

ENVIRONMENTAL PROTECTION COMMISSION[567]

Regulatory Analysis

Notice of Intended Action to be published: Iowa Administrative Code 567—Chapter 53
“Protected Water Sources”

Iowa Code section(s) or chapter(s) authorizing rulemaking: 455B.262, 455B.264 through 455B.274 and 455B.278

State or federal law(s) implemented by the rulemaking: Iowa Code sections 455B.262, 455B.264 through 455B.274 and 455B.278

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 Ave, Suite 200
Des Moines, Iowa 50321
Email: chad.fields@dnr.iowa.gov

Purpose and Summary

Proposed Chapter 53 provides procedures for designating specific surface water and groundwater sources as protected sources, including information that water use permit applicants and nonregulated entities are to provide to withdraw water from such sources. The sources designated as protected sources are clearly listed and mapped in the chapter. Designation of protected surface and groundwater sources allows for continued beneficial use of those sources while protecting their capacity to supply adequate quantity and quality of water for use within the state of Iowa. This chapter has been reviewed and edited consistent with Executive Order 10.

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 applicants and nonregulated well drillers in the protected sources will bear the costs.
 - Classes of persons that will benefit from the proposed rulemaking:
Water use permit applicants and permit holders, public water supplies, citizens of Iowa, and businesses and industries in 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:

Costs to the public to comply with these rules are limited. Any costs related to these rules would be indirect, such as costs for a potential water use permit holder or well driller needing to seek out a different water source if they initially intended to withdraw water from a designated protected source area and it is determined that no additional withdrawals can be authorized at that time due to water quantity or water contamination.

- Qualitative description of impact:

Chapter 53 provides transparency and clarity to the regulated public regarding protected surface and groundwater sources within the state. These rules provide a significant benefit to the public since they provide a mechanism to ensure long-term availability of the quantity or quality of the protected surface and groundwater sources. Long-term availability of quantity and quality of surface and groundwater sources allows for the public, along with business and industry, in Iowa to benefit from the use of Iowa's water resources.

3. Costs to the State:

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

Costs incurred by the Department include the staff time and necessary tools required to implement this chapter. It is noted that staff that implement these rules have other assigned duties.

- Anticipated effect on state revenues:

A neutral impact on state revenues is expected since these rules were previously in effect. Funding of the programs implemented in Chapter 53 are drawn from fees collected by the Department as authorized in Iowa Code sections 455B.265 and 455B.265A.

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 implement the rules regarding protected source water and groundwater sources in Iowa. The costs to implement Chapter 53 are covered by fees collected by the Department as authorized in Iowa Code sections 455B.265 and 455B.265A.

Benefits of proposed new Chapter 53 include transparency and clarity to the regulated public regarding protected surface and groundwater sources within the state. These rules benefit the public since the rules provide a mechanism to ensure long-term availability of the quantity or quality of the protected surface and groundwater sources. Long-term availability of quantity and quality of surface and groundwater sources allows for the public, along with business and industry, in Iowa to benefit from the use of Iowa's water resources.

Failure to repromulgate Chapter 53 would greatly reduce the Department's ability to protect and conserve Iowa's water resources for beneficial use now and in the future.

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:

Chapter 53 is limited and is specific to designation of protected surface and groundwater sources in the state of Iowa and the information necessary for water use withdrawal applications related to the designated sources.

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 these rules have previously been in place for a substantial period of time.

Text of Proposed Rulemaking

ITEM 1. Rescind 567—Chapter 53 and adopt the following **new** chapter in lieu thereof:

CHAPTER 53
PROTECTED WATER SOURCES

567—53.1(455B) Designation of protected sources.

53.1(1) The department may designate a surface water or groundwater source within a defined geographical area as a protected source. Notwithstanding the requirements in this chapter, the department may impose permit conditions on a case-by-case basis to protect the water resources of the state.

53.1(2) The purpose of designating a water source as a protected source is to ensure long-term availability in terms of quantity and quality to preserve public health and welfare. Purposes include but are not limited to the following:

- a. To preserve the availability of the protected source for sustained beneficial use.
- b. To prevent or minimize the movement of groundwater contaminants.
- c. To maintain the surface water quality within a specific stream segment in order to meet state or federal standards, to preserve protected flows, or to maintain its availability for other beneficial use.
- d. To preserve the protected flows in a stream that is hydraulically connected to a protected groundwater source.

