

## CONCLUSIONS

To date, the Metropolitan Council's lake monitoring programs have provided an important tool for making informed lake management decisions. Data from our regional lake monitoring programs are frequently used to determine possible trends in lake water quality, estimate expected ranges in water quality of unmonitored lakes, examine intra-and inter-regional differences, determine potential impairments due to water quality, and investigate the relationships between land use and water quality. In 2007, the Council's lake monitoring program collected data from 181 lake sites on 176 lakes, which were all monitored by CAMP volunteers.

Seventy-one lakes monitored in 2007 are listed by the MPCA as impaired waters due to excessive phosphorus, which affects the lakes' ability to support their designated recreational uses. To learn more about the impaired lakes listings and potential next steps, see <http://www.pca.state.mn.us/water/tmdl/index.html>.

The year 2007 marked the fifteenth year that CAMP was used to increase our knowledge of the water quality of area lakes. Once again, volunteers measured surface water temperature and transparency, and collected surface water samples that were analyzed for total phosphorus, total Kjeldahl nitrogen, and chlorophyll-a on a biweekly basis from mid-April to mid-October (approximately 14 sampling events).

This year's monitoring program included 11 lakes never before monitored by the Council and volunteers. The 2007 lake monitoring program included lakes from 36 municipalities, watershed management organizations/districts, and counties. Additionally, the 2007 CAMP program enrolled one new group, continuing to expand the list of monitoring partners.

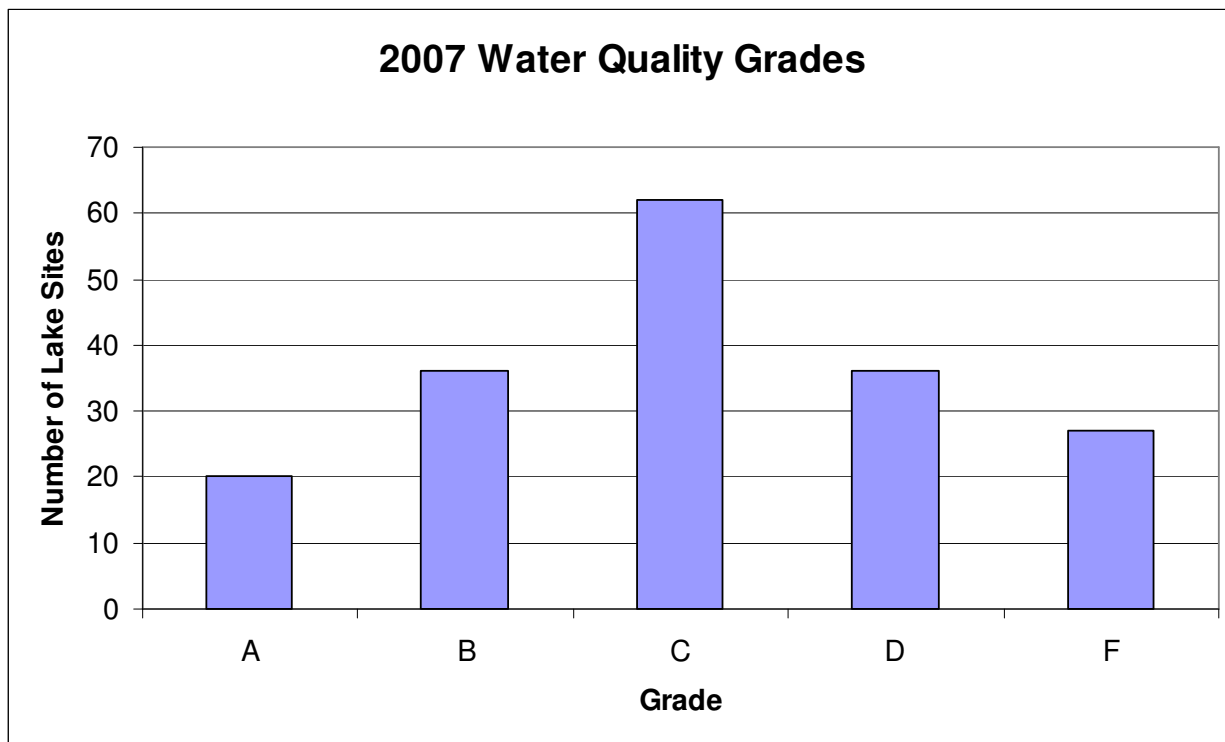
Each lake was given an annual water quality grade. The spread of water quality grades for all of the lakes monitored in 2007 is as follows:

- A – 11% (20 lake sites).
- B – 20% (36 lake sites).
- C – 34% (62 lake sites).
- D – 20% (36 lake sites).
- F – 15% (27 lake sites).

The greatest percentage of the lake sites monitored through CAMP in 2007 received a water quality grade of "C" (34%). The water quality of these lakes is considered average as compared to others in the seven-county Metropolitan Area. When comparing the percentage of above-average lakes, those receiving grades of "A" or "B" (31%), to below-average lakes, those receiving "D" or "F" (35%), more lakes were below average.

The 20 lakes that received "A" grades include: Big Carnelian, Big Marine, Brickyard, Cenaiko, Courthouse, Edith, Elmo, Fireman's, Glen, Halfbreed (Sylvan), Jane, Kingsley, Lac Lavon, Little Carnelian, Little Long, Lochness, Square, St. Joe's, Sunset, and West Boot.

The 27 lakes receiving the lowest water quality grade "F" include: Ardmore, Bay Pond, Benton, Benz, Cobblecrest, Cody, Cornelia, Dean, Downs, Eagle, East, Farquar, Friedrich's Pond, George Watch, Goose (Waconia), Highland, July, Long (Apple Valley), Loon, Lynch, Miller, Pepin, Rice (Maple Grove), Rutz, South Oak, Swede, and Twin (St. Louis Park).



Similar to past years, there is no distinct pattern as to where lakes with specific water quality were located. As observed in the past, the only similarity between the majority of the D and F grade lakes is their size and mean depth. These lakes are generally shallow with small surface areas. In some cases, the lakes are simply deep marshes with an excess of emergent and submergent vegetation. As mentioned in past reports, this distinction is important for three reasons: 1) deeper lakes have a greater ability to incorporate nutrients and trap them in the sediments, where they are not available for plant growth (macrophyte and/or algae), 2) shallow lakes typically do not stratify during the summer months, allowing the potential release of phosphorus from bottom sediments to rise through the water column and become available for plant growth, and 3) the small surface areas of these lakes generally result in higher watershed-to-lake ratios. Lakes with high watershed-to-lake ratios have to handle larger pollutant loads for their size than do larger lakes in a similar-sized watershed.

Similarly, the lakes with above-average water quality (grades of “A” and “B”) were not area specific. They were located in all seven of the region’s counties. Lakes receiving an “A” grade were found in five of the seven metropolitan counties. Common characteristics of the above-average lakes were: deeper maximum and mean depths, development of a thermocline, small contributing watersheds relative to the lake’s surface area, and little construction within the watershed.

Of the 159 lake sites previously monitored in 2006 with a sufficient database needed to generate annual grades:

- 19 lakes had a worse water quality grade in 2007 [Armstrong, Barker, Bass (west), Benz, Bush, Demontreville, Earley, Henry, Herber’s, La, Long (May Township), MacDonald’s, McDonald’s, North Twin, O’Connor, Orchard, Rutz, South Oak, and Twin (St. Louis Park)];
- 34 lakes had a better water quality grade in 2007 [Alimagnet, Bass (May Township), Bass (east), Big Comfort, Big Marine, Carol, Colby, Cowley, Edith, Farquar, Fireman’s, Fish (Scandia), Island, Jellum’s, Keller, Kingsley, Little Comfort, Long (Pine Springs), Long (Stillwater),

McMahon, Mitchell, Markgraffs, O'Dowd, Pat, Peltier, Reitz, Sand, St. Joes, Sunset Pond, Sweeney (site 1), Tamarack, Twin (Burnsville), Valley, and Woodpile]; and

- 106 lakes had the same water quality grade in both 2006 and 2007.

The locations of the 19 lakes with worse water quality grades in 2007 as compared to 2006 were: Carver County (1), Dakota County (2), Hennepin County (4), and Washington County (12). The 34 lakes with better water quality in 2007 were located in Anoka County (2), Carver County (4), Dakota County (8), Hennepin County (3), Scott County(2), and Washington County (15).

Water quality data from the 159 lake sites monitored in both 2006 and 2007 seem to indicate that the Metro Area lakes experienced slightly better water quality conditions in 2007 as compared to 2006. This observation indicates a reversal of a previous trend in which more lakes saw degradation in their water quality grades from 2004 to 2006.

