NC Wildlife Resources Commission
Grass Carp Cohort Analysis for Lake Gaston
January 2007

Annual mortality	20%	0.223
Escapement	0%	0.000

100% 11.513

Assuming complete mortality by age 12.

Target density 10.0

M	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	11.51
E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Z	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	11.51
S	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.00

	Permitted Stockings	Homeowner Stockings														Vegetated		Stocked following spring	
Year	N	N	Age 0	Age 1	Age 2	Age 3	Age 4	Age 5	Age 6	Age 7	Age 8	Age 9	Age 10	Age 11	Age 12	N	Acres	N/acre	N(stocked)	N(stocked)/acre
1995	0	0	0													0	3,102	0.0		
1996	20,000	0	20,000	0												20,000	3,250	6.2		
1997	680	0	680	16,000	0											16,680	3,325	5.0		
1998	0	0	0	544	12,800	0										13,344	3,400	3.9		
1999	5,000	0	5,000	0	435	10,240	0									15,675	2,800	5.6		
2000	0	0	0	4,000	0	348	8,192	0								12,540	2,400	5.2		
2001	0	0	0	0	3,200	0	279	6,554	0							10,032	3,200	3.1		
2002	0	0	0	0	0	2,560	0	223	5,243	0						8,026	3,400	2.4		
2003	25,382	0	25,382	0	0	0	2,048	0	178	4,194	0					31,803	2,908	10.9		
2004	0	0	0	20,306	0	0	0	1,638	0	143	3,355	0				25,442	3,018	8.4		
2005	0	0	0	0	16,244	0	0	0	1,311	0	114	2,684	0			20,354	3,100	6.6	10,646	3.4
2006	7,000	0	7,000	0	0	12,996	0	0	0	1,049	0	91	2,147	0		23,283	3,000	7.8	6,717	2.2
2007	6,717	0	6,717	5,600	0	0	10,396	0	0	0	839	0	73	1,718	0	25,343				

Estimated number to attain 10fish/acre.

14,000 was the mean of estimates generated by NCDWR and NCWRC to attain 10 fish/acre . However, TAG agreed that only 50% of the 14,000 should be stocked in 2006.

1996-1998 acerage Historical Review section of Lake Gaston Aquatic Vegetation Management Plan.

1999-2004 Aquatic Nuisance Plant Control treatment summary.

Total vegetated acres of Hydrilla reported at January 17, 2006 Lake Gaston TAG meeting by Aquatic Nuisance Plant Control.

Estimated value pending analysis of the 2006 data by the Army Corps of Engineering.