This rule is intended to implement Iowa Code sections 455B.262, 455B.264 through 455B.274 and 455B.278.

567—53.2(455B) Designation procedure. The procedure for designation of a protected source shall be a rulemaking to amend the list of protected sources in rule 567—53.5(455B). In addition to the requirements of rule 561—5.1(17A), an interested person who petitions the department to designate a protected water source may also be required to provide supporting information, including but not limited to:

53.2(1) Facts and arguments demonstrating that existing rules and the opportunity for public participation in the application review and decision-making procedures of rule 567—50.7(17A,455B) and 567—subrule 50.8(3) are inadequate to ensure the long-term availability of the source and to preserve the public health and welfare.

53.2(2) Predictive geohydrological and chemical analyses of the groundwater source if the petition is to prevent or minimize the movement of known or suspected contaminants.

53.2(3) Facts and arguments demonstrating the effect that additional withdrawals from a stream or stream segment proposed for designation would have on downstream discharges, surrounding alluvial systems, and biological systems, and on potential changes in the frequency at which the protected stream discharge levels are reached.

This rule is intended to implement Iowa Code sections 455B.262, 455B.264 through 455B.274 and 455B.278.

567—53.3(455B) Information requirements for applications to withdraw water from protected sources. An applicant proposing to withdraw water from a protected source, as listed in rule 567—53.5(455B), may be required to submit information necessary for the department to determine the effects resulting from such withdrawal.

53.3(1) *Withdrawals from protected groundwater sources.* Applicants for water use permits may be required to provide the information detailed in rule 567—50.7(17A,455B) and additional predictive geohydrological and chemical analyses of the groundwater source. Where there is potential for a known contaminant to migrate, predictive analyses may also be requested to show potential movement and effects of the withdrawal on the hydraulic head. Monitoring may be required in permits authorizing withdrawals from a protected groundwater source.

53.3(2) *Withdrawals from protected surface water sources.* Applicants for water use permits may be required to demonstrate the effect of proposed withdrawals on downstream discharges, surrounding alluvial systems, and biological systems, and of potential changes in the frequency at which protected stream discharge levels are reached, for any stream or stream reaches listed in rule 567—53.5(455B).

This rule is intended to implement Iowa Code sections 455B.262, 455B.264 through 455B.274 and 455B.278.

567—53.4(455B) Conditions in permits for withdrawals of water from a protected source. The designation of a protected water source in rule 567—53.5(455B) may include a list of special conditions for permits issued for withdrawals of water from the designated source. The designation may also include guidelines for the imposition of special limitations on withdrawals authorized by permits that were in force on the effective date of the protected source designation. However, such guidelines may be enforced only in accordance with the procedures in rule 567—50.14(455B) for modification, termination, and emergency suspension of permits, or after a permittee has had an opportunity to contest the imposition of proposed special limitations in permit renewal proceedings. When a group of permits is potentially affected by the guidelines in rule 567—53.5(455B), hearings under rule 567—50.14(455B) may be consolidated.

53.4(1) *Withdrawals from streams or associated alluvium that are protected sources.* The department may apply special conditions on all water use permits for withdrawals from streams and associated alluvial systems that are protected water sources listed in rule 567—53.5(455B). Such conditions may include a cessation of withdrawals at a stream discharge rate as determined by the department when withdrawals may be in excess of the level required by 567—subrule 50.15(3). These conditions may apply to both consumptive and nonconsumptive withdrawals.

53.4(2) *Withdrawals from groundwater sources that are protected sources.* The department may apply special conditions on all water use permits for withdrawals from groundwater systems that are protected water sources listed in rule 567—53.5(455B). Such conditions may include immediate cessation of withdrawals if declines in hydraulic head or movement of known contaminants in the source are detected. These conditions may apply to both consumptive and nonconsumptive withdrawals.

567—53.5(455B) List of protected water sources. The following list identifies water sources designated as protected sources under this chapter. Each listing includes the name of the designated

surface water or groundwater source, the geographical areas affected, the specific purposes for designating the source, and special limitations imposed or recommended to achieve the purpose of the protected source designation. The listing may also include special monitoring requirements or specify a date by which the department must review a protected source designation.

