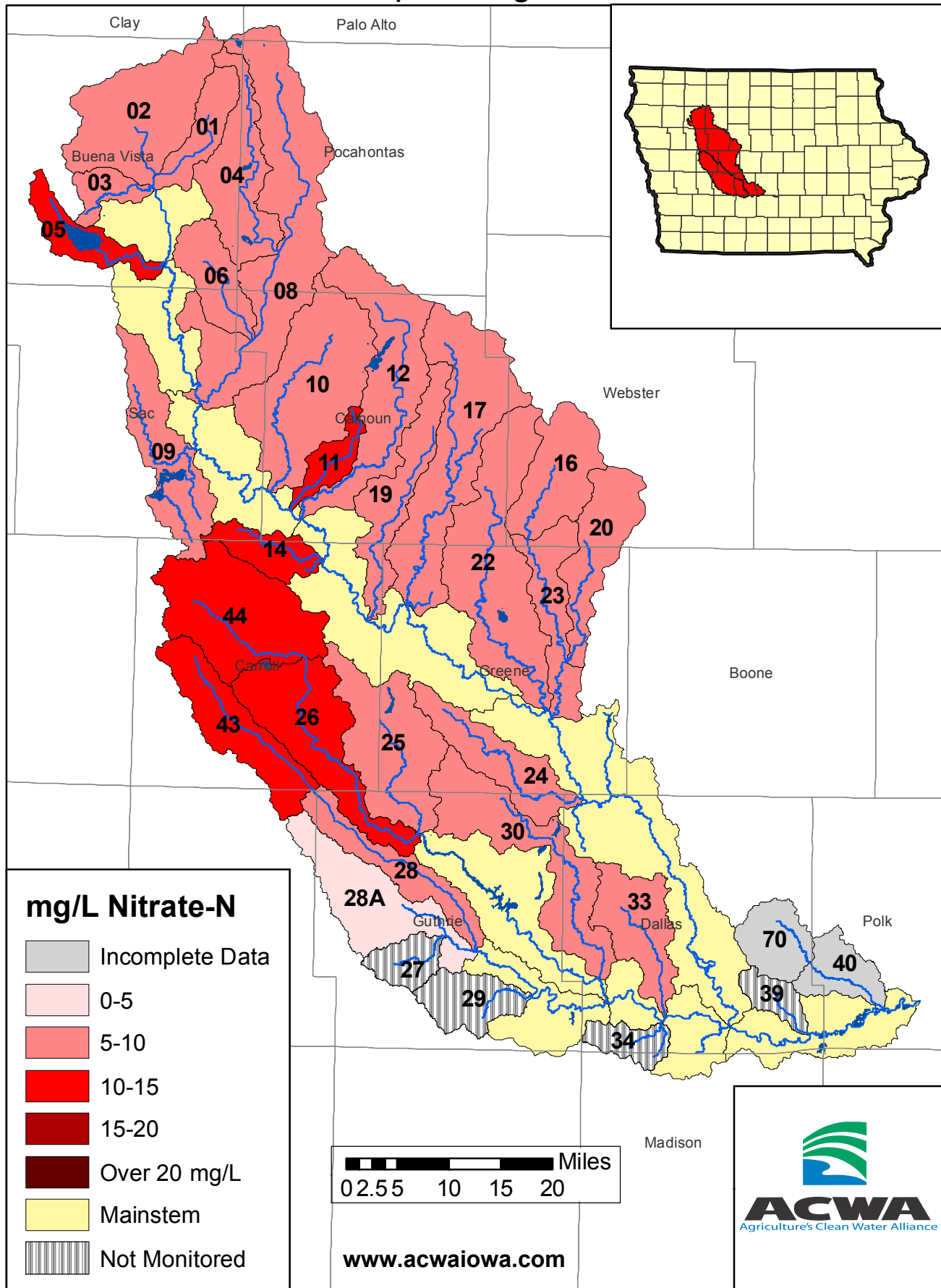


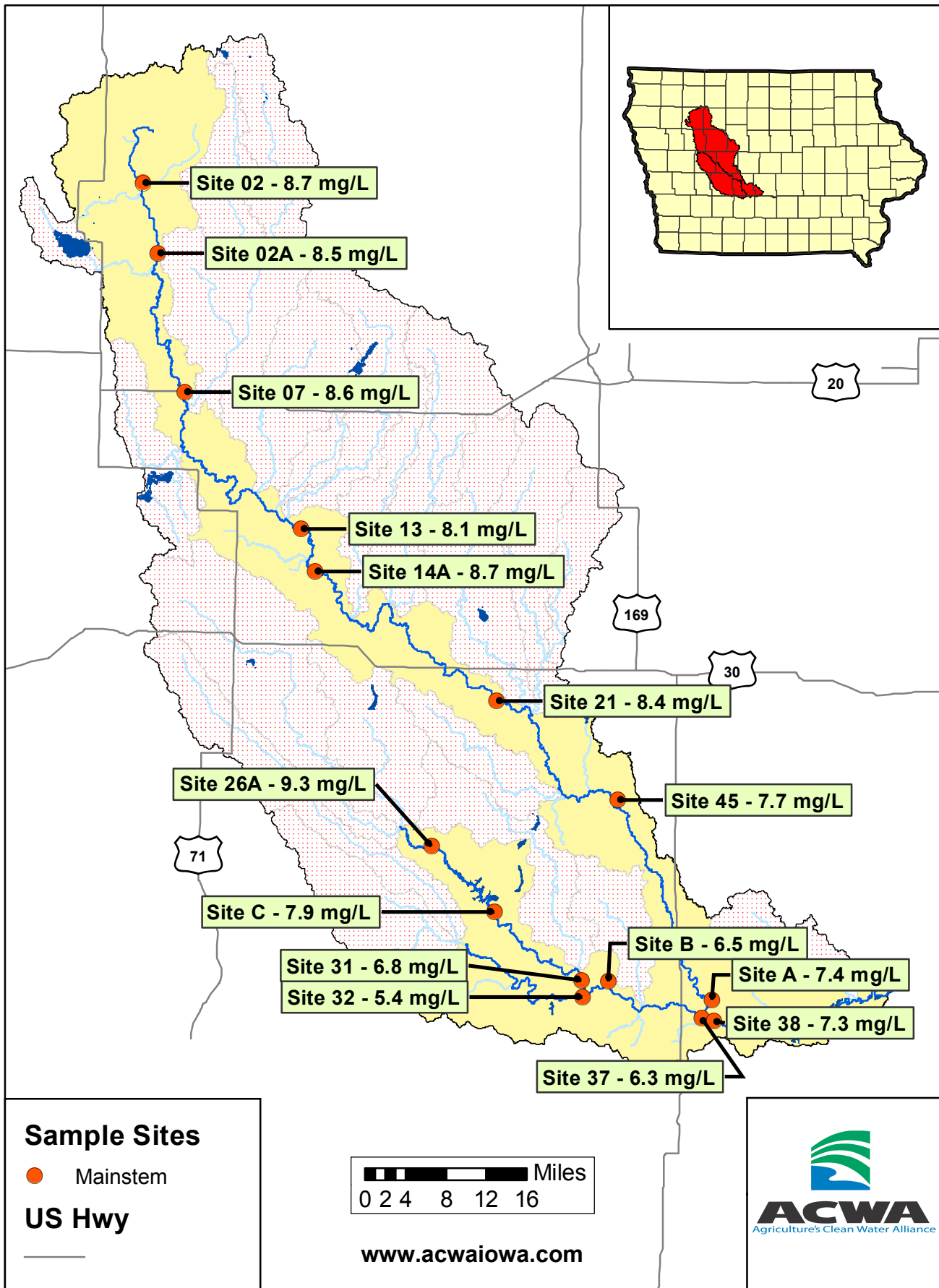
2019 Avg. Nitrate Concentrations-Raccoon River Tributaries

