

USDA Climate Hubs Quarterly Report

Summer 2020

The Climate Hubs reduce climate related risks to agriculture, forestry, and rural communities by working with and through USDA agencies and partners. The hubs develop and deliver science-driven strategies and tools so that USDA programs, advisors, and land managers can make informed decisions to manage risk.



Oregon, Washington, and Idaho have been experiencing drought conditions since mid-December 2019. The **Northwest Climate Hub** is partnering with NIDIS Pacific Northwest's Drought Early Warning System on bi-monthly webinars to share current climate and drought outlooks and adaptation practices. The June webinar reviewed climate conditions, outlook for the summer season, the RangeSAT tool (to aid ranchers by providing satellite information on forage quality), and wildland fire outlook. See webinar here:

<https://www.youtube.com/watch?v=B6VWCvm2ryc>

Station	Time	Temperature (F)			Precipitation (in.)
		Latest	Max	Min	
Artesia ASC	12:00	90.0	90.0	70.5	0.0
Clovis ASC	12:00	86.1	86.1	66.6	0.0
Corona Range LRC	12:00	79.0	79.0	50.3	0.0
Fallier Garcia SC	12:00	85.1	85.1	67.2	0.28
Farmington ASC	11:50	73.8	73.8	61.3	0.0
Leyendecker II PSRC	12:00	81.1	81.4	66.2	0.19
Los Lunas ASC	12:00	79.7	79.8	64.5	0.0
Mora SC	11:55	74.8	75.7	64.0	0.13
NMSU Main Campus	12:00	82.8	83.1	67.6	0.36
Tucumania ASC	12:00	86.1	87.5	68.4	0.02

NM Climate Outlook webinar

CoCoRaHS: Community Collaborative Rain, Hail, and Snow Network

- Volunteers measure precipitation once a day
- Record observations using mobile devices
- All you need is a 4"-diameter CoCoRaHS rain gauge & 10 min/day

Sign up: www.cocorahs.org

Information shared in the June NWCH/NIDIS-DEWS webinar

Climate-wise Reforestation Toolkit

- Reforestation Prioritization Tool
- Post-drought Stand Condition Summary Tool
- Climate-wise Reforestation BMPs

Logos: USDA, California Climate Hub, J. R. Meyer Institute of the Environment, Berkeley University of California



Being informed about likely precipitation and temperature conditions for the upcoming growing season is key for making critical farm and ranch management decisions. However climate outlook information is often difficult to interpret for non-climatologists and lay-users alike. The **Southwest Hub** has developed, with the NM State climatologist, the Santa Ana Pueblo and the Quivera Coalition, a monthly webinar series with climate outlooks for NM Tribes and other producers.



The **California Climate Hub** and University of California have developed new climate decision tools for forest managers and forestry decision makers. The Climate-wise Reforestation Toolkit is an on-line, web based, decision support toolkit that allows users to ID areas to consider and prioritize for reforestation, assess scale of recent tree mortality and review best management practices for climate-wise reforestation. See toolkit here: <https://www.climatehubs.usda.gov/hubs/california/tools/climate-wise-reforestation-toolkit>



The **Southern Plains Climate Hub** has produced podcasts, videos, and blogs featuring Southern Plains agricultural producers; check them out at the Southern Plains Perspective! See products here: <https://southernplainsperspective.wordpress.com/>

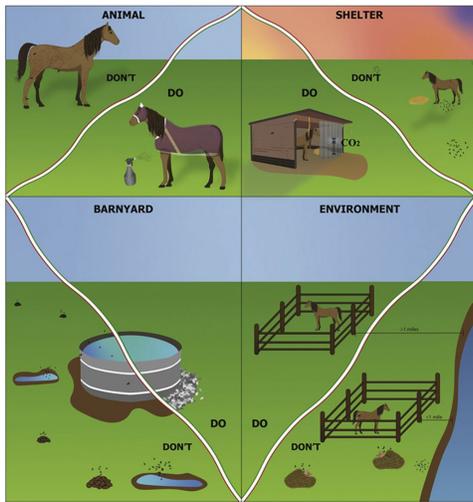


Vesicular stomatitis virus (VSV) causes painful lesions in equine, cattle, and other hooved animals. VSV affected a record number of animals in 2019 and is active again this year. A multidisciplinary team of scientists from ARS and APHIS is modeling VSV in the western U.S. **The Northern Plains Climate Hub** led a recent article in the *Journal of Equine Veterinary Science*. This article makes complex information about insect vectors of VSV more accessible to equine veterinarians and owners. It also provides practical, science-based management tips for reducing the risk of equines contracting the disease. See article here: <https://doi.org/10.1016/j.jevs.2020.103026>



