



High Quality Water Resources

A list for manure applicators and producers who need a construction permit

Passed by the 2002 General Assembly, Senate File 2293 set new requirements for the location and expansion of confinement feeding operations and for the land application of manure.

One of these changes added high quality water resources to the protected areas from certain manure application practices and as Items 10 and 35 on the master matrix, a system used to rate potential locations for confinement feeding operations needing a construction permit.

As defined by SF 2293, high quality water resources include high quality (HQ) waters and high quality resource (HQR) waters which are both listed in Iowa’s Water Quality Standards in Chapter 61.3(5) “e” of the Iowa Administrative Code. Waters that were listed as HQ or HQR waters have above average characteristics and have not been channelized or significantly altered. High quality water resources also include protected water areas (PWA) listed below and on the DNR website under state parks, other division programs.

Definitions of the three water types

High quality water (HQ): Waters with exceptionally better quality than the levels specified in the Water Quality Standards and with exceptional recreational and ecological importance. Special protection is warranted to maintain the unusual, unique or outstanding physical, chemical, or biological characteristics which these waters possess.

High quality resource water (HQR): Waters of substantial recreational or ecological significance which possess unusual, outstanding or unique physical, chemical, or biological characteristics which enhance the beneficial uses and warrant special protection.

Protected water areas (PWA): This program started in 1978 to maintain, preserve and protect outstanding natural and scenic qualities of select waters and their adjacent land areas. Sections of five rivers have been designated (see below), but other possible protected waters exist, including lakes and marshes. The long-term goal of the program is to have one PWA in each of

the seven landform regions in Iowa.



A meandering stream, Catfish Creek is a typical high quality resource water (HQR). The creek is located in Swiss Valley County Park in Dubuque County.
Photo by Jamie Mootz

How to use the list

Look for high quality water resources by county or in the PWA list below.

For More Information

Manure applicators should see the DNR factsheet “Separation Distances for Land Application of Manure,” available on the DNR website and at DNR field offices. **Producers** who need to use the master matrix can find more information, including an interactive matrix, under animal feeding operations on the DNR website at www.iowadnr.gov.

Protected Water Areas (PWA)

- Upper Iowa River:** Kendallville (Winneshiekie Co.) to Hwy 76 in Allamakee Co. (64.2 miles)
- Little Sioux River:** Spencer (Clay Co.) to the Linn Grove Dam in Buena Vista Co. (34.5 miles)
- Middle Raccoon River:** Panora (Guthrie Co.) to the Redfield Dam in Dallas Co. (14.6 miles)
- Wapsipinicon River:** Hwy 93 (Bremer Co.) to conjunction with the Mississippi River, Clinton/Scott Co. line (177 miles)
- Boone River:** Webster City (confluence of Brewers Cr.) to confluence with the Des Moines River (25 miles)

CAUTION: This document is only a summary of administrative rules contained in 567 IAC chapters 61 and 65; it is a guidance document and should not be used as replacement for the administrative rules. While every effort has been made to assure the accuracy of this information, the administrative rules will prevail in the event of a conflict between this document and the administrative rules.