April - August



2019 Avg. Nitrate Concentrations-Raccoon River

April - August



2019 Average Nitrate-N Concentrations

Site ID	Stream Name	April	May	June	July	August	Annual
01	Lateral 2	7.8	9.5	12.7	11.8	6.9	9.7
02	North Raccoon River	7.1	9.5	11.9	9.7	5.2	8.7
02A	North Raccoon River	6.5	9.1	11.9	9.9	5.1	8.5
03	Poor Farm Creek	6.5	9.6	12.0	10.4	5.3	8.7
04	Little Cedar Creek	5.9	8.6	11.1	9.6	5.9	8.2
04A	Cedar Creek	6.2	8.9	11.9	9.7	5.9	8.5
05	Outlet Creek	5.7	7.5	6.8	15.9	30.4	13.3
06	Prairie Creek	6.6	8.8	12.4	9.8	10.1	9.5
07	North Raccoon River	5.9	9.0	10.8	9.9	7.5	8.6
08	Cedar Creek	6.0	9.5	12.2	9.8	5.0	8.5
09	Indian Creek	3.9	6.5	9.3	7.1	4.5	6.3
10	Camp Creek	6.8	9.8	13.2	11.1	4.2	9.0
11	Prairie Creek	7.0	10.1	13.2	12.1	9.0	10.3
12	Lake Creek	4.4	7.6	10.4	8.9	2.7	6.8
13	North Raccoon River	5.5	8.9	11.3	9.7	5.1	8.1
14	Elk Run	11.4	14.3	18.0	15.5	7.9	13.4
14A	North Raccoon River	6.3	9.5	12.0	9.9	5.8	8.7
16	West Buttrick Creek	5.9	8.7	11.6	9.0	2.3	7.5
17	Cedar Creek	5.1	8.3	11.1	9.4	3.6	7.5
19	Purgatory Creek	5.0	7.8	10.4	9.5	3.6	7.3
20	East Buttrick Creek	4.6	7.2	9.9	7.8	1.8	6.2
21 +	North Raccoon River	6.0	9.2	11.4	10.0	5.5	8.4
22	Hardin Creek	5.5	8.3	11.0	9.3	1.9	7.2
23	Buttrick Creek	4.9	7.8	10.5	7.9	1.9	6.6
24	Greenbrier Creek	5.1	7.3	10.5	8.6	2.5	6.8
25	Willow Creek	6.1	8.8	10.6	7.7	2.0	7.0
26	Middle Raccoon River	7.9	11.7	13.6	12.2	7.9	10.6
26A	Middle Raccoon River	7.2	9.5	12.8	11.0	6.3	9.3
28	Brushy Creek	6.6	8.0	9.8	10.2	7.6	8.5
28A	South Raccoon River	3.6	4.3	5.3	5.0	4.1	4.5
30	Mosquito Creek	5.7	7.7	11.0	8.3	1.5	6.8
31	Middle Raccoon River	4.6	6.8	9.9	8.4	4.3	6.8
32	South Raccoon River	3.6	4.4	6.7	7.2	5.1	5.4
33	Panther Creek	8.1	9.9	14.2	10.0	2.9	9.0

Mainstem

All concentrations in mg/L, which is the same as ppm

+ Site data provided by Iowa Water Quality Information System (<https://iwqis.iowawis.org/>)



ACWA
Agriculture's Clean Water Alliance

www.acwaiowa.com

2019 Average Nitrate-N Concentrations

Site ID	Stream Name	April	May	June	July	August	Annual
37	South Raccoon River	4.4	5.6	9.6	7.8	4.1	6.3
38 +	Raccoon River	5.4	7.5	10.3	9.0	4.4	7.3
40 \$	Walnut Creek	1.6		7.1	2.9	0.2	
42A	Brushy Creek	11.3	13.0	14.6	14.4	10.8	12.8
42B	Brushy Creek	12.4	14.5	16.1	16.0	13.5	14.5
43	Brushy Creek	9.8	11.8	13.6	13.0	11.2	11.9
44	Middle Raccoon River	8.7	10.8	13.4	12.7	10.6	11.2
45	North Raccoon River	5.6	8.4	11.1	9.4	4.0	7.7
60	Swan Lake Branch	9.4	11.0	15.4	11.9	1.4	9.8
61	Elm Branch	10.1	11.5	15.5	13.5	4.6	11.0
70 \$	Walnut Creek	3.6		10.5	6.3	0.8	
A	North Raccoon River	5.4	7.9	10.5	9.3	3.9	7.4
B +	South Raccoon River	4.6	6.3	9.4	7.1	5.4	6.6
C +	Middle Raccoon River	5.9	6.1	10.2	9.6		7.9
WRR7	Middle Raccoon River	8.3	11.6	13.7	12.7	7.9	10.8

