6 Capacity

Changing climate conditions will have a number of potential impacts on agriculture. Farmers have differing adaptive capacities to adjust and moderate potential damages or take advantage of opportunities as conditions change. Farmer ability to cope is based on their current situation, access to data, information and technology and their confidence, ability and skills to turn data into useable information about how to best respond to weather-related threats. Further, perceptions about uncertainty, the vulnerably of their farm enterprise, and access to resources including crop insurance and other programs can also affect capacity to respond to perceived risks and hazards.

Five survey items measured farmers' self-rated capacity to cope with the potential impacts of climate change on a five-point agreement scale from strongly disagree (1) to strongly agree (5). The items were preceded by the text, "given what you believe to be true about the potential impacts of climate change on agriculture in the Corn Belt, please provide your opinions on the following statements."

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Table 7. Perceived capacity[1] to deal with the potential impact of climate change, percent agree or strongly agree (n = 4,778)

Watershed (HUC6)	Q19A[a]	Q19B[b]	Q19E[e]	Q19F[f]	Q19H[h]
Full Weighted Sample	48.4	45.0	30.9	32.6	27.2
Loup	50.0	41.6	23.4	18.2	26.6
Middle Platte	54.3	45.7	29.8	29.8	31.8
Elkhorn	50.0	39.6	31.7	30.5	25.0
Big Blue	49.7	44.9	29.7	30.8	26.5
Lower Platte	43.5	45.3	24.2	30.4	23.0
Big Sioux	45.9	42.1	31.7	28.4	26.8
Missouri-Little Sioux	45.3	44.8	29.6	33.2	29.2
Missouri-Nishnabotna	40.6	39.3	25.0	30.8	21.9
Minnesota	49.0	40.5	29.5	35.4	30.4
Des Moines	46.0	45.6	31.7	36.3	25.9
Iowa	49.6	42.7	29.4	31.1	22.2
Black Root	43.0	38.0	24.4	27.3	25.2
Skunk Wapsipinicon	45.5	48.5	30.0	33.5	27.5
Maquoketa Plum	42.4	37.7	31.0	32.2	26.7
Lower Illinois	48.4	49.2	28.7	35.3	23.4
Rock	42.5	37.8	24.7	24.7	27.4
Kaskaskia	40.6	39.1	26.9	30.0	22.3
Upper Illinois	44.9	41.9	29.9	27.4	22.7
Wabash	45.2	43.5	33.5	27.2	23.9
Patoka-White	35.3	33.8	24.4	21.4	18.4
Southeastern Lake Michigan	48.5	42.0	29.9	21.7	29.9
Western Lake Erie	40.6	35.4	27.6	32.3	21.7

[1]Measured by percent agreement (agree or strongly agree) on a 5-point scale.
[a]I have the knowledge and technical skill to deal with any weather-related threats to the viability of my farm operation.
[b]I have the financial capacity to deal with any weather-related threats to the viability of my farm operation.
[e]Climate change is not a big issue because human ingenuity will enable us to adapt to changes.
[f]Crop insurance and other programs will protect the viability of my farm operation regardless of weather.
[h]I am concerned that available best management practice technologies are not effective enough to protect the land I farm from the impacts of climate change.

