Under the Big Sky
e-Letter
March 2021



Photo Credit: Ryan Bernhart Meteorologist at NWS Glasgow.







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Cold Advisory for Newborn Livestock (CANL)

The calendar says Spring is here, but cold snaps, rain and snow, and gusty winds can all have an impact on newborn livestock during calving season. As calving continues across NE Montana, know that we are here to help with the Cold Advisory for Newborn Livestock (CANL). NWS Glasgow uses this criteria based on research and feedback from the ranching community for the CANL product. Online via our website, you can also find additional background information on this product. The latest CANL forecasts are updated daily.

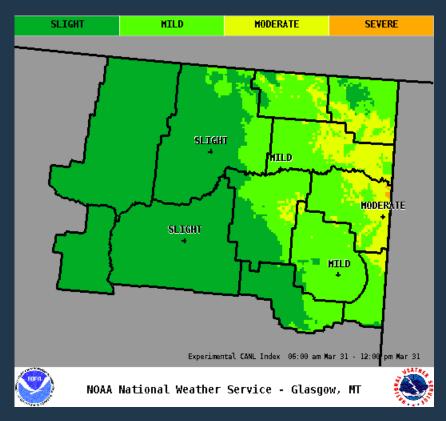


Figure 1: Here is an example of a CANL forecast valid 6am 3/31 through Noon. Note the higher impacts to the east where cold morning temperatures settled in.

Looking for Weather Observer for CoCoRaHS:

NWS Glasgow is looking for new CoCoRaHS volunteers to send in daily precipitation reports.

CoCoRaHS is a grassroots organization with a network of dedicated observers who report daily precipitation such as rain, hail, or snow from all across the country. The data



are used by meteorologists, insurance adjusters, mosquito control, and even by those in academia.

Training Announcement

If you're looking to become a new observer or looking for some refresher training, we have set one up for 4/21/2021 from 3:30-4PM MDT with emphasis on warm season observing. Details below:

When: April 21, 2021, 3:30-4:00 PM MDT

GoToMeeting Link:

https://www.gotomeet.me/NWSGlasgow/nws-glasgow-cocorahs

Dial-in Option:

United States: +1 (646) 749-3122

Access Code: 273-142-405

Participating in the CoCoRaHS program is a great way to make a difference in your community. Check out the <u>CoCoRaHS main page</u> to learn more!

30 Day Percent of Normal Precipitation (Montana)

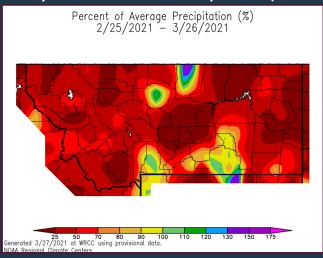


Figure 2: 30-day percent of normal precipitation across Montana.

Avg. Temp Departure from Normal (Montana)

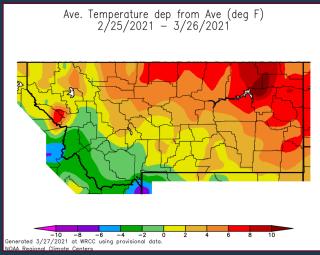


Figure 3: 30-day temperature anomalies across Montana.

Summary: Across much of MT in general, including NE MT, the last 30 days can be characterized as having been markedly drier and warmer than average. This has been contributing to growing drought concerns across the region. The exception (for temperatures) is across southwest parts of the state, where things have trended closer to normal to a couple degrees below normal.

Hydrologic Summary for February 2021 by Greg Forester, Lead Forecaster at NWS Glasgow:

It was a colder than normal month over Northeast Montana. Temperatures averaged between 6 degrees and 11 degrees below normal across the region. Glasgow averaged 10.8 degrees which was 8.5 degrees below normal.

Most locations had below normal precipitation for the month. The dry spots were Scobey with 0.04 inch, Glasgow 14 NW with 0.05 inch, and St. Marie, Opheim 12SSE, and Wolf Point with 0.06 inch. The wet spots were Zortman with 0.67 inch, Flatwillow with 0.47 inch, and Raymond with 0.25 inch. Glasgow received 0.10 inch which was 38 percent of normal.

Stream flow on the Milk, Yellowstone, Missouri, and Poplar Rivers was not available due to rivers being partly frozen.

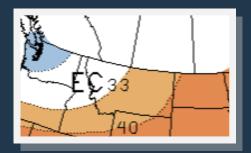
The Fort Peck Reservoir elevation fell below to 2233.2 feet during the month. The reservoir was at 79 percent of capacity and 99 percent of the mean pool.