The MPCA recently conducted a statewide statistical trend analysis on lakes with extensive Secchi transparency databases. The analysis revealed that the majority of assessed lakes showed no statistically significant trends in water clarity (either negative or improving). However, more lakes showed an improving trend than a degrading trend (MPCA 2008). There were 81 CAMP lakes monitored in 2007 which were included in the MPCA's trend analysis. The following is a summary of which lakes saw a statistically significant trend in water clarity:

- 24 lakes showed an improving trend in water clarity [Armstrong (south bay), Bass (Plymouth), Big Carnelian, Big Marine, Colby, Courthouse, DeMontreville, Earley, Elmo, Halfbreed (Sylvan), Hay, Kismet, Langton (site 2), Little Carnelian, Long (May Township), Marion, McKusick, Olson, Pine Tree, Silver (Stillwater), Sunset, Valentine, Waconia, and West Boot].
- 9 lakes showed a negative trend [Goggins, La, Little Long, Markgraffs, Pike (Maple Grove), Powers, Seidl, Shields, and Square].

Since 1980, 333 Metropolitan Area lakes have been monitored through the Council's lake monitoring program. Since some of the lakes have multiple monitoring sites, a total of 354 lake sites have been monitored. The list of lakes in the Council's monitoring database is shown in Appendix A. The resulting data from the Council's lake monitoring program are permanently stored in the U.S. EPA's national water quality data bank, STORET (STorage and RETrieval). The Council's lake monitoring data are readily available via the Metropolitan Council Environmental Information Management System (EIMS), at: <http://es.metc.state.mn.us/eims/lakes/index.asp>. The majority of the 354 lake sites have been revisited on a rotating schedule throughout the past 28 years, to develop a working baseline to help determine possible water quality trends, and to aid lake and watershed managers in their decision making. While the Council has done its best to enhance and expand the region's lake water quality database, it is apparent that one of the most economical and efficient methods to expand knowledge of our lakes has been with the assistance of volunteers and the cooperation and financial support of local partners, including watershed management organizations, watershed districts, counties, and cities. So while the first 15 years of CAMP have been very successful, our future goal is to continue to expand the coverage of our lake monitoring program, in order to better understand and manage the region's water resources.

The Council's lake monitoring program, especially the use of volunteer monitors through CAMP, has played a key role in the Council's recent efforts to use satellite images to assess annual lake water clarity for the entire region. The monitoring program provides "ground-based" measurements used to calibrate mathematical models, which in turn are used to interpret the satellite images. The use of satellite technology provides a cost-effective way to extend the analysis of the region's lake water quality from just the lakes involved in our ground-based programs to all of the lakes in the region. The satellite-based information can be used to detect how lake trophic conditions (especially water clarity) have changed over time and space in relation to changes in land-use and land-cover conditions.

If you have questions pertaining to the lake data or descriptions contained in this report, inquiries about CAMP, or suggestions of lakes the Council should consider monitoring in the future, please contact Brian Johnson of the Metropolitan Council at (651) 602-8743 or [brian.johnson@metc.state.mn.us](mailto:brian.johnson@metc.state.mn.us).

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**APPENDIX A**  
**Lakes Sampled by the Metropolitan Council and CAMP, 1980 - 2007**  
(Numbers indicate sampling visits per year, while <sup>v</sup> denotes volunteer monitoring)

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	
Acorn	82-102																												<sup>v</sup> 14	
Alimagnet	19-21																<sup>v</sup> 12	<sup>v</sup> 10	<sup>v</sup> 10	<sup>v</sup> 10	<sup>v</sup> 10	<sup>v</sup> 10	<sup>v</sup> 10	<sup>v</sup> 8	<sup>v</sup> 9	<sup>v</sup> 12	<sup>v</sup> 10	<sup>v</sup> 10	<sup>v</sup> 8	<sup>v</sup> 10
Ann	10-12						5				13													13						
Ardmore	27-153																													<sup>v</sup> 4
Armstrong	82-116 -02																				<sup>v</sup> 15	<sup>v</sup> 10	<sup>v</sup> 13	<sup>v</sup> 14	<sup>v</sup> 15	<sup>v</sup> 14	<sup>v</sup> 14	<sup>v</sup> 14	<sup>v</sup> 7	<sup>v</sup> 7
Assumption	10-63																				<sup>v</sup> 1									
Auburn-East	10-44				10																									
Auburn-West	10-44				10			17	18				12			13														
Aue	10-28																				<sup>v</sup> 1									
Bald Eagle (Site-1)	62-2	4	5		5																					13	13			
Bald Eagle (Site-2)	62-2																									13	13			
Barnes	10-109																				<sup>v</sup> 1									
Barker	82-96																					<sup>v</sup> 5	<sup>v</sup> 5	<sup>v</sup> 7	<sup>v</sup> 7	<sup>v</sup> 7	<sup>v</sup> 7	<sup>v</sup> 7	<sup>v</sup> 7	<sup>v</sup> 7
Bass	27-98	4														<sup>v</sup> 16				<sup>v</sup> 15	<sup>v</sup> 15		<sup>v</sup> 13		<sup>v</sup> 9		<sup>v</sup> 15			<sup>v</sup> 14
Bass (East Basin)	82-124																											<sup>v</sup> 7	<sup>v</sup> 7	
Bass (West Basin)	82-123																											<sup>v</sup> 7	<sup>v</sup> 8	
Bass (St. Louis Park)	27-15																							<sup>v</sup> 12			<sup>v</sup> 12	<sup>v</sup> 2		
Bass (Washington Co.)	82-35																					<sup>v</sup> 14	<sup>v</sup> 5	<sup>v</sup> 7	<sup>v</sup> 7	<sup>v</sup> 7	<sup>v</sup> 7	<sup>v</sup> 7	<sup>v</sup> 7	<sup>v</sup> 7
Battle Creek	82-91													<sup>v</sup> 14	<sup>v</sup> 13	<sup>v</sup> 11	<sup>v</sup> 13													
Bavaria	10-19				5			17	18							13	<sup>v</sup> 11	<sup>v</sup> 12	<sup>v</sup> 15	<sup>v</sup> 12	<sup>v</sup> 14	<sup>v</sup> 14	<sup>v</sup> 14	<sup>v</sup> 14	<sup>v</sup> 19	<sup>v</sup> 16	<sup>v</sup> 18	<sup>v</sup> 16	<sup>v</sup> 14	
Bay Pond	82-11																											<sup>v</sup> 14	<sup>v</sup> 14	
Benton	10-69																				<sup>v</sup> 13	<sup>v</sup> 14	<sup>v</sup> 14		<sup>v</sup> 15		<sup>v</sup> 14		<sup>v</sup> 13	
Benz	82-120																				<sup>v</sup> 8						<sup>v</sup> 14	<sup>v</sup> 14	<sup>v</sup> 14	

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	
Berliner	10-103																				'1									
Big Carnelian	82-49					5					13					13						'14	'7	'14	'14	'14	'14	'14	'7	'7
Big Marine	82-52	4	5			5					13					13						'14	'7	'14	'14	'14	'14	'7	'7	
Birch	13-42																										'10	'7	'7	
Birch	62-24	2																									'14			
Bluebill Bay	19-449																		'8											
Bone	82-54					5					13				'7		'14		'14	'14	'14		'14	'14	'14	'14	'14	'14	13	'10
Brand	10-110																				'1									
Braunworth	10-107																				'1									
Brickyard	10-225																							'14	'13	'14	'14	'14	'13	
Bryant	27-67	2	5	16		5					13	13	12																	
Burandt	10-84																				'7	'13	'9			'18	'22			
Bush	27-47					5									13	13					13		13			13		'13	'15	
Byllesby	19-6														'14	'14	'13													
Calhoun	27-31		5			5																								
Campbell	10-127																				'2	'14		'10			'14	'14		
Carol	82-17																					'5	'5	'7	'7	'7	'7	'7	'7	
Carver	82-166									20					'15	'15	'16	'9												
Cates	70-18																							'14	'13	'15	'13	'14	'13	
Cedar (Minneapolis)	27-39					5																								
Cedar (Scott Co.)	70-91	4	5			5						13															13	'14	'14	
Cedar Island	27-119																'13						'13		'11			'9		
Cenaiko	2-654																		'12	'11	'13	'11	'13	'12	'12	'14	'14	'14	'12	
Centerville	2-6	4	5		5																	13	13/v4	v1	13	13				
Charley	62-62						5																							

