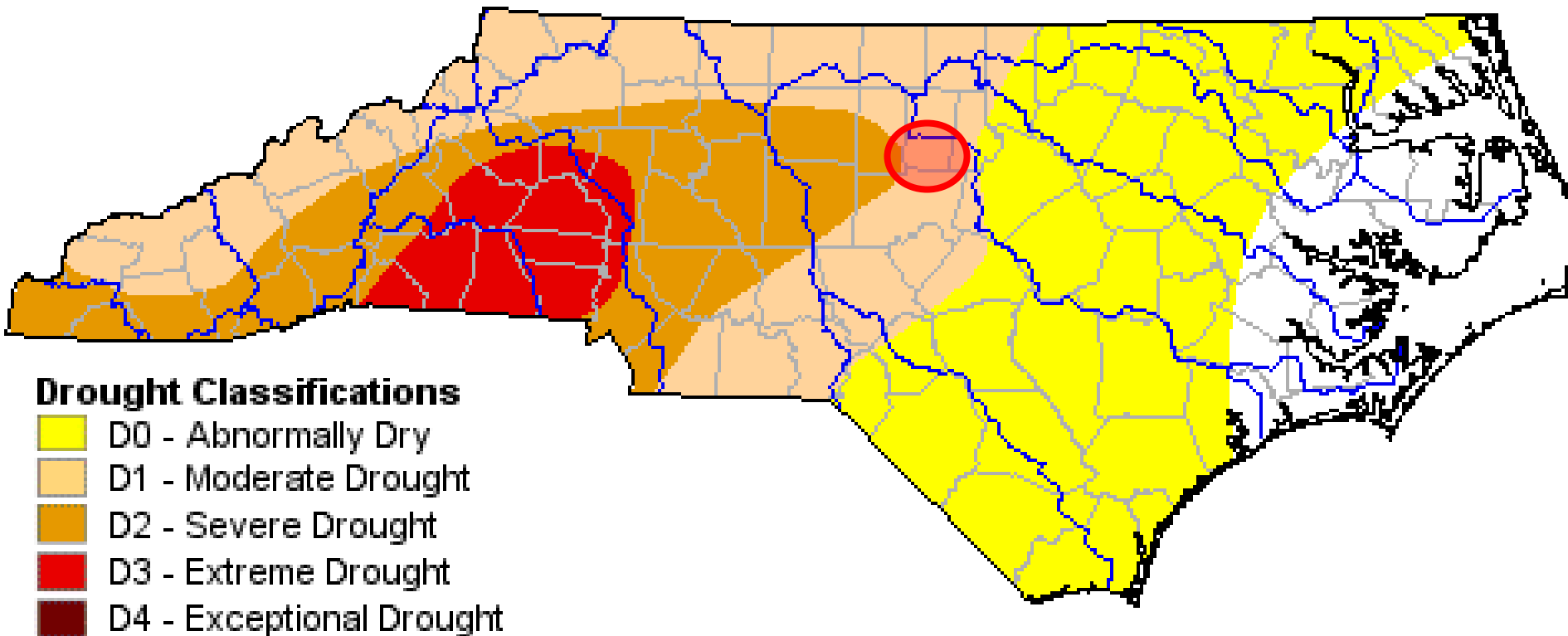


Water Supply and Demand Update

Chapel Hill Town Council
May 5, 2008

NC Drought Status

April 29, 2008

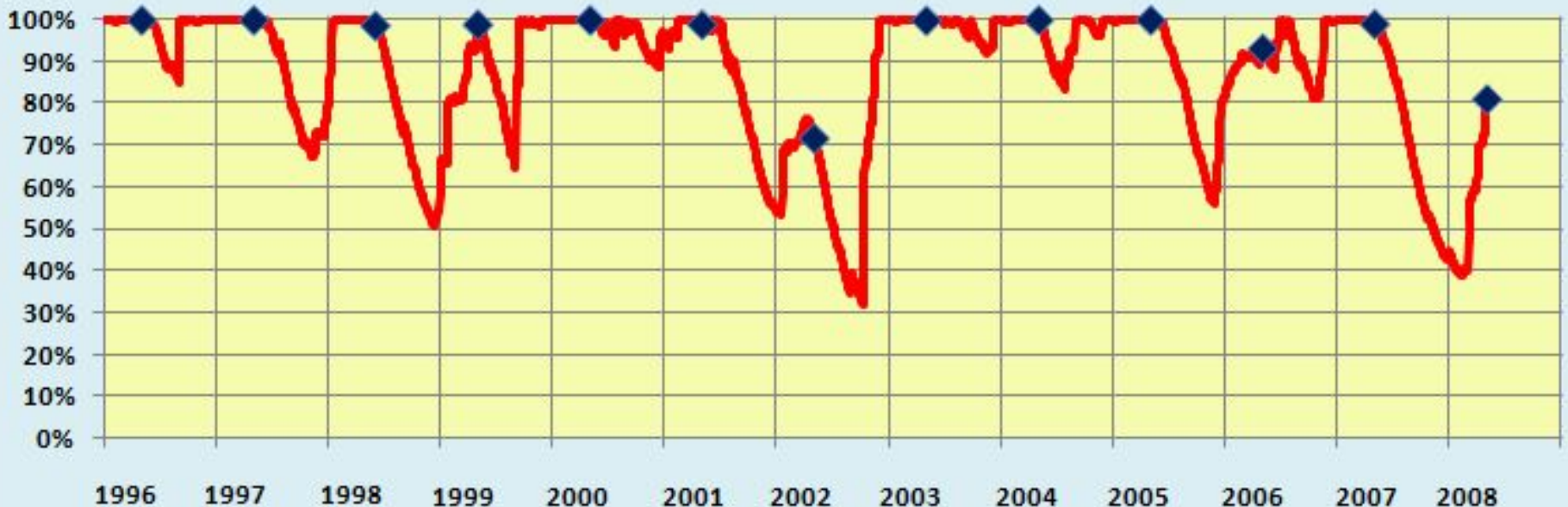


Improved Rainfall Conditions