High Quality Water Resources by County

HQ = High Quality Water

HQR = High Quality Resource Water

PWA = Protected Water Areas on page 1

Allamakee

- HQR** **Yellow River** - Mouth to Allamakee-Winneshiek Co. line
- Dousman Creek** - Mouth to Allamakee-Clayton Co. line
- Suttle Creek** - Mouth to Allamakee-Clayton Co. line
- Unnamed Creek (aka Bear Creek)** - Mouth (S13, T96N, R5W) to N. line of S12, T96N, R5W, Allamakee Co.
- Norfolk Creek** - Mouth to confluence with Teeple Cr. (S24, T97N, R6W, Allamakee Co.)
- Teeple Creek** - Mouth to W. Line of S11, T97N, R6W, Allamakee Co.
- Cota Creek** - Mouth to W. line of S10, T97N, R3W, Allamakee Co.
- Trout Run** - Mouth through one mile reach
- Unnamed Creek (Erickson Spring)** - Mouth (S 23, T98N R4W) to W. line of S23, T98N, R4W, Allamakee Co.
- Irish Hollow Creek** - Mouth to N. line of S17, T100N, R4W, Allamakee Co.
- Clear Creek** - Mouth to N. line of S15, T100N, R5W, Allamakee Co.
- Upper Iowa River** - Lane's Bridge (Allamakee Co.) to Allamakee-Winneshiek Co. line
- Paint Creek** - Little Paint Creek to Rd Crossing, S18, T97N, R4W, Allamakee Co.
- Little Paint Creek** - Mouth to N. line of S30, T97N, R3W, Allamakee Co.
- Hickory Creek** - Mouth to S. line of S28, T96N, R5W, Allamakee Co.
- Wexford Creek** - Mouth to W. line of S25, T98N, R3W, Allamakee Co.
- Village Creek** - Mouth to W. line of S19, T98N, R4W, Allamakee Co.
- Clear Creek** - Mouth to W. line of S25, T99N, R4W, Allamakee Co.
- French Creek** - Mouth to E. line of S23, T99N, R5W, Allamakee Co.
- Silver Creek** - Mouth to S. line of S31, T99N, R5W, Allamakee Co.
- Waterloo Creek** - Mouth to Iowa-Minnesota state line
- Patterson Creek** - Mouth to E. Line S3, T98N, R6W, Allamakee Co.

Appanoose

- HQR** **Chariton River** - Hwy 2 to Appanoose - Lucas Co. line

Black Hawk

- HQR** **Cedar River** - Confluence with Beaver Creek to Blackhawk-Bremer Co. line
- W Fk Cedar River** - Mouth to Blackhawk-Butler Co. line
- Shell Rock River** - Mouth to Blackhawk-Bremer Co. line
- Wapsipinicon River** - Buchanan-Blackhawk Co. Line to Blackhawk-Bremer Co. line

Boone

- HQR** **Des Moines River** - Fraiser Dam to Boone - Webster Co. line

Bremer

- HQR** **Cedar River** - Bremer-Blackhawk Co. line to Bremer-Chickasaw Co. line
- Shell Rock River** - Bremer-Blackhawk Co. Line to Bremer-Butler Co. line
- Wapsipinicon River** - Bremer-Blackhawk Co. line to Snyder's Access (S34, T93N, R12W, Bremer Co.)

Buchanan

- HQR** **Wapsipinicon River** - Linn-Buchanan Co. line to Buchanan-Blackhawk Co. line

Buena Vista

- HQR** **Little Sioux River** - entire length in Buena Vista Co.

Butler

- HQR** **W Fk Cedar River** - Butler-Blackhawk Co. line to confluence with Maynes Creek
- Shell Rock River** - Butler-Bremer Co. line to S. corporate limits, Shell Rock (S12, T91N, R15W, Butler Co.)

Carroll

- HQR** **North Raccoon River** - Carroll-Greene Co. line to Hwy 286 (S17, T85N, R33W, Carroll Co.)

Cerro Gordo

- HQR** **Clear Lake**

Cherokee

HQR

Little Sioux River - Hwy 3 in Cherokee (S26, T92N, R40W, Cherokee Co.) to Buena Vista - Cherokee Co. line

Chickasaw

HQR

Cedar River - Bremer-Chickasaw Co. line to S29, T94N, R14W, Chickasaw Co.

Clay

HQR

Little Sioux River - Buena Vista-Clay Co. line to east corporate limit Spencer (S17, T96N, R36W, Clay Co.)

Elk Lake

Clayton

HQR

Point Hollow Creek - Mouth to Clayton-Dubuque Co. line

Bloody Run Creek (aka Grimes Hollow) - Mouth to Clayton-Delaware Co. line

Pecks Creek - Mouth to S. line S15, T91N, R3W, Clayton Co.

South Cedar Creek - N. line S7, T92N, R3W to N. line S30, T93N, R3W, Clayton Co.

