

TRANSCRIPT

2023 NOAA Spring Outlook Virtual Media Briefing

March 16th, 2023 at 11 a.m. EDT via GoToMeeting

Hosted by NOAA National Weather Service Public Affairs

Media advisory about briefing

NOAA to announce U.S. Spring Outlook on March 16

Hurricane Outlook news release

Spring Outlook: California drought cut by half with more relief to come

0:09

Welcome to the webinar. We have a number of reporters, still logging in, so we'll start momentarily. Thank you.

1:30

OK, good morning, and thank you for joining us today for NOAA's Announcement of the 2023 US. Spring Outlook, including predictions for temperature, precipitation, drought, and flood risk across the country.

1:45

This news conference is being recorded, so if you do not want to be recorded, please disconnect at this time.

1:52

My name is Susan Buchanan. I'm the Director of Public Affairs for NOAA's National Weather Service. You can find the news release and maps related to today's announcement at NOAA dot gov. And I would like to bring your attention to the chat box to the right of your screen where you can find a direct link to the news release.

2:13

If you have questions following this news conference, my team can be reached at NWS dot PA at NOAA dot gov, or by phone at (301) 427-9000.

The beginning of today's news conference will consist of prepared remarks from our speakers, and we'll then take questions from reporters. If you would like to ask a question during the question and answer portion of the briefing, please click the hand icon in the goto Webinar window next to your name in the attendees list that appears to the right of your screen.

2:52

NOAA experts with me today to announce the spring outlook are John Gottschalk, Chief of the Operational Branch at NOAA Climate Prediction Center, and Ed Clark, the Director of the National Water Center. Both John and Ed, are participating in today's news conference from the Operations Center at NOAA's National Water Center in Tuscaloosa, Alabama.

3:17

The National Weather Service plays a critical role in helping the nation prepare for extreme weather and climate events. The accurate and timely forecasts, along with forecast advice and interpretation interpretive services that we refer to as impact based decision support services, help the nation become more ready, resilient, and responsive to extreme events. And this will ultimately result in a more weather and climate ready nation. We also issue seasonal forecasts, like the US Spring outlook, so communities and our partners can prepare for what may come.

3:54

Our scientists at the Climate Prediction Center produce the Outlooks for Drought, along with predictions for temperature and precipitation from April through June. And the National Water Center produces the National Hydrologic Assessment or the US. Spring flood risk, which is valid April to June. And together, these NOAA produced outlooks give individuals the best possible scientific prediction for how we think the Spring will develop across the nation. And with that, I will turn it over to John Gottschalk.

4:32

Thank you, Susan. And thank you all for joining today's announcement for NOAA's Spring Outlook for 2023.

4:38

This past winter was colder than normal for the Western US, and for the Northern Plains while the winter was quite mild across the Eastern Contiguous US.

4:48

In fact, more than half of the U S saw top 10 warmest winter season on record. The warmer weather also contributed to well below normal snowfall for the mid atlantic and parts of the north-east.

5:01

Well, on a whole, though, total winter precipitation was above average across the country, ranking the wettest third, December through February on record.

Most of this precipitation was the result of a parade of storms from the west into the northern states.

5:17

Most notably, nearly 12 atmospheric rivers impacted the west coast over the past few months bringing astonishing amounts of rain and snow to California.

5:26

The heavy rain caused flash flooding, which led to numerous fatalities and damaged infrastructure.

5:32

Parts of the Sierra Nevada Mountains of California received near record breaking snowfall as well.

5:39

In the past seven days, two more strong, wet and warm storm systems deluge the coast and mountains in California resulting in catastrophic flooding and additional heavy mountain snow.

5:51

Yet another storm system looks to impact California early next week as well, which will only exacerbate current impacts and hamper ongoing relief efforts across the state.

6:02

The good news, the wet winter has eased the drought significantly.

6:06

In fact, drought was nearly cut in half between just early January and late February in California.

6:13

Less than 40% of the country is currently experiencing moderate to exceptional drought, compared to nearly 60% at this time last year.

6:22

This is the lowest coverage we've seen since August of 2020.

Last week, we announced that La Nina had finally come to an end after being in place for effectively more than two years.

6:32

La Nina and El Nino are climate patterns that are defined by sea surface temperature and precipitation departures from normal across the equatorial Pacific Ocean, and it can influence weather patterns for the US and globally.

6:46

And so neutral is expected to persist into the early summer months.

6:51

And so neutral when ocean temperatures and precipitation are near normal means that neither the La Nina or El Nino are likely to play a role moving through the spring.