- May 2007 – Jan 2008: 40% below normal
- Feb – April 2008: 25% above normal

OWASA Reservoir Storage Continues to Increase

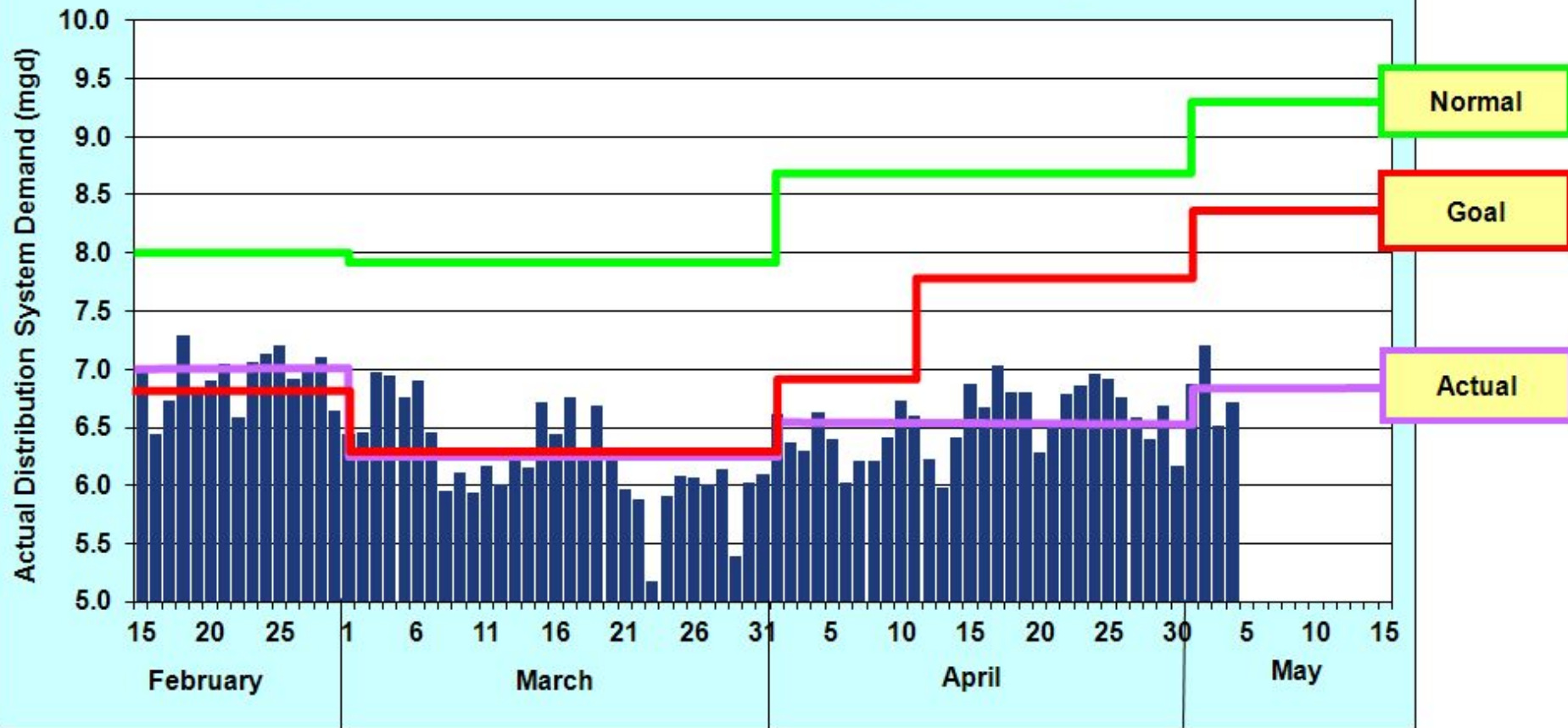
OWASA Reservoir Storage Jan 1, 1996 - May 5, 2008



