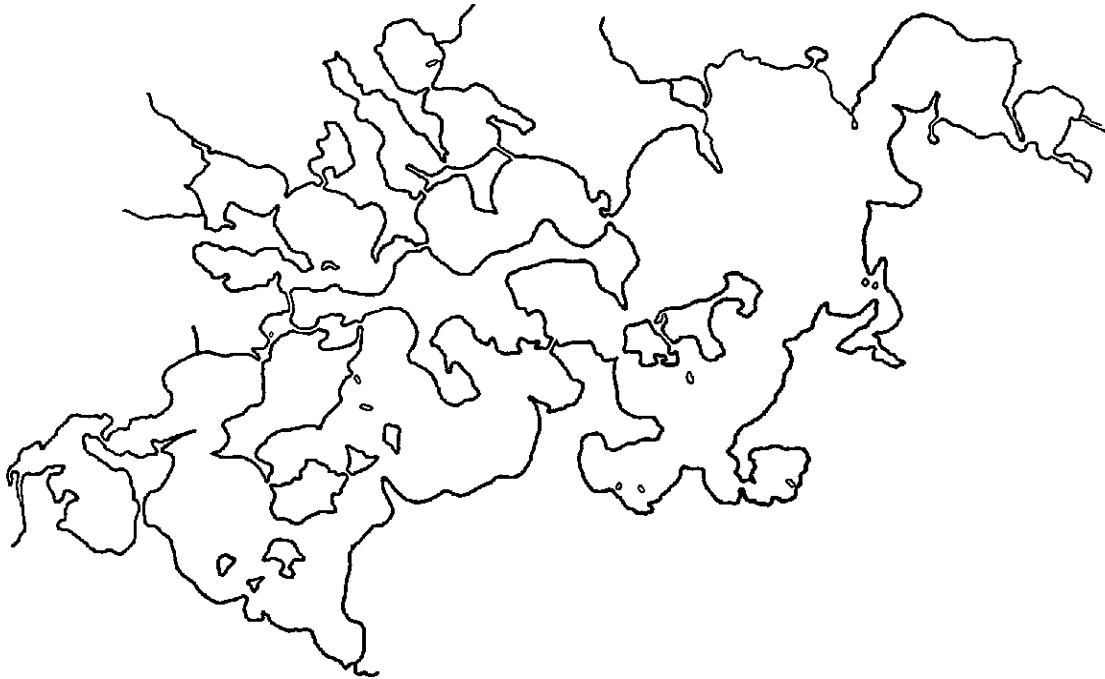


MINNESOTA DEPARTMENT OF NATURAL RESOURCES

SECTION OF FISHERIES

LAKE MINNETONKA
Fisheries Special Assessment--2012

June 18 to June 28, 2012



Part of Federal Aid Project: F-29-R(P)-30

Compiled by:

B.J. Bauer, FISHERIES SPECIALIST
WEST METRO FISHERIES MANAGEMENT AREA

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MINNESOTA DEPARTMENT OF NATURAL RESOURCES

Section OF FISHERIES

FISHERIES POPULATION ASSESSMENT

Survey Date: June 18-June 28, 2012

Date Mapped: 1949

Map I.D.No.: B-0122

Lake Identification and Location

Name: LAKE MINNETONKA

Bay/Basin Station No.: 1-37

D.O.W. Watershed

(2)No.: 27-0133 (3)No.: 20

Management Meandered:

Area: 314 (4) Yes

(5)County(ies): Hennepin & Carver

Twnshp: 116,117N Range:22,23,24W

Section: Various

(6) Nearest Town: The cities of Minnetonka, Wayzata, Woodland, Orono, Tonka Bay, Spring Park, Minnetonka Beach, Greenwood,

Excelsior, Deephaven, Shorewood, Victoria, Mound, and Minnetrista border the lake.



Figure: Outline map of Lake Minnetonka

(7) Accessibility:

(a) Designated Public Access (Location and Ownership): See table of access sites.

(b) Other access Areas: See table of access sites.

(8) Reason for Survey/Requested by:

Daryl Ellison, West Metro Area Fisheries Supervisor, requested survey to update lake file information. B.J. Bauer and interns Ben Lazzari and Mike Thai completed the field collections. B.J. Bauer completed the survey report.

(9) Previous investigations, Surveys, and Dates: Fish Population Assessment 2012-2009, 2007,1970, 1982, 1992

Lake Survey 1997,1987,1977, 1949 Special Assessments 1998-2006,2008

Ice-Out TN Assessment1997,1995,1992,1990,1987 Creel Census1996, 1975

Lake Survey (Halsteds Bay) 1955 Lake Survey (Lower Lake) 1953

Game Lake Surveys:

Crystal Bay Marsh 1972,1949 Grays Bay Marsh 1972, 1949

Fagerness-Shadywood Marsh 1972,1949 French Lake Marsh 1972,1949

Seton Lake Marsh 1972,1949 Carsons Bay Marsh 1972,1949

Tanager (Mud) Lake Marsh 1978,1949 South Mound Marsh 1972,1949

Enchanted Island Marsh 1972,194 Ferndale (Orono) Marsh 1978,1949

Six Mile Creek Marsh 1972,1949 Libbs Lake 1972

Winter Ice-House Census 2003-1975,1967-1961,1958,1953,1952

Lake and Drainage Basin Characteristics and Use

(10)Lake Area: 14,004 acres¹ (Planimetered from 1949 map in 1990) D.O.W. 14,310 acres

(11)Maximum Depth: 113 ft. Schupp's Lake Type: 22

(12)Littoral Acres: 5,849 acres¹ Percent Littoral: 41.77

(13)Length of Shoreline: 106.12 miles² Greatest length: 13.33 mile(s)

¹Acres planimetered from 1949 sounding map by the DNR Aquatic Plant Management program in 1990. That data is used in this assessment so that standardized area is used in various fisheries management programs.

² Length of shoreline does not include channel or dredged harbor shoreline distances. Islands are included in the total.

Discussion

The 2012 Lake Minnetonka (27-0133-00) fisheries assessment was conducted June 18th through 28th. Annual sampling began in 1997 following a 20-year period when the fish community was sampled every five years. Sampling in Lake Minnetonka is divided into three aggregations of basins (Figure 1, Table 2) that differ in their habitat and water chemistry characteristics. The Northwest Bays are most fertile, primarily because they are the first recipients of the majority of surface runoff from the watershed. The Upper Lakes are intermediate in fertility, while the Lower Lakes are least fertile (Figure 2).

Since 1997, assessments have been conducted every year to assess trends in growth, condition, relative abundance, reproduction, and size structure of northern pike, walleye, and yellow perch. Sampling of these species typically involves 24 experimental gill-net sets at 12 historic locations (24-hr sets; 2 net sets at each location with approximately 7-9 days between net sets [Figure 3, Table 1]). However, due to budget and staffing constraints, only one circuit of 12 net sets was completed in 2012. In May 2011, an electrofishing special assessment was conducted to evaluate the status of the largemouth bass population. That data is included in this report. The 2012 gill-net assessment revealed a diverse fish community (14 species) dominated (based on lbs/gillnet) by northern pike (32.3 lbs/net), walleye (11.4 lbs/net), and bluegill (6.1 lbs/net, Table 5).

Water Quality

Water quality trends in Lake Minnetonka indicate a positive change in average Secchi depth (Table 3) and anoxic depth (< 2 ppm dissolved oxygen; Table 4) over time. Secchi depths in 2012 were generally shallower than 2011 in the Upper Lakes and Northwest Bays; however, the trends in Secchi depth for all three basins show a positive relationship for increasing water clarity (Figure 4). The same positive relationship is also true of historical anoxic depths (Figure 5). The Lower Lakes have the best water quality, followed by the Upper Lakes, then the Northwest Bays.

Walleye

Lake Minnetonka is stocked with 6,446 pounds of fingerling walleye in even-numbered years. This equates to 1.1 lbs/littoral acre. Starting in the fall of 2010, walleye were and will continue to be stocked into all three basins of the lake. For more than 30 years, previous management limited walleye stocking locations to the Upper Lake and Lower Lake basins. Since 2004, most or all of the walleye fingerlings stocked were purchased from Minnesota-based fish vendors under State contracts.

Despite extensive stocking (Table 6), walleye abundance, as indicated by gill-net catch per unit effort, has remained at low levels (Tables 5, 8). Since 1977, 20 surveys have been conducted on Lake Minnetonka; of these, 12 had walleye catch rates below the first quartile (4.0 fish/net) for Class 22 lakes. The 2012 catch of 4.3 fish/net is higher than that of 2011 (3.5/net), and for the first time since 2007, is near

the long term average (4.2/net; 1997-2011; Figure 6, Table 8). On an entire-lake basis, walleye abundance was higher than the previous 4 years; however, catch rates differed by basin (Table 8). In Upper lakes, walleye catch rate increased from 2.9 to 3.5/net since 2011. In the Northwest Bays, catch increased from 3.5 to 5.7 walleye per net. In Lower Lakes, no considerable change in walleye abundance (4.0/net) was observed from 2011 (Table 8). The long-term (1997-2010) average walleye gill-net catch per net for Upper lakes is 4.1, 4.8 in Lower Lakes, and 3.3 in the Northwest Bays (Table 8). Walleye catch rate in the Northwest Bays has been increasing since 2010 and in 2012 it was the highest observed in 12 years (Table 8). This may be related to the increased distribution of stocked fish into those bays of the lake.

A comparison of northern pike and walleye catch rates suggests an inverse relationship (Figure 7). For example, the second lowest walleye catch rate (1.5 fish/net) occurred in 2005, three years after the second highest northern pike catch rate (17.7 fish/net). The high northern pike catch rate in 2002 represents a large population of northern pike in Lake Minnetonka that could have preyed upon the walleye fingerlings stocked in that year. Since walleye are recruited to gill nets by age 3, this predation was evident three years later (2005) when they were large enough to be sampled. This relationship is also evident from 1999 through 2001. However, northern pike numbers have been decreasing since 2002 (with the exception of 2012) and show no relationship with relative walleye abundance (Figure 7). During that same time period (2002-2012), walleye abundance also showed no relationship with yellow perch abundance.

Walleye mean weight in 2012 (2.7 lbs) exceeded the third Lake Class quartile (75th percentile) when compared to other Class 22 lakes (Table 5), and this has been the case since at least 1992 (Table 9). Mean weight was highest in the Upper Lakes (3.3 lbs, Table 20), followed by the Northwest Bays (2.9 lbs, Table 25), and the Lower Lakes (2.1 lbs, Table 30). The general trend over time has been for the largest walleyes to be located in the Northwest Bays, followed by Upper Lakes, then Lower Lakes (Tables 9, 18). This is assumed to be related to the productivity of the basins and the amount of yellow perch available as prey. Historically, the physical condition of walleye in Lake Minnetonka has been good. A relative weight value of 100 indicates the fish is in the 75th percentile for weight, relative to its length (above average condition). In 2012, walleye relative weight (95) was above the average of the previous 15 years (91, Table 19) and was similar among all three basins of the lake.

After walleye mean length exceeded 20 inches for the first time ever in the 2011 assessment, mean length decreased in 2012 to a value more similar to previous assessments (Table 9). Walleye averaged 18.6 inches in length and ranged from 11.0 to 24.4 inches (Table 10). Following the same trend as mean weight, mean length was highest in the Upper Lakes (20.1 inches, Table 23), followed by Northwest Bays (19.0 inches, Table 28), and Lower Lakes (17.2 inches, Table 33). Historically, size structure indices have revealed Lake Minnetonka's walleye population consists of larger individuals. This was again observed in 2012; however, values were lower than recent years (Proportional Size Distribution (PSD) = 78, Relative

Size Distribution-Preferred (RSD-P) = 42, Table 18). The proportion of walleye 20 inches and larger (RSD-P) had increased every year for the last 5 until the 2012 assessment. Forty-two percent were 20 inches or larger in 2012, which is lower than the 2011 value, but still higher than the long-term (1997-2011) average of 34%. The proportion of 15-inch and longer walleye has fluctuated over the same time period and has averaged 80% in the last 15 years (Table 18). In 2012, size structure metrics (PSD) were higher in the Upper Lakes (93) than in the Lower Lakes (74) and the Northwest Bays (71, Table 18).

Aging walleyes using otoliths allowed year-class inferences to be made (Tables 11, 14, 17). Consistent with previous assessments, walleye natural reproduction is limited. In 2012, 3 of 46 (6.5%) walleye sampled originated from a non-stocked year-class (Table 6). This was lower than 2011, when 16.0% were determined to be naturally reproduced. The two most abundant year classes were 2008 (age-4) and 2010 (age-2); each were equally present and constituted 52% of the walleye catch (Table 17). The strong 2004 (age-8) and 2006 (age-6) year classes observed in 2011 were still present, representing 15 and 9% of the catch, respectively. The oldest walleye sampled was a 19-year old 23.4-inch, 4.6-lb male.

In 2009, a catch curve analysis estimated walleye total annual mortality at 27.5% (Figure 8) Ages 3, 5, and 7-9 were used to calculate the catch curve. Total annual mortality was derived from the slope of a linear regression of the number of fish sampled in each age class. Constant recruitment is one of the major assumptions in catch curve analysis; however, since the walleye population in Lake Minnetonka is dependent upon stocking in alternate years this assumption is violated. To address this problem, the gill net age frequency data was adjusted to accommodate for the number of walleyes stocked in each age class. For example, 22 walleyes were captured from the 2006 year-class when 125,337 fish were stocked. The gill-net catch of 22 age-3 walleyes was divided by 125,337 (number stocked in that year). The resulting value was then entered into the catch curve analysis for the number of age-3 walleyes sampled.

Growth of walleye sampled in 2012 was similar to that of previous assessments. In general, walleye grew to 11.6 inches by age-3 and 18.2 inches by age-6 (Table 11), however there were gender-related differences. Males grew slower, but reached older ages (Table 11). An age-3 female averaged 13.6 inches, while an age-3 male averaged 10.9 inches. Trends in growth were similar in all three basins, although young walleye (age-1 and 2) grew fastest in the Northwest bays and older ages grew fastest in the Lower Lakes (Table 11).

Northern Pike

Consistent with recent assessments, northern pike were relatively high in abundance in 2012 (Table 5). On an entire-lake basis, the 2012 northern pike catch of 11.2/net ended a streak of 9 consecutive years of showing decreasing relative abundance (6.3/net in 2011; Table 8, Figure 7). The current assessment was the first time since 2008 that relative abundance was above the third quartile (7.9/net) for Class 22 lakes, where it had consistently been between 1987 and 2008.

Northern pike catch rates in the Lower Lakes (14.8 fish/net, Tables 8, 30) exceeded catch rates in both the Northwest Bays (10.3 fish/net, Tables 8, 25) and Upper Lakes (7.3 fish/net, Tables 8, 20). Northern pike average size (2.89 lbs) was similar to 2011 (3.08 lbs) and remained above the third quartile for Class 22 lakes (Table 5). Northern pike averaged 22.8 inches in length, which was similar to 2011 (23.0 inches) and was at the long-term average of 22.8 inches (1992-2011, spanning 16 surveys). Northern pike mean length was similar among all three basins (Northwest Bays = 23.9 inches, Table 28; Upper Lakes = 23.5 inches, Table 23; Lower Lakes = 22.1 inches, Table 33). Relative weight (90) was good and near the historic average (89, Table 19). Northern pike condition was similar among all three basins (Table 19). The largest individual captured was an age-7 33.7-inch, 10.8-pound female.

Size structure indices revealed a quality northern pike population (PSD=61; RSD-P=14, Table 18) with the best size structure found in the Northwest Bays (PSD=71, RSD-P=19, Table 18). Despite a quality population, size structure was poorer in 2012 than 2011 as evidenced by lower size structure indices (Table 18). Growth rates were similar to other West Metro Management Area lakes (Table 15). On average, northern pike in Lake Minnetonka were 20.7 inches by age-3 and 26.8 inches by age-6, although growth did differ, as expected, by gender (Table 12). Females reached older ages and consistently grew faster. For example, an age-6 female was 28.0 inches, compared to a 21-inch male that same age. Growth was similar among the basins (Table 12). Nine year-classes were sampled, with most fish (80%) between 2 and 5 years old (Table 17). In 2009, a catch curve analysis estimated northern pike total annual mortality at 36.1% (Figure 8). Fish of ages 3-8 were used to calculate the catch curve.

Yellow Perch

After a historical high of 31.7 yellow perch per gill net in 2011, the 2012 catch (13.4/gill net) returned to nearer the long-term average (1997-2011) of 14.2/gill net. Yellow perch relative abundance (13.4/net) in 2012 was moderate compared to other Class 22 lakes (Table 5). Despite a drop in 2012 (lowest since 2004), the overall trend since 2000 has been for increasing yellow perch gill-net catch (Figure 7, Table 8). In most previous surveys, yellow perch abundance was highest in the Northwest bays, but in 2012 the highest catch was in the Upper Lakes (25.5/net), followed by the Northwest bays (18.7/net), then the Lower Lakes (0.6/net, Table 8). Gill-net catch was down in all three basins. Over time, there has been an inverse relationship between yellow perch and northern pike abundance (Figure 7). Recently, this appears to be evident as yellow perch gill-net catch peaked in 2011, and in 2012 northern pike abundance increased for the first time since 2002 (Figure 7).

Size structure indices (PSD = 4, Table 18) revealed a population consisting of small individuals (Table 10). Yellow perch size structure has been historically small in Lake Minnetonka with an average PSD of 3 since 1997 (Table 18). Yellow perch mean length (6.7 inches) and weight (0.14 lbs) were similar to 2011 (Table 9). The perch population in the Northwest Bays has a better size structure (PSD = 9) than

the other two basins. In 2012, however, the largest mean size was in the Upper Lakes (6.8 inches, 0.14 lbs, Table 22).

Yellow perch relative weight (86) was fair and the same as 2011, but lower than the historical average of 90 (Table 19). Seven year-classes were sampled with the oldest individual captured age-8 (Table 17). Recruitment seemed consistent as ages 2 through 5 were relatively evenly represented (Table 17). Yellow perch growth was slower on average than other Class 22 lakes in the West Metro Management Area (Table 16). Comparing basins, yellow perch grew fastest in the Northwest Bays, followed by Lower Lakes, then Upper Lakes (Table 13). Yellow perch averaged 5.4 inches by age 3 and 7.5 inches by age 6 (Table 13). In 2009, a catch curve analysis estimated yellow perch total annual mortality at 46.5% (Figure 8). Ages 3-7 were used to calculate the catch curve.

Muskellunge

Muskellunge were not targeted during this assessment, but, based on other indicators and reports, their population remains strong. Fish exceeding 50 inches and approaching 40 pounds are caught in Lake Minnetonka every year. Survival of stocked fingerling muskellunge is assumed to be very low due to the high abundance of largemouth bass and northern pike. Advanced fingerlings and yearlings have been used in recent years in attempt to improve survival rates of stocked fish. A research study is currently taking place in Lake Minnetonka comparing the survival of stocked fingerling and yearling muskellunge. Stocked fish were tagged in 2008, 2009, 2011, and 2012. Muskellunge were tagged with an external spaghetti-type tag near the dorsal fin on the fish's left side. These tags, yellow in color, include a six-digit number. Angler reports of captured tagged muskellunge are essential to the success of this project. If you catch a tagged muskellunge please record the tag number and length of fish and report the catch via the Tagged Fish Reporting page within the MNDNR website. Please DO NOT remove the tag. Please contact the West Metro Area Fisheries Office with questions. Practicing CPR (Catch, Photo, and Release) is essential to maintaining the trophy muskellunge fishery found in Lake Minnetonka.

