

# Delaware River Basin Commission

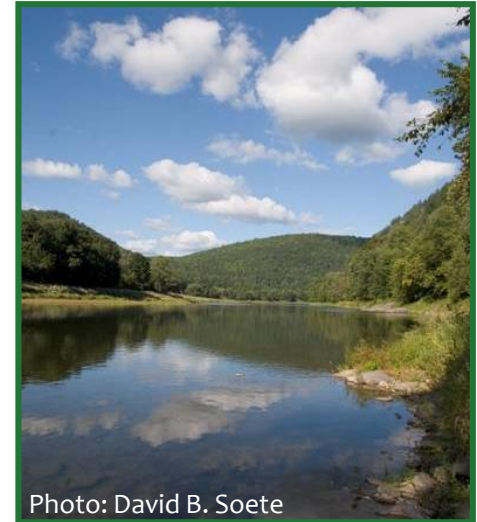
Presented to the DRBC Water Management Advisory Committee on June 22, 2017.  
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## Hydrologic Conditions

*Hernán Quinodoz, Ph.D.*

WMAC

June 22, 2017



**Delaware River Basin Commission**

DELAWARE • NEW JERSEY  
PENNSYLVANIA • NEW YORK  
UNITED STATES OF AMERICA

# Precipitation

	2015	2016	Jan. 1- June 20, 2017
<b>Above Montague</b>	43.34" (-1.95")	38.09" (-7.20")	22.75" (+2.74")
<b>Above Trenton</b>	44.06" (-3.93")	39.20" (-8.80")	21.90" (+0.89")
<b>Wilmington</b>	48.74" (+5.66")	40.78" (-2.30")	20.21" (+0.69")

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# Streamflow

Monthly Average Streamflow  
for May 2017  
Compared to Historical  
Streamflow for the Month



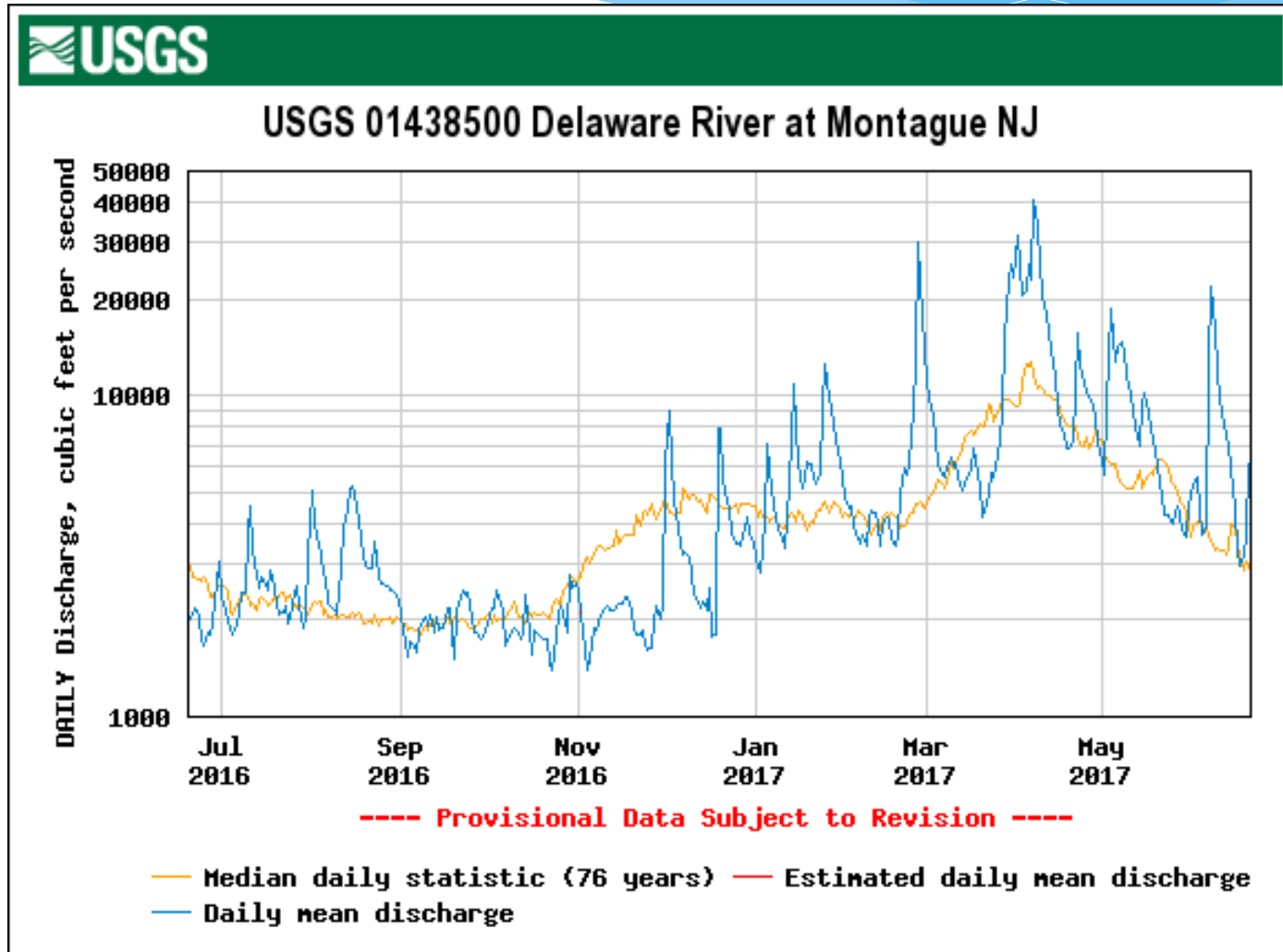
Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

