

Session 5

The Florida WCA Learning Network

March 30, 2016

OUC Pershing Facility in Orlando, FL

Kevin Morris



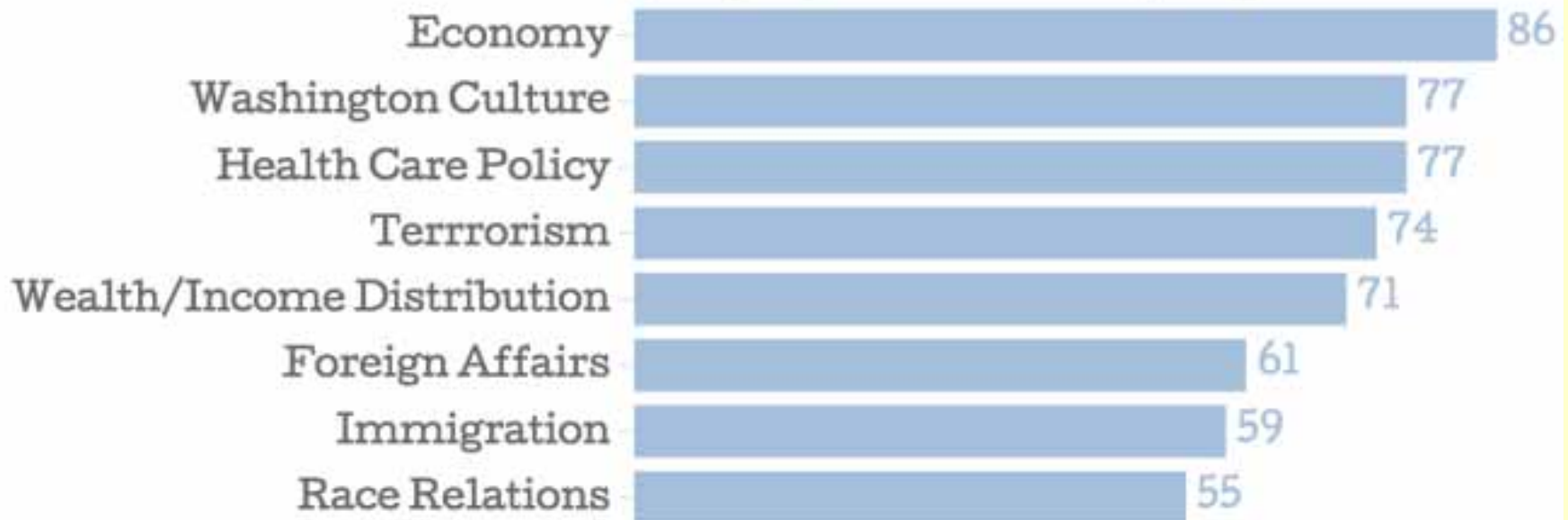
**As a Society
we are easily
distracted**



It is Difficult for our Leaders to Engage in Climate Change Concerns when it is not an Important Issue to the Electorate

Important Issues to Voters in 2016 Election

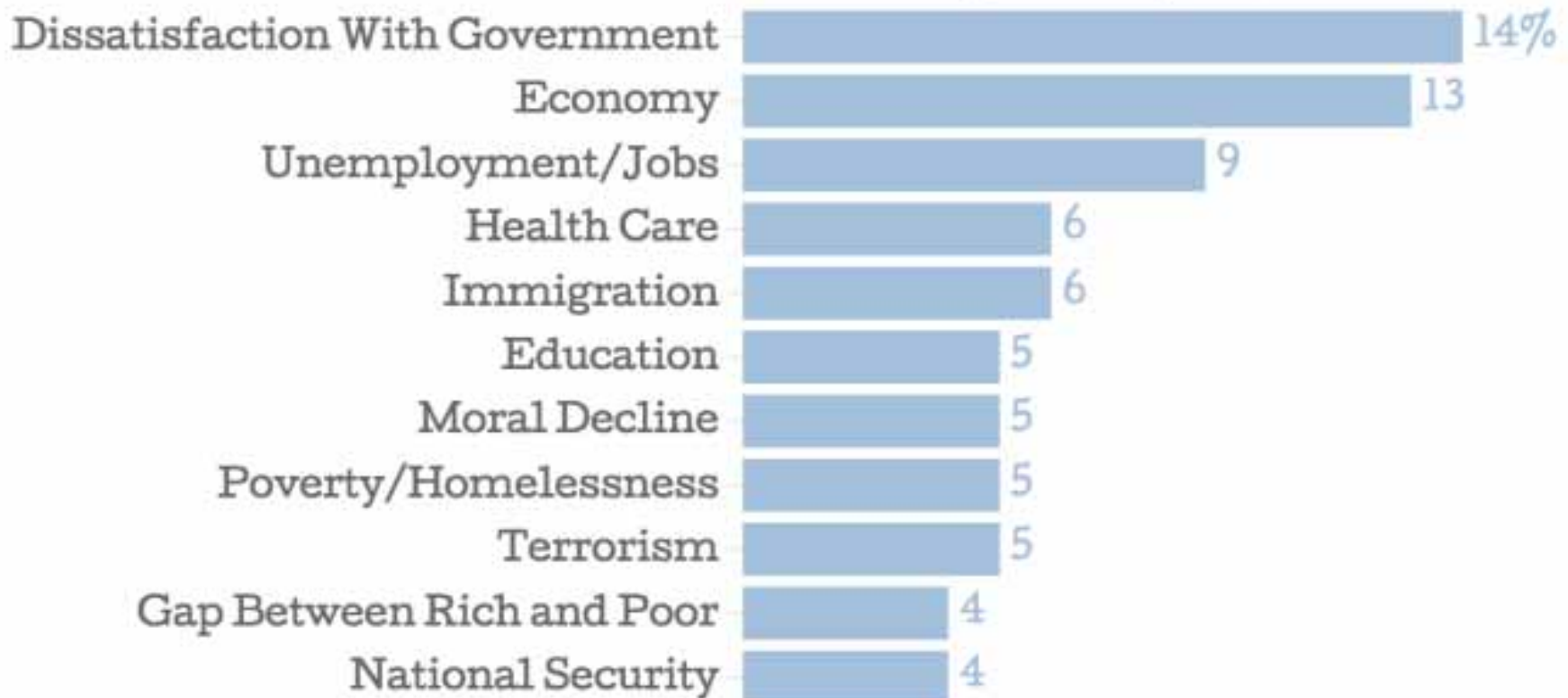
% Saying Issue Was "Very Important"