Largemouth Bass

The largemouth bass population in Lake Minnetonka has a reputation for quality fishing. In May 2011, a nighttime boat electrofishing assessment was performed to target largemouth bass. A total of 385 largemouth bass were sampled in 11 electrofishing transects, equating to 75.4 bass per hour of on-time. Catch rates were similar to the 2009 assessment, when 73.2 bass per hour were sampled. These catch rates are above average for area lakes. The size structure (PSD=59) of the largemouth bass population in Lake Minnetonka is well-balanced (Tables 35, 36) and the fish are in good physical condition ($W_r = 95$). It appeared the larger fish tended to be in the best condition (Table 36). Largemouth bass averaged 11.8 inches (Table 35) and 1.04 lbs, lower than in 2009 when fish averaged 13.5 inches and 1.5 lbs. The largest bass sampled was 20.9 inches long and 4.9 lbs. Fish from the 1999 through 2009 year classes were present,

indicating consistent reproduction and recruitment (Table 37). Age-3 bass from the 2008 year class were most abundant (25%), followed by the 2007 (23% of the total) and 2005 (9.4% of the total) year classes. Growth was (Table 38) slower than average compared with other West Metro Area lakes. Largemouth bass reached 14 inches by age 7 and 18 inches by age 11 (Table 37). No smallmouth bass were sampled during the spring electrofishing assessment.

Numerous bass tournaments are held on the lake every year. These tournaments are held by permit only and fish data must be turned into the DNR. In 2012, 10 bass tournaments were held. A total of 869 tournament anglers caught 1,989 largemouth bass. Average size was 2.73 lbs and the largest recorded was 6.25 lbs. Since bass anglers target the largest individuals in a population, it is common for angling results to yield larger size fish, on average, than electrofishing. Additionally, individual tournaments may enact their own minimum size limit, thus only measuring larger size fish. The electrofishing assessment targeted all sizes of bass.

Other Fish Species

Bluegill and black crappie are abundant in Lake Minnetonka; however, gill nets are not reliable indicators of their relative abundance (Tables 5, 7). The consistent natural reproduction and high recruitment of these species have ensured quality angling opportunities. Black bullhead, green sunfish, hybrid sunfish, pumpkinseed sunfish, rock bass, smallmouth bass, white sucker, and yellow bullhead were also captured in low numbers during the 2012 assessment (Tables 5, 7). Smallmouth bass and rock bass were found only in the Lower Lakes.

Invasive Aquatic Species

Eurasian water milfoil and curly leaf pondweed are found in high abundance throughout the lake and in 2010 zebra mussels and flowering rush were first found to be present. Lake Minnetonka receives heavy recreational use, so potential for the spread of invasive species into and out of the lake is high. Anglers and boaters should take the precautions necessary to prevent the further spread of all invasive species.

The shoreline and watershed of Lake Minnetonka is highly developed and puts stress on the lake's aquatic habitat and ecosystem integrity. Large docks, boating platforms, and man-made beaches have the potential to destroy vital habitat for fish and wildlife. Environmentally friendly development practices, such as shoreline buffer strips of natural vegetation, are necessary to maintain the current water quality of Lake Minnetonka. Shoreline development, invasive species, and the fish diseases Viral Hemorrhagic Septicemia (VHS) and Largemouth Bass Virus should be a concern to everyone who enjoys lake recreation.

Status of the Fishery

The 2012 Lake Minnetonka (27-0133-00) fisheries assessment was conducted June 18th through 28th. Annual sampling began in 1997 following a 20-year period when the fish community was sampled every five years. Sampling in Lake Minnetonka is divided into three aggregations of basins that differ in their habitat and water chemistry characteristics. The Northwest Bays are most fertile, primarily because they are the first recipients of the majority of surface runoff from the watershed. The Upper Lakes are intermediate in fertility, while the Lower Lakes are least fertile.

Since 1997, assessments have been conducted every year to assess trends in growth, condition, relative abundance, reproduction, and size structure of northern pike, walleye, and yellow perch. Sampling of these species typically involves 24 experimental gill net sets at 12 historic locations (24-hr sets; 2 net sets at each location with approximately 7-9 days between net sets. However, due to budget and staffing constraints, only one circuit of 12 net sets was completed in 2012. In May 2011, an electrofishing special assessment was conducted to evaluate the status of the largemouth bass population. That year-old data is included in this report. The 2012 gill net assessment revealed a diverse fish community (14 species) dominated (based on lbs/gillnet) by northern pike (32.3 lbs/net), walleye (11.4 lbs/net), and bluegill (6.1 lbs/net).

Water Quality

Water quality trends in Lake Minnetonka indicate a positive change in average Secchi depth and anoxic depth (< 2 ppm dissolved oxygen) over time. Secchi depths in 2012 were generally shallower than 2011 in the Upper Lakes and Northwest Bays; however, the trends in Secchi depth for all three basins show a positive relationship for increasing water clarity. The same positive relationship is also true of historical anoxic depths. The Lower Lakes have the best water quality, followed by the Upper Lakes, then Northwest Bays.

Walleye

Lake Minnetonka is stocked with 6,446 pounds of fingerling walleye in even-numbered years. This equates to 1.1 lbs/littoral acre. Starting in the fall of 2010, walleye were and will continue to be stocked into all three basins of the lake. For more than 30 years, previous management limited walleye stocking locations to the Upper Lake and Lower Lake basins. Since 2004, most or all of the walleye stocked were purchased from Minnesota-based fish farmers.

Despite extensive stocking, walleye abundance, as indicated by gill net catch per unit effort, has remained at low levels. Since 1977, 20 surveys have been conducted on Lake Minnetonka; of these, 12 had walleye catch rates below 4.0 fish/net. The 2012 catch of 4.3 fish/net is higher than that of 2011 (3.5/net), and for the first time since 2007, is near the long term average (4.2/net; 1997-2011). On an entire-lake

basis, walleye abundance was higher than the previous 4 years; however, catch rates differed by basin. In Upper lakes, walleye catch rate increased from 2.9 to 3.5 per net since 2011. In the Northwest Bays, catch increased from 3.5 to 5.7 walleye per net. In Lower Lakes, no considerable change in walleye abundance (4.0/net) was observed from 2011. The long-term (1997-2010) average walleye gill net catch per net for Upper Lakes is 4.1, 4.8 in Lower Lakes, and 3.3 in the Northwest Bays. Walleye catch rate in the Northwest Bays has been increasing since 2010 and in 2012 it was the highest observed in 12 years. This may be related to the increased distribution of stocked fish into those bays of the lake.

A comparison of northern pike and walleye catch rates suggests an inverse relationship. For example, the second lowest walleye catch rate (1.5 fish/net) occurred in 2005, three years after the second highest northern pike catch rate (17.7 fish/net). The high northern pike catch rate in 2002 represents a large population of northern pike in Lake Minnetonka that could have preyed upon the walleye fingerlings stocked in that year. Since walleye are recruited to gill nets by age 3, this predation was evident three years later (2005) when they were large enough to be sampled. This relationship was also evident from 1999 through 2001. However, northern pike numbers have been decreasing since 2002 (with the exception of 2012) and show no relationship with relative walleye abundance. During that same time period (2002-2012), walleye abundance also showed no relationship with yellow perch abundance.

Walleye mean weight in 2012 (2.7 lbs) exceeded the 75th percentile (1.9 lbs) when compared to other similar lakes, and this has been the case since at least 1992. Mean weight was highest in the Upper Lakes (3.3 lbs), followed by the Northwest Bays (2.9 lbs), and the Lower Lakes (2.1 lbs). The general trend over time has been for the largest walleyes to be located in the Northwest Bays, followed by Upper Lakes, then Lower Lakes. This is assumed to be related to the productivity of the basins and the amount of yellow perch available as prey. Historically, the physical condition of walleye in Lake Minnetonka has been good. A relative weight value of 100 indicates the fish is in the 75th percentile for weight, relative to its length (above average condition). In 2012, walleye body condition was above the average of the previous 15 years and was similar among all three basins of the lake.

After walleye mean length exceeded 20 inches for the first time ever in the 2011 assessment, mean length decreased in 2012 to a value more similar to other recent assessments. Walleye averaged 18.6 inches in length and ranged from 11.0 to 24.4 inches. Following the same trend as mean weight, mean length was highest in the Upper Lakes (20.1 inches), followed by Northwest Bays (19.0 inches), and Lower Lakes (17.2 inches). Historically, size structure indices have revealed Lake Minnetonka's walleye population consists of larger individuals and this was again observed in 2012; however, values were lower than those of recent years. The proportion of walleye 20 inches and larger had increased every year for the last 5 until the 2012 assessment. Forty-two percent were 20 inches or larger in 2012, which is lower than the 2011 value, but still higher than the long-term (1997-2011) average of 34%. The proportion of 15-inch and longer walleye

has fluctuated over the same time period and has averaged 80% in the last 15 years. In 2012, the highest proportion of larger fish was in the Upper Lakes, followed by the Lower Lakes, then the Northwest Bays.

Aging walleyes using otoliths (bones within the skull) allowed year-class inferences to be made. Consistent with previous assessments, walleye natural reproduction is limited. In 2012, 3 of 46 (6.5%) walleye originated from a non-stocked year-class. This was lower than 2011, when 16.0 % were determined to be naturally reproduced. The two most abundant year classes were 2008 (age-4) and 2010 (age-2); each was equally present and together constituted 52% of the walleye catch. The strong 2004 (age-8) and 2006 (age-6) year classes observed in 2011 were still present, representing 15 and 9% of the catch, respectively. The oldest walleye sampled was a 19- year old fish that was a 23.4-inch, 4.6-lb male.

Growth of walleye sampled in 2012 was similar to that of previous assessments. In general, walleye grew to 11.6 inches by age-3 and 18.2 inches by age-6, however there were gender-related differences. Males grew slower, but reached older ages. An age-3 female averaged 13.6 inches, while an age-3 male averaged 10.9 inches. Trends in growth were similar in all three basins, although young walleye (age-1 and 2) grew fastest in the Northwest Bays and older ages grew fastest in the Lower Lakes.

Northern Pike

Consistent with recent assessments, northern pike were relatively high in abundance in 2012. On an entire-lake basis, the 2012 northern pike catch of 11.2/net ended a streak of 9 consecutive years showing decreasing relative abundance (6.3/net in 2011). The current assessment was the first time since 2008 that relative abundance was above 7.9/net, where it had consistently been between 1987 and 2008.

Northern pike catch rates in the Lower Lakes (14.8 fish/net) exceeded catch rates in both the Northwest Bays (10.3 fish/net) and Upper Lakes (7.3 fish/net). Northern pike average size (2.89 lbs) was similar to 2011 (3.08 lbs). Northern pike averaged 22.8 inches in length, which was similar to 2011 (23.0 inches) and was at the long-term average of 22.8 inches (1992-2011, spanning 16 surveys). Northern pike mean length was similar in all three basins (Northwest Bays = 23.9 inches, Upper Lakes = 23.5 inches, Lower Lakes = 22.1 inches). Relative weight (90) was good and near the historic average (89). Northern pike condition was similar among all three basins. The largest individual captured was an age-7 female (33.7 inches, 10.8 lbs).

Size structure indices revealed a quality northern pike population. Fifty-one percent were 21 inches or longer and 10% were 28 inches or longer. The best size structure found in the Northwest Bays where 52% were 21 inches or longer and 13% were 28 inches or longer. Growth rates were similar to other West Metro Management Area lakes. On average, northern pike in Lake Minnetonka were 20.7 inches by age-3 and 26.8 inches by age-6, although growth did differ, as expected, by gender. Females reached older ages and consistently grew faster. For example, an age-6 female was 28.0 inches compared to a 21-inch male that same age. Growth was similar among the basins. Nine year-classes were sampled, with most fish (80%)

between 2 and 5 years old.

Yellow Perch

After a historical high of 31.7 yellow perch/net in 2011, the 2012 catch (13.4/net) returned to near the long-term (1997-2011) average of 14.2/net. Yellow perch relative abundance (13.4/net) in 2012 was moderate compared to other similar lakes. Despite a drop in 2012 (lowest since 2004), the overall trend since 2000 has been for increasing yellow perch gill-net catch. In most previous surveys, yellow perch abundance was highest in the Northwest Bays, but in 2012, the highest catch was in the Upper Lakes (25.5/net), followed by the Northwest Bays (18.7/net), then the Lower Lakes (0.6/net). Gill-net catch was down in all three basins. Over time, there has been an inverse relationship between yellow perch and northern pike abundance. Recently, this appears to be evident as yellow perch gill-net catch peaked in 2011, and in 2012 northern pike abundance increased for the first time since 2002.

Size structure indices revealed a population consisting of small individuals, and this has historically been the case. Yellow perch mean length (6.7 inches) and weight (0.14 lbs) were similar to 2011. The perch population in the Northwest Bays has a better size structure than the other two basins. In 2012, however, the largest mean size was in the Upper Lakes (6.8 inches, 0.14 lbs).

Yellow perch relative weight (86) was fair and the same as 2011, but lower than the historical average of 90. Seven year-classes were sampled with the oldest individual captured age-8. Recruitment seemed consistent as ages 2 through 5 were relatively evenly represented. Yellow perch growth was slower on average than other similar lakes in the West Metro Management Area. Comparing basins, yellow perch grew fastest in the Northwest Bays, followed by Lower Lakes, then Upper Lakes. Yellow perch averaged 5.4 inches by age 3, and 7.5 inches by age 6.

Muskellunge

Muskellunge were not targeted during this assessment, but based on other measures and reports, their population remains strong. Fish exceeding 50 inches and approaching 40 pounds are caught in Lake Minnetonka every year. Survival of stocked fingerling muskellunge is assumed to be low due to the high abundance of largemouth bass and northern pike. Advanced fingerlings and yearlings have been used in recent years in attempt to improve survival rates of stocked fish. A research study is currently taking place in Lake Minnetonka comparing the survival of stocked fingerling and yearling muskellunge. Stocked fish were tagged in 2008, 2009, 2011, and 2012. These muskellunge were tagged with an external spaghetti-type tag near the dorsal fin on the fish's left side. These tags are yellow in color and each includes a unique six-digit number. Angler reports of captured tagged muskellunge are essential to the success of this project. If you catch a tagged muskellunge please record the tag number and length of fish and report the catch via the Tagged Fish Reporting page within the MNDNR website. Please DO NOT remove the tag. Please contact the West Metro Fisheries Office with questions. Practicing CPR (Catch, Photo, and Release) is

essential to maintaining the trophy muskellunge fishery found in Lake Minnetonka.

Largemouth Bass

The largemouth bass population in Lake Minnetonka has a reputation for quality fishing. In May 2011, nighttime boat electrofishing was performed to assess the largemouth bass population. A total of 385 largemouth bass were sampled in 11 electrofishing transects, equating to 75.4 bass per hour. Catch rates were similar to the 2009 assessment, when 73.2 bass per hour were sampled. These catch rates are above average for area lakes. The size structure of the largemouth bass population in Lake Minnetonka is well-balanced and the fish are in good physical condition. It appeared the larger fish tended to be in the best condition. Largemouth bass averaged 11.8 inches and 1.04 lbs, which is lower than in 2009 when fish averaged 13.5 inches and 1.5 lbs. In 2011, 52% were 12 inches or longer, 24% were 15 inches or longer, and 1% were 20 inches or larger. The largest bass sampled was 20.9 inches long and 4.9 lbs. Fish from the 1999 through 2009 year classes were present, indicating consistent reproduction and recruitment. Age-3 bass from the 2008 year class were most abundant (25%), followed by the 2007 (23% of the total) and 2005 (9.4% of the total) year classes. Growth was slower than average compared with other West Metro Area lakes. Largemouth bass reached 14 inches by age 7 and 18 inches by age 11. No smallmouth bass were sampled during the spring electrofishing assessment.

Numerous bass tournaments are held on the lake every year. These tournaments are held by permit only and fish data must be turned into the DNR. In 2012, 10 bass tournaments were held. A total of 869 tournament anglers caught 1,989 largemouth bass. Average size was 2.73 lbs and the largest recorded was 6.25 lbs. Since bass anglers target the largest individuals in a population, it is common for angling results to yield larger size fish, on average, than electrofishing. Additionally, individual tournaments may enact their own minimum size limit, thus only measuring larger size fish. The electrofishing assessment targeted all sizes of bass.

Other Fish Species

Bluegill and black crappie are abundant in Lake Minnetonka; however, gill nets are not reliable indicators of their relative abundance. The consistent natural reproduction and high recruitment of these species have ensured quality angling opportunities. Black bullhead, green sunfish, hybrid sunfish, pumpkinseed sunfish, rock bass, smallmouth bass, white sucker, and yellow bullhead were also captured in low numbers during the 2012 assessment. Smallmouth bass and rock bass were found only in the Lower Lakes.

Invasive Aquatic Species

Eurasian water milfoil and curly leaf pondweed are found in high abundance throughout the lake and in 2010 zebra mussels and flowering rush were first found to be present. Lake Minnetonka receives heavy recreational use, so potential for the spread of invasive species into and out of the lake is high. Anglers and

boaters should take the precautions necessary to prevent the further spread of all invasive species.

The shoreline and watershed of Lake Minnetonka is highly developed and puts stress on the lake's aquatic habitat and ecosystem integrity. Large docks, boating platforms, and man-made beaches have the potential to destroy vital habitat for fish and wildlife. Environmentally friendly development practices, such as shoreline buffer strips of natural vegetation, are necessary to maintain the current water quality of Lake Minnetonka. Shoreline development, invasive species, and the fish diseases Viral Hemorrhagic Septicemia (VHS) and Largemouth Bass Virus should be a concern to everyone who enjoys lake recreation.

Figure 1: Location and numbering of individual sampling bays on Lake Minnetonka.