7:02

This, along with antecedent surface conditions helps set the stage for the Spring outlook.

7:07

I'll start with our Spring drought outlook.

7:11

Drought is expected to improve further or go away completely across much of California in the Great Basin.

7:18

The spring wet season should also help to improve drought across the northern and central plains, where some areas are currently experiencing severe to exceptional drought conditions.

7:28

Severe to exceptional drought coverage also extends into parts of the Southern Plains, but is unlikely to improve much during the spring season.

7:36

With drought also expanding into parts of New Mexico.

7:39

This may bring an increased risk of wildfires to this region, particularly when high winds are present.

Across parts of the north-west U S and the Northern Rockies drought, conditions are expected to continue.

7:54

Drought may develop in parts of Washington state as well.

7:57

Near term heavy rain threats in Florida, and the normal onset of the rainy season are expected to ease or eliminate drought conditions there by the end of June.

8:08

Outside of the contiguous US.

8:10

Drought can develop this spring season across portions of Puerto Rico as well.

8:16

Looking at the Spring Temperature Outlook, warmer than normal, average, or warmer than average temperatures are favored for much of the Southern and Eastern half of the US.

8:27

The greatest chances exist from the Southern Plains to the Gulf Coast and up the Eastern seaboard.

8:32

There are also probabilities for above normal temperatures across Hawaii and Northern Alaska.

8:37

Below average, temperatures are most likely for the Central Great Basin, and the Northern Plains, for the Spring precipitation Outlook.

8:47

Below normal precipitation is most favored across the south-west US and parts of the Pacific north-west.

8:53

above normal precipitation chances are present for the Great Lakes Ohio Valley and into parts of the mid Atlantic and north-east.

That concludes my remarks, and with that, I will turn it over to Ed, who will speak about this year, Spring, flood risk, Outlook.

9:35

Thank you, John, I'm pleased to provide the 2023 national hydrologic assessment, A collaboration between the National Water Center, regional offices, and the National Weather Service River Forecast Centers.

9:46

NOAA categorizes flooding as minor, moderate, major, or record flooding.

9:51

You can see the news release for definitions of these categories, but in brief, minor flooding means that minimal or no property damage but roads may be inundated.

10:00

Moderate flooding means some inundation of structures and roads and waterways.

10:04

Major flooding means extensive inundation of structures and roads.

10:08

Record flooding is when flooding meets or exceeds historical levels.

10:13

Please be advised that this outlook is on the timescale of weeks to months, not days or hours, and localized flooding may be caused by heavy intense rainfall at any time.

10:23

This year, approximately 146 million people are at risk for flooding in their communities.

10:29

With an additional six point four million at risk for moderate flooding. There is an estimated one point four million people at risk for major flooding.

Earlier this week, near record snowpack across California, combined with heavy rainfall from the most recent atmospheric river events led to widespread flooding throughout the state.

10:48

While floodwaters in many areas are beginning to recede, minor and moderate flooding is ongoing in the Upper Sacramento Salinas River basins.

10:58

California's near record snowpack will lead to continued potential for flooding this spring, particularly if additional rainfall occurs.

11:06

There is a risk of moderate flooding for rivers and streams along the Sierra Nevada Foothills, from the Consumnes south through the Kern River drainage.

11:14

This spring, NOAA is projecting moderate to major flooding in the Upper Mississippi River Basin.

11:20

This is focused on the mainstem of the Mississippi in the Twin Cities in Minnesota. Saint Louis, Missouri.

11:26

Portions of the Red River of the North in North Dakota, and the James and Vermillion Rivers in South Dakota may experience moderate flooding this spring due to greater than normal snowpack.

11:36

Water flooding is also projected on tributaries of the Missouri River in Missouri and Illinois River in Illinois.

11:43

Additionally, moderate flooding is expected along the lower Ohio River downstream of Paducah Kentucky, to the confluence with the Mississippi.

11:51

Elsewhere, NOAA is projecting areas of minor floating throughout much of the eastern half of the Continental US, including along the main stem, lower Mississippi downstream of Cape Girardeau.

Due to the much above normal snowpack and even record conditions across California, the Great basin, and the Colorado and the Upper Snake River basins, miter flooding can be expected in these areas during the snow melt season.

12:14

In these regions, the risk of flooding may increase due to heavy rainfall and rapid warming and flash flooding or debris flows Risk is high over burn scars from recent wildfires.

