteria and conditions that may be applicable to those sources. Chapter 54 describes procedures and criteria for determining compensation to owners of nonregulated wells for well interference caused by permitted uses.

**567—50.2(455B) Definitions.** In addition to the definitions, references, and abbreviations in 567—Chapter 40, the following definitions apply to this title unless otherwise specified in the particular chapter of this title:

*“Administrative resolution”* means the settlement of well interference conflicts by the department according to established rules and procedures.

*“Aquifer”* means a water-bearing geological formation of sufficient volume, porosity, and permeability to be capable of yielding a usable quantity of water to a well or spring.

*“Certified well contractor”* means a well contractor who has successfully passed an examination prescribed by the department to determine the applicant’s qualifications to perform well drilling or pump services or both pursuant to 567—Chapter 82.

*“Community public water supply”* or *“CWS”* means a system for the provision to the public of piped water for domestic use that has at least 15 service connections used by year-round residents or serves at least 25 year-round residents.

*“Confined aquifer”* means an aquifer that contains water under pressure and bounded above and below by confining layers. In a well penetrating a confined aquifer, pressure will cause water to rise above the top of the aquifer.

*“Confining layer”* means a body of low permeable geologic material that is located above or below one or more aquifers.

*“Conflict”* means a dispute between a nonregulated or regulated well owner and a permitted water user regarding the liability of the permitted user for well interference damages to the nonregulated well.

*“Consumptive use”* means any use of water that involves substantial evaporation, transpiration, incorporation of water into a product, or removal of water from a source without return.

*“Domestic use”* means a use of water for human consumption and sanitation and public safety (fire protection).

*“Drainage system”* means tile lines, laterals, surface inlets, or other improvements that are constructed to facilitate land drainage.

*“Drawdown”* means the decrease in groundwater level due to well pumping.

*“General crop”* means commercial field corn or soybeans.

*“Industrial use”* means a use of water by manufacturing, processing, commercial, and other industrial facilities to provide a product or a service, excluding domestic use, irrigation use, livestock use, quarry use, power generation use, and recreational and aesthetic use.

*“Interior stream”* means rivers, creeks, or other watercourses located within the interior of Iowa, not forming the borders of the state.

*“Irrigation use”* means a use of water that is artificially applied to land to aid vegetative growth.

*“Livestock use”* means a use of water in the production of animals, such as for drinking, sanitation, and cooling.

*“Nonregulated well”* means a well used to supply water for a nonregulated use.

“*Permitted use*” means a use of water in excess of 25,000 gallons per day that requires a water use permit pursuant to these rules and Iowa Code chapter 455B, subchapter III, part 4.

“*Pesticide*” means (1) any substance or mixture of substances intended to prevent, destroy, repel, or mitigate, directly or indirectly, any insects, rodents, nematodes, fungi, weeds, or other forms of plant or animal life or viruses, except viruses on or in living persons, which the secretary of agriculture shall declare to be a pest; and (2) any substance intended for use as a plant growth regulator, defoliant, or desiccant.

“*Power generation use*” means a use of water incidental to the generation of electric power for distribution and sale to the public, including process water and water for cooling purposes.

“*Protected flow*” means the “*established average minimum flow*” defined in Iowa Code section 455B.261.

“*Protected source*” means a surface water or groundwater source recognized by rule as needing special protection to ensure its long-term availability, in terms of either quality, quantity, or both, to preserve the public health and welfare.

“*Pump test*” means a department-approved test for pumping from a well at controlled rate(s) for a specified duration while water levels are accurately measured at given frequencies in the pumping well and observation well(s).

“*Quarry use*” means a use of water for the extraction of stone, sand, minerals, or other geologic materials from the earth.

“*Recreational and aesthetic use*” means a use of water that is not essential for the preservation of life, the general welfare, or the state’s economic base. Examples include but are not limited to flooding of wildlife areas, filling of pools and fountains, nonessential cooling, car washing, street cleaning, washing of other exterior surfaces, amusement park-type water rides, turf watering, and watering of landscape plantings.

“*Seven-day, 1-in-10 year low flow*” or “*7Q10*” means the minimum average flow expected to occur during a period of seven consecutive days that has an average recurrence interval of once in ten years.

“*Specialty crop*” means all other crops not listed as a general crop.

“*Stream*” means a watercourse other than a lake as defined in Iowa Code section 455B.261.

“*Stream bordering the state*” means those reaches of the Missouri, Mississippi, Des Moines, and Big Sioux rivers that mark Iowa’s boundaries.

“*Sufficient water supply*” means a nonregulated well that is capable of providing enough water for the nonregulated use.

“*Surface water*” means water occurring on the surface of the ground.

“*Surface water intake*” means an artificial opening to a drain tile that drains into an agricultural drainage well, if the artificial opening allows surface water to enter the drain tile without filtration through the soil profile.

“*Test pumping*” means a controlled aquifer test for verification of well interference.

“*Verified well interference*” means well interference that has been proven by test pumping or with other substantial evidence to have caused or will cause a nonregulated well to be unable to maintain a sufficient water supply.

“*Water use reduction plan*” means a plan that establishes numeric water reduction goals on a short-term time frame through either voluntary or mandatory water conservation requirements.

“*Well interference*” means the lowering of water level in a well caused by the withdrawal of water at another location (usually a nearby well).

### **567—50.3(17A,455B) Forms.**

**50.3(1)** *Application forms.* The following application forms are currently in use:

Form 16: Application for a New Water Use Permit or to Modify an Existing Water Use Permit. 542-3106.

Form 18: Application for Permit to Store Water for Beneficial Use. 542-3109.

Form 20: Registration of Minor Nonrecurring Use of Water. 542-3112.

Form 542-1470: Water Supply Section Water Use Permit Renewal.

Form 542-1539: Application for Use of an Agricultural Drainage Well.

**50.3(2)** *Supplementary information forms.* The following forms are used to obtain additional information to supplement applications:

Form 21: Survey of Land Owners and Occupants. 542-3113.

Form 22: Well Inventory Form. 542-3114.

Form 122: Water Well Inspection Report.

**50.3(3)** *Reporting form.* The following form is for reporting permitted activities:

Form 23: Report of Water Use by all Regulated Users. 542-3115.

**567—50.4(17A,455B) When a water use permit is required.** Unless otherwise provided herein, a water use permit shall be required for the use, withdrawal, or diversion of more than 25,000 gallons of water per day for any purpose.

**50.4(1)** *Drainage at construction sites.* A permittee may obtain permit coverage through registration as described in 50.4(4) for a withdrawal of water to lower the water table as necessary at a construction site.