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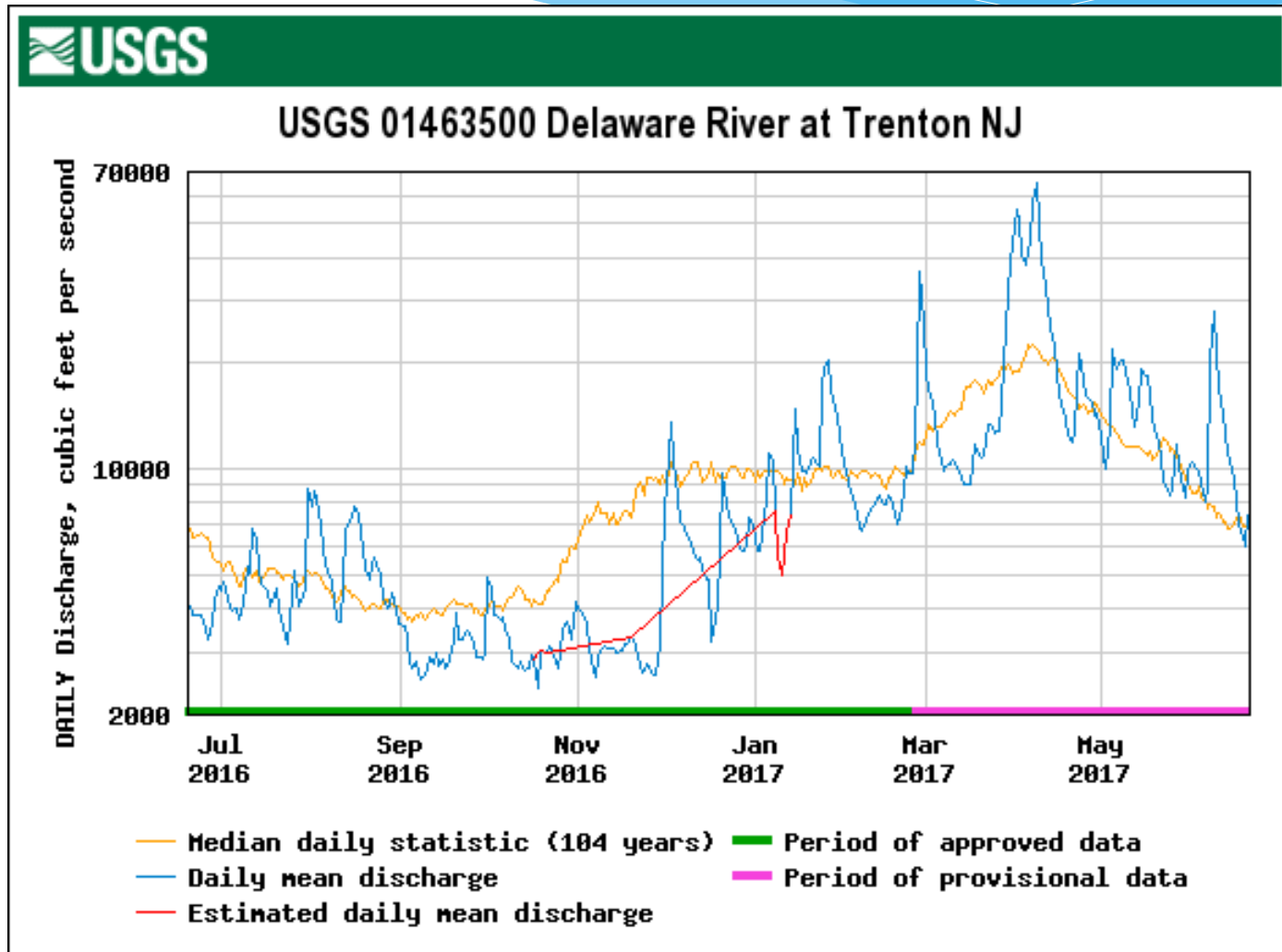
# Streamflow



