U.S. DEPARTMENT OF ENERGY | OFFICE OF ENVIRONMENTAL MANAGEMENT

Draft Permit Update and Monitoring Plan Overview

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Overview of Individual Permit

- U.S. Environmental Protection Agency (EPA) Los Alamos National Laboratory (LANL) National Pollutant Discharge Elimination System (NPDES) Permit No. NM0030759 Individual Permit (IP) authorizes the discharge of storm water from sites that are associated with historical industrial activities at specified solid waste management units (SWMUs) and areas of concern (AOC), collectively referred to as Sites.

Timeline of IP

- Original (administratively continued permit) issued November 2010
- EPA submitted draft IP renewal in March 2015
- NMED issued 401 Certification in July 2015, no final permit was issued by EPA
- Permittees submitted a permit application renewal in July 2019
- Draft Permit submitted by EPA on November 19, 2019
  - Original Public Meeting/Hearing was scheduled for January 2020
  - Original comment due date was March 31, 2020
  - 3 extension periods were issued by EPA during COVID
  - Permittees submitted comments on draft IP on November 2, 2020
- Received NMED 401 Certification of draft permit on November 30, 2020
  - Permittees submitted a petition for review of the certification on December 30, 2020
  - Permittees are in technical discussions with NMED regarding a path forward

2021 Monitoring Year

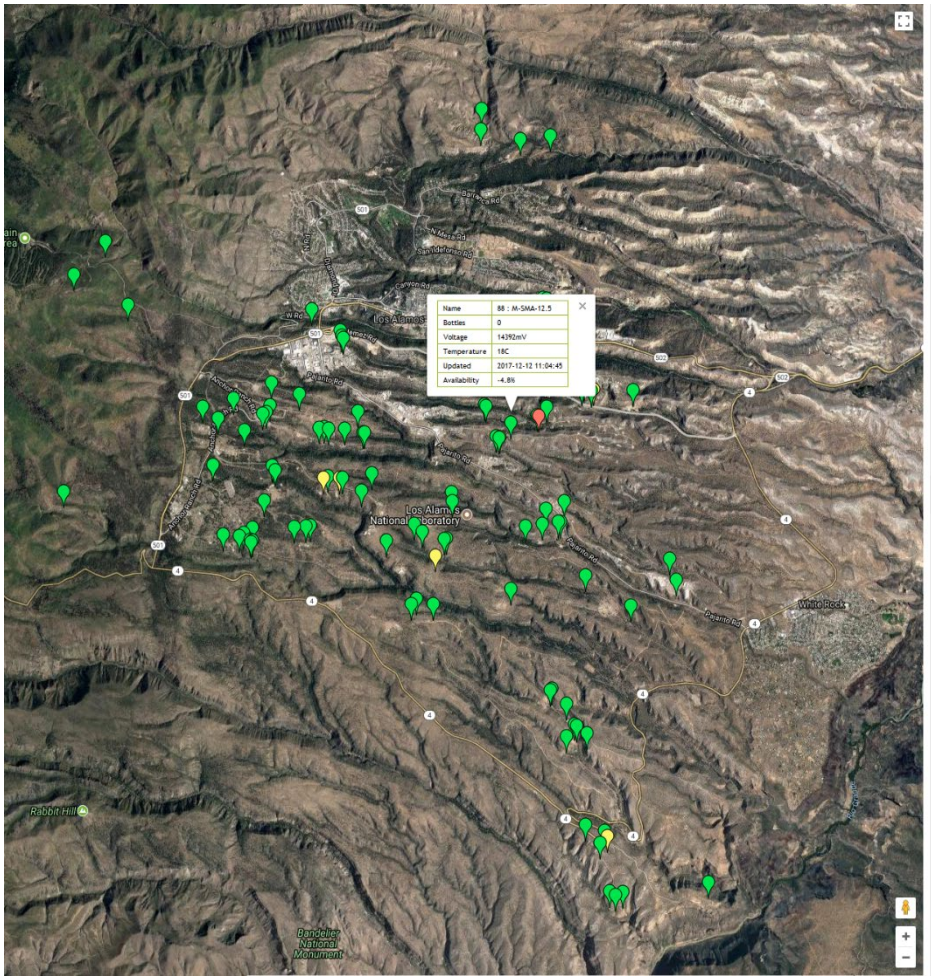
- Sampler activation began: March 17, 2021
- Samplers activation ended: April 5, 2021
- Total samplers activated: 133 Site Monitoring Areas (SMAs) are active
- Remote Telemetry Unit triggers: 16 triggering events as of May 24, 2021
- No samples have been collected this year