**50.4(2)** *Pump test.* The department may authorize by registration as described in 50.4(4) test pumping of sources of water to determine the source's adequacy and the effects of water withdrawals on other users and the natural environment. The department may require an applicant to submit the pump test results to the department. No registration for a pump test shall be for a period of more than one year. A registration must be obtained from the department for any pump test in which more than 25,000 gallons of water will be withdrawn in a 24-hour period.

**50.4(3)** *Rural water districts.* A water use permit shall be required for withdrawals of water by any rural water district having its own source of water, and such a withdrawal shall be classified as a use by a CWS.

**50.4(4)** *Permit coverage obtained by registration for minor, nonrecurring uses.* Any use of water that is a minor, nonrecurring use, including but not limited to highway construction and maintenance, charging of lagoons, drilling wells, or hydrostatic testing of pipelines, shall require permit coverage that may be obtained through registration.

*a.* An applicant may register a minor, nonrecurring water use by submitting the registration form provided by the department. Such registrations shall be for up to one year.

*b.* After an investigation of any withdrawal allegedly causing material damage, the department shall require prompt, appropriate action for the alleviation of damages. Where agreement cannot be reached on the action necessary for the alleviation of damages, withdrawal of water shall cease immediately upon notification by the department and a water use permit application shall be submitted.

**50.4(5)** *Research contracts.* Water withdrawals for research purposes by the Iowa Geological Survey through its agents, employees, or contractees may be authorized by registration under 50.4(4) and may be subject to conditions set by the department.

**50.4(6)** *Excavation and processing of rock and gravel products.* A water use permit is required for withdrawal of more than 25,000 gallons of surface water or groundwater in one day in connection with removal or processing of rock or gravel products. A water use permit is not required for the following:

*a.* Operation of a hydraulic dredge that returns all water used as a transport medium directly back into the pit from which it is withdrawn by the dredge; and

*b.* Water withdrawal from a gravel pit or rock quarry sump pit for material washing if the wash water is discharged directly back into the pit from which it is withdrawn.

**50.4(7)** *Diversion from surface into aquifer.* A water use permit is required for diversion of water or any other material from the surface directly into any aquifer, including diversion by means of an agricultural drainage well. Diversion by tile or ditch into a sinkhole or quarry excavated in carbonate

rock is presumed to be a diversion from the surface directly into an aquifer in the absence of convincing evidence to the contrary.

**50.4(8) Cooling/heating systems.** A water use permit to withdraw groundwater for use as a heat exchange media in a heating/cooling system may be granted, allowing such groundwater to be discharged into sanitary or storm sewers when the use is complete. However, a permittee that has such a system shall make a plan and design provisions to the permittee's system to allow the groundwater to be reinjected to the aquifer from which it was originally pumped. The department reserves the right to order such direct return as part of its water conservation plan responsibility described in 50.16(3) and its priority allocation plan responsibility described in rule 567—50.17(455B).

**50.4(9) Drain tile lines.** Water in drain tile lines shall be considered surface water.

These rules are intended to implement Iowa Code sections 455B.262, 455B.264 through 455B.274, and 455B.278 and chapter 460.

**567—50.5(17A,455B) Water use permit applications.**

**50.5(1) Application forms.** Department forms for water use permit applications and modifications are listed in 50.3(1) and are located on the water use program website at [www.iowadnr.gov/wateruse](http://www.iowadnr.gov/wateruse).

*a. Application for approval of a new withdrawal or diversion of water.* For withdrawals or diversions of water, a water use permit application shall be submitted to the department by or on behalf of the owner, lessee, easement holder, or option holder of the source and area where the water is to be withdrawn, diverted, and used. An application shall be accompanied by a map portraying the withdrawal or diversion points and the land area on which water is to be used.

*b. Application for modification or renewal of a water use permit.* A request for renewal of a water use permit shall be submitted to the department. A request to modify an existing water use permit shall be submitted to the department and must include an explanation of the necessity for the modification.

**50.5(2) Fees.**

*a. Water use permit application fees.* A new water use permit application, an existing water use permit modification request, or a registration of a minor nonrecurring use of water must be accompanied by the fee listed in the table below. These fees are nonrefundable and nontransferable. For any single application, if more than one fee applies, only the higher fee is required.

| Water Use Permit Application Description   | Form          | Fee, in dollars |
|--|---------------|-----------------|
| (1) To apply for a new permit to withdraw or divert water  | 16 (542-3106) | \$350           |
| (2) To renew an existing permit  | 542-1470      | \$0             |
| (3) To modify an existing permit to either add a new source or increase the amount or rate of water withdrawn or diverted from a source or sources | 16 (542-3106) | \$350           |
| (4) To modify the conditions of an existing permit that are not described in Item 3 of this table  | 16 (542-3106) | \$0             |
| (5) To apply for an ASR permit or a protected source designation   | N/A           | \$700           |
| (6) To register a minor nonrecurring use of water  | 20 (542-3112) | \$75            |

*b. Annual water use permit fee.* In addition to the application fee, there is an annual permit fee. Each water use permittee shall pay the same annual fee. The fee is not prorated and is nonrefundable. The annual water use permit fee is due December 1 of each year. The department will provide an annual fee notice to each permittee at least 60 days prior to the fee due date. An additional fee of \$100 will be imposed if the fee is not received by December 1. Failure to remit the fee by January 1 may result in permit termination.

(1) The annual fee shall be based on the costs for administering the water use permitting program for the previous calendar years and on the anticipated expenses for succeeding fiscal years. The department will review the annual permit fee each year and adjust the fee as necessary to cover all reasonable costs required to develop and administer the water use permitting program. The department

shall request commission approval of the amount of the annual fee no later than September 30 of each year.

(2) Permittees that have paid an application fee after December 1, but prior to November 30, will not be required to pay an annual fee until December 1 of the following year. If an applicant remits an annual fee for the 12-month period beginning December 1 and then later submits an application fee for a permit modification, the applicant will be refunded the lesser fee.

**50.5(3)** *Required supporting information.* A water use permit application shall not be considered complete until the fee specified in this rule and all supporting information requested under rule 567—50.6(17A,455B) has been submitted by the applicant or the applicant's agent.

**50.5(4)** *Initial screening of water use permit applications.*

*a. General procedure.* Upon receipt, each application shall be evaluated by the department to determine whether adequate information is available to review the project. The department shall then advise the applicant of additional information required for project review.

*b. Application to withdraw groundwater.* Evaluation of the potential effects of a proposed withdrawal of groundwater requires review of available hydrogeological information. The department may require additional supporting hydrogeological information, which the applicant is responsible for providing.