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	
Christmas	27-137	4	5				5												13	13	13			13	13					
Chub	19-20	2													'14	'14	'11													
Clear (Forest Lake)	82-163	4				5						13			'11	'12	'12	'11	'10	'11	'10	'9	'12	'12	'12	'6		13		
Cleary	70-22					5																								
Cloverdale	82-9																						'10	'10	'11	'13	'12	'11	'10	
Cobblecrest	27-53																							'4		'14	'16	'13	'13	
Cobblestone	19-456																										'14	'14	'12	
Cody	66-61																												'3	
Colby	82-94															'13	'14	'13	'13	'12	'12	'9	'10	'10	'10	'10	'6	'7	'7	
Comfort	13-53																		'3			'14	'14	'14	'14	'14	'13	'14	'14	
Coon	2-42	4				5										13														
Cornelia	27-28																								'7		'11	'14	'14	
Courthouse (Chaska)	10-5																'2	'14	'13	'13	'14	'14	'14	'14	'14	'14	'14	'13	'13	
Cowley	27-169																	'12									'10	'1		
Crane	27-734														'9															
Crooked	2-84				5						13				'15	'15	'14	'14	'12	'14	'14									
Crystal (Burnsville)	19-27	2			5						13					13	13	13	13	13	'12	'10	'14	'15	'15	'15	'16	13/ '14	'14	
Crystal (Robbinsdale)	27-34							17	19	19						'15							'8				'7			
Crystal (Spring Lake)	70-61																			'12		'11								
Cynthia	70-52	2																												
Dan Patch	70-16																													
Dean	70-74																							'7	'7	'6	'7	'8	'9	
Deeg	19-117																						'12							
Deep	62-18						5																							
DeMontreville	82-101	4				5							12		'15		14								13		'14	'7	'7	'11

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07
Diamond (Dayton)	27-125	2														'13										13			
Downs	82-110																				'14		'9	'9	'6	'7	'9	'7	'5
Dutch	27-181					5																							
Eagle (Maple Grove)	27-111-01	4			5			17	18				11		'15			'14	'14	'14		'6		'4			'6		
Eagle (Young America)	10-121	4	5				5										12		'15	'14	'14	'14	'12	'14	'14	13	'14	'14	'13
Eagle Point	82-109			2											'14												'5	'2	
Earley	19-33															'10	'11	'9	'10	'10	'9	'8	'6	'10	'9	'6	'7	'9	'12
East	19-349																									'13	'6	'14	
East Boot	82-34																				'14	'14	'14	'14	'14	'14	'14	'7	'7
East Twin	2-133	2	5		5						13						13												
Echo	82-135																											'10	'8
Edina	27-29																								'10	'10			
Edith	82-4																									'6	'12	'12	
Egg	82-147																						'3						
Elmo	82-106	4	5	16		5				19			12			'11											'9	'8	'8
Farquar	19-23	4														'15	'16	'14	'15		'15	'13	'11	'13	'14	'14	'15	'13	'13
Fireman's	10-226																						'12	'14	'14	'14	'14	'13	'13
Fish (Eagan)	19-57										13																		
Fish (Grant Twmsp)	82-137																						'5	'5	'4				
Fish (Maple Grove)	27-118	4	5	16			5					13																	
Fish (Scott County)	70-69	4				5						13					13		'2	'13	'8	'12	'9	'14	'13	'11	'13	'11	'13
Fish (Washington Co.)	82-64																				'5	'14	'7	'7	'7	'7	'7	'7	'7
Forest - East (3)	82-159	4				5						13			'7			'12						13			13	13	
Forest - Middle (2)	82-159					5						13			'7			'12						13			13	13	
Forest - West (1)	82-159					5						13			'7			'12	'14	'15	'14	'14	'14	'14	'14	'14	'14	13	'14

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07
French	27-127																						'11	'10	'7	'7			
Friedrich's Pond	82-108																										'13	'14	
Gables	82-82																			'8	'5								
Gaystock	10-31																				'2	'14	'14				'14	'14	
George	2-91	4	5	16		5					13					13													
George Watch	2-5																'14	'12	'11	'11	'6	'7	'8	'9	'10	'12	'7	'8	
German	82-56																						'7	'7	'7	'7	'7	'7	'7
Gervais	62-7						5																						
Glen	82-93																										'13	'7	
Goetschel	82-313																						'11	'9	'4	'15	'9	'5	
Goggins	82-77																				'13	'14	'14	'14	'14	'14	'14	'14	'14
Golden	2-45	2										12		14			'13	'11	'15	'13	'13	'12	'11	'11	'10	'11	'11	'10	
Goose (Lakeville)	19-360															'13	'13												
Goose (New Scandia)	82-59														'15	'15	'13	'13	'15						'7	'7	'7	'7	
Goose (Waconia)	10-89														'9	'7	'15	'15	'14	'11	'14	'14	'14	'14	'14	'14	'14	'14	'13
Grace	10-218																						'11	'14	'14		'14		
Grass	27-681																		'12										
Hafften	27-199																					13	13		13	'15	'13		
Half Breed (Sylvan)	82-80														'7		'14		'15	'14	'14	'14	'14	'14	'14	'14	'14		'11
Ham	2-53					5									'15	'13		'13	'9	'14									
Harriet	27-16					5																							
Hart	2-81																								'6	'4	'8		
Harvey	27-???																								'10				
Haughey	27-187																						'4						
Hay	82-65																			'14	'13	'14	'14	'4	'7	'7	'7	'7	'7

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07
Hazeltine	10-14																				'91	'14	'14				'14	'14	
Henry	27-175																'10										'11	'11	'6
Herber's Pond	82-15-01																								'14	'14	'7	'7	
Highland	2-79																				'13	'11	'13	'12	'12	'14	'14	'14	'12
Holland	19-65				10	16	15			20					13							13							
Hornbean	19-47																										'11	'8	
Horseshoe (Wash. Co.)	82-74																				'1								
Horseshoe (Dakota Co.)	19-32																'11	'10											
Horseshoe (Sunfish Lake)	19-51																										'11	'11	
Hydes	10-88						5					12		13			12				'11	'4	'9	'14	'15	'14	'14	'14	'13
Independence	27-176	4	5		5							13		'14	'15														
Isabelle	19-4															'14													
Island (Linwood)	2-22				7																			'12	'14	'14	'14	'13	
Jane	82-104					5		17	18			12			'12							13				'15	'13	'10	'12
Jellum's (Site-1)	82-52-01																					'14	'14	'12	'14	'14	'14	'7	'7
Jellum's (Site-2)	82-52-02																						'11	'11					
Johanna	62-78		5				5				13																		
Jonathan	10-217																							'13				'14	
Josephine	62-57						5				13																		
Jubert	27-165																					'11							
July	82-318																											'7	'7
Karth	62-72																												'11
Keller (Burnsville)	19-25																13	13	'13	'15	'14	'12	'13	'15	'15	'14	13/ '14	'12	
Keller (Maplewood)	62-10						5																						
Kingsley	19-30													5		'11	'10	'9				'14	'14	'15	'14	'15	'16	'14	'14

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07
Kismet	82-333																			'14	'13	'14	'14	'14	'14	'14	'13	'14	'14
Klawitter	82-368																						'13	'13	'14	'13	'12	'12	
Kohlman	62-6						5																						
La	82-97														'13	'11	'13	'11	'10	'10	'8	'6	'5	'6	'3	'13	'12	'14	
Lac Lavon	19-446																		'11	'10	'10	'9	'2	'7	'12	'12	'12	'12	'13
Laddie	2-72	4													'13	'14	'12					'13	'13	'14	'10				
Langdon	27-182					5																							
Langton (Site-1)	62-49-01																									'14	'7	'13	
Langton (Site-2)	62-49-02																									'14	'13	'13	
Langton (North Basin)	62-204																									'14			
Lee	19-29															'14	'15	'14	'13			'12	'13	'11	'9	'15	'9	'14	'14
Legion Pond	82-462																									'14	'10		
LeMay	19-82																											'11	
Libbs	27-85																								'10				
Lily	82-23															'15	'14	'14	'15	'13	'14	'14	'14	'14	'7	'7	'7	'7	'7
Linwood	2-26	4	5		7						13					13			13										
Lippert	10-104																				'1								
Little Carnelian	82-14																				'14	'7	'14	'14	'14	'14	'14	'7	'7
Little Comfort	13-54																										'14	'13	
Little Johanna	62-58																					'12	'16	'15	'8	'6	'3		
Little Long	27-179-01	4				5						13								13		13		13			'11	'2	
Lochness	2-584																												'12
Long (Apple Valley)	19-22																				'16			'11	'13	'12	'15	'14	'13
Long (Carver Co.)	10-16																				'2		'13		'5				
Long (Mahtomedi)	82-130																							'11	'9	'12	'10	'10	

