



Drought Update

Roanoke River Basin Bi-State Commission Meeting

October 14, 2015

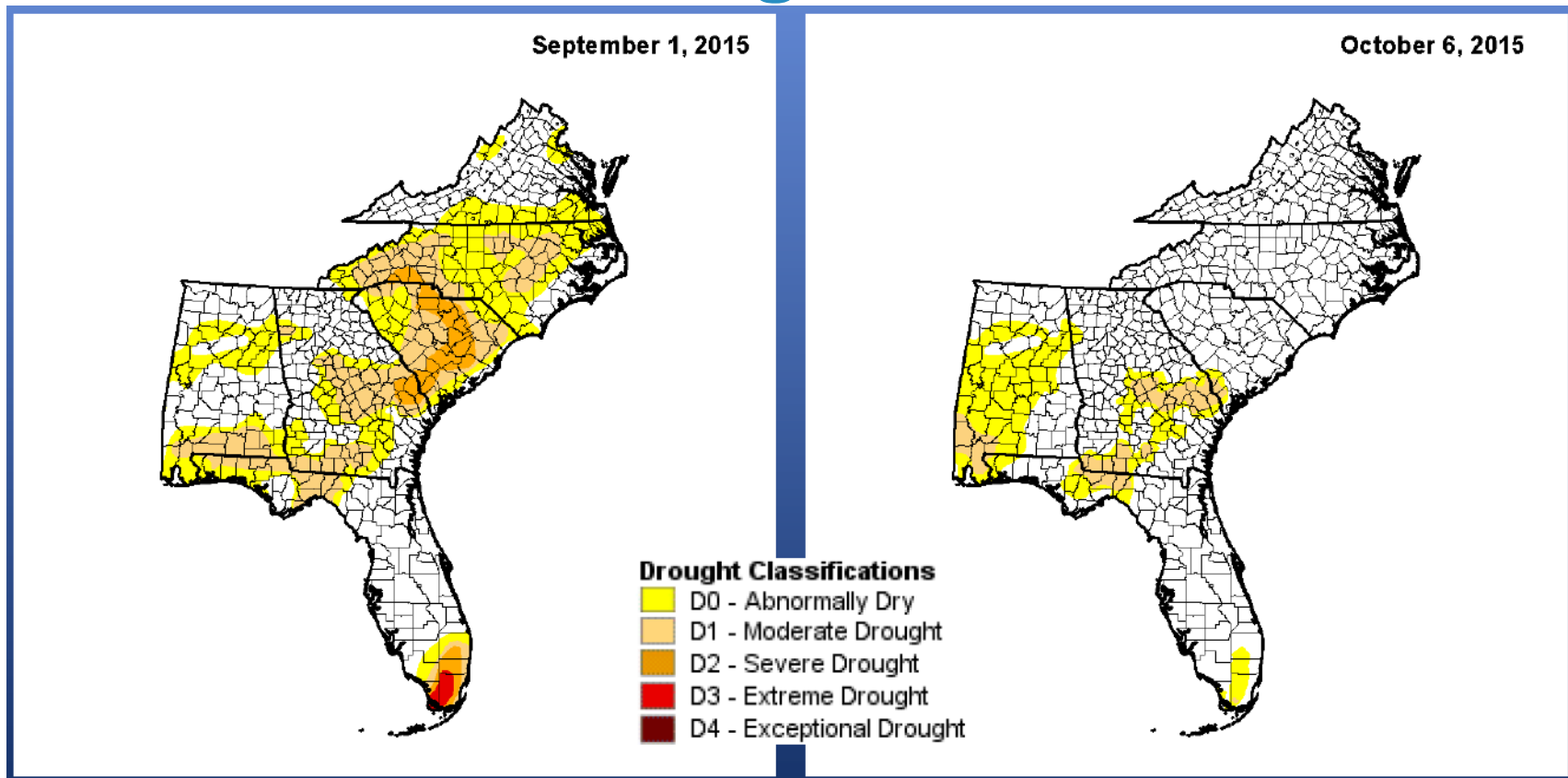
Department of Environmental Quality



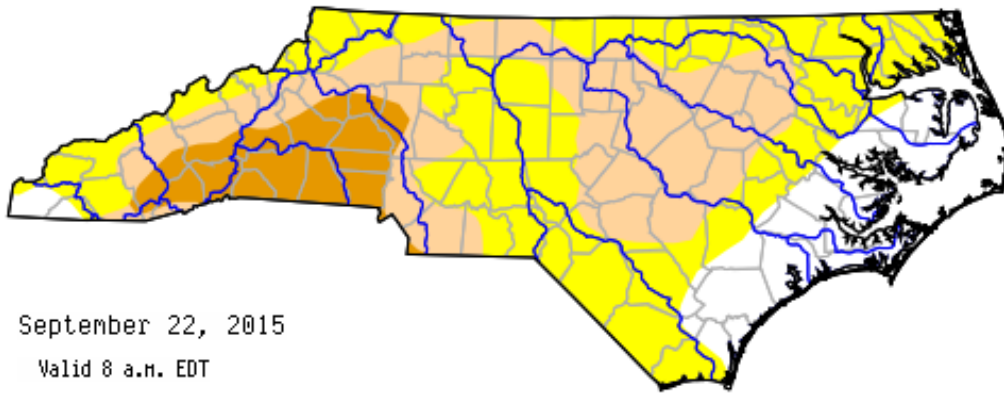
Drought Update

- Drought Conditions
 - Past and Present
 - Precipitation
 - Lake Levels
 - Future Outlook
 - El Niño
 - Forecast
- Questions