12:26

For Alaska, the spring ice break up and the snow melt flood's potential is forecast to be near normal.

12:33

Additional river basins with risk of spring flooding are identified in our hydrologic assessment, which is linked in the news release on noaa dot gov.

12:42

This hydrologic assessment also provides information about the nation's critical water supply forecast for agricultural, municipal and industrial uses.

12:50

Our National Weather Service River water supply predictions this year are average too much above average over areas of California, the Great Basin, and the Colorado Basin do too well above normal snowpack.

13:03

In contrast across the Pacific north-west, current normal to below normal snowpack conditions lead to average to below average water supply forecasts.

13:13

Finally, water supply is projected to be above average across much of the eastern slope of the Rockies due to below too much below.

13:22

Normal snowpack combined with ongoing dry soil conditions.

13:27

The National Hydrologic Assessment also provides a first look at some of the major drivers influencing sommer hypoxia in the Gulf of Mexico and Chesapeake Bay.

This year's Mississippi River Basin, Flood Forecasts is anticipated to result in near normal springtime discharge of nutrients in freshwater.

13:43

In turn, this will create conditions for an average hypoxic zone of approximately 5000 square miles in the Northern Gulf of Mexico.

13:51

An average hypoxic zone, or approximately 350 square miles is projected to develop in the Chesapeake Bay.

13:59

These predictions are based on the assumption typical server conditions, such as tropical storms and or drought.

14:06

It's important to note that heavy rainfall can lead to flooding at any time.

14:09

Even in areas where the national hydrologic assessment does not project flooding, the public can determine whether their community is a flood risk area, by monitoring local flood conditions at water dot weather dot gov.

14:22

This concludes the hydrologic outlook, and with that, I'll turn it over to Susan to moderate the question and answer session.

14:29

Thank You, Ed. And before we move into the Q and A portion of the News Conference, I'd like to introduce a few additional experts we have on the line to assist in answering your questions. We have Brad Pugh, he's the Operational Drought Lead for NOAA's Climate Prediction Center. We have Tom Di Liberto, he's a Public Affairs Specialist and Climate Scientist with NOAA's Communications Office. And we have Brad Rippey, who is a meteorologist at the US. Department of Agriculture, and Brad is here to answer any questions you may have related to agriculture. We also are pleased to have Jeff Jackson join us from FEMA. Jeff is the Deputy Assistant Administrator with FEMA's Federal Flood Insurance and Mitigation Administration, and Jeff will handle any questions you might have related to FEMA and the flood Insurance program.

15:27

And we're also joined today by experts from the National Weather Service's River Forecast Centers. And their names and titles are up on the screen for you to see, in case there are any specific questions about specific river basins in the country and we'll now take your questions.

If you'd like to ask a question, please click the hand icon in the GoTo Webinar window next to your name and the attendees list that appears to the right of your screen. And my colleague, John Moore, will pop on the screen and he'll call upon each reporter who has virtually raised a hand and we'll go one at a time. Once you're called upon, you'll need to unmute yourself and please be sure to state your full name and your media affiliation before asking your question. And if you know who you're directing your question to, feel free to call out that expert as well. And if you prefer to write your question to us, you can submit a question in the question chat box, and we'll read it for you, and again, be sure to write in your full name and media affiliation, and we'll take those questions at the end. So I'd like to ask for your patients now for a moment while we get the questions lined up.

16:46

And John, if you're here, please come on the screen and go ahead and take over, thank you.

16:53

Alright, thank you Susan, and I'll be taking your questions for today.

16:56

Alright first we have Rachel Ramirez, Rachel Ramirez, I'll unmute you and allow you to answer your question also asks you to unmute yourself.

17:08

Alright can y'all hear me?

17:09

Yes, we can hear you. Thank you so much. Hi everyone. This is Rachel Ramirez, CNN, I guess, it was mentioned that the north-west and south-west will be dry or see below normal precipitation. And can folks talk about, do you think all this faucet and precipitation that's pummeling the West Coast is going to suddenly turn off again. I guess, what are your water supply concerns in the context of this outlook? And thinking about how the Metropolitan Water District of Southern California, for instance, just lifted the restrictions yesterday. But I'm also curious about the Colorado River Basin. And if I could just throw in one more question, John. And as I mentioned, that, this spring NOAA is predicting moderate to major flooding in the Upper Mississippi River Basin. Are you thinking? Maybe. That's because the northern states got some decent snow. Can you just provide some context on that sort of forecasts? Thank you.