Agricultural losses alone from a single hurricane can exceed one billion dollars, and the risk from hurricane impacts is projected to increase, with slower-moving, higher-category storms producing destructive winds and flooding. Southern farmers, ranchers, and foresters need to minimize their risk and recovery time if they are to remain profitable. To address this threat, and allow producers to remain resilient and productive, **the Southeast Climate Hub** and University extension have developed hurricane preparation and recovery guides for 8 states and 12 top commodities to help producers prepare for and recover from hurricane events. See guides here:

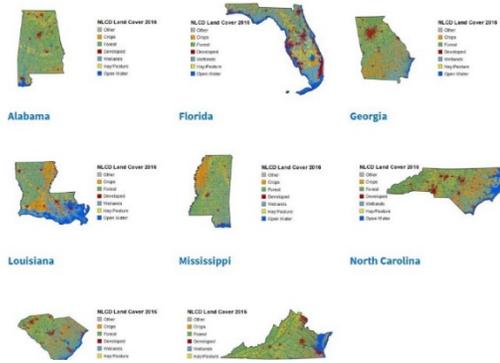
<https://www.climatehubs.usda.gov/hubs/southeast/topic/hurricane-preparation-and-recovery-southeast-us>



Proactive strategies at the animal, shelter, barnyard/premises, and environment and neighborhood level for preventing VSV infection.

State Commodity Guides

The State Commodity Guides contain hurricane preparation and recovery guidance and state-specific resource links for the most economically important agricultural commodities in each state.



State commodity hurricane preparedness and recovery guides on the Southeast Climate Hub site.



The Northern Plains Climate Hub's Grass-Cast is now available for the Great Plains and Southwest regions! An introductory webinar on the new Southwest Grass-cast is available at the Grass-Cast website. See webinar here: <https://grasscast.unl.edu/>



The Northern Forests Climate Hub and the Northern Institute of Applied Climate Science supported future-adapted tree planting efforts for the Adaptive Silviculture for Climate Change (ASCC) project site located in Mississippi National River and Recreation Area's floodplain forest. The experiment seeks to respond to climate pressures and loss of ash trees to the emerald ash borer by planting over 1,200 bareroot trees in twenty-four plots. The planting was conducted with the help of ~200 community volunteers. 10,000 feet of deer fencing was installed to protect the newly planted trees from herbivory. See project here: <https://www.adaptivesilviculture.org/project-site/mississippi-national-river-and-recreation-area>



The rush to remove obstructions and a lack of forestry culture resulted in the landfill disposal of most wood resources after hurricanes Irma and Maria hit the US Caribbean. **The Caribbean Climate Hub** developed a video to promote the use of felled wood in the development of valuable wood products. The video is available in both Spanish and English versions. The projected rise in hurricane intensity further accentuates the need for adaptive measures that value, rather than discard, these resources. See videos here: <https://youtu.be/F766uRaBkKU>



West Virginia's mountainous topography creates diverse microclimates. The Allegheny Mountains stretch along the border with Virginia trapping moisture flowing into the state from the north and west. Thin soils contribute to flooding issues. Climate change is contributing to more intense rain events and an increase in floods. **The Northeast Climate Hub**, working with WV State University partners, is coordinating The West Virginia Weather Data Project, engaging landowners in monitoring weather patterns throughout the state. The project aims for at least one farm in each county to host a weather station on farmland. The farmers communicate with the network and use the weather data to inform decision-making. See project here: <https://www.wvstateu.edu/campusnews/2020/may/wvsu-extension-service-to%2%A0host-second-information.aspx>