US Drought Monitor



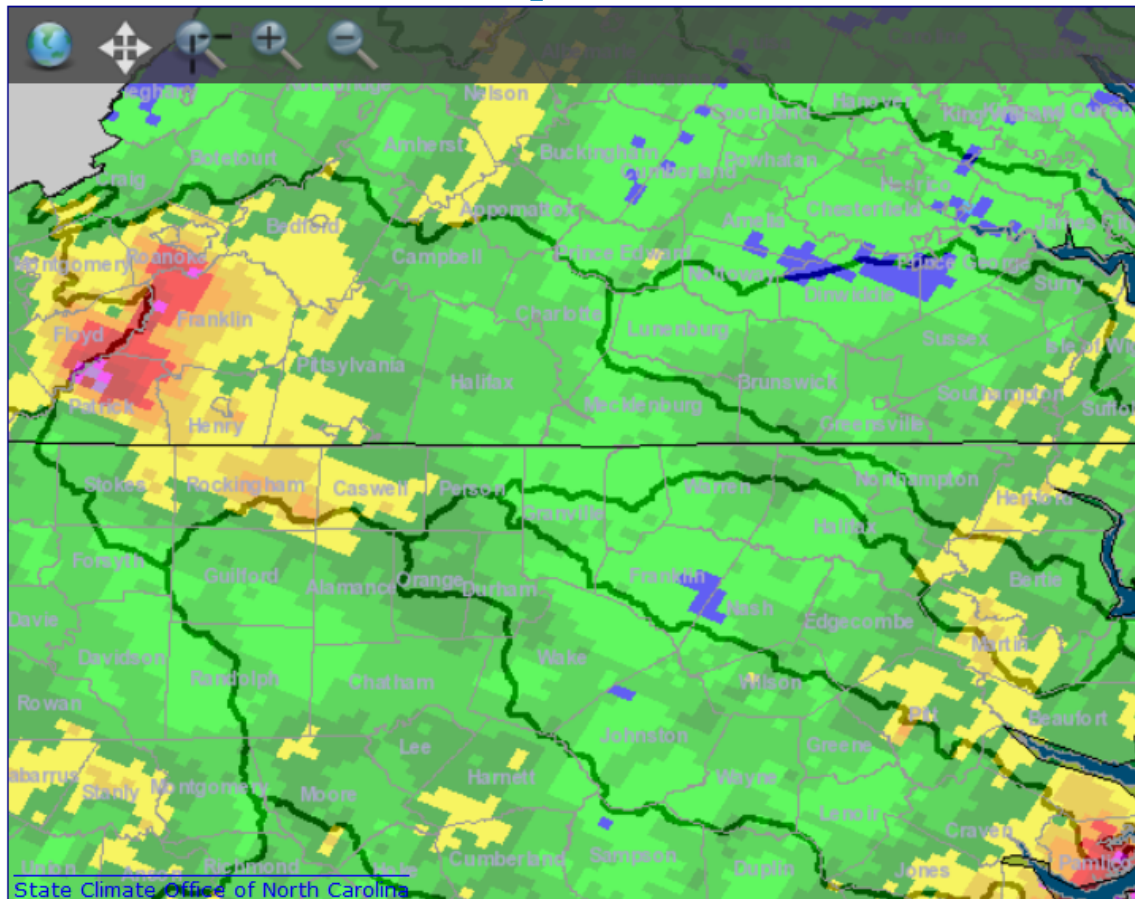
NC Drought Management Advisory Council



Department of Environmental Quality



Observed Precipitation – Last 30 Days



Legend:

- ⚡ County Lines
- 🟦 ≤ 1.5 in.
- 🟩 1.5 to 3 in.
- 🟨 3 to 4.5 in.
- 🟧 4.5 to 6 in.
- 🟥 6 to 7.5 in.
- 🟤 7.5 to 9 in.
- 🟡 9 to 10.5 in.
- 🟠 10.5 to 12 in.
- 🟢 12 to 13.5 in.
- 🔴 13.5 to 15 in.
- 🟠 15 to 16.5 in.
- 🟡 16.5 to 18 in.
- 🟢 18 to 19.5 in.
- 🟣 > 19.5 in.
- ⚡ HUC6



Lake Levels – Past

Reservoir	14-Sep-15 0800 Elev (ft-msl)	Guide Curve (ft-msl)	Forecast 21-Sep-15 Elevation (ft-msl)	Average Net Inflows		Rainfall at Dam	
				7-day cfs (% median)	Sep cfs (% median)	7-day (inches)	Sep (inches)
Kerr	296.99	299.5	296.5	1479 (30%)	1,295 (26%)	1.82	2.81
Philpott	968.95	972.0	968.0	38 (20%)	46 (25%)	0.17	0.20