Biggest Problems Facing our Country?

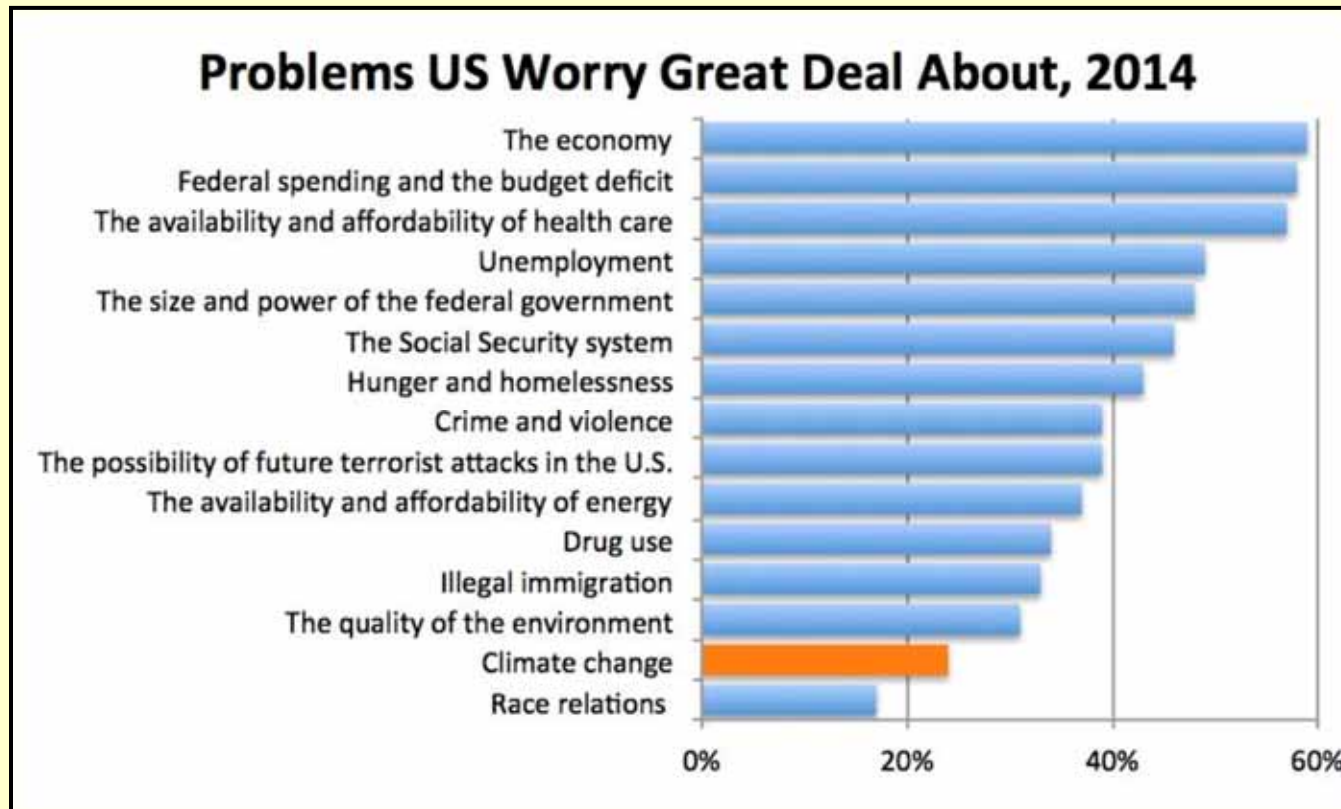
What is the Country's Most Important Problem?

