OWASA
Water Supply Advisory

Presentation to Chapel Hill Town Council
September 10, 2007

Good News/Bad News

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- Storage = 63% (2.1 BG)
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- Low risk of severe depletion during next 18 months
- Customers are using less water

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Warning: "Additional measures may become necessary."

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- No water waste!

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(if necessary in the coming months . . .)

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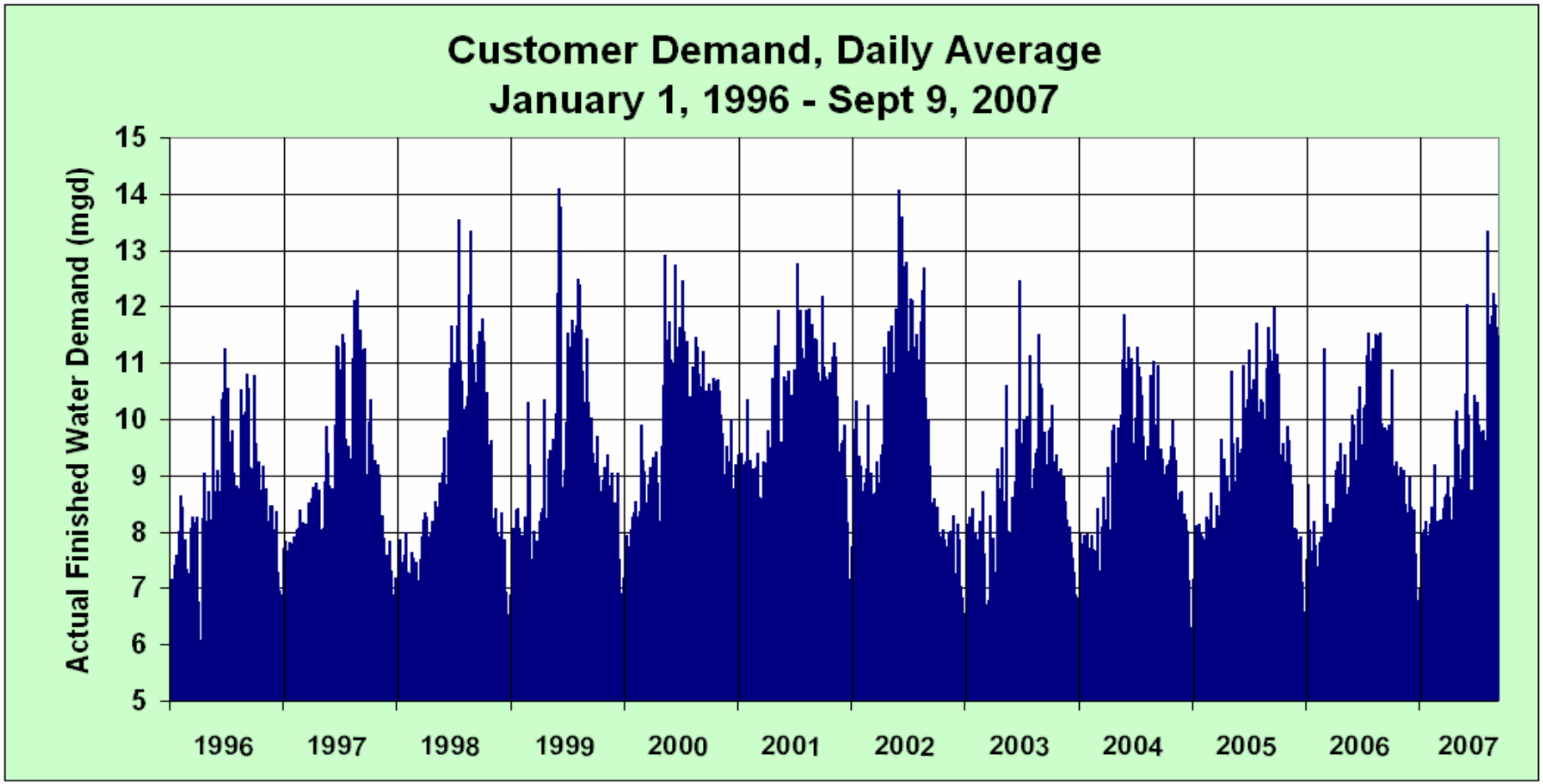
- ***One-half inch* total per week.**
- **1,000 gal / day residential limit**

Where Are We Now?

