



TRANSCRIPT

NOAA Monthly Climate Media Telecon

June 16, 2022

Hosted by: John Leslie, NOAA

Media advisory about briefing:

<https://www.noaa.gov/media-advisory/noaa-monthly-us-global-climate-report-call-june-16>

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Operator:

Welcome and thank you for standing by at this time, all participants are on the listen only mode until the question and answer session of today's conference. At that time to ask a question, press star one on your phone and record your name at the prompt. Today's call is being recorded. If you have any objections, you may disconnect at this time. I would now like to turn the call over to John Leslie with NOAA communications. Thank you. You may begin.

John:

Thank you so much operator. Good morning. And thank you for joining this monthly climate update call. Part of the suite of climate services. NOAA provides the government business academia and the public to support informed decision making. I'm John Leslie with NOAA communications and I'll facilitate today's call. If you have additional questions after the conclusion of today's call my colleague John Bateman, and I can both be reached by email at nesdis.pa@noaa.gov that's N E S D I S . P A @ N O A A . g o v . Today's update will feature three short presentations followed by an operator assistant question and answer session. A copy of the presentation of our speakers can be downloaded from the link in the media advisory.

John:

With that I'll introduce our speakers. The first presenter is Karen Gleason, a climatologist with NOAA's national centers for environmental information who will provide a summary of the May, 2022 U.S. and global climate report and the latest drought monitor update. Our second presenter is Victor Murphy from NOAA's national weather services, Southern region headquarters, who will provide a review of the extreme heat and record breaking high temperatures across Texas last month. And our third presenter is Brad Pew, a meteorologist at NOAA's climate prediction center, who will provide the latest El Nino, La Nina update and the U.S. Temperature precipitation drought outlook for July, August, and September. Our first speaker will be Karen.

Karen:

Thank you, John. And thanks to everyone for attending today's call. Please turn your slides to slide number two, and we'll begin with the global temperatures for May and for March through May. For the month of May, the global land and ocean temperature was 0.77 degrees Celsius, or 1.39 degrees Fahrenheit above average. This ranks as the ninth warmest May in the 143 year record. And it was the coolest May we've experienced since 2013. The map on the left shows the gridded temperature percentile rankings across the globe for the month. And on this map, we see above average temperatures, blanketing Southern and Eastern parts of North America, Northern South America, much of Africa, Western Europe, Eastern Asia, Oceania, and Australia. Parts of the Pacific Northwest in North America, Southern South America, Eastern Europe, and Southeast Asia experienced below average temperatures during the month of May. Sea surface temperatures were above average, across much of the Northern and Western Pacific parts of the Southeastern Pacific and most of the Atlantic and Indian oceans. Consistent with La Nina, sea surface temperatures were below average over much of the tropical and Southern subtropical Eastern Pacific.

Karen:

Significant events from May globally include record breaking temperatures that contributed to a hot and dry month across Southern central and Western Europe with France having its warmest and driest May on record. Extreme heat persisted throughout Pakistan and India, where Pakistan recorded its first 50 degree Celsius or 122 degree Fahrenheit temperature day during this calendar year. New Zealand had its third warmest May on record. Looking at the temperature statistics now for the March to May period, which is defined as the Northern hemisphere's meteorological spring and the Southern hemisphere's meteorological fall. The global surface temperature for this three month period was 0.8, five degrees Celsius, or 1.5 degrees Fahrenheit above average. And this ranks as the sixth highest March to May period in the 143 year record. Looking at the map on the right side of this slide, we see similar patterns of warm above average and below average temperatures across both oceans and land. And of note Asia ranked, fourth warmest and Oceania third warmest for this three month season, moving on to slide number three and our current year to date temperatures for the globe for January to May.

Karen:

We see that the global surface temperature was also 0.85 degrees Celsius, or 1.53 three degrees Fahrenheit above average. And this ranks as the sixth warmest January to May period on record, it was the fourth warmest such year to date period for Asia and the seventh warmest for Oceania. Looking at the time series plot on the right hand side of the slide, we see how 2022 year to date temperature compares with the 10 warmest years on record. And according to NCEI's global annual temperature rankings outlook, there is a 99% chance that 2022 will rank among the 10 warmest years on record, but less than a 10% chance that it will rank among the top five warmest years. Zooming in a little closer to home on slide number four, we see the temperature in precipitation statistics and associated maps for May. And for the contiguous U.S., we had an average temperature of 61.9 degrees Fahrenheit, which was 1.7 degrees Fahrenheit above the long term average. And that translates to an overall above average month.