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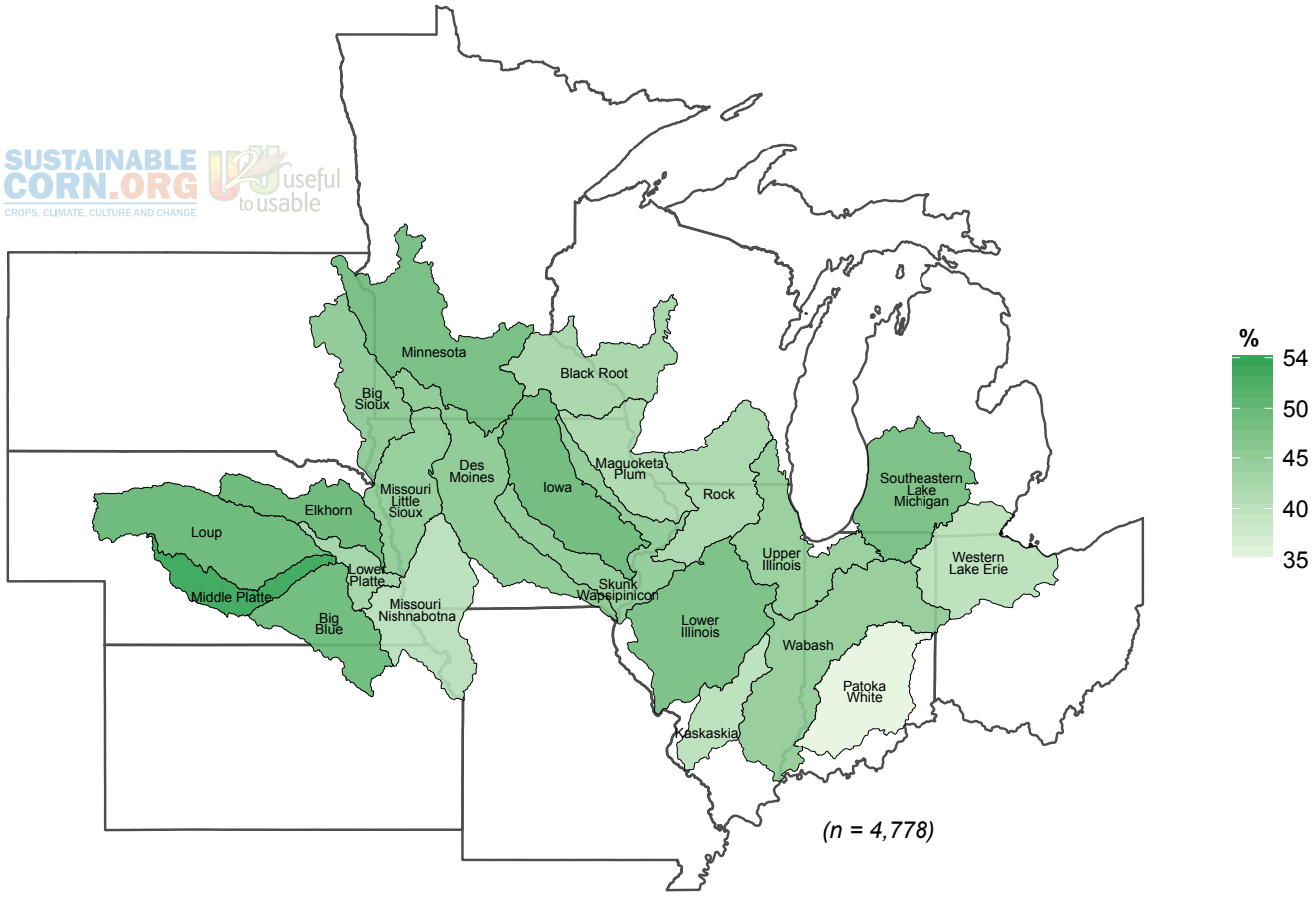

Map 43. Have the knowledge and technical skill to deal with any weather-related threats to the viability of my farm operation (Q19A), percent agree or strongly agree.