KEY TO NUMBERED BAYS OF LAKE MINNETONKA (27-0133)

- | | |
|----------------------------|----------------------------------|
| 1 Halsted's Bay | 21 Lafayette Bay |
| 2 Priest's Bay | 22 Smith's Bay |
| 3 Cook's Bay | 23 Brown's Bay |
| 4 West Upper Lake | 24 Wayzata Bay |
| 5 South Upper Lake | 25 Gray's Bay |
| 6 Smithtown Bay | 26 Robinson's Bay |
| 7 Phelp's Bay | 27 St. Louis Bay |
| 8 East Upper Lake | 28 Carsons Bay |
| 9 Carman's/Old Channel Bay | 29 St. Alban's Bay |
| 10 Spring Park Bay | 30 Excelsior Bay |
| 11 Black Lake | 31 Gideon's Bay |
| 12 Emerald Lake | 32 South Lower Lake & Echo Bay |
| 13 Seton Lake | 33W North Lower Lake (West half) |
| 14 Harrison's Bay | 33E North Lower Lake (East half) |
| 15 Jennings Bay | 34 Forest Lake (27-0139) |
| 16 West Arm Bay | 35 Libb's Lake (27-0085) |
| 17 Crystal Bay | 36 Peavy Lake (27-0138) |
| 18 North Arm Bay | 37 Tanager Lake (27-0141) |
| 19 Stubb's Bay | |
| 20 Maxwell Bay | |

Lake: MINNETONKA

Bay/Basin: ENTIRE LAKE

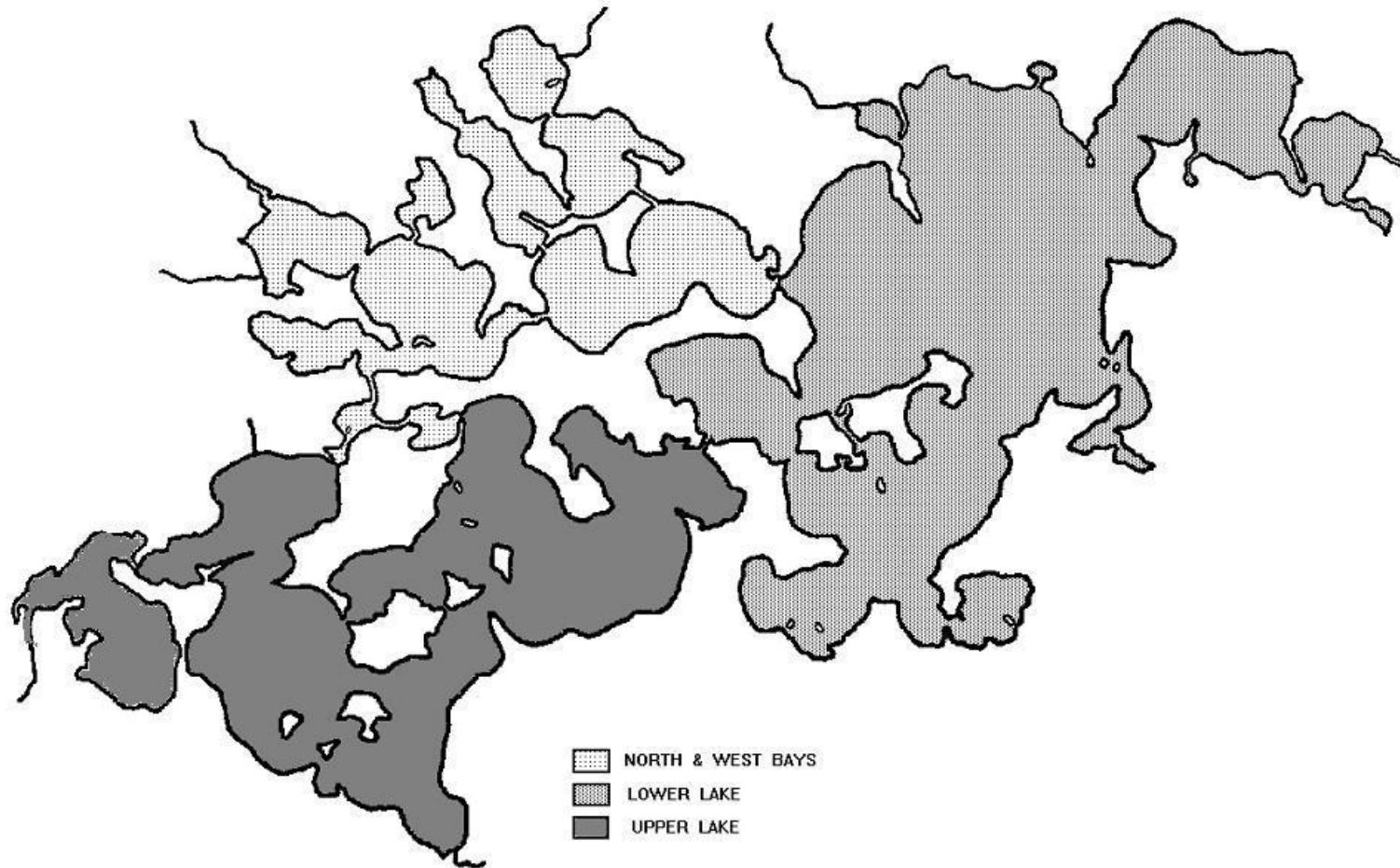


Figure 2: Location of the three major sampling basins of Lake Minnetonka.

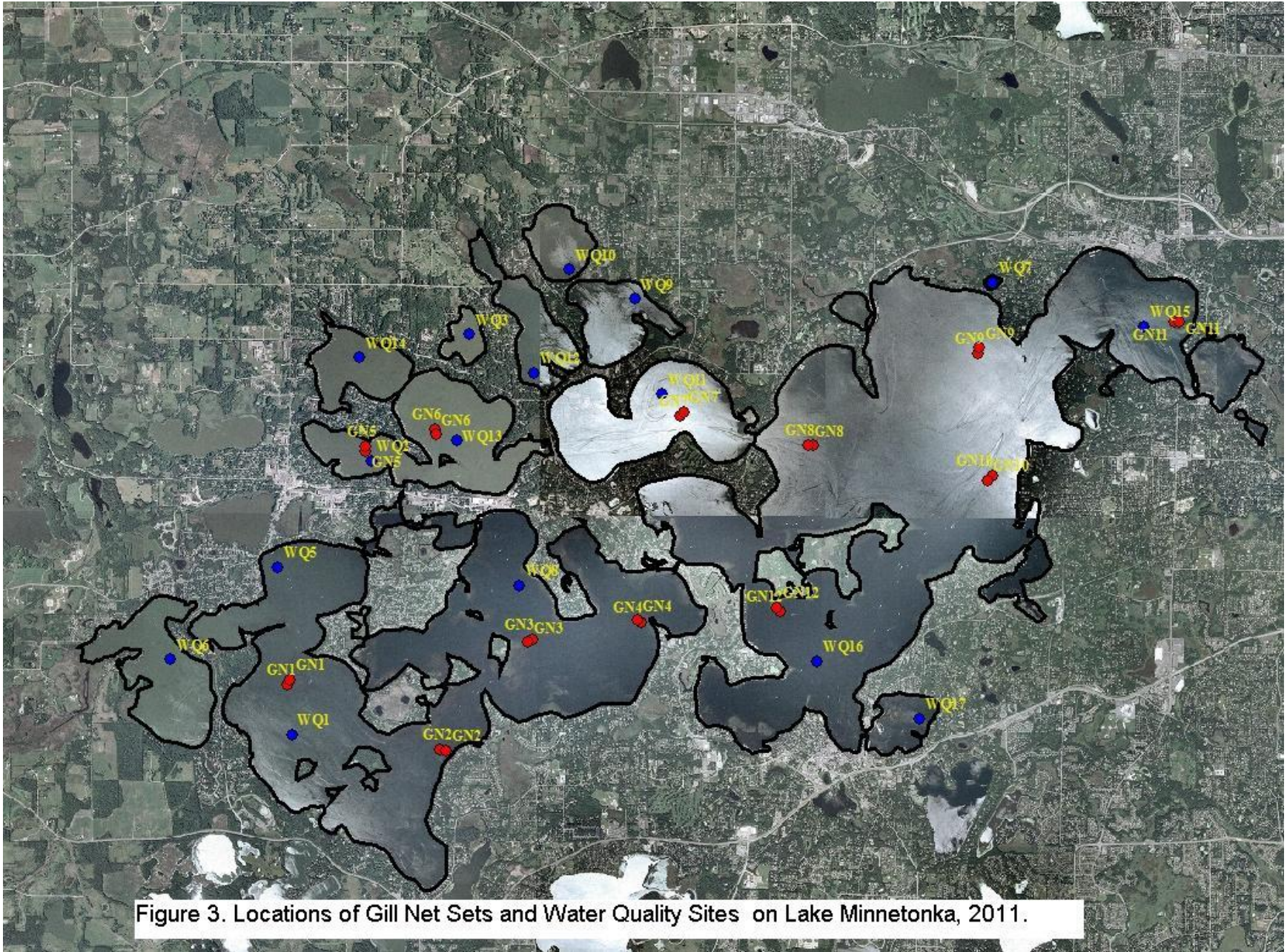


Figure 3. Locations of Gill Net Sets and Water Quality Sites on Lake Minnetonka, 2011.

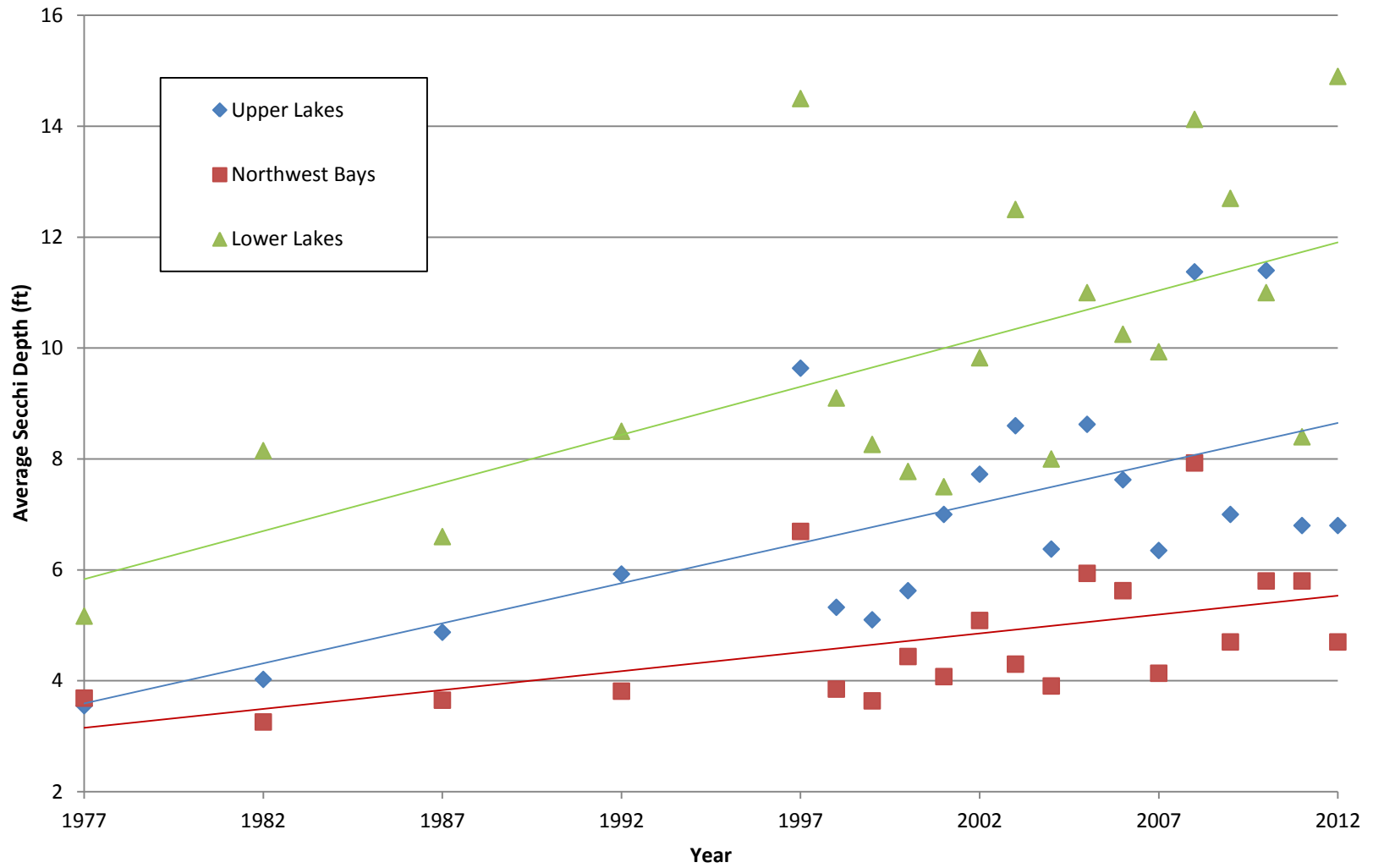


Figure 4. Average Secchi Depth Readings in the Three Basins of Lake Minnetonka, 1977-2012

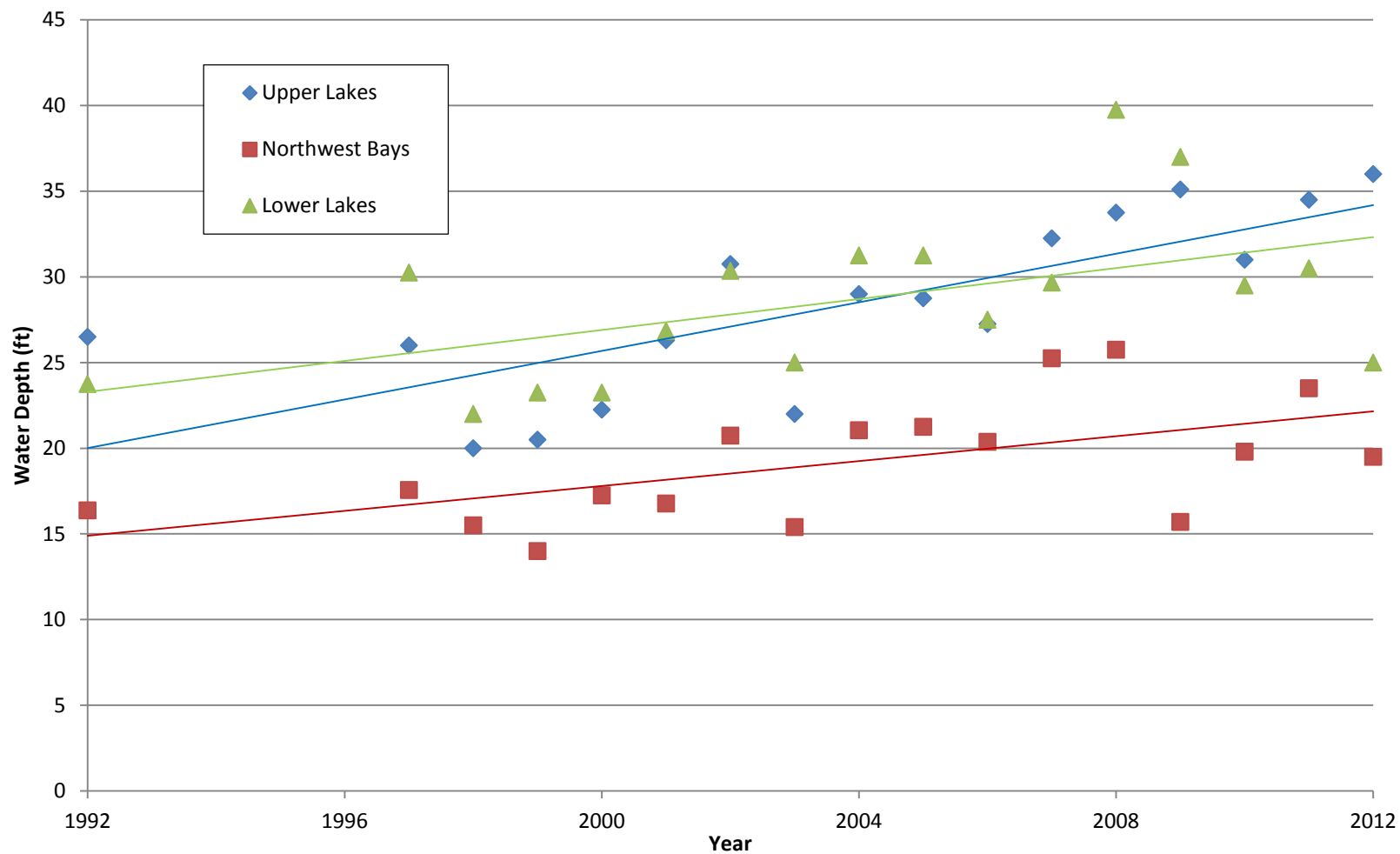


Figure 5. Average Minimum Water Depth in the Three Basins of Lake Minnetonka Where Dissolved Oxygen is Below 2.0 Parts per Million, 1992-2012

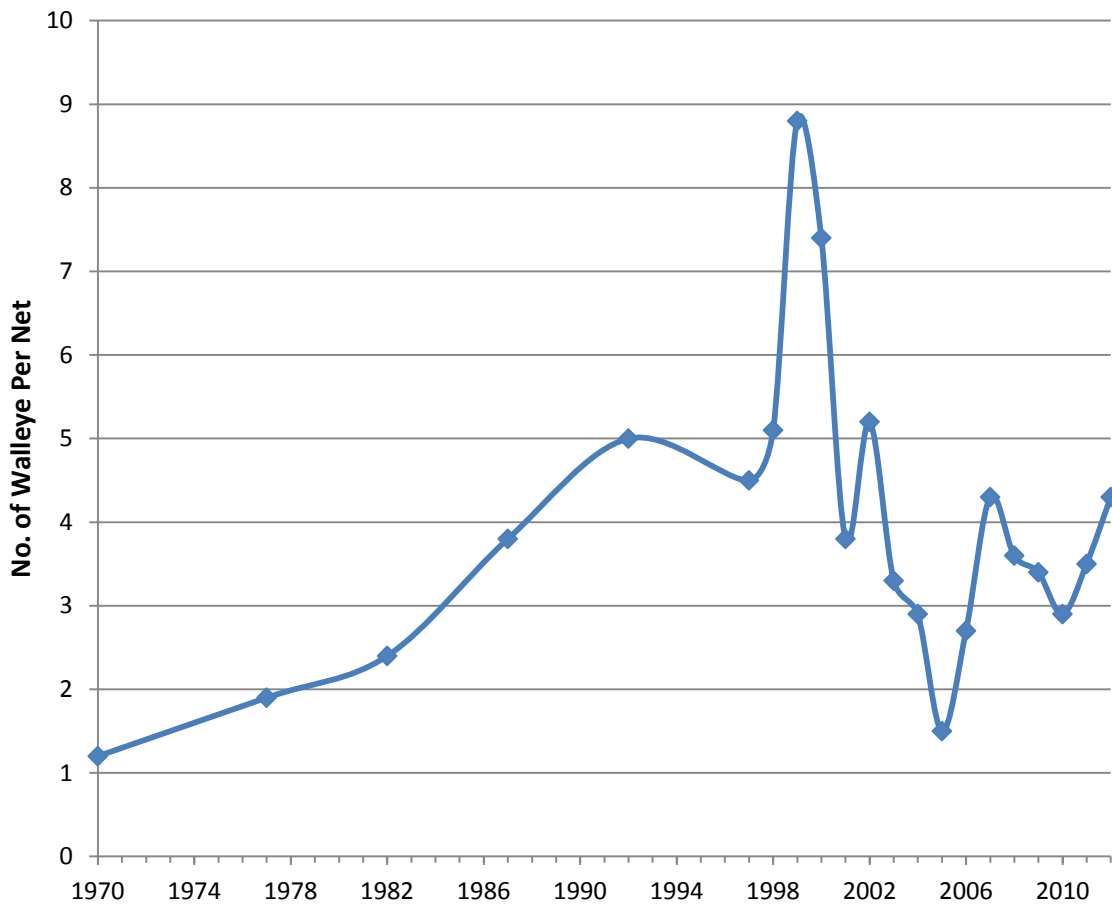


Figure 6. Historic walleye gillnet catch rates in Lake Minnetonka, Hennepin County, 1970-2012. The walleye stocking rate doubled in Lake Minnetonka in 2001, but resumed 1.1/ littoral acre thereafter