Poll From June 2-7, 2015



Climate Policy

- Policy makers represent the broad, often conflicting, interests of society



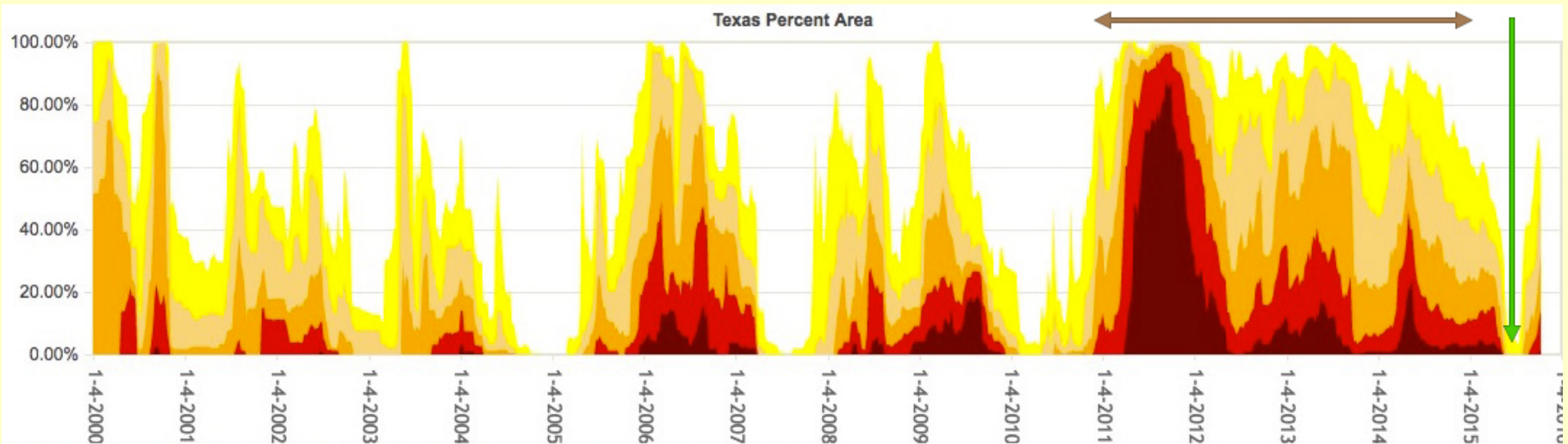
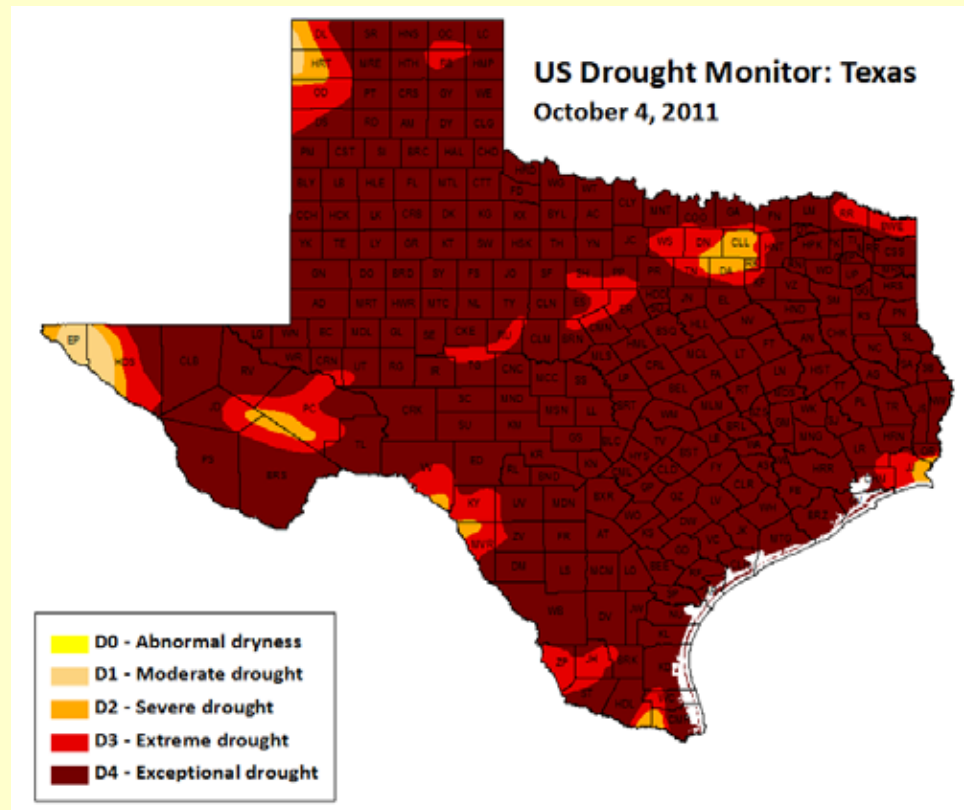
*Recent Gallup poll
on what issues most
concern Americans*

Opportunities

- Climate is Cyclical – Recognition Ebbs and Flows in the Public Consciousness
- Florida WCA's Perceived Value Can Increase:
 - during droughts for water suppliers/regulators
 - during floods for stormwater managers/regulators
- Recent Severe Droughts in Other States that Have Influenced Thinking, Spending and Cultural Awareness



