Central US is now getting worst of the drought. Corn crops are stressed, rivers are running low

June 29 2023, by Jim Salter

This photo provided by Mike Shane shows Shane as he stands in his corn field near Peoria, Ill., Tuesday, June 27, 2023. By now, the corn stalks should be 10 feet high. Instead, they're barely up to Shane's waist. Illinois and other corn-growing states in the central U.S. have been hit hard by drought, prompting concerns that the crop will be hurt this year. Credit: Mack Foster/Mike Shane via AP

Mike Shane's Illinois farm got a nice soaking on May 8, shortly after he planted his corn crop. Since then, rain has been hard to come by.

Plenty of storms have ventured close only to fizzle out before making it to Shane's 200-acre spread near Peoria.

"It comes across the Mississippi River and then just disappears," Shane, 47, said. "My corn looks absolutely terrible right now." Without substantial rain soon, "I just don't see any hope for it," he said.

Heavy rain over the winter eased the drought in the West, but now the middle of the country is extraordinarily dry. Crops are stressed, rivers are running low, and cities and towns are anxiously hoping for a break in the weather.

Experts say the drought in the central U.S. is the worst since at least 2012, and in some areas, is drawing comparisons to the 1988 drought that devastated corn, wheat and soybean crops. This year, although temperatures have been generally mild through the spring and early days of summer, rainfall has been sorely lacking.

The U.S. Drought Monitor, operated by the federal government and the National Drought Mitigation Center at the University of Nebraska-Lincoln, reports that nearly half of Kansas is in either extreme or exceptional drought condition—the highest drought designation. More than a quarter of Nebraska is in extreme drought, and 13% is in exceptional drought. Arid conditions permeate Minnesota, Iowa, Wisconsin, Michigan, Indiana, Missouri and Kentucky.

The frequency and intensity of droughts and rainfall are increasing due to burning fossil fuels and other human activity that releases greenhouse

gases, according to data from a pair of satellites used to measure changes in Earth's water storage. The study was published in March in the journal Nature Water.

Adam Hartman, a meteorologist at the National Oceanic and Atmospheric Administration's Climate Prediction Center, said some parts of the central U.S. have been experiencing extreme drought since the winter. In other states, "flash droughts" have popped up over the past 2-3 months.

"As a result you've see drastic losses in topsoil, subsoil moisture," Hartman said. "We've seen ground water levels start to lower as well. We've seen stream flows start to decline."

Crops are feeling the impact. The U.S. Department of Agriculture now rates only half of the U.S. corn crop as good or excellent—the lowest percentage since 1988. Nearly two-thirds of the nation's corn-growing areas are in drought.

"That gives us some indicator that we're seeing widespread stress on those crops throughout the Corn Belt," said Krista Swanson, an economist for the National Corn Growers Association.

If rains don't arrive soon, Swanson believes total yield could be down about 1 billion bushels from the original projection of 16.7 billion bushels.

That won't necessarily mean higher costs for consumers because much of the corn is used for feed, ethanol or is exported, Swanson said. The real impact is on the farmers.

"Their cost-per-acre is the same regardless of what they produce," Swanson said. "In these years where we have lower production, on the

farmer side that's a challenge."

Water levels are dipping in rivers. The Mississippi River—especially from southern Illinois to the south—is extremely low in many spots. It was just last fall that the river reached or neared record low-water marks in several places, only to bounce back to flood levels in the spring, before the latest drought-fueled decline.

Lynn Muench, a senior vice president for the American Waterways Operators, which advocates for the tugboat, towboat and barge industry, said barge capacity is being voluntarily reduced on parts of the Mississippi River.

Losing capacity is a financial setback but operators are taking it in stride, Muench said.

"We're a flexible and resilient industry so we'll keep going," he said.

Colin Wellenkamp, executive director of the Mississippi River Cities and Towns Initiative, said many communities are on edge. The drought last fall cost river communities billions of dollars in losses due to increased energy and water purification costs, lost tourism revenue, commodity losses and other hits.

"Now we're right back into drought again," Wellenkamp said. So far, impact has been minimal, "but if we don't get relief in July, that's all going to change," he said.

On Shane's 200-acre farm, corn should be standing 10 feet tall by now. It's barely to his waist. The leaves are yellowed and Shane isn't certain the ears of corn are even developing.

"If that's the case, it's worthless," he said.

But farmers aren't giving up hope. Swanson said the El Nino weather pattern that has taken hold typically means more rain and better growing conditions in the central U.S.

"We could see more favorable weather over the next two months, which could have a positive impact," she said.

But even with El Nino, Hartman noted that the seasonal outlook for the summer months projects below-normal rainfall.

"This drought could stick around for a little bit," Hartman said.