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# Streamflow

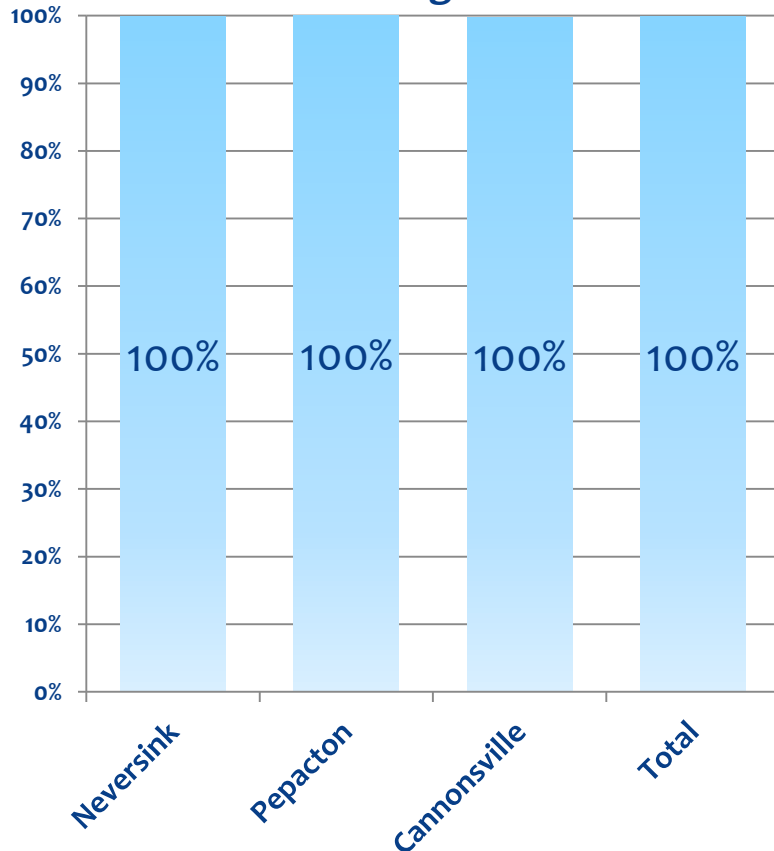


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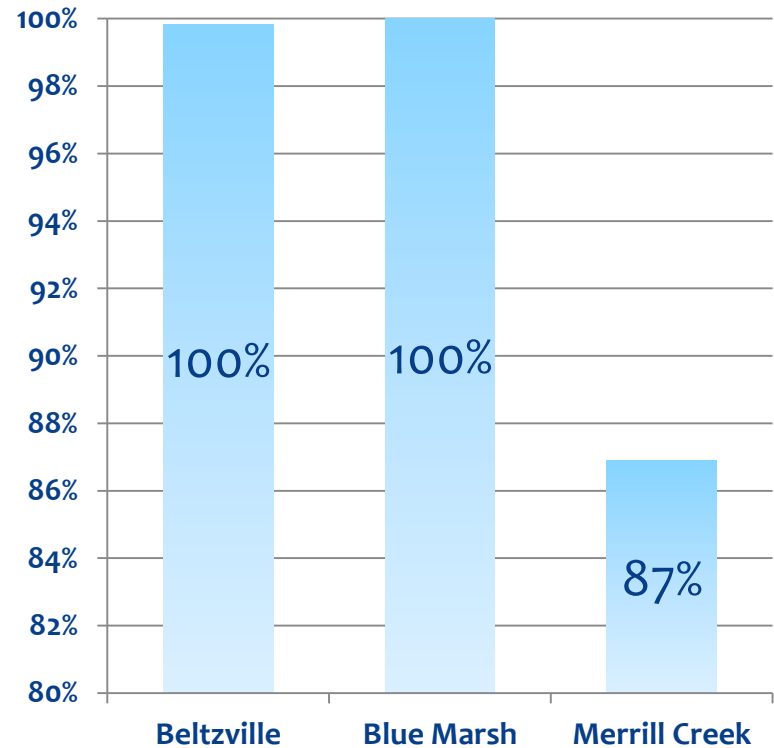
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# Basin Storage