53.5(1) Ralston Site, Linn County.

a. Geographic area. The protected water source area includes an area within the boundaries of the cities of Cedar Rapids and Marion in Linn County. The actual geographical boundaries of the area are defined in 53.5(1) "d."

b. New or modified water use permits. Any new application for a permit to withdraw groundwater or to increase an existing permitted groundwater withdrawal from within the protected water source area will be restricted or denied, if necessary to preserve public health and welfare or to minimize movement of groundwater contaminants from the Ralston Site. The Ralston Site is identified as an EPA Comprehensive Environmental Response, Compensation, and Liability Act site under identification number IAD 980632491.

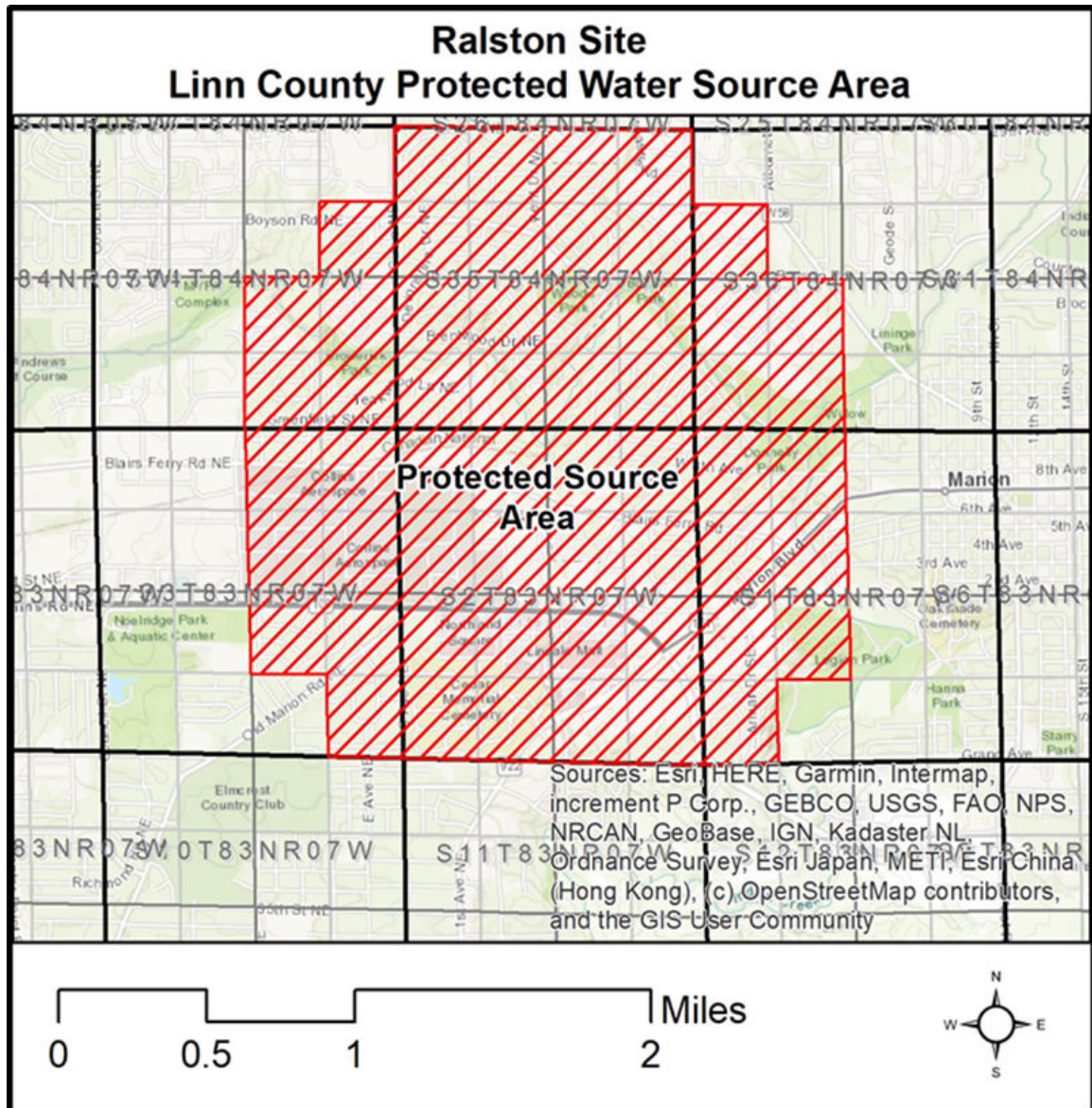
c. Groundwater withdrawal. Groundwater withdrawal from within the protected water source area may also be restricted or denied from what would otherwise be nonregulated wells, if necessary to preserve public health and welfare or to minimize the movement of groundwater contaminants from the Ralston Site. The Linn County health department will refer any application for a private well construction permit within the protected water source area to the department, which will determine whether to permit the proposed well.

