Drought Identify. A drought is a prolonged period without rain, particularly during the planting and growing season in agricultural areas. It can range from two weeks to six months or more and affects water availability and quality. In Georgia, droughts affect municipal and industrial water supplies, stream-water quality, recreation at reservoirs, hydropower generation, navigation, agricultural and forest resources. Farmland irrigation is a means of mitigation and preparedness. Additional sources of water may be identified to assist with individual and family consumption during time of response and recovery.

Hazard Scores

Flood Hazard Scores

The flood hazard scores are derived from the FEMA Q3 "Zone" values. The Q3 layer is derived from the FEMA paper flood insurance rate maps. Although the resolution is 1:24,000, which has an allowable error of 40 feet, FEMA recommends using 250 feet as the potential error. This layer cannot be used for a legal flood determination.

Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

SLOSH Hazard Scores

The Sea, Lake and Overland Surges from Hurricanes (SLOSH) is a computerized model to estimate storm surge heights and winds resulting from historical, hypothetical, or predicted hurricanes by taking into account pressure, size, forward speed, track, and wind speed from a storm. This layer represents the SLOSH results from a hypothetical event, showing SLOSH inundation areas for each category in the Saffir-Simpson Hurricane Scale. The areas inundated by a category 4 or category 5 storm surge have been combined to reflect their decreased probability of occurrence. The horizontal positional accuracy is unknown for this layer.

Score	Original Value	Description
5	1	Inundated By a Category 1 Hurricane
4	2	Inundated By a Category 2 Hurricane
3	3	Inundated By a Category 3 Hurricane
2	4	Inundated By a Category 4 Hurricane
	5	Inundated By a Category 5 Hurricane

Seismic Hazard Scores

The seismic hazard layer is based on the USGS Probabilistic Seismic Hazard Map, showing the percentage of gravity that the area has a 2 percent probability of exceedance in 50 years. The score classification reflects that used by the IRC Seismic Design Categories. The horizontal positional accuracy is unknown for this layer.

Score	Original Value	Description
4	D1	50 - 83% gravity
3	C	33 - 50% gravity
2	B	17 - 33% gravity
1	A	0 -17% gravity

Wildfire Risk Scores

The Wildfire Risk Layer was based on the USDA Forest Service, RMRS Fire Sciences Laboratory "Wildland Fire Risk to Flammable Structures, V 1.0" map. Although this data was not intended for use at a detail greater than state-wide analysis, it has been included as the best available data on wildfire risk. The scores are based on the risk value from the original layer. The horizontal positional accuracy is unknown for this layer.

Score	Original Value	Description
4	5	High

3	4	Moderate
2	3	Low
1	2	Very Low
0	1	No Houses
	7	Agriculture
	8	Water
	9	City

Wind Hazard Scores

The Wind Hazard Scores are based on the 2000 International Building Code, figure 1609 contours showing 3 second gust wind speeds with a 50 year return interval. The Northwest portion of the state scored an additional point for the 250 mph community tornado shelter design zone according to FEMA publications.

Score	Original Value	Description
5	> 120 mph	3 second gust greater than 120 mph
4	110 to 119 mph	
3	100 to 109 mph	
2	90 to 99 mph (or ZONE IV)	This score is also given to an area with Zone IV of the "Design Wind Speed Map for Community Shelters," representing an area exposed to 250 mph winds. This area is the Northwestern corner of the state.
1	< 90 mph	

Marty LeFiles

From: asloan@gema.state.ga.us
Sent: Monday, March 21, 2005 3:54 PM
To: cliff.atkinson@gmail.com; ajbelinc@msn.com; bhso17@mchsi.com; tema911@alltel.net; chiefbrooksdfd@alltel.net; Sherry Davidson; ddrake@swgrdc.org; ellisjim@alltel.net; mikef@tifton.net; emawc@worthcountyboc.com; stacygriffin@alltel.net; mvjsegardc@accessatc.net; rayj@alltel.net; tcfd@rose.net; nlacey@lowndescounty.com; alamb@camillaga.net; RLand@columbusga.org; jalsegardc@accessatc.net; Marty LeFiles; ccema@alltel.net; warmcclung1@aol.com; colquittcode@yahoo.com; Quitman/County/GEMA@gema.state.ga.us; mkp@alltel.net; mccomm@surfsouth.com; claycountysheriff@alltel.net; brks911@surfsouth.com; Eric Vorwald; emaberrien@alltel.net; jlmbc@surfsouth.com; dylan0315@alltel.net; icema@alltel.net; cholmsley@lcrdc.org
Subject: Critical Facilities hazard layers scores

Good afternoon, all!