## New York City Delaware River Basin Storage

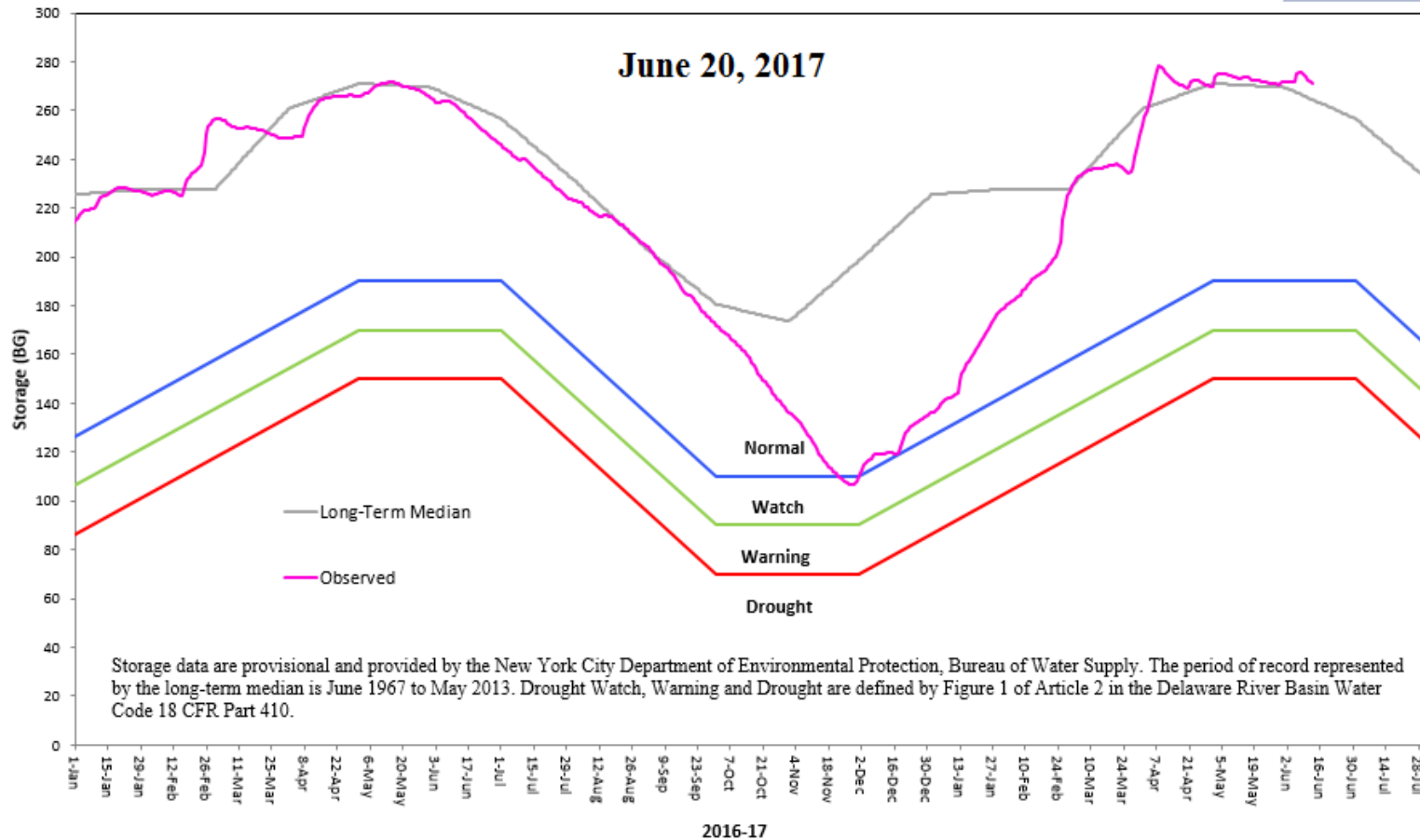


## Lower Basin Storage



# Basin Storage

## New York City Delaware River Basin Storage



### Useable

Storage	Cannonsville	Pepacton	Neversink	Total	BG Above Drought Watch =	BG Above Daily Storage Median =
BG	95.2	140.4	35.1	270.6	81	9
%	99.5%	100.1%	100.4%	99.9%	101	16
					BG Above Drought = 121	

# Groundwater

COUNTY	STATE	AGENCY DATA	WELL ID	YEAR RECORD BEGINS	INDICATOR STATUS AS OF MARCH 14, 2017	INDICATOR STATUS AS OF JUNE 21, 2017
<a href="#">Sullivan</a>	NY	USGS	<u>Sv</u> 535	2001	Normal	Normal
<a href="#">Wayne</a>	PA	USGS	WN 64	1967	Normal	Normal
<a href="#">Monroe</a>	PA	USGS	MO 190	1967	Normal	Normal
<a href="#">Carbon</a>	PA	USGS	CB 104	1969	Normal	Normal
<a href="#">Schuylkill</a>	PA	USGS	SC 296	1975	Normal	Normal
<a href="#">Lehigh</a>	PA	USGS	LE 644	1971	Drought Warning	Drought Watch
<a href="#">Lebanon</a>	PA	USGS	LB 372	1973	Drought Emergency	Normal
<a href="#">Bucks</a>	PA	USGS	BK 1020	1975	Drought Watch	Above Normal
<a href="#">Chester</a>	PA	USGS	CH 10	1966	Drought Emergency	Drought Watch
<a href="#">Delaware</a>	PA	USGS	DE 723	1983	Drought Emergency	Drought Watch
<a href="#">Burlington</a>	NJ	USGS	050689	1955	Below Normal	Below Normal
<a href="#">Cumberland</a>	NJ	USGS	110042	1972	Below Normal	Below Normal
<a href="#">New Castle</a>	DE	Delaware GS	Db24-18	1993	Below Normal	Below Normal

