

# Significant Weather Observation Program

November 15, 2021

Matt Barnes

Scott Baker



# Winter 2021-2022 Call Agenda



- What to Report
- Winter Precipitation Types
- Snow Measurement
- Winter 2021-2022 Outlook



Bob Beckenbaugh  
Peoria  
January 3, 2021



Tom Gover  
Mattoon  
February 16, 2021

Question/Answer Session  
Afterwards



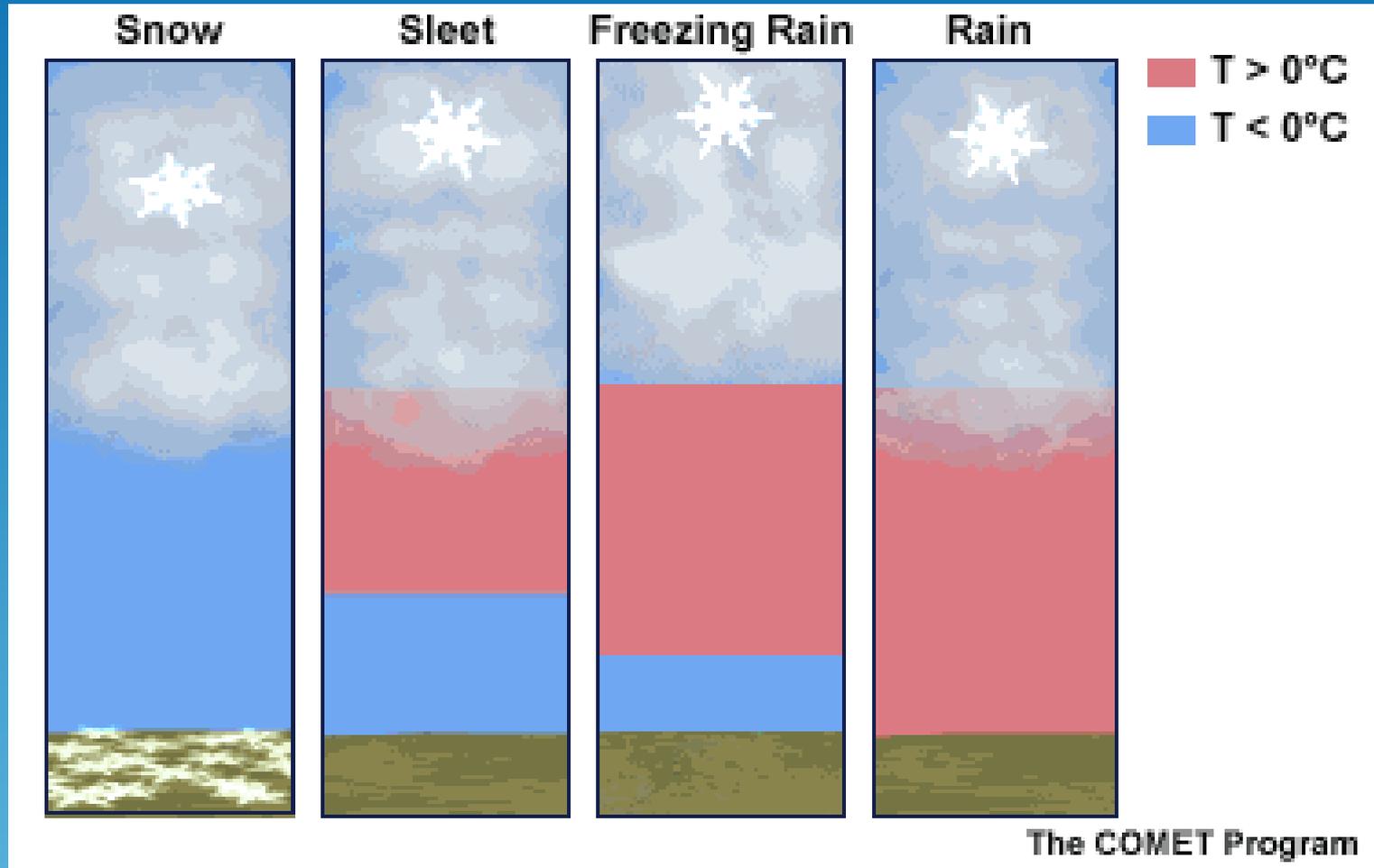
# What to Report

- Type of precipitation
- When it started
- When it changes (rain to snow)
- Measurement