Texas



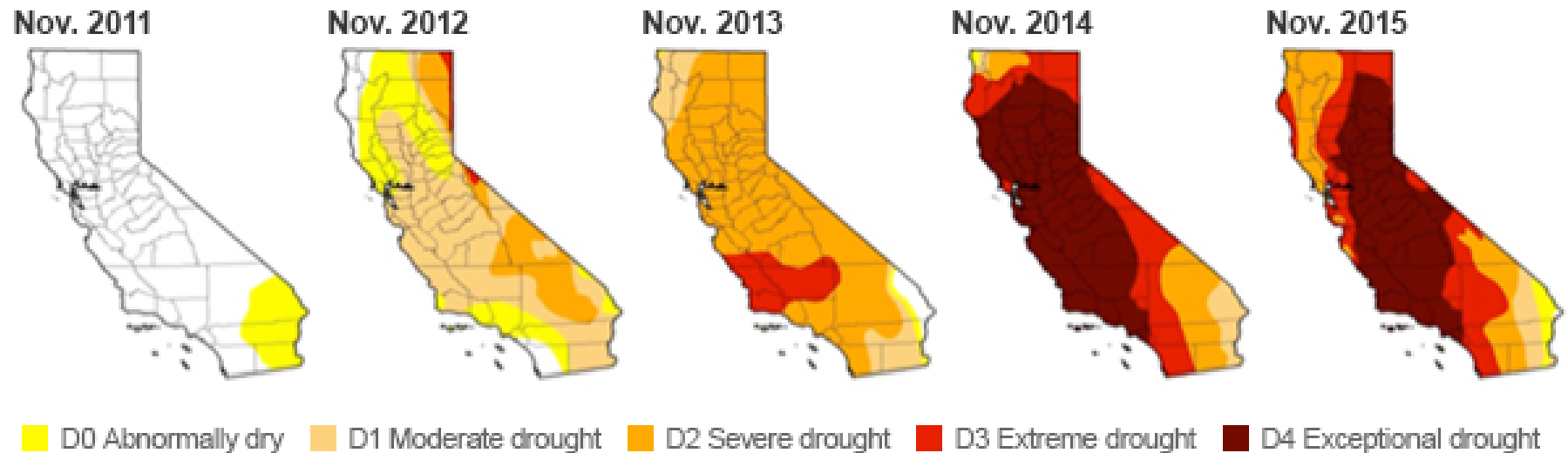
- State Water Implementation Fund for Texas (SWIFT) - \$3.9 Billion in commitments in 2015 alone

**Welcome
to
California**



California Drought

Time-series comparison of statewide drought conditions



Lake
Shasta

- The \$7.5 billion water bond approved overwhelmingly by California voters in November 2014 will fund water supply projects across the state...

Florida's Weather Patterns Are Also
Cyclical Though Thankfully Not as
Extreme as We have Seen in Texas and
California