18:15

John, I'll let you take the first question. Sure. This is John Gottschalk from the Climate Prediction Center.

18:22

With respect to the the atmospheric river events and the above average precipitation, that's been, inevitave for quite some time, both in January and now, more recently, in California. There will be one more event early next week. But

right now, our model forecast information that we have, and the other climate indicators that we're looking at, does look like that will probably shut off as we go into our early part of April.
18:47

And at that point, normal, climatological precipitation for much of California goes towards zero quite quickly. So we do think there'll be a break after this initial first storm that's coming up early next week.

19:03

So, Ms Ramirez, I think, the other questions you had, or about water supply, both in California and in the Colorado Basin. So I'll point you to Brett from the California Nevada River Forecast Center, then. Also, I'll pull Miller's with us from the Colorado Basin River Forecast Center.

19:19

Brett, maybe start with you.

19:24

Sure.

19:25

You can hear me OK, So in California, Central Valley, the Sierra Nevada Drainage, West Slope, San Joaquin River System in the southern Sierras.

19:42

All that snowpack is record level right now.

19:45

So in terms of seasonal runoff, April July, we're looking at record probably 50 to 75% chance of getting record AJ

19:54

runoff in the San Joaquin system in Northern California, Northern Sierra.

20:00

Um, drainage from Sacramento River Basin is probably going to be somewhere in the ninth maybe higher AJ runoff so probably be closer to 2017, though, not as significant in the northern part of the state, but the Southern Sierras, Is really here has record snowpack right now.

Do you want to address the Colorado Basin water supply Forecast?

20:28

I pick up, pass it over to Paul Miller. Who, the Colorado River Basin Forecast Center focal point.

20:39

Thanks. And I'm Paul Miller, service coordination hydrologist at the Colorado Basin River Forecast Center.

20:45

And though we haven't been hit as hard as California, we have definitely benefited from the Atmospheric River Events and other precipitation events over the Colorado River Basin.

20:57

That have, uh, really done record breaking snowpack in some areas are basin in most areas in our base in our scene, 130 to 150% of normal snowpack.

21:13

And for the Upper Colorado River Basin, our most popular product that, tends to get the most attention is the unregulated inflow forecast into Glen Canyon Dam, which is where Lake Powell is. And our last official forecast was, for March first. And we were forecasting 125% average.

21:37

But with these recent storm events that we've had, our raw guidance is now pushing into that 150% of average range. So we'll do another official forecast near the first of April.

21:50

But these, this recent storm event has been very beneficial in terms of providing water supply to the basin.

22:02

I think the last question was, are the conditions that are driving the flood risk and the upper Mississippi? So, I'll turn that over to Masha, our hydrologist at the North Central River Forecast Center motion.

22:13

Hello, yes, thank you for your question. My name is Masha Hoy and I'm a hydrologist at the North Central River Forecast Center and we do have an elevated risk for flooding along the Mississippi River. This spring, there's moderate risk of even major flooding between the Twin Cities in Minnesota. to Saint Louis and a big driver of that is the above average snowpack. We've been in a wet pattern and the snow water equivalent in the snowpack that's still on the ground is in the top 10 or 20% compared to historic years, so there's really just quite a lot of snow water out there and combined

with cold temperatures or temperatures on the colder side for this winter, it hasn't had a chance to melt out slowly yet, so a lot will depend on how quickly the snowpack melts and it's evolving. So we're keeping an eye on that this spring.
23:09
All right. Thank you. I think that answers all of your questions, Rachel.
23:13
Next, we'll go over to Brian Sullivan, Brian, I'm going to unmute you.
23:18
You can ask your question.
23:24
I said I've got a quick clarification here. The water, the rain in California's gotta kinda end, climatologically towards the end of April or the end of March here. And you showed great improvement through the spring. This is all because of the snow runoff. Is that, is that what's improving the conditions there?
23:46
Yeah, this is John Gottschalk from the Climate Prediction Center. Yes, that's correct. A lot of that will be the snow melt across much of the West.
23:55
But I also turn that over to Brad Pugh, who was the author of The Seasonal Drought Outlook this season.
24:07
Yeah, Hi, Brian.
24:09
The improvement continued improvement through the next month or more is related to the above average snowpack throughout California and the Great Basin.
24:22
And also we do have this one more atmospheric river event coming early next week, which will provide additional heavy precipitation, especially to Northern and Central California.
24:38
OK, thank you.

Next, we have a question from Rebecca Hirscher. And as a reminder, please state your affiliation when you ask your question. I will unmute you, Rebecca.