d. Map of protected water source area. The department shall maintain a map of the protected water source area.

(1) The entire following described area within Linn County is defined as a protected water source:

1. All areas of Section 35, Township 84 North, Range 7 West.
2. All areas of the SW $\frac{1}{4}$ of Section 36, Township 84 North, Range 7 West.
3. All areas of the SW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 36, Township 84 North, Range 7 West.
4. All areas of the SE $\frac{1}{4}$ of Section 34, Township 84 North, Range 7 West.
5. All areas of the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 34, Township 84 North, Range 7 West.
6. All areas of Section 2, Township 83 North, Range 7 West.
7. All areas of the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 1, Township 83 North, Range 7 West.
8. All areas of the N $\frac{1}{2}$ of the SW $\frac{1}{4}$ of Section 1, Township 83 North, Range 7 West.
9. All areas of the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 1, Township 83 North, Range 7 West.
10. All areas of the NE $\frac{1}{4}$ of Section 3, Township 83 North, Range 7 West.
11. All areas of the N $\frac{1}{2}$ of the SE $\frac{1}{4}$ of Section 3, Township 83 North, Range 7 West.
12. All areas of the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 3, Township 83 North, Range 7 West.

(2) Map of the protected source area.



53.5(2) *Cambrian-Ordovician (Jordan) aquifer in Johnson and Linn Counties.*

a. Geographical area. The protected water source area includes portions of Johnson and Linn Counties. The actual geographical boundaries of the area are defined in 53.5(2)“d.”

b. New or modified water use permits. Any new application for a permit to withdraw groundwater or to increase an existing permitted groundwater withdrawal from the Cambrian-Ordovician (Jordan) aquifer within the protected water source area will be restricted or denied if necessary to preserve public health and welfare.

c. Groundwater withdrawal. Groundwater withdrawal from within the protected water source area may also be restricted or denied from water supply wells constructed in the Cambrian-Ordovician (Jordan) aquifer, public or private, and the construction of all new water supply wells in this aquifer shall be restricted or denied, if necessary, to preserve public health and welfare or to minimize adverse effects to the available head. The Johnson County and Linn County health departments are not authorized to issue a construction permit for a private well drilled into or through the Cambrian-Ordovician (Jordan) aquifer within the protected water source area without department approval. The department will determine whether the proposed well can be constructed and may require that the well meet public water well standards.

d. Map of protected water source area. The department shall maintain a map of the protected water source area.