Report to us as quickly as possible...as we can use your data to adjust our forecasts and graphics “on the fly”

# Winter Precipitation Types



Depends on the depth of the **WARM LAYER**

# Snow

- Use an NWS “snow stick”
- Or a yardstick/ruler
- Measured in tenths of an inch  
(0.1, 1.8, 4.6)



# Snow

- Select a flat, grassy location
- Make sure you're away from structures and trees
- Take at least 5 measurements and average them
- If possible, please provide us with a measurement **DURING** the event
- Then send a **STORM TOTAL** afterwards



# Snow

Much more information on the **SWOP Training Page**  
<https://www.weather.gov/ilx/swop-training>

Including **TIPS** and several **YouTube** demonstration videos



**Supplemental Weather Observer Program (SWOP)**

5 videos • 651 views • Last updated on Oct 31, 2020

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This playlist will contain training materials and informational segments for the ILX SWOP Program.



NWSLincoln



-  **SWOP Part 1**  
NWSLincoln  
7:43
-  **SWOP Part 2**  
NWSLincoln  
7:06
-  **SWOP Part 3**  
NWSLincoln  
4:40
-  **SWOP Part 4**  
NWSLincoln  
5:07
-  **Winter 2020-2021 Outlook**  
NWSLincoln  
10:53

# Sleet

- Tiny balls of ice that bounce upon impact with surfaces
- Typically does not last long
- But can occasionally produce significant accumulations
- Measure using a ruler



# Freezing Rain

- A slick glaze of ice
- Use a ruler
- Measure ice accumulation on a branch or on top of a flat surface
- Measured in tenths of an inch, but we can do the math ( $1/16'' = 0.1$ )



# Rain

- Use an official NWS gauge
- Or your backyard gauge
- Measured in hundredths of an inch (0.06, 0.57, 1.31)

If you'd like one of our gauges, go to:  
<https://weatheryourway.com/>

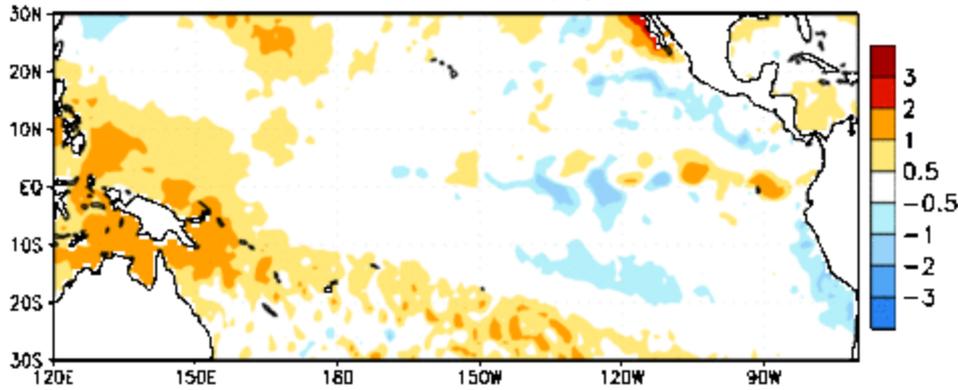
Makes a great Christmas present!



# Winter 2021-2022 Outlook

We're heading into a **La Nina** winter

Week centered on 18 AUG 2021  
SST Anomalies (°C)