Daily Demand



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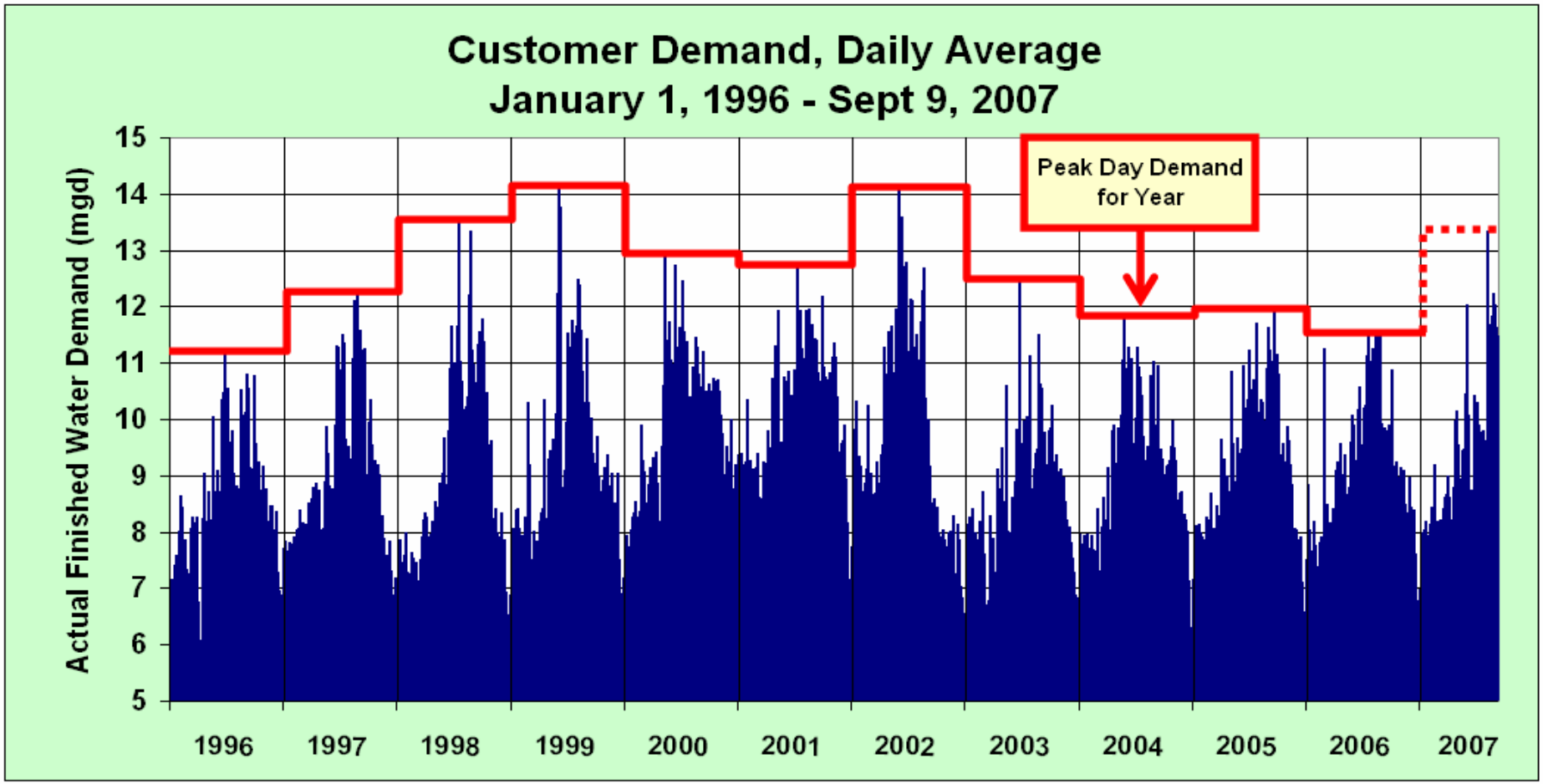

