Latest forecasts through March, have put Nebraska in an area of below-normal temperatures, the Nebraska state climatologist says.

Projections for below-normal temperatures for the Pacific Northwest have expanded farther west to include the Great Plains. This area starts north of a line that extends from San Diego to Las Vegas, eastward to Dodge City, KS, and northeast through Des Moines, said Al Dutcher, state climatologist in the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln.

“This is a sharp reversal in the forecast which removed all above normal temperature projections, and a significant change from last year when average temperatures were 12-15 degrees above normal,” Dutcher

The western U.S. is still in a “mean atmospheric trough pattern,” Dutcher said, which started in December and shows no signs of breaking down. He said the radical change in the 30-day forecast has not been reflected in the 90-day forecast, which was issued in mid-February.

“I have no faith in the 90-day forecast,” he said. “Now that they have a new 30-day forecast, which is considerably less warm, my suspicion is that April and May will see more normal temperatures as well.”

Dutcher said the aggressive storm pattern the state has seen in the last few months will most likely continue through spring, but should shift to the north and impact the northern plains of North Dakota, South Dakota, Wyoming and Montana, making for favorable storm conditions this spring.

Snow pack in northern Canada along with below-normal temperatures for March should favor additional snow in the northern plains. If snow pack across southern Canada remains in place through March, it would further support cooler than normal conditions through April.

“It would also be supportive of spring thunderstorm activity across the Central Plains,” he said.

Precipitation this spring will be critical as the state is in worse shape at this time this year than it was at this time last year.

“We don’t have any deep subsoil moisture,” Dutcher said. “Areas east of a line from Hebron northeastward to West Point, we have received 4 inches of moisture since Oct. 1. The heaviest precipitation has fallen from Blair southward to Nebraska City and westward to Syracuse, where there has been 6 inches of moisture.”

With an infiltration rate of 70 percent, that would suggest 2.5 to 4 inches of moisture, Dutcher said.

Dutcher does see several more aggressive storms moving across the region with a very good opportunity for a significant moisture outbreak.

“With virtually no precipitation this fall, we need this spring months to be above normal so we can get caught up,” he said.

However, even if moisture this spring does materialize, it won’t reduce the hydrological effect from this drought any time soon.

“We can have good timed rainfall, but still have hydrological effects,” Dutcher said. “Barring an exceptionally wet summer, hydrological impacts will be with us into next winter.”

Dutcher said he recommends all producers and ranchers have a drought plan in place.

In addition, he suggests junior right water holders have some type of plan in place as water

restrictions most likely will come earlier than last year, if spring rains fail to materialize.

Snowpack across the central Rocky Mountains also is very poor this year.

“Right now it is near 75 percent of normal, but stream flow projections are currently in the range of 60 percent of normal,” Dutcher said.

However, March and April are two of the biggest months for snowfall.

“We want to see that central Rocky Mountain snow pack to recharge the South and North Platte River Basin.”

For more information about weather and crops, visit CropWatch, UNL Extension’s crop production newsletter, at cropwatch.unl.edu