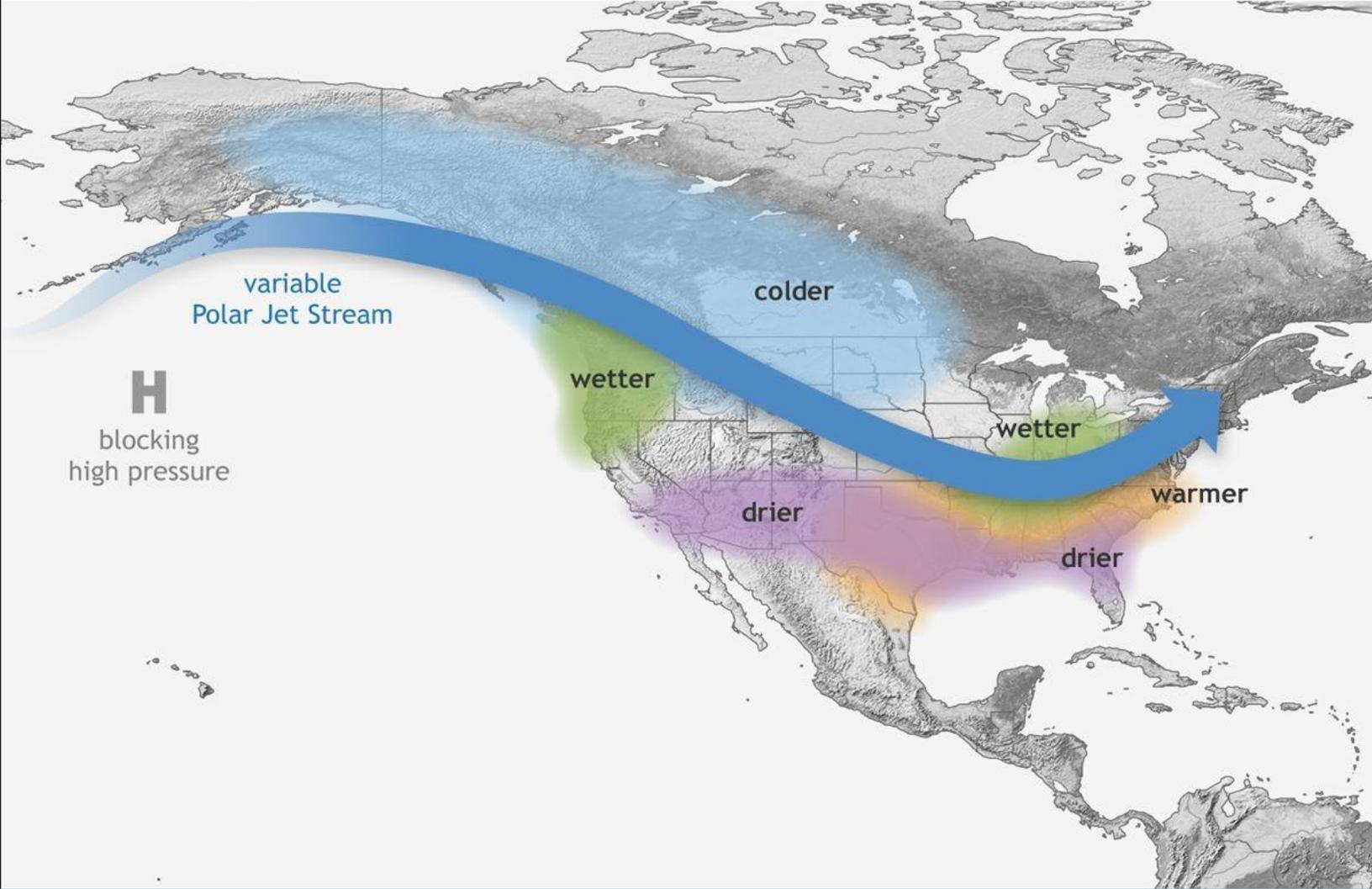
The correlation between La Nina and Midwest winter weather is weak and varies from event to event