Steeles Branch - Mouth to Clayton-Delaware Co. line

Brownfield Creek - Mouth to spring source (S31, T91N, R3W, Clayton Co.)

Volga River - Mouth to Clayton-Fayette Co. line

Bear Creek - S. Line S18, T91N, R4W to W. line S23, T91N, R5W, Clayton Co.

Mossey Glen Creek - Mouth to S. line S10, T91N, R5W, Clayton Co.

Cox Creek (aka Anderson Hollow) - Kleinlein Cr. to S. Line S12, T91N, R6W, Clayton Co.

Kleinlein Creek (aka Spring Creek) - Mouth to spring source (S10, T91N, R6W, Clayton Co.)

Hewett Creek - Mouth to S. line of S29, T92N, R6W, Clayton Co.

Dry Mill Creek - Mouth to W. line of S9, T93N, R4W, Clayton Co.

Miners Creek - Hwy 52 (Clayton Co.) to W. line of S1, T92N, R3W, Clayton Co.

Unnamed Creek (aka W. Fk. Sny Magill Cr.) - Mouth to W. line of S7, T94N, R3W, Clayton Co.

Bloody Run - Mouth to W. line of S22 T95N, R4W, Clayton Co.

Maquoketa River - Delaware-Clayton Co. line to Clayton-Fayette Co. line

Pine Creek - Mouth to confluence with Brownfield Creek (Clayton Co.)

Turkey River - Confluence with Volga River to Clayton-Fayette County line

Little Turkey River - Clayton-Delaware Co. line to S. line S11, T90N, R3W, Delaware Co.

Ram Hollow - Mouth to Clayton-Delaware Co. line

Baron Spring - Mouth to spring source (S4, T91N, R6W, Clayton Co.)

Ensign Creek (aka Ensign Hollow) - Mouth to spring source (S29, T92N, R6W, Clayton Co.)

Mink Creek - Mouth to Clayton-Fayette Co. line

Buck Creek - Mouth to W. line of S9, T93N, R3W, Clayton Co.

Sny Magill Creek - Mouth to W. line of S6, T94N, R3W, Clayton Co.

North Cedar Creek - Mouth to W. line of S24, T94N, R4W, Clayton Co.

Cedar

HQR

Cedar River - Muscatine-Cedar Co. line to Cedar-Johnson Co. line

Wapsipicon River - Cedar-Clinton Co. line to Cedar-Jones Co. line

Clinton

HQR

Wapsipicon River - Mouth to Clinton-Cedar Co. line

Dallas

HQR

Raccoon River - Polk-Dallas Co. line to confluence of N. & S. Raccoon River

Middle Raccoon River - Redfield Dam to Dallas-Guthrie Co. line

North Raccoon River - Mouth to Dallas-Greene County line

Dickinson

HQR

Grover's Marsh

Big Spirit Lake

East Okoboji Lake

Lower Gar Lake

Minnewashta Lake

Upper Gar Lake

West Okoboji Lake

Delaware

HQR

Bloody Run Creek (aka Grimes Hollow) - Clayton-Delaware Co. line to source S3, T90N, R3W, Delaware Co.

Steeles Brook - Clayton-Delaware Co. line to W. line S5, T90N, R4W, Delaware Co.

Twin Springs Creek - Mouth to spring source in S12, T90N, R4W, Delaware Co.

HQR	<p>S Br Fountain Spring Creek - Mouth to W. line of SW1/4, S16, T90N, R4W, Delaware Co.</p> <p>Schechtman Branch - Mouth to S. line S14, T90N, R4W, Delaware Co.</p> <p>Maquoketa River - Delaware-Jones Co. line to confluence with Plum Creek</p>
HQ	<p>Maquoketa River - Mouth of S. Fk. Maquoketa River to Clayton-Delaware Co. line</p> <p>Spring Branch - Mouth to spring source in S35, T89N, R5W, Delaware Co.</p> <p>Fenichel Creek - Mouth to Richmond Springs (center S4, T90N, R6W, Delaware Co.)</p> <p>Little Turkey River - Clayton-Delaware Co. line to S. Line S11, T90N, R3W, Delaware Co.</p> <p>Ram Hollow - Clayton-Delaware Co. line to source S10, T90N, R3W, Delaware Co.</p> <p>Fountain Spring Creek - Mouth to W. line of NW1/4, S16, T90N, R4W, Delaware Co.</p>