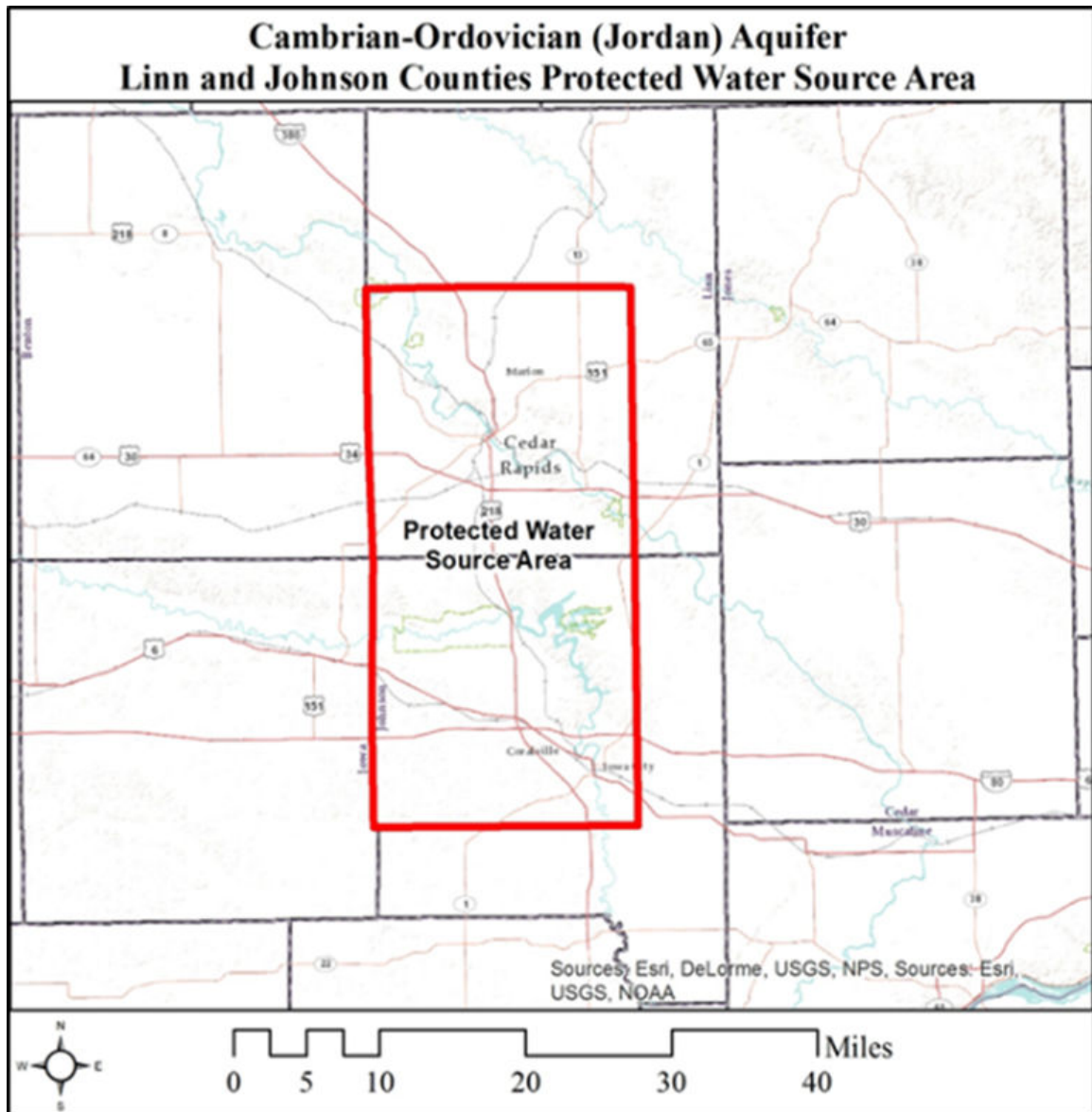
(1) The entire following described area within Johnson County and within Linn County is defined as a protected water source.

Johnson County

1. All areas of Township 79 North, Range 6 West.
2. All areas of Township 79 North, Range 7 West.
3. All areas of Township 79 North, Range 8 West.
4. All areas of Township 80 North, Range 6 West.
5. All areas of Township 80 North, Range 7 West.
6. All areas of Township 80 North, Range 8 West.
7. All areas of Township 81 North, Range 6 West.
8. All areas of Township 81 North, Range 7 West.
9. All areas of Township 81 North, Range 8 West.

Linn County

1. All areas of Township 82 North, Range 6 West.
 2. All areas of Township 82 North, Range 7 West.
 3. All areas of Township 82 North, Range 8 West.
 4. All areas of Township 83 North, Range 6 West.
 5. All areas of Township 83 North, Range 7 West.
 6. All areas of Township 83 North, Range 8 West.
 7. All areas of Township 84 North, Range 6 West.
 8. All areas of Township 84 North, Range 7 West.
 9. All areas of Township 84 North, Range 8 West.
- (2) Map of the described protected water source area in Linn and Johnson Counties.