Historic Rainfall Totals: 7 County Area Comprising Peace River Drainage Basin

**Below
Average
Monthly
Rainfall**



**Above
Average
Monthly
Rainfall**

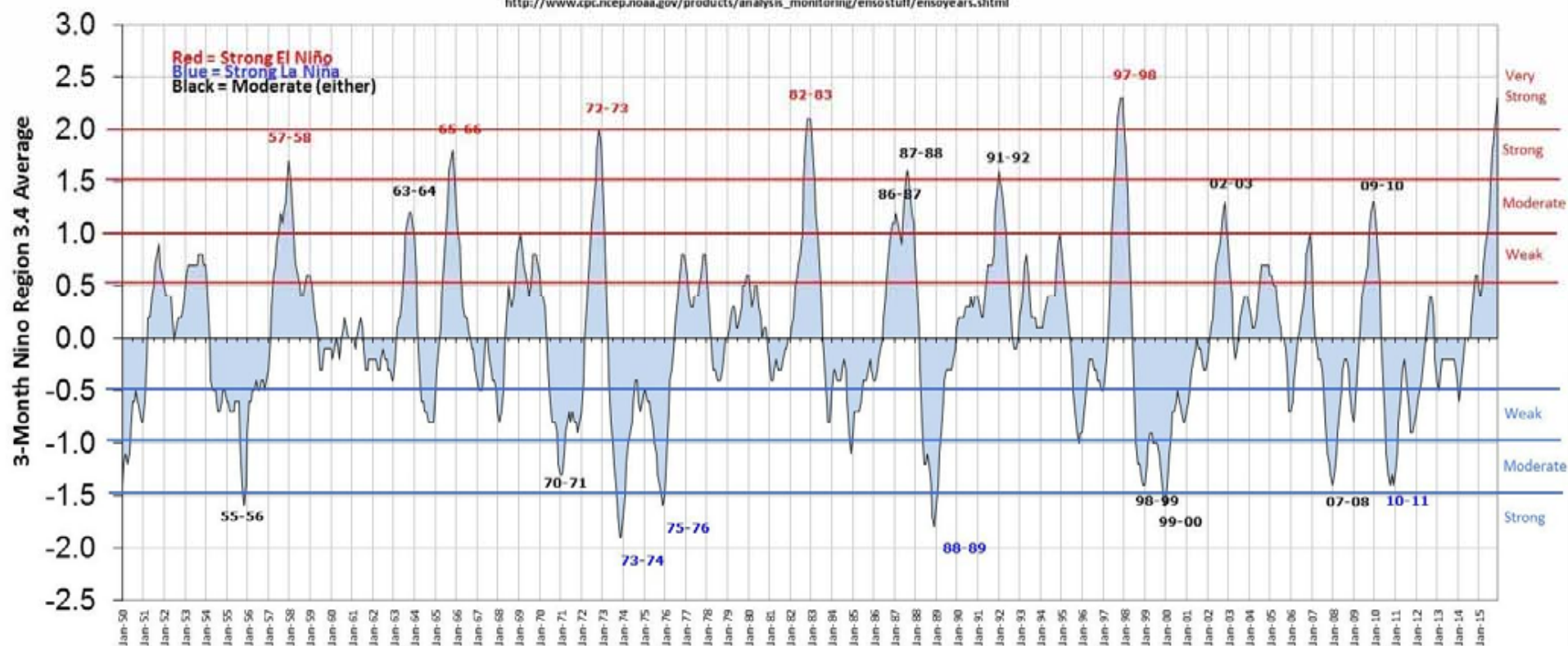


Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Average (inches)	Annual Deficit (inches)
1975	0.749	1.539	1.147	0.547	5.137	6.554	9.101	6.327	8.549	6.074	0.563	0.670	46.957	3.835
1976	0.586	0.934	1.003	1.789	7.613	9.014	7.800	7.800	7.259	1.659	2.450	1.819	49.724	1.068
1977	2.351	1.494	0.673	0.507	3.551	4.949	8.629	8.186	8.144	1.619	2.741	4.530	47.374	3.418
1978	2.863	4.227	2.976	0.273	4.899	9.027	10.561	6.049	4.584	2.330	0.993	3.666	52.447	-1.655
1979	7.164	1.647	2.137	1.937	6.821	4.193	6.643	9.513	13.960	0.944	1.251	2.493	58.704	-7.912
1980	2.726	2.579	2.583	3.877	4.866	3.693	7.214	6.954	5.339	2.079	3.763	0.934	46.606	4.187
1981	0.506	3.910	1.340	0.069	2.559	8.056	6.060	12.753	5.639	0.950	1.619	1.036	44.494	6.298
1982	1.557	2.630	5.776	3.881	5.666	12.974	8.766	6.881	9.776	4.200	1.410	0.777	64.294	-13.502
1983	3.344	4.216	3.103	0.889	4.253	5.201	7.019	7.850	4.651	2.871	0.863	3.311	47.571	3.221
1984	1.064	3.444	4.641	3.036	4.414	4.391	10.303	5.620	3.771	0.900	2.439	0.543	44.567	6.225
1985	1.176	0.964	2.424	2.291	1.743	6.323	7.533	8.019	6.074	3.483	1.840	1.014	42.884	7.908
1986	2.036	1.564	5.367	0.621	2.026	11.197	7.023	7.964	4.710	4.104	1.229	4.540	52.381	-1.589
1987	2.579	1.616	8.636	0.284	4.559	6.264	7.401	5.491	5.917	4.171	5.689	0.459	53.066	-2.273
1988	3.341	2.573	5.444	1.776	2.046	4.477	8.491	10.050	8.521	1.324	4.119	1.256	53.419	-2.626
1989	2.377	0.444	2.629	1.840	1.173	7.610	7.044	6.320	7.553	2.230	1.133	3.499	43.851	6.941
1990	0.229	3.529	1.776	1.467	3.424	6.057	8.624	7.756	3.919	2.967	0.630	0.784	41.161	9.631
1991	4.519	1.809	3.916	3.716	8.054	9.010	9.874	6.124	4.144	2.479	0.561	0.446	54.651	-3.859
1992	0.773	4.450	2.496	3.969	0.937	17.470	4.679	9.359	5.403	2.709	1.971	0.790	55.004	-4.212
1993	5.780	2.623	5.011	3.993	2.493	5.266	6.153	6.980	5.529	5.829	0.564	0.993	51.213	-0.420
1994	3.181	1.540	2.521	3.426	1.683	9.399	8.317	9.277	11.756	3.403	2.097	2.944	59.544	-8.752
1995	2.767	2.351	2.013	3.920	1.711	13.396	11.637	12.190	7.346	8.739	1.404	0.817	68.291	-17.499
1996	3.666	1.317	4.709	1.833	4.749	7.160	4.184	4.607	4.853	4.600	0.433	1.743	43.853	6.940
1997	1.590	1.133	1.954	7.043	3.100	5.861	8.603	5.290	9.496	2.017	6.177	8.133	60.397	-9.605
1998	5.050	7.437	7.753	0.877	2.531	2.551	7.521	6.223	9.691	1.273	3.589	0.937	55.434	-4.642
1999	3.444	0.557	1.130	1.499	3.803	11.226	5.693	9.723	6.249	4.139	1.319	1.679	50.459	0.334
2000	1.173	0.291	1.220	1.543	0.540	5.604	7.069	6.229	7.270	0.407	0.609	0.637	32.591	18.201
2001	0.306	0.064	6.429	0.260	2.027	7.071	11.510	5.617	13.200	2.043	0.216	0.770	49.513	1.280
2002	1.931	3.664	0.407	2.063	3.001	12.197	6.620	9.003	5.194	2.320	4.481	7.599	58.481	-7.689
2003	0.214	1.254	3.246	3.391	3.624	14.010	5.716	10.170	8.644	0.779	1.121	3.429	55.599	-4.806
2004	2.091	3.927	0.931	3.734	1.567	9.747	8.563	12.879	11.520	1.506	1.244	3.121	60.831	-10.039
2005	1.770	3.277	4.601	3.399	5.051	15.413	8.613	6.750	3.684	6.709	2.756	0.687	62.710	-11.917
2006	0.631	3.491	0.587	0.503	2.000	6.399	8.641	8.650	6.801	1.247	0.820	2.380	42.151	8.641
2007	1.420	1.699	0.641	2.536	1.363	6.469	7.903	5.364	4.927	4.031	0.309	1.059	37.720	13.073
2008	2.211	1.717	3.054	4.091	1.447	8.307	10.046	9.960	3.546	2.756	0.573	1.043	48.751	2.041
2009	1.153	0.534	1.076	1.070	8.300	7.480	8.060	7.560	6.349	1.024	1.490	4.424	48.520	2.273
2010	2.320	2.429	6.841	2.939	2.883	6.074	6.760	10.229	4.694	0.100	2.786	1.041	49.096	1.697
2011	3.180	0.337	5.884	1.401	2.354	5.807	7.576	8.471	5.659	5.626	0.617	0.243	47.156	3.637
2012	0.484	1.286	1.441	1.943	2.947	13.031	6.173	9.263	4.761	3.636	0.209	2.343	47.517	3.275
2013	0.280	1.161	1.141	3.977	3.453	11.513	10.423	8.316	8.531	1.561	1.144	0.423	51.924	-1.132
Averages	2.169	2.196	3.094	2.262	3.445	8.216	7.911	7.994	6.862	2.842	1.775	2.026	50.793	