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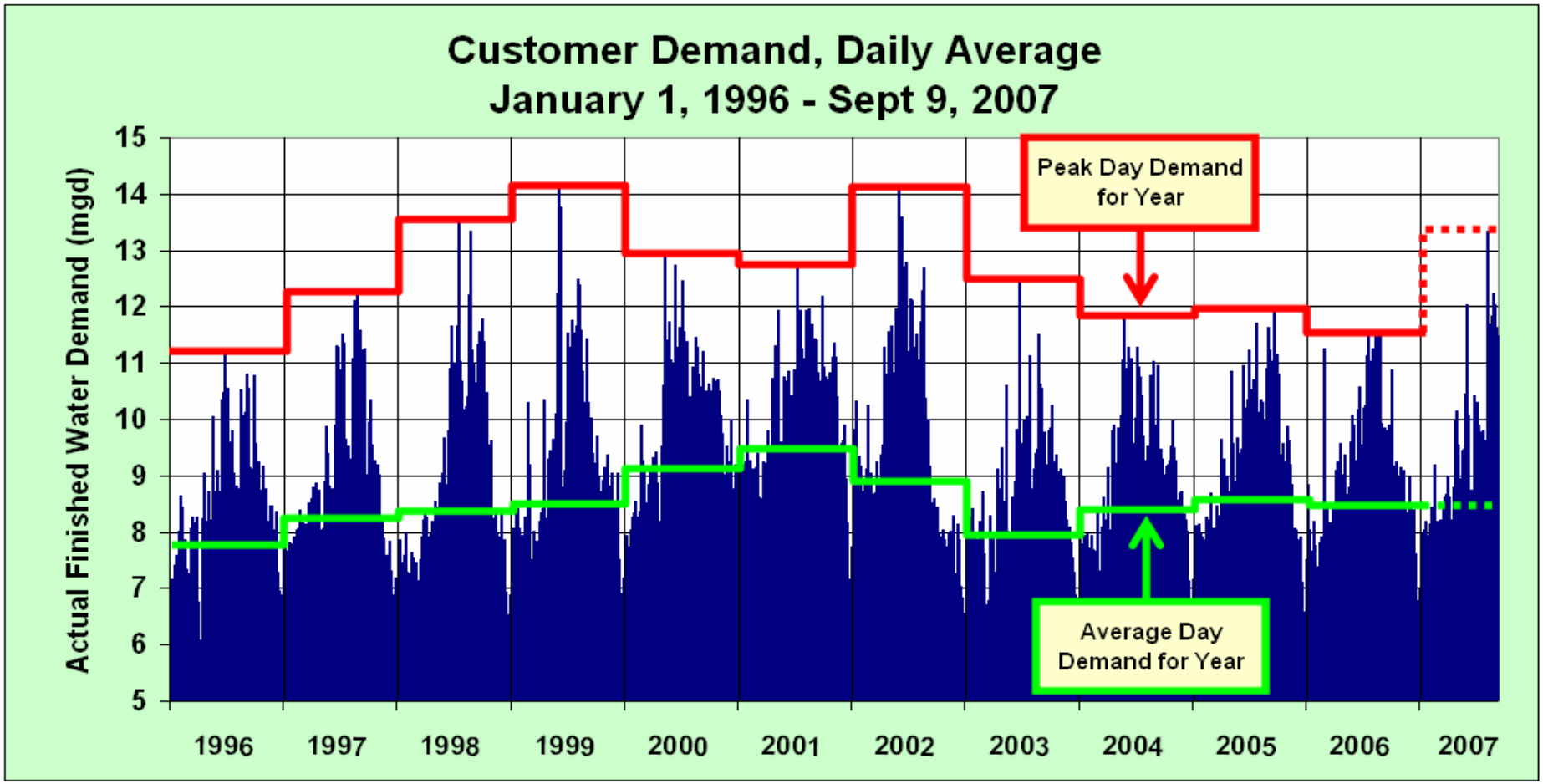
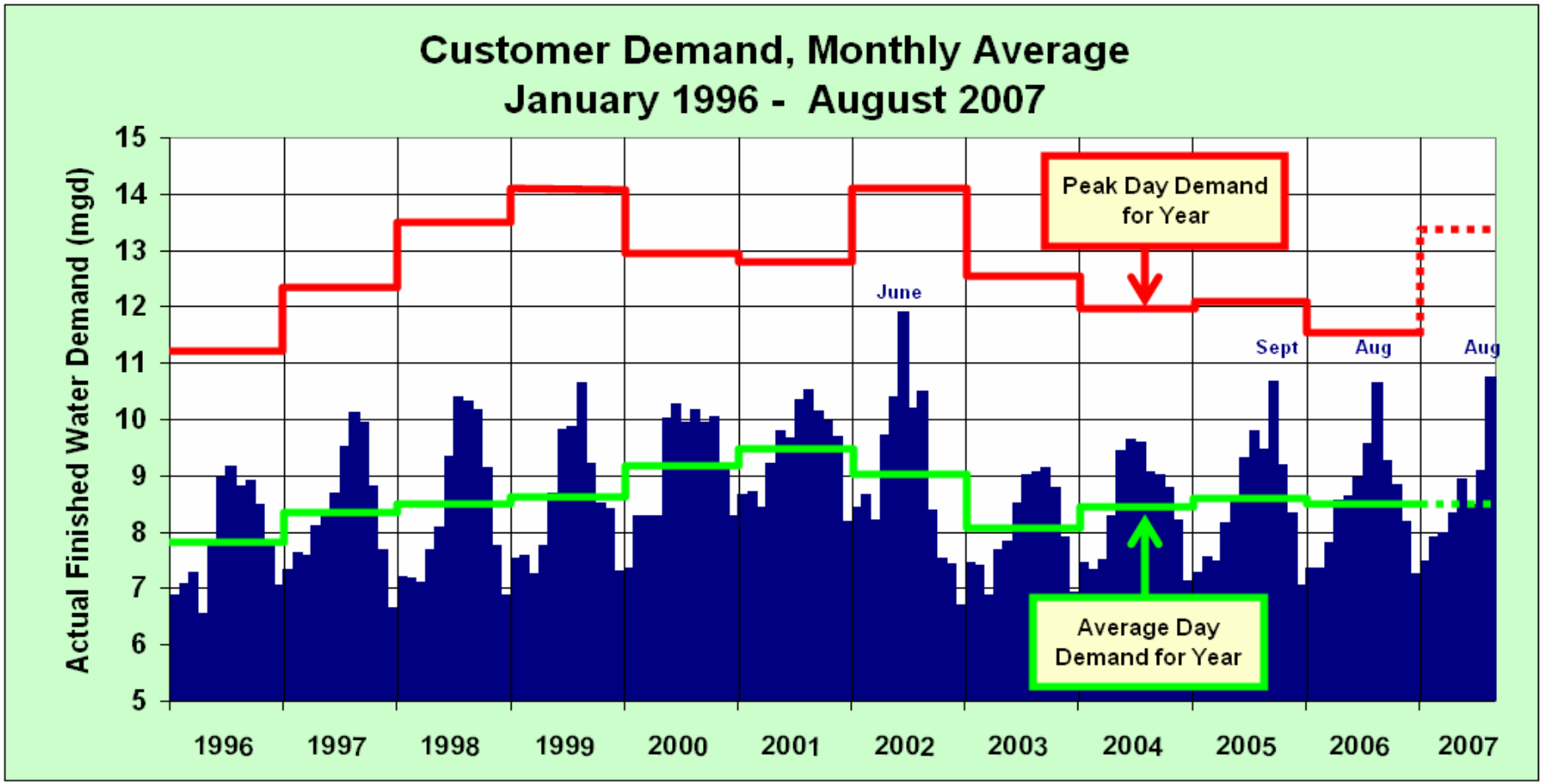
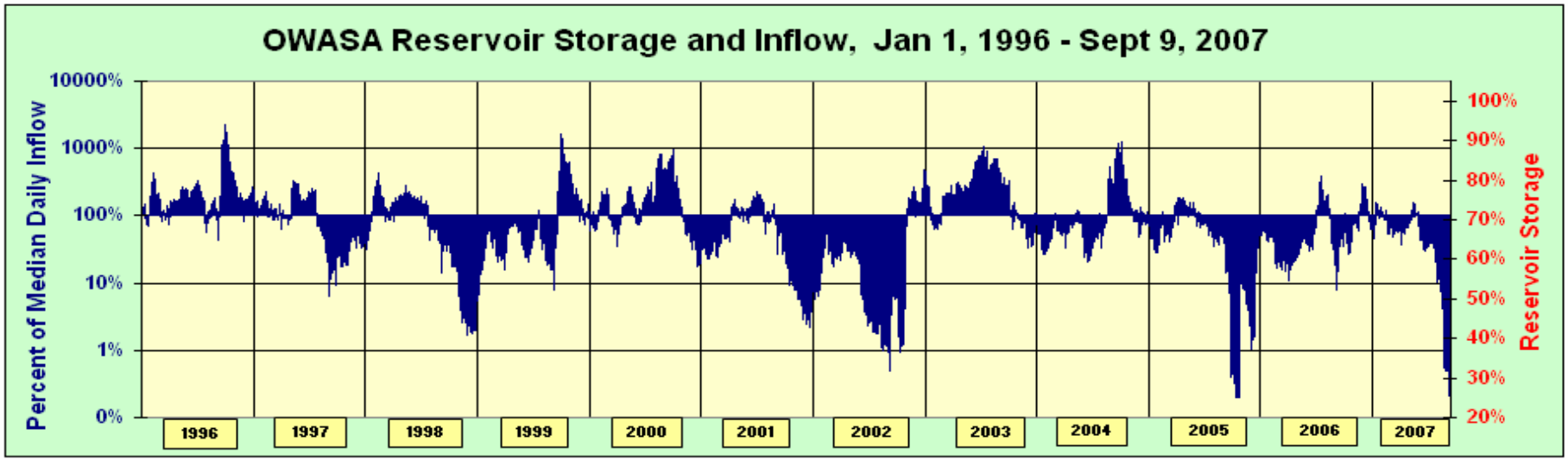