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07
Long (May Twmsp)	82-30														'14	'14	'14	'13	'14		'14	'14	'14	'14	'14	'7	'7	'7	'7
Long N (New Brighton)	62-67						5																						
Long S (New Brighton)	62-67						5																						
Long (Orono)	27-160				5																								
Long (Pine Springs)	82-118														'14										13	'15	'14	'14	'14
Long (Stillwater)	82-21															'14	'7			'14	'13	'14	'14	'14	'14	'14	'14	'14	'14
Long (Washington Co.)	82-68																					'5	'14	'7	'7	'7	'7	'7	'7
Loon	82-15																					'14	'14	'7	'7	'7	'7	'7	'7
Lost	27-103														'13														
Lost (Mahtomedi)	82-134																											'13	'13
Lotus	10-6						5					13										13	13		'5	'10	'8	'11	'9
Louise	82-25																					'5	'5	'7	'7	'7	'7	'7	'7
Lucy	10-7						5																						
Lynch	82-42																												'7
MacDonald's Pond	82-1501																								'14	'14	'7	'7	
Magda	27-65																				'14	'13			'11			'12	
Maple Marsh	82-38																					'5	'5	'7	'7	'7	'7	'7	'7
Marcott (site 1)	19-263																'15												
Marcott (site 2)	19-41																'15	'13	'10	'10	'12	'10	'6	'5					
Maria	10-58																				'2	'14	'14				'13		
Marion (Lakeville)	19-26	2	5		5											'15					'15	'14	'13	'14	'14	'15	'16	'15	'14
Markgrafs	82-89															'15	'11	'12	'10	'15	'10	'10	'9	'13	'14	'14	'14	'15	'14
Markley	70-21																		'11	'13	'12	'14	'13	'9	'6	'4		'10	'7
Marsh	10-54																				'1								
Marshan	2-7																	'10	'13	'10	'9	'8	'7						

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07
Martin	2-34				7															13									
Masterman	82-126																											'14	'14
McCarrons	62-54					12	20	17	18	19	13	13	12		14	13	16	13			18	13	13	13		13	13		
McDonald	82-10																				'11		'14	'9	'12	'12	'14	'10	'9
McDonough	19-76						5														13								
McKnight	10-216																											'14	
McKusick	82-20															'14	'14	'14	'14	'14	'14	'13	'14	'14	'14	'14	'14	'14	'14
McMahon	70-50	2				5											13				13						13	'14	'10
Meadow	27-57																	'12			'12			'9			'10		
Medicine	27-104	4	5		10							13	12																
Mergen's	82-482																					'10			'3	'2	'6		
Meuwissen	10-70																				'1								
Miller	10-29																	'6	'13		'12	'14	'13	'13	'14	'14	'14	'12	'13
Minnetoga	27-88																												'14
Minnetonka (Lower)	27-133	4	5																										
Minnetonka (Upper)	27-133	2	5																										
Minnewashta	10-9					5						13			13						13	13	13		13	13			
Mitchell	27-70																13				13	13			13	'14	'14	'14	'13
Moody	13-23																										'14	'14	'14
Mooney	27-134														'14	'10													
Moore	2-75																				'14								
Mud	82-26-02																					'5	'5	'7	'7	'7	'7	'7	'7
Myers	10-68																				'1								
Nokomis	27-19	4				5																							
Normandale	27-1045																											'5	'3

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	
North Twin	82-18																					'5	'5	'7	'7	'7	'7	'7	'7	
Northwood	27-627																					'12	'10	'13	'12	'12	'10	'10	'10	
Oak (Site 1)	10-93																				'2		'14	'13	'12	'14	'14	'14		
Oak (Site 2)	10-93																										'10			
Oak (Site 3)	10-93																										'10			
O'Connor	82-2																									'8	'15	'12		
O'Dowd	70-95					5										13							13		13		13	'12	'13	
Olson	82-103												12		'15		14						13			13	'14	'7	'7	'11
Oneka	82-140																				'13	'11	'11	'9	'6	'5				
Orchard	19-31	4	5		5							13			13						13	'15	'13	'13		'14	'14	'14	13/ '14	'14
Otter	2-3	2			5																									
Owasso	62-56	4			5																									
Pamela	27-675																										'10			
Parkers	27-107	4										13				13						13	'12		'14	'15	'15	'15	'14	'14
Parley	10-42					5		17	18				12				12					13		13		13			13	
Pat	82-125																										'7	'7		
Patterson	10-86																				'2									
Peltier	2-4				5										'14	'16	'15	'14	'14	'13	'13	'13	'14	'13	'17	'15	'15	'16	'17	'16
Pepin	40-28																												'13	
Phalen	62-13	4	5				5																							
Pickerel	2-103	2															13													
Pierson	10-53	2	5		5												13							13	13	13			13	
Pike (Maple Grove)	27-111-02																	'14	'15	'13		'13							'4	
Pike (Ramsey Co.)	62-69																				'14	'10	'14	'14	'14	'15	'15	'11	'14	
Pike (Scott Co.) [Site-1]	70-76-1																		'9		'10	'9	'9	'11	'15	'15	'13			

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	
Pike {Scott Co.} [Site-2]	70-76-2																							'11						
Pine Tree	82-122						5								'14	'14	'16	'14	'15	'15	'13	'14	'9	'12	'7	'8	'12	'10	'9	
Pleasant (New Prague)	70-98														13															
Pleasant (North Oaks)	62-46						5																							
Pomerleau	27-100																'9			'10		'6		'3						
Powers	82-92														'12	'13	'13	'12	'9	'10	'8	'5	'7	'14	'14	'14	'14	'14		
Prior (Lower) [Site-1]	70-26-1					5						13					13	'15	'14	'13	'9	'14	'16	'13	'12	'12	'12	'12		
Prior (Lower) [Site-2]	70-26-2																			'14	'13	'9	'14	'15						
Prior (Upper) [Site-1]	70-72-1	4	5			5						13					13	'15	'14	'13	'9	'14	'12	'13	'10	'9	'9	'5		
Prior {Upper} [Site-2]	70-72-2																							'12						
Raven	19-369																'13	'6	'8											
Rebecca	27-192				10	12	12																							
Red Rock	27-76																				12	13			13	13		13		
Regional Park	82-87																			'12	'14	'12	'13	'14	'15	'15	'14	'7	'7	
Reitz	10-52						5					12		13							'15	'13	'7	'13	'14	'14	15	'14	'14	
Reshanau	2-9	2																			'7	'1	'6					'13	'9	
Rest Area Pond	82-0514																											'13	'10	
Rice	10-78	2																			'1									
Rice (Maple Grove)	27-116																												'10	
Riley	10-2	2	5	16			5	17	18			13	12		13								13		13	'14	'15	'14	'10	'15
Rogers	19-80																												'12	
Rose	27-92																											'14	'13	
Rutz	10-89																				'1	'14	'14	'14				'14	'7	
Ryan	27-58																'14		'5		'9		'4	'6						
Sanborn	40-27																												'2	

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	
Sand (New Scandia)	82-67														'7	'14	'14	'13						'14	'7	'7	'7	'7	'7	
Sarah	27-191	4			5																									
Scheuble	10-85																				'1									
Schmidt (Smith)	27-102															'14			'12		'12	'9			'14	'9		'9		
School	13-57																									'14	'7	'7		
Schroeder's Pond	82-301																								'14	'14	'7	'7		
Schultz	19-75					5	5														13									
Schutz	10-18					5																'6	'10	'6	'8	'9	'11			
Scout	19-198																											'14		
Seidl's	19-95															'15	'14	'14	'15	'16	'14	'14	'15	'8	'14	'14	'14	'14	'8	
Shaver (Site 1)	27-86																									'14	'13			
Shaver (Site 2)	27-86																										'6			
Shields	82-162														'6	'14	'14	'13	'13	'14	'14	'14	'14	'14	'14	'14	'14	'14	'14	'7
Silver (Washington Co.)	82-16																					'14	'5	'7	'7	'7	'7	'7	'7	
Sliver (North St. Paul)	62-1																											'12		
Simley	19-37															'10	'16	'14	'15	'16	'14	'12	'14							
Snail	62-73	4					5																							
South Oak	27-661																						'12	'15			'9	'8		
South Rice	27-645																				'9	'14	'15	'14	'14	'15	'14	'12		
South School Section	82-151														'14	'7		'14								'14	'14	'14		
South Twin	82-19																				'5	'5	'7	'7	'7	'7	'7	'7		
Spring (Anoka Co.)	2-71																					'11								
Spring (Prior Lake)	70-54	4	5	16		5						13					13	'12			'6	'11	'13	'14	'14	'13	'9	'8		
Square	82-46	4	5	16	6	7	7				13				'11	'14	'14	'13	'14	19	'14	'14	'15	'14	'14	'14	'14	'14	'14	
Staring	27-78	4					5										13				13		13		13		13			