Over the past few weeks, there have been some questions regarding the scoring on the hazard layers within the ITOS Critical Facilities database. While I apologize for the time it has taken for me to get this to you, here are the answers:

SLOSH: 2 = low, 5 = high
seismic: 1 = low, 4 = high
Land Slide: 1 = High, 0 = none (0 always equal none and, since there are only two options for this one - yes or no - 1 is high)
Wind: 1 = low, 5 = high
Wildfire: 1 = low, 4 = high
Flood: 1 = low, 4 = high

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NOAA's Drought Information Center

Drought Home

THE PALMER DROUGHT SEVERITY INDEX

The Palmer Index was developed by Wayne Palmer in the 1960s and uses temperature and rainfall information in a formula to determine dryness. It has become the semi-official drought index.

The Palmer Index is most effective in determining long term drought—a matter of several months—and is not as good with short-term forecasts (a matter of weeks). It uses a 0 as normal, and drought is shown in terms of minus numbers; for example, minus 2 is moderate drought, minus 3 is severe drought, and minus 4 is extreme drought. At present, northern Virginia is at a minus 4.0 point; north central Maryland is at a minus 4.2 level, and southern Maryland is at least a minus 4 level.

The Palmer Index can also reflect excess rain using a corresponding level reflected by plus figures; i.e., 0 is normal, plus 2 is moderate rainfall, etc. At present, north central Iowa is at a plus 5.2 level, and parts of South Dakota are even higher.

The advantage of the Palmer Index is that it is standardized to local climate, so it can be applied to any part of the country to demonstrate relative drought or rainfall conditions. The negative is that it is not as good for short term forecasts, and is not particularly useful in calculating supplies of water locked up in snow, so it works best east of the Continental Divide.

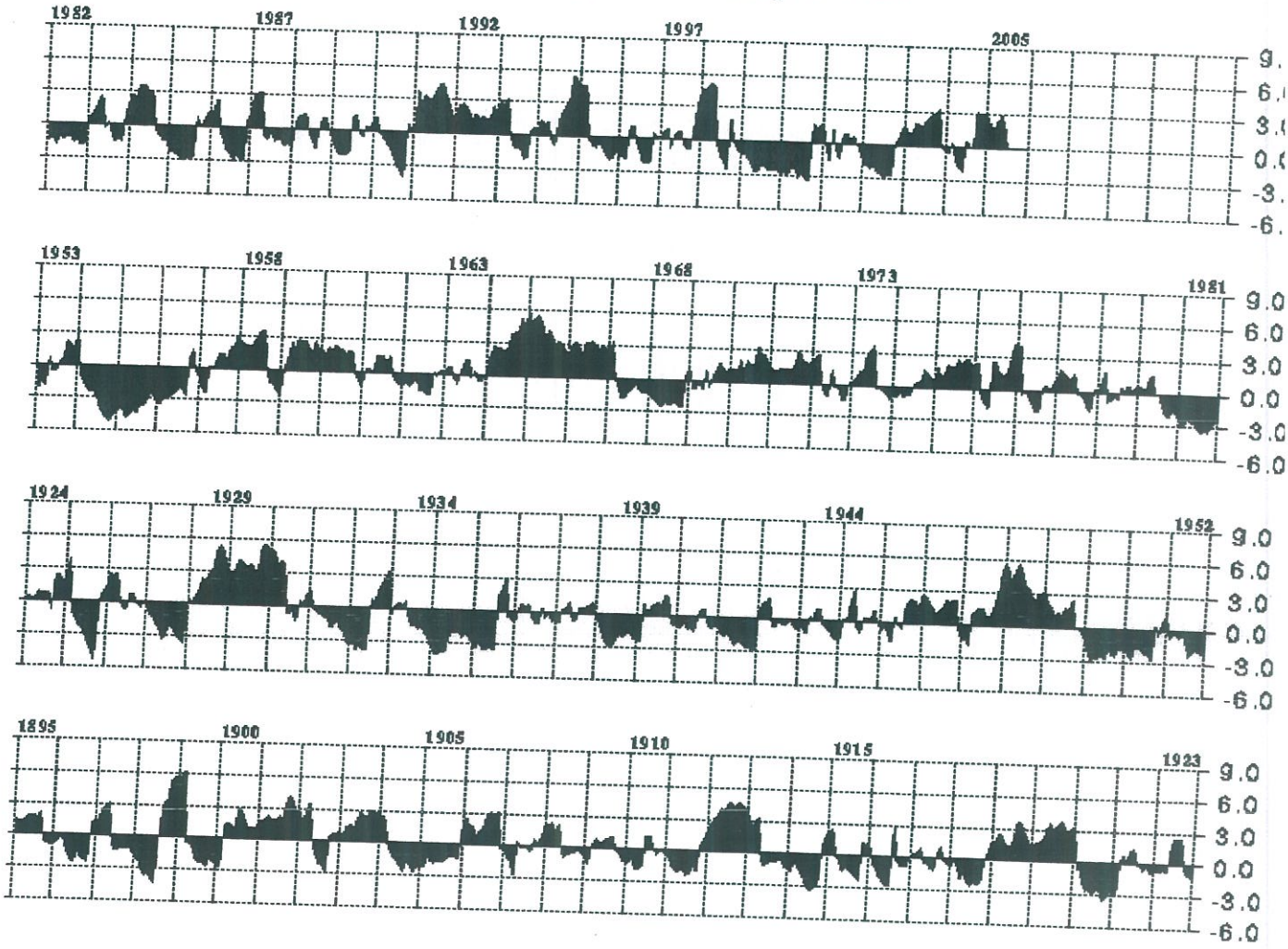
The Crop Moisture Index (CMI) is also a formula that was also developed by Wayne Palmer subsequent to his development of the Palmer Drought Index.