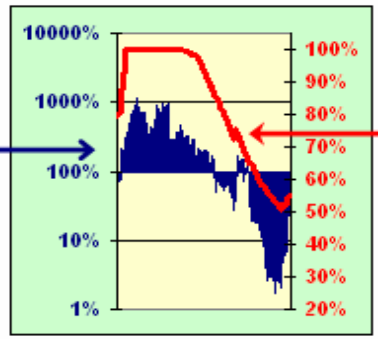
Monthly Demand



Streamflow and Reservoir Storage



Total Reservoir Inflow (30-day median) as percent of 18-year daily median



Percent of Total Reservoir Storage

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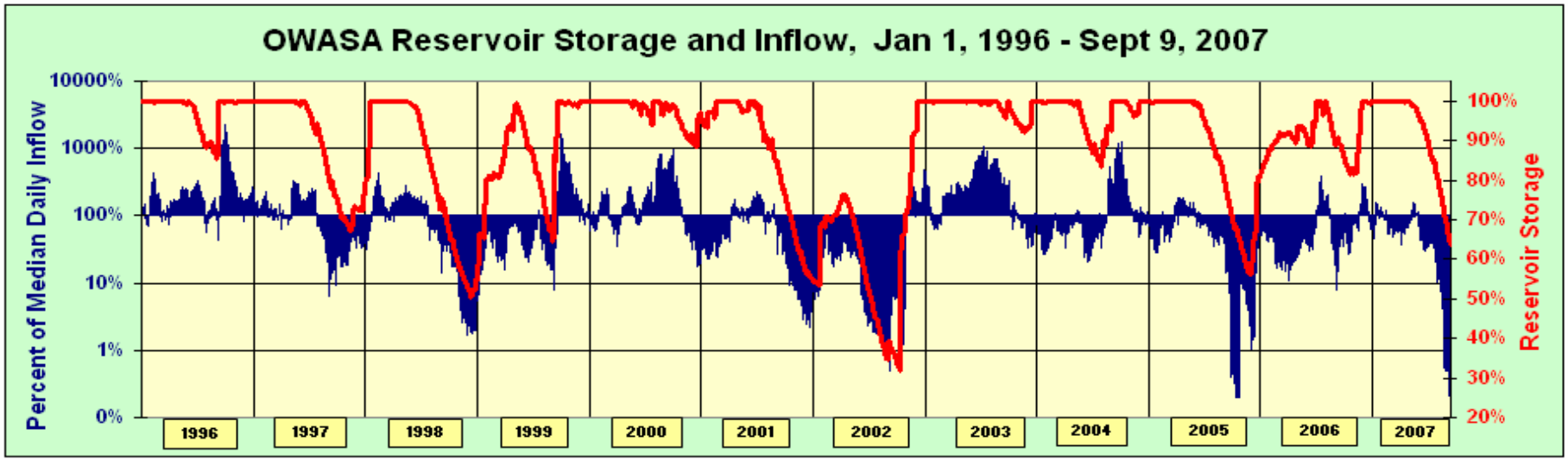

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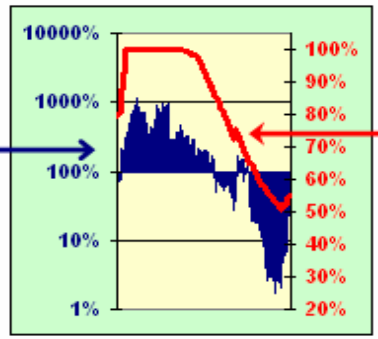

Percent of Total Reservoir Storage

Sept 1, 2002 vs Sept 1, 2007

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30-day demand (mgd):	10.5	10.9
365-day demand:	9.7	8.6
Peak day (summer)	14.1	13.3

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During this same 5-year reporting period, OWASA customer accounts (5/8" meter-equivalents) increased by 11%

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- Reclaimed water system with UNC.

Decision Guide for Drought Management

Reservoir Drawdown Frequency and Guidelines for Conservation Triggers, Average Demand = 9.15 mgd

Number of times (or percent of years) during the 77-year streamflow record in which reservoir storage would have declined to 20% or less during the following 18 months.

Water Remaining in University Lake and Cane Creek Reservoirs (% Full and Million Gallons)		Jan 8.0 mgd	Feb 8.2 mgd	Mar 8.0 mgd	Apr 8.3 mgd	May 9.2 mgd	Jun 9.8 mgd	Jul 10.5 mgd	Aug 10.6 mgd	Sep 10.3 mgd	Oct 9.8 mgd	Nov 9.0 mgd	Dec 8.1 mgd
100%	3358	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
95%	3190	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
90%	3022	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 1%	0 0%	0 0%	0 0%	0 0%
85%	2854	0 0%	0 0%	0 0%	0 0%	2 3%	0 0%	0 0%	1 1%	0 0%	0 0%	0 0%	0 0%
80%	2686	0 0%	0 0%	0 0%	0 0%	2 3%	3 4%	2 3%	1 1%	1 1%	0 0%	0 0%	0 0%
75%	2519	0 0%	0 0%	0 0%	0 0%	2 3%	3 4%	2 3%	1 1%	1 1%	0 0%	0 0%	0 0%
70%	2351	0 0%	0 0%	0 0%	0 0%	2 3%	3 4%	3 4%	3 4%	1 1%	1 1%	0 0%	0 0%
65%	2183	0 0%	0 0%	0 0%	2 3%	4 5%	4 5%	4 5%	3 4%	1 1%	1 1%	0 0%	0 0%
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25%	839	3 4%	4 5%	6 8%	17 22%	33 43%	45 58%	48 62%	46 60%	50 65%	40 52%	19 25%	5 6%