N3B Los Alamos

Remote Telemetry Unit Network

Currently

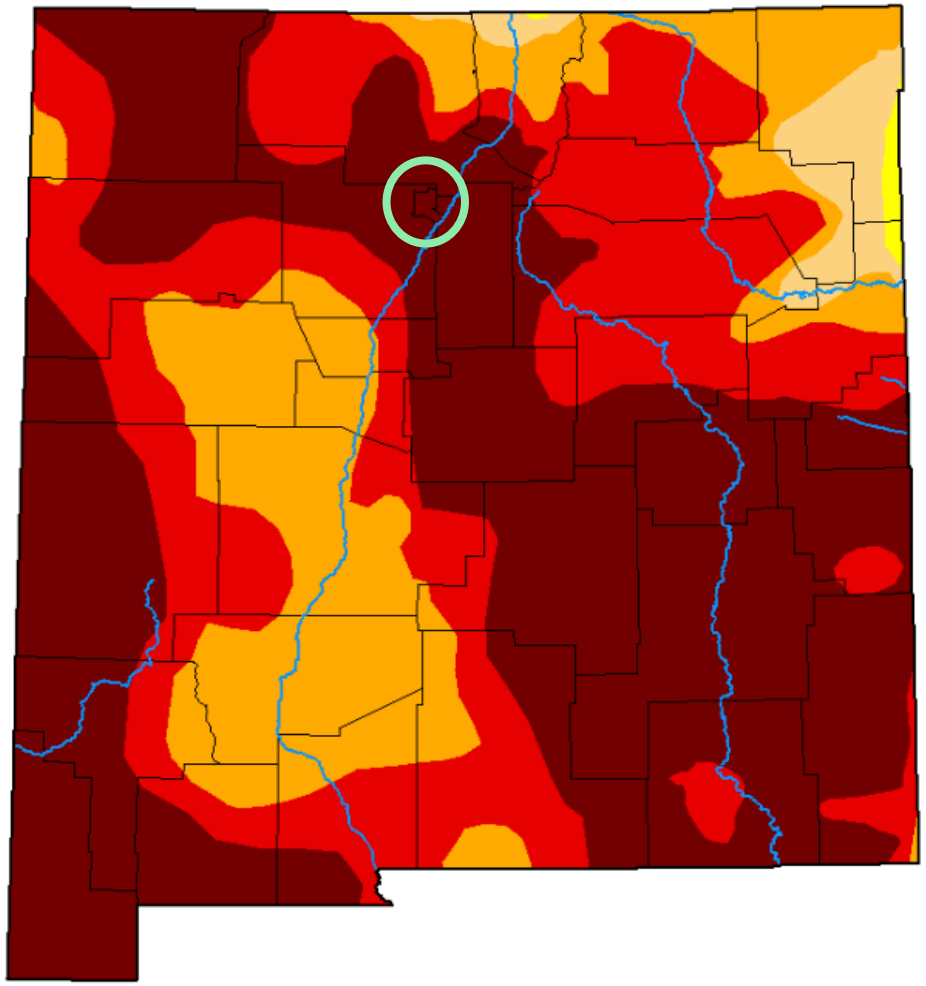
- 125 locations with monitoring alarms
- Mesh self healing network