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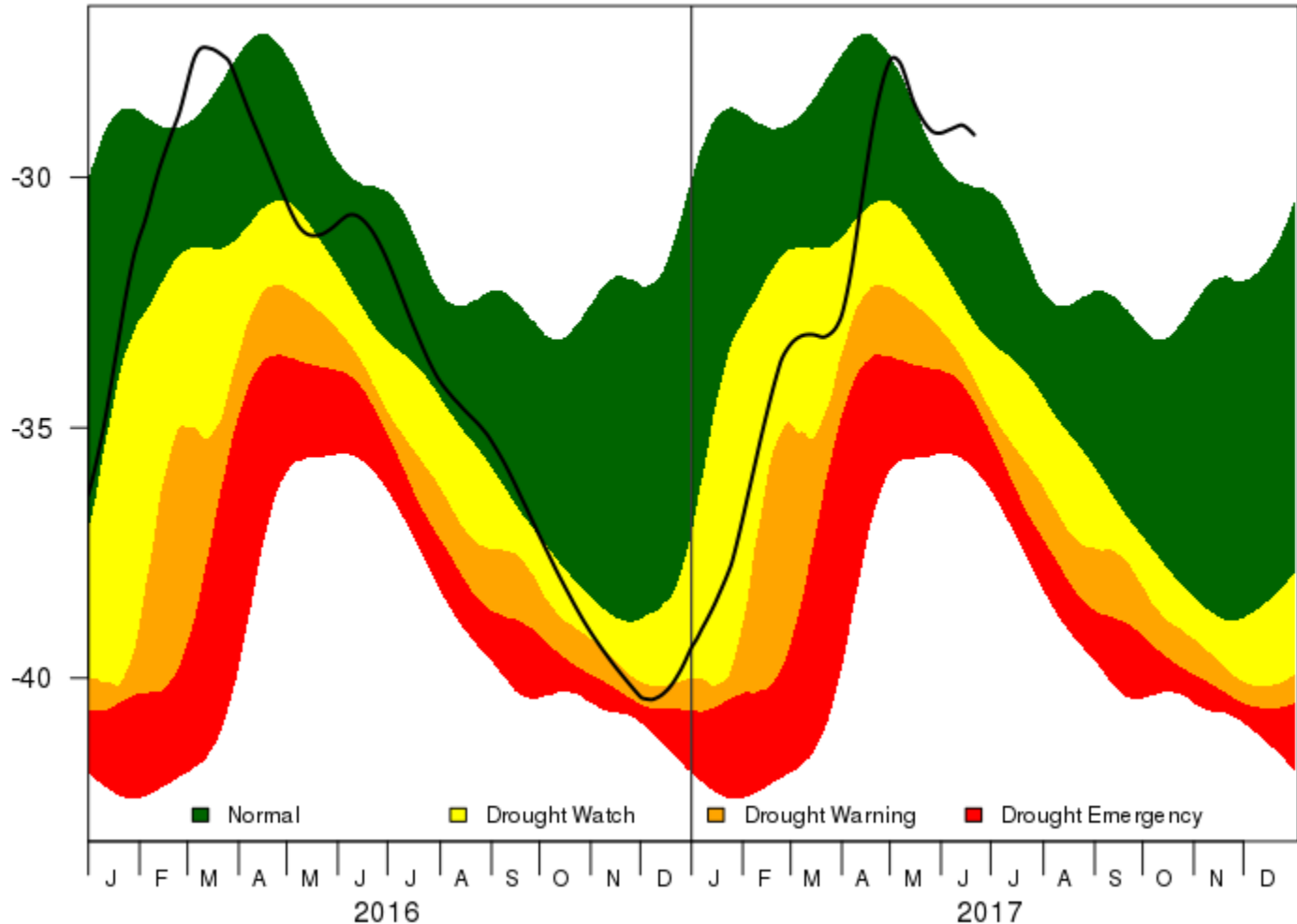
# Groundwater



