



Boat Density Study Report

Quarterly Public Meeting
July 19, 2007



Purpose of Study

- Identify area available for recreational boating on Lake Murray by lake segment.
- Assess boat densities occurring under normal (weekend) and peak (holiday) use conditions on Lake Murray by lake segment.
- Examine whether recreational boat use of Lake Murray is currently above, below, or at a desirable, or optimal, level.



Methods

- Usable Boating Acreage
- Boat Count Estimates
- Recreational Boating Capacity



Boat Count Estimates

WEEKEND DATES

May 5

May 19

June 17

June 24

July 15

August 11

September 22

HOLIDAY DATES

May 26

June 30

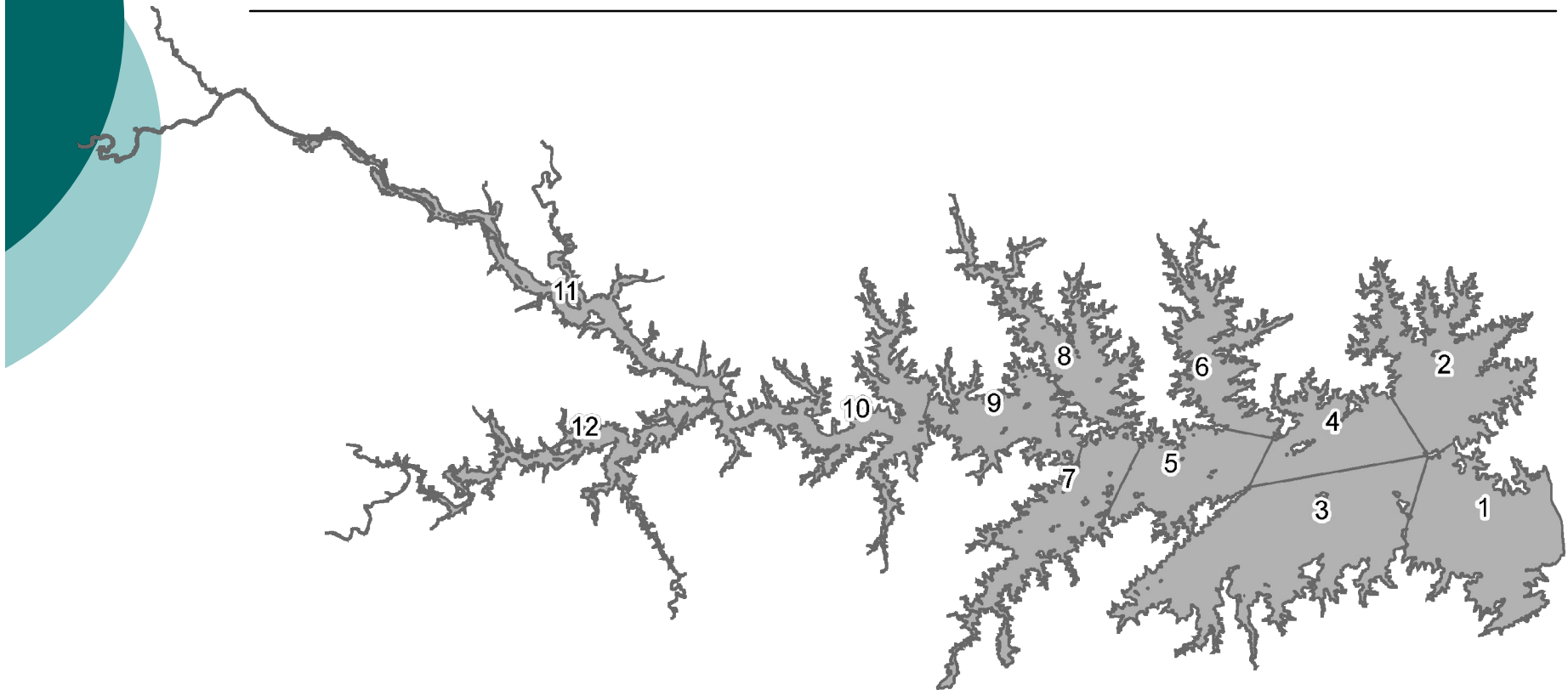
July 4



Optimal Boating Acreage

- Multiple use of water area
- Shoreline configuration
- Amount of open water
- Amount of facility and shoreline development
- Crowding

Segments of Lake Murray Used in Analysis





Segment #1 – Usable Acreage

Estimated Acreage

5,740

minus islands & 75 foot “buffer”