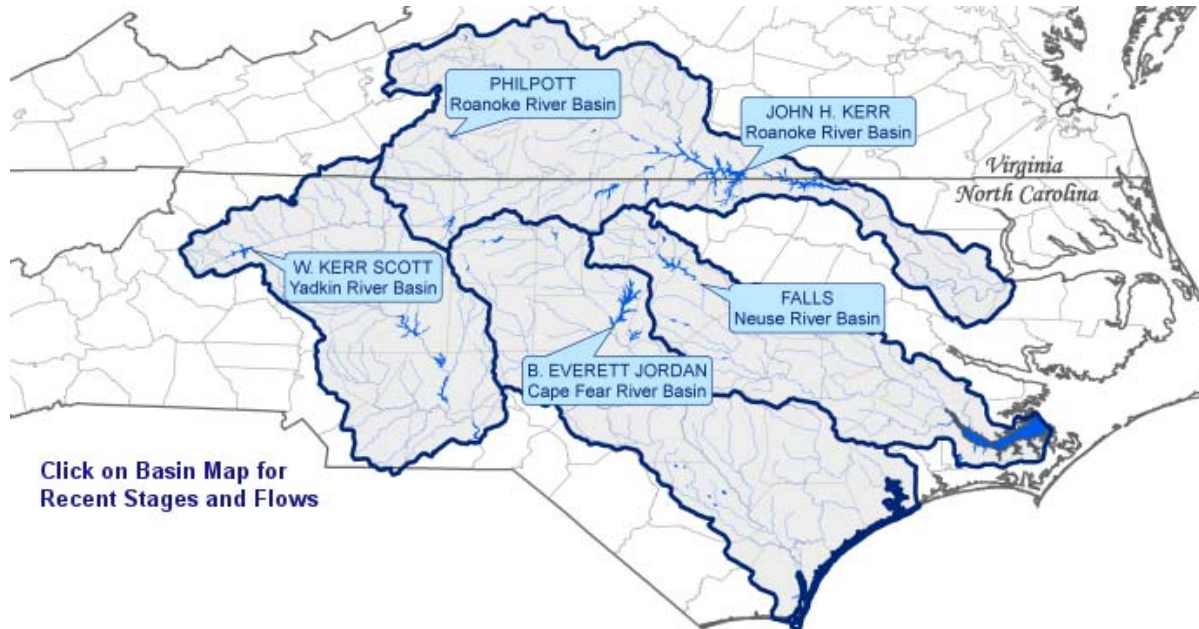
Reservoir	21-Sep-15 0800 Elev (ft-msl)	Guide Curve (ft-msl)	Forecast 21-Sep-15 Elevation (ft-msl)	Average Net Inflows		Rainfall at Dam	
				7-day cfs (% median)	Sep cfs (% median)	7-day (inches)	Sep (inches)
Kerr	296.13	299.5	295.5	504 (10%)	1,018 (20%)	0.00	2.81
Philpott	968.34	971.8	967.5	18 (10%)	37 (20%)	0.80	1.00

Lake Levels – Past

Reservoir	28-Sep-15 0800 Elev (ft-msl)	Guide Curve (ft-msl)	Forecast 21-Sep-15 Elevation (ft-msl)	Average Net Inflows		Rainfall at Dam	
				7-day cfs (% median)	Sep cfs (% median)	7-day (inches)	Sep (inches)
Kerr	296.09	299.5	296.0	2,419 (48%)	1,381 (27%)	2.39	5.20
Philpott	972.14	971.5	967.2	875 (470%)	254 (137%)	5.87	6.87