Background Photo Credit: Greg Forrester, Lead Forecaster at NWS Glasgow.

CPC Three Month Outlook:

The Climate Prediction Center released an update of its three month outlook for temperature and precipitation for April through June back on March 18, 2021. The outlook calls for above average temperatures to be favored for much of the state. Precipitation is favored to be below normal, unfortunately, across southern parts of the state. Equal chances for above normal, below normal, or normal precipitation exist elsewhere but no strong signals exist for drought relief at this time.

The latest outlook in full detail is always available here. In addition, you can check out the Climate Prediction Center Interactive site! You can zoom in on our area, and navigate to see the climate outlook for your specific location. The pie charts on the left hand side can be particularly useful for assessing the outlook at your specific location.



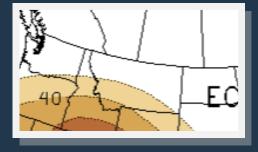
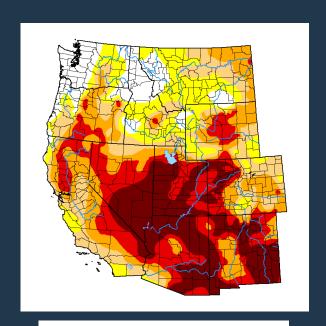
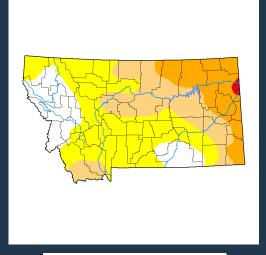


Figure 4: Climate Prediction Center three month temperature (top) and precipitation (bottom) outlook for April 2021 through June 2021.

U.S. Drought Monitor:

The latest U.S. Drought Monitor was released on Thursday April 1, 2021. Worsening drought continues. Much of NE Montana is now under moderate to severe drought, with eastern Roosevelt and eastern Richland counties in an extreme drought situation. Check out the latest <a href="https://example.com/here/beauty-state-new-montane-new





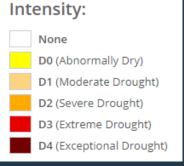


Figure 5: U.S. Drought Monitor updated April 1, 2021

<u>U.S. & Global Climate Highlights (February)</u>: The <u>U.S.</u> & <u>Global</u> climate highlights for February 2021 have been released, the latest month for which data was available. A few points for you to take home are provid-

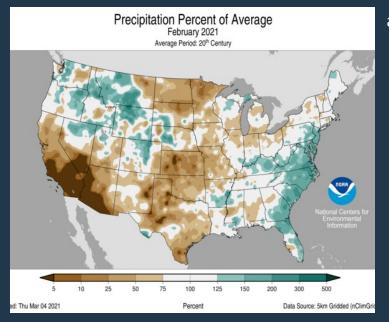


Figure 6: February 2021 Percent of Average Precipitation (U.S.).

U.S. Highlights for February 2021

ed below.

- 1) The contiguous U.S. average temperature for February 2021 was 30.6 °F, ranking as the 19th coldest.
- 2) The average February precipitation total for the contiguous U.S. came in at 1.99 inches. This ranks within the middle of the existing period of record.

Global Highlights for February 2021

- The February 2021 global land and ocean surface temperature was the 16th warmest February on record.
- 2) The February 2021 global oceans experienced the 9th warmest February on record.
- La Niña continued to be present during the month of February.

Social Media Highlight of the Month

A strong cold front pushed through NE Montana, leading to high winds on Monday 3/29/2021. Here are some of the preliminary reports.

Wind Reports (mph)					
4 NE Hodges	73	11 ENE Zortman	71		
2 WNW Jordan	70	11 SSW Landusky	68		
5 ESE Hoyt	67	4 NE Terry	66		
1 NNE Glasgow	66	1 N Navajo	65		
2 ENE Plentywood	64	8 NW Lindsay	63		
1 NE Saint Marie	63	12 WSW Nohly	63		
1 ESE Zortman	63	6 S Comertown	62		
2 ENE Plentywood	62	2 E Fort Peck	62		
14 NNW Hell Creek Rec A	62	11 N Vandalia	62		
9 SW Bredette	62	10 S Vida	61		
4 SSE Whatley	61	7 SE Devils Creek Rec A	60		
2 WSW Thoeny	59	2 WNW Malta	59		
3 ENE Wolf Point	59	1 SSW Midway	58		
1 NW Forest Park	58	2 NW Archer	58		
4 WNW Glasgow 58 data valid as of Mon 09:13 pm - NWS Glasgow					

Figure 7: Social media graphic depicting high wind reports on Monday 3/29 following a cold frontal passage.