Estimated Usable Acreage

5,440



Segment #1 – Boat Counts

Weekend Days

Total = 784

Average = 112

Holiday Days

Total = 727

Average = 242

Base Acreages

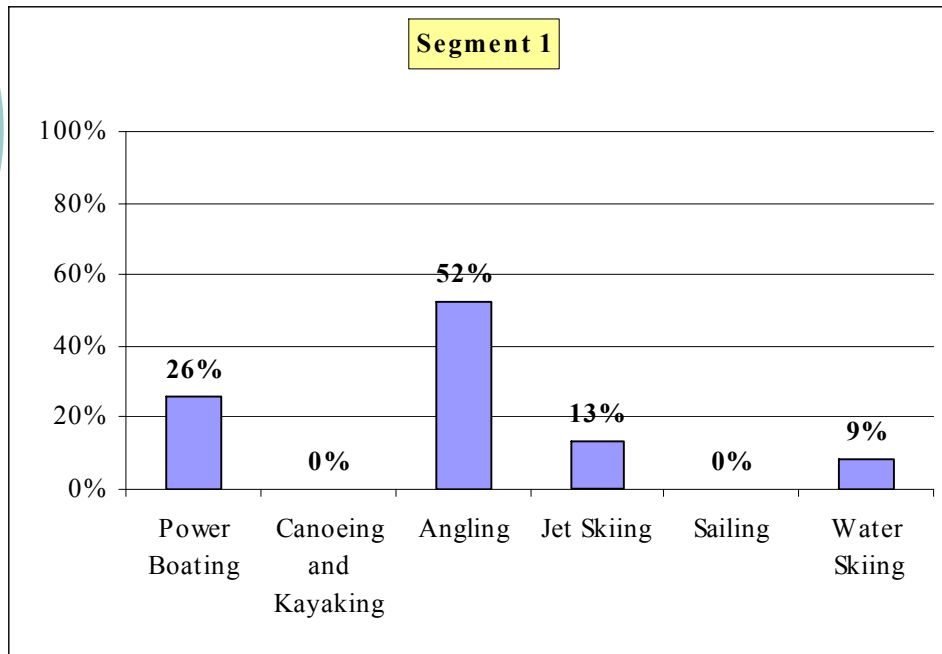
	LOW -5	BASE 0	HIGH 5
Power Boating	18	9	3
Canoeing and Kayaking	2.5	1.3	0.5
Angling	1.0	.5	.06
Jet Skiing	20	12	7
Sailing	10	4.3	2
Water Skiing	20	12	7



Segment #1 – Factor Assessment

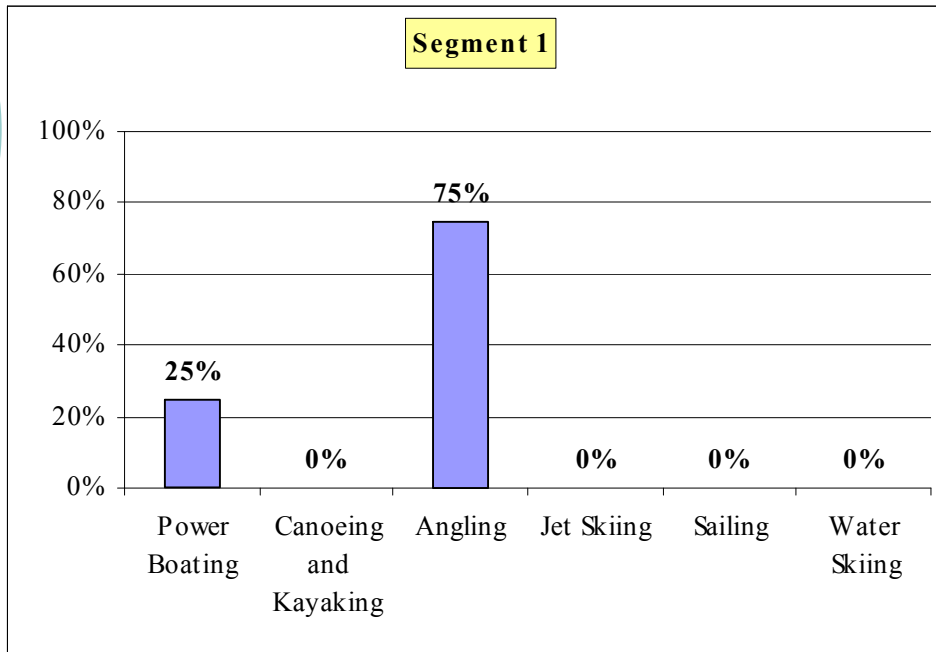
Multiple Use	=	-1
Shoreline Configuration	=	-1
Amount of Open Water	=	1
Available Recreation Access	=	1
Weekend Crowding Rating	=	0
<hr/>		
Total	=	0