Dubuque

HQR	<p>Catfish Creek - S. line S9, T88N, R2E to W. line S30, T88N, R2E, Dubuque Co.</p> <p>Little Maquoketa River - Hogans Branch to N. line of S5, T88N, R1W, Dubuque Co.</p> <p>Bloody Run - Mouth to W. line S21, T90W, R2E, Dubuque Co.</p> <p>Cloie Branch - Mouth to W. line S5, T89W, R2E, Dubuque Co.</p> <p>Hogans Branch - Mouth to W. line S9, T88N, R1W, Dubuque Co.</p> <p>Point Hollow Creek - Clayton-Dubuque Co. line to source (S8, T90N, R2W, Dubuque Co.)</p>
HQ	<p>Mid. Fk Little Maquoketa River - W. line S31, T90N, R1E to N. line S33, T90N, R1W, Dubuque Co.</p>

Emmet

HQR	<p>Burr Oak Lake</p> <p>Tuttle Lake</p>
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Fayette

HQR	<p>Volga River - Clayton-Fayette Co. line to E. corporate limit Fayette (NE1/4, S28, T93N, R8W, Fayette Co.)</p> <p>Brush Creek - Bear Creek to E. line of S17, T92N, R7W, Fayette Co.</p> <p>Bell Creek - Mouth to W. line S8, T94N, R7W, Fayette Co.</p> <p>Bass Creek - Mouth to W. line S3, T95N, R9W, Fayette Co.</p>
HQ	<p>Otter Creek - Mouth to confluence Grovers Cr. (S22, T94N, R8W, Fayette Co.)</p> <p>Maquoketa River - Fayette-Clayton Co. line to Hwy. 3</p>

HQR	<p>Turkey River - Clayton-Fayette Co. line to Fayette-Winneshiek Co. line</p> <p>Mink Creek - Clayton-Fayette Co. line to W. line S15, T93N, R7W, Fayette Co.</p> <p>Bear Creek - Mouth to W. line S6, T92N, R7W, Fayette Co.</p> <p>Grannis Creek - Mouth to W. line S36, T93N, R8W, Fayette Co.</p> <p>Unnamed Creek (aka Glovers Cr.) - Mouth to W. line S15, T94N, R8W, Fayette Co.</p>
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Greene

HQR	<p>North Raccoon River - Entire length in Co.</p>
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Guthrie

HQR	<p>Middle Raccoon River - Dallas-Guthrie Co. line to Lake Panorama Dam</p> <p>Lake Panorama</p>
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Hamilton

HQR	<p>Boone River - Webster-Hamilton Co. line to confluence with Brewers Creek</p> <p>South Skunk River - Story-Hamilton Co. line to Drainage Ditch 71 (S11, T86N, R24W)</p>
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Hardin

HQR	<p>Iowa River - Marshall-Hardin Co. line to E. corporate limits, Iowa Falls (S20, T89N, R20W)</p>
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Harrison

HQR	<p>DeSoto Bend</p>
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Henry

HQR	<p>Skunk River - Henry Co. Rd. (S3, T71N, R7W) to Henry-Jefferson Co. line</p>
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Humboldt

HQR	<p>E. Fork Des Moines River - Mouth to Humboldt - Kossuth Co. line</p>
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Howard

HQR	<p>Chialk Creek - Mouth to N. line of S36, T99N, R11W, Howard Co.</p> <p>Upper Iowa River - Winneshiek-Howard Co. line to NE1/4, S12, T100N, R13W (Howard Co.)</p> <p>Staff Creek - Mouth to W. line S 27, T100N, R14W</p> <p>Beaver Creek - Mouth to S. line S29, T100N, R13W, Howard Co.</p>
HQ	<p>Turkey River - Howard-Winneshiek Co. line to Vernon Springs (S34, T99N, R11W)</p> <p>Bohemian Creek - Winneshiek-Howard Co. line to W. line S2, T97N, R11W, Howard Co.</p>

HQ **Nichols Creek** (aka Bigalk Cr.) - Winneshiek-Howard Co. line to W. line S23, T100N, R11W, Howard Co.