**567—50.6(17A,455B) Supporting information for water use permit applications.** As described in this rule, applicants shall submit supporting information reasonably required to assist the department in conducting the investigation required by Iowa Code sections 455B.264 and 455B.281 and in determining whether permit issuance would be consistent with the beneficial use policies and principles in Iowa Code section 455B.262. The department may require additional information relative to applications for the following types of permits.

**50.6(1)** *Groundwater withdrawal permit.*

*a. Identification of source and effects of pumping.* Applicants for a water use permit to withdraw groundwater shall submit information to identify the well location(s) and the aquifer(s) from which water withdrawals are proposed, predict the effects of pumping with a reasonable degree of confidence, and determine any permit conditions for well interference pursuant to 567—Chapter 54. In areas of uncertainty, to determine the availability of a water source of adequate quantity and quality and to predict the effects of pumping, the applicants shall perform test drilling, yield testing, and pump testing that includes measurements in one or more observation wells conducted with prior approval and in a manner acceptable to the department. Applicants shall perform each of these exploratory operations to the extent necessary for the department to determine whether a water use permit should be issued and to identify conditions which should be imposed in a permit. The following requirements apply to exploratory drilling, yield testing, and pump testing.

(1) Test drilling. Where test drilling is needed for geological information relevant to the application, an applicant shall employ a driller to collect, bag, and properly label cutting samples at each five-foot interval and at each apparent change in geological formation from a test hole or production well hole at least the approximate depth of the proposed production well. The cutting samples shall be saved for collection in sample bags provided by the Iowa Geological Survey (IGS). The samples shall be submitted to the IGS and be accompanied by a driller's log showing the well's location and total depth and a description of the materials encountered at successive intervals.

(2) Yield testing. An applicant shall construct a well and test pump it for yield to the extent necessary to determine whether water is available at the applicant's proposed rate of withdrawal from the proposed source. A written registration from the department is required before any yield test in which more than 25,000 gallons will be withdrawn in a period of 24 hours or less, as provided in 50.4(4).

(3) Pump testing. An applicant shall conduct a controlled aquifer pump test with supervision by a certified well contractor, licensed professional engineer, or other department designee as a condition of obtaining a water use permit, if the department finds an aquifer test necessary to determine the



effects that the proposed withdrawal has on other nearby water users. An applicant may be required to construct, develop, and maintain adequate observation wells for use in an aquifer pump test, subsequent water level measurements, or water quality monitoring. An applicant shall obtain a registration for an aquifer pump test as provided in 50.4(4).

*b. Cooperation in obtaining well information.* An applicant requesting a permit authorizing groundwater withdrawals from a well or reservoir may be required to assist the department in conducting an inventory of nearby wells within a designated radius of the proposed site. The need for an inventory and the appropriate radius will be determined after considering the characteristics of the aquifer that is proposed as a source of water and the proposed withdrawals. The department shall provide the applicant a map specifying the proposed inventory area, forms specifying the information to be gathered in the inventory, and a description of regulated uses within the inventory area. The applicant shall make a good-faith effort to assist the department in obtaining information from public records to identify landowners and occupants and from drilling contractors or pump installers identified by a landowner or occupant responding to the inventory.

**50.6(2) Irrigation permit.** An applicant proposing to irrigate crops on land shall submit a soil conservation plan prepared with the assistance of the NRCS for the land where crop irrigation is proposed, if the land includes either of the following:

- a.* Soils more erodible than Capability Subclass IIe as defined by the NRCS; or
- b.* Slopes greater than 6 percent, where a modern NRCS Soil Survey is not available.

A soil conservation plan shall include a written explanation of how operation of the proposed irrigation system will be compatible with the plan.

**50.6(3) Quarry permit.** Iowa Code section 455B.268 requires that a water use permit be obtained before diverting water or material from the surface directly into any underground watercourse or basin.

**50.6(4) Diversion of water into an aquifer not related to the use of an agricultural drainage well.** An applicant for a water use permit to divert water or any other material from the surface into an aquifer not related to the use of an agricultural drainage well shall submit information showing that the requested diversion will not alter the quality of the aquifer.

**50.6(5) Water withdrawal from a protected water source.** An applicant for a water use permit to withdraw water from a protected water source designated in 567—Chapter 53 may be required to provide specific information to support the application as required by rule 567—53.3(455B).

#### **567—50.7(17A,455B) Review of complete water use permit applications.**

**50.7(1) Summary report.** Before a decision is made on a water use permit application, the department shall prepare a summary report stating whether the withdrawal, diversion, or use of water described in the application conforms to relevant criteria. The report shall identify the information used to determine the potential for a proposed use of water to adversely affect other water users. For an application to withdraw groundwater, the report shall describe the anticipated effects on water levels resulting from the proposed use, indicate if verified well interference has been found, and provide options for resolving any verified well interference in accordance with 567—Chapter 54.

**50.7(2) Public notice (PN).**

*a. New water use permits and permit modifications.* Prior to issuing a permit to withdraw, divert, or inject water, the department shall publish a PN of recommendation to issue a water use permit. A PN shall summarize the application and the recommendations in the summary report and allow the public 20 days to request a copy of the summary report and submit comments on the report. The department may extend the comment period upon request for good cause. PNs may be published in a newspaper circulated in the locality of the proposed water source, or the department may use other publication methods to ensure adequate notice to the affected public. A PN shall be sent to any person who has requested a copy of the notice concerning the particular water use under consideration.

*b. Water use permit renewals.* The PN provisions of 50.7(2)“a” shall not apply to water use permit renewals.

**50.7(3)** *Notice to the applicant of criteria violation.* If the application review determines that the proposed withdrawal, diversion, or use of water violates one or more criteria and the application should therefore be disapproved, or approved only subject to special conditions to which the applicant has not agreed, the department shall notify the applicant and, when practical, suggest appropriate project modifications. The department shall offer the applicant an opportunity to submit comments before a decision is made.

**567—50.8(17A,455B) Decision by the department.**

**50.8(1)** *Form of decision.* The decision by the department shall be either approval or denial of the water use permit application. Each water use permit shall include appropriate standard and special conditions consistent with Iowa Code sections 455B.261 through 455B.274 and 455B.281 and 567—Chapters 50, 53 and 54. The decision shall incorporate by reference or attachment the summary report described in 50.7(1). Each decision shall include the following:

*a.* Determinations as to whether the project satisfies all relevant criteria not addressed in the attached summary report;

*b.* An explanation of the purpose for imposing each special condition; and

*c.* An explanation of consideration given to all comments submitted pursuant to 50.7(2) unless the comments are adequately addressed in the attached summary report.