Conservation Stages and Risk Levels =

NORM	ADV	#1	#2	#3	EMRG
0-1%	1-3%	3-8%	8-21%	21-47%	48+%

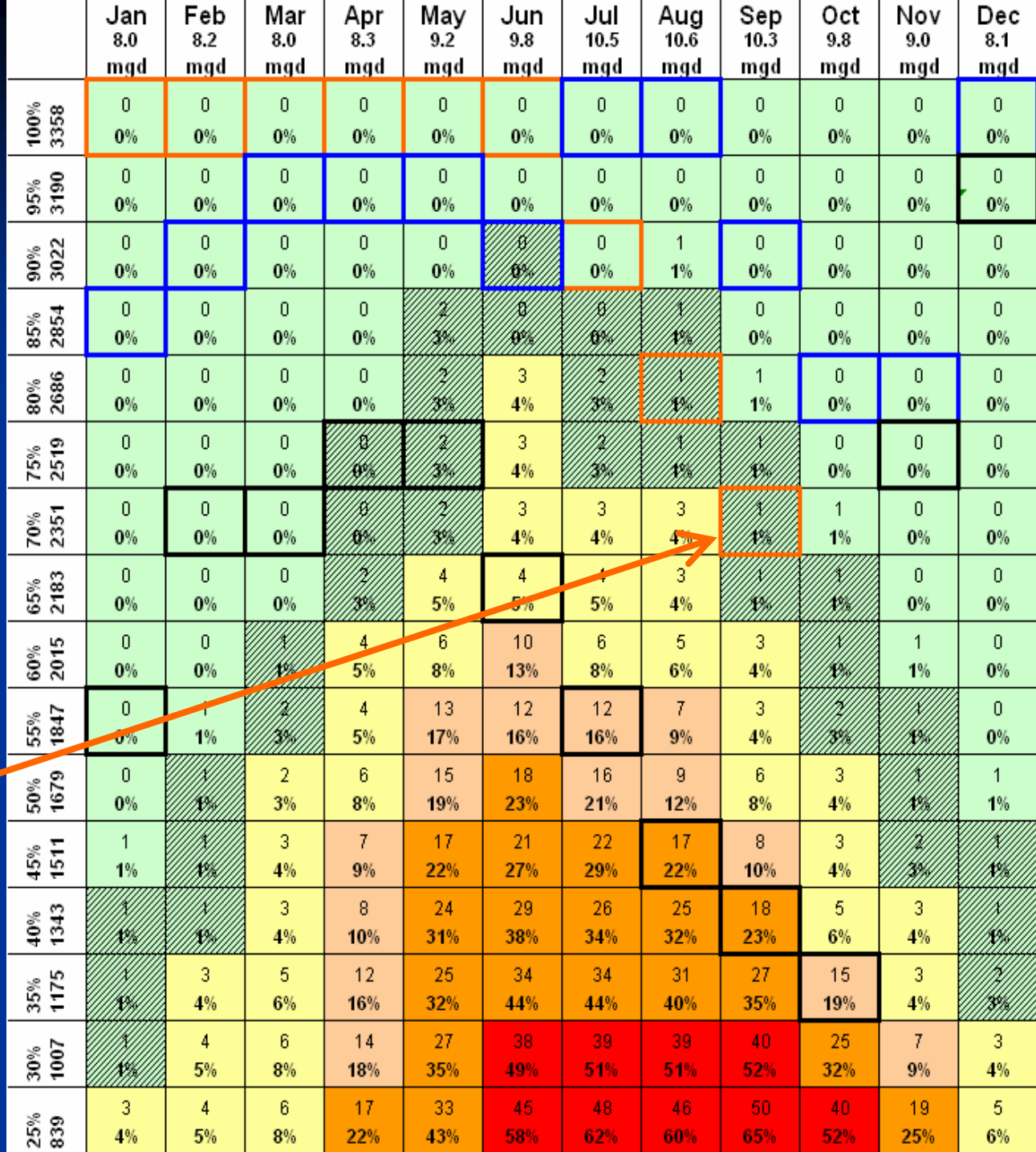
2002 Reservoir Levels

2006 Reservoir Levels

2007 Reservoir Levels

Where are we heading?

Sept



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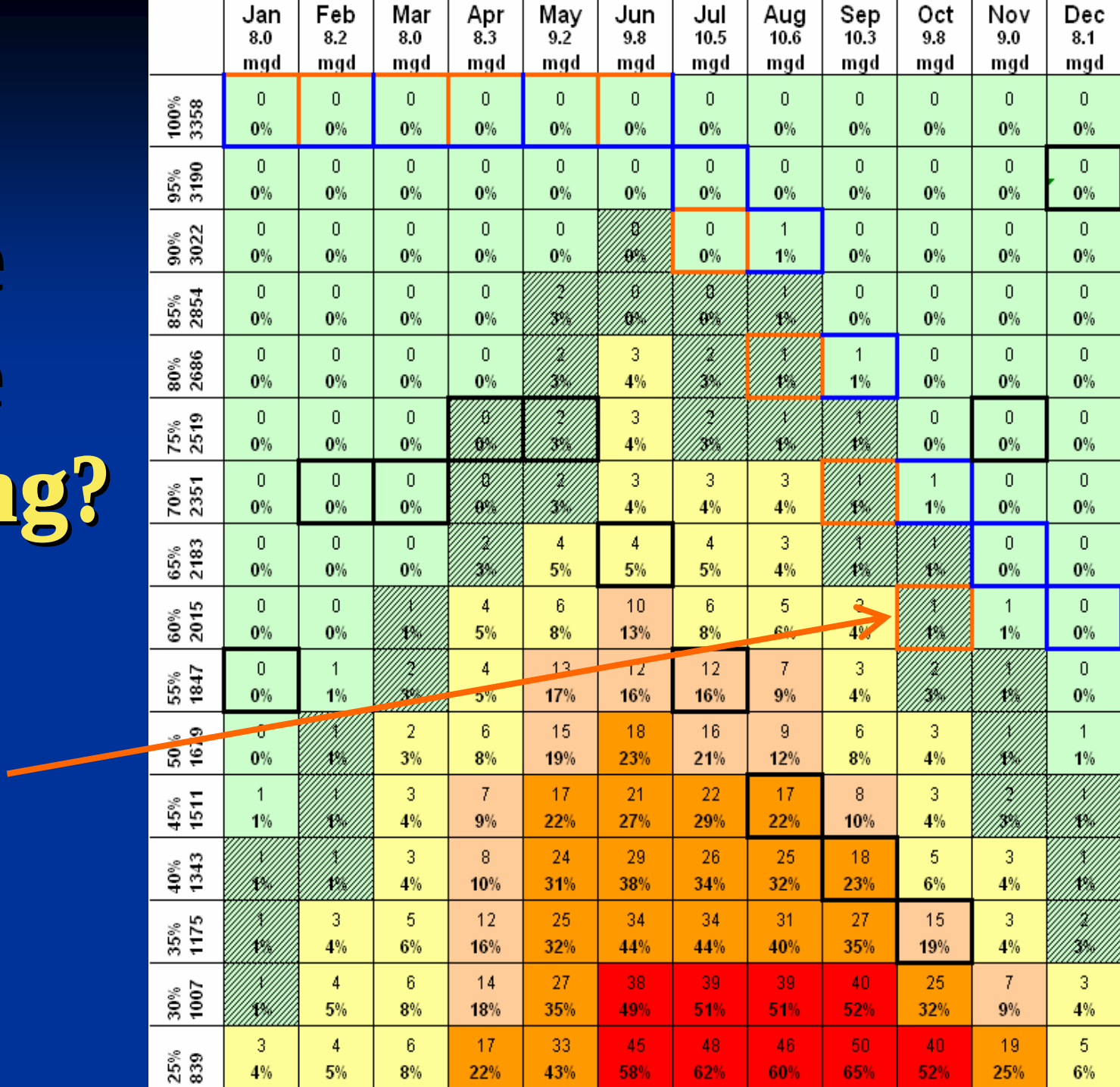