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	
Staples	82-28																					'14	'5	'7	'7	'7	'7	'7	'7	
Steiger	10-45					12					13					13														
St. Croix (Upper Basin S-1)	82-1																											'2		
St. Croix (Upper Basin S-2)	82-1																										'10	'10	'9	
St. Croix (Mid Basin S-3)	82-1																										'11	'9	'9	
St. Croix (Mid Basin S-5)	82-1																									'8	'10	'7		
St. Croix (Lower Basin S-6)	82-1																										'11	'10	'10	
St. Croix (Lower Basin S-7)	82-1																										'8	'8	'10	
St. Joe	10-11																								'17	'8	'9	'9		
Success	27-634																'10							'11			'11			
Sucker	62-28						5																							
Sullivan	2-80														'14	'14	'15		'15	'14	'13	'11	'11	'12	'12					
Sunfish (Lake Elmo)	82-107																					'10					'13	'11		
Sunfish (Sunfish Lake)	19-50																										'13	'13		
Sunnybrook	82-133																				'14		'13	'10	'12	'10	'16	'14	'14	
Sunset	82-153					5									'14	'14	'12	'13	'16	'12	'10	'13	'13	'18	'20	'15	'17	'12	'10	
Sunset Pond	19-451														'14	'14	'14	'12	'10			'13	'11	'10	'12	'11		'14	'14	
Susan	10-13																											'7	'11	
Swan	10-82																				'1									
Swede	10-95	2															13						13	'14	'16	'13	'14	'14	'13	
Sweeney (South) [Site-1]	27-35																					'11	'9	'14	'13	'14	'11	'10	'15	
Sweeney (North) [Site-2]	27-35																					'11	'9							
Tamarack	10-10																						'10	'11	'12	'11	'11	'13	'14	
Tanners	82-115	2								20					'14	'13	'12	'14												
Terrapin	82-31																									'7	'7	'7	'7	

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07
Thole	70-120-01					5										13			13			13		13			13	'14	
Thomas	19-67	2																											
Tiger	10-108																				'1								
Turtle	62-61	4	5		5																								
Turtle (Washington Co.)	82-36																					'5	'5	'7	'7	'7	'7	'7	'7
Twin (Burnsville)	19-28																				'6		'13	'11	'6	'2	'11	'8	'8
Twin-Lower (Robbinsd.)	27-42-03											12		'14			13			'5		13			'13		'8		
Twin-Middle (Crystal)	27-42-02					5						12				13	'11			'13	13			'13		'8			
Twin-Upper (Br. Center)	27-42-01											12		'14			11			'15		'11		'13		'14		'13	
Twin-South (May Twosp)	82-48																		'13	'13									
Twin (St. Louis Park)	27-656																						'12	'14	'14	'11	'14	'10	
Vadnais	62-38					5																							
Valentine	62-71																						'14	'13	'12	'12	'9	'10	'12
Valley	19-348															'15	'14	'11		'8	'14	'14	'14	'14	'14	'14	'13	'14	'14
Virginia	10-15																				'11	'12	'14	'12	'15	'13			
Wabasso	62-82	4	5		5						12																		
Waconia	10-59	4	5			5						13			'16	'13	'15	'17	'15	'14	'14	'14	'14	'15	'14	12	'14	'14	'13
Wasserman	10-48				5			17	18							13			13	13	13			13	13			13	
Weaver	27-117				5			17	18																				
Weber	82-119																											'12	
West Boot	82-44																					'14	'14	'14	'14	'14	'14	'7	'7
West Lakeland	82-488																					'2							
Westwood	27-711													'13								'15	'14	'10	'9	'7	'7	'8	'8
Whaletail (Site-1)	27-184-01																								13	13			
Whaletail (Site-2)	27-184-02	4				5																			13	13			

LAKE	ID #	'80	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07
White Bear	82-167	4	5			5																							
White Rock	82-72																											'11	'14
Wilmes	82-90															'14	'15	'14	'15	'15	'14	'13	'13	'10	'12	'12	'10	'12	'11
Windsor	27-82																								'12	'14			
Wing	27-91																										'14	'14	
Winkler	10-66																				'8	'6	'6		'13		'14		'13
Wolsfeld	27-157	4																											
Wood (Burnsville)	19-24																'10	'14	'15	'15	'14	'13	'14	'14	'14	'14	'14	'13	'13
Woodpile	82-132																										'7	'7	
Young America	10-105																				'1								
Zumbra	10-41					5						13												13					

## APPENDIX B 2007 CAMP Volunteers

<u>Enrolling Group</u>	<u>Lake</u>	<u>DNR #</u>	<u>Volunteer</u>
Anoka Co. Parks	Cenaiko	2-0654	Anoka County Parks
Anoka Co. Parks	Highland	2-0079	Anoka County Parks
Anoka Co. Parks	Island	2-0022	Anoka County Parks
Apple Valley	Cobblestone	19-0456	Wyatt Yohnk
Apple Valley	Farquar	19-0023	Bill Sherry
Apple Valley	Long (Apple Valley)	19-0022	Al Kettelkamp
Apple Valley	Scout Lake	19-0198	Dan Stanek
Bassett Creek WMO	Northwood	27-0627	Robert White
Bassett Creek WMO	Parkers	27-0107	Bob Videen
Bassett Creek WMO	South Rice	27-0645	Steve Streff
Bassett Creek WMO	Sweeney	27-0035	Dave Hanson
Bassett Creek WMO	Westwood	27-0711	Westwood Nature Center
Black Dog WMO	Crystal	19-0027	Carroll Armett
Black Dog WMO	Keller	19-0025	Glenn Gramse
Black Dog WMO	Kingsley	19-0030	City of Lakeville
Black Dog WMO	Lac Lavon	19-0446	Wally Shaver
Black Dog WMO	Orchard	19-0031	Tom Goodwin
Black Dog WMO	Sunset Pond	19-0451	Dan Wallace
Browns Creek WMO	Bass (East)	82-0124	Washington Conservation District
Browns Creek WMO	Bass (West)	82-0123	Washington Conservation District
Browns Creek WMO	Benz	82-0120	Washington Conservation District
Browns Creek WMO	Goggins	82-0077	Washington Conservation District
Browns Creek WMO	July	82-0318	Washington Conservation District
Browns Creek WMO	Kismet	82-0333	Washington Conservation District
Browns Creek WMO	Long (Stillwater)	82-0021	Washington Conservation District
Browns Creek WMO	Lynch	82-0042	Washington Conservation District
Browns Creek WMO	Masterman	82-0126	Washington Conservation District
Browns Creek WMO	Moody	13-0023	Washington Conservation District
Browns Creek WMO	Pat	82-0125	Washington Conservation District
Browns Creek WMO	South School Section	82-0151	Washington Conservation District
Browns Creek WMO	Woodpile	82-0132	Washington Conservation District
Burnsville	Alimagnet	19-0021	John Ritter
Burnsville	Earley	19-0033	John Saffert
Burnsville	Twin (Burnsville)	19-0028	Dan Freeman
Burnsville	Wood	19-0024	Dave Bess
Carnelian-Marine	Barker	82-0076	Washington Conservation District
Carnelian-Marine	Bass	82-0035	Washington Conservation District
Carnelian-Marine	Big Carnelian	82-0049	Washington Conservation District