Reservoir	5-Oct-15 0800 Elev (ft-msl)	Guide Curve (ft-msl)	Forecast 21-Sep-15 Elevation (ft-msl)	Average Net Inflows		Rainfall at Dam	
				7-day cfs (% median)	Sep cfs (% median)	7-day (inches)	Sep (inches)
Kerr	303.06	299.2	300.0	29,979 (614%)	2,682 (53%)	4.24	6.15
Philpott	977.58	971.5	973.0	3,261 (1782%)	723 (389%)	6.49	9.67

Lake Levels – Present



Click on Reservoir Name Below to go to Project Webpage:

	John H. Kerr	Philpott	Falls	B. Everett Jordan	W. Kerr Scott
0800 Elevation (ft-msl)	302.18	973.14	251.38	216.88	1030.70
Guide Curve (ft-msl)	298.63	971.50	251.50	216.00	1030.00

Lake and Guide Curve Levels for the past 180 days

Future Outlook

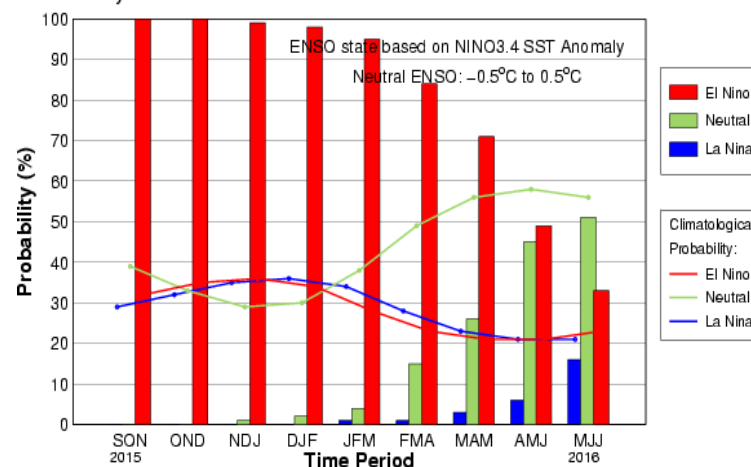
ENSO Alert System Status: El Niño Advisory

El Niño conditions are present.