From NOAA's Climate Prediction Center

Oceanic Niño Index (ONI)

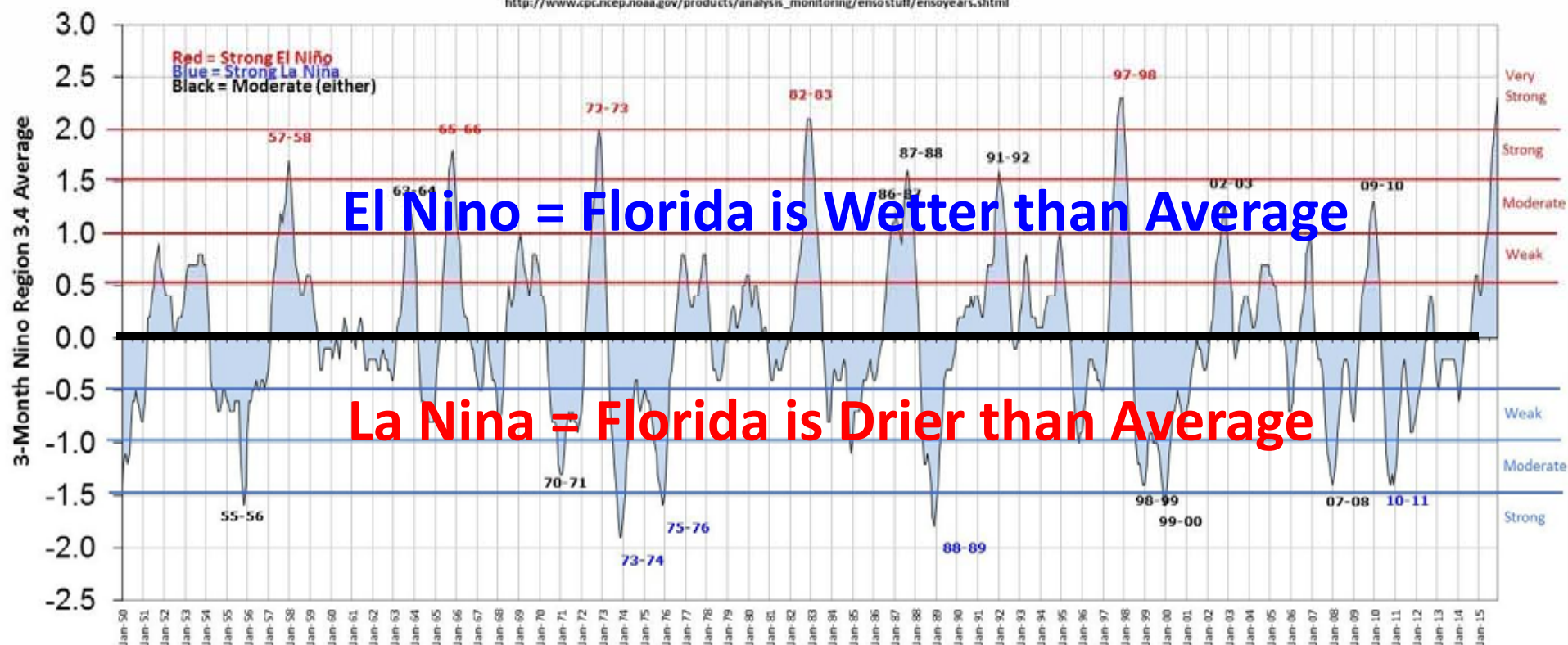
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