<b><u>Enrolling Group</u></b>	<b><u>Lake</u></b>	<b><u>DNR #</u></b>	<b><u>Volunteer</u></b>
Carnelian-Marine	Big Marine	82-0052	Washington Conservation District
Carnelian-Marine	Carol	82-0017	Washington Conservation District
Carnelian-Marine	East Boot	82-0034	Washington Conservation District
Carnelian-Marine	Fish	82-0064	Washington Conservation District
Carnelian-Marine	German	82-0056	Washington Conservation District
Carnelian-Marine	Herber's Pond	82-0015-01	Washington Conservation District
Carnelian-Marine	Jellum's	82-0052-02	Washington Conservation District
Carnelian-Marine	Little Carnelian	82-0014	Washington Conservation District
Carnelian-Marine	Long	82-0068	Washington Conservation District
Carnelian-Marine	Loon	82-0015-02	Washington Conservation District
Carnelian-Marine	Louise	82-0025	Washington Conservation District
Carnelian-Marine	MacDonald's Pond	82-0062	Washington Conservation District
Carnelian-Marine	Maple Marsh	82-0038	Washington Conservation District
Carnelian-Marine	Mud	82-0026	Washington Conservation District
Carnelian-Marine	North Twin	82-0018	Washington Conservation District
Carnelian-Marine	Schroeder's Pond	82-0301	Washington Conservation District
Carnelian-Marine	Silver	82-0016	Washington Conservation District
Carnelian-Marine	South Twin	82-0019	Washington Conservation District
Carnelian-Marine	Staples	82-0028	Washington Conservation District
Carnelian-Marine	Turtle	82-0036	Washington Conservation District
Carnelian-Marine	West Boot	82-0044	Washington Conservation District
Carver Co.	Bavaria	10-0019	John Ryski
Carver Co.	Benton	10-0069	Carver County
Carver Co.	Brickyard	10-0225	Carver County
Carver Co.	Courthouse	10-0005	Carver County
Carver Co.	Eagle	10-0121	Carver County
Carver Co.	Fireman's	10-0226	Carver County
Carver Co.	Goose (Waconia)	10-0089	Carver County
Carver Co.	Hydes	10-0088	Carver County
Carver Co.	Miller	10-0029	Joe, Diane, & Elysia Williamson
Carver Co.	Reitz	10-0052	Lynne McMullen
Carver Co.	Rutz	10-0080	Marty Ziemans
Carver Co.	Swede	10-0095	Wayne Hubin
Carver Co.	Waconia	10-0059	Carver County
Carver Co.	Winkler	10-0066	Carver County
Chanhassen	Lotus	10-0006	Shelley Strohmaier & Family
Chanhassen	Riley	10-0002	David Florenzano
Chanhassen	St. Joe	10-0011	Sue Morgan & Linda Scott
Chanhassen	Susan	10-0013	Armstrong Family
Comfort Lk-Forest Lk	Big Comfort	13-0053	Charlie Rheault
Comfort Lk-Forest Lk	Birch	13-0042	Washington Conservation District
Comfort Lk-Forest Lk	Bone	82-0054	Jon Hafner & Don Jack
Comfort Lk-Forest Lk	Forest Lake West	82-0159	Dale Hebelsen
Comfort Lk-Forest Lk	Little Comfort	13-0054	Steve Schreiber
Comfort Lk-Forest Lk	School	13-0057	Washington Conservation District
Comfort Lk-Forest Lk	Shields	82-0162	Washington Conservation District

<b><u>Enrolling Group</u></b>	<b><u>Lake</u></b>	<b><u>DNR #</u></b>	<b><u>Volunteer</u></b>
Comfort Lk-Forest Lk	Sylvan (Half Breed)	82-0080	Curtis Sparks
Eden Prairie	Mitchell	27-0070	Fran & Gordon Warner
Elm Creek	Cowley	27-0169	Lori and Tierney Ende
Elm Creek	Henry	27-0175	Pam & George Christ
Elm Creek	Rice	27-0116	George Schneider
IGH/SSP	Seidl's	19-0095	Randy Bjorklund
Lakeville	East	19-0349	City of Lakeville
Lakeville	Lee	19-0029	City of Lakeville
Lakeville	Marion	19-0026	Wally Potter
Lakeville	Valley	19-0348	City of Lakeville
Lower St. Croix Valley WMO	O'Connor	82-0002	Ken Nieman & Jeff Keene
Mahtomedi	Lost	82-0134	Matha Popp & Bob Lane
Marine/St.Croix WD	Goose (New Scandia)	82-0059	Washington Conservation District
Marine/St.Croix WD	Hay	82-0065	Washington Conservation District
Marine/St.Croix WD	Long (May)	82-0030	Washington Conservation District
Marine/St.Croix WD	Sand	82-0067	Washington Conservation District
Marine/St.Croix WD	Square	82-0046	Washington Conservation District
Marine/St.Croix WD	Terrapin	82-0031	Washington Conservation District
Mendota Heights	LeMay	19-0082	City of Mendota Heights
Mendota Heights	Rogers	19-0080	Doug Hennes
Middle St. Croix WMO	Lily	82-0023	Washington Conservation District
Middle St. Croix WMO	McKusick	82-0020	Washington Conservation District
Minnehaha Creek Watershed District	Tamarack	10-0010	Mike Scholdice
Minnetonka	Minnetoga	27-0088	Maressia & John Twele
Minnetonka	Rose	27-0092	Mark Storck
Nine Mile Creek WD	Bush	27-0047	Gregg Thompson & Gordy Bratsch
Nine Mile Creek WD	Cornelia	27-0028	Jon Moon & Heidi Dorfmeister
Nine Mile Creek WD	Glen	27-0093	Christine Petersen
Nine Mile Creek WD	Normandale	27-1045	Jane Ladky
Nine Mile Creek WD	Wing	27-0091	John Burton, Jerry & Jane Greene
Pioneer-Sarah WD	Ardmore	27-0153	Pioneer-Sarah WMC
Pioneer-Sarah WD	Little Long	27-0179	Boys and Girls Club

<b><u>Enrolling Group</u></b>	<b><u>Lake</u></b>	<b><u>DNR #</u></b>	<b><u>Volunteer</u></b>
Prior Lake	Markley	70-0021	City of Prior Lake
Prior Lake-Spring Lake WD	Cates	70-0018	Tom & Peggy Sletta
Prior Lake-Spring Lake WD	Fish	70-0069	Steve Pierson
Prior Lake-Spring Lake WD	Prior (Lower)	70-0026	Walt Burris
Prior Lake-Spring Lake WD	Prior (Upper)	70-0072	Jim Peterson
Prior Lake-Spring Lake WD	Spring	70-0054	Lance Needham
Rice Creek WD	George Watch	2-0005	Wargo Nature Center
Rice Creek WD	Golden	2-0045	Dave Phipps
Rice Creek WD	Karth Lake	62-0072	Gary Gerding & Mike Enz
Rice Creek WD	Langton	62-0049	Tam & Dick McGehee
Rice Creek WD	Langton	62-0049	Tam & Dick McGehee
Rice Creek WD	Lochness	2-0584	Jim Hafner
Rice Creek WD	Long (Mahtomedi)	82-0130	Kitty Francy-Payton
Rice Creek WD	Peltier	2-0004	Wayne LeBlanc
Rice Creek WD	Pike	62-0069	Helen & Phil Goodrich
Rice Creek WD	Pine Tree	82-0122	Gene Berwald
Rice Creek WD	Reshanau	2-0009	Brian Fossey
Rice Creek WD	Sunset	82-0153	Diane Coderre
Rice Creek WD	Valentine	62-0071	Bob Kistler
Rice Creek WD	White Rock	82-0072	David, Joseph, & Ruthmary Bluhm
Saint Louis Park	Cobblecrest	27-0053	Jim Kellogg
Saint Louis Park	South Oak	27-0661	Aaron Patterson
Saint Louis Park	Twin (St. Louis Pk)	27-0656	Bruce, Meghan, & Kathy Cornwall
Scott Co. WMO	Cedar	70-0091	Jerry Edberg
Scott Co. WMO	Cody	66-0061	Scott County
Scott Co. WMO	McMahon	70-0050	Joe Williamson
Scott Co. WMO	Pepin	40-0028	Debbie Olson
Scott Co. WMO	Sanborn	40-0027	Debbie Olson
Shakopee	Dean	70-0074	Andy, Andrew, & Alyssa Voit
Shakopee	O'Dowd	70-0095	Sandy & Andrew Boyce
Shingle Creek WMC	Bass	27-0098	Marvin Groth
Shingle Creek WMC	Pike	27-0111-02	Kurt & Keith Paulsen
Shingle Creek WMC	Schmidt	27-0102	Dale Wahlstrom
South Washington WD	Armstrong	82-0116	Washington Conservation District
South Washington WD	Colby	82-0094	Washington Conservation District
South Washington WD	Powers	82-0092	Washington Conservation District
South Washington WD	Regional Park	82-0087	Washington Conservation District
St. Croix Basin Planning Team	Lake St. Croix	82-0001	Jim and Roberta Harper
St. Croix Basin Planning Team	Lake St. Croix	82-0001	Cecelia and Harry Martin
St. Croix Basin Planning Team	Lake St. Croix	82-0001	Richard and Sheryl Lindholm
St. Croix Basin Planning Team	Lake St. Croix	82-0001	Rick Meierotto

<b><u>Enrolling Group</u></b>	<b><u>Lake</u></b>	<b><u>DNR #</u></b>	<b><u>Volunteer</u></b>
St. Croix Basin Planning Team	Lake St. Croix	82-0001	Carpenter Nature Center
Sunfish	Hornbean	19-0047	Dave Johnson
Sunfish	Horseshoe	19-0051	Jim Naves
Sunfish	Sunfish	19-0050	Dick Bancroft
Valley Branch WD	Bay Pond	82-0011	Josh Rinke
Valley Branch WD	Cloverdale	82-0009	Kevin Bjork
Valley Branch WD	DeMontreville	82-0101	Bob Meier
Valley Branch WD	Downs	82-0110	The Sly Family & Friends
Valley Branch WD	Eagle Point	82-0109	Bob Schumacher
Valley Branch WD	Echo	82-0135	Jim Serley
Valley Branch WD	Edith	82-0004	Dave Nimmer
Valley Branch WD	Elmo	82-0106	Scott Knudson & Terry Bouthilet
Valley Branch WD	Friedrich's Pond	82-0108	Josh Rinke
Valley Branch WD	Goetschel	82-0313	Nancy & Gary VanCleve
Valley Branch WD	Jane	82-0104	Chuck Taylor
Valley Branch WD	Klawitter	82-0368	Bonnie Juran
Valley Branch WD	Long (Pine Springs)	82-0118	Bill Feely
Valley Branch WD	McDonald	82-0010	Randy Hunt
Valley Branch WD	Olson	82-0103	Bob Meier
Valley Branch WD	Rest Area Pond		MnDOT
Valley Branch WD	Sunnybrook	82-0133	Arnie Johnson
Woodbury	La	82-0097	Simon Fung
Woodbury	Markgrafs	82-0089	Terry Riley
Woodbury	Wilmes	82-0090	Bill Aamodt