**50.8(2)** *Notice of decision.* Copies of the decision shall be mailed to the applicant, any person who commented pursuant to 50.7(2), and any other person who has requested a copy of the decision. The decision shall be sent by certified mail. A decision becomes the final decision of the department unless a timely notice of appeal is filed in accordance with 50.8(3).

**50.8(3)** *Appeal of decision.* Any person aggrieved by a decision issued under this rule may file a notice of appeal with the director. The notice of appeal must be filed within 30 days following the certified mailing date of the decision unless the appellant shows good cause for failure to receive actual notice and file within the allowed time. The form of the notice of appeal and appeal procedures are governed by 567—Chapter 7. The department shall mail a copy of the notice of appeal to each person who commented on the application. If the appeal is from denial of a permit and a notice of recommendation to grant a permit was not published, the department shall publish the notice of commencement of a contested case and provide an opportunity for interested people to seek intervention in the contested case.

These rules are intended to implement Iowa Code sections 17A.3, 455B.105, 455B.171, 455B.262, 455B.264 through 455B.274, 455B.278, and 455B.281.

**567—50.9(455B) Conditions on permitted water uses.** This rule includes permit restrictions that apply to various types of permitted water uses. A permitted use may be subject to additional restrictions related to its potential effects on surface or groundwater. Procedures for determining conditions imposed due to well interference are found in 567—Chapter 54.

**50.9(1)** *Irrigation water use permits.*

*a. Authorized irrigation season.* Permits shall authorize irrigation of any general crop from April 1 to September 30 and any specialty crop from April 1 to October 31 unless the department finds that a different period is justified.

*b. Authorized annual amount.* Permits shall authorize withdrawals equivalent to one acre-foot per acre for a general crop and two acre-feet per acre for a specialty crop unless the department finds that a different amount is justified. Notwithstanding the general criteria in this paragraph, permits for irrigation of general crops from the alluvial aquifers of the Missouri and Mississippi Rivers shall authorize withdrawals of up to 1.5 acre-feet per acre if requested by the applicant unless the department finds that a different amount is justified.

*c. Conservation plan for erosion control.* Where 50.6(2) requires the submission of a soil conservation plan, an irrigation water use permit shall make authorization of irrigation contingent upon compliance with the soil conservation plan.

*d. Irrigation scheduling.* The department may require that irrigation of a general crop be scheduled according to a department-recommended method to minimize the potential for waste of water or by an equivalent method selected by the permittee and approved by the department.

*e. Irrigation system check valve.* Each irrigation water use permit shall require the installation of an adequate check valve and frequent inspections of proper valve function to prevent contaminants from back-siphoning into the water source before a fertilizer, pesticide, herbicide, or other additive is introduced into the irrigation system.

**50.9(2)** The amount of water authorized for industrial use or power generation use shall be consistent with industry-wide usage for the same or similar purposes and types of facilities and shall provide for growth where need is demonstrated by the applicant.

**50.9(3)** The amount of water authorized for use by a CWS shall not exceed 200 gallons per day per capita, except that additional water may be authorized for growth and industrial use where need is demonstrated by the applicant.

**50.9(4)** *Recreational and aesthetic water use permits.*

*a. Authorized amount.* The amount of water authorized for recreational and aesthetic uses shall be determined on a case-by-case basis.

*b. Watering system backflow-prevention valve.* Water use permits authorizing the use of water for turf or landscape plantings shall require the installation of an adequate check valve and annual inspections of proper valve function to prevent contaminants from back-siphoning into the water source before a fertilizer, pesticide, herbicide, or other additive is introduced into the irrigation system.

This rule is intended to implement Iowa Code section 455B.265.

**567—50.10(455B) Conditions on withdrawals from streams.** Water withdrawals from streams shall be subject to the following conditions:

**50.10(1)** *Protected flow restriction.* Except as provided in 50.10(2), withdrawals for consumptive uses, with the exception of CWSs, shall cease when the streamflow is below the protected flow designated in 50.15(3). When the flow of a stream, or portion thereof designated by the department, is below a flow equal to the protected flow plus the summation of all permitted consumptive withdrawals by permittees whose permits provide for maintenance of a protected flow in such stream or portion thereof, the department may, subject to the provisions of 50.10(2), order temporary cessation or rotation of all consumptive withdrawals, with the exception of CWSs, to ensure that the protected flow is preserved.

**50.10(2)** *Replacement water exemption.* Subrule 50.10(1) shall not apply to withdrawals for consumptive uses from a stream if the permittee discharges replacement water into such stream or tributary thereto at rates sufficient to offset the consumptive withdrawals and the department approves the method and location of discharge.

**567—50.11(455B) Conditions on water withdrawals from groundwater sources.**

**50.11(1)** *Withdrawals from unconfined aquifers adjacent to streams.* Water withdrawals from unconfined aquifers adjacent to streams shall be subject to the following conditions:

*a. Protected flow restriction.* Withdrawals for consumptive uses, with the exception of CWSs, at any point within 1/8 mile (660 feet) of an interior stream shall be considered withdrawals from the stream and shall cease when the stream is below the protected flow designated in rule 567—50.15(455B) except as provided in 50.11(1)“c” to “f.”

*b. Seven-day, one-in-ten-year low flow (7Q10) restriction.* Withdrawals for consumptive uses, with the exception of CWSs, at any point located between 1/8 mile (660 feet) and 1/4 mile (1,320 feet) of a stream, other than a stream bordering the state, shall cease when the streamflow is at or below the 7Q10 as determined at the nearest downstream USGS gage, except as provided in 50.11(1)“c” to “f.”

*c. Missouri/Mississippi River-interior stream confluence restriction.* Withdrawals for consumptive uses, with the exception of CWSs, from the alluvial aquifers below the floodplains of streams bordering the state at any point within 1/8 mile (660 feet) of any interior stream shall cease when the flow of such interior stream is at or below the 7Q10, except as provided in 50.11(1)“d.”

*d. Other conditions.* Notwithstanding 50.11(1)“a” to “c,” other conditions may be imposed as necessary to ensure adequate protection of water supplies for ordinary household, livestock, and domestic uses; fish and wildlife use; recreational use; preservation and enhancement of aesthetic values; or other uses of a public nature.

*e. Replacement water exemption.* 50.11(1)“a” to “c” shall not apply to withdrawals for consumptive uses from an unconfined aquifer, if the permittee discharges replacement water into such stream or tributary thereto at rates sufficient to offset the consumptive withdrawals and the department approves the method and location of discharge.