Karen:

Looking at the temperature of percentile map on the left for May. We see it was cooler than average across the Northwest as well as the Northern Rockies. And it was warm across the Southwest, the South and the Eastern half of the contiguous U.S. Washington had its eighth coolest May on record and Texas was second warmest May. And Victor will speak a little bit to that in the coming slides, looking at the precipitation for the month, we had a total of 3.17 inches, which was a little more than a quarter of an inch above average. And that translates overall to an above average month. Looking at the map on the right hand side, we see that there was above average precipitation across the Northwest in portions of the Northern and central Plains, as well as the Ohio valley and the Eastern Gulf coast.

Karen:

It was dry from California to Texas and as well as parts of the Northeast. Arizona had its fifth driest May on record. Whereas, Washington had its eighth wettest May on record. Moving on to slide number five and our Spring season of March, April, and May we see that the average temperature for the continuous U.S. was 52.2 degrees Fahrenheit, which is 1.3 degrees Fahrenheit above average. Looking at the map on the left hand side, we see it was cool from the Pacific Northwest to the upper Midwest. And it was warm from California to the deep South and pretty much from the Mississippi river to the east coast. Rhode Island had its fourth warmest spring on record, and there were nine additional states in the south, the southeast in parts of the northeast that ranked among their top 10 warmest springs on record looking at precipitation for the continuous U.S.

Karen:

We had 8.07 inches of precipitation, which was 0.1, three inches above average. And that actually translates to a near average spring season on a whole looking at the map on the right hand side, we see it was wet across the Pacific Northwest, and from the Northern Plains to the great lakes. And from the central Plains to the Gulf coast. It was dry from California to the high Plains and also down to the Western Gulf coast. New Mexico had its sixth driest spring and North Dakota had its fourth wettest March, April and May on record. Looking at slide number six now, and our current year to date or January to may period on record, the average temperature was 44.3 degrees Fahrenheit, which is one degree Fahrenheit above average. Looking at the map on the left hand side, we see pockets of coolness across parts of the Northwest and the Northern Plains and portions of the Midwest.

Karen:

We also see warm temperatures from California to Texas and from the central Gulf coast to new England. California experienced its eighth warmest year to date on record. Looking at precipitation for this five month period. We had 11.48 inches of precipitation, which was almost an inch below average, looking at the map on the right hand side, we see that there was an abundance of moisture in the Northern Plains towards the great lakes and also from the mid Mississippi valley to the Northeast. It was dry across much of the west, the deep south in parts of the central Plains. In fact, California's currently experiencing its driest year to date period on record. Whereas, North Dakota had its fourth wettest first five months of the year on record.

Karen:

Looking now at slide number seven, we see the latest drought monitor map that was released this morning. And that indicates that about 44 and a half percent of the contiguous U.S. is currently experiencing some level of drought. This is actually just more than 9% below what it was at in early May. So, there's been a reduction of almost 10 percentage points. We did see drought severity and extent less across the Northwestern United States, as well as the Northern Rockies and across a large swathe of the extent of the plains that borders no drought to drought conditions, as well as partial portions of the Southeast. We did see drought severity increase from central California to New Mexico with those dry conditions that have persisted over the last month.

Karen:

And then outside of the continuous U.S., we saw drought expand across Puerto Rico. Specifically, moderate drought with a small pocket of severe drought. And we also saw it expand across Alaska over the last couple of weeks and the drought severity and extent lessons across the islands of Hawaii. And I just wanted to mention that according to The United States, drought monitor statistics, about 40% or more of the continuous U.S. has been in D1, which is moderate drought or worse over the last 89 straight weeks. And this is a record in the 22 year drought monitor history. And the previous record was 68 weeks, which ran from June of 2012 through October of 2013. And with that, I will hand the call over to Victor Murphy.

Victor:

Okay. Thank you Karen. Good morning, everyone looking at slide number eight, Karen did mention earlier the fact that Texas as a whole saw its second hottest May on record since 1895. Tied for that dubious honor with 2018, only 1996 was hotter. The statewide average temperature anomaly was plus 5.5 degrees Fahrenheit. Which is pretty significant when you think about it. Day after day for 31 days, we know we average five and a half degrees above normal. The map here on the right hand side, I think breaks it down into individual counties. 79 of the 254 counties in Texas saw record hot temperatures in the month of May. And those are the ones that are highlighted there in the red or the bright red color there, you can see the main, it runs from about the Texas big bend Texas hill country in central Texas Southeast towards the coast down near the Corpus Christi area and the Houston area.