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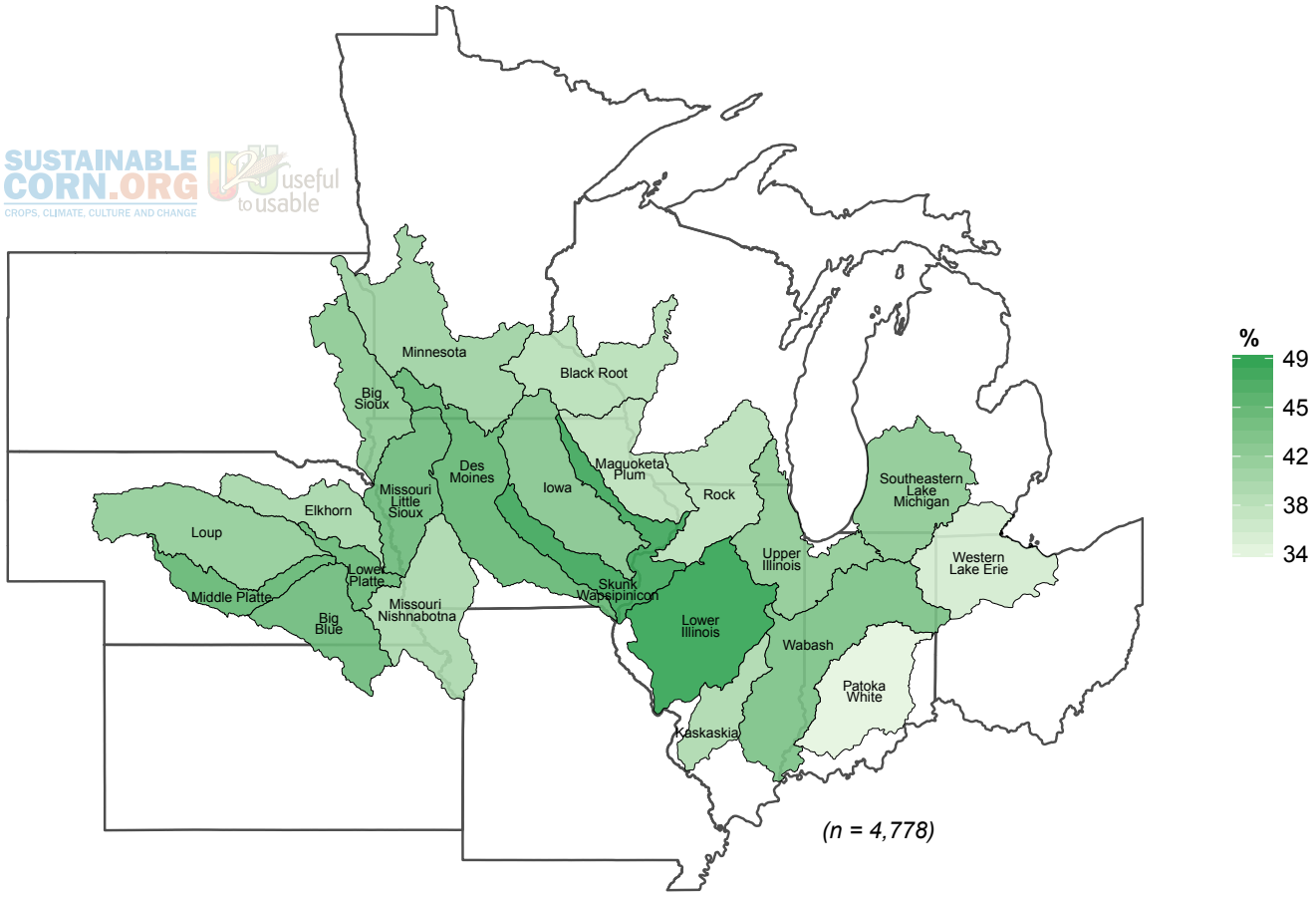

Map 44. Have the financial capacity to deal with any weather-related threats to the viability of my farm operation (Q19B), percent agree or strongly agree.