## BK 1020 BUCKS COUNTY OBSERVATION WELL

PROVISIONAL DATA - SUBJECT TO CHANGE  
RECORD START = 1975-09-04 NUMBER OF YEARS = 39  
DATE OF PLOT = 2017-06-21

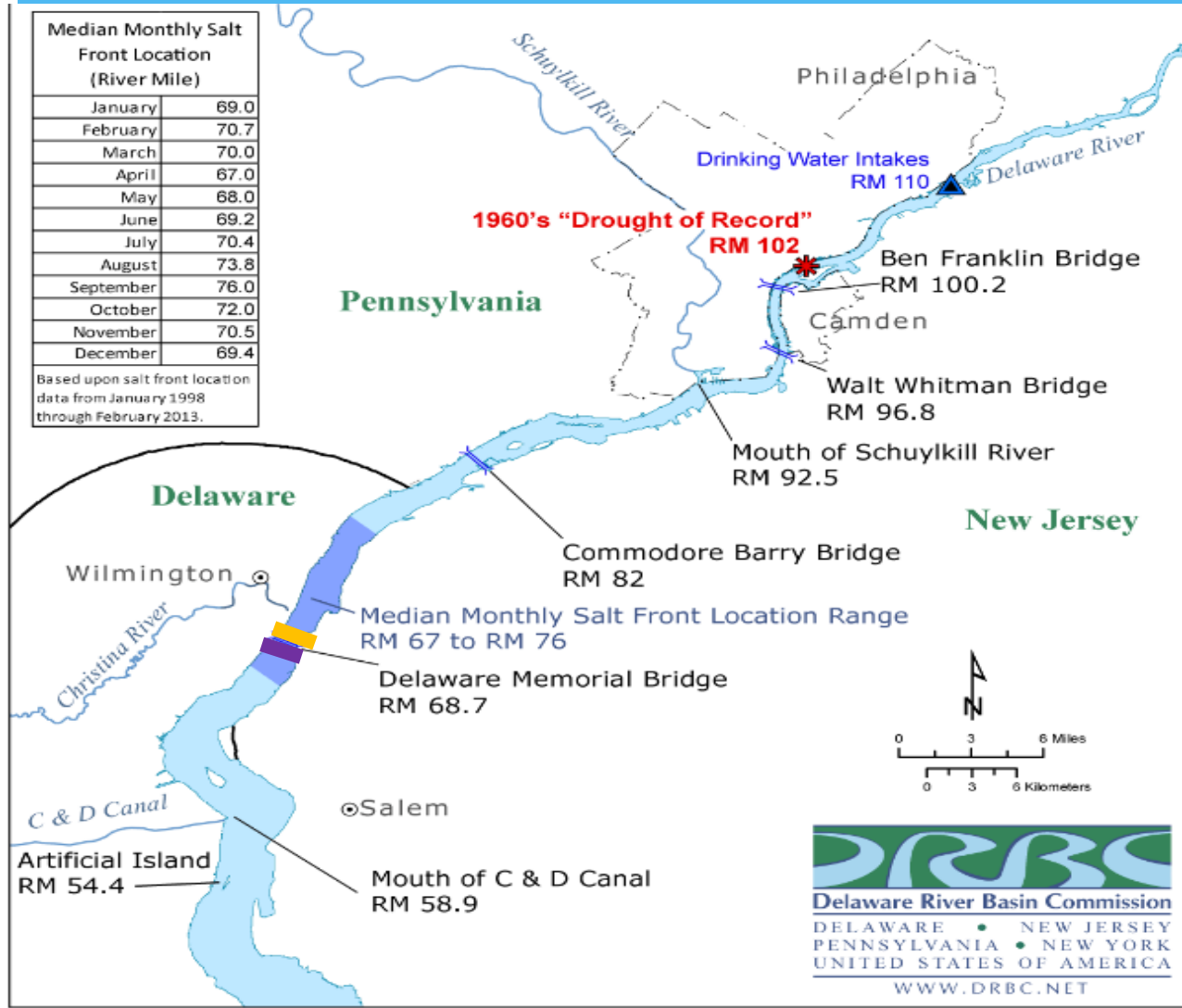
30-Day Moving Average Depth to Water, in Feet Below Land Surface



# Salt Front

Median Monthly Salt Front Location (River Mile)	
January	69.0
February	70.7
March	70.0
April	67.0
May	68.0
June	69.2
July	70.4
August	73.8
September	76.0
October	72.0
November	70.5
December	69.4

Based upon salt front location data from January 1998 through February 2013.