Victor:

And that's where the brunt of the heat has been so far in May. The Metro areas of Houston, some very large cities been impacted by this. The Houston area, Austin Metro area, San Antonio, Corpus Christi, all those counties in which those cities are located had record heat for the month of May. The actual largest anomalies were in Kimble counties and Menard counties, which were the hill country. They had 8.5 degrees warmer than normal temperatures. The next slide shows the year to date precipitation for Texas. One of the reasons why Texas is so much, if you will, in red alert for drought concerns going forward in the summer, we had our eighth driest January one through May 31st on record. The statewide average precipitation for that period of time was 6.55 inches were about 60% of normal. The counties there that are highlighted in the darkest brown, which are nine counties. Nine counties that are continuous there in South Central Texas and the hill country.

Victor:

And those nine counties had their driest January through May on record. And that's based on the hill country, just upstream from the Austin San Antonio area. This is the area of Texas that we're very concerned about going forward as far as significant drought goes and also record heat. You can see the pattern there sort of similar to the heat. You can see the hottest areas are central Texas. And there is a swath of dryness extends Southeast where down to the coast, similar to the temperature anomaly map that we saw. This is the driest start of the year. January through May, driest since 2011. Of course, we all know that 2011 was the hottest and driest summer ever on record for state of Texas. And I believe it may have been actually the hottest summer ever for entire U.S. So, I think Oklahoma and Texas ran neck and neck for the hottest summer on record there, back in 2011. Coming forward and no surprise, the first half of June has seen record to near record heat across most of Texas. And that's mainly tied into the lack of precipitation. So, here's the latest U.S. Drop monitor map. This is from the release actually last week and new one came out today.

Victor:

40% of Texas is an extreme to exceptional drought. This is the highest this time of year since May of 2014. So, what eight years' time? Actually the new one came out today and 42% of the state is now an extreme to exceptional drought. And like the bottom Texas says we are clearly trending worse and we should continue to worsen into the rest of June with the next seven days. Also, looking very dry for Texas, probably actually next two weeks trending very dry. So, June is going to be a bad month for Texas, as far as heat goes. And as far as precipitation goes for lack of rainfall. And, but however, I do want to compare the same date, June 7th, 2011 to June 7th, 2022, you can see the 2011 drop monitor map is on the right. 2022 is the left. So, you can see how much worse off we were than 2011.

Victor:

So while 2011, there's a lot of talk about perhaps this summer being similar to 2011 so far, it is not quite to that level yet, although it's trending in that direction, unfortunately. But you can see the large parts of Texas are basically drought

free right now. The deep south Texas drought free. Most of East Texas drought free. And also along the red river, you can see the main area concern is the Texas panhandle and West Texas had been very wet since actually late last year... Excuse me, very dry since late last year. And the Texas hill country is really had a very, very dry year as I showed earlier. And it's been a major area of concern going forward for the first 14, 15 days of June, San Antonio has had it's hottest June on record so far.

Victor:

So, how about the impact? So let's look at some things here, the statewide reservoir levels right now, this tends to be a lagging indicator. Usually, water supplies are one of the later or last impacts be felt when you're going into a drought. So right now, 70 statewide reservoir levels for Texas are 77.4% of normal, which is about 10% less where we should be. The dash line there in brown, above it is where we should be for mid-June. It's about 85% or so, where we should be. And today we're at 77%, about 10%, eight percentage points less. About 10% less. You can see how we are considerably less than we were in 2020, and also 2021. Those are the gray lines and the blue lines above. And once again, comparing it to 2011 on this same date in 2011, the reservoir for 75% of capacity. So we're sort of down in that 2011 level, but not, not quite there yet, obviously going forward next two to four weeks will determine a lot as far as whether we get there or not. And the last slide, as far as additional impacts go, the Texas winter wheat harvest has pretty much been wrapped up. We had 40,300 bushels of output this year, which is about a 40% drop from last year, which is at 74 million bushels.

Victor:

As far as power concern goes, we set a record in the middle of May or end of May we set a record for May power usage and this past Sunday on June 12th, same day that it was 105 in San Antonio and 105 in Austin. The electrical reliability council of Texas or ERCOT for short, we did set an all-time peak hourly power usage record of almost 75,000 megawatts. And it's really unusual to be setting power demand records in June. Usually, all the power demand records take place in July or August, which is your peak months for heat. Brain flows, going back, looking at the lower Colorado river, which starts off in West Central Texas and feeds into the Highland lakes, which is just upstream from Austin. You can see the picture there on the right, that is one of the Highland lakes there on the West side of Austin. The stream flows into the Highland lakes for May, was 3% of normal. That's really astounding because extreme that May is the wettest month of the year in Texas. And usually the month of the year in which you would have your greatest inflow. So, at the time of year when you should be having your greatest inflows and you're only getting 3% of normal inflows that's cause for major concerns. So, that's about all that I have and I will hand over to Brad Pew of our climate prediction center.