Segment #1 – Weekend Boating Use Distribution



Power Boating	29
Canoeing and Kayaking	0
Angling	58
Jet Skiing	15
Sailing	0
Water Skiing	10
Total	112

Segment #1 – Holiday Boating Use Distribution



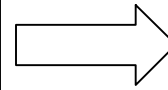
Power Boating	61
Canoeing and Kayaking	0
Angling	182
Jet Skiing	0
Sailing	0
Water Skiing	0
Total	242

Segment #1 – Optimum Boating Use

Usable Acreage
(5,440)

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Use Factor
(Base 9)



Max No. of Boats
(604)

Activity Distribution
(26%)

Boat Activity Mix
(158)

Segment #1 – Optimum Boating Use

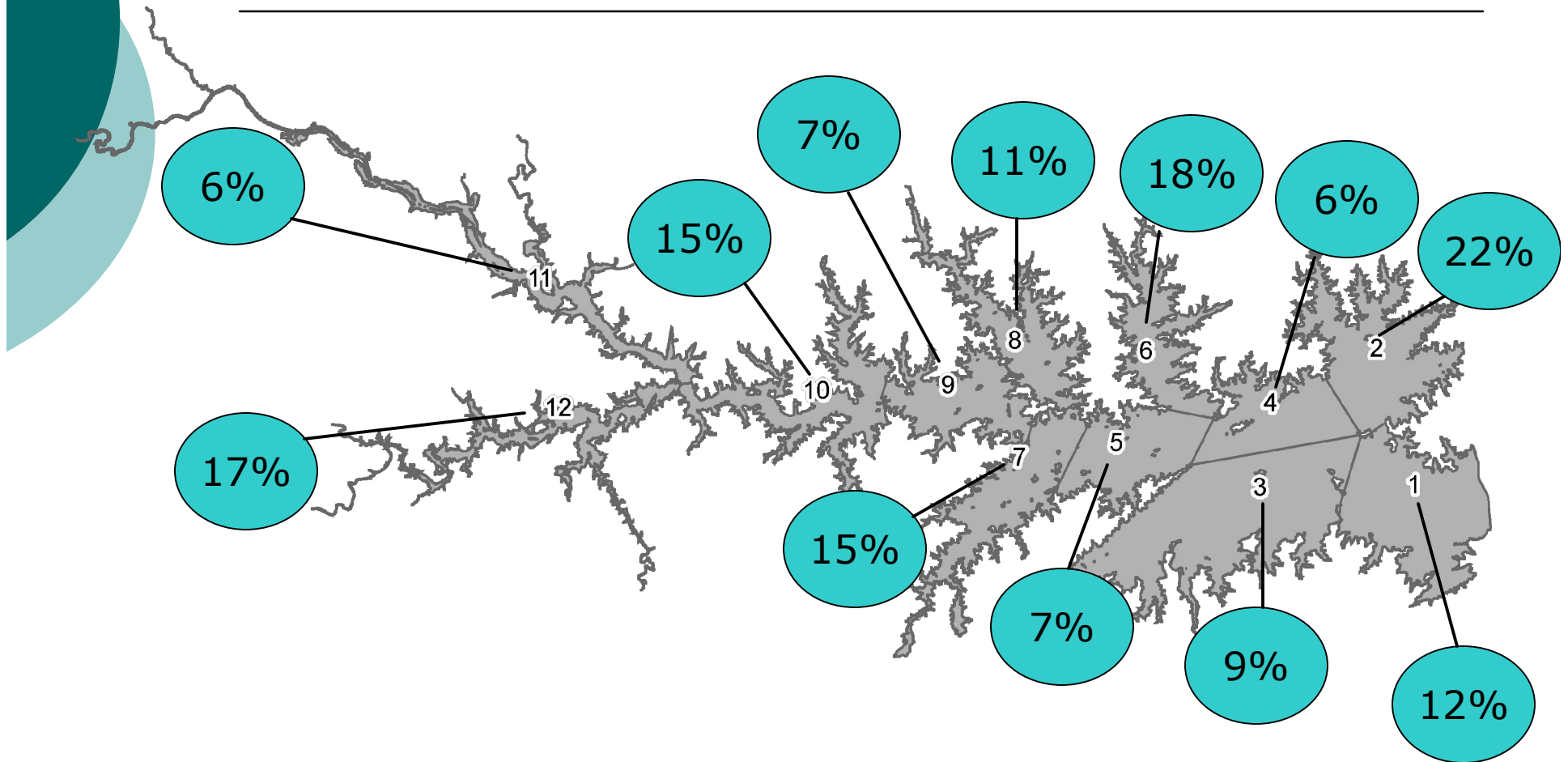
Power Boating	158
Canoeing and Kayaking	0
Angling	660
Jet Skiing	59
Sailing	0
Water Skiing	39
Optimum Boating Use	916 boats