Jackson

HQR **N Fork Maquoketa River** - Mouth to Jackson-Jones Co. line

Cedar Creek - Mouth to E. line of S29, T85N, R3E, Jackson Co.

Unnamed Creek - Mouth (S7, T86N, R2E) to W. line S11, T86N, R 1E, Jackson Co.

Ozark Spring Run - Mouth to spring source in center of S32, T86N, R1E, Jackson Co.

Pleasant Creek - W. line S11, T85N, R4E, to W. line S15, T85N, R4E, Jackson Co.

Maquoketa River - Deep Creek to Jones-Jackson Co. line

Brush Creek - N. line S23, T85N, R3E to N line S1, T85N, R3E, Jackson Co.

Mill Creek (aka Big Mill Creek) - Confluence with Little Mill Cr. to confluence with unnamed Cr. (S1, T86N, R3E, Jackson Co.)

Little Mill Creek - Mouth to W. line of S29, T86N, R4E, Jackson Co.

S. Fk. Big Mill Creek - Mouth to W. line of S17, T86N, R4E, Jackson Co.

Storybook Hollow - Mouth to S. line S12, T86N, R3E, Jackson Co.

Unnamed Creek - Mouth (S1, T86N, R3W) to W. line of S1, T86N, R3E, Jackson Co.

Dalton Lake

Jefferson

HQR **Skunk River** - Entire length in Jefferson Co.

Jones

HQR **Maquoketa River** - Jones-Jackson Co. line to Delaware-Jones Co. line

N Fork Maquoketa River - Jackson-Jones Co. line to confluence with White Water Creek

Wapsipinicon River - Cedar-Jones Co. line to Jones-Linn Co. line

Johnson

HQR **Iowa River** - Louisa-Johnson Co. line to northern- most point of Johnson-Washington Co. line

Cedar River - Cedar-Johnson Co. line to Johnson-Linn Co. line

Keokuk

HQR **Skunk River** - Keokuk-Washington Co. line to confluence N. & S. Skunk R.

South Skunk River - Mouth to Hwy 21 (S34, T75N, R13W, Keokuk Co.)

North Skunk River - Mouth to Keokuk-Mahaska Co. line

Kossuth

HQR **E. Fork Des Moines River** - Kossuth-Humboldt Co. line to Co. Rd. B63 (S23, T94N, R29W, Kossuth Co.)

Union Slough

Linn

HQR **Cedar River** - Johnson-Linn Co. line to Hwy 30

Wapsipinicon River - Entire length in county

Louisa

HQR **Iowa River** - Mouth to S. corporate limits Wapello (S35, T74N, R3W, Louisa Co.)

Iowa River - Confluence with Cedar River to Louisa-Johnson Co. line

Cedar River - Mouth to Louisa-Muscatine Co. line

Lucas

HQR **Chariton River** - Appanoose-Lucas Co. line to Highway 14

Mahaska

HQR **North Skunk River** - Entire length in county

Marshall

HQR **Iowa River** - Hwy 149 to confluence with Asher Creek (excluding waters in Meskwaki Settlement of the Sac Fox Tribe of the Mississippi)

Mitchell

HQR **Burr Oak Creek** - Co. Rd. T46 to N. line of S5, T98N, R16W, Mitchell Co.

Beaver Creek - Mouth to Mitchell Co. Rd A31 (N line S19, T99N, R15W, Mitchell Co.)

Rock Creek - Confluence with Goose Cr. to Hwy. 9 (N line S26, T98N, R18W, Mitchell Co.)

Wapsipinicon River - Town of McIntire to N line S20, T100N, R15W, Mitchell Co.

HQ **Spring Creek** - Mouth to N. line of S8, T97N, R16W, Mitchell Co.