53.5(3) Cambrian-Ordovician (Jordan) aquifer in Webster County.

a. Geographical area. The protected water source area includes portions of Webster County. The actual geographical boundaries of the area are defined in 53.5(3) "d."

b. New or modified water use permits. Any new application for a permit to withdraw groundwater or to increase an existing permitted groundwater withdrawal from the Cambrian-Ordovician (Jordan) aquifer within the protected water source area will be restricted or denied if necessary to preserve public health and welfare.

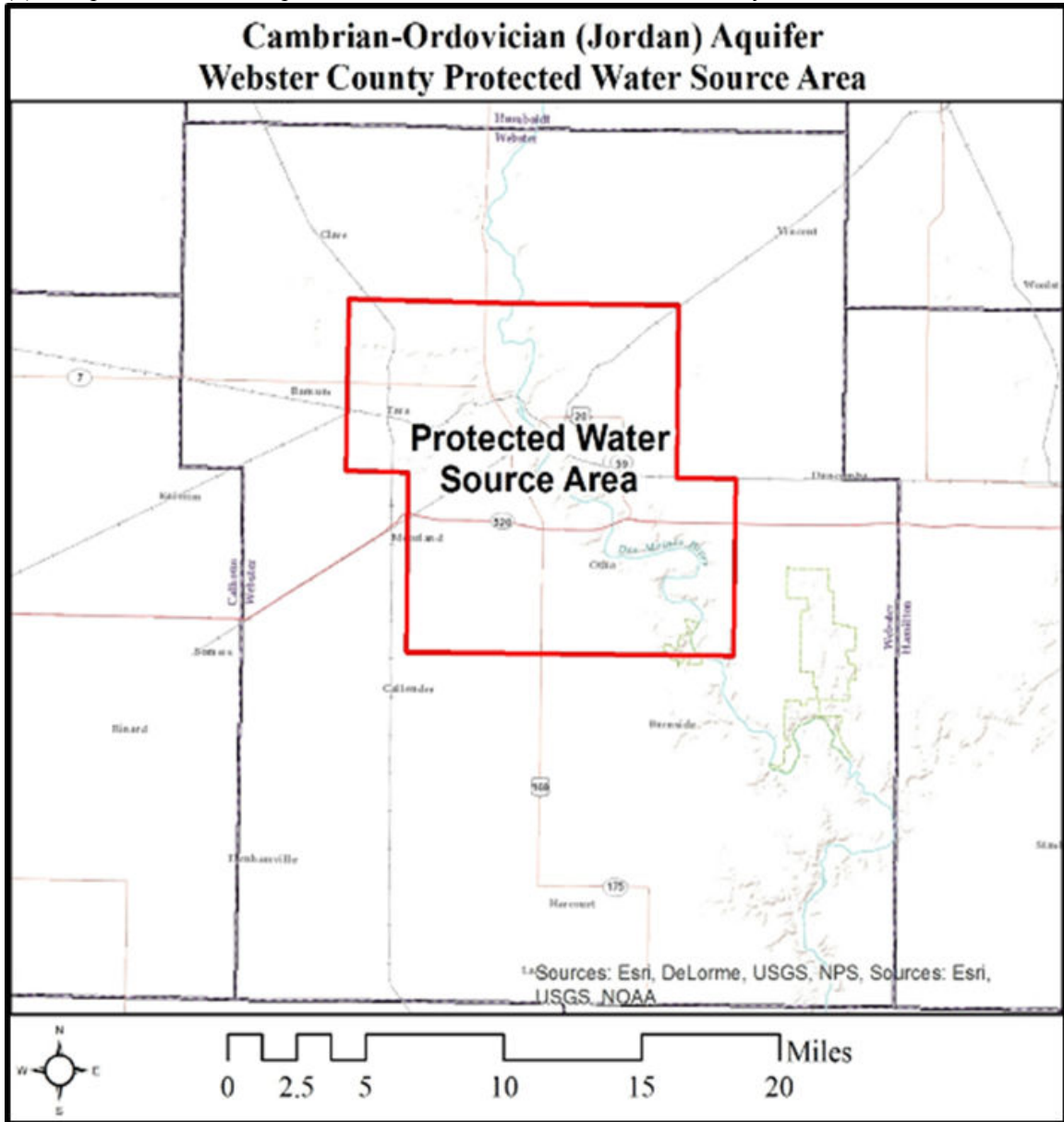
c. Groundwater withdrawal. Groundwater withdrawal from within the protected water source area may also be restricted or denied from water supply wells constructed in the Cambrian-Ordovician (Jordan) aquifer, public or private, and the construction of all new water supply wells in this aquifer shall be restricted or denied, if necessary, to preserve public health and welfare or to minimize adverse effects to the available head. The Webster County health department is not authorized to issue a construction permit for a private well drilled into or through the Cambrian-Ordovician (Jordan) aquifer within the protected water source area without department approval. The department will determine whether the proposed well can be constructed and may require that the well meet public water well standards.