24:50

Hi, This is Rebecca Hirscher from NPR.

24:53

I just had a follow up about La Nina and el nino, can you talk a little bit more about how long you expect the neutral status to last and sort of what's coming later this year, as much, you know? Sure. This is John Gottschalk from from The Climate Prediction Center. Yes. We we issued our final La Nina Advisory earlier this month. And so La Nina has ended we're in currently ENSO neutral conditions. Right now, as we mentioned, we expect this to continue through the spring and perhaps into the early summer.

25:26

Um thereafter we have elevated odds for actually potential development of El Nino, for the first time in several years. And the climatological, the probabilities for that happening are about 60% as we enter the fall and into the early part of the winter.

25:43

So, it's the most favorite category right now of ENSO, but there's still quite a bit of uncertainty because forecasts that are initialized and predicted at this point in the seasonal cycle or the year have potentially lower forecast scale during the Spring initialization month. So, we still have to wait a few more months to be sure whether we might go into El Nino later this year or not.

26:05

I hope that helps.

26:10

Alright, thank you. Next on the line, we'll have a question from Dan.

26:15

Chrisler, I'll unmute you now, Dan.

26:20

Dan Chrisler from the Omaha World Herald just got a question.

According to the US. Drought Monitor, in Nebraska here, pretty much all the states. Some form of drought, particularly in the northeast.
26:32
Well, I mean, just the highest level drought has come after, you know, last year.
26:40
There was, you know, last year was a tough year for farming. I guess, bottom line is, How does the Winter Weather plus the Spring Outlook here, how
26:50
Is it going to help me kind of alleviate those drought conditions? I don't know if you maybe offer any predictions on that front for as it pertains to Nebraska.
27:01
Sure, I'll turn that over to Brad Pugh, who was the lead of our seasonal drought outlook for the Spring
27:06
Brad, can you help?
27:11
Yes. Yeah, this is Brad Pugh. again, the climate prediction center.
27:15
So yeah, we do expect improving drought conditions throughout the spring season across Nebraska.
27:23
And that's related mostly to the increasingly wet climatology as we go in deeper into spring, 40 to 45% of the annual precipitation typically occurs during the months of April, May June, for the Central and Northern Great Plains.
27:44
All right. Thank you, sir.
27:50

Thank you next, on the line will have Cory Rapenhagen. Cory Unmuting, you now.

Corey Reppinhagen, nine news KUSA in Denver, I have two questions. I'm not sure who you want to try to tackle these. But first question is, do you consider this winters, La Nina to be a failed teleconnection ... particularly in the south-west part of the country?

28:20

And the second question is, does this winter give you this La Nina, winter give you any less competence in the teleconnect ... or does it fit into the variability that you have seen through time? Yeah, this, this is John Gottschalk, that's a great question. The answer, your first question, yes, the forecast that we issued for the western US in general, was actually opposite or flipped. If you will, from the typical, below normal precipitation that we often see across parts of Southern California and the south-west, for example, and the southern Rockies, generally wetter across the northern Rockies and the Pacific north-west, Pacific north-west this year was generally drier than normal.

29:07

And as we know, a lot of the storm systems storm track was shifted further south than expected. And then there's often during many la nina events, so it's very wet in your area, including Colorado. But I will say that if you look at past La Nina events over the historical record, it's not unusual to have this sort of variability from one linear event to another. In fact, if you look at modern la nina events over the record that we have going back to 1948 or so. There's the potential for above, normal precipitation near, normal precipitation, or below normal precipitation is almost equally, likely along the west coast and parts of the west. So, it certainly fits in the variability of what we've seen in the past overall.

29:53

So, I hope that helps answer your question.

30:01

All right. Thank you.

30:03

Next, we'll go to Carlos Grenda Carlos.

30:09

I'm unmuting you now.

30:11

Hi! Thank you for taking my question, Carlos Granda, from KBC in Los Angeles. As you know, we've had this record amount of snow and rain here in California, and it's all going to start melting. And that's a big concern, I think, that we have, is where's it going to go? The reservoirs are near capacity in many places. Is this even going to help our drought? It's really a two part question. We're gonna get all this rain. There's really no place to put it. I mean, all this, ... was no place to put it. Is it really going to help our drought? Because people here are saying that, despite this, we're still not really out of the woods, what are your thoughts?

So, I'm going to turn that over to Brett at the California Nevada River Forecast Center. I think he could speak to the interactions with the reservoir systems across the state, and provide some insight, Brett.