Chlorides  
7-Day Avg. RM Location of  
250 mg/l

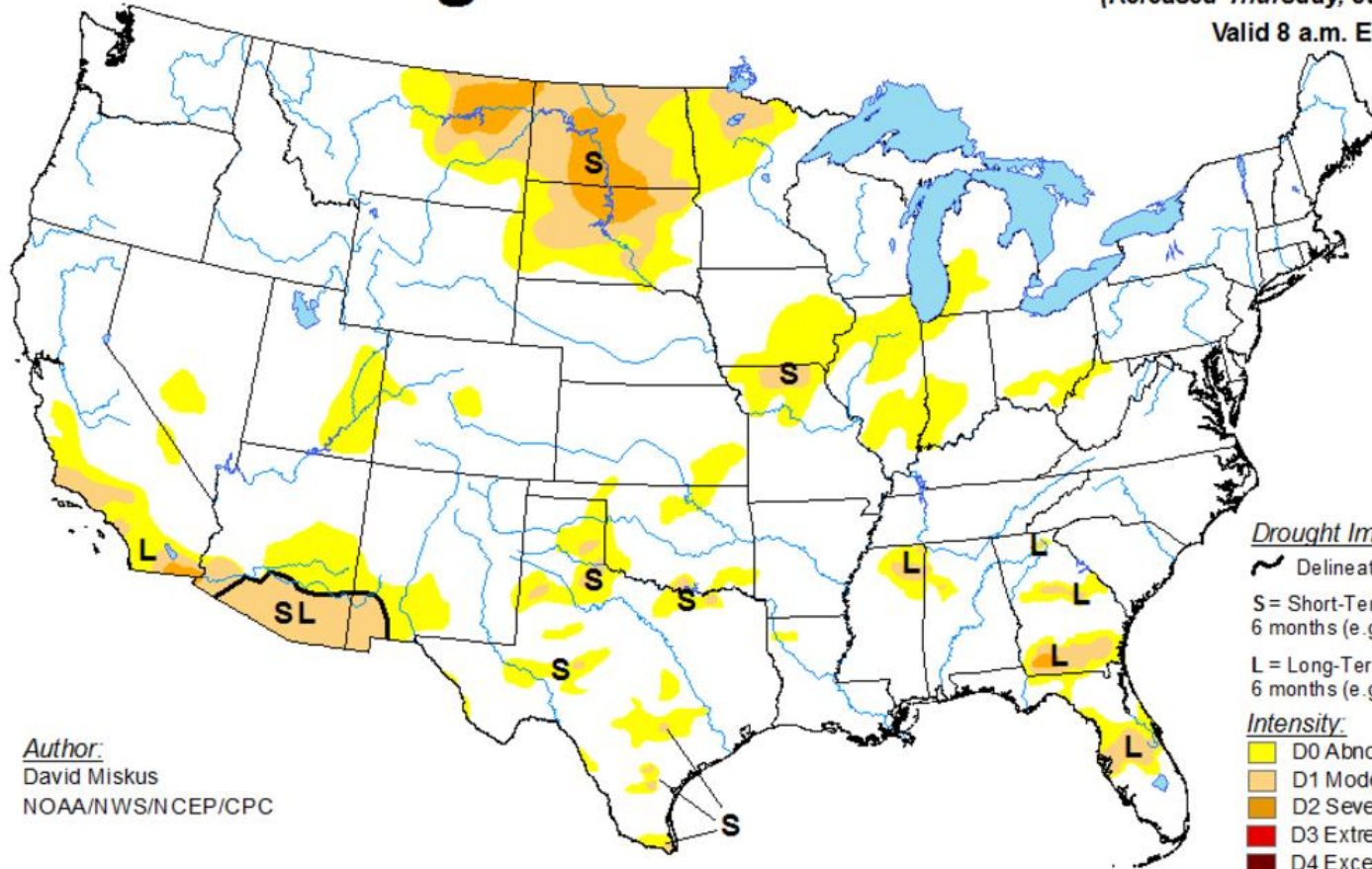
Current R.M. 68

Normal R.M. 69

The Flow Objective at Trenton was designed to repel salinity for the protection of drinking water treatment facilities and industrial intakes.

# U.S. Drought Monitor

June 13, 2017  
(Released Thursday, Jun. 15, 2017)  
Valid 8 a.m. EDT



Author:  
David Miskus  
NOAA/NWS/NCEP/CPC

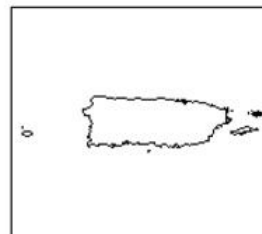
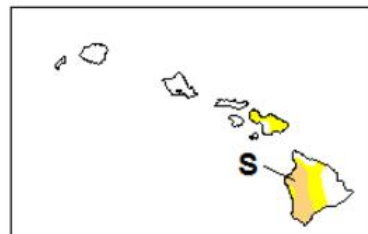
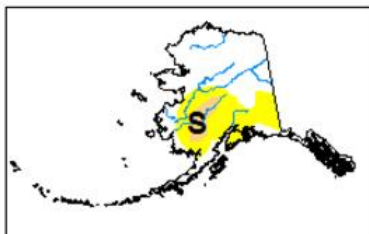
### Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

### Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

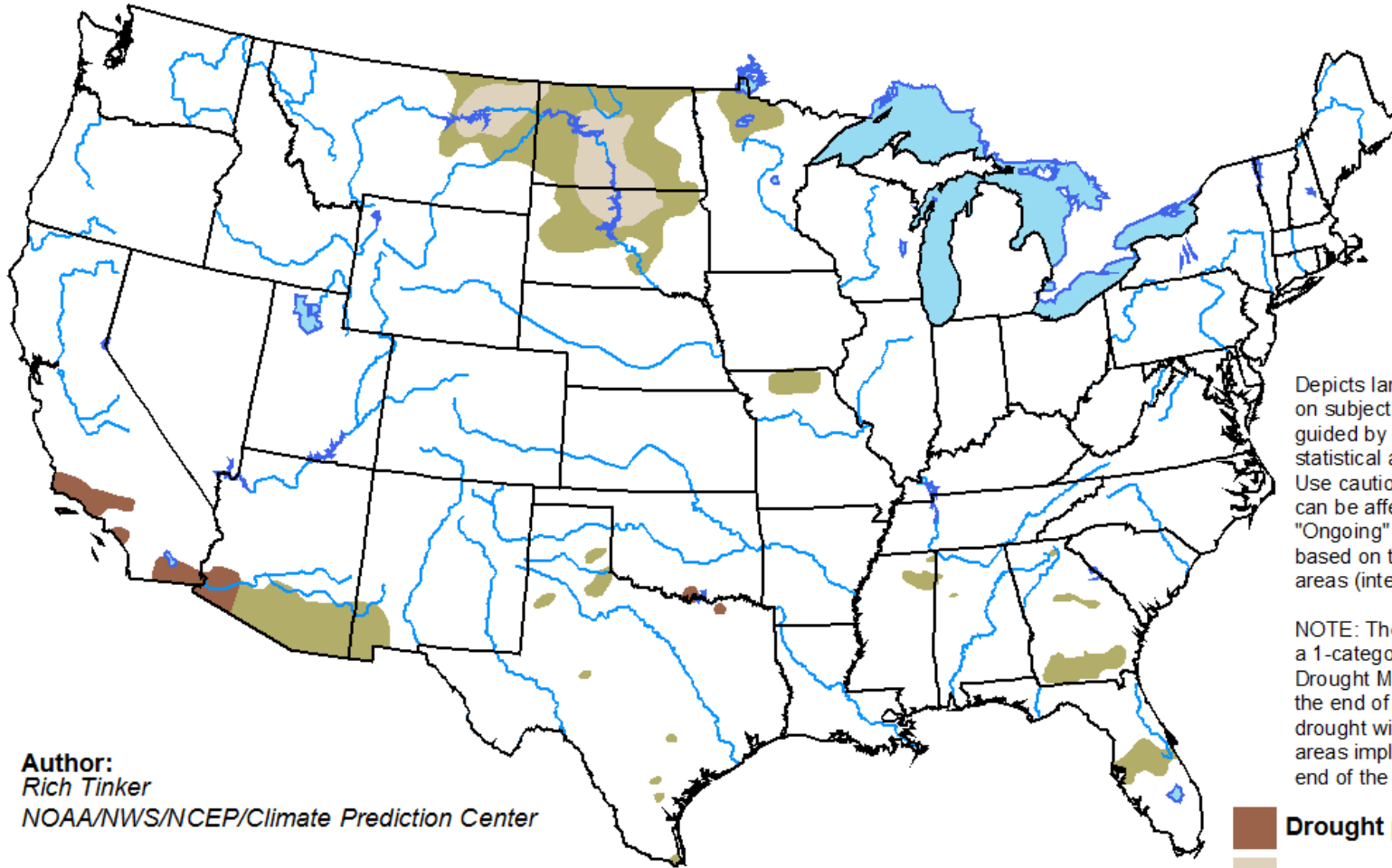


<http://droughtmonitor.unl.edu/>

# U.S. Seasonal Drought Outlook

## Drought Tendency During the Valid Period





Valid for June 15 - September 30, 2017  
Released June 15, 2017

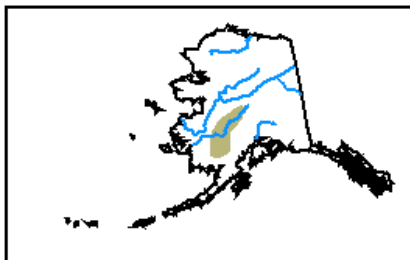


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:  
Rich Tinker  
NOAA/NWS/NCEP/Climate Prediction Center

-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZ73>