Mainstem

All concentrations in mg/L, which is the same as ppm

No Data

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Site data provided by Iowa Water Quality Information System (<https://iwqis.iowawis.org/>)

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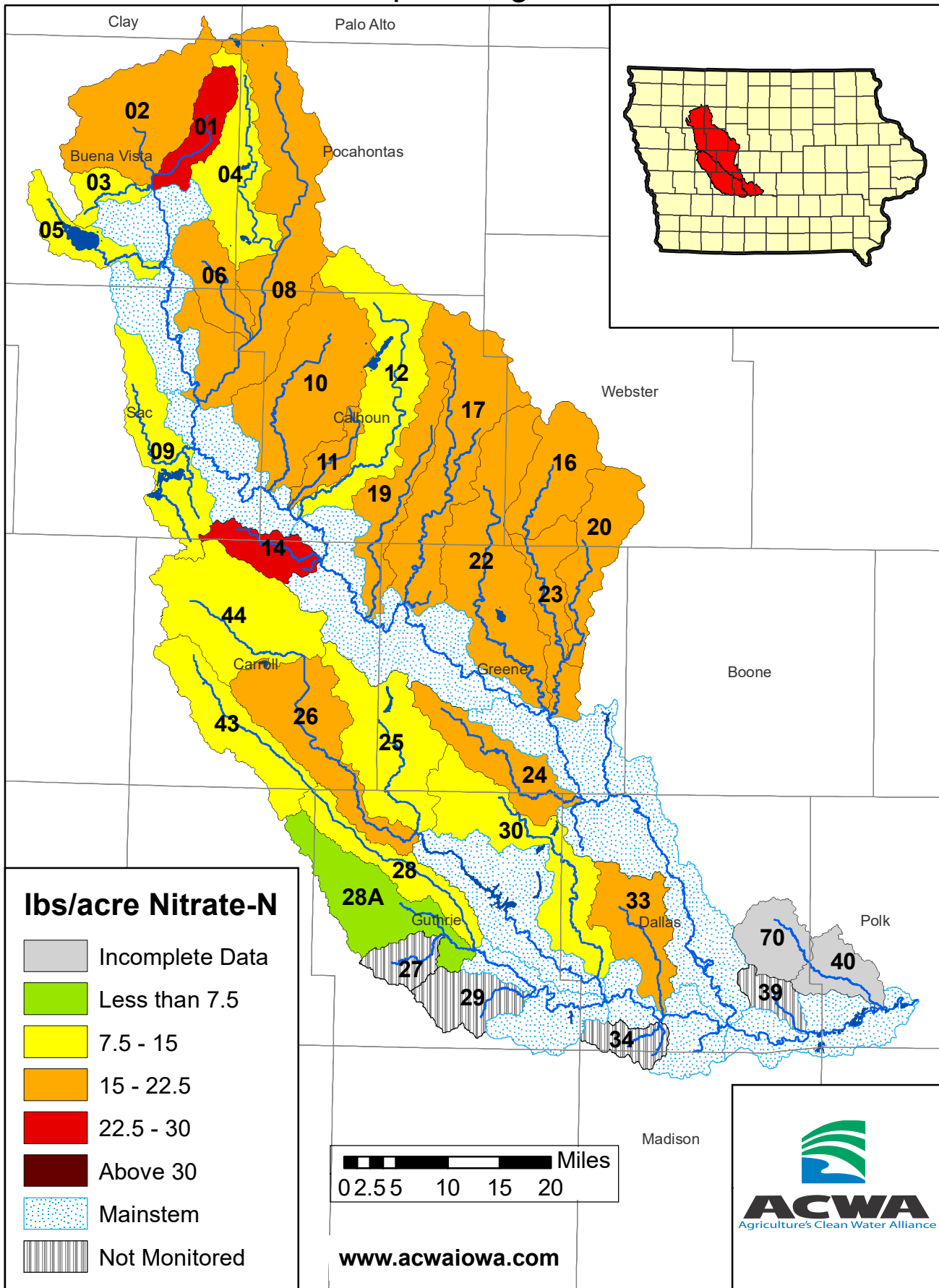
Site data provided by Drake University Dept. of Environmental Science and Sustainability