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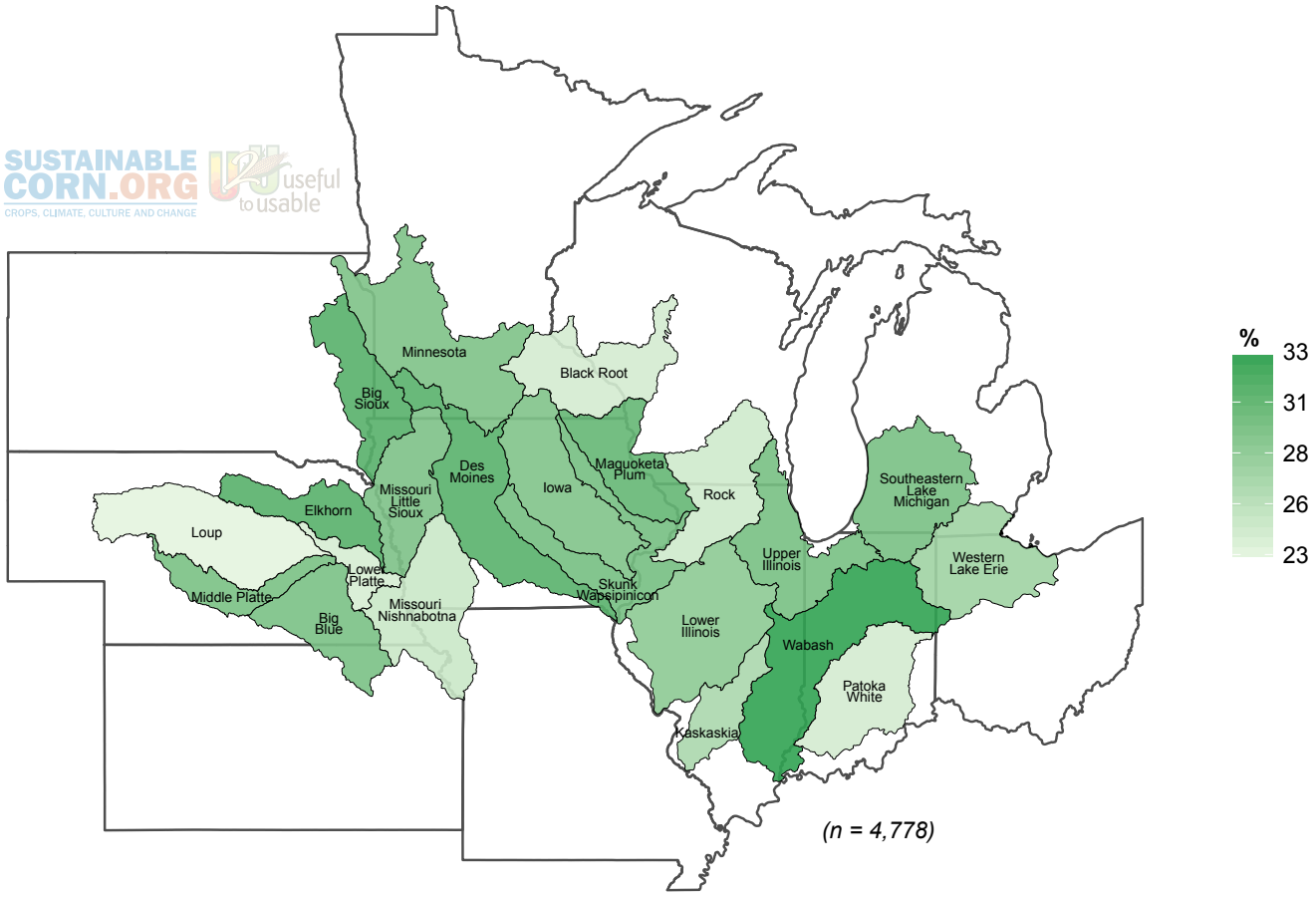

Map 45. Climate change is not a big issue because human ingenuity will enable us to adapt to changes (Q19E), percent agree or strongly agree.