State of Health | Cumulative Events

ID	Name	Bottles	Location
4		0	Latitude 0 Longitude 0
6		0	Latitude 0 Longitude 0
12		0	Latitude 0 Longitude 0
30		0	Latitude 0 Longitude 0
31		0	Latitude 0 Longitude 0
32	CDV-SMA-3	0	Latitude 35.847766 Longitude -106.320665
33	PJ-SMA-14.4	0	Latitude 35.83970826 Longitude -106.265013
34	CDV-SMA-4	0	Latitude 35.847971 Longitude -106.319726
35		0	Latitude 0 Longitude 0
36	LA-SMA-6.31	0	Latitude 35.874771 Longitude -106.277958
37		0	Latitude 0 Longitude 0
38		0	Latitude 0 Longitude 0
39		0	Latitude 0 Longitude 0
40		0	Latitude 0 Longitude 0
41		0	Latitude 0 Longitude 0
42	PJ-SMA-14	0	Latitude 35.843467 Longitude -106.264164
43		0	Latitude 0 Longitude 0
44		0	Latitude 0 Longitude 0

Exceptional Drought



Map released: Thurs. May 20, 2021

Data valid: May 18, 2021 at 8 a.m. EDT

Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Authors

United States and Puerto Rico Author(s):
Adam Hartman, NOAA/NWS/NCEP/CPC

Pacific Islands and Virgin Islands Author(s):
Denise Gutzmer, National Drought Mitigation Center

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Source: The U.S. Drought Monitor

Reduced Snowpack

NEW MEXICO SNOTEL Snow Water Equivalent Update Graph

As of TUESDAY: MAY 25 , 2021

Basin	Snow Water Equivalent Percent of Median
RIO CHAMA RIVER BASIN	*
UPPER RIO GRANDE BASIN - New Mexico	3*%
SANGRE DE CRISTO MOUNTAIN RANGE BASINS	3*%
JEMEZ RIVER BASIN	*
SAN FRANCISCO RIVER BASIN	*
GILA RIVER BASIN	*
MIMBRES RIVER BASIN	*
PECOS RIVER BASIN	2*%
SAN JUAN RIVER BASIN	39*%
ANIMAS RIVER BASIN	45*%
CANADIAN RIVER BASIN	*
ZUNI/BLUEWATER RIVER BASIN	*
RIO HONDO BASIN	*
CHUSKA MOUNTAINS	*

Legend:	<70%	70-90%	91-110%	111-130%	>130%

* = Data are not available or data may not provide a valid measure of conditions for over half of the sites within the basin.