31:04

Yeah, thanks, Ed.

31:07

So, you know, the records note that in the Sierra that you're alluding to. So, this is good for reservoir storage.

31:17

We're up approximately 7.5 million acre feet in California's storage since last year at this time. So already a significant gain in water supply.

31:27

And this snowpack is going to benefit those reservoirs, as it start to melt this Spring but it will be a challenge.

31:35

To manage all of the snowpack.

31:37

I mean, there's record snow, and so a lot of these rivers have limited channel capacity downstream, though, getting that water out safely so that they can manage it without spilling.

31:50

It's going to be a challenge will be a lot of water and a lot of the flood conveyance systems throughout the spring and into the early summer just to try to manage all that snow melt.

32:01

So, it's a concern for sure, hopefully the snow comes off in a way that we can, that the reservoir management community can manage it successfully.

32:18

Great, thank you.

Right, next. We'll go to Don Jenkins, who has a hand, raised and questions in the chat.
32:26
I'm unmuting you now Don
32:31
Yeah, thank you. This is Don Jenkins, with the Capital Press. Why is below average precipitation favored in the Pacific north-west?
32:41
This is John Gotsschalk from the Climate Prediction Center.
32:44
For two main reasons, actually three main reasons is that, for the most part, most of our initial forecast model guidance that we use for short-term climate prediction, there were more of a more uniform and consistent for a forecast for drie than normal conditions in that area. But also as we move through the spring months, into the early, summer months, longer, long-term precipitation trends. And what I mean with that is the precipitation anomalies or departures from normal over the last, say 10, 10 or 15 years as compared to the 30 year normal have been significantly on the negative side meaning drier than normal conditions. So those were a couple of factors that went into releasing, that the probability then slightly enhanced probabilities for below normal precipitation in the Pacific north-west.
33:39
Thank you.
33:44
OK, next on the line will have AJ Burnett.
33:49
I'm unmuting you now AJ.
33:53
Thank you very much. A quick question regarding the strength of the El Nino coming at us.
34:00
Any idea how strong the El Nino is expected to get, and its possible impacts on the tropics coming up this year?
34:10

Yeah. It's a great question right now. But I do want to say right at the start, however, even though we're favoring the potential development of El Nino as we go into the summer and early fall, it's by no means a certainty. So I want to make that very clear. We are favoring that transition.

34:27

Um, and to that point we're not at the point where we'll be able to get a feeling for the strength with respect to some other model guidance or predictions that we do have right Now it would be more of a moderate strength El Nino But again, that's probably putting the little too early that's going to tell with respect to the magnitude. And whether we'll certainty to have an El Nino however as you their second question, if we do have an El Nino event do develop, as we get into the summer months, that tends to suppress the north Atlantic hurricane seasons, as I think many of you know, with respect to the number of storms and some of the intensities of the storms.

35:10

However, in the Eastern Pacific Basin, there tends to be an increase in tropical cyclone activity.

35:20

and that may play a role later on in the year during the monsoon season with potentially a increase in precipitation in parts of the south-west.

35:30

So, those would be the impacts that I would look out for if again we move towards El Nino later in the summer, and fall.

35:39

Thank you, and apologies. This is AJ Burnett from WCVB in Boston, ABC Affiliate.

35:44

All right.

35:46

Thank you, AJ. Thank you, John. We have a similar question in the chat that I'll go to from Halle Parker. Can you speak a little bit more regarding how weather patterns typically change during El Nino compared to La Nina, especially in context of what it means for the Gulf Coast?

36:02

Yeah. Another great question. So with respect to moving towards El Nino again, that's the most likely outcome right now. But again, not a certainty.

But if that were to happen, as we get into the summer months, as I mentioned, that tends to be (****this section has been corrected**** more shear across the Atlantic Basin and in parts of the Gulf of Mexico. And that tends to decrease the tropical cyclone activity during the hurricane season in those areas. end correction****)

36:30

And, and though we don't know eventual impacts of any landfall and, or a hurricane or tropical cyclones, if there is an above average season, having above average season would put some potential for increased rainfall and storminess along the Gulf Coast.

36:45

But, again, that's pretty uncertain in quite a, quite a bit away from this, part in March.

36:54

All right. Thank you. Our next question on the line will come from Melissa

37:00

Melissa,, I'm currently unmuting you.

37:04

This is Melissa Peyto, from the Florida Public Radio Emergency Network. As we all know, Florida is under some pretty extensive drought coverage right now.