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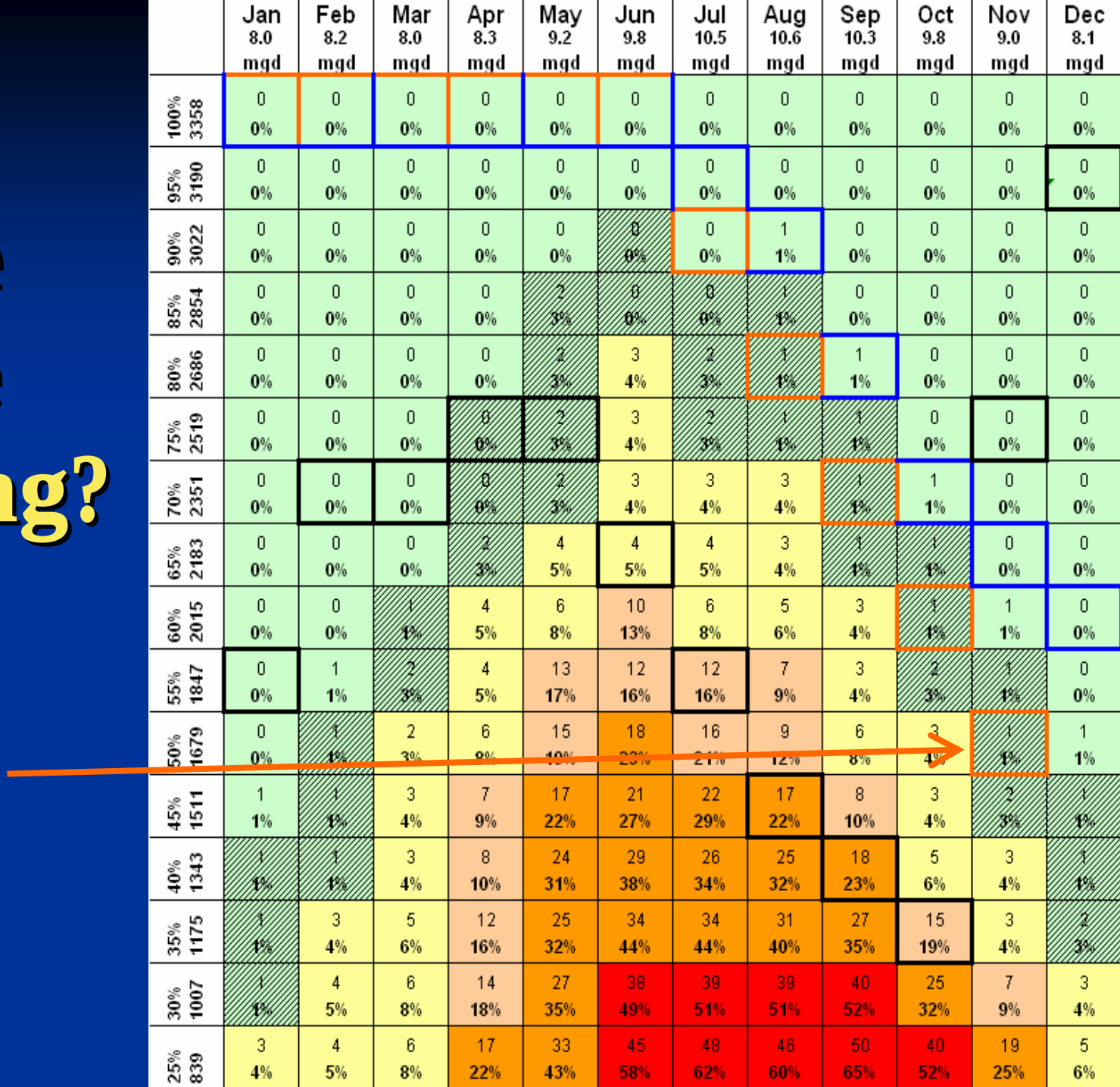