Other shorter-term atmospheric oscillations will largely drive our weather

# Typical La Nina Winter Pattern



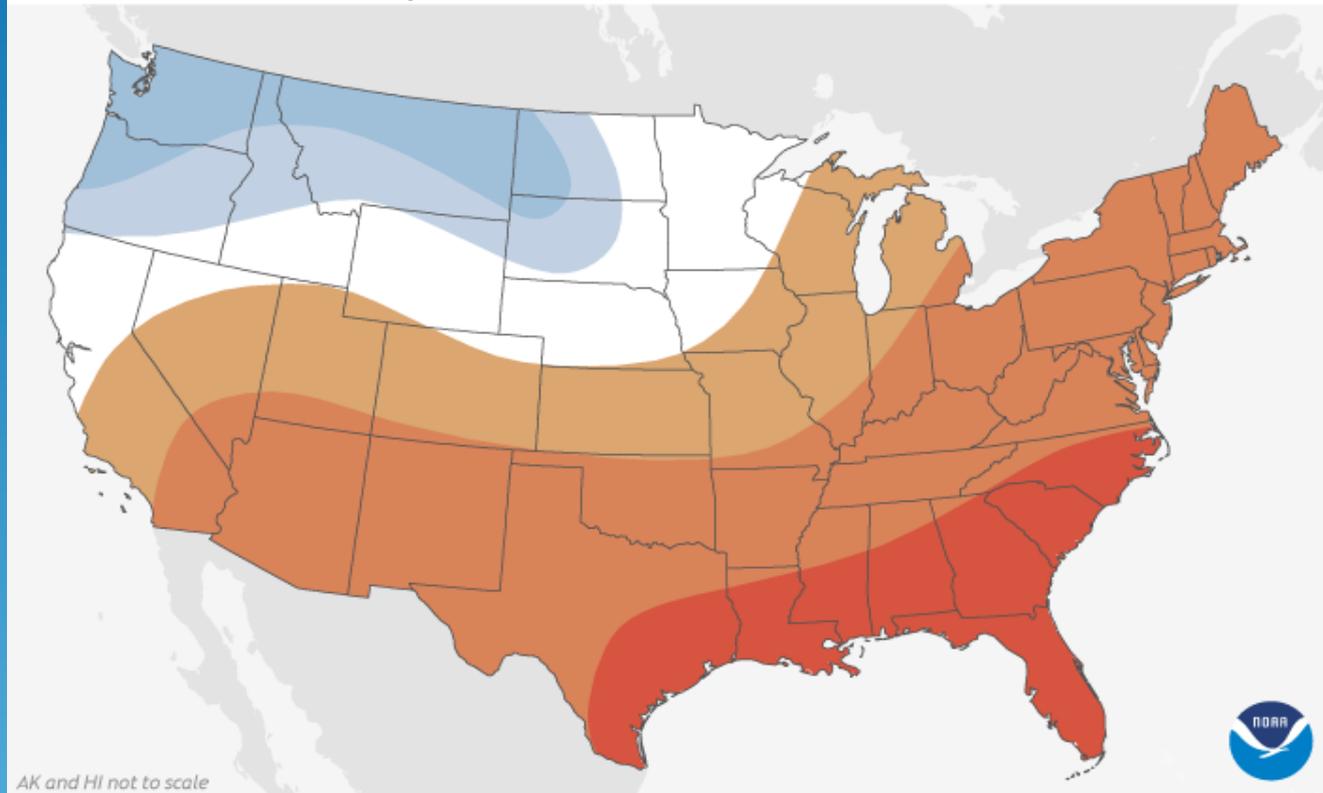
TYPICAL LA NIÑA WINTERS



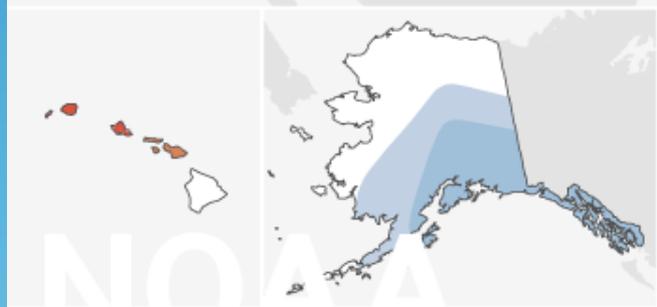
# Winter 2021-2022 Outlook



## Winter 2021: U.S. Temperature Outlook



AK and HI not to scale



Probability (percent chance)

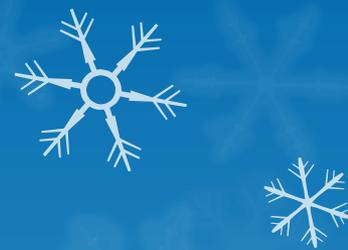
Below Normal		Equal Chances	Above Normal	
Leaning Below	33-40%		33-40%	Leaning Above
	40-50%	40-50%		
Likely Below	50-60%	50-60%	Likely Above	
	60-70%	60-70%		
	70-80%	70-80%		