*f. Exemptions from low-flow restrictions.* The restrictions of 50.11(1)“a” to “d” may be waived if the applicant or permittee can conclusively demonstrate, by conducting pump testing, that the withdrawal will not reduce the flow of the adjacent stream. The pump testing plan must be approved by the department prior to the testing.

**50.11(2) Withdrawals from the Cambrian-Ordovician (Jordan) aquifer.** Water withdrawals from the Cambrian-Ordovician (Jordan) aquifer, including the St. Peter sandstone formation, the Prairie du Chien group, and the Jordan sandstone formation, shall be subject to the following conditions:

*a. Two-hundred-gallon-per-minute (gpm) restriction.* New withdrawals of water for irrigation, recreational, or aesthetic uses shall not exceed 200 gpm. Existing permits for irrigation, recreational, and aesthetic uses that authorize withdrawal rates in excess of 200 gpm may be modified or rescinded if the department determines that any well in the vicinity experiences loss of water due to pumping or if the pumping water level is reduced to or below the levels described in 50.11(2)“f”(1) and 50.11(2)“g”(1).

*b. Two-thousand-gallon-per-minute (gpm) restriction.* New water withdrawals for industrial or power generation uses at a single plant location shall not exceed 2,000 gpm. Existing permits for industrial or power generation use that authorize withdrawal rates in excess of 2,000 gpm may be modified or rescinded if the department determines that any well in the vicinity experiences a loss of water due to pumping or if the pumping water level is reduced to or below the levels described in 50.11(2)“f”(1) and 50.11(2)“g”(1).

*c. Limited cooling and geothermal use.* No once-through (single pass with disposal to storm sewer or equivalent) cooling water or geothermal usage is allowed. Withdrawals for geothermal purposes are prohibited unless 100 percent of the withdrawn water is reinjected into the aquifer in accordance with department requirements.

*d. Jordan aquifer high-capacity permits and wells.* Water use permits for the Jordan aquifer shall be issued on a five-year permit cycle. A water use permit for wells expected to pump over 25,000 gallons per day from the Jordan aquifer shall be obtained from the department before any water well construction permit is issued. After a water use permit has been obtained, a county may issue a Jordan aquifer water well construction permit for any nonpublic water supply system unless that well is located in one of the protected-source areas listed in 567—subrules 53.5(2) and 53.5(3). The department may issue a Jordan aquifer water well construction permit for a public water supply system or a well located in the protected source areas listed in 567—subrules 53.5(2) and 53.5(3). All driller’s logs for water use wells completed in the Jordan aquifer shall be submitted to the department and the Iowa Geological Survey.

*e. Tier 1 Jordan wells.* A Jordan water use well is classified as Tier 1 when pumping water levels have not reached the Tier 2 or Tier 3 levels described in 50.11(2)“f”(1) and 50.11(2)“g”(1). Permittees with Tier 1 Jordan wells shall follow standard water use reporting procedures for the Jordan aquifer pursuant to rule 567—50.13(455B).

*f. Tier 2 Jordan wells.*

(1) A Jordan well is classified as Tier 2 when the pumping water level measured at the well declines over 300 feet below the 1978 Horick and Steinhilber potentiometric surface, or the pumping water level declines over 50 percent from the 1978 Horick and Steinhilber potentiometric surface and the top of the Jordan aquifer, whichever is more conservative.

(2) Permittees with Jordan wells that have reached the Tier 2 level shall develop a site-specific water use reduction plan and submit it to the department for review and approval. The water use reduction plan shall set a defined usage percent reduction target that will minimize Jordan aquifer withdrawals and prevent the decline of the water level from reaching the Tier 3 category pursuant to 50.11(2)“g”(1). If the water use reduction plan is not implemented, the department may reduce the permitted water use allocation, pursue permit enforcement, or rescind the permit.

*g. Tier 3 Jordan wells.*

(1) A Jordan well is classified as Tier 3 when the pumping water level measured at the well declines over 400 feet below the 1978 Horick and Steinhilber potentiometric surface, or the pumping water level declines over 75 percent from the 1978 Horick and Steinhilber potentiometric surface and the top of the Jordan aquifer, whichever is more conservative.

(2) Permittees with Jordan wells that have reached the Tier 3 level shall develop an aggressive water use reduction plan using an approved predictive model that will lead to recovery of the pumping water level to elevations above Tier 3 levels. The department shall review and approve the plan and model predictions. If water levels continue to decline beyond the Tier 3 level, the department may reduce the permitted water use allocation; pursue permit enforcement, including aspects of the water use reduction plan; or rescind the permit.

*h. Waivers.* Waivers from these rules will be considered by the department through the procedures found in 561—Chapter 10.

*i. Plan resources.* Resources for developing water use reduction plans are listed in 50.16(3)“d.”

**567—50.12(455B) Duration of water use permits for withdrawal or diversion of water.**

**50.12(1) General.** A water use permit shall remain as an appurtenance of the land described in the permit through the date specified in the permit and any permit extension unless the permit or its extension is terminated under rule 567—50.14(455B). A water use permit may be renewed if an application is submitted prior to the termination date specified in the permit.

**50.12(2) Withdrawal or diversion of surface water.** Water use permits for withdrawal or diversion of surface water shall be issued for ten years.

**50.12(3) Withdrawal of groundwater.** Water use permits for groundwater withdrawal shall be issued for a maximum period of ten years and may be granted for less than ten years if geological data on the capacity of the aquifer and its rate of recharge are indeterminate.

This rule is intended to implement Iowa Code section 455B.265.

**567—50.13(455B) Monitoring, recording, and reporting of water use and effects on water sources.**

**50.13(1) Water use reports.** Each permittee shall submit to the department, at least annually, or as prescribed by the department, reports of water used, diverted, or stored and any other information deemed necessary by the department.

**50.13(2) Access ports.** All new water use permits authorizing withdrawals from wells shall require that each authorized production well be equipped with an access port with a minimum diameter of  $\frac{3}{4}$  inch. Access ports must be located to allow insertion of a steel tape or electric probe into the well casing for measurement of water levels.

**50.13(3) Pump tests and observation wells.** A permittee may be required to conduct a pump test as a condition of keeping a water use permit if the department finds a pump test is necessary to determine the effects that the authorized withdrawals have on other water users. A pump test, authorized by the department and supervised by a certified well contractor, licensed professional engineer, or other department designee, may be required for an administrative resolution of a well

interference conflict pursuant to 567—Chapter 54. A permittee may be required to construct, develop, and maintain adequate observation wells for use in a pump test and for subsequent water level measurements or water quality monitoring.

This rule is intended to implement Iowa Code sections 455B.261, 455B.264, 455B.266, 455B.268(1) and 455B.281.