Turtle Creek - Mouth to E. line of S7, T99N, R17W, Mitchell Co.

Muscatine

HQR Cedar River - Entire length in county

Palo Alto

HQR Virgin Lake

Scott

HQR Wapsipinicon River - entire length in Scott Co.

Story

HQR South Skunk River - Ames Waterworks Dam to Story-Hamilton Co. line

Warren

HQR North River - Co. Rd. R63 (S16, T77N, R24W) to Badger Cr. (S33, T77N, R25W, Warren Co.)

Washington

HQR Skunk River - Entire length in Washington Co.
Iowa River - Entire length in Washington Co.
English River - Mouth to confluence (N. line S2, T77N, R6W, Washington Co.) with Ramsey Cr.

Webster

HQR Des Moines River - Boone-Webster Co. line to W. line S15, T88N, R28W, Webster Co.
Boone River - Mouth to Webster-Hamilton Co. line

Winneshiek

HQR Yellow River - Allamakee-Winneshiek Co. line to N. Fork Yellow R. (S13, T96N, R7W, Winneshiek Co.)
Upper Iowa River - Entire length in Co.
Middle Bear Creek - Mouth to N. line S16, T100N, R7W, Winneshiek Co.
Paint Creek (aka Pine Cr.) - Mouth (Allamakee Co.) to unnamed creek (SE¼, S11, T99N, R7W, Winneshiek Co.)
Unnamed Creek - Mouth (SE¼, Sec 11, T99N, R7W) to N. line S12, T99N, R7W, Winneshiek Co.
Pine Creek - Mouth to N. line S21, T99N, R7W, Winneshiek Co.
North Canoe Creek - Mouth to N. line S2, T99N, R8W, Winneshiek Co.
Trout Creek (aka Trout River) - Mouth to confluence with Smith Cr.
Trout Creek (aka Trout Run) - Mouth to confluence with unnamed stream (S27, T98N, R8W, Winneshiek Co.)

HQR Ten Mile Creek - Mouth to confluence with Walnut Cr. (S18, T98N, R9W, Winneshiek Co.)
Unnamed Stream (aka Casey Spring) - Mouth to W. line S26, T99N, R9W, Winneshiek Co.
Dry Run Creek - Mouth to W. line S36, T98N, R9W, Winneshiek Co.
Martha Creek - Mouth to W. line S13, T99N, R10W, Winneshiek Co.
E Pine Creek - Mouth to Iowa-Minnesota State line
Pine Creek - Mouth to Iowa-Minnesota State line
Silver Creek - Mouth to N. line S26, T100N, R9W, Winneshiek Co.
Bohemian Creek - Mouth to Howard-Winneshiek Co. line
Bear Creek - N. Bear Creek to spring source S29, T100N, R7W, Winneshiek Co.
North Bear Creek - Mouth to Iowa-Minnesota State line
Canoe Creek (aka W. Canoe Cr.) - Winneshiek Co. Rd W38 to W. line of S8, T99N, R8W, Winneshiek Co.
Coon Creek - Mouth to road crossing S13, T98N, R7W, Winneshiek Co.
Smith Creek (aka Trout River) - Mouth to S. line S33, T98N, R7W, Winneshiek Co.
Twin Springs Creek - Mouth to springs in S20, T98N, R8W, Winneshiek Co.
Unnamed Stream (aka Trout Run) - mouth to S. line S27, T98N, R8W, Winneshiek Co.
Nichols Creek (aka Bigalk Cr.) - Mouth to Winneshiek-Howard Co. line
Unnamed Creek (aka Cold Water Cr.) - Mouth to N. line S31, T100N, R9W, Winneshiek Co.
Turkey River - Fayette-Winneshiek County line to Winneshiek-Howard Co. line

Worth

HQR Silver Lake
Silver Lake Marsh

Wright

HQR Elm Lake

This list was developed to assist manure applicators and applicants for a confinement feeding operation construction permit. It was current in March 2003.

If you need more information, please contact the closest DNR field office.