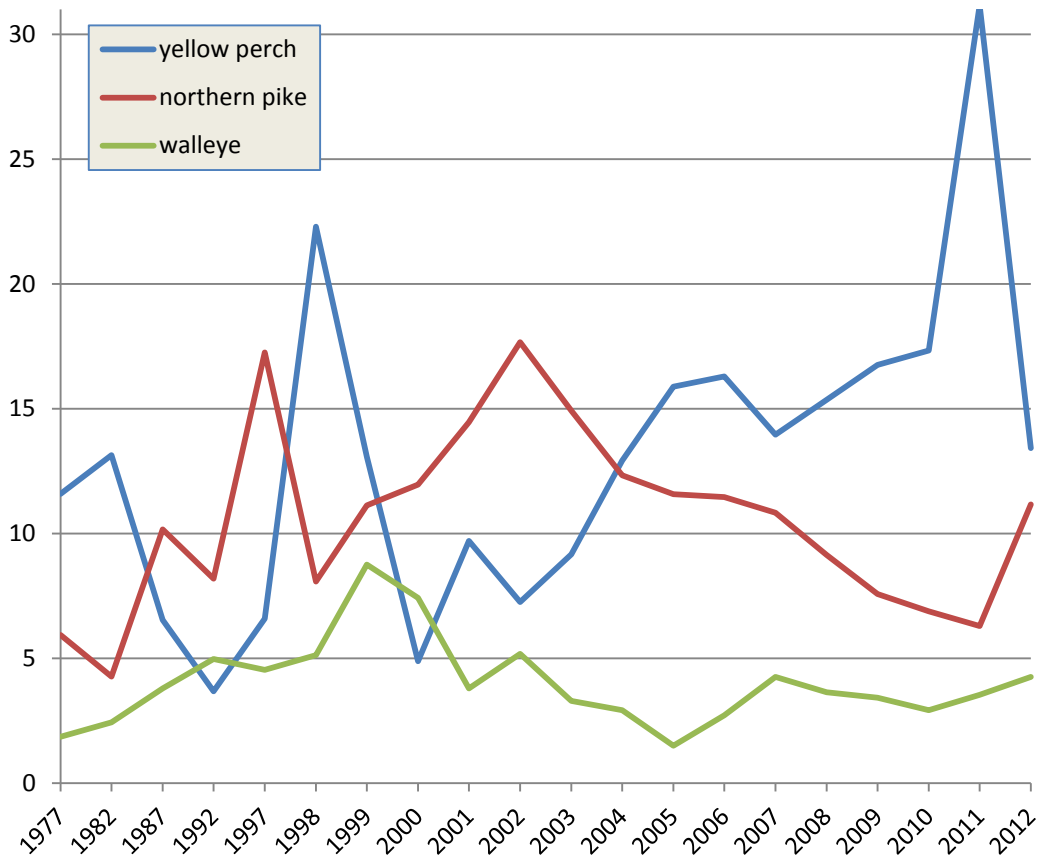


Figure 7. Historic yellow perch, northern pike, and walleye gillnet catch rates (#/net) in Lake Minnetonka, Hennepin County, 1970-2012. The walleye stocking rate doubled in Lake Minnetonka in 2001, but resumed 1.1/ littoral acre thereafter

Species	Vital Rate		
	Z	S	A
Walleye	0.322	0.725	0.275
Northern pike	0.447	0.639	0.361
Yellow perch	0.626	0.535	0.465

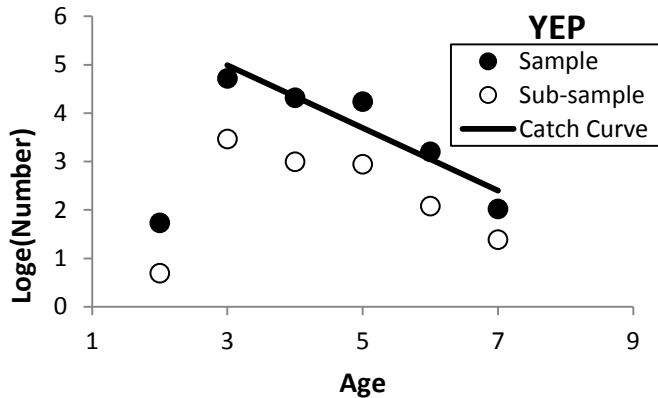
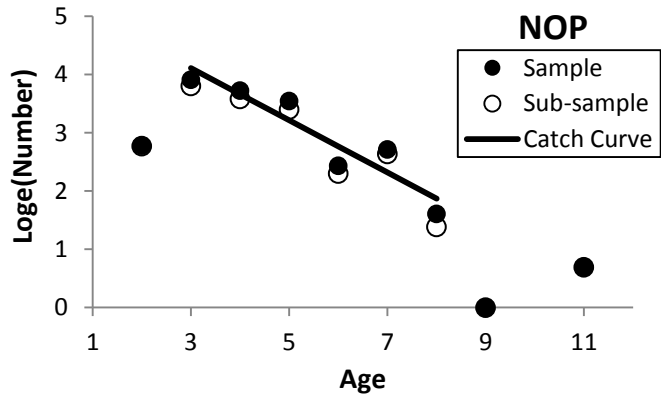
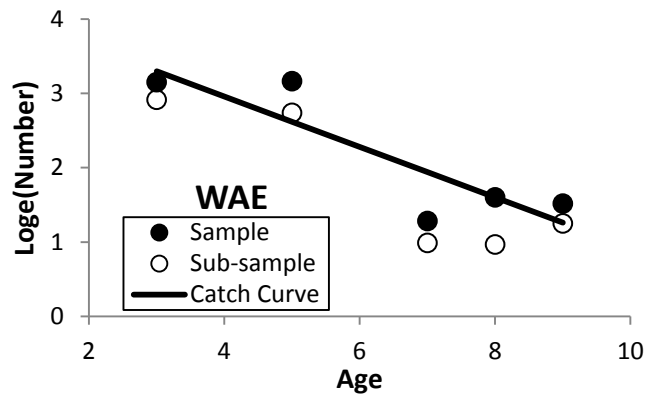


Figure 8. Instantaneous total mortality (Z), annual survival (S), and annual mortality (A) of walleye, northern pike and yellow perch derived from gillnets in Lake Minnetonka, Hennepin County, Minnesota in 2009.

Table 1. Description of Gill Net Target Locations used on Lake Minnetonka

Upper Lakes

- GN1: Crotch of buoys on West side, just South of West buoy, go toward white house right of series of stalls.
- GN2: Undeveloped shore, 1 boat lift west of triple stall, go toward brown house w/ tan roof.
- GN3: Line up with tall cottonwood on island go East to tip of Casco Point.
- GN4: South side off underwater reef point, due West of point (land) tip go W towards house with flat roof.

Northwest Bays

- GN5: Rocks on point to beach to Southwest.
- GN6: Start close to outer buoy; go towards tip of point to Northwest.
- GN7: Between buoys on West side of hump toward water tower.

Lower Lakes

- GN8: North side of buoyed channel, head East.
- GN9: Between buoys on West side, follow spine toward white house on point.
- GN10: South side of hump, between water towers (blue one).
- GN11: Big lawn on east to big lawn across long bay.
1st set, start at top of saddle.
2nd set may have to start on east side of hump.
- GN12: Start between buoys on Southeast side, head East/Southeast toward Gale Island. Shallow to North, deeper to South

Table 2. Physical Parameters and Sampling Effort, by Basin

Bay/Basin	Lake Section (Figure 1)	Surface Area	Littoral Acres	Percent Littoral	Maximum Depth	Miles of Shoreline	Lake Class	2012 Effort
								Gill Nets
Halsteds	1	545	322	59	36	5.36	24	0
Priests	2	138	76	55	34	1.75	24	0
Cooks	3	362	131	36	43	2.29	24	0
West Upper	4	379	193	51	84	5.62	27	1
South Upper	5	710	320	45	67	4.95	27	1
Smithtown	6	114	33	29	88	1.22	24	0
Phelps	7	379	272	72	36	3.81	24	0
East Upper	8	783	261	33	52	3.33	27	2
Carmans	9	403	187	46	56	3.14	24	0
Spring Park	10	402	141	35	36	2.67	24	0
Upper Lake Total		4215	1936	46	84	34.14	22	4
Black Lake	11	80	64	80	24	1.81	38	0
Emerald Lake	12	15	14	93	16	1.02	40	0
Seton Lake	13	44	41	93	24	1.24	38	0
Harrisons	14	211	183	87	46	3.61	38	1
Jennings	15	285	174	61	23	3.05	24	0
West Arm	16	577	383	66	44	4.60	24	1
Crystal	17	800	285	36	113	6.10	27	1
North Arm	18	307	186	61	64	4.57	24	0
Stubbs	19	195	104	53	37	2.25	24	0
Maxwell	20	300	175	58	44	3.43	24	0
Forest Lake	34	84	49	58	42	1.72	30	0
NW Bays Total		2898	1658	57	113	33.40	22	3
Lafayette	21	460	195	42	62	3.47	24	0
Smiths	22	262	244	93	20	1.71	38	0
Browns	23	648	209	32	88	3.05	27	1
Wayzata	24	751	198	26	63	3.33	27	1
Grays	25	175	127	73	28	2.19	30	0
Robinsons	26	90	27	30	70	0.86	24	0
St. Louis	27	22	12	55	42	0.48	30	0
Carsons	28	173	108	62	64	2.74	24	0
St. Albans	29	164	102	62	44	2.19	24	0
Excelsior	30	123	79	64	34	1.14	30	0
Gideons	31	350	150	43	56	3.14	24	0
South Lower	32	1069	310	29	77	7.53	27	1
Northeast Lower	33E	1010	190	19	96	1.62	27	1
Northwest Lower	33W	1008	240	24	73	2.38	27	1
Libbs Lake	35	23	23	100	8	1.11	40	0
Peavy Lake	36	9	3	33	63	0.57	30	0
Tanager Lake	37	54	38	70	23	1.07	30	0
Lower Lake Total		6391	2255	35	96	38.58	22	5

Table 3 Secchi Depth (continued on following page).

2001 - 2003 data were collected by Three Rivers Park District. All other data were collected by MN DNR Fisheries.

Bay/Basin	Secchi Depth (feet)															
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997
Halsted's	2.3	5.0	7.0	2.4	9.5	1.9	3.5	3.5	2.0	1.6	4.9	4.9	2.5	2.9	3.4	5.4
Cook's	5.3	7.0	11.0	7.2	10.5	7.0	7.5	7.0	5.0	6.2	6.6	7.2	6.0	5.0	4.2	9.8
West Upper	7.5	8.0	11.0	7.5	13.0	8.0	10.0	12.0	9.0	16.4	8.9	6.6	6.5	5.6	5.8	12.2
Spring Park	12.0	7.0	16.5	10.8	12.5	8.5	9.5	12.0	9.5	10.2	10.5	9.2	7.5	6.9	7.9	11.2
Upper Lake Avg.	6.8	6.8	11.4	7.0	11.4	6.4	7.6	8.6	6.4	8.6	7.7	7.0	5.6	5.1	5.3	9.6
Harrison's	3.3	5.0	4.0	2.5	7.0	--	4.5	6.5	3.0	3.0	3.3	3.2	2.8	2.7	2.1	4.2
Jenning's	4.3	5.0	3.0	1.8	6.5	2.9	3.5	6.0	3.0	3.0	4.3	2.6	2.5	2.5	2.1	5.3
West Arm	4.0	5.0	4.0	2.1	--	3.8	5.5	6.0	3.0	3.3	5.2	3.6	3.5	2.9	2.0	4.9
Crystal	7.0	7.0	11.0	11.0	12.0	6.3	8.5	7.0	6.8	8.2	5.9	6.1	6.3	5.0	5.5	10.6
North Arm	6.0	7.0	8.0	8.0	10.5	6.0	9.5	6.5	5.5	5.9	6.9	6.9	8.0	6.9	7.5	9.9
Stubb's	4.0	5.0	5.0	3.1	4.0	4.5	3.5	4.5	3.0	3.3	4.6	3.0	3.0	2.0	3.6	3.9
Maxwell	6.0	7.0	8.0	7.5	9.0	4.0	6.0	6.0	4.0	4.9	5.6	3.6	6.0	5.0	5.0	5.9
Forest Lake	3.0	5.0	3.0	1.5	6.5	1.5	4.0	5.0	3.0	3.0	4.9	3.6	3.5	2.1	3.0	8.9
NW Bays Avg.	4.7	5.8	5.8	4.7	7.9	4.1	5.6	5.9	3.9	4.3	5.1	4.1	4.4	3.6	3.9	6.7
Wayzata	20.0	10.0	11.0	13.7	16.0	8.8	12.0	14.0	10.0	12.5	10.5	6.7	9.0	8.5	8.1	14.9
St. Alban's	12.5	8.0	13.0	14.4	17.0	12.0	13.0	12.0	9.0	14.1	13.1	9.5	9.9	9.0	11.7	16.0
Lower Lake So.	22.0	9.5	14.0	13.7	14.0	9.0	11.0	12.0	9.0	18.4	10.5	6.6	8.9	9.6	9.6	16.0
Peavy	5.0	6.0	6.0	9.1	9.5	--	5.0	6.0	4.0	4.9	5.2	7.2	3.3	6.0	7.0	11.1
Lower Lake Avg.	14.9	8.4	11.0	12.7	14.1	9.9	10.3	11.0	8.0	12.5	9.8	7.5	7.8	8.3	9.1	14.5

Table 3 (continued). Secchi Depth.

2001 - 2003 data were collected by Three Rivers Park District. All other data were collected by MN DNR Fisheries.

Bay/Basin	Secchi Depth (feet)			
	1992	1987	1982	1977
Halsted's	4.0	2.0	2.0	2.2
Cook's	4.9	4.5	4.2	2.9
West Upper	6.5	5.5	3.9	4.2
Spring Park	8.3	7.5	6.0	4.9
Upper Lake Avg.	5.9	4.9	4.0	3.6
Harrison's	2.3	6.4	1.9	2.6
Jenning's	2.1	2.3	4.2	2.5
West Arm	2.4	2.5	3.2	3.0
Crystal	5.6	4.5	3.1	7.0
North Arm	6.0	4.4	--	5.0
Stubb's	3.6	2.6	2.9	2.3
Maxwell	5.5	3.3	4.9	4.5
Forest Lake	3.0	3.2	2.6	2.6
NW Bays Avg.	3.8	3.7	3.3	3.7
Wayzata	10.0	9.0	6.3	7.3
St. Alban's	6.0	--	--	--
Lower Lake So.	12.0	7.5	10.0	6.5
Peavy	6.0	3.3	--	1.7
Lower Lake Avg.	8.5	6.6	8.2	5.2

Table 4. Minimum Depth Where Dissolved Oxygen is Below 2.0 Parts Per Million

2001 - 2003 data were collected by Three Rivers Park District. All other data were collected by MN DNR Fisheries.

Bay/Basin	Depth (ft.) of D.O. < 2.0 ppm.													
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
Halsted's	30.0	20.0	18.0	19.7	22.0	18.0	20.0	20.0	16.0	13.0	16.4	20.0	15.0	17.0
Cook's	36.0	28.0	27.0	42.0	28.0	29.0	27.0	30.0	25.0	23.0	27.9	23.0	23.0	23.0
West Upper	82.0	60.0	47.0	52.5	54.0	54.0	38.0	36.0	49.0	26.0	50.8	36.0	29.0	21.0
Spring Park	36.0	30.0	32.0	26.0	31.0	28.0	24.0	29.0	26.0	26.0	27.9	26.2	22.0	21.0
Upper Lake Avg.	46.0	34.5	31.0	35.1	33.8	32.3	27.3	28.8	29.0	22.0	30.8	26.3	22.3	20.5
Harrison's	20.0	18.0	16.0	11.5	19.0	16.0	15.0	17.0	19.4	13.0	14.8	13.1	14.0	12.0
Jenning's	18.0	16.0	16.0	12.5	19.0	14.0	16.0	14.0	13.0	13.0	14.8	13.1	19.0	13.0
West Arm	26.0	22.0	20.0	13.5	25.0	22.0	23.0	22.0	20.0	13.0	19.7	19.7	18.0	17.0
Crystal	26.0	60.0	36.0	28.5	71.0	75.0	35.0	40.0	45.0	26.0	51.0	26.0	27.0	17.0
North Arm	20.0	22.0	24.0	19.0	21.0	23.0	24.0	22.0	20.0	16.0	21.3	16.4	19.0	15.0
Stubb's	12.0	16.0	14.0	14.0	17.0	16.0	16.0	22.0	20.0	16.0	14.8	13.1	12.0	11.0
Maxwell	20.0	22.0	18.0	16.5	21.0	22.0	20.0	22.0	20.0	16.0	18.0	19.7	18.0	17.0
Forest Lake	14.0	12.0	14.0	10.0	13.0	14.0	14.0	11.0	11.0	10.0	11.5	13.1	11.0	10.0
NW Bays Avg.	19.5	23.5	19.8	15.7	25.8	25.3	20.4	21.3	21.1	15.4	20.7	16.8	17.3	14.0
Wayzata	30.0	34.0	32.0	39.4	36.0	13.0	30.0	42.0	40.0	30.0	32.8	32.0	28.0	28.0
St. Alban's	24.0	30.0	32.0	36.5	29.0	36.0	30.0	35.0	40.0	30.0	31.2	32.8	27.0	24.0
Lower Lake So.	38.0	44.0	46.0	55.8	58.0	40.0	35.0	33.0	35.0	33.0	49.2	32.8	32.0	32.0
Peavy	8.0	14.0	8.0	16.4	36.0	--	15.0	15.0	10.0	7.0	8.2	9.8	6.0	9.0
Lower Lake Avg.	25.0	30.5	29.5	37.0	39.8	29.7	27.5	31.3	31.3	25.0	30.4	26.9	23.3	23.3

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 5. 2012 Gill Net Catch Summary

250 Foot Experimental Gill Nets

Number of net sets: 12

First net set on: 6-18-2012

Last net set on: 6-28-2012

Target species: Northern Pike, Walleye, Yellow Perch

Summary by Numbers

Summary by Weight (lbs.)