Links You May Like:

ENSO Update

Spring Outlook: Drought Expansion

Winter Outlook: A Look Back

Climate Impact: Antarctic Sea Ice

COOP Precipitation Data (*Preliminary* February 2021)

Station	Precipitation	Location
BAYM8	0.14	Baylor
BRDM8	0.13	Bredette
BTNM8	M	Brockton 17 N
BKNM8	0.13	Brockton 20 S
BKYM8	0.05	Brockway 3 WSW
BRSM8	M	Brusette
CLLM8	0.77	Carlyle 13 NW
CIRM8	0.17	Circle
CHNM8	0.07	Cohagen
COM8	0.21	Cohagen 22 SE
CNTM8	0.12	Content 3 SSE
CULM8	0.08	Culbertson
DSNM8	M	Dodson 11 N
FLTM8	0.47	Flatwillow 4 ENE
FPKM8	0.15	Fort Peck PP
GLAM8	0.05	Glasgow 14 NW
GGWM8	0.10	Glasgow WFO
GGSM8	0.31	Glasgow 46 SW
GNDM8	0.08	Glendive WTP
HRBM8	M	Harb
HINM8	0.02	Hinsdale 4 SW
HNSM8	0.07	Hinsdale 21 SW
HOMM8	0.07	Homestead 5 SE
HOYM8	0.16	Hoyt
JORM8	M	Jordan
LNDM8	0.15	Lindsay
MLAM8	0.11	Malta
MLTM8	0.12	Malta 7 E
MTAM8	0.16	Malta 35 S

Station	Precipitation	Location
MDCM8	0.09	Medicine Lake 3 SE
MLDM8	0.11	Mildred 5 N
MSBM8	0.39	Mosby 4 ENE
OPNM8	0.11	Opheim 10 N
OPMM8	0.06	Opheim 12 SSE
PTYM8	0.21	Plentywood
PTWM8	0.19	Plentywood 1 NE
POGM8	0.07	Port of Morgan
RAYM8	0.25	Raymond Border Station
SAOM8	0.13	Saco 1 NNW
SMIM8	0.06	St. Marie
SAVM8	M	Savage
SCOM8	0.04	Scobey 4 NW
SDYM8	0.11	Sidney
SIDM8	0.04	Sidney 2S
TERM8	0.13	Terry
TYNM8	M	Terry 21 NNW
VIDM8	M	Vida 6 NE
WSBM8	M	Westby
WTRM8	0.03	Whitewater
WHIM8	M	Whitewater 18 NE
WBXM8	0.11	Wibaux 2 E
WTTM8	M	Winnett
WNEM8	0.28	Winnett 6 NNE
WNTM8	0.43	Winnett 8 ESE
WITM8	0.29	Winnett 12 SW
WLFM8	0.06	Wolf Point
ZRTM8	0.67	Zortman

Monthly Trivia:

Last time we asked...

During the spring flood season, we usually use the phrase "Turn Around, Don't Drown!" as part of our safety campaign each year. That's because many get caught off-guard when encountering flooded or washed out roads in their vehicles. Many individuals can underestimate how deep the water is across the road, or overestimate their ability to power through it. This leads us to the next trivia question for you to ponder: Just how much water does it take to lift a vehicle?



Answer: For starters, it takes just 6 inches of moving water to knock over the typical adult. Not much more than that, a mere 12 inches, is all it takes to carry away most cars. Believe it or not, if the water is 2 feet deep, it can carry away larger vehicles such as SUVs and trucks. It is never, ever safe to drive across flooded roads. What's more, when you encountered water covered roadways, how confident are you in your assessment on how deep that water really is? What about at night? It's best to make the smart choice: Turn Around, Don't Drown!

To learn more about flooding safety, check out this resource.

New Question: As spring and summer get underway, so does increasing recreation on Fort Peck Lake! NWS Glasgow issues many products to help keep you safe out on your adventures, such as a Lake Wind Advisory during those breezy days! Our question this month, what is the Criteria for when a Lake Wind Advisory is officially hoisted?

Find us on Facebook, Twitter and YouTube! No account needed:

<u>Facebook.com/NWSGlasgow</u> <u>Twitter.com/NWSGlasgow</u> <u>YouTube.com/NWSGlasgow</u>