*38 percent less water
pumped from OWASA
reservoirs during April 2008
than in April 2002*

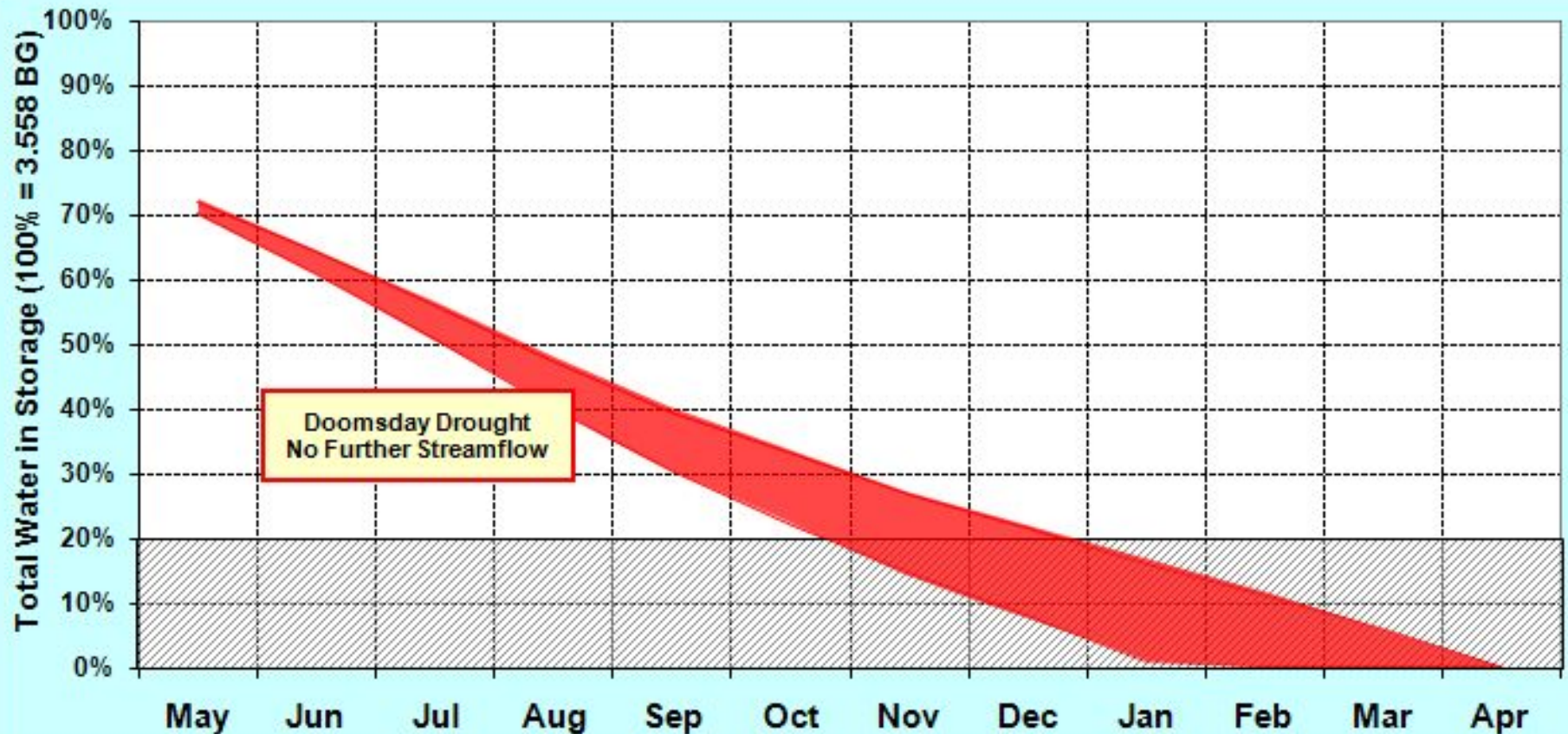
Customer Use Remains Low

Daily Customer Demand February 15 - May 4, 2008



Actual Days Remaining?