Species	Total No.	Number Per Set	Lake Class 22 Quartiles			Total Pounds	Pounds Per Set	Mean Weight	Lake Class 22 Quartiles		
			25%	50%	75%				25%	50%	75%
Black bullhead	3	0.25	0.46	1.63	4.11	2.03	0.17	0.68	0.55	0.7	0.95
Black Crappie	41	3.42	0.22	0.42	1.14	7.99	0.67	0.19	0.24	0.38	0.55
Bluegill	410	34.17	N/A	N/A	N/A	73.48	6.12	0.18	N/A	N/A	N/A
Green Sunfish	2	0.17	0.11	0.20	0.46	0.10	0.01	0.05	N/A	N/A	N/A
Hybrid Sunfish	7	0.58	N/A	N/A	N/A	0.91	0.08	0.13	N/A	N/A	N/A
Largemouth Bass	2	0.17	0.25	0.62	1.20	1.96	0.16	0.00	0.55	0.77	1.05
Muskellunge	0	0.00	0.10	0.14	0.29	0.00	0.00	0.00	3.06	3.82	5.25
Northern Pike	134	11.17	3.00	5.00	7.89	387.25	32.27	2.89	1.68	2.25	2.80
Pumpkinseed	11	0.92	N/A	N/A	N/A	1.38	0.12	0.13	N/A	N/A	N/A
Rock Bass	13	1.08	1.00	2.93	6.63	3.03	0.25	0.23	0.30	0.41	0.52
Smallmouth Bass	1	0.08	0.20	0.44	0.87	0.58	0.05	0.58	0.94	1.35	1.81
Walleye	51	4.25	4.01	6.61	9.63	136.27	11.36	2.67	1.12	1.43	1.90
White Sucker	4	0.33	1.02	2.00	3.49	9.26	0.77	2.32	1.52	1.89	2.28
Yellow Bullhead	9	0.75	0.65	2.59	6.43	7.33	0.61	0.81	0.62	0.75	0.95
Yellow Perch	161	13.42	7.06	17.14	33.87	21.87	1.82	0.14	0.12	0.15	0.21

Total fish per set:	70.75	Total pounds per set:	54.45
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Table 6. Stocking History and Walleye Year Class Strength from 2012 Gill Net Sample

Walleye Stocked											
Year	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
Fingerlings	113,471		101,533		126,124		125,337		123,456		111,603
Yearlings								12,441			
Adults											
Pounds	6,444		6,442		6,448		6,450	1,164	5,346		6,407
Walleye Aged 2012											
Age	0	I	II	III	IV	V	VI	VII	VIII	IX	X
Entire Lake (n = 46)			12		12	1*	7	1*	4		3
Lower Lake (n = 18)			5		6	1*	3		1		2
Upper Lake (n = 12)			1		5		1		1		1
NW Bays (n = 16)			6		1		3	1*	2		

Walleye Stocked										
Year	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992
Fingerlings	329,318	66,811		143,238		106,345		85,257		24,141
Yearlings	19,051		5,975					2,160		2,741
Adults								273		556
Pounds	11,608	3,651	2,505	6,459		3,975		4,278		3,523
Walleye Aged 2012										
Age	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX
Entire Lake (n = 46)	3	1			1*				1	
Lower Lake (n = 18)										
Upper Lake (n = 12)	1	1			1*					
NW Bays (n = 16)	2								1	

*Originated from non-stocked year class

Table 7. Historic Catch per Gill Net Set

	Fish/Net																			
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1992	1987	1982	1977
Black Bullhead	0.25	0.17	0.29	0.04	0.32	0.08	0.46	0.25	1.04	1.21	1.46	1.21	2.13	4.79	0.38	0.4	8.19	6.76	4.95	12.36
Black Crappie	3.42	7.54	5.00	4.42	3.27	4.58	3.67	1.13	2.71	3.46	2.17	1.88	3.79	4.5	2.83	2.63	4.01	5.86	11.2	8.23
Bluegill	34.17	63.21	86.25	48.29	87.32	54.33	57.42	30.13	44.54	34.50	40.58	35.58	24.33	29.92	16.58	56.88	44.92	24.49	39.11	18.55
Bowfin	--	--	0.04	--	--	0.04	0.08	0.04	0.08	0.08	0.04	--	0.04	0.08	0.08	0.05	0.05	--	0.18	0.02
Brown Bullhead	--	--	--	0.04	--	--	0.04	--	0.08	0.13	0.04	--	--	0.08	0.13	0.15	0.73	0.98	0.25	0.75
Common Carp	--	0.21	0.08	0.08	0.27	--	0.08	0.04	0.38	0.17	0.08	0.21	0.21	0.38	0.25	0.27	0.47	0.3	0.64	0.36
Golden Shiner	--	0.04	--	0.04	0.18	--	--	--	--	--	0.04	--	--	0.33	0.29	0.47	0.09	0.07	0.25	0.05
Green Sunfish	0.17	0.29	0.71	0.13	0.27	0.38	0.13	0.04	--	--	0.04	0.08	0.04	0.04	--	0.04	0.03	0.09	0.02	0.05
Hybrid Sunfish	0.58	0.88	0.67	0.13	1.23	0.42	0.83	0.38	--	0.42	0.46	0.08	0.08	0.13	0.13	0.32	0.33	0.67	0.16	--
Largemouth Bass	0.17	0.17	0.08	--	0.05	0.08	--	--	0.08	0.04	0.04	0.08	0.04	0.04	--	0.13	0.16	0.56	0.18	0.54
Muskellunge	--	0.04	0.08	0.08	0.09	0.04	0.08	0.04	--	0.04	0.08	0.08	0.25	--	0.08	0.05	--	--	--	--
Northern Pike	11.17	6.29	6.88	7.58	9.14	10.83	11.46	11.58	12.33	14.92	17.67	14.46	11.96	11.13	8.08	17.25	8.19	10.16	4.27	5.93
Pumpkinseed	0.92	1.33	1.08	1.50	1.45	2.08	1.04	1.08	0.92	0.13	0.33	0.21	0.33	0.5	0.13	1.25	0.8	0.88	0.41	0.8
Rock Bass	1.08	0.83	1.13	0.33	1.18	0.71	0.50	0.13	0.63	0.38	0.38	0.33	0.21	0.33	0.33	0.48	1.24	0.23	0.27	0.16
Smallmouth Bass	0.08	0.08	--	--	0.09	--	0.08	0.04	--	0.08	0.08	--	0.17	0.08	--	0.05	0.17	0.35	--	--
Walleye	4.25	3.54	2.92	3.42	3.64	4.25	2.71	1.50	2.92	3.29	5.17	3.79	7.42	8.75	5.13	4.53	4.97	3.79	2.43	1.86
White Crappie	--	--	--	--	--	--	--	--	--	0.04	--	0.08	--	--	0.13	0.13	1.2	7.51	3.86	6.73
White Sucker	0.33	0.25	0.04	0.08	0.05	0.17	0.04	0.13	0.13	0.04	--	0.21	0.08	0.13	0.17	0.19	0.43	0.79	0.84	0.91
Yellow Bullhead	0.75	0.13	0.13	0.21	0.41	0.25	0.17	--	0.13	0.13	0.08	0.04	0.13	0.46	0.21	1.15	6.99	5.63	1.95	2.91
Yellow Perch	13.42	31.17	17.33	16.75	15.36	13.96	16.29	15.88	12.92	9.16	7.25	9.71	4.88	13.08	22.29	6.59	3.67	6.53	13.14	11.59

Table 8. Historic Gill Net Catch per Net of Northern Pike, Walleye, and Yellow Perch by Basin

Entire Lake		2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1992	1987	1982	1977	1970
No. of Sets		12	24	24	24	22	24	24	24	24	24	24	24	24	24	24	75	75	43	44	44	32
	NOP	11.2	6.3	6.8	7.6	9.1	10.8	11.5	11.6	12.3	14.9	17.7	14.5	12.0	11.1	8.1	17.3	8.2	10.2	4.3	5.9	5.0
	WAE	4.3	3.5	2.9	3.4	3.6	4.3	2.7	1.5	2.9	3.3	5.2	3.8	7.4	8.8	5.1	4.5	5.0	3.8	2.4	1.9	1.2
	YEP	13.4	31.2	17.3	16.8	15.4	14.0	16.3	15.9	12.9	10.3	7.3	9.7	4.9	13.1	22.3	6.6	3.7	6.5	13.1	11.6	22.1
Upper Lake		2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1992	1987	1982	1977	1970
No. of Sets		4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	25	22	14	14	14	12
	NOP	7.3	5.4	6.1	4.3	8.6	8.8	16.4	14.6	12.8	13.8	18.3	10.0	14.6	16.5	9.4	26.4	8.0	11.0	4.6	6.1	5.1
	WAE	3.5	2.8	3.3	2.3	3.1	5.0	2.0	1.6	4.6	2.4	5.9	3.5	6.4	9.3	5.4	4.4	5.2	3.5	1.2	1.0	0.3
	YEP	25.5	38.0	21.5	7.4	7.9	16.3	8.5	12.0	6.6	6.4	2.4	2.4	0.9	13.4	23.5	6.6	4.7	11.2	26.3	11.4	15.4
Lower Lake		2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1992	1987	1982	1977	1970
No. of Sets		5	10	10	10	8	10	10	10	10	10	10	10	10	10	10	33	34	18	19	19	11
	NOP	14.8	7.0	7.8	10.1	10.4	13.5	7.6	10.2	12.8	14.8	23.5	19.2	10.7	7.1	6.8	12.6	9.1	10.0	4.0	4.7	4.9
	WAE	4.0	4.1	3.5	4.3	4.3	5.1	3.0	1.8	2.4	4.0	6.3	5.9	8.0	10.0	5.4	4.4	5.3	5.1	4.4	3.3	1.8
	YEP	0.6	8.7	6.1	3.1	2.0	4.0	6.9	9.2	2.2	3.6	0.2	1.6	0.0	3.1	5.8	1.6	1.2	3.5	2.2	2.4	23.3
NW Bays		2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1992	1987	1982	1977	1970
No. of Sets		3	6	6	6	6	6	6	6	6	6	6	6	6	6	6	17	19	11	11	11	9
	NOP	10.3	6.3	6.3	7.8	8.2	9.2	11.3	9.8	11.0	16.2	15.2	12.5	10.5	10.7	8.5	12.9	6.6	9.4	4.4	7.8	5.1
	WAE	5.7	3.5	1.5	3.5	3.5	1.8	3.2	0.8	1.5	3.3	2.3	0.7	7.8	6.0	4.3	5.0	3.9	1.7	0.6	0.5	1.8
	YEP	18.7	59.5	30.5	52.0	43.2	27.5	42.3	32.2	39.2	22.2	25.5	33.0	18.3	29.3	48.2	16.2	7.3	5.8	15.3	27.7	29.6

**Table 9. Mean Length (in.) and Weight (lbs.) of Gillnet Sampled Fish
 (continued on following page)**

Species	2012			2011			2010			2009			2008		
	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight
Black Bullhead	3	10.41	0.68	4	8.76	0.44	7	10.74	0.68	1	8.86	0.38	7	7.28	0.25
Black Crappie	41	7.25	0.19	181	7.50	0.24	120	7.58	0.24	106	7.50	0.23	72	7.50	0.23
Bluegill	410	6.20	0.18	1517	5.82	0.16	2070	5.94	0.16	1159	5.94	0.16	1921	5.87	0.17
Bowfin	--	--	--	0	--	--	1	25.00	5.29	0	--	--	0	--	--
Brown Bullhead	--	--	--	0	--	--	0	--	--	1	13.15	1.68	0	--	--
Common Carp	--	--	--	5	25.70	8.1	2	29.07	11.18	2	--	--	6	25.53	2.30
Golden Shiner	--	--	--	1	7.13	0.14	0	--	--	1	7.72	0.17	4	7.01	0.12
Green Sunfish	2	4.31	0.05	7	4.53	0.06	17	4.54	0.07	3	4.51	0.06	6	4.33	0.06
Hybrid Sunfish	7	5.73	0.13	21	5.47	0.13	16	5.24	0.13	3	5.62	0.14	27	5.55	0.14
Largemouth Bass	2	12.72	0.98	4	10.42	0.58	2	7.81	0.21	0	--	--	1	15.24	1.86
Muskellunge	--	--	--	1	35.43	10.39	2	39.76	15.77	2	29.07	6.41	2	20.69	2.33
Northern Pike	134	22.79	2.89	151	22.99	3.08	165	25.38	3.00	182	23.78	3.29	201	24.53	3.50
Pumpkinseed	11	5.31	0.13	32	4.82	0.09	26	4.76	3.94	36	4.24	0.06	32	4.33	0.06
Rock Bass	13	6.67	0.23	20	6.74	0.26	27	6.89	0.27	8	8.49	0.47	26	8.01	0.41
Smallmouth Bass	1	10.47	0.58	2	11.65	1.16	0	--	--	0	--	--	2	15.37	1.59
Walleye	51	18.63	2.67	85	20.29	3.42	70	19.89	3.16	82	19.60	3.11	80	17.96	2.49
White Crappie	--	--	--	0	--	--	0	--	--	0	--	--	0	--	--
White Sucker	4	17.36	2.32	6	15.39	1.71	1	8.62	0.26	2	16.85	2.16	1	17.64	2.37
Yellow Bullhead	9	11.55	0.81	3	9.97	0.55	3	10.47	0.62	5	9.65	0.51	9	10.15	0.66
Yellow Perch	161	6.71	0.14	748	6.74	0.14	416	6.56	0.13	402	6.66	0.14	338	6.61	0.13

Lake: Minnetonka
 Bay/Basin: Entire Lake

**Table 9 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet Sampled Fish
 (continued on following page)**

Species	2007			2006			2005			2004			2003		
	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight
Black Bullhead	2	11.65	0.82	11	10.60	0.76	6	9.82	0.58	25	9.52	0.61	29	9.80	0.23
Black Crappie	110	7.36	0.22	88	7.22	0.22	27	7.46	0.21	63	7.66	0.26	83	7.10	0.22
Bluegill	1304	5.89	0.15	1378	5.92	0.17	721	6.04	0.17	1068	5.81	0.15	828	5.80	0.16
Bowfin	1	24.61	5.05	2	17.32	1.83	1	22.40	3.15	2	19.17	2.35	2	17.40	1.73
Brown Bullhead	--	--	--	1	14.02	1.41	0	--	--	2	13.35	1.35	3	8.80	0.41
Comon Carp	--	--	--	2	25.67	8.99	1	28.15	10.25	9	27.80	10.22	4	24.50	8.03
Golden Shiner	--	--	--	0	--	--	0	--	--	0	--	--	0	--	--
Green Sunfish	9	4.29	0.05	3	4.34	0.07	1	4.09	0.05	0	--	--	0	--	--
Hybrid Sunfish	10	5.35	0.13	20	5.60	0.14	9	6.51	0.22	0	--	--	10	4.90	0.09
Largemouth Bass	2	7.26	0.17	0	--	--	0	--	--	2	18.60	3.70	1	6.30	0.16
Muskellunge	1	40.39	16.12	2	47.56	27.59	1	38.70	16.89	0	--	--	1	38.40	14.11
Northern Pike	260	23.32	3.07	275	24.10	3.53	277	23.97	3.29	293	22.20	2.53	358	21.90	2.63
Pumpkinseed	50	4.60	0.08	25	4.60	0.08	26	3.79	0.05	22	4.24	0.07	3	5.30	0.12
Rock Bass	17	7.69	0.38	12	7.42	0.34	3	9.08	0.59	15	7.56	0.37	9	8.30	0.44
Smallmouth Bass	--	--	--	2	12.40	1.17	1	15.24	1.61	0	--	--	2	15.90	1.93
Walleye	102	17.89	2.38	65	18.60	2.66	37	19.33	2.92	70	19.06	2.85	79	16.50	1.97
White Crappie	--	--	--	0	--	--	0	--	--	0	--	--	1	7.90	0.19
White Sucker	4	15.61	1.74	1	13.07	0.94	3	15.76	1.72	3	17.74	2.60	1	17.70	2.09
Yellow Bullhead	6	10.58	0.65	4	11.06	0.80	0	--	--	3	11.23	0.81	3	12.00	1.00
Yellow Perch	335	6.37	0.11	391	6.24	0.12	380	6.19	0.12	310	6.34	0.13	247	6.10	0.15

Lake: Minnetonka
 Bay/Basin: Entire Lake

**Table 9 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet Sampled Fish
 (continued on following page)**

Species	2002			2001			2000			1999			1998		
	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight
Black Bullhead	33	10.20	0.67	29	9.70	0.57	51	10.36	0.64	115	8.72	0.38	9	10.70	0.73
Black Crappie	53	7.10	0.22	45	6.60	0.18	91	7.41	0.23	108	6.97	0.20	68	7.24	0.21
Bluegill	974	5.50	0.12	854	5.70	0.15	584	5.82	0.14	718	5.38	0.11	398	5.76	0.14
Bowfin	1	10.70	0.43	0	--	--	1	19.13	2.56	2	26.77	7.28	2	21.97	3.07
Brown Bullhead	1	13.70	1.50	0	--	--	0	--	--	2	13.44	1.31	3	11.82	0.77
Comon Carp	2	27.40	9.47	5	27.50	9.71	5	28.57	11.83	9	27.93	9.87	6	26.14	8.57
Golden Shiner	1	5.90	0.08	0	--	--	0	--	--	8	6.19	0.09	7	7.24	0.14
Green Sunfish	1	5.90	0.10	2	5.10	0.09	1	4.57	0.05	1	4.13	0.05	0	--	--
Hybrid Sunfish	11	4.60	0.09	2	5.00	0.11	2	4.78	0.10	3	5.10	0.10	3	5.83	0.17
Largemouth Bass	1	12.90	1.59	2	10.10	0.57	1	11.30	0.67	1	8.11	0.24	0	--	--
Muskellunge	2	30.90	6.64	2	27.90	4.80	6	24.97	5.06	0	--	--	2	42.70	18.71
Northern Pike	425	21.40	2.40	347	21.60	2.35	287	21.58	2.37	267	21.87	2.50	194	22.06	2.54
Pumpkinseed	8	4.10	0.06	5	4.60	0.09	8	4.90	0.10	12	4.93	0.09	3	3.79	0.04
Rock Bass	8	8.20	0.48	8	8.40	0.54	5	9.54	0.65	8	8.70	0.55	8	8.57	0.51
Smallmouth Bass		16.10	2.20	0	--	--	4	16.90	2.39	2	13.48	1.39	0	--	--
Walleye	126	17.60	2.20	91	18.00	2.30	176	17.44	2.10	210	16.23	1.86	123	17.63	2.17
White Crappie	0	--	--	2	4.60	0.04	0	--	--	0	--	--	3	9.59	0.43
White Sucker	0	--	--	5	17.10	2.10	2	17.26	2.32	3	14.25	1.45	4	18.60	2.69
Yellow Bullhead	2	5.30	1.22	1	12.00	0.95	3	12.94	1.31	11	12.00	1.02	5	12.13	0.96
Yellow Perch	174	6.30	0.11	233	6.30	0.12	117	6.98	0.15	314	6.49	0.12	535	6.16	0.10

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 9 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet Sampled Fish

Species	1997			1992		
	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight
Black Bullhead	30	10.23	0.68	147	10.14	0.62
Black Crappie	197	7.35	0.22	301	6.85	0.19
Bluegill	4,266	6.10	0.17	3,369	6.31	0.19
Bowfin	4	21.00	3.23	4	16.20	1.98
Brown Bullhead	11	13.10	1.10	55	11.22	0.07
Comon Carp	20	25.92	8.34	35	24.65	7.20
Golden Shiner	35	6.94	0.12	7	6.84	0.12
Green Sunfish	3	5.21	0.10	2	4.20	0.10
Hybrid Sunfish	24	5.60	0.15	25	5.06	0.13
Largemouth Bass	10	11.00	1.01	12	11.60	0.98
Muskellunge	4	36.26	11.35	0	--	--
Northern Pike	1,294	21.19	2.24	614	22.17	2.62
Pumpkinseed	94	4.27	0.07	60	4.93	0.12
Rock Bass	36	7.20	0.32	93	6.67	0.26
Smallmouth Bass	4	15.65	2.15	13	14.03	1.61
Walleye	340	18.23	2.26	373	17.34	2.13
White Crappie	10	9.12	0.37	90	7.89	0.27
White Sucker	14	17.28	2.34	32	18.20	2.60
Yellow Bullhead	86	11.66	0.90	524	10.69	0.66
Yellow Perch	494	6.70	0.13	275	6.54	0.13

Table 10. Length-Frequency Distribution (inches) of Fish Collected in Gill Nets, 2012 (continued on following page)