The CMI responds more rapidly than the Palmer Index and can change considerably from week to week, so it is more effective in calculating short-term abnormal dryness or wetness affecting agriculture.

CMI is designed to indicate normal conditions at the beginning and end of the growing season; it uses the same levels as the Palmer Drought Index.

It differs from the Palmer Index in that the formula places less weight on the data from previous weeks and more weight on the recent week.

Palmer Drought Severity Index



Georgia - Division 08: 1895-2005 (Monthly Averages)

PALMER DROUGHT INDEX
1980 - 2003
Region 8

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
January	0.66	-2.91	-1.42	0.85	2.81	-2.38	1.32	2.99	0.4	-1.76	1.26	3.78	2.55	3.1	1.48	4.57	-1.58	0.56	4.57	-1.01	-2.73	-0.48	-1.74	1.05
February	0.1	-2.66	-1.27	1.37	2.54	-2.46	2.42	3.27	1.09	-2.17	-0.16	2.5	2.65	2.71	0.8	4.61	-1.86	0.88	4.85	-1.54	-2.96	-1.55	-2.18	1.15
March	1.43	-2.29	-1.84	2.14	3.61	-2.83	-0.58	3.16	1.2	-2.19	-0.64	3.57	2.55	3.29	1.37	-0.38	1.05	-0.81	5.11	-2.05	-2.41	1.3	-1.94	2.11
April	1.66	-2.56	-1.16	2.59	3.6	-3.06	-1.39	-0.73	1.51	-2.12	-1.16	2.95	1.87	-0.34	-0.35	-0.72	1.1	0.37	4.79	-2.67	-2.29	-0.64	-2.41	2.02
May	0.04	-2.7	-1.41	-0.28	3.46	-2.88	-2.21	-0.95	-0.33	-2.02	-1.52	3.1	1.26	-1.04	-0.86	-0.98	-0.47	0.61	-0.4	-2.73	-3.17	-1.41	-2.65	1.83
June	-0.1	-3.25	-1.17	0.26	2.87	-2.92	-2.42	-0.34	-0.95	1.26	-2.34	3.64	1.79	-1.22	1.45	-0.39	-1.2	0.76	-1.52	-2.19	-2.77	0.89	-2.92	2.43
July	-1.05	-3.59	-1.11	-0.91	3.17	-2.74	-3.05	-1.06	-1.79	1.35	-2.94	4.36	1.41	-1.27	2.17	-1.04	-2.21	-0.56	-1.82	-2.14	-3.09	0.96	-2.71	2.65
August	-1.99	-3.12	-1.7	-1.58	-0.5	0.94	-2.32	-0.99	0.01	-0.21	-3.59	4.45	1.66	-2.15	2.8	-1.68	-2.12	-0.91	-2.65	-2.61	-3.41	0.27	-2.82	3.01
September	-2.13	-3.46	-1.45	-1.21	-1.04	0.15	-2.85	-1.08	1.11	-0.61	-4.12	3.32	1.34	-2.02	3.27	-1.97	-2.09	-0.84	1.98	-2.41	1.81	0.81	0.28	2.79
October	-1.5	-2.8	-1.88	-1.48	-1.41	0.48	-2.93	-1.56	1.05	0.3	0.77	2.61	1.49	0.53	5.47	-1.85	0.56	1.54	-0.11	-2.43	1.36	-0.12	0.77	3.51
November	-1.76	-2.52	-1.78	1.18	-1.29	1.2	0.76	-1.24	-0.25	0.31	0.52	1.72	2.57	0.78	5.13	-1.3	0.21	3.49	-0.72	-2.54	1.63	-0.81	1.54	2.94
December	-2.34	-1.72	0.46	2.28	-2.3	1.58	1.41	-1.7	-0.89	1.04	0.19	1.35	2.01	0.65	4.46	-1.61	0.13	4.5	-1.27	-2.87	1.74	-1.75	1.87	