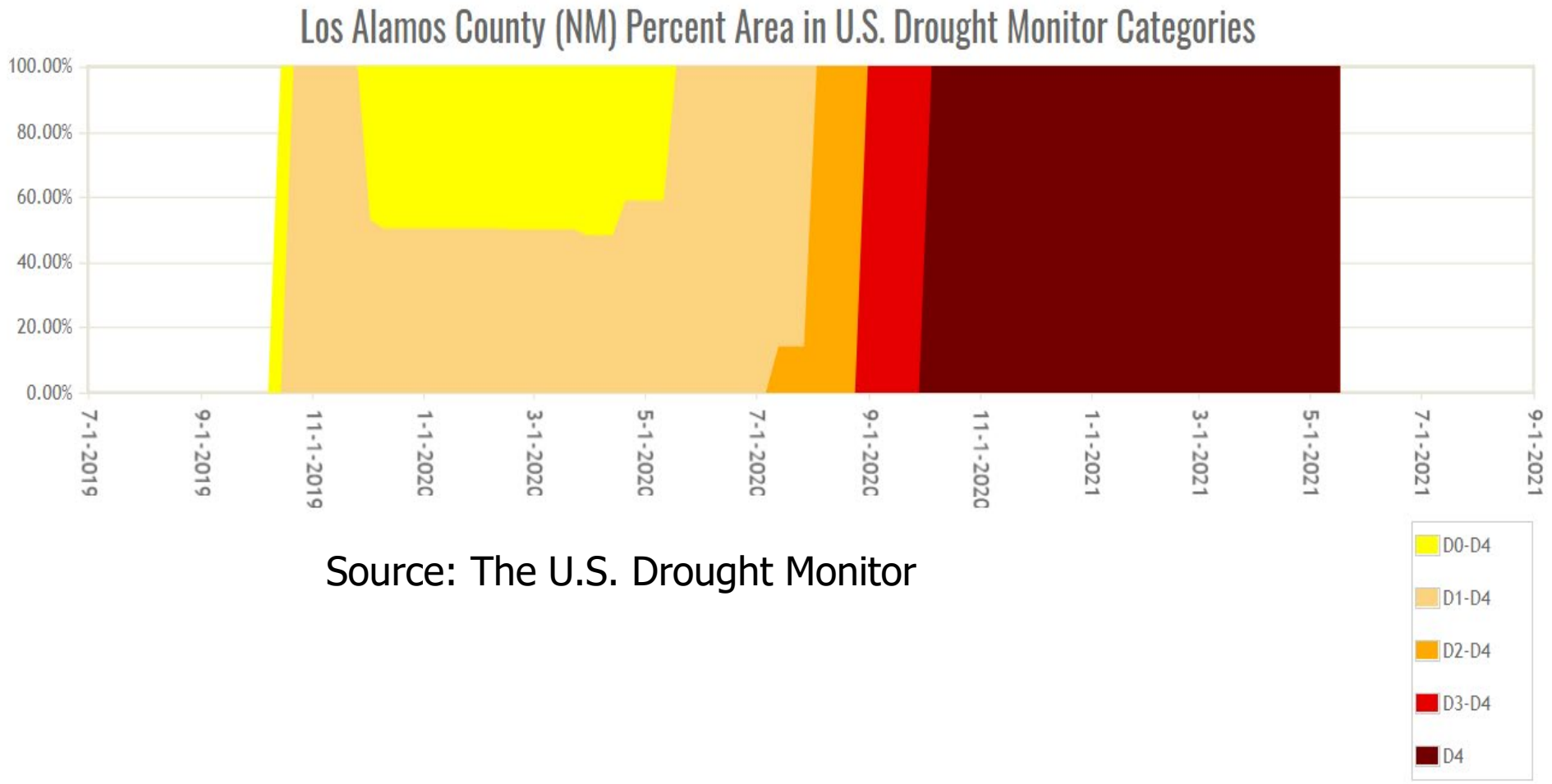
Source: Natural Resources Conservation Service SNOTEL

Western Region Drought Summary

- Right now, the U.S. Drought Monitor places 60% of the Western states under severe, extreme, or exceptional drought. The reason for the extensive drought is two-fold:
  - (1) Long term drying fueled by human-caused climate change
  - (2) In the short term, a La Niña event in which cool Equatorial Pacific waters failed to fuel an ample fetch of moisture.
- Most basin snow water equivalent (SWE) percentiles across the Western Region are well below normal for the period of record (near and below the 65th percentile), especially in the Four Corners region (below the 5th percentile in Arizona and New Mexico).
- Above-normal temperatures over much of the West over the past 60 days has resulted in rapid snowmelt and, due to dry topsoil, much of the melt water has not made it into the rivers, lakes, and reservoirs.
- Climate Prediction Center (CPC) soil moisture ranks below the 1st percentile, NASA GRACE indicates severely depleted groundwater, and remote sensing vegetation indices indicate severe vegetation stress.