**567—50.14(455B) Modification, termination, and emergency suspension of water use permits.**

**50.14(1) General.** Except as provided in 50.14(2), after at least 30 days' written notice mailed to the permittee's last-known address by certified mail, and an opportunity for the permittee to be heard in an evidentiary hearing conducted in accordance with Iowa Code chapter 17A, the department may modify or terminate a water use permit or any permit condition, notwithstanding any other rule, for any of the following reasons:

*a. Violation of permit condition or law.* Violation of a permit condition or the law pertaining to the water use permit by the permittee or permittee's agent, tenant, or consultant.

*b. Nonuse.* The permittee has failed for three consecutive years to use the water, and the permittee has not demonstrated adequate plans to use the water within a reasonable time. Nonuse due to adequate rainfall shall not be a justification for permit termination. However, authorization to withdraw water from a proposed well may be terminated after notice to the permittee if the permittee has failed to construct the proposed well within three years after permit issuance.

*c. Public health and safety.* Modification or termination is necessary to protect the public health and safety, to protect the public interests in lands and waters, or to prevent any manner of substantial injury to persons or property.

*d. Addition of conservation provisions.* Modification to include conservation provisions is deemed necessary by the department.

*e. Allocated amount.* For three consecutive years, annual water use has exceeded the amount of water allocated in the water use permit.

**50.14(2) Emergency suspension or restriction.** Notwithstanding any other rule or permit conditions, if the department finds that it is imperatively necessary in an emergency to protect from imminent danger or substantial injury the public health, welfare, or safety, or the public or private interest in lands or water, or to implement the priority allocation system pursuant to rule 567—50.17(455B), and these findings are incorporated into a written emergency order to the permittee, the department may immediately suspend or restrict operations under a water use permit and require the permittee to take measures necessary to prevent or remedy the injury. The emergency order shall state an effective date appropriate to the situation that invoked the suspension or restriction and shall be immediately effective on that date unless stayed, modified, or vacated at a hearing before the commission or by the court. The emergency order shall remain in effect until a date specified in the order unless the order is revoked or the expiration date is modified due to a change in the situation giving rise to the order or a decision following appeal.

This rule is intended to implement Iowa Code sections 455B.271, 455B.272 and 17A.3.

**567—50.15(455B) Designated protected flows of streams.**

**50.15(1) Purpose.** A protected flow is designed to protect and maintain adequate water supplies for: ordinary household, livestock, and domestic uses; fish and wildlife use; recreational use; in-stream wasteload assimilation and pollution control; beneficial water use needs in the watershed; preservation or enhancement of aesthetic values; and other uses of a public nature.

**50.15(2) Protected flow basis.** Protected flows are based in part on statistical information in "Low-Flow Characteristics of Iowa Streams" (INRC Bulletin No. 9 (1958)), "Low-Flow Characteristics of Iowa Streams through 1966" (INRC Bulletin No. 10 (1970)), "Annual and Seasonal Low-Flow Characteristics of Iowa Streams" (INRC Bulletin No. 13 (1976)), and "Statistical Summaries of Selected Iowa Streamflow Data Through September 1996, USGS Open-File Report 98-176 (1998)."

**50.15(3)** *Protected flow levels.*

a. *At stream gaging stations.* Protected flows, expressed in cubic feet per second (cfs) at points on a stream with an official USGS streamflow gage, are listed in the table below.

**Protected Flow at USGS Stream Gaging Locations**

| <b>River or Stream</b>     | <b>Gage Location</b>  | <b>USGS Gage Number</b> | <b>Protected Low Flow (CFS)</b> |
|----------------------------|-----------------------|-------------------------|---------------------------------|
| Beaver Creek               | New Hartford          | 5463000                 | 18                              |
| Big Creek                  | Mount Pleasant        | 5473450                 | 2                               |
| Black Hawk Creek           | Hudson                | 5463500                 | 4.5                             |
| Boone River                | Webster City          | 5481000                 | 24                              |
| Boyer River                | Logan                 | 6609500                 | 41                              |
| Cedar River                | Conesville            | 5465000                 | 1240                            |
| Cedar River                | Cedar Rapids          | 5464500                 | 937                             |
| Cedar River                | Waterloo              | 5464000                 | 710                             |
| Cedar River                | Janesville            | 5458500                 | 185                             |
| Cedar River                | Charles City          | 5457700                 | 100                             |
| Chariton River             | Rathbun               | 6903900                 | 2.9                             |
| Des Moines River           | Keosauqua             | 5490500                 | 350                             |
| Des Moines River           | Ottumwa               | 5489500                 | 300                             |
| Des Moines River           | Tracy                 | 5488500                 | 300                             |
| Des Moines River           | Des Moines (14th St.) | 5485500                 | 300                             |
| Des Moines River           | Saylorville           | 5481650                 | 200                             |
| Des Moines River           | Stratford             | 5481300                 | 310                             |
| Des Moines River           | Fort Dodge            | 5480500                 | 220                             |
| East Fork Des Moines River | Dakota City           | 5479000                 | 42                              |
| East Nishnabotna River     | Red Oak               | 6809500                 | 37                              |
| East Nishnabotna River     | Atlantic              | 6809210                 | 18                              |
| Floyd River                | James                 | 6600500                 | 22                              |
| Iowa River                 | Wapello               | 5465500                 | 1390                            |
| Iowa River                 | Lone Tree             | 5455700                 | 150                             |
| Iowa River                 | Iowa City             | 5454500                 | 150                             |
| Iowa River                 | Marengo               | 5453100                 | 204                             |
| Iowa River                 | Marshalltown          | 5451500                 | 104                             |
| Iowa River                 | Rowan                 | 5449500                 | 21                              |
| Little Cedar River         | Ionia                 | 5458000                 | 28                              |
| Little Sioux River         | Turin                 | 6607500                 | 200                             |
| Little Sioux River         | Correctionville       | 6606600                 | 106                             |
| Little Sioux River         | Linn Grove            | 6605850                 | 42                              |
| Maple River                | Mapleton              | 6607200                 | 50                              |
| Maquoketa River            | Maquoketa             | 5418500                 | 372                             |
| Middle Raccoon River       | Panora                | 5483600                 | 20                              |
| Middle River               | Indianola             | 5486490                 | 14.6                            |
| Monona-Harrison Ditch      | Turin                 | 6602400                 | 27                              |
| Nishnabotna                | Hamburg               | 6810000                 | 128                             |
| Nodaway                    | Clarinda              | 6817000                 | 15                              |
| North Raccoon River        | Jefferson             | 5482500                 | 82                              |
| North Raccoon River        | Sac City              | 5482300                 | 14                              |
| North River                | Norwalk               | 5486000                 | 5.6                             |
| North Skunk River          | Sigourney             | 5472500                 | 35                              |
| Raccoon River              | Van Meter             | 5484500                 | 190                             |
| Rock River                 | Rock Valley           | 6483500                 | 26                              |
| Shell Rock River           | Shell Rock            | 5462000                 | 147                             |