Yearly Average	-0.58	-2.8	-1.31	0.43	1.29	-1.24	-0.99	-0.02	0.18	-0.57	-1.14	3.11	1.93	0.25	2.27	-0.23	-0.71	0.8	1.07	-2.27	-1.36	-0.21	-1.24	2.32

Source: http://www.ncdc.noaa.gov/oa/climate/onlineprod/drought/xmgrg3.html

-4 = Extreme Drought
-3 = Severe Drought
-2 = Moderate Drought
0 = Normal
2 = Moderate Rainfall
3 = Severe Rainfall
4 = Extreme Rainfall

NOAA Satellite and Information Service
National Environmental Satellite, Data, and Information Service (NESDIS)

National Climatic Data Center
U.S. Department of Commerce

Query Results

1 DROUGHT event(s) were reported in **Ben Hill County, Georgia** between **01/01/1950** and **12/31/2004**.

*Click on **Location or County** to display Details.*

Mag: Magnitude
Dth: Deaths
Inj: Injuries
PrD: Property Damage
CrD: Crop Damage

Georgia

Location or County	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
1 GAZ121>131 - 142>148 - 155>161	09/01/1997	12:00 AM	Drought	N/A	0	0	0	46.5M
				TOTALS:	0	0	0	46.500M

Top of Page

This page dynamically generated 24 Oct 2007 from:
http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~storms
Please send questions or comments about this system to Stuart.Hinson@noaa.gov
Please see the NCDC Contact Page if you have questions or comments.

NOAA Satellite and Information Service
National Environmental Satellite, Data, and Information Service (NESDIS)

National Climatic Data Center
U.S. Department of Commerce

Event Record Details

Event: **Drought**
Begin Date: **01 Sep 1997, 12:00:00 AM EST**
Begin Location: **Not Known**
End Date: **22 Sep 1997, 12:00:00 AM EST**
End Location: **Not Known**
Magnitude: **0**
Fatalities: **0**
Injuries: **0**
Property Damage: **$ 0.0**
Crop Damage: **$ 46.5M**

State: **Georgia**
Map of Counties
Forecast Zones affected: **Baker, Ben Hill, Berrien, Brooks, Calhoun, Clay, Colquitt, Cook, Decatur, Dougherty, Early, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Randolph, Seminole, Terrell, Thomas, Tift, Turner, Worth**

Description:
The dry spell that existed the last 10 days of August persisted through the first three weeks of September. Little or no rain fell during this period. University of Georgia agricultural experts estimated crop losses at $66.5 million statewide.