Source: The U.S. Drought Monitor

Los Alamos Drought



Source: The U.S. Drought Monitor

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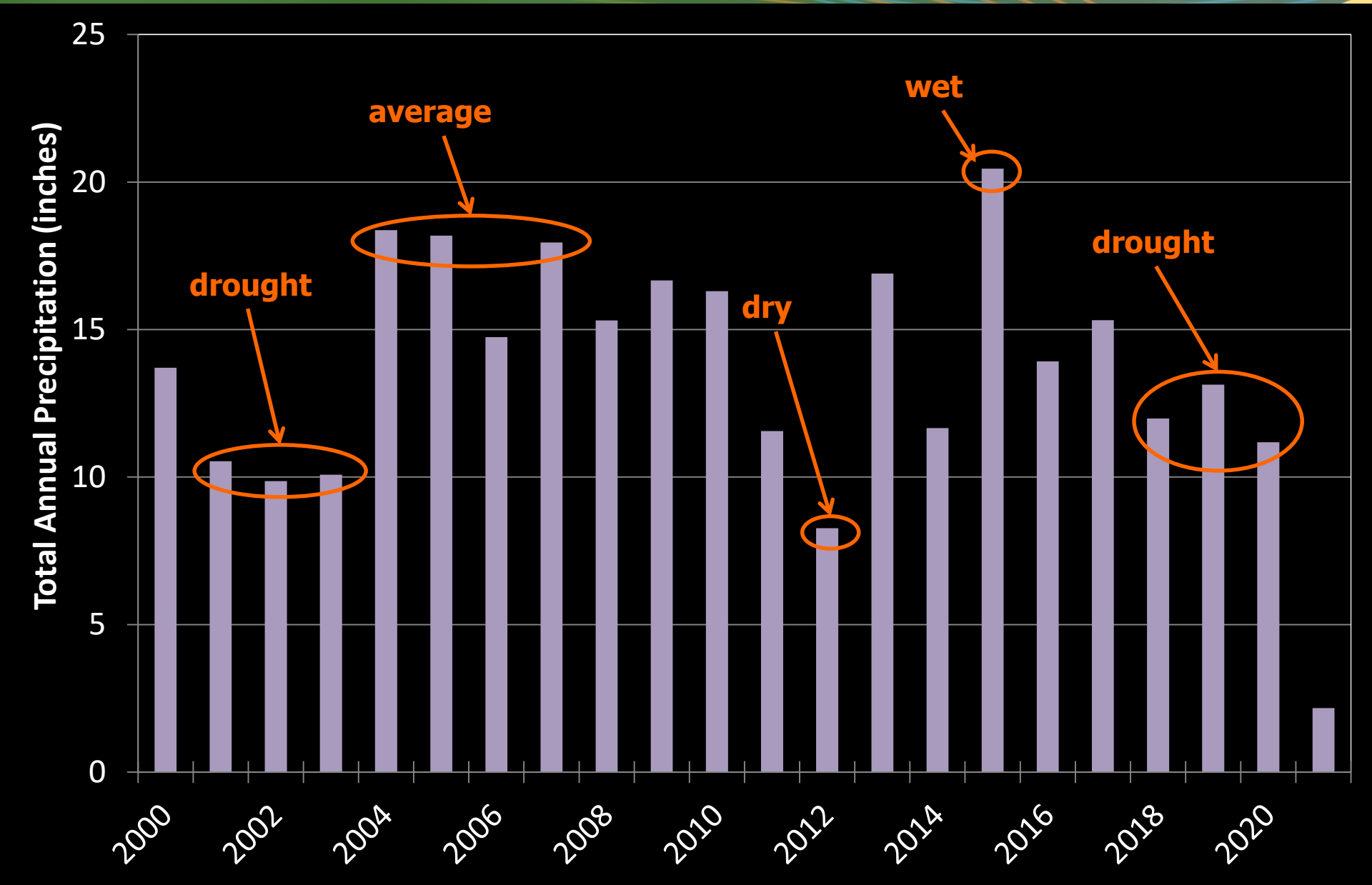
Precipitation across the Lab



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Questions?

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