



Most of today's cow-cooling technologies rely on water to effectively relieve cows during periods of heat stress. Especially in the West, this water usage would likely come from groundwater. Dairies often use groundwater for other necessary production activities such as crop irrigation and livestock drinking water.

This year already there have been media reports of deeper well drilling in California during its statewide drought. And an ongoing argument is whether dairies built on top of the Ogallala Aquifer in the central U.S. will be sustainable in the long term because of added pressure from withdrawal rates from that groundwater source.

The global groundwater stress map featured on this page puts both of those discussions into a larger context. Blue areas on the map indicate groundwater usage areas that are recharged by rain at a pace that exceeds the sources drawing on it. Yellow areas of the map indicate regions that are starting to be depleted faster than they are recharged. And red areas are groundwater-stressed regions that are already depleted and not being recharged faster than withdrawal rates. **PD**

This figure was originally published in the weekly journal Nature and has been republished with permission.