**APPENDIX C**  
**Lake/Watershed Characteristics**

Lake DNR #	Surface Area(ac)	Watershed Area(ac)	Ratio	Max Depth(m)	Mean Depth(m)	Volume (ac-ft)	% Littoral	# Inlets	Thermo - cline?	Public Access	Shr Length (miles)	DNR Classification
Acorn 82-102	44	296	7:1	3.0	0.7	440	100	0	N			
Alimagnet 19-21	109	1,094	10:1	3.0	1.5	545	100	12	N	C	3.2	
Ardmore 27-0153	10.1			6.1	2.4	78.0						
Armstrong 82-116-02	39			1.5	1.0	128	100		N	N		
Barker 82-76	45	823	19:1	9.0	4.4	648			Y	N		
Bass (Henn) 27-98	194	3,100	16:1	9.4	3.1	1,979	82		Y	N	2.3	
Bass (StLP) 27-15	95											
Bass (Wash)82-35	81			4.3			100		N	N		
Bass (Wash)82-123							100		N	N		
Bavaria 10-19	200	711	3.5:1	18.3	5.6	3,674	40		Y	Y		Centrarchid
Bay Pond 82-11	10.2	849	9:1	1.1								
Benton 10-69	115	322	3:1	2.0			100		N	N		
Benz 82-120	36						100		N	N		
Big Carnelian 82-49	455	1,900	4:1	20.0	9.8	14,560	28		Y	Y		
Big Comfort 13-53	219			14.3			41		Y	Y		
Big Marine 82-52	1,706	2,659	1.5:1	15.2	7.6	42,527	67		Y	Y		
Birch 13-42	65											

Lake DNR #	Surface Area(ac)	Watershed Area(ac)	Ratio	Max Depth(m)	Mean Depth(m)	Volume (ac-ft)	% Littoral	# Inlets	Thermo - cline?	Public Access	Shr Length (miles)	DNR Classification
Bone 82-54	212	5,177	24:1	9.8	3.7	2,820	59	3	Y	Y		
Brickyard 10-225	17			13.1			35		Y	N		
Burandt 10-84	93			7.3			72		Y	N		
Bush 27-47	172			8.5			64		Y	Y		
Campbell 10-127	72			2.0			100		N	N		
Carol 82-17	63	375	6:1	1.8	0.9	186	100		N	N		
Cates 70-18	27			4.0			100		N	N		
Cedar (Scott) 70-91	742	11,104	14:1	4.7	2.1	5,194	100		N	Y		
Cedar Island 27-119	80	800	10:1	2.1	1.4	368	100		N	N		
Cenaiko 2-654	29			9.1			40		Y	N	0.6	Stocked w/Trout - Fishing Pier
Clear 82-163	400			8.5	3.7	4,800	67		Y	Y	3.9	Walleye
Cloverdale 82-9	45	819	18:1	8.5	3.0	450	86		Y	N		
Cobblecrest 27-53	10									N		
Cobblestone 19-456												
Cody 66-61	256			3.7	2.4	78						
Colby 82-94	71	8,088	114:1	3.4			100		N	N		
Cornelia 27-28										N		
Courthouse 10-5	10			17.4			30		Y	N	0.6	Stocked w/Trout
Cowley 27-169												
Crystal(Bnsv)9-27	292	2,001	7:1	11.3	3.1	2,920	72		Y	Y		Panfish - Fishing Pier
Crystal(rob) 27-34	76	1,272	17:1	10.4	3.7	917	68		Y	Y	1.4	Centrarchid - Fishing Pier

Lake DNR #	Surface Area(ac)	Watershed Area(ac)	Ratio	Max Depth(m)	Mean Depth(m)	Volume (ac-ft)	% Littoral	# Inlets	Thermo - cline?	Public Access	Shr Length (miles)	DNR Classification
Dean 70-74	128						100		N	N		
DeMontreville82-101	160	1,108	7:1	7.3	2.4	1,280	90		Y	Y		
Downs 82-110	35	2,400	69:1	2.1	1.5	175	100		N	N		
Eagle(Crv)10-121	233	1,050	4.5:1	4.0	1.2	920	100		N	Y		Natural Environment
Eagle(m.g.) 27-111	291	3,220	11:1	10.4	3.8	3,667	68		Y	Y	3.2	Centrarchid
Eagle Point 82-109	120	11,502	96:1	1.8	1.0	360	100		N	N		
Earley 19-33	29	1,629	56:1							N		
East 19-349	40											
East Boot 82-34	47	93	2:1	8.2	0.9	282	84		Y	Y		
Echo 82-135	41	194	4.7:1	1.8	0.8	107	100		N	N		
Edina 27-29				1.0			100		N	N		
Edith 82-4	81	1,576	19:1	13.0					Y			
Elmo 82-106	284	1,191	4:1	41.7			22		Y			
Farquar 19-23	63	353	6:1	3.0	1.4	290	100		N	N		
Fireman's 10-226	8			7.0			88		Y			
Fish (Grant) 82-137	21			10.4			67		Y			
Fish(Scott) 70-69	171	660	4:1	8.5	4.4	2,468	43		Y	Y		Centrarchid
Fish (Wash) 82-64	72	683	9.5:1	3.0	1.5	360	100		N	N		
Forest 82-159	2,249	4,285	2:1	11.5	3.4	24,986	68	14	Y	Y		
Friedrich's 82-108	14.5	360	25:1									
French 27-127	352	870	4:1	1.0					N	Y		

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Gaystock 10-31	105			5.0			100		N	N		
George Watch 2-5	528			2.0	1.5	2,587	100		N	Y		
German 82-56	109											
Glen 27-93	98			7.6			91			N		
Goetschel 82-313	22	2,812	122:1	4.2	1.2	88	100		N	N		
Goggins 82-77	11						100		N	N		
Golden 2-45	57	7,680	135:1	7.3	2.5	463	90	1	Y	Y	1.5	
Goose (Scndia) 82-59	83			7.6	2.4	664	55			Y		
Goose(Wac)10-89	407	1,100	27:1	3.0	1.5	2,035	100		N	C		Natural Environment
Grace 10-218	22			6.7			79					
Hafften 27-199	43		13.4				60		Y	Y		
Half Breed 82-80	75	303	4:1	10.3	1.7	420	67		Y	N		
Hart 2-81	8						100		N	N		
Harvey 27-??				0.7			100		N	N		
Hay 82-65	33									N		
Hazeltine 10-14	236			2.0			100		N	N		
Henry 10-175	77			1.5			100		N	N		
Herbers Pnd 82-15-01				2.0			100		N	N		
Highland 2-79	22			1.0			100		N	N		
Hornbean 19-47	22											
Horseshoe 19-51	16											

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Hydes 10-88	215	430	2:1	5.5	3.0	2,150	88		Y	Y		
Island 2-22	67			6.7			87		Y	N		
Jane 82-104	155	1,402	9:1	12.0	3.7	1,860	72		Y	Y		
Jellum's 82-5202	72	333	4.6:1	4.9	2.4	569	100		N	N		
Jonathon 10-217												
July 82-318												
Karth 62-0072												
Keller (Brn)19-25	60			2.5	1.5	300	100		N	N		
Kingsley 19-30	44	193	4:1	4.0			100		N	N	1.7	
Kismet 82-333										N		
Klawitter 82-368	4.5	168	37:1				100					
La 82-97	35			3.5			100		N	N	1.3	
Lac Lavon19-446	69	306	4:1	9.8			26		Y	N	2.3	Stocked w/Trout - Fishing Pier
Langton 62-49	30	257	9:1	1.5	1.2	120	100		N			
Lee 19-29	25	324	13:1	5.2			100		N	N	1.0	
Legion Pond 82-462	16	224	14:1									
LeMay 27-85	34			4.0	1.6	173						
Libbs 27-85	23			2.1			100		N	N		
Lily 82-23	52			17.4			73		Y	Y		Centrarchid - Fishing Pier
Little Carnelian 82-14	162	565	3.5:1	21.3	10.7	5,686			Y	N	1.7	
Little Comfort 13-54	36			17.0			44		Y	N		