37:14

I was wondering if any of the experts can just elaborate on why and what conditions are expected to alleviate our drought. It seems like completely by June. Thank you.

37:27

Sure. This is John Gotsschalk. at the Climate Prediction Center. There's two factors for that and I'll turn it over to Brad Pugh for a follow up. But one is related to short-term enhanced precipitation rainfall during the next couple of weeks, but also as we go into the month of June, the rainy season in Florida really starts to ramp up. Pretty vigorously and so it's it's anticipated that the drought by the end of June by the end of June is likely to be removed Or improved quite a bit across much of the Florida Peninsula and I'll turn it over to Brad for any follow-up information.

38:07

Yeah, hi, Melissa. Yeah, it was a perfect answer by John.

Yeah, over the next week we are expecting a widespread heavy rainfall across across the state, especially the panhandle and Northern Florida Peninsula so that that should begin to ease drought concerns.

38:28

I've said it could be a continuation of drought through April and May.

38:31

And then as John stated, during June, the climatology becomes rapidly, you know, wet with time, we are expecting the drought to two and by the end of June.

38:52

Alright, thank you.

38:54

Alright next we'll have a question from Doyle Rice. I'm unmuting you now.

39:03

Good morning, thanks for doing this.

39:05

John had mentioned wildfires, and I kind of had a follow up questions about the wildfires forecast for the spring. Especially in the south-east and Florida, I wonder what what it's looking like for fires this year.

39:24

Yes, you bring up a very good point. Doyle, actually the most probably the highest concern right now with respect to fire is probably the Florida Peninsula because of the drought conditions that are ongoing there plus unlikely to get much rain after this initial frontal system that Brad mentioned earlier as far as the more of the April May potential period there. But as you, as you go further out to the south-west with the high amounts of precipitation in snowpack, there's likely to be a delay, probably in the fire season in that part of the country. But it doesn't mean there couldn't end up being a very strong season, it just likely to be more muted, beginning for sure, and may end up being a below average year, but we still have a little ways to go. The other areas to focus on would be the Southern Plains, which is South Central High Plains, where the drought is pretty exceptional.

40:22

With Respect, when wind conditions are elevated, there will be a potential for fire weather in those areas, but one caveat is that a lot of it's been so dry for so long. I think a lot of the fuels and grass and that would burn with wildfires seems to have been really so depleted over the last year that it's, it's kind of a mixed case in that region. But it's something certainly to keep in mind.

Sure, that's a great question. John Gottschalk, here from the Climate Prediction Center, is correct, but much of the West that's shown to have Improvement Or removal is related to the antecedent conditions or snowpack, the current snowpack and short-term precipitation moving forward. But there are two areas that may see drought development due to favorable, below normal precipitation. That is parts of Washington State in the Pacific north-west. And also later on in the spring, as we start to head towards the monsoon season and the convective season in the South Eastern parts of the south-west. We expect below normal precipitation there as well. And so drought developed. They may also develop or creep into parts of Mexico by the end of June.

I think that answers Drew's question.

42:38

Alright. Next, we'll go to Susan Montoya Bryant.

42:42

I'm Unmuting you now, Susan.

42:46

Yes, Good morning. Thanks for taking our questions as Susan Montoya Bryan with the Associated Press out here in the south-west.

42:52

And I know Brett had mentioned earlier the favorable conditions for the reservoirs in California but maybe Paul could speak a little bit more about the Colorado Basin and some of our biggie's like Mead and Powell and how over the long term, how much of an impact this extra moisture we've seen will actually have on those reservoirs and what we can look for further into the year.

43:20

Sure, sure. I can speak to that a little bit.

43:23

So the Bureau of Reclamation makes the operational decisions on how those reservoirs are operated and they take our forecasts and run that information through their hydrologic models to, to best decide how to manage those water resources.

43:43

So, it's, it's not entirely up to us, so, with that being said, the Bureau of Reclamation just released their latest 24 months study report, which is a projection of how those reservoirs are going to respond to the, to the inflow that we're expected to see. And Lake Powell is expected to rise about 35 feet in its surface water elevation. Which sounds like a lot, and it is a lot of water, but currently lake powell is about 23, 25% full, and even rising, 35 feet, that only puts out at about 36% ish capacity. I have to double-check those numbers. So, you know, it's definitely moving in the right direction.

44:32

But we're far from, uh, filling the reservoirs in the Colorado River system and we're far from being a comfortable point from a water supply perspective. Lake Mead is really dictated by outflow from Glen Canyon Dam.