d. *Map of protected water source.* The department shall maintain a map of the protected water source area.

(1) The entire following described area within Webster County is defined as a protected water source.

1. All areas of Township 88 North, Range 28 West.
2. All areas of Township 88 North, Range 29 West.
3. All areas of Township 89 North, Range 28 West.
4. All areas of Township 89 North, Range 29 West.

(2) Map of the described protected water source area in Webster County.



53.5(4) *Iowa Army Ammunition Plant (IAAAP) RDX Contaminant Site in Des Moines County and Lee County.* The IAAAP hexahydro-1,3,5-trinitro-1,3,5-triazine (CAS Registry Number 121-82-4, also known as RDX, or Royal demolition explosive) protected water source area is known as the IAAAP RDX protected water source area.

a. Geographical area. The IAAAP RDX protected water source area includes portions of Des Moines and Lee Counties. The geographical boundaries of the area are defined in 53.5(4) “e.” The IAAAP site is identified as an EPA Comprehensive Environmental Response, Compensation, and Liability Act site under identification number IA7213820445.

b. New or modified water use permits. Any new application for a permit to withdraw groundwater or to increase an existing permitted groundwater withdrawal from the IAAAP RDX protected water source area will be restricted or denied if necessary to preserve public health and welfare and to minimize the movement of groundwater contaminants from the IAAAP RDX site.

c. Groundwater withdrawal. Groundwater withdrawal from within the protected water source area may also be restricted or denied from regulated or nonregulated water supply wells, and the construction of all new water supply wells shall be restricted or denied, if necessary, to preserve public health and welfare and to minimize movement of groundwater contaminants.

(1) The department is the only authorized well permitting authority within the protected water source area. No well shall be constructed within the protected water source area unless a written permit is obtained from the department.

(2) All well construction permit applications for this protected water source area shall be submitted to the department. The Des Moines County and Lee County health departments or their designated permitting authorities shall refer all private well construction permit applications to the department when the proposed wells are located within the protected water source area.

(3) The department will determine whether the proposed well can be installed and the well construction standards that are required for the well’s installation. All approved well construction shall use department-approved well construction standards and operational standards to ensure the protection of public health and welfare and to minimize the potential movement of contaminants in the groundwater within the protected water source area.