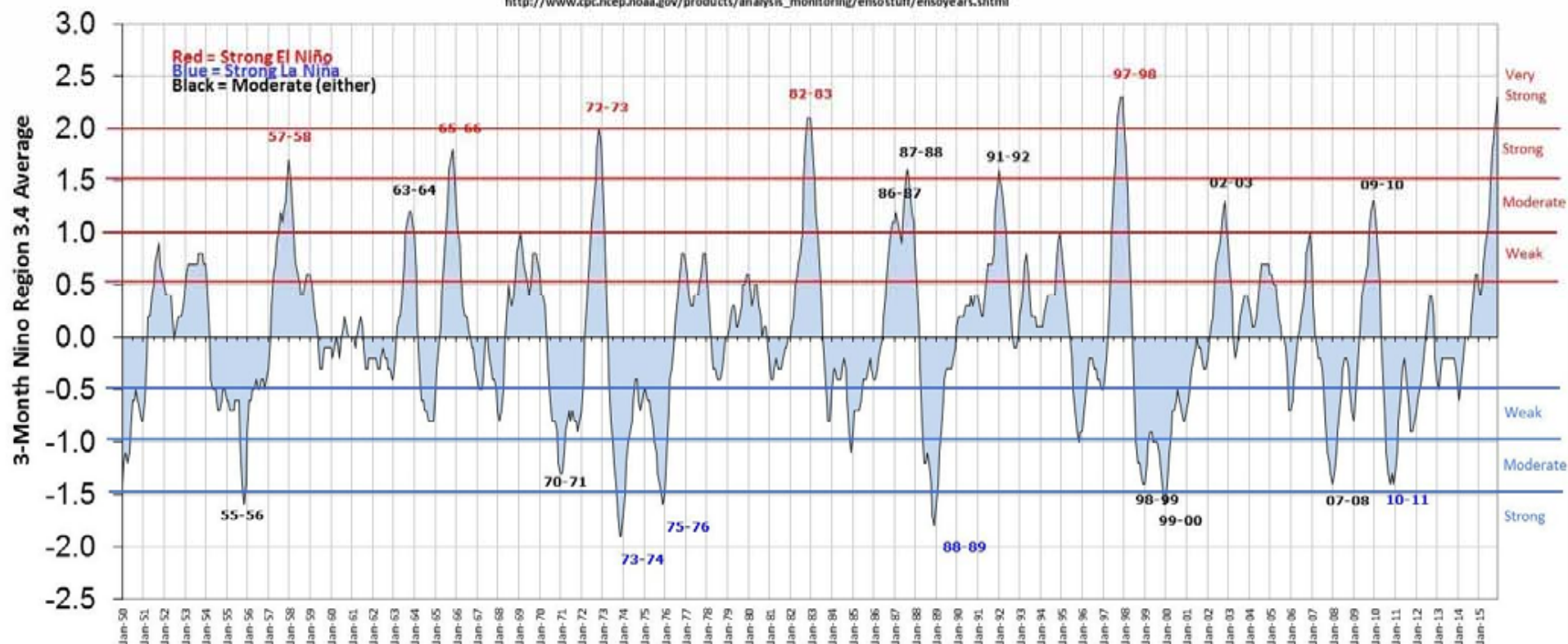
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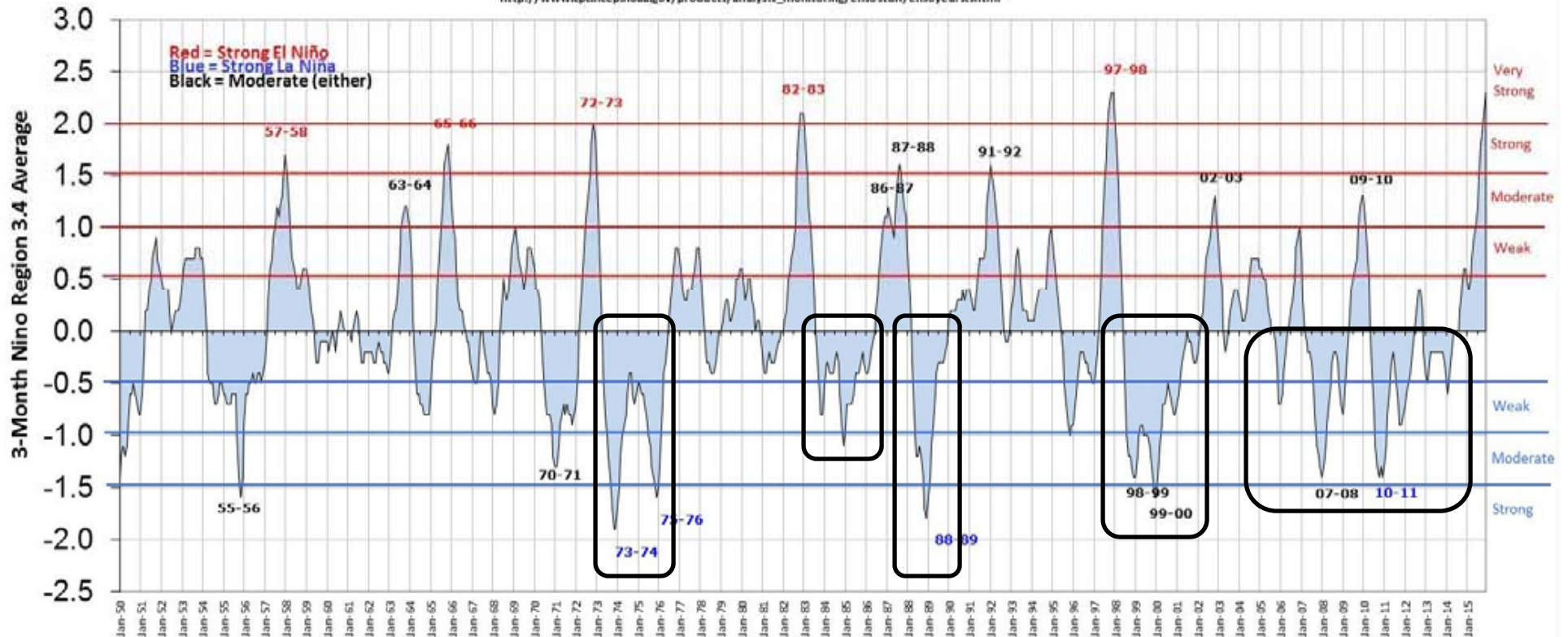