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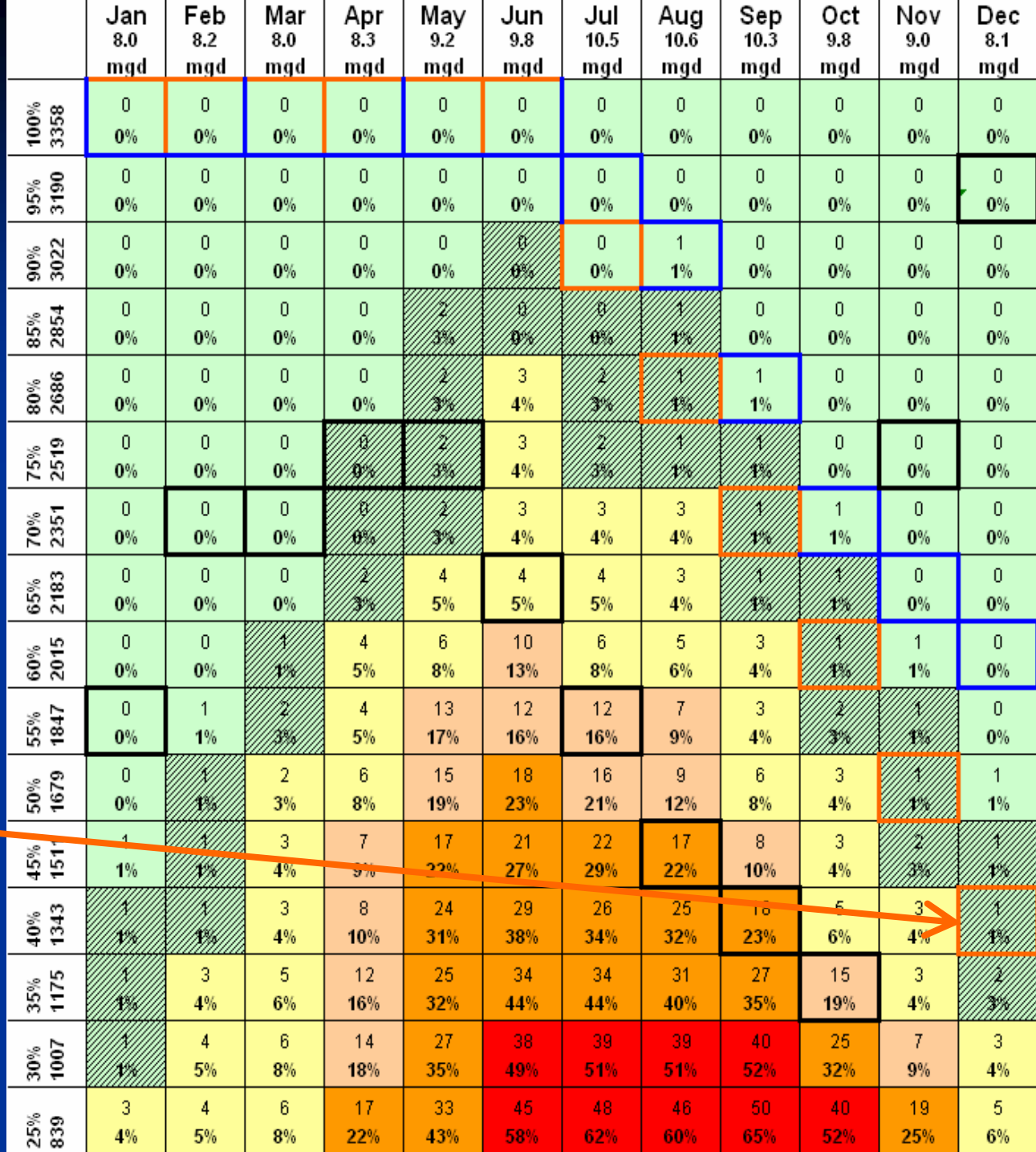

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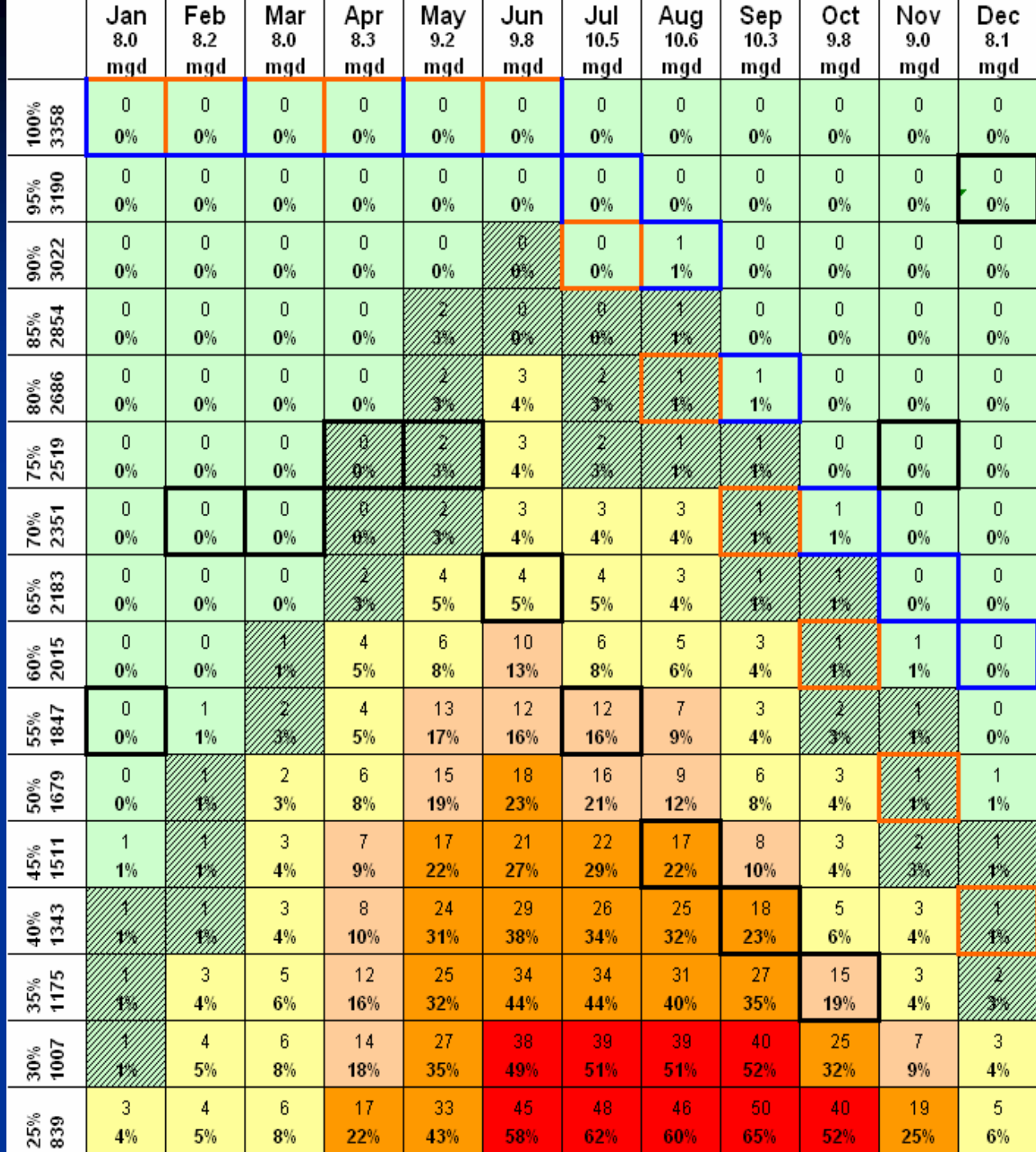
Unlikely that risk will increase substantially before next spring.