So that really is a decision from the Bureau of Reclamation and how they're going to operate releases from Glen Canyon Dam and move that water between those 2 reservoirs.

45:05

OK, great, Thank you.

45:08

Next, we'll have, we have a question in chat, from Matthew Chase. And this is, for a particular region, his question, is, what is the forecast for the New York Region, and Long Island, in particular, the Yale, the city of Yale in Long Island.

45:25

This is John ... from the Climate Prediction Center and refer to that for the tri-state area in that region. First for temperature, pretty, pretty high odds for above normal temperatures, for that region, along with the rest of the mid atlantic and north-east for precipitation. There is also an elevated chance for odds for above normal precipitation as well.

45:47

So generally favorite warmer and wetter conditions for, for that region during the upcoming spring.

45:57

Alright, thank you. Alright.

45:58

We have some more hands raised. Haley Parker.

46:03

Your hand's raised.

46:03

I'm going to unmute you now, Hailey.

46:11

Hi, this is Haley Parker from New Orleans Public Radio.

I was just hoping to get a little bit more clarification regarding the higher flood risk for up river in the Mississippi River basin. Like, how could that possibly affect us, farther down river?

46:27

I'm like in New Orleans.

46:30

That's a great question, and I'm going to turn it over to Jeff Graschel He's the service coordination hydrologist down there in Slidell at the Lower Mississippi River Forecast Center, Jeff.

46:39

They don't know if you want to take this and then if we need to, Masha could speak again to the drivers upstream.

46:51

This is Jeff ... the coordination hydrologist for Lower Mississippi River Forecast Center and a good question, too. We do have, like, was, already mentioned the chances of above normal flood risk on the upper part of the Mississippi River. But as you probably well know, the Ohio and Tennessee contribute more to the lower part of the Mississippi River than the upper part of the Mississippi or in the Missouri River. So, based on what we've seen in Ohio and Tennessee, we kind of just looking at normal conditions for the lower part of the Mississippi River near the New Orleans area.

47:22

Thank you.

47:28

Alrighty. We have one more question Or one more hand raised from Corey Ribbenhagen again. Corey, I'm going to unmute you.

47:40

Thank you. I appreciate another question here, Corey from Denver again. My question is about the atmospheric rivers that develops over the winter. Can you put any contexts in and how they might or may not relate to la nina? Do, is that maybe why the Pacific north-west, is favored wetter and it just went south, or was this pattern really just completely unprecedented?

48:05

This is John Gottschalk CLimate prediction center and that's a great question. It was actually more related to what we would call variability or changes within the season or sub seasonal.

Change is one of the factors that did play a role, and there was a few, but one of them was the existence of a tropical disturbance that that's called the Madden Julian Oscillation, or MJO. That tends to operate to the global tropics as well, and produces impacts to

48:35

North America and the Pacific that are similar to ENSO, but, but it's as opposed to having those impacts the additive over the on seasonal averages, the changes can occur over few weeks or 2 or 3 weeks.

48:49

And so what we had happened, at least with the January events, late December to January our events is that we had a lot of subtropical and tropical moisture. That was in the right place, due to Madden Julian Oscillation and the jet stream and the troughing across the eastern part of the North Pacific. Was just right, and the right place that, I was able to link up.

49:09

both, rather the northern stream and southern stream of the Jet stream, which is the flow of air in the upper levels of the atmosphere, where we're able to link up.

49:17

And the storm track, as I mentioned earlier, was able to be further, further south and produce a lot of precipitation right into Central Southern California's south-west, as well as Northern California parts of Southern Oregon. But that's one reason a lot of the moisture went into that area and why the Pacific north-west ended up being dry in that region.

49:36

I hope that helps.

49:37

Yeah, great, thank you.

49:41

OK, with that being our last question, I'd like to thank John Moore on my team for facilitating the Q and A part and tell the reporters for all those great questions. And before we conclude, I'd like to thank all of our experts who participated from across NOAA, the National Water Center, the Climate Prediction Center, the River Forecast Centers, and our federal partner agencies at FEMA and Agriculture. If you have any questions following this news conference, please reach out to my team. National Weather Service Public Affairs by e-mail at NWS, Stop PA at NOAA dot gov, or by phone at (301) 427-9000. The Spring Outlook news release with the flood. With the Outlook and Flood Risk maps are available at NOAA dot gov. And there's a link in the chat window here. And audio and video from this news conference will be added to the news release this afternoon. So, thank you for joining us, and have a great day.