| River or Stream        | Gage Location            | USGS Gage Number | Protected Low Flow (CFS) |
|------------------------|--------------------------|------------------|--------------------------|
| Skunk River            | Augusta                  | 5474000          | 287                      |
| Soldier River          | Pisgah                   | 6608500          | 20                       |
| South Raccoon River    | Redfield                 | 5484000          | 58                       |
| South River            | Ackworth                 | 5487470          | 4.1                      |
| South Skunk River      | Oskaloosa                | 5471500          | 94                       |
| South Skunk River      | Ames (below Squaw Creek) | 5471000          | 23                       |
| South Skunk River      | Ames                     | 5470000          | 4.8                      |
| Thompson River         | Davis City               | 6898000          | 13                       |
| Turkey River           | Garber                   | 5412500          | 210                      |
| Upper Iowa River       | Decorah                  | 5387500          | 80                       |
| Walnut Creek           | Hartwick                 | 5452200          | 2                        |
| Wapsipinicon River     | DeWitt                   | 5422000          | 150                      |
| Wapsipinicon River     | Independence             | 5421000          | 17                       |
| West Fork Cedar River  | Finchford                | 5458900          | 66                       |
| West Fork Ditch        | Hornick                  | 6602020          | 12                       |
| West Nishnabotna River | Randolph                 | 6808500          | 67                       |
| West Nishnabotna River | Hancock                  | 6807410          | 49                       |
| White Breast Creek     | Dallas                   | 5487980          | 3.2                      |
| Winnebago River        | Mason City               | 5459500          | 39                       |

*b. At stream locations other than gaging stations.* The protected flow for points on a stream, other than at a USGS gaging station, shall be established, as the need arises, by comparison of available streamflow data and basin characteristics.

This rule is intended to implement Iowa Code sections 455B.261, 455B.262 and 455B.267.

#### **567—50.16(455B) Water conservation.**

**50.16(1) General.** The purpose of these water conservation requirements is to preserve the availability of water that is withdrawn for use, as opposed to protected flow provisions that preserve in-stream flows.

*a.* Each water use permit, including any permit granted to a CWS, will include conditions requiring routine (day-to-day) conservation practices and emergency conservation practices after department notification. Existing permits may be modified to include conservation conditions pursuant to 50.14(3) if deemed necessary by the department.

*b.* Only general provisions for routine conservation will be included in a water use permit unless water is to be withdrawn from a protected water source designated in 567—Chapter 53 that has specific requirements for routine conservation. Such permit conditions are primarily intended to raise awareness of water usage, develop a preparedness for periods of water shortages, and minimize waste of water.

*c.* General conditions involving emergency conservation will be included in all water use permits. Specific emergency conservation conditions may be included in a permit pursuant to 50.16(2). If specific emergency conservation permit conditions are required, they will be based on a department-approved water conservation plan developed by the permittee or applicant in accordance with 50.16(3).

*d.* The purpose of emergency conservation is to minimize consumptive use of water from a source experiencing a temporary shortage. Emergency conservation restrictions will be imposed only when water shortages are imminent or actually exist, in accordance with rule 567—50.17(455B). Long-term water shortages are addressed in the protected source rules, 567—Chapter 53.

**50.16(2) Applicability of emergency conservation.** Specific emergency conservation requirements may be made a condition of a water use permit if the proposed or permitted withdrawal could result in a significant consumptive use of water from a source that is likely to experience a



short-term shortage. Specific emergency conservation requirements will not normally be included in a water use permit under any of the following conditions:

*a.* The proposed or existing permitted water use involves a consumptive use of less than 25,000 gallons per day from any water source during periods of substantial water shortage.

*b.* The proposed or permitted use is subject to protected streamflow conditions pursuant to rule 567—50.15(455B).

*c.* The water source for the proposed or permitted use is a surface water impoundment or purchased storage owned by the applicant or permittee.

*d.* The proposed or permitted use is unable to conserve water without substantially disrupting or ceasing an essential activity that requires water.

*e.* The proposed or permitted withdrawal is from a source of water that is not likely to experience a substantial short-term water shortage, including but not limited to the Missouri and Mississippi Rivers and adjacent alluvial aquifers and the Iowa Great Lakes (West Okoboji, East Okoboji, Big Spirit, Little Spirit, Upper Gar, Lower Gar, and Lost Island Lakes).

*f.* The source of water is or will be utilized by only the permitted or proposed water user and withdrawal from the source for the permitted or proposed use has no potential for affecting other water uses.

**50.16(3)** *Water conservation plans.* The department may require a water conservation plan to be submitted by any existing permittee after a minimum of 90 days' notice. If a water conservation plan is required with a renewal application, the department will notify the permittee at least 120 days prior to expiration of the water use permit. Water conservation plans shall describe the measures to be used to achieve water conservation and estimate the water savings from each measure.

*a. General provisions.* The following information shall be included in all water conservation plans:

(1) A description of each source of water withdrawal, including the location, well depth, pumping rate, and date of installation.

(2) A description of the wastewater discharge, including the location and discharge frequency.

(3) Monthly withdrawal amounts from each source for the past five years.

(4) Monthly total water withdrawal amount for the past five years.

(5) Monthly total wastewater discharge amount for the past five years.

(6) A quarterly breakdown, by the water use categories in 50.17(3), of total water use and estimated consumptive water use over the past five years.

(7) A description of any previous water shortage problems, including the cause, frequency, other affected parties, and how they were resolved.

(8) Identification of nearby water supplies that are potentially affected by or could potentially affect the proposed or permitted withdrawal.

(9) A means of identifying impending water shortage problems.

*b. Routine conservation provisions.* Consideration of routine conservation is encouraged in a water conservation plan. Documented water savings from routine conservation measures will be credited toward emergency conservation requirements. Suggested routine conservation measures include:

(1) Use of water-saving plumbing devices or required use of these devices in building codes.

(2) Scheduling irrigation to minimize peak water use.

(3) Use of efficient irrigation techniques.

(4) Implementing programs to minimize lost water, such as distribution system leaks.

(5) Use of metered water billing by public water supplies.

(6) Utilizing best commercially available technology to optimize efficiency of water use.

(7) Implementing recycling and reuse practices.