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Little Johanna 62-58	35			12.0			67		N	N		
Little Long 27-179	108			23.2			49		Y	Y		
Lochness 2-0584	5.3			4.9								
Long(ap val)19-22	36			3.5			100		N	N		
Long(Maht) 82-130	48			7.7			92		Y	N		
Long (May)82-30	88			3.7			100		N	Y		
Long (P.S.) 82-118	62	2,060	33:1	10.4	3.6	744	55		Y	N		
Long(Still) 82-21	71			6.7			96		N	N		
Long (Wash) 82-68	35	381	11:1	2.1	1.1	126	100		N	N		
Loon 82-15	64	407	6.4:1	4.9	2.4	206	100		N	N		
Lost 82-134	9.1			7.9			82					
Lotus 10-6	246	1,033	4:1	8.8	4.3	3,500	74		Y	Y		
Louise 82-25	48	616	13:1	3.7	1.8	283	100		N	N		
Lynch 82-42	43											
MacDonald Pnd 82-62	12			2.7			100		N	N		
Magda 27-65	15											
Maple Marsh 82-38	38	148	4:1	3.4	1.7	212	100		N	N		
Maria 10-58	169			1.0			100		Y	N		
Marion 19-26	560			6.4			81		Y	Y		
Markgrafs 82-89	46	413	10:1	2.4			100		N	N	2.6	Rearing
Markley 70-21	27			3.7			100		N	N		

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Masterman 82-126	45											
McDonald 82-10	54	1,051	19:1	3.7	1.8	324	100		N	N		
McKnight 10-216												
McKusick 82-20	46			4.7			100		N	N	1.6	
McMahon 70-50	110			4.5			100		N	Y		
Meadow 27-57	11	121	11:1	1.2			100		N	N	0.7	
Mergen's 82-482	12	1,383	115:1	1.3			100		N	N		
Miller 10-29	145	16,701	115:1	4.3	3.1	1,479	100		N	N		
Minnetoga 27-88	14.4			8.2	3.9	183						
Mitchell 27-70	112			5.8			97		N	Y		
Moody 13-23	35			14.6			63		Y	N		
Mud 82-26-02	62	899	15:1	2.1	1.1	224	100		N	N		
Normandale 21-1045	103			3.7			100		N			
North Twin 82-18	69	187	3:1	1.8	0.9	207	100		N	N		
Northwood 27-627	15	1,341	89:1	1.5	0.8	41	100		N	N		
Oak 10-93	339			3.4			100		N	N		
O'Connor 82-2	38									N		
O'Dowd 70-95	258			6.7			91		Y	Y		
Olson 82-103	89	200	2:1	4.5	2.1	623	100		N	Y		
Oneka 82-140	381			2.1	1.2	1,524	100		N	N		Wildlife
Orchard 19-31	250	2,012	8:1	10.0	3.0	2,500	75		Y	Y		Centrarchid

Lake DNR #	Surface Area(ac)	Watershed Area(ac)	Ratio	Max Depth(m)	Mean Depth(m)	Volume (ac-ft)	% Littoral	# Inlets	Thermo - cline?	Public Access	Shr Length (miles)	DNR Classification
Pamela 27-675	18			1.5			100		N	N		
Parkers 27-107	97	950	10:1	11.3	3.7	1,164	70		Y	Y		
Pat 82-125	13											
Peltier 2-4	174	68,082	391:1	4.9	2.1	3,255	100		N	Y		Gamefish
Pepin 40-28	326			3.4	1.1	1,150				Y		
Pike(m.g.) 27-111	59	919	16:1	11.9	2.0	395	95		Y	Y	1.5	Centrarchid
Pike(ramsy)62-69	35			4.9	2.1	252	100		N	N		Gamefish
Pike (scott) 70-76	57	1,991	35:1	2.7			100		N	N		
Pine Tree 82-122	174			7.9	3.0	1,740	91		Y	N		Centrarchid
Powers 82-92	57	1,238	22:1	12.5			57	2	Y	N	1.8	Centrarchid
Prior(lower)70-26	827	19,560	24:1	18.3	4.1	11,120	46	1	Y	Y		Centrarchid
Prior(upper)70-72	340	16,460	48:1	15.2	3.1	3,460	93	2	Y	Y		Centrarchid
Region Prk 82-87	16	600	38:1	5.8			100		N	N		
Reitz 10-52	79	3,711	47:1	11.0	4.0	1,027	58		Y	Y		
Reshnanau 2-9												
Rest Area 82-0514	12.6	17,781	157:1									
Rice 27-116	252			3.4	1.9	1,570				Y		
Riley 10-2	297	4,796	16:1	15.0	6.6	6,429	34		Y	Y	2.9	
Rogers 19-80	94			2.4	1.3	393				Y		
Rose 27-92	17											
Ryan 27-58	20	5,510	157:1	10.7	64.8	312	56		Y	N	0.6	

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Sanborn 40-27				1.2	0.9					Y		
Sand 82-67	46			5.5	2.4	368	46	2		N	1.8	
Schmidt 27-102	37	190	4:1	9.1	1.5	207	92		Y	N	1.6	
School 13-57	48											
Schutz 10-18	105	943	9:1	15.0	6.0	2,100	27		Y	N		
Schroeder Pnd 82-301				3.0			100		N	N		
Scout 19-198				2.9								
Seidl's 19-95	14	415	30:1	5.0			100	5	N	N		Rearing
Shaver 27-86	11									N		
Shields 82-162	27			8.2			85		Y	N	0.8	
Silver 82-16	98	455	4.6:1	3.4	1.7	549	100		N	N		
Silver (Ramsey) 62-1	72			5.5			99			Y		
South Oak 27-661										N		
South Rice 27-645	3.2	63	20:1	2.5	0.5	5.4	100		N	N		
S. School Section 82-151	125			8.0			41					
South Twin 82-19	54	63	1.2:1	4.0	2.0	356	100		N	N		
Spring (Scott)70-54	630	13,500	21:1	11.3	5.6	11,500	50	2	Y	Y	5.0	
Square 82-46	193	782	4:1	20.7	9.0	5,694	65	5	Y	Y	2.2	Stocked w/Trout
Staples 82-28	24	127	5.3:1	4.3	2.1	165	100		N	N		
St. Croix 82-1	8,600	4,918,790		23.8					Y	Y		
St. Joe 10-11	14			15.9			46		Y	Y		

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Success 27-634												
Sunfish 19-50	49											
Sunfish 82-107	50	526	11:1							N		
Sunnybrook 82-133	16	630	39:1	6.1	2.0	104			Y	N		
Sunset 82-153	124			5.2			100		N	N	2.3	Gamefish
Sunset Pnd19-451	60			3.7			100		N	N	1.9	
Susan 10-13	93			5.2			81			Y		
Swede 10-95	376			4.0			100		N	Y		
Sweeney 27-35	66	2,400	36:1	8.0	3.6	790	52		Y	N		Panfish
Tamarack 10-10	24			20.0			41		Y	N		
Terrapin 82-31	86			4.6			100		N	N		
Thole 70-120	105			3.7			100		N	Y		
Turtle 82-36	44	699	16:1	2.4	1.2	172	100		N	N		
Twin(Bnsv)19-28	11						100					
Twin(U)(b.p.)27-42	137	3,657	31:1	2.4	0.9	397	100		Y	N	2.8	Centrarchid
Twin(M)(cry)27-42	69	4,053	72:1	14.0	4.9	918	57		Y	Y	1.4	Centrarchid
Twin(L)(rob)27-42	46	5,322	176:1	6.7	2.3	340	83		Y	Y	1.2	Centrarchid
Twin(StLP) 27-656										N		
Valentine 62-71	60	2,237	37:1	4.0	1.5	300	100		N			
Valley 19-348	8	117	8:1	3.2			100	1	N	N		
Virginia 10-18	110	772	7:1	10.4	3.3	1,210	88		Y	Y		

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Waconia 10-59	3,000	7,880	4:1	11.3	4.0	38,632	53		Y	Y	6.8	Centrarchid
Weber 82-119	7.5	1.4	19:1	1.5			100		N	N		
West Boot 82-44	110	209	2:1	11.9	5.9	2,090	56		Y	Y		
West Lakeland 82-488	27	1,139	347:1						N	N		
Westwood 27-711	41			2.0			100		N	N		
White Rock 82-72	65											
Wilmes 82-90	41	2,247	55:1	5.5						Y	1.3	
Windsor 27-82	14									N		
Wing 27-91	11											
Winkler 10-66	129	2,758	21:1									
Wood(Brns)19-24	9	157	17:1	4.5			100	1	N	N		Panfish
Woodpile 82-132	19											