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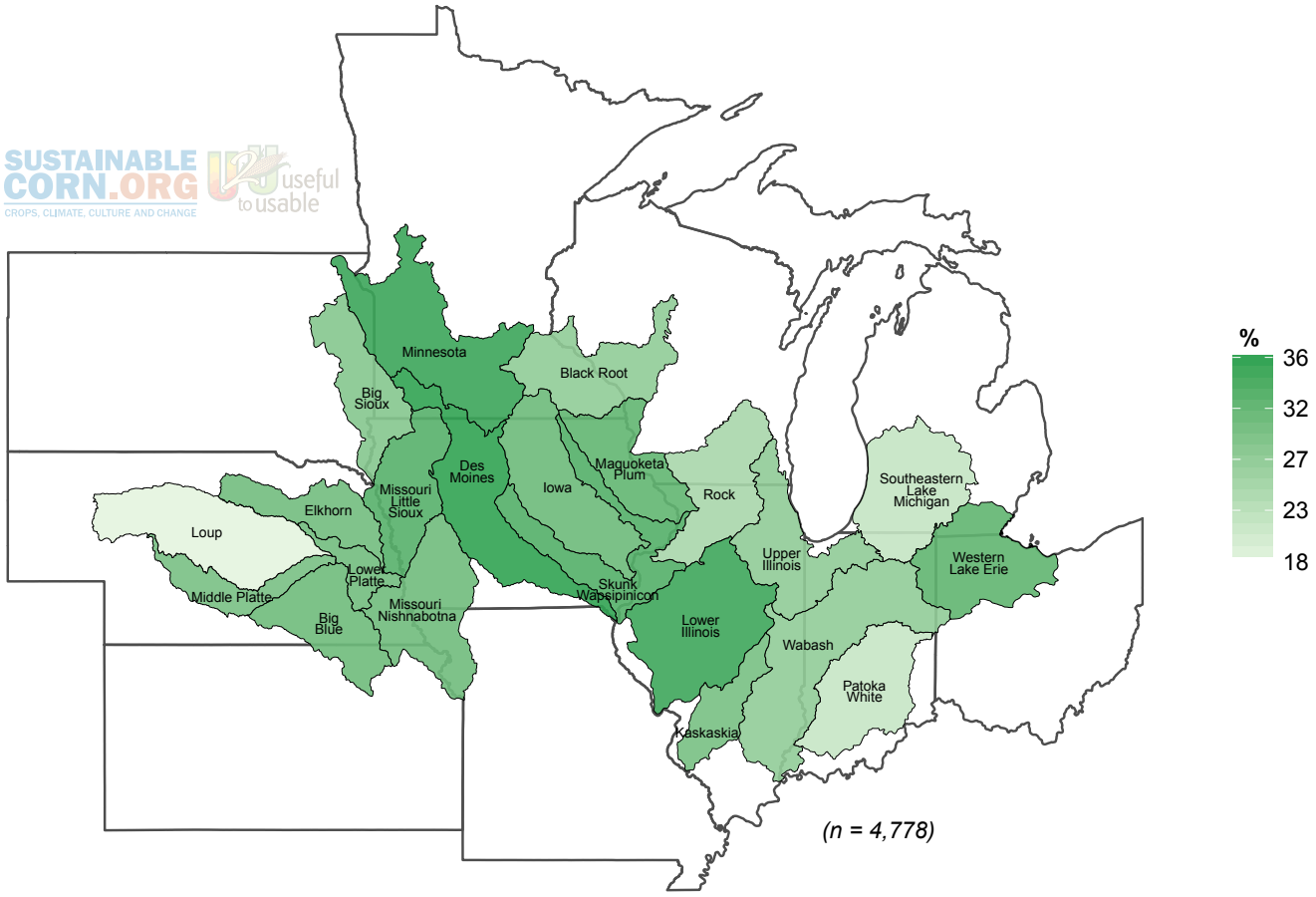

Map 46. Crop insurance and other programs will protect the viability of my farm operation regardless of weather (Q19F), percent agree or strongly agree.