Temperature Outlook for December 2021 - February 2022  
Issued 21 October 2021

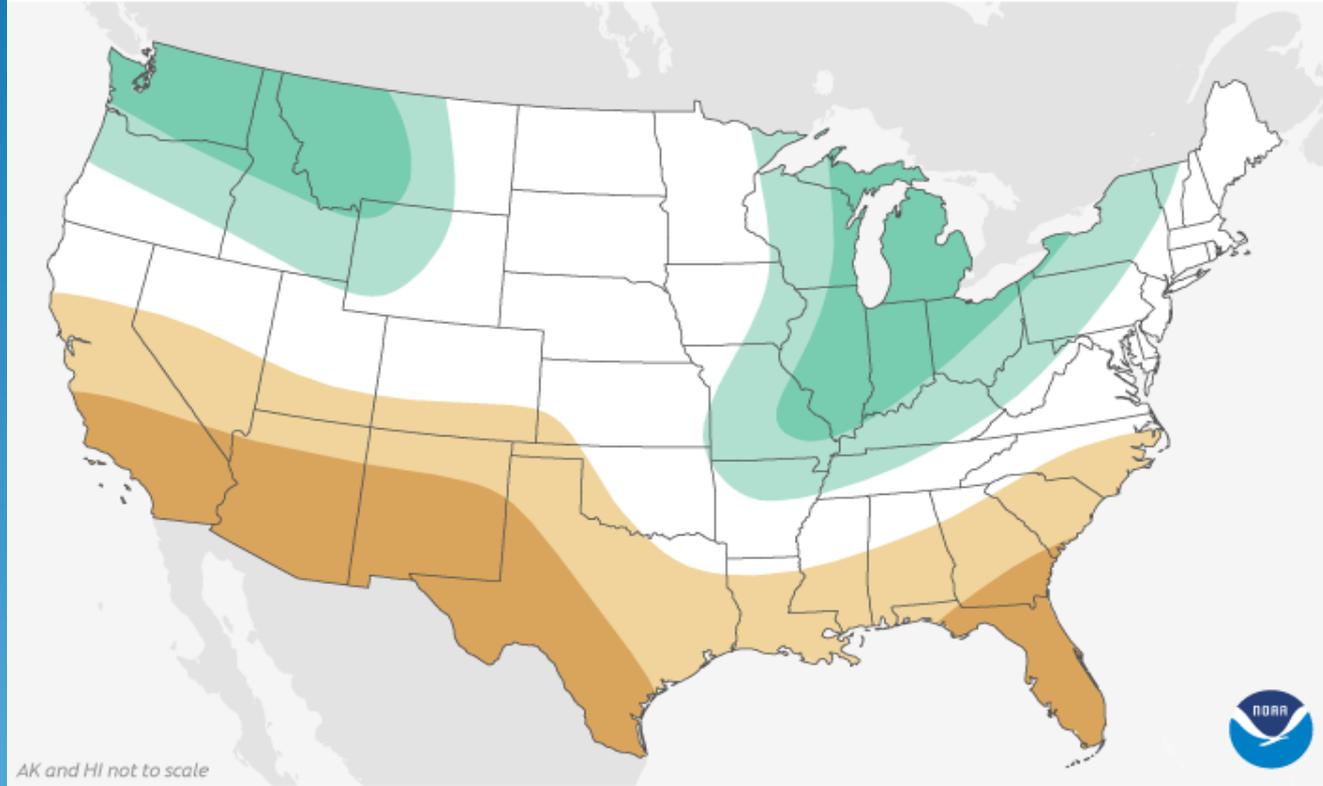
NWS Climate Prediction Center  
Map by NOAA Climate.gov



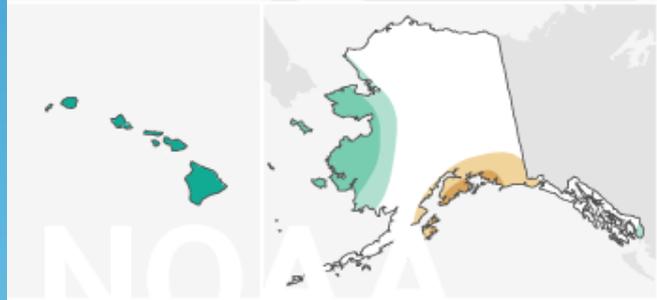
# Winter 2021-2022 Outlook



## Winter 2021: U.S. Precipitation Outlook



AK and HI not to scale



Probability (percent chance)				
Below Normal		Equal Chances	Above Normal	
Leaning Below	33-40%	Equal Chances	33-40%	Leaning Above
	40-50%		40-50%	
Likely Below	50-60%		50-60%	Likely Above
	60-70%		60-70%	
	70-80%		70-80%	

Precipitation Outlook for December 2021 - February 2022  
Issued 21 October 2021

NWS Climate Prediction Center  
Map by NOAA Climate.gov



# The Bottom Line

- Overall **warmer** and **wetter** conditions anticipated
- Does NOT imply a mild winter...as plenty of “ups and downs” will occur
- There will be heavy snow and ice events...so the main take-away is to be prepared for anything



**Ethan Schisler  
Near Abingdon  
November 17, 2018**



**Paul Hadfield  
Looking NW from N of Jacksonville  
December 1, 2018**

# Questions?



**Nisa Dykstra**  
**Rosamond 1.5SW**  
**January 25, 2021**



**David Brent**  
**Normal**  
**January 5, 2021**