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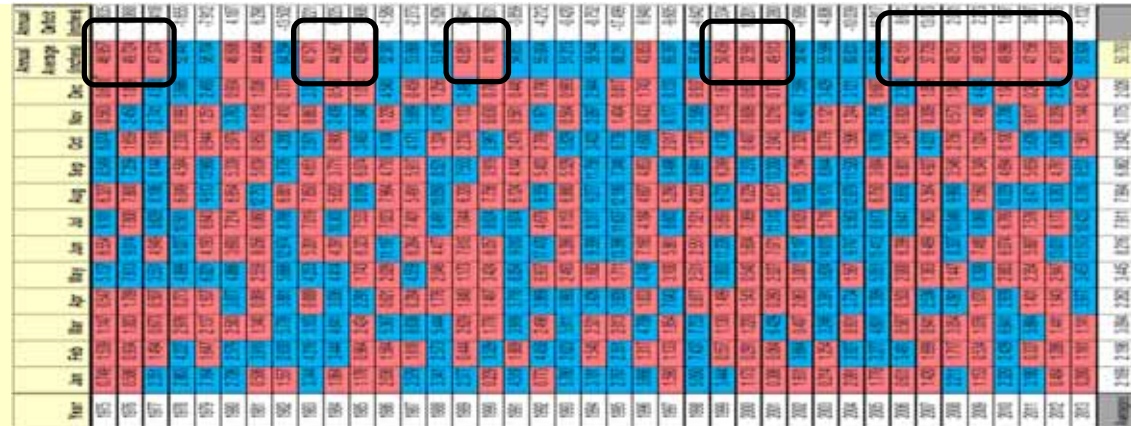
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Oceanic Niño Index (ONI)

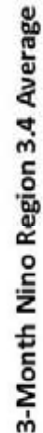
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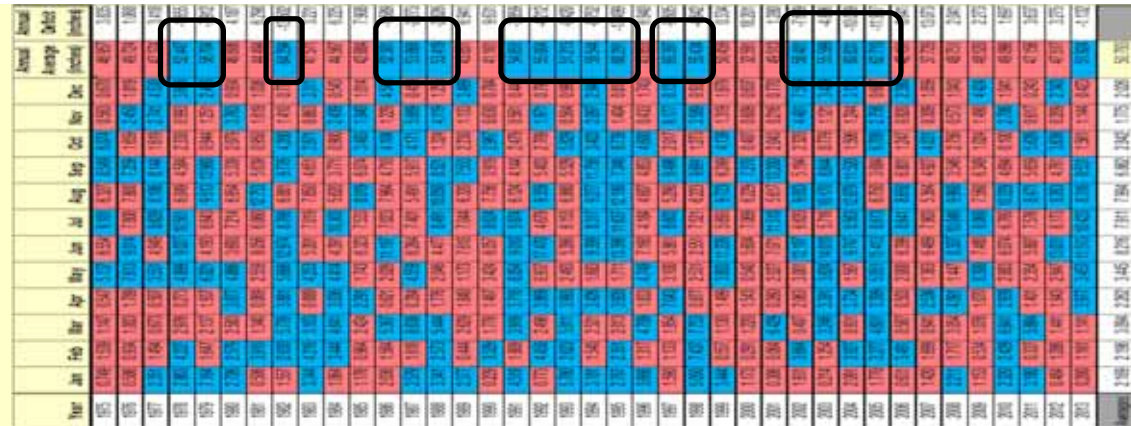
Let's First Examine
the Correlation for
Drought Periods
and La Nina



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Now Let's Examine the Correlation for Wet Periods and El Nino



The Human, Institutional and
Organizational Capital Comprised of
the Networks represented by Florida
WCA Uniquely Position this Entity to
Respond to Opportunities.

Opportunities Which Can Elevate Florida WCA's Profile/Opportunities

- Longer Term Cyclical Climate Pattern Challenges
- Tragic Single Inundation Events
 - Superstorm Sandy
 - Hurricane Katrina
- Policy Changes (Local, State & Federal)
- Others:
 - Collaboration Opportunities with Other Entities
 - Establishing New Partnerships/Re-establish Old Ones
 - Response to Grant Proposals
 - Outreach to New Participants