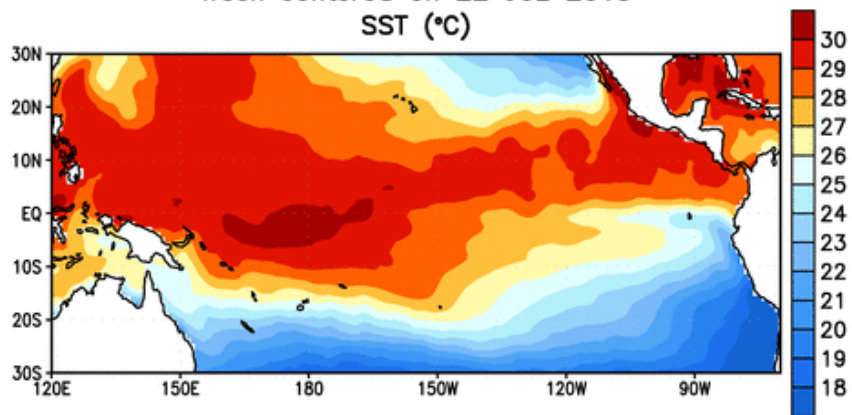
Positive equatorial sea surface temperature (SST) anomalies continue across most of the Pacific Ocean.

There is an approximately 95% chance that El Niño will continue through Northern Hemisphere winter 2015-16, gradually weakening through spring 2016.

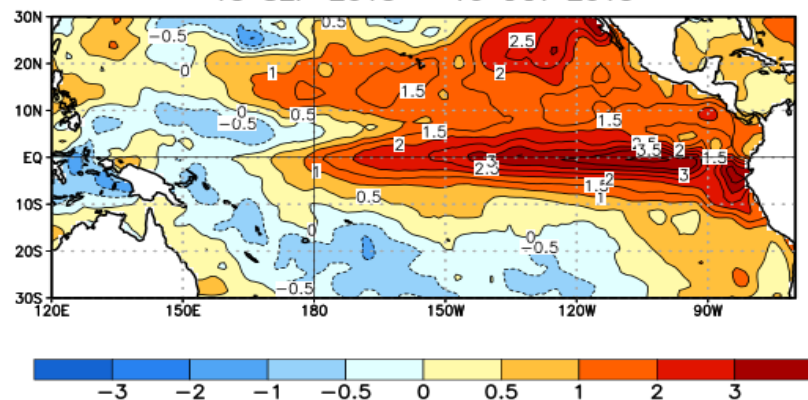
Early-Oct CPC/IRI Consensus Probabilistic ENSO Forecast