	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>GSF</u>	<u>HSF</u>	<u>LMB</u>	<u>NOP</u>	<u>PMK</u>	<u>RKB</u>	<u>SMB</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	8	-	-	-	-	1	-	-	-	-	-	-
4.00 - 4.49	-	1	28	2	-	-	-	1	2	-	-	-	-	-
4.50 - 4.99	-	-	10	-	2	-	-	2	-	-	-	-	-	-
5.00 - 5.49	-	-	37	-	2	-	-	2	2	-	-	-	-	4
5.50 - 5.99	-	7	41	-	1	-	-	3	2	-	-	-	-	31
6.00 - 6.49	1	5	94	-	-	-	-	1	-	-	-	-	-	40
6.50 - 6.99	-	9	121	-	-	-	-	1	-	-	-	-	-	30
7.00 - 7.49	-	2	63	-	2	-	-	-	1	-	-	-	-	24
7.50 - 7.99	-	2	8	-	-	-	-	-	2	-	-	-	-	24
8.00 - 8.49	-	6	-	-	-	-	-	-	4	-	-	-	-	4
8.50 - 8.99	-	5	-	-	-	-	-	-	-	-	-	-	-	2
9.00 - 9.49	-	2	-	-	-	-	-	-	-	-	-	-	-	-
9.50 - 9.99	-	-	-	-	-	-	-	-	-	-	-	-	-	1
10.00 - 10.49	-	-	-	-	-	-	-	-	-	1	-	-	3	-
10.50 - 10.99	-	1	-	-	-	-	-	-	-	-	1	-	1	-
11.00 - 11.49	1	-	-	-	-	-	-	-	-	-	1	-	-	-
11.50 - 11.99	-	-	-	-	-	-	-	-	-	-	1	-	2	-
12.00 - 12.99	-	-	-	-	-	1	-	-	-	-	1	-	2	-
13.00 - 13.99	1	-	-	-	-	1	2	-	-	-	6	-	-	-
14.00 - 14.99	-	-	-	-	-	-	-	-	-	-	1	-	1	-
15.00 - 15.99	-	-	-	-	-	-	1	-	-	-	3	1	-	-
16.00 - 16.99	-	-	-	-	-	-	5	-	-	-	3	1	-	-
17.00 - 17.99	-	-	-	-	-	-	5	-	-	-	3	1	-	-
18.00 - 18.99	-	-	-	-	-	-	11	-	-	-	4	-	-	-
19.00 - 19.99	-	-	-	-	-	-	10	-	-	-	5	1	-	-
20.00 - 20.99	-	-	-	-	-	-	19	-	-	-	4	-	-	-
21.00 - 21.99	-	-	-	-	-	-	12	-	-	-	3	-	-	-
22.00 - 22.99	-	-	-	-	-	-	9	-	-	-	7	-	-	-
23.00 - 23.99	-	-	-	-	-	-	11	-	-	-	2	-	-	-
24.00 - 24.99	-	-	-	-	-	-	11	-	-	-	5	-	-	-
25.00 - 25.99	-	-	-	-	-	-	10	-	-	-	-	-	-	-
26.00 - 26.99	-	-	-	-	-	-	5	-	-	-	-	-	-	-
27.00 - 27.99	-	-	-	-	-	-	4	-	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	-	-	5	-	-	-	-	-	-	-
29.00 - 29.99	-	-	-	-	-	-	5	-	-	-	-	-	-	-
30.00 - 30.99	-	-	-	-	-	-	4	-	-	-	-	-	-	-
31.00 - 31.99	-	-	-	-	-	-	1	-	-	-	-	-	-	-
32.00 - 32.99	-	-	-	-	-	-	1	-	-	-	-	-	-	-
33.00 - 33.99	-	-	-	-	-	-	2	-	-	-	-	-	-	-
34.00 - 34.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35.00 - 35.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
= > 36.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>GSF</u>	<u>HSF</u>	<u>LMB</u>	<u>NOP</u>	<u>PMK</u>	<u>RKB</u>	<u>SMB</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
Total	3	40	410	2	7	2	133	11	13	1	50	4	9	160
Min. Length	6.10	4.41	3.78	4.21	4.61	12.20	13.46	3.78	4.21	10.47	10.94	15.35	10.04	5.20
Max. Length	13.98	10.83	7.68	4.41	7.36	13.23	33.66	6.77	8.43	10.47	24.41	19.29	14.61	9.61
Mean Length	10.41	7.25	6.20	4.31	5.73	12.72	22.79	5.31	6.67	10.47	18.63	17.36	11.55	6.71
# Measured	3	40	396	2	7	2	133	11	13	1	50	4	9	157
No Lengths for	0	1	14	0	0	0	1	0	0	0	1	0	0	4

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 11. Walleye Mean Back-calculated Length (in.) at Age, by Basin and Sex, 2012

Entire Lake	Sample Size	AGE																		
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX
Male	28	4.9	8.0	10.9	13.8	15.3	17.0	17.8	18.8	19.2	20.2	20.9	20.4	19.7	20.6	21.3	21.1	21.7	22.3	22.8
Female	16	5.9	10.5	13.6	17.0	19.9	21.9	23.2	23.8											
Combined	46	5.3	9.0	11.6	14.6	16.4	18.2	18.6	19.2	19.2	20.2	20.9	20.4	19.7	20.6	21.3	21.1	21.7	22.3	22.8

Lower Lakes	Sample Size	AGE																
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII
Male	10	5.3	8.8	11.9	14.3	16.5	17.9	18.0	18.7	18.9	19.5							
Female	7	5.7	9.4	12.9	16.4	19.4	20.8											
Combined	18	5.4	9.0	12.2	15.1	16.9	18.4	18.0	18.7	18.9	19.5							

Upper Lakes	Sample Size	AGE																
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII
Male	10	4.2	7.0	10.5	14.0	15.2	17.1	18.3	19.2	20.5	21.3	21.7	22.2	21.1	21.8	22.3		
Female	1	5.0	10.8	15.0	17.9	19.7	21.2	22.5	23.8									
Combined	12	4.4	7.7	10.9	14.3	16.0	17.8	23.8	20.2	20.5	21.3	21.7	22.2	21.1	21.8	22.3		

Northwest Bays	Sample Size	AGE																		
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX
Male	8	5.3	8.3	10.5	13.0	14.2	16.1	17.4	18.6	17.9	19.1	20.0	16.8	18.3	19.3	20.3	21.1	21.7	22.3	22.8
Female	8	6.2	11.4	13.9	17.5	20.2	22.4	23.8												
Combined	16	5.7	9.9	11.5	14.3	16.2	18.2	18.4	18.6	17.9	19.1	20.0	16.8	18.3	19.3	20.3	21.1	21.7	22.3	22.8

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 12. Northern Pike Mean Back-calculated Length (in.) at Age, by Basin and Sex, 2012.

Entire Lake	Sample Size	AGE								
		I	II	III	IV	V	VI	VII	VIII	IX
Male	29	8.8	16.1	19.3	21.6	20.1	21.0	23.4		
Female	84	9.1	16.7	21.0	23.5	26.0	28.0	30.1	30.0	30.0
Combined	118	9.0	16.6	20.7	23.3	25.6	26.8	29.0	30.0	30.0

Lower Lakes	Sample Size	AGE								
		I	II	III	IV	V	VI	VII	VIII	IX
Male	15	8.8	16.1	19.3	21.0	19.1	19.5			
Female	46	9.5	17.0	21.2	23.3	25.4	27.0	26.7	30.7	
Combined	64	9.3	16.8	21.1	23.3	25.0	25.1	29.7	30.7	

Upper Lakes	Sample Size	AGE								
		I	II	III	IV	V	VI	VII	VIII	IX
Male	5	9.3	15.6	18.8	21.9	21.2	22.5	23.4		
Female	17	8.6	15.8	20.3	23.3	26.4	27.8	28.6	29.2	30.0
Combined	23	8.8	15.8	19.9	23.0	25.5	26.9	26.9	29.2	30.0

Northwest Bays	Sample Size	AGE								
		I	II	III	IV	V	VI	VII	VIII	IX
Male	9	8.6	16.3	19.8	21.8					
Female	21	8.7	17.0	21.2	24.1	27.1	30.1	31.8		
Combined	31	8.7	16.7	20.9	23.7	27.1	30.1	31.8		

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 13. Yellow Perch Mean Back-calculated Length (in.) at Age by Basin, 2012.

Basin	Sample Size	Age							
		I	II	III	IV	V	VI	VII	VIII
Entire Lake	72	2.7	4.2	5.4	6.5	7.1	7.5	7.8	8.6
Lower Lakes	3	2.8	4.2	5.6	6.5				
Upper Lakes	35	2.4	3.9	5.2	6.3	7.0	6.9	7.5	
Northwest Bays	34	2.9	4.6	5.7	6.8	7.6	8.1	8.2	8.6

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 14. Walleye Back-Calculated Lengths (in.) for Each Age Class and Average Annual Increments of Back-Calculated Lengths, 2012(continued on following page)

Class	Age	N	1	2	3	4	5	6	7	8	9	10	11	12
2010	2	12	6.17 6.17	10.91 4.74	-	-	-	-	-	-	-	-	-	-
2008	4	12	4.95 4.95	8.54 3.59	12.29 3.76	15.73 3.44	-	-	-	-	-	-	-	-
2007	5	1	4.28 4.28	8.51 4.23	12.69 4.18	15.76 3.07	17.90 2.14	-	-	-	-	-	-	-
2006	6	7	5.76 5.76	9.71 3.95	13.10 3.39	16.07 2.97	18.40 2.33	20.13 1.73	-	-	-	-	-	-
2005	7	1	5.78 5.78	10.12 4.34	12.84 2.72	16.30 3.46	19.65 3.35	22.17 2.52	23.77 1.60	-	-	-	-	-
2004	8	4	5.03 5.03	8.73 3.70	12.30 3.56	14.74 2.45	16.68 1.94	18.95 2.27	20.51 1.56	21.54 1.03	-	-	-	-
2002	10	3	4.17 4.17	6.48 2.31	8.98 2.51	11.40 2.42	14.68 3.28	16.78 2.09	17.85 1.07	18.72 0.87	19.64 0.92	20.41 0.77	-	-
2001	11	3	4.64 4.64	6.69 2.05	9.19 2.50	11.82 2.63	14.40 2.58	16.29 1.88	18.04 1.75	19.29 1.25	20.47 1.18	21.47 1.00	22.19 0.72	-
2000	12	1	3.62 3.62	6.47 2.85	9.03 2.56	13.46 4.43	15.58 2.12	17.39 1.81	18.50 1.11	19.62 1.12	21.17 1.55	22.03 0.86	22.97 0.94	23.94 0.97
1997	15	1	4.44 4.44	6.99 2.55	10.36 3.37	14.10 3.74	15.31 1.21	16.37 1.06	17.71 1.34	18.46 0.75	18.90 0.44	19.58 0.68	20.14 0.56	20.52 0.38
1993	19	1	3.86 3.86	4.85 0.99	6.22 1.37	7.77 1.55	8.67 0.90	9.45 0.78	10.26 0.81	11.55 1.29	12.76 1.21	14.18 1.42	15.43 1.25	16.80 1.37
Mean Length			5.27	8.97	11.59	14.63	16.36	18.16	18.57	19.22	19.24	20.16	20.85	20.42
Mean Increment			5.27	3.70	3.30	3.04	2.34	1.87	1.40	1.05	1.05	0.92	0.82	0.91
Total N			46	46	34	34	22	21	14	13	9	9	6	3

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 14. Walleye Back-Calculated Lengths (in.) for Each Age Class and Average Annual Increments of Back-Calculated Lengths, 2012

Class	Age	N	13	14	15	16	17	18	19
1997	15	1	21.08 0.56	21.83 0.75	22.26 0.43	-	-	-	-
1993	19	1	18.31 1.51	19.34 1.03	20.33 0.99	21.06 0.73	21.66 0.60	22.27 0.61	22.83 0.56
Mean Length			19.70	20.59	21.30	21.06	21.66	22.27	22.83
Mean Increment			1.04	0.89	0.71	0.73	0.60	0.61	0.56
Total N			2	2	2	1	1	1	1

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 15. Northern Pike Back-Calculated Lengths (in.) for Each Age Class and Average Annual Increments of Back-Calculated Lengths, 2012

Class	Age	N	1	2	3	4	5	6	7	8	9
2011	1	2	9.78 9.78	- -	- -	- -	- -	- -	- -	- -	- -
2010	2	33	9.22 9.22	16.63 7.41	- -	- -	- -	- -	- -	- -	- -
2009	3	35	8.76 8.76	16.47 7.71	20.57 4.10	- -	- -	- -	- -	- -	- -
2008	4	19	8.89 8.89	15.88 6.99	20.07 4.19	22.74 2.67	- -	- -	- -	- -	- -
2007	5	17	9.08 9.08	17.47 8.39	21.81 4.34	24.21 2.40	25.90 1.69	- -	- -	- -	- -
2006	6	6	9.05 9.05	16.14 7.09	20.80 4.67	22.86 2.06	24.61 1.75	25.87 1.25	- -	- -	- -
2005	7	4	9.50 9.50	16.42 6.93	19.80 3.38	22.46 2.67	25.43 2.97	27.60 2.17	28.94 1.34	- -	- -
2004	8	1	10.79 10.79	17.97 7.18	21.63 3.66	23.95 2.32	26.48 2.53	28.33 1.85	29.65 1.32	30.69 1.04	- -
2003	9	1	9.26 9.26	18.68 9.42	23.56 4.88	25.19 1.63	26.59 1.40	27.83 1.24	28.44 0.61	29.23 0.79	30.03 0.80
Mean Length			9.03	16.58	20.74	23.33	25.61	26.81	28.97	29.96	30.03
Mean Increment			9.03	7.56	4.18	2.47	1.90	1.61	1.21	0.92	0.80
Total N			118	116	83	48	29	12	6	2	1

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 16. Yellow Perch Back-Calculated Lengths (in.) for Each Age Class and Average Annual Increments of Back-Calculated Lengths, 2012

Class	Age	N	1	2	3	4	5	6	7	8
2010	2	13	2.99 2.99	4.80 1.82	- -	- -	- -	- -	- -	- -
2009	3	18	2.68 2.68	4.05 1.37	5.32 1.28	- -	- -	- -	- -	- -
2008	4	20	2.70 2.70	4.29 1.59	5.58 1.30	6.52 0.94	- -	- -	- -	- -
2007	5	15	2.44 2.44	3.89 1.45	5.36 1.47	6.45 1.09	7.15 0.70	- -	- -	- -
2006	6	4	2.29 2.29	3.85 1.57	5.33 1.48	6.33 1.00	7.01 0.68	7.51 0.50	- -	- -
2005	7	1	2.19 2.19	3.95 1.76	5.01 1.06	5.73 0.72	6.51 0.78	6.94 0.43	7.46 0.52	- -
2004	8	1	3.38 3.38	4.90 1.52	5.88 0.98	6.54 0.66	7.27 0.73	7.76 0.49	8.17 0.41	8.61 0.44
Mean Length			2.67	4.22	5.43	6.46	7.10	7.46	7.82	8.61
Mean Increment			2.67	1.55	1.34	0.99	0.70	0.49	0.47	0.44
Total N			72	72	59	41	21	6	2	1

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 17. Length-at-Capture (in.) of Northern Pike, Walleye, and Yellow Perch Collected in Gill Nets, 2012(continued on following page)

Species: Northern Pike
Body-Scale Constant: 2.09
Total Sample Size: 118

Year Class	Age	Sample Size	Length At Capture				Length Increments	
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2011	1	2	13.62	13.78	13.46	0.157	3.84	0.003
2010	2	33	18.74	21.89	15.35	0.282	2.11	0.130
2009	3	35	22.12	26.22	18.54	0.339	1.55	0.078
2008	4	19	24.08	28.54	21.14	0.435	1.34	0.118
2007	5	17	26.93	30.51	20.94	0.683	1.04	0.107
2006	6	6	26.59	30.91	19.80	1.567	0.73	0.167
2005	7	4	29.71	33.66	23.86	2.155	0.78	0.251
2004	8	1	31.61	31.61	31.61	N/A	0.92	N/A
2003	9	1	30.51	30.51	30.51	N/A	0.49	N/A

Species: Walleye
Body-Scale Constant: 1.10
Total Sample Size: 46

Year Class	Age	Sample Size	Length At Capture				Length Increments	
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2010	2	12	13.10	15.83	10.94	0.397	2.19	0.209
2009	3	0	-	-	-	-	-	-
2008	4	12	17.51	19.29	15.28	0.382	1.78	0.226
2007	5	1	19.02	19.02	19.02	N/A	0.11	N/A
2006	6	7	21.25	24.09	19.17	0.734	1.13	0.151
2005	7	1	24.33	24.33	24.33	N/A	0.56	N/A
2004	8	4	22.17	24.41	20.71	0.812	0.63	0.052
2003	9	0	-	-	-	-	-	-
2002	10	3	20.97	22.83	20.00	0.932	0.57	0.066
2001	11	3	22.61	22.99	22.32	0.199	0.42	0.031
2000	12	1	24.41	24.41	24.41	N/A	0.47	N/A
1999	13	0	-	-	-	-	-	-
1998	14	0	-	-	-	-	-	-
1997	15	1	22.64	22.64	22.64	N/A	0.38	N/A
1996	16	0	-	-	-	-	-	-
1995	17	0	-	-	-	-	-	-
1994	18	0	-	-	-	-	-	-
1993	19	1	23.43	23.43	23.43	N/A	0.60	N/A

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 17 (continued). Length (in.) at Capture of Northern Pike, Walleye, and Yellow Perch Collected in Gill Nets, 2012

Species: Yellow Perch
Body-Scale Constant: 1.18
Total Sample Size: 72

Year Class	Age	Sample Size	Length At Capture				Length Increments	
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2010	2	13	5.84	6.42	5.20	0.106	1.03	0.059
2009	3	18	6.12	6.89	5.43	0.096	0.80	0.042
2008	4	20	7.09	7.72	5.79	0.103	0.57	0.031
2007	5	15	7.56	8.31	6.50	0.136	0.41	0.022
2006	6	4	7.87	8.90	6.30	0.554	0.36	0.050
2005	7	1	7.87	7.87	7.87	N/A	0.41	N/A
2004	8	1	8.86	8.86	8.86	N/A	0.24	N/A

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 18. Historic Proportional Size Distribution and Relative Size Distribution-Preferred of Northern Pike, Walleye, and Yellow Perch Collected in Gill Nets (continued on following page)

Species	Year	Entire Lake		Lower Lakes		Upper Lakes		NW Bays	
		PSD*	RSD-P*	PSD	RSD-P	PSD	RSD-P	PSD	RSD-P
Northern Pike	2012	61	14	56	11	62	14	71	19
	2011	71	19	57	15	79	24	80	14
	2010	85	22	83	15	82	35	95	18
	2009	78	15	74	12	75	13	87	24
	2008	78	20	74	20	76	16	88	27
	2007	71	16	60	7	74	23	71	16
	2006	73	21	73	24	69	15	82	28
	2005	77	17	77	18	49	8	84	28
	2004	55	9	46	4	54	11	77	14
	2003	53	7	47	6	48	7	60	9
	2002	49	8	33	2	47	10	83	13
	2001	48	8	35	3	59	21	70	8
	2000	48	7	36	2	46	7	70	16
	1999	53	7	33	7	53	8	73	5
	1998	54	7	51	10	44	9	73	6
	1997	47	9	43	7	47	6	52	6
1992	59	6	50	7	68	13	73	15	
Walleye	2012	78	42	74	26	93	50	71	53
	2011	86	64	69	36	96	78	100	86
	2010	97	51	94	37	100	61	100	77
	2009	77	49	55	36	100	61	100	67
	2008	81	38	58	23	92	40	100	57
	2007	75	33	70	21	74	36	75	33
	2006	87	33	71	14	88	50	89	47
	2005	76	38	68	26	77	38	100	80
	2004	81	36	75	67	84	38	89	33
	2003	66	12	50	8	83	11	85	30
	2002	88	22	87	22	91	22	86	21
	2001	79	30	86	32	86	32	100	75
	2000	78	27	59	12	90	25	96	53
	1999	60	25	54	16	49	25	97	50
	1998	84	27	79	8	88	38	88	46
	1997	82	28	69	14	85	30	99	49
1992	68	31	68	32	57	16	90	57	

*Stock, quality, and preferred lengths (inches) are, respectively: 14, 21, and 28 for northern pike, 10, 15, and 20 for walleye, and 5, 8, and 10 for yellow perch.

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 18 (Continued). Historic Proportional Size Distribution and Relative Size Distribution-Preferred of Northern Pike, Walleye, and Yellow Perch Collected in Gill Nets

Species	Year	Entire Lake		Lower Lake		Upper Lake		NW Bays	
		PSD*	RSD-P*	PSD	RSD-P	PSD	RSD-P	PSD	RSD-P
Yellow Perch	2012	4	0	0	0	2	0	9	0
	2011	8	0	0	0	1	0	18	0
	2010	3	0	3	0	0	0	7	0
	2009	4	0	0	0	5	0	16	0
	2008	4	0	0	0	0	0	5	0
	2007	3	0	0	0	1	0	3	0
	2006	4	0	0	0	1	0	6	0
	2005	1	0	0	0	0	0	2	0
	2004	2	0	0	0	0	0	3	0
	2003	2	0	0	0	0	0	4	0
	2002	2	0	0	0	0	0	2	0
	2001	3	0	7	0	0	0	4	0
	2000	6	0	--	--	0	0	6	0
	1999	2	0	0	0	0	0	4	0
	1998	2	0	0	0	0	0	4	0
	1997	4	0	0	0	6	0	4	0
	1992	9	0	0	0	20	0	1	0

*Stock, quality, and preferred lengths (inches) are, respectively: 14, 21, and 28 for northern pike, 10, 15, and 20 for walleye, and 5, 8, and 10 for yellow perch.