ACWA
Agriculture's Clean Water Alliance

2019 Estimated Nitrate Yields-Raccoon River Tributaries

April - August



2019 April - August Nitrate-N Summary

Site_Id	Stream_Name	Flow-Weighted Concentration (mg/L)	Precipitation (in)	Estimated Water Yield (in)	Estimated N Yield (Pounds/acre)
01	Lateral 2	10.1	24.6	11.2	25.8
02	North Raccoon River	9.4	21.2	7.8	16.7
02A	North Raccoon River	9.2	22.7	8.6	18.0
03	Poor Farm Creek	9.4	23.2	6.2	13.2
04	Little Cedar Creek	8.6	26.1	7.1	13.9
04A	Cedar Creek	9.0	25.8	9.3	19.1
05	Outlet Creek	9.5	24.9	6.9	14.9
06	Prairie Creek	9.4	24.9	9.4	19.9
07	North Raccoon River	8.8	23.5	8.9	17.7
08	Cedar Creek	9.2	25.3	9.6	20.1
09	Indian Creek	6.6	24.0	7.3	11.0
10	Camp Creek	10.2	23.7	8.7	20.0
11	Prairie Creek	10.7	24.2	7.9	19.2
12	Lake Creek	7.8	22.9	8.3	14.7
13	North Raccoon River	8.8	24.1	11.1	22.3
14	Elk Run	14.7	23.2	7.8	26.1
14A	North Raccoon River	9.5	24.0	11.0	23.6
16	West Buttrick Creek	8.9	20.5	10.8	21.8
17	Cedar Creek	8.5	22.1	8.7	16.8
19	Purgatory Creek	8.1	22.0	9.1	16.9
20	East Buttrick Creek	7.4	20.9	9.6	16.2
21 +	North Raccoon River	9.3	23.6	9.6	20.2
22	Hardin Creek	8.4	21.7	10.7	20.4
23	Buttrick Creek	7.9	20.8	11.2	19.9
24	Greenbrier Creek	7.8	19.7	10.2	18.1
25	Willow Creek	8.3	20.3	6.8	12.8
26	Middle Raccoon River	11.3	22.3	6.2	15.9
26A	Middle Raccoon River	9.9	21.6	6.1	13.7
28	Brushy Creek	8.5	22.4	6.2	11.8
28A	South Raccoon River	4.5	22.0	6.6	6.7
30	Mosquito Creek	7.6	20.5	6.7	11.6
31	Middle Raccoon River	7.2	21.2	7.3	12.0
32	South Raccoon River	5.3	22.2	6.8	8.2
33	Panther Creek	10.1	21.8	6.9	15.7

Mainstem

All concentrations in mg/L, which is the same as ppm

+

Site data provided by Iowa Water Quality Information System (<https://iwqis.iowawis.org/>)



2019 April - August Nitrate-N Summary

Site_Id	Stream_Name	Flow-Weighted Concentration (mg/L)	Precipitation (in)	Estimated Water Yield (in)	Estimated N Yield (Pounds/acre)
37	South Raccoon River	6.5	21.7	7.6	11.3
38 +	Raccoon River	8.0	22.4	7.8	14.1
40 \$	Walnut Creek		21.0	10.4	
42A	Brushy Creek	13.1	22.8	5.5	16.1
42B	Brushy Creek	14.7	22.0	5.2	17.4
43	Brushy Creek	12.0	23.2	5.5	15.0
44	Middle Raccoon River	11.4	22.6	4.6	11.8
45	North Raccoon River	8.6	22.8	11.4	22.3
60	Swan Lake Branch	11.6	20.3	7.7	20.4
61	Elm Branch	12.4	20.1	8.1	22.6
70 \$	Walnut Creek		21.4	6.5	
A	North Raccoon River	8.1	22.8	11.6	21.4
B +	South Raccoon River	6.8	21.6	5.9	9.1
C +	Middle Raccoon River	7.7	21.4	5.7	9.9
WRR7	Middle Raccoon River	11.5	22.4	5.4	13.9

Mainstem

All concentrations in mg/L, which is the same as ppm

No Data

+

Site data provided by Iowa Water Quality Information System (<https://iwqis.iowawis.org/>)

\$

Site data provided by Drake University Dept. of Environmental Science and Sustainability