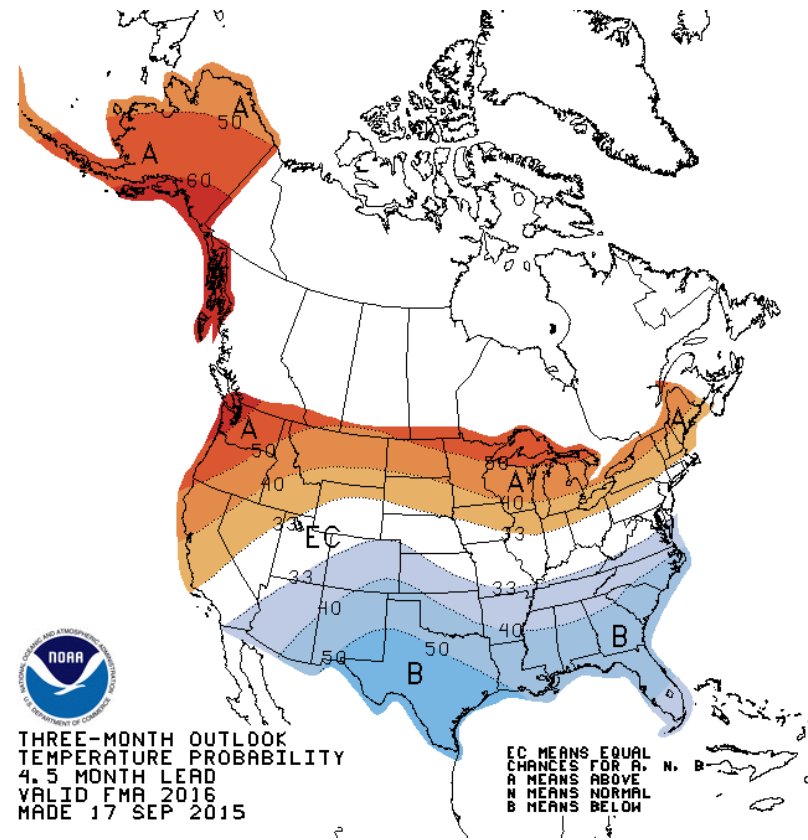
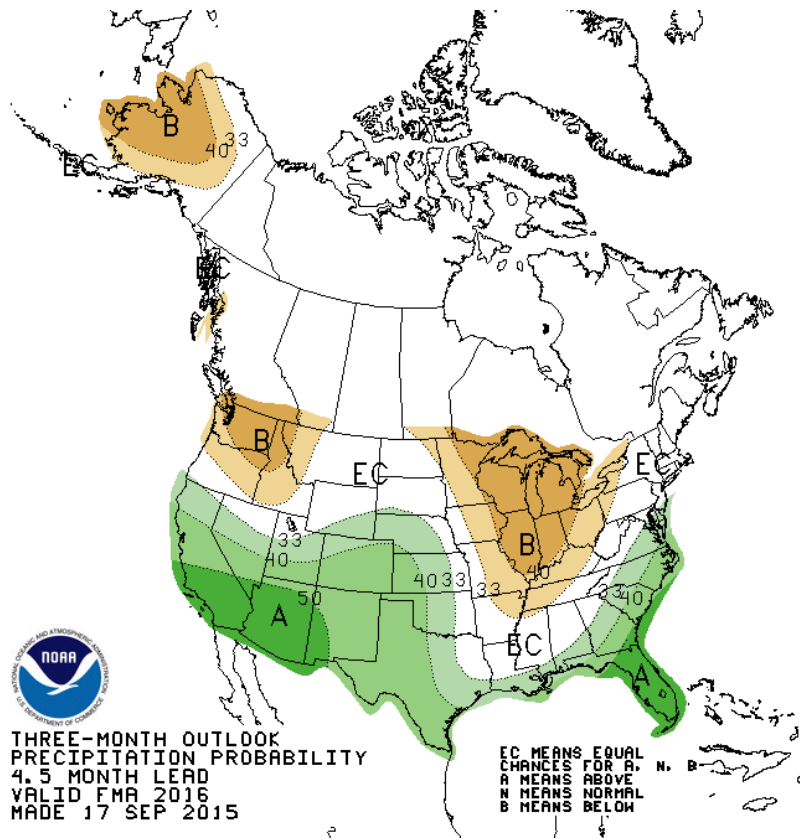
Week centered on 22 JUL 2015
SST ($^{\circ}\text{C}$)



Average SST Anomalies
13 SEP 2015 – 10 OCT 2015



Future Outlook



Contact Information

QUESTIONS?

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