Lake: Minnetonka
 Bay/Basin: Entire Lake

Table 19. Historic Relative Weight of Northern Pike, Walleye, and Yellow Perch Collected in Gill Nets

Basin	Species	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997
Entire Lake	NOP	90	92	92	92	90	90	92	89	86	91	89	85	90	89	86	86
	WAE	95	90	90	94	91	91	93	91	91	96	94	89	91	94	89	88
	YEP	86	86	90	90	87	88	91	93	97	102	88	92	86	84	89	88
Lower Lakes	NOP	87	91	90	89	87	88	93	88	84	92	85	82	84	88	85	83
	WAE	95	89	91	93	90	91	92	93	89	95	93	90	93	94	87	85
	YEP	88	89	92	87	90	81	99	96	99	100	79	85	--	77	89	88
Upper Lakes	NOP	94	93	93	90	90	90	92	89	87	88	90	84	87	87	85	88
	WAE	95	90	89	92	91	91	93	89	93	91	97	89	90	95	91	89
	YEP	84	86	92	88	87	91	85	95	99	93	98	102	79	83	89	92
NW Bays	NOP	94	93	92	101	93	91	93	93	90	94	93	92	91	94	90	88
	WAE	94	91	89	96	92	93	93	88	92	100	94	88	90	94	88	92
	YEP	88	84	87	87	87	88	90	90	96	105	87	92	86	86	88	85

Relative weights were calculated for individual fish and then averaged by basin as described in Anderson, R.O., and R.M. Neumann. 1996. Length, Weight and Associated Structural Indices. Pages 447-482 in B.R. Murphy and D.W. Willis, editors. Fisheries techniques, 2nd edition. American fisheries Society, Bethesda, Maryland.

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

Section OF FISHERIES

FISHERIES POPULATION ASSESSMENT

Survey Date: June 18-June 22, 2012
Date Mapped: 1949
Map I.D.No.: B-0122

Lake Identification and Location

Name: LAKE MINNETONKA--UPPER LAKE

Bay/Basin Station No.: 1-10

D.O.W. Watershed
(2)No.: 27-0133 (3)No.: 20-055

Management Meandered:
Area: 314 (4) Yes

(5)County(ies): Hennepin & Carver
Twnshp: 116,117N Range: 23,24W
Section: 6;1;19-21,28-31;22-27,34-36

(6) Nearest Town: The cities of Minnetrista, Mound, Spring Park, Victoria, Orono, Tonka Bay, and Shorewood make up the shoreline of the Upper Lake basin of Lake Minnetonka.

(7) Accessibility:
(a) Designated Public Access (Location and Ownership): See table access of sites.
(b) Other access Areas: See table of access sites.

(8) Reason for Survey/Requested by:
Daryl Ellison, West Metro Area Fisheries Supervisor, as part of ongoing monitoring of Lake Minnetonka.

Lake and Drainage Basin Characteristics and Use

(10)Lake Area: 4,715 acres¹ (Planimetered from 1949 map in 1990) D.O.W. N/A
acres

(11)Maximum Depth: 88 ft. Schupp's Lake Type: 22

(12)Littoral Acres: 1,936 acres¹ Percent Littoral: 41.06

(13)Length of Shoreline: 34.14 miles² Greatest length: 7.65
mile(s)

¹ Acreages planimetered from 1949 sounding map by the DNR Aquatic Plant Management program in 1990. That data is used in this assessment so that standardized area is used in various fisheries management programs.

² Length of shoreline does not include channel or dredged harbor shoreline distances. Islands are included in the total.



Figure: Upper Lake Minnetonka sampling area (shaded).

Lake: Minnetonka
 Bay/Basin: Upper Lakes

Table 20. 2012 Gill-Net Catch Summary

250 Foot Experimental Gill Nets

Number of net sets: 4

First net set on: 6-18-12

Last net set on: 6-20-12

Target species: Northern Pike, Walleye, Yellow Perch

Summary by Numbers

Summary by Weight (lbs.)

Species	Total No.	Number Per Set	Lake Class 22 Quartiles			Total Pounds	Pounds Per Set	Mean Weight	Lake Class 22 Quartiles		
			25%	50%	75%				25%	50%	75%
Black Bullhead	1	0.25	0.46	1.63	4.11	0.11	0.03	0.11	0.55	0.70	0.95
Black Crappie	5	1.25	0.22	0.42	1.14	1.21	0.30	0.24	0.24	0.38	0.55
Bluegill	178	44.5	N/A	N/A	N/A	30.57	7.64	0.17	N/A	N/A	N/A
Common Carp	0	0	0.13	0.30	0.46	0.00	0.00	0.00	3.11	5.21	7.10
Hybrid Sunfish	3	0.75	N/A	N/A	N/A	0.55	0.14	0.18	N/A	N/A	N/A
Northern Pike	29	7.25	3.00	5.00	7.89	93.49	23.37	3.22	1.68	2.25	2.80
Pumpkinseed	6	1.5	N/A	N/A	N/A	0.75	0.19	0.12	N/A	N/A	N/A
Walleye	14	3.5	4.01	6.61	9.63	46.00	11.50	3.29	1.12	1.43	1.90
White Sucker	0	0	1.02	2.00	3.49	0.00	0.00	0.00	1.52	1.89	2.28
Yellow Bullhead	4	1	0.65	2.59	6.43	2.33	0.58	0.58	0.62	0.75	0.95
Yellow Perch	102	25.5	7.06	17.14	33.87	14.40	3.60	0.14	0.12	0.15	0.21

Total fish per set:	85.50	Total pounds per set:	47.35
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Lake: Minnetonka
 Bay/Basin: Upper Lakes

Table 21. Historic Catch per Gill Net Set

Species	Year																
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1992
Black Bullhead	0.25	--	--	--	0.13	--	0.13	--	1.13	0.13	0.63	0.25	0.25	--	--	0.24	0.50
Black Crappie	1.25	9.00	4.00	6.13	4.88	3.38	3.63	1.40	2.50	5.63	1.63	0.88	3.00	1.88	1.38	1.72	3.27
Bluegill	44.50	72.25	97.50	57.00	76.38	83.63	41.38	30.10	42.80	17.88	45.50	44.63	30.75	47.63	18.13	51.92	50.64
Brown Bullhead	--	--	--	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--
Bowfin	--	--	--	--	--	--	--	--	--	--	0.13	--	--	--	--	0.08	0.05
Common Carp	--	0.50	--	0.25	--	--	--	0.10	0.13	0.13	0.13	0.13	0.25	0.50	0.25	0.16	0.55
Hybrid Sunfish	0.75	1.75	1.00	0.25	1.25	0.38	0.63	0.10	0.00	0.13	0.75	0.25	0.13	0.13	0.13	0.64	0.23
Green Sunfish	--	--	0.13	--	0.13	--	--	--	--	--	--	n/a	n/a	n/a	n/a	n/a	n/a
Largemouth Bass	--	--	--	--	--	--	--	--	--	--	0.13	--	0.13	--	--	--	0.05
Muskellunge	--	--	0.13	0.13	0.13	--	0.13	--	--	0.13	0.13	0.13	0.25	--	--	0.12	--
Northern Pike	7.25	5.38	6.13	4.25	8.63	8.75	16.38	14.60	12.75	13.75	18.25	10.00	14.63	16.50	9.38	26.36	7.95
Pumpkinseed	1.50	1.88	2.13	1.63	2.38	1.63	1.25	2.00	0.75	0.13	0.25	--	0.38	0.38	0.13	2.72	1.23
Walleye	3.50	2.88	3.25	2.25	3.13	5.00	2.00	1.60	4.63	2.38	5.88	3.50	6.38	9.25	5.38	4.44	5.05
White Crappie	--	--	--	--	--	--	--	--	--	0.13	--	0.25	--	--	0.13	0.16	1.45
White Sucker	--	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Yellow Bullhead	1.00	0.13	0.38	0.13	0.38	--	0.13	--	--	--	0.13	0.25	--	--	0.13	0.16	1.45
Yellow Perch	25.50	38.00	21.50	7.38	7.88	16.25	8.50	12.00	6.63	6.38	2.38	2.38	0.88	13.38	23.50	6.56	1.14

Lake: Minnetonka
 Bay/Basin: Upper Lakes

**Table 22. Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish
 (continued on following page)**

Species	2012			2011			2010			2009			2008		
	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght
Black Bullhead	1	6.1	0.11	--	--	--	--	--	--	--	--	--	1	7.4	0.19
Black Crappie	5	7.7	0.24	72	7.9	0.26	32	7.6	0.23	49	7.7	0.24	39	7.4	0.21
Bluegill	178	6.1	0.17	578	5.9	0.17	780	5.9	0.16	456	5.8	0.16	610	5.7	0.15
Brown Bullhead	--	--	--	--	--	--	--	--	--	1	--	1.68	--	--	--
Bowfin	--	--	--	--	--	--	--	--	--	--	13.2	--	--	--	--
Green Sunfish	--	--	--	--	--	--	1	4.6	0.07	--	--	--	--	--	--
Common Carp	--	--	--	4	26.4	8.71	--	--	--	2	--	--	--	--	--
Hybrid Sunfish	3	6.7	0.18	14	5.6	0.13	8	5.6	0.16	2	5.6	0.14	10	5.6	0.15
Largemouth Bass	--	--	--	--	--	--	--	--	--	--	--	--	1	15.2	1.86
Muskellunge	--	--	--	--	--	--	1	36.2	11.18	1	22.1	1.84	--	--	--
Northern Pike	29	23.5	3.22	43	23.9	3.4	49	25.9	4.36	34	23.9	3.39	67	24.3	3.40
Pumpkinseed	6	5.5	0.12	15	5.2	0.12	17	4.7	0.09	13	4.3	0.06	19	4.4	0.06
Walleye	14	20.1	3.29	23	22.7	4.58	26	20.1	3.38	18	21.5	3.81	25	19.5	2.96
White Crappie	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
White Sucker	--	--	--	1	14.7	1.32	--	--	--	--	--	--	--	--	--
Yellow Bullhead	4	10.6	0.58	1	9.7	0.48	3	10.5	0.62	1	8.7	0.46	3	10.8	0.80
Yellow Perch	102	6.8	0.14	304	6.5	0.12	172	6.3	0.11	59	6.1	0.10	63	6.2	0.10

Lake: Minnetonka
 Bay/Basin: Upper Lakes

**Table 22 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish
 (continued on following page)**

Species	2007			2006			2005			2004			2003		
	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght
Black Bullhead	--	--	--	1	10.8	0.71	--	--	--	9	6.9	0.27	1	12.7	1.49
Black Crappie	27	7.5	0.23	29	8.0	0.27	11	7.4	0.20	20	7.5	0.21	45	6.8	0.18
Bluegill	669	5.7	0.15	331	5.7	0.15	241	5.9	0.16	343	5.3	0.12	143	5.7	0.14
Brown Bullhead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bowfin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Common Carp	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Green Sunfish	--	--	--	--	--	--	1	28.1	10.25	1	28.1	9.37	1	27.2	9.92
Hybrid Sunfish	3	5.7	0.14	5	5.8	0.17	1	5.1	0.09	--	--	--	1	5.3	0.11
Largemouth Bass	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Muskellunge	--	--	--	1	53.0	40.00	--	--	--	--	--	--	1	38.5	14.10
Northern Pike	70	23.9	3.37	131	23.4	3.20	117	23.6	3.08	102	22.1	2.55	110	21.9	2.45
Pumpkinseed	13	4.6	0.07	10	4.2	0.05	16	3.8	0.05	6	4.5	0.08	1	5.3	0.11
Walleye	40	18.0	2.44	16	19.2	2.92	13	19.6	3.07	37	19.5	3.20	19	16.3	1.76
White Crappie	--	--	--	--	--	--	--	--	--	--	--	--	1	7.9	0.19
White Sucker	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Yellow Bullhead	--	--	--	1	10.3	0.62	--	--	--	--	--	--	--	--	--
Yellow Perch	130	6.2	0.10	68	6.1	0.10	96	6.0	0.11	53	5.9	0.09	51	5.7	0.10

Lake: Minnetonka

Bay/Basin: Upper Lakes

**Table 22 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish
(continued on following page)**

Species	2002			2001			2000			1999			1998		
	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght
Black Bullhead	5	11.0	0.80	2	8.3	0.39	2	10.89	0.78	--	--	--	--	--	--
Black Crappie	13	6.5	0.17	7	7.2	0.23	24	6.9	0.19	15	7.5	0.24	11	7.97	0.25
Bluegill	364	5.4	0.11	357	5.9	0.16	246	6.0	0.15	381	5.0	0.09	145	5.28	0.11
Brown Bullhead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bowfin	1	10.7	0.43	--	--	--	--	--	--	--	--	--	--	--	--
Green Sunfish	--	--	--	--	--	--	--	--	--	4	27.2	8.8	2	27.8	10.64
Common Carp	1	28.9	11.10	1	27.3	8.49	2	26.9	9.2	--	--	--	--	--	--
Hybrid Sunfish	6	4.1	0.05	2	5.0	0.11	1	3.9	0.04	1	5.4	0.11	1	4.0	0.04
Largemouth Bass	1	12.9	1.59	--	--	--	1	11.3	0.67	--	--	--	--	--	--
Muskellunge	1	31.0	6.50	1	27.9	4.96	2	31.8	11.71	--	--	--	--	--	--
Northern Pike	146	21.6	2.52	80	23.3	3.03	117	21.6	2.41	132	22.1	2.55	75	21.7	2.39
Pumpkinseed	2	4.1	0.05	--	--	--	3	4.3	0.06	3	4.1	0.04	1	3.7	0.04
Walleye	47	17.2	2.12	28	18.6	2.54	51	17.7	2.22	74	16.5	1.89	43	18.2	2.43
White Crappie	--	--	--	2	4.6	0.04	--	--	--	--	--	--	1	7.8	0.24
White Sucker	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Yellow Bullhead	1	12.3	1.26	--	--	--	1	13.0	1.3	3	13.2	1.37	1	13.3	1.14
Yellow Perch	19	6.2	0.11	19	5.5	0.08	7	6.6	0.11	107	6.2	0.09	188	5.9	0.09

Lake: Minnetonka

Bay/Basin: Upper Lakes

Table 22 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish

Species	1997			1992		
	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght
Black Bullhead	6	10.69	0.66	65	10.1	0.62
Black Crappie	43	6.8	0.18	129	6.87	0.18
Bluegill	1298	5.92	0.16	1326	6.37	0.19
Brown Bullhead	--	--	--	--	--	--
Bowfin	2	20.9	2.87	1	25.5	5.6
Green Sunfish	4	25.5	8.16	17	23.9	6.47
Common Carp	--	--	--	--	--	--
Hybrid Sunfish	16	5.4	0.13	6	5.3	0.13
Largemouth Bass	--	--	--	1	17.5	3.4
Muskellunge	3	38.0	13.1	--	--	--
Northern Pike	659	21.0	2.25	199	22.9	2.93
Pumpkinseed	68	4.2	0.06	27	5.1	0.12
Walleye	111	18.4	2.35	129	16.2	1.74
White Crappie	4	9.4	0.45	49	8.1	0.27
White Sucker	--	--	--	--	--	--
Yellow Bullhead	34	12.0	1	222	10.4	0.57
Yellow Perch	164	6.6	0.13	118	6.9	0.16

Table 23. Length-Frequency Distribution of Fish in Gill Nets, 2012

	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>HSF</u>	<u>NOP</u>	<u>PMK</u>	<u>WAE</u>	<u>YEB</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-	-	-	-
4.00 - 4.49	-	-	17	-	-	-	-	-	-
4.50 - 4.99	-	-	4	-	-	2	-	-	-
5.00 - 5.49	-	-	21	-	-	1	-	-	-
5.50 - 5.99	-	1	17	1	-	2	-	-	11
6.00 - 6.49	1	-	48	-	-	1	-	-	29
6.50 - 6.99	-	-	54	-	-	-	-	-	23
7.00 - 7.49	-	-	16	2	-	-	-	-	16
7.50 - 7.99	-	1	1	-	-	-	-	-	21
8.00 - 8.49	-	2	-	-	-	-	-	-	2
8.50 - 8.99	-	1	-	-	-	-	-	-	-
9.00 - 9.49	-	-	-	-	-	-	-	-	-
9.50 - 9.99	-	-	-	-	-	-	-	-	-
10.00 - 10.49	-	-	-	-	-	-	-	3	-
10.50 - 10.99	-	-	-	-	-	-	-	-	-
11.00 - 11.49	-	-	-	-	-	-	-	-	-
11.50 - 11.99	-	-	-	-	-	-	-	1	-
12.00 - 12.99	-	-	-	-	-	-	-	-	-
13.00 - 13.99	-	-	-	-	-	-	1	-	-
14.00 - 14.99	-	-	-	-	-	-	-	-	-
15.00 - 15.99	-	-	-	-	-	-	2	-	-
16.00 - 16.99	-	-	-	-	1	-	1	-	-
17.00 - 17.99	-	-	-	-	1	-	-	-	-
18.00 - 18.99	-	-	-	-	3	-	1	-	-
19.00 - 19.99	-	-	-	-	-	-	2	-	-
20.00 - 20.99	-	-	-	-	6	-	-	-	-
21.00 - 21.99	-	-	-	-	2	-	-	-	-
22.00 - 22.99	-	-	-	-	3	-	4	-	-
23.00 - 23.99	-	-	-	-	2	-	-	-	-
24.00 - 24.99	-	-	-	-	1	-	3	-	-
25.00 - 25.99	-	-	-	-	2	-	-	-	-
26.00 - 26.99	-	-	-	-	1	-	-	-	-
27.00 - 27.99	-	-	-	-	3	-	-	-	-
28.00 - 28.99	-	-	-	-	-	-	-	-	-
29.00 - 29.99	-	-	-	-	1	-	-	-	-
30.00 - 30.99	-	-	-	-	2	-	-	-	-
31.00 - 31.99	-	-	-	-	-	-	-	-	-
32.00 - 32.99	-	-	-	-	-	-	-	-	-
33.00 - 33.99	-	-	-	-	1	-	-	-	-
34.00 - 34.99	-	-	-	-	-	-	-	-	-
35.00 - 35.99	-	-	-	-	-	-	-	-	-
= > 36.00	-	-	-	-	-	-	-	-	-
	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>HSF</u>	<u>NOP</u>	<u>PMK</u>	<u>WAE</u>	<u>YEB</u>	<u>YEP</u>
Total	1	5	178	3	29	6	14	4	102
Min. Length	6.10	5.87	4.02	5.59	16.02	4.76	13.62	10.04	5.59
Max. Length	6.10	8.74	7.60	7.36	33.46	6.18	24.41	11.89	8.31
Mean Length	6.10	7.72	6.09	6.71	23.45	5.45	20.05	10.55	6.82
# Measured	1	5	176	3	29	6	14	4	100
No Lengths for	0	0	2	0	0	0	0	0	2

*See appendix 2 for species abbreviation code

Lake: Minnetonka
 Bay/Basin: Upper Lakes

Table 24. Length-at-Capture of Northern Pike, Walleye, and Yellow Perch Collected in Gill Nets, 2012 (continued on following page)