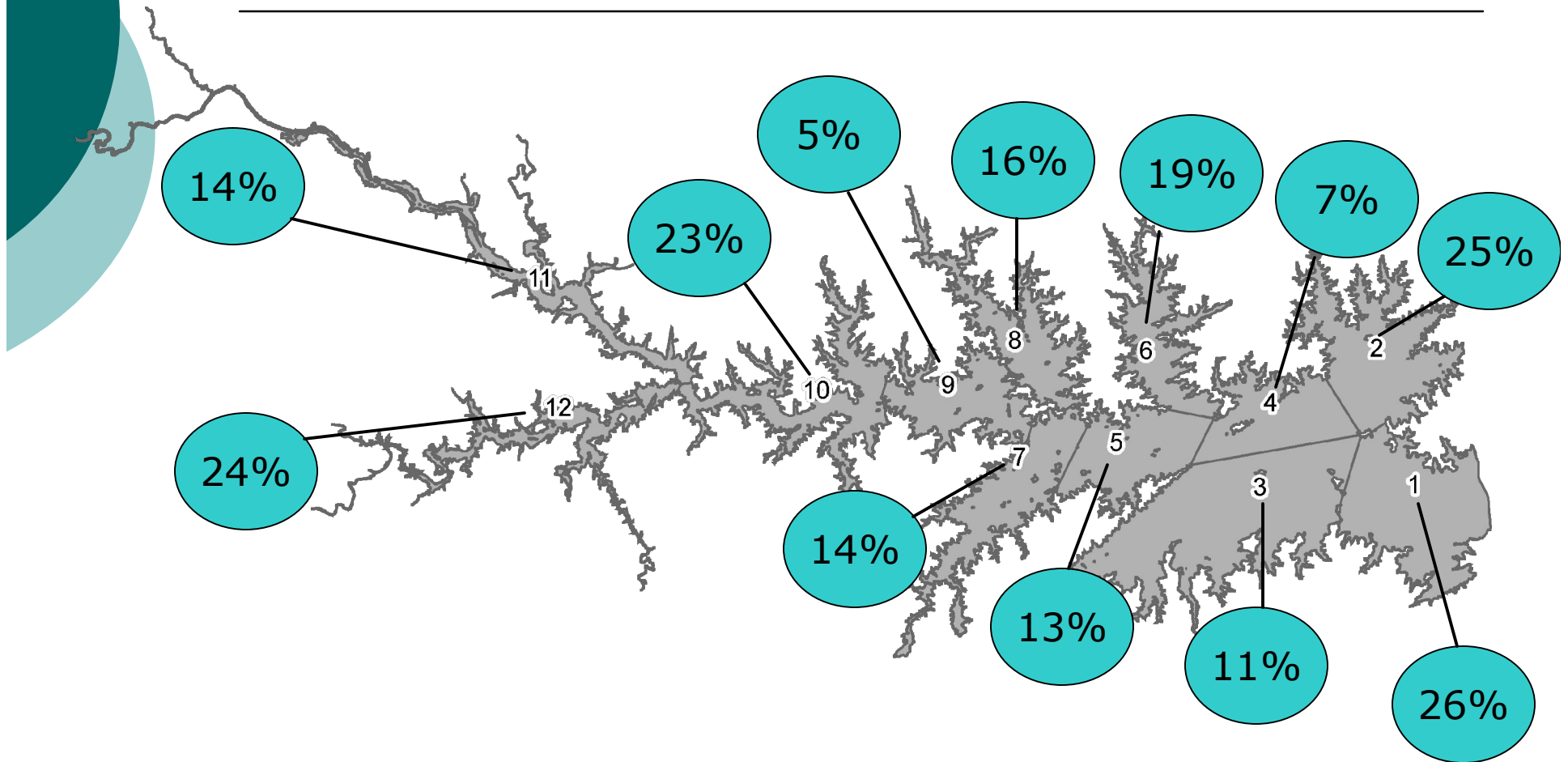
Segment #1 – Recreational Boating Carrying Capacity

Optimum Boating Capacity	916 boats
Average Peak Weekend Use	112 boats
Percent Capacity on Weekends	12%
Average Peak Use Holiday Use	242 boats
Percent Capacity on Holidays	26%

Recreational Boating Weekend Carrying Capacity



Recreational Boating Holiday Carrying Capacity





Conclusions

- Lake Murray is currently used at levels well below its estimated boating capacity.
- Based on projections to 2030, future use can be accommodated.
- Results could be used in future recreation facility planning activities



Questions?