Brad:

Okay. Thank you, Victor. And hello everyone. So, moving along to slide number 13 with an update on ENSO. On the left hand side is the average sea surface temperature anomalies from May 15th through June 11th. And that shows below average sea surface temperatures roughly from the Dateline eastward across the equatorial Eastern Pacific, towards South America. And these below normal sea surface temperatures along with atmospheric observations currently reflect La Nina conditions on the right hand side is the CPC IRI probabilistic ENSO forecast as of early June. And that shows that La Nina is favored to continue during July, August, September. And as you move later into the fall and winter probabilities for La Nina are close to 60% during that time period.

Brad:

Next slide, number 14, is the monthly forecast for July and that favors above normal temperatures throughout all of the Eastern U.S.. Also the Gulf coast states extending westward towards the four corners region. Only a small area of below normal temperatures are favored during July and that's limited to coastal Washington and Oregon and above normal temperatures are also favored for Western mainland Alaska and the Aleutians. There's also a small tilt towards below normal temperatures in the Alaska panhandle during July and the monthly precipitation outlook for July shows slightly

elevated probabilities for above normal precipitation along the Southeast coast and northward into the Mid-Atlantic states and Southern New England. Above normal precipitation is also favored for parts of the Southwest and much of Alaska with below normal precipitation, more likely across much of the central U.S., especially across the great Plains and middle of Mississippi valley.

Brad:

The next slide number 15 is the seasonal temperature and precipitation outlooks covering July, August, and September. So, during the three month time period, you see we're broadly favoring above normal temperatures throughout much of the country. Although there are variations in the probabilities, regionally. Above normal temperatures are most likely in New England and also the four corners region, great basin where probabilities for above normal temperatures exceed 60%. And probabilities are just slightly elevated towards above normal temperatures across parts of the central U.S. And equal chances of below, near, or above normal temperatures or forecast for parts of the Northern Plains and Pacific Northwest west.

Brad:

The seasonal precipitation outlook for July, August, September depicts, slightly elevated probabilities for above normal precipitation for parts of the Eastern U.S., the Southwest, and also parts of Alaska. With below normal precipitation more likely across much of the Great Plains, Western Corn Belt, upper Mississippi valley, and Northern to Central Rockies.

Brad:

So, the final slide number 16 is the seasonal drought outlook, which is valid through the end of September. And the seasonal drought outlook calls for improving conditions for the Southwest due to a likely robust start to the monsoon. That's also consistent with the seasonal precipitation outlook and July, August, September is a wet time of year across Arizona and New Mexico. Southern Arizona typically receives more than half of its annual precipitation during that three month time period, July, August, September. It is important to note though, that long term drought impacts such as low reservoir levels may continue. Persistence is likely for the remainder of the west, due in part to a drier climatology during the summer.

Brad:

And as you move east towards the Plains and Mississippi valley, due to the ongoing heat wave and a likely continuation of the excessive heat through the end of June, rapidly developing drought is expected for parts of the central U.S. where there are currently short term precipitation deficits. And for the Southeast drought may expand during the next few weeks, what we are expecting either improvement or removal of drought being the most likely outcome by the end of September. Drought removal is also favored for Puerto Rico. By the end of September, conversely drought is forecast to either persist or develop across Hawaii and persistence is favored for Southwestern Alaska with removal, more likely for central interior parts of Alaska. And with that, I'll pass it back to John now.

John:

Thank you. Thank you so much, Brad. Well, we will now take a few questions, specific questions from the audience. Please be sure to identify who you would like to answer the question, if possible. Operator, please remind the audience how they can ask a question and then please queue up the first one.

Operator:

Thank you. If you'd like to ask a question, please press star one on your touchstone phone. Make sure your phone is unmuted and record your name clearly when prompted. If you need to withdraw your question, you may press star two again, to ask a question, please press star one to record your name. We'll take a moment for questions to come through. Please stand by. And I'm showing no questions in the queue at this time.

John:

Well, if there are no questions, we'll go ahead and wrap up the call. First, I want to thank all of our speakers for their time and to everyone else for participating in the conference call today. I want to end by reminding you to mark your calendar for the following upcoming event. The release of the June 2022 U.S. Climate report is scheduled for July 11 and the release of the June 2022 global climate report is scheduled for July 14. And the next monthly media climate call is scheduled for July 21st at 11:00 AM. Eastern time. Finally, an audio file of this call will be posted on the NOAA.gov media advisory site later today. If you have any further information or needs, please feel free to email me. John Leslie, my contact information is available at the top of the media advisory. This concludes today's call. Thank you very much.

Operator:

That concludes today's conference. Thank you for participating. You may disconnect at this time.

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