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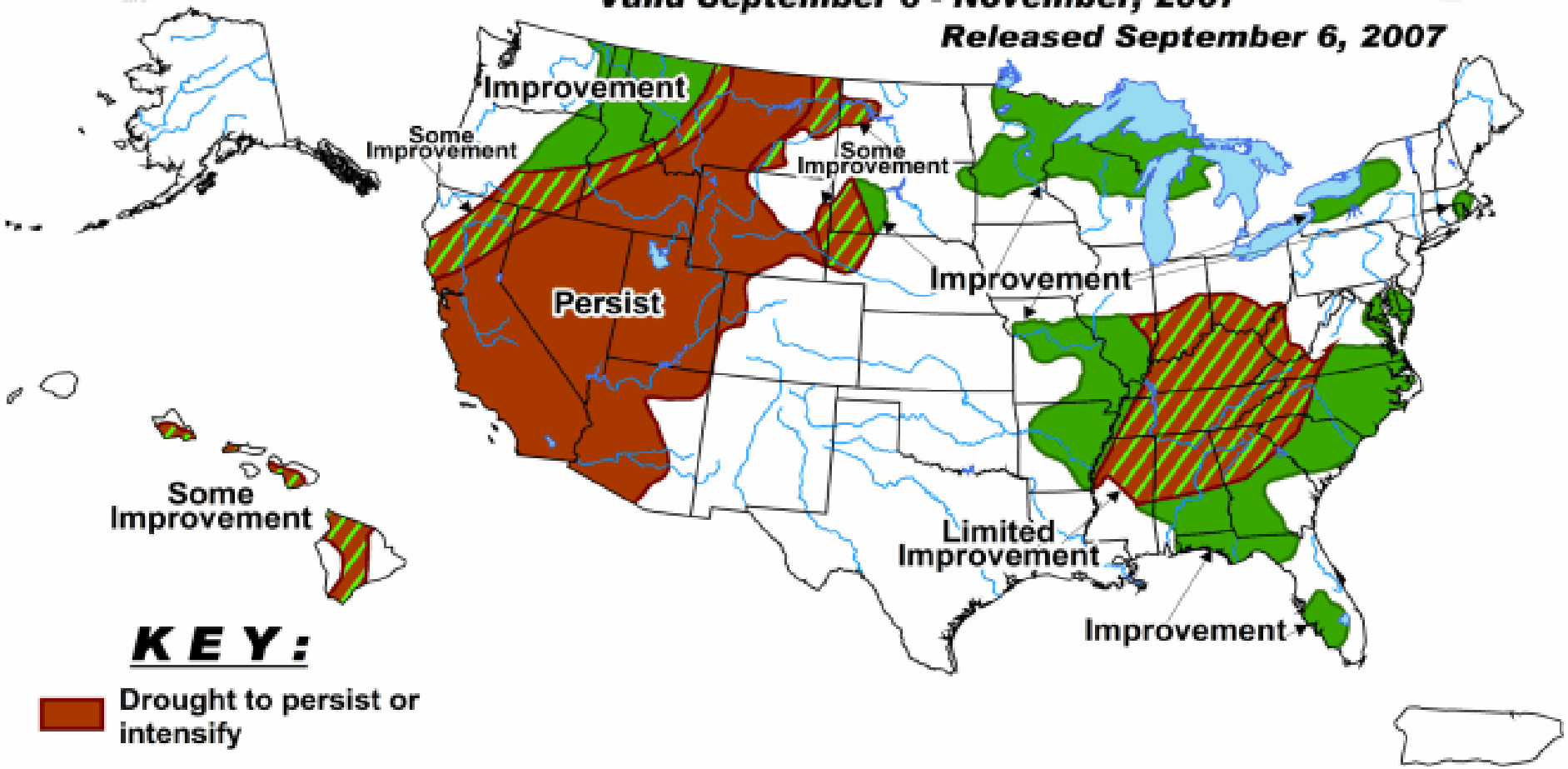
100% 3358	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
95% 3190	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
90% 3022	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 1%	0 0%	0 0%	0 0%	0 0%
85% 2854	0 0%	0 0%	0 0%	0 0%	2 3%	0 0%	0 0%	1 1%	0 0%	0 0%	0 0%	0 0%
80% 2686	0 0%	0 0%	0 0%	0 0%	2 3%	3 4%	2 3%	1 1%	1 1%	0 0%	0 0%	0 0%
75% 2519	0 0%	0 0%	0 0%	0 0%	2 3%	3 4%	2 3%	1 1%	1 1%	0 0%	0 0%	0 0%
70% 2351	0 0%	0 0%	0 0%	0 0%	2 3%	3 4%	3 4%	3 4%	1 1%	1 1%	0 0%	0 0%
65% 2183	0 0%	0 0%	0 0%	2 3%	4 5%	4 5%	4 5%	3 4%	1 1%	1 1%	0 0%	0 0%
60% 2015	0 0%	0 0%	1 1%	4 5%	6 8%	10 13%	6 8%	5 6%	3 4%	1 1%	1 1%	0 0%
55% 1847	0 0%	1 1%	2 3%	4 5%	13 17%	12 16%	12 16%	7 9%	3 4%	2 3%	1 1%	0 0%
50% 1679	0 0%	1 1%	2 3%	6 8%	15 19%	18 23%	16 21%	9 12%	6 8%	3 4%	1 1%	1 1%
45% 1511	1 1%	1 1%	3 4%	7 9%	17 22%	21 27%	22 29%	17 22%	8 10%	3 4%	2 3%	1 1%
40% 1343	1 1%	1 1%	3 4%	8 10%	24 31%	29 38%	26 34%	25 32%	18 23%	5 6%	3 4%	1 1%
35% 1175	1 1%	3 4%	5 6%	12 16%	25 32%	34 44%	34 44%	31 40%	27 35%	15 19%	3 4%	2 3%
30% 1007	1 1%	4 5%	6 8%	14 18%	27 35%	38 49%	39 51%	39 51%	40 52%	25 32%	7 9%	3 4%
25% 839	3 4%	4 5%	6 8%	17 22%	33 43%	45 58%	48 62%	46 60%	50 65%	40 52%	19 25%	5 6%

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid September 6 - November, 2007

Released September 6, 2007



KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

OWASA staff recommendation?

OWASA staff recommendation?

Hope for normal rainfall this winter . . .