2008 Minimum Reservoir Storage Projections At Average Demands of 7 and 9 mgd Under Severe Historic Drought Conditions
Beginning with Reservoirs 80% Full on May 1, 2008



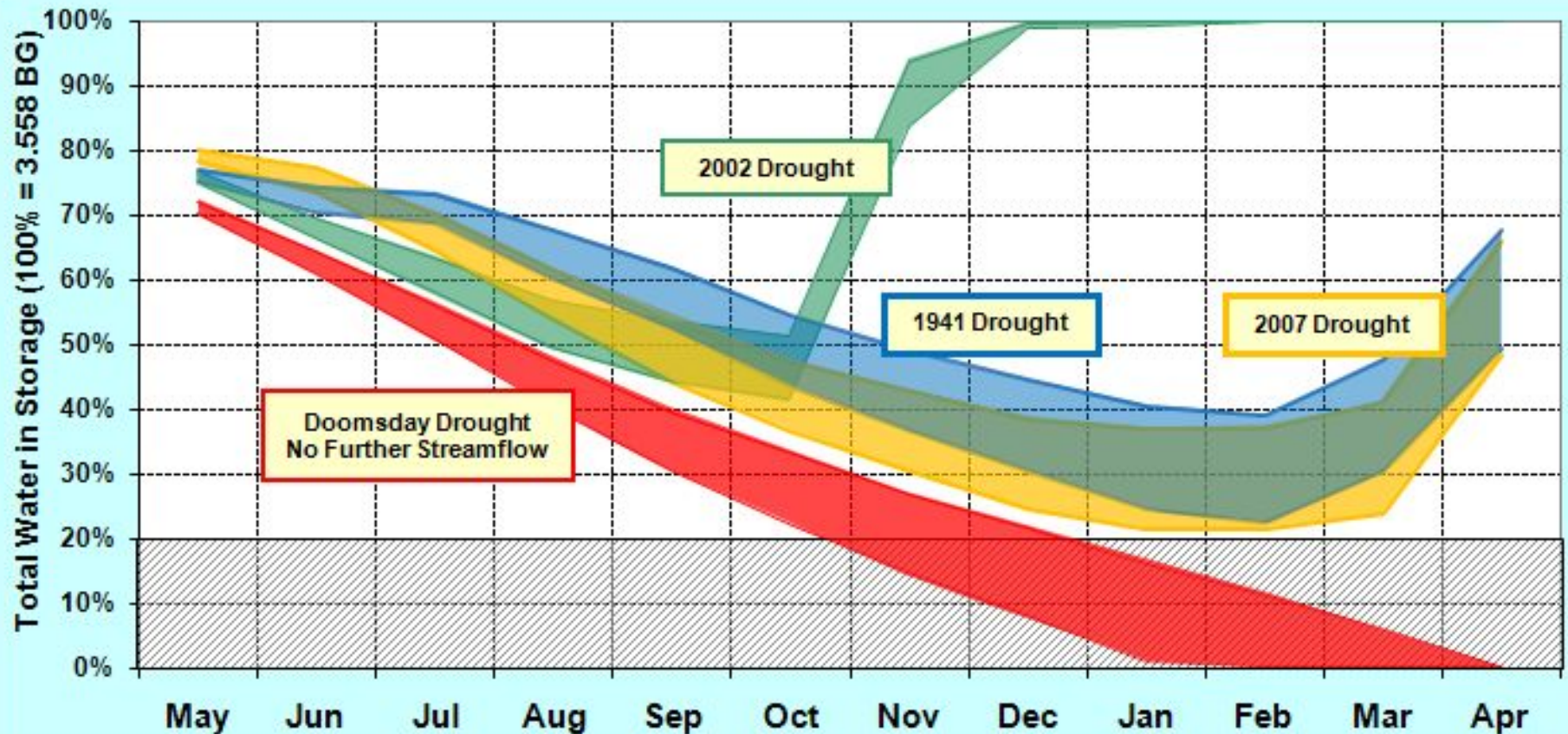
Assumes that total storage begins at 80% on May 1, 2008

7 mgd Demand = Upper edge of each color band

9 mgd Demand = Lower edge of each color band

Actual Days Remaining?