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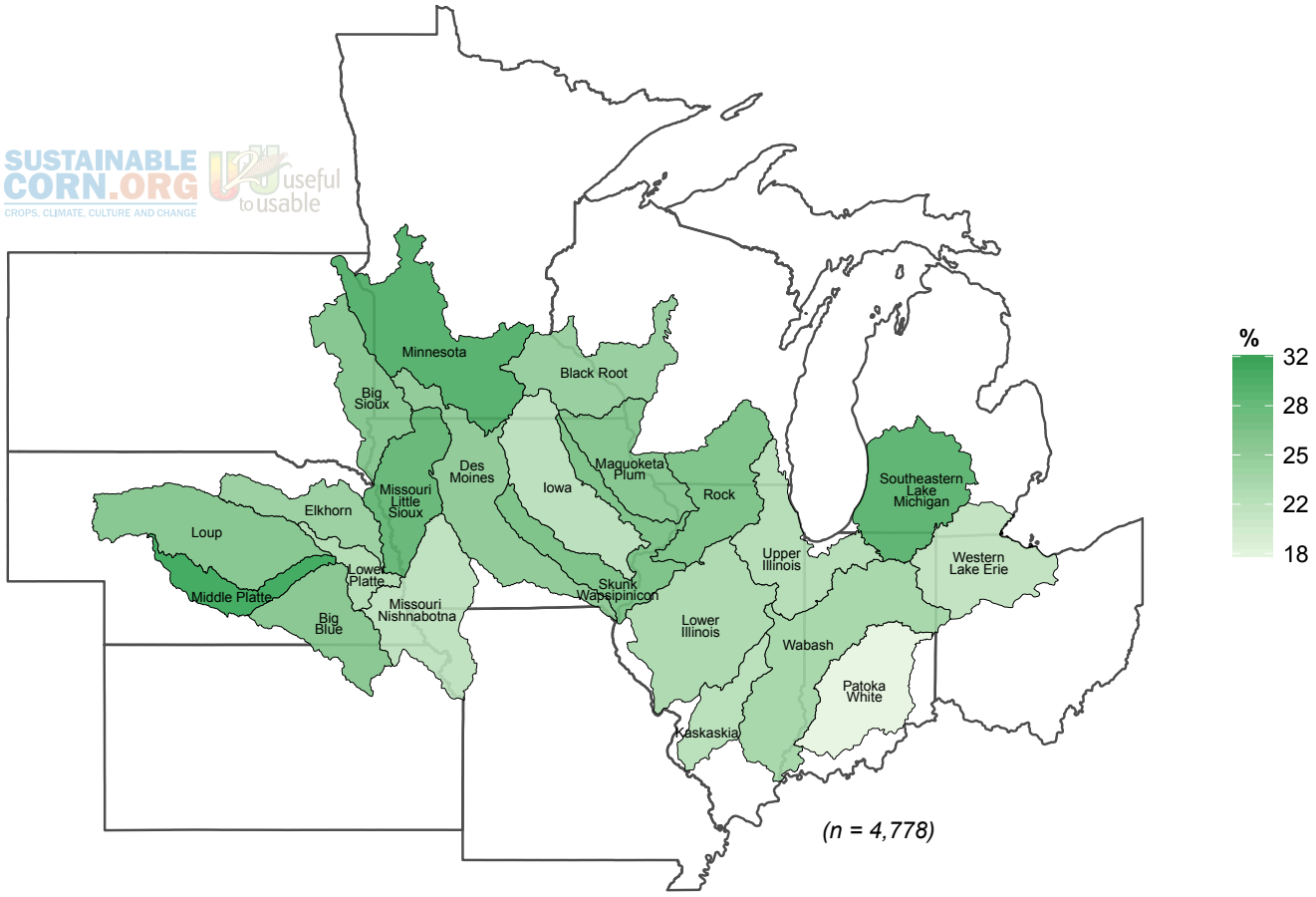

Map 47. I am concerned that available best management practice technologies are not effective enough to protect the land I farm from the impacts of climate change (Q19H), percent agree or strongly agree.

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