(8) Developing alternative water sources that are not susceptible or are less susceptible to shortages.

(9) Increasing rates charged for water or eliminating reduced rates for large users.

*c. Emergency conservation provisions.* Water conservation plans shall contain emergency conservation provisions in accordance with the following criteria.

(1) General.

1. The consumptive nature of a water use, as described in 50.16(2) and in accordance with this subrule, shall be reduced by at least 50 percent over similar periods of normal use. This criterion does not apply to irrigation use. If this requirement cannot be met, justification for nonattainment shall be provided. Justification shall include documentation that an activity involving water use is essential and that the best commercially available technology is being used. The department may then grant waivers on a case-by-case basis.

2. Measures that will be credited for emergency conservation include but are not limited to the following:

- Documented water savings resulting from routine water conservation measures;
- Shutdown, postponement, or curtailment of nonessential water use activities;
- Switching to nonaffected sources for water supply;
- Mitigation of consumptive uses by directly discharging stored water or water from a nonaffected source to the affected water source;
- Acquisition and retirement of existing consumptive uses from the affected water source (credit for retirement of existing consumptive uses will be given only for the amount authorized during periods when emergency conservation is required); and
- Imposing surcharges on water use during periods of shortage.

(2) Public water supplies (PWSs). At a minimum, emergency water conservation plans for PWSs must include provisions for restricting outside, consumptive water use.

(3) Irrigation water use.

1. Emergency water conservation plans for irrigation water uses shall limit irrigation water use to the equivalent of one inch per irrigated acre per week for general crops and specialty crops unless the plan contains other mitigating provisions, such as those listed above in 50.16(3)“c”(1).

2. Water conservation plans shall address irrigation scheduling. Irrigation scheduling should attempt to provide approximately equal water use on each day of an irrigation cycle. Scheduling may be done in cooperation with other nearby irrigators who utilize the same water source.

*d. Resources for water conservation and water use reduction planning.*

(1) The following resources are suggested by and available from the department as guidance for the development of water conservation plans and water use reduction plans:

1. “Water Wise—Efficiency Planning and Water Conservation Plan Workbook for Water and Wastewater Utilities,” Iowa Association of Municipal Utilities, 2013 (available online through the department’s website).

2. “Water Conservation Programs—A Planning Manual,” Manual of Water Supply Practices M52, American Water Works Association, 2006.

3. “Handbook of Water Use and Conservation,” Amy Vickers, Waterplow Press, Amherst, Massachusetts, 2001.

(2) Water conservation plans and water use reduction plans shall comply with the standards of the American Water Works Association or a reasonable equivalent as determined by the department.

This rule is intended to implement Iowa Code sections 455B.262 and 455B.265.

**567—50.17(455B) Priority allocation restrictions.**

**50.17(1) General.** After any triggering event described in 50.17(2) occurs, the department will investigate and may restrict water use according to the priority allocation plan described in 50.17(3). Prior to imposing the priority allocation plan, the department will normally require emergency conservation measures to be taken by existing permittees. The department will not normally require emergency conservation until a shortage of water is imminent and will not normally impose the priority allocation plan until an actual impairment of water usage exists.

*a.* The department will notify existing permittees of any emergency restriction or suspension of water use by written order pursuant to 50.14(2). A permittee will be required to maintain daily water withdrawal and wastewater discharge records, if any, while the emergency order is in effect. These records shall be available for department inspection to verify compliance with the order.

*b.* Suspension or restriction of water usage applicable to otherwise nonregulated water users shall be by emergency order of the director that the department shall cause to be published in local newspapers of general circulation and broadcast by local media. The emergency order shall state an effective date of the suspension or restriction and shall be immediately effective on that date unless stayed, modified, or vacated at a hearing before the commission or by a court.

*c.* The department will lift the suspension or restriction of water usage, as deemed appropriate, when evidence of sustained, improved conditions is available.

*d.* The department will not impose a suspension of water or a further restriction, other than emergency conservation, on the uses of water provided in 50.17(3) “b”(6) through (8), or on uses of water pursuant to a contract with the state as provided in Iowa Code sections 455B.263(5) and 455B.263(6), unless the governor has issued a proclamation as described in 50.17(2) “b.” Notwithstanding such proclamation, in the case of water use under a contract with the state pursuant to Iowa Code sections 455B.263(5) and 455B.263(6) and in effect prior to March 5, 1985, restriction or suspension measures will be limited to emergency conservation.

**50.17(2) Triggering events.** The department may implement the priority allocation plan following the occurrence of any of the following:

*a.* Receipt of a petition by a governmental subdivision or 25 persons to implement the priority allocation plan due to a substantial local water shortage adversely affecting their water supply.

*b.* Issuance by the governor of a proclamation of a disaster emergency due to a drought or other event affecting water resources of the state.

*c.* Determination by the department in conjunction with the homeland security and emergency management division of the Iowa Department of Public Defense of a local crisis that affects availability of water.

*d.* Receipt of information from a state or federal natural resource, research, or climatological agency indicating that a drought of local or state magnitude is imminent. As a general guideline, emergency conservation or priority allocation restrictions will not be imposed on withdrawals from a surface stream or adjacent alluvial aquifer when streamflow is above the 7Q10 level.

**50.17(3) Priority allocation plan.** Notwithstanding a person’s possession of a permit or a person’s use of water being a nonregulated use, the department may suspend or restrict water use by use category on a local or statewide basis in the following order:

*a.* Water conveyed across state boundaries.

*b.* Water used for:

(1) Recreational or aesthetic purposes.

(2) Irrigation of general crops.

(3) Irrigation of specialty crops.

(4) Manufacturing or other industrial processes.

(5) Generation of electrical power.

(6) Livestock production.

(7) Human consumption and sanitation supplied by rural water districts, municipal water systems, or other public water supplies.

(8) Human consumption and sanitation supplied by a private water supply.

This rule is intended to implement Iowa Code section 455B.266.

**567—50.18(455B) Well plugging.** When a water use well is no longer used, or is in a state of disrepair or neglect, the permittee shall be responsible for plugging the well in accordance with Iowa Code section 455B.190, 567—Chapter 39, or by an alternate method approved by the department for prevention of groundwater pollution. The well plugging form must be completed and submitted as

specified on the form. However, the department shall grant a waiver from the well plugging requirement if a permittee demonstrates an intent to maintain the well as a source of water for a nonregulated use or if the department determines that the well should be maintained as an observation well.

This rule is intended to implement Iowa Code sections 455B.262 through 455B.279(2).

ITEM 2. Rescind and reserve **567—Chapter 51**.

ITEM 3. Rescind and reserve **567—Chapter 52**.