2008 Minimum Reservoir Storage Projections At Average Demands of 7 and 9 mgd Under Severe Historic Drought Conditions
Beginning with Reservoirs 80% Full on May 1, 2008



Assumes that total storage begins at 80% on May 1, 2008

7 mgd Demand = Upper edge of each color band

9 mgd Demand = Lower edge of each color band

Risk of Critical Draw- down

	Jan 7.51 mgd	Feb 7.65 mgd	Mar 7.58 mgd	Apr 8.04 mgd	May 8.49 mgd	Jun 8.97 mgd	Jul 9.12 mgd	Aug 9.31 mgd	Sep 8.95 mgd	Oct 8.44 mgd	Nov 8.02 mgd	Dec 7.14 mgd
95%	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%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
85%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
80%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
75%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
70%	0 0%	0 0%	0 0%	0 0%	1 1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
65%	0 0%	0 0%	0 0%	0 0%	3 4%	4 5%	2 2%	1 1%	0 0%	0 0%	0 0%	0 0%
60%	0 0%	0 0%	0 0%	0 0%	3 4%	4 5%	4 5%	2 2%	1 1%	0 0%	0 0%	0 0%
55%	0 0%	0 0%	0 0%	2 2%	5 6%	4 5%	5 6%	3 4%	1 1%	1 1%	0 0%	0 0%
50%	0 0%	0 0%	0 0%	4 5%	9 11%	10 12%	6 7%	6 7%	3 4%	1 1%	0 0%	0 0%
45%	0 0%	1 1%	2 2%	4 5%	16 19%	15 18%	15 18%	9 11%	3 4%	2 2%	1 1%	0 0%
40%	0 0%	1 1%	2 2%	6 7%	18 22%	20 24%	19 23%	15 18%	6 7%	3 4%	1 1%	1 1%
35%	1 1%	1 1%	3 4%	14 17%	23 28%	27 33%	28 34%	23 28%	17 20%	3 4%	3 4%	1 1%
30%	1 1%	3 4%	5 6%	15 18%	29 35%	38 46%	34 41%	32 39%	30 36%	13 16%	3 4%	2 2%
25%	2 2%	4 5%	6 7%	18 22%	33 40%	44 53%	43 52%	43 52%	42 51%	28 34%	10 12%	3 4%
20%	3 4%	4 5%	7 8%	21 25%	37 45%	51 61%	53 64%	58 70%	59 71%	48 58%	33 40%	9 11%

Next Steps?

- No staff recommendation at this time
- OWASA Board will discuss Thursday, May 8, at 7:00 pm

*Implementing the Water
Shortage Restrictions
(Who, How, Why?)*

Brief Background . . .

- Lessons learned from 2002 drought
- Public forums, news releases
- Public input at Board meetings
- Presentations to Carrboro, Chapel Hill, and Orange County Boards
- Formal adoption by Towns and County

Purpose: Reduce Demands

- Long-term, through year-round practices
- Drought shortages
- Emergencies (natural disasters, acts of terror, system failure, etc.)

Water Supply Shortage Status

- Advisory (no additional restrictions)
- Stage 1
- Stage 2
- Stage 3
- Emergency

*Water Shortage status is
determined/declared by
OWASA, based on:*

(from the ordinance)

- Water supply (reservoir levels) and demand
- Streamflow
- Availability of supplemental supplies
- “Other elements of reasonable professional judgment . . .”

Risk of Critical Depletion

“Until alternative criteria are developed, such guidance shall be based on 5 percent or greater risk that reservoir storage will decline to 20 percent or less within the next 18 months.”

- Staff provides data and recommendation to OWASA Board
- Board declares Water Shortage status
- OWASA advises Mayors, BOCC Chair, and requests local Proclamations

- Water use restrictions and rate surcharges go into effect
- Surcharges are enforced per adopted OWASA rate schedule
- Restrictions enforced jointly by OWASA and Towns

- 2007-08 has been the first time this process has been tested
- Very pleased with degree of cooperation and collaboration among OWASA and the Towns
- Staff and Board look forward to continued success and further improvements after the drought

Questions or comments?