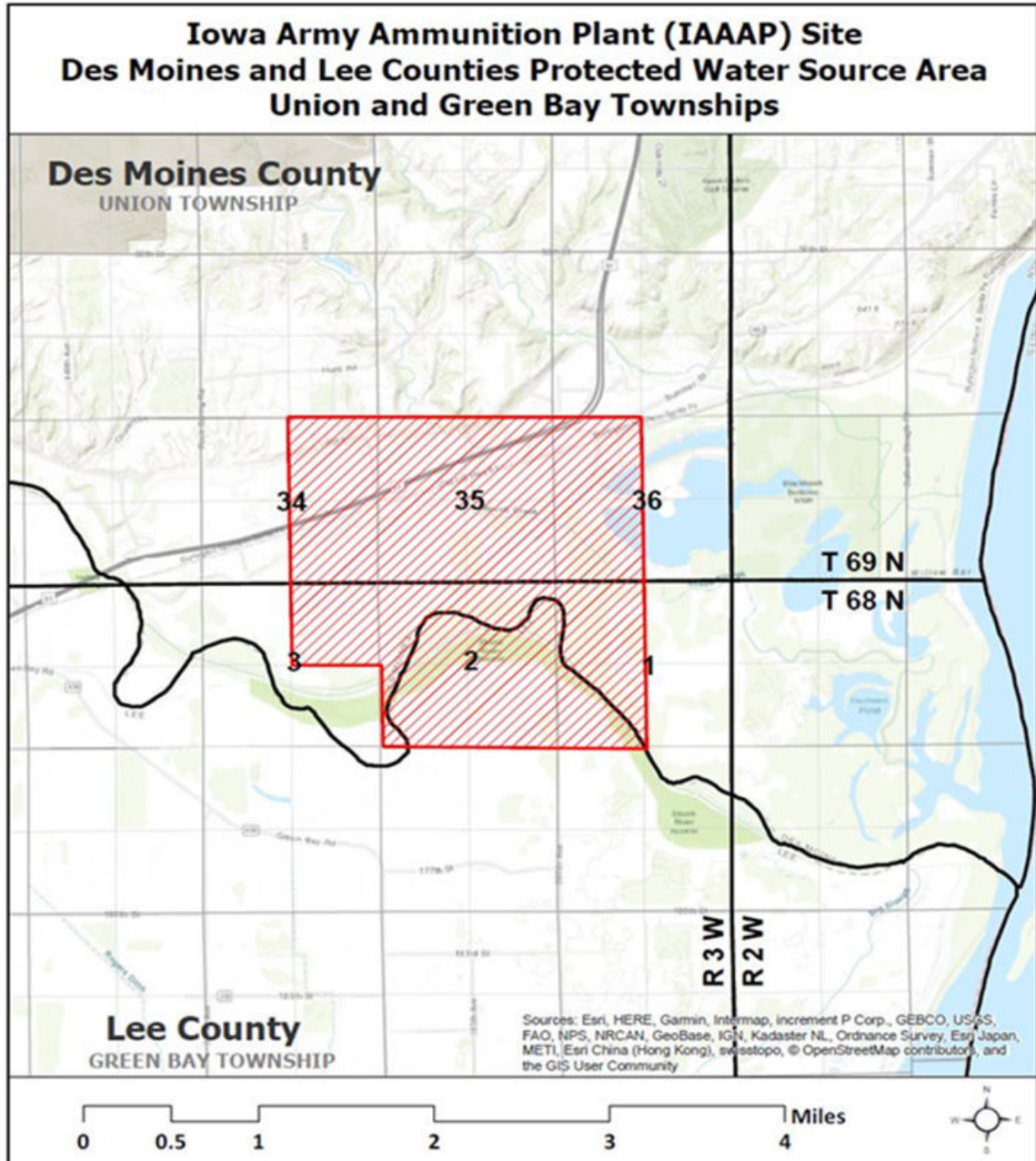
d. Boundaries. When monitoring results, or an investigation conducted by the department, the IAAAP, or an agent designated by either party indicates that the monitored contaminant concentrations or the monitored contaminant boundaries have significantly changed, the department may increase or decrease the boundaries of the protected water source area to maintain the separation distance to the monitored contamination. The department will publish any changes in the contaminant boundaries and send a notice to the IAAAP, the Des Moines County and Lee County health departments, and the affected landowners.

e. Map of protected water source. The department shall maintain a map of the protected water source area.

(1) The following described area within Des Moines County and Lee County is defined as a protected water source.

1. Des Moines County, Union Township
 - East one-half of section 34 in Township 69 North, Range 3 West
 - All areas of section 35 in Township 69 North, Range 3 West
 - West one-half of section 36 in Township 69 North, Range 3 West
2. Des Moines County, Green Bay Township
 - Northeast quarter section 3 in Township 68 North, Range 3 West
 - All areas of section 2 in Township 68 North, Range 3 West
 - West one-half of section 1, Township 68 North, Range 3 West
3. Lee County, Green Bay Township
 - All areas of section 2 in Township 68 North, Range 3 West
 - All areas of section 1 in Township 68 North, Range 3 West

(2) Map of the described protected water source area in Des Moines and Lee Counties.



NOTE: When protected sources are designated, they will be listed as part of this rule.
This rule is intended to implement Iowa Code sections 455B.262, 455B.264 through 455B.274 and 455B.278.