Species: Northern Pike
Body-Scale Constant: 2.09
Total Sample Size: 23

Year Class	Age	Sample Size	Average Length	Length At Capture			Length Increments		
				Maximum Length	Minimum Length	Standard Error	Increment	Standard Error	
2010	2	4	18.81	20.55	16.02	1.046	2.61	0.227	
2009	3	6	20.48	22.83	18.54	0.699	1.69	0.185	
2008	4	7	23.95	27.17	21.14	0.801	1.47	0.225	
2007	5	0	-	-	-	-	-	-	
2006	6	3	28.54	30.91	26.93	1.207	0.82	0.328	
2005	7	2	26.56	29.25	23.86	2.697	0.46	0.040	
2004	8	0	-	-	-	-	-	-	
2003	9	1	30.51	30.51	30.51	N/A	0.49	N/A	

Species: Walleye
Body-Scale Constant: 1.10
Total Sample Size: 12

Year Class	Age	Sample Size	Average Length	Length At Capture			Length Increments		
				Maximum Length	Minimum Length	Standard Error	Increment	Standard Error	
2010	2	1	13.62	13.62	13.62	N/A	2.07	N/A	
2009	3	0	-	-	-	-	-	-	
2008	4	5	16.91	19.09	15.28	0.780	1.76	0.462	
2007	5	0	-	-	-	-	-	-	
2006	6	1	19.17	19.17	19.17	N/A	1.45	N/A	
2005	7	0	-	-	-	-	-	-	
2004	8	1	24.41	24.41	24.41	N/A	0.58	N/A	
2003	9	0	-	-	-	-	-	-	
2002	10	1	22.83	22.83	22.83	N/A	0.69	N/A	
2001	11	1	22.52	22.52	22.52	N/A	0.41	N/A	
2000	12	1	24.41	24.41	24.41	N/A	0.47	-	
1999	13	0	-	-	-	-	-	-	
1998	14	0	-	-	-	-	-	-	
1997	15	1	22.64	22.64	22.64	N/A	0.38	N/A	

Lake: Minnetonka
 Bay/Basin: Upper Lakes

Table 24 (continued). Length-at-Capture of Northern Pike, Walleye, and Yellow Perch Collected in Gill Nets, 2011

Species: Yellow Perch
Body-Scale Constant: 1.18
Total Sample Size: 35

Year Class	Age	Sample Size	Length At Capture			Length Increments		
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2009	3	11	6.04	6.50	5.59	0.088	0.84	0.039
2008	4	7	6.75	7.40	5.79	0.198	0.54	0.037
2007	5	14	7.51	8.31	6.50	0.137	0.41	0.023
2006	6	2	7.24	8.19	6.30	0.945	0.43	0.032
2005	7	1	7.87	7.87	7.87	N/A	0.41	N/A

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

SECTION OF FISHERIES

FISHERIES POPULATION ASSESMENT

Survey Date: June 20-June 26, 2012
Date Mapped: 1949
Map I.D.No.: B-0122

Lake Identification and Location

Name: LAKE MINNETONKA---N.W. BAYS

Bay/Basin Station No.: 11-20;34

D.O.W. Watershed
(2)No.: 27-0133 (3)No.: 20-055

Management Meandered:
Area: 314 (4) Yes

(5)County(ies): Hennepin & Carver
Twnshp: 117N Range: 23,24W
Section: 4-9,15-19;12,13,24

(6) Nearest Town: The cities of Orono, Minnetrista, Mound, Spring Park, and Minnetonka Beach make up the shoreline of the North and West Bays of Lake Minnetonka.

(7) Accessibility:
(a) Designated Public Access (Location and Ownership): See table of access sites.
(b) Other access Areas: See table of access sites.

(8) Requested by/Reason for Survey:
Daryl Ellison, West Metro Area Fisheries Supervisor, as part of ongoing monitoring of Lake Minnetonka.

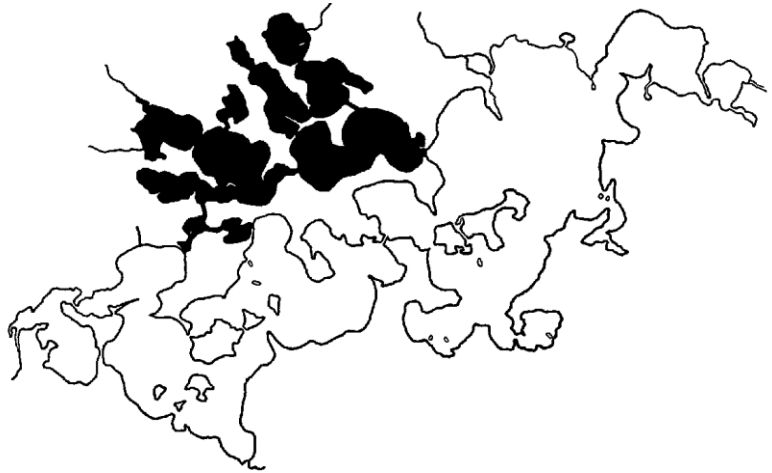


Figure: Northwest Bays sampling area of Lake Minnetonka (shaded).

Lake and Drainage Basin Characteristics and Use

(10)Lake Area: 2,898 acres¹ (Planimetered from 1949 map in 1990) D.O.W. N/A acres

(11)Maximum Depth: 113 ft. Schupp's Lake Type: 22

(12)Littoral Acres: 1,658 acres¹ Percent Littoral: 57.21

(13)Length of Shoreline: 33.40 miles² Greatest length: 4.58 mile(s)

¹ Acreages planimetered from 1949 sounding map by the DNR Aquatic Plant Management program in 1990. That data is used in this assessment so that standardized area is used in various fisheries management programs.

² Length of shoreline does not include channel or dredged harbor shoreline distances. Islands are included in the total.

Lake: Minnetonka
 Bay/Basin: Northwest Bays

Table 25. 2012 Gill-Net Catch Summary

250 Foot Experimental Gill Nets

Number of net sets: 3

First net set on: 6-20-12

Last net set on: 6-26-12

Target species: Northern Pike, Walleye, Yellow Perch

Summary by Numbers

Summary by Weight (lbs.)

Species	Total No.	Number Per Set	Lake Class 22 Quartiles			Total Pounds	Pounds Per Set	Mean Weight	Lake Class 22 Quartiles		
			25%	50%	75%				25%	50%	75%
Black Bullhead	2	0.67	0.46	1.63	4.11	1.92	0.64	0.96	0.55	0.70	0.95
Black Crappie	26	8.67	0.22	0.42	1.14	4.24	1.41	0.16	0.24	0.38	0.55
Bluegill	112	37.33	N/A	N/A	N/A	19.45	6.48	0.17	N/A	N/A	N/A
Common Carp	0	0.00	0.13	0.30	0.46	0.00	0.00	0.00	3.11	5.21	7.10
Golden Shiner	0	0.00	0.06	0.11	1.63	0.00	0.00	0.00	0.09	0.12	0.15
Green Sunfish	0	0.00	0.11	0.20	0.46	0.00	0.00	0.00	N/A	N/A	N/A
Hybrid Sunfish	0	0.00	N/A	N/A	N/A	0.00	0.00	0.00	N/A	N/A	N/A
Largemouth Bass	2	0.67	0.25	0.62	1.20	1.96	0.65	0.98	0.55	0.77	1.05
Northern Pike	31	10.33	3.00	5.00	7.89	106.94	35.65	3.45	1.68	2.25	2.80
Pumpkinseed	1	0.33	N/A	N/A	N/A	0.13	0.04	0.13	N/A	N/A	N/A
Walleye	17	5.67	4.01	6.61	9.63	48.99	16.33	2.88	1.12	1.43	1.90
White Sucker	3	1.00	1.02	2.00	3.49	6.75	2.25	2.25	1.52	1.89	2.28
Yellow Bullhead	2	0.67	0.65	2.59	6.43	1.65	0.55	0.83	0.62	0.75	0.95
Yellow Perch	56	18.67	7.06	17.14	33.87	7.08	2.36	0.13	0.12	0.15	0.21

Total fish per set:	84.00	Total pounds per set:	66.37
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Lake: Minnetonka
 Bay/Basin: Northwest Bays

Table 26. Historic Catch per Gill Net Set.

Species	Year																
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1992
Black Bullhead	0.67	0.67	0.83	0.17	0.33	0.33	1.67	0.67	2.17	4.17	4.17	4.33	8.17	19.17	1.33	0.88	4.63
Black Crappie	8.67	10.83	5.67	5.00	3.33	4.17	5.17	0.83	2.83	3.67	3.83	4.83	6.50	12.50	6.83	8.29	9.42
Bluegill	37.33	80.33	60.33	48.17	45.83	25.50	51.00	32.17	51.50	36.17	25.83	28.33	35.00	21.50	19.33	40.18	35.89
Bowfin	--	--	0.08	--	--	--	0.33	--	0.33	0.17	--	--	0.17	0.33	0.17	0.16	0.06
Brown Bullhead	--	--	--	--	--	--	--	--	0.17	0.50	--	--	--	0.33	0.50	--	0.35
Common Carp	--	0.17	0.3	--	1.00	--	0.17	--	0.67	0.33	0.17	0.67	0.33	0.50	0.50	0.76	1.00
Golden Shiner	--	0.17		0.17	0.67	--	--	--	--	--	0.17	0.00	0.00	1.33	1.17	2.06	0.37
Green Sunfish	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hybrid Sunfish	--	0.50	0.17	0.17	--	0.33	0.17	--	--	0.17	--	--	--	--	0.17	--	0.84
Largemouth Bass	0.67	0.33	0.33	--	--	0.33	--	*	*	*	*	0.08	0.04	0.04	--	0.13	0.16
Muskellunge	--	--	--	--	0.33	0.17	--	*	*	*	*	0.08	0.25	--	0.08	0.05	--
Northern Pike	10.33	6.33	6.33	7.83	8.17	9.17	11.33	9.83	11.00	16.17	15.17	12.50	10.50	10.67	8.50	12.88	6.84
Pumpkinseed	0.33	0.50	0.5	0.17	0.50	0.33	--	*	*	*	*	0.21	0.33	0.50	0.13	1.25	0.80
Rock Bass	--	--	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--
Walleye	5.67	3.50	1.5	3.50	3.50	1.83	3.17	0.83	1.50	3.33	2.33	0.67	7.83	6.00	4.33	5.00	4.26
White Sucker	1.00	0.33	0.17	0.33	--	0.50	0.17	0.50	0.50	--	--	--	--	--	--	--	--
Yellow Bullhead	0.67	0.17		0.50	0.83	1.00	0.33	--	0.17	0.17	--	0.04	0.33	1.17	0.33	0.94	5.19
Yellow Perch	18.67	59.50	30.5	52.00	43.17	27.50	42.33	32.00	39.17	22.17	25.50	33.00	18.33	29.33	48.17	16.24	11.05

* Fish were caught but CPUE is unknown

Lake: Minnetonka
 Bay/Basin: Northwest Bays

**Table 27. Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish
 (continued on following page)**

Species	2012			2011			2010			2009			2008		
	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght
Black Bullhead	2	12.6	0.96	4	8.8	0.44	5	10.6	0.67	1	8.9	0.38	2	5.5	0.08
Black Crappie	26	6.9	0.16	65	6.3	0.15	34	7.1	0.18	30	6.6	0.16	20	7.3	0.22
Bluegill	112	6.1	0.17	482	5.7	0.14	362	6.1	0.18	289	6.2	0.17	274	6.1	0.18
Bowfin	--	--	--	--	--	--	1	25.0	5.29	--	--	--	--	--	--
Brown Bullhead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Common Carp	--	--	--	1	23.0	5.66	1	27.8	9.80	--	--	--	2	25.5	2.30
Golden Shiner	--	--	--	1	7.1	0.14	--	--	--	1	7.7	0.17	4	7.0	0.12
Green Sunfish	--	--	--	1	4.8	0.07	--	--	--	--	--	--	--	--	--
Hybrid Sunfish	--	--	--	3	5.2	0.1	1	5.0	0.10	1	5.7	0.15	--	--	--
Largemouth Bass	2	12.7	0.98	2	9.6	0.44	2	7.8	0.21	--	--	--	--	--	--
Muskellunge	--	--	--	--	--	--	--	--	--	--	--	--	2	20.7	2.32
Northern Pike	31	23.9	3.45	38	23.4	3.23	38	25.5	3.93	47	24.7	3.83	49	25.7	4.12
Pumpkinseed	1	5.4	0.13	3	4.7	0.09	3	5.5	0.14	1	5.9	0.17	3	4.3	0.07
Rock Bass	--	--	--	--	--	--	--	--	--	1	8.3	0.39	--	--	--
Walleye	17	19.0	2.88	21	22.2	4.06	9	22.2	4.14	21	21.2	3.73	21	20.6	3.30
White Sucker	3	17.2	2.25	2	18.3	2.52	1	8.6	0.26	2	16.9	2.16	--	--	--
Yellow Bullhead	2	11.9	0.83	1	9.3	0.42	--	--	--	3	9.8	0.52	5	6.8	0.62
Yellow Perch	56	6.5	0.13	357	7.1	0.16	183	6.9	0.15	312	6.9	0.16	257	6.8	0.14

Lake: Minnetonka
 Bay/Basin: Northwest Bays

**Table 27 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish
 (continued on following page)**

Species	2007			2006			2005			2004			2003		
	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght
Black Bullhead	2	11.7	0.82	10	10.6	0.76	4	10.8	0.58	13	11.4	0.76	25	9.5	0.54
Black Crappie	25	7.4	0.20	31	6.4	0.14	5	7.0	0.21	17	7.9	0.27	22	7.3	0.27
Bluegill	153	5.8	0.14	306	6.2	0.19	193	6.3	0.19	309	6.2	0.19	217	5.9	0.17
Bowfin	--	--	--	2	17.3	1.83	--	--	--	2	19.2	2.35	1	14.6	0.92
Brown Bullhead	--	--	--	--	--	--	--	--	--	1	12.6	1.10	3	8.8	0.41
Common Carp	--	--	--	1	22.7	5.62	--	--	--	4	27.0	9.70	2	21.2	4.82
Golden Shiner	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Green Sunfish	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hybrid Sunfish	2	6.2	0.18	1	4.3	0.05	--	--	--	--	--	--	1	6.7	0.24
Largemouth Bass	2	7.3	0.17	--	--	--	--	--	--	2	18.6	3.70	1	6.3	0.16
Muskellunge	1	40.4	16.10	--	--	--	1	38.7	16.89	--	--	--	1	38.4	14.11
Northern Pike	55	25.3	3.92	68	25.3	4.12	59	24.9	3.83	66	23.8	3.25	97	22.5	2.86
Pumpkinseed	2	4.6	0.07	--	--	--	26	3.8	0.05	22	4.2	0.07	3	5.3	0.12
Rock Bass	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Walleye	11	21.8	3.91	19	20.2	3.17	5	22.0	3.84	9	18.8	2.51	20	18.2	2.55
White Sucker	3	15.4	1.68	1	13.1	0.94	--	--	--	--	--	--	--	--	--
Yellow Bullhead	6	10.6	0.65	2	12.0	1.04	--	--	--	1	9.8	0.52	1	11.7	0.82
Yellow Perch	165	6.6	0.12	254	6.4	0.13	192	6.4	0.13	235	6.5	0.14	133	6.4	0.19

Lake: Minnetonka
 Bay/Basin: Northwest Bays

**Table 27 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish
 (continued on following page)**

Species	2002			2001			2000			1999			1998		
	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght
Black Bullhead	25	10.0	0.65	26	9.8	0.59	49	10.34	0.64	115	8.7	0.38	8	10.6	0.71
Black Crappie	23	6.3	0.14	29	6.4	0.17	39	7.45	0.22	75	6.6	0.16	41	6.8	0.18
Bluegill	155	5.9	0.15	170	5.7	0.15	210	6.02	0.16	129	6.0	0.17	116	5.8	0.15
Bowfin	--	--	--	--	--	--	1	19.13	2.56	2	26.8	7.28	1	19.9	2.56
Brown Bullhead	--	--	--	--	--	--	--	--	--	2	13.4	1.31	3	11.8	0.77
Common Carp	1	25.9	7.82	4	27.6	10.02	2	29.11	13.78	3	28.4	10.55	3	25.0	7.13
Golden Shiner	1	5.9	0.08	--	--	--	--	--	--	8	6.2	0.09	7	7.2	0.14
Green Sunfish	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hybrid Sunfish	--	--	--	--	--	--	--	--	--	--	--	--	1	6.3	0.19
Largemouth Bass	1	12.9	1.59	2	10.1	0.57	1	11.30	0.67	1	8.1	0.24	--	--	--
Muskellunge	2	30.9	6.64	2	27.9	4.80	6	24.97	5.06	--	--	--	2	42.7	18.71
Northern Pike	91	24.6	3.30	75	22.9	2.85	63	23.31	3.09	64	22.7	2.83	51	22.7	2.77
Pumpkinseed	8	4.1	0.06	5	4.6	0.09	8	4.90	0.1	12	4.9	0.09	3	3.8	0.04
Rock Bass	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Walleye	14	18.8	2.61	4	22.8	4.56	47	19.67	2.62	36	19.9	3.04	26	19.9	2.93
White Sucker	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Yellow Bullhead	--	--	--	--	--	--	2	12.89	1.31	7	11.5	0.88	2	10.1	0.61
Yellow Perch	153	6.3	0.11	198	6.5	0.13	110	7.01	0.15	176	6.7	0.13	289	6.4	0.12

Lake: Minnetonka
 Bay/Basin: Northwest Bays

Table 27 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish

Species	1997			1992		
	No.	Mean Length	Mean Wght	No.	Mean Length	Mean Wght
Black Bullhead	15	11.2	0.86	34	10.8	0.73
Black Crappie	141	7.5	0.23	122	6.6	0.17
Bluegill	683	6.2	0.17	470	6.1	0.16
Bowfin	1	21.3	3.86	3	13.1	0.77
Brown Bullhead	6	12.9	1.07	10	11.0	0.72
Common Carp	13	25.7	8.09	14	24.7	6.78
Golden Shiner	35	6.9	0.12	4	6.8	0.14
Green Sunfish	--	--	--	--	--	--
Hybrid Sunfish	--	--	--	1	3.7	0.05
Largemouth Bass	10	11.0	1.01	--	--	--
Muskellunge	4	36.3	11.35	--	--	--
Northern Pike	219	21.9	2.47	106	23.2	2.94
Pumpkinseed	94	4.3	0.07	--	--	--
Rock Bass	--	--	--	--	--	--
Walleye	85	20.1	3.05	63	20.1	3.17
White Sucker	--	--	--	--	--	--
Yellow Bullhead	16	12.0	0.84	101	10.4	0.60
Yellow Perch	276	6.9	0.14	117	6.4	0.11

Table 28. Length Frequency Distribution of Fish in Gill Nets, 2012

	<u>BLC</u>	<u>BLG</u>	<u>LMB</u>	<u>NOP</u>	<u>PMK</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>	
< 3.00	-	-	-	-	-	-	-	-	-	
3.00 - 3.49	-	-	-	-	-	-	-	-	-	
3.50 - 3.99	-	-	7	-	-	-	-	-	-	
4.00 - 4.49	-	1	4	-	-	-	-	-	-	
4.50 - 4.99	-	-	3	-	-	-	-	-	-	
5.00 - 5.49	-	-	5	-	1	-	-	-	4	
5.50 - 5.99	-	4	13	-	-	-	-	-	20	
6.00 - 6.49	-	4	27	-	-	-	-	-	10	
6.50 - 6.99	-	8	36	-	-	-	-	-	5	
7.00 - 7.49	-	2	14	-	-	-	-	-	8	
7.50 - 7.99	-	-	2	-	-	-	-	-	3	
8.00 - 8.49	-	3	-	-	-	-	-	-	2	
8.50 - 8.99	-	3	-	-	-	-	-	-	2	
9.00 - 9.49	-	-	-	-	-	-	-	-	-	
9.50 - 9.99	-	-	-	-	-	-	-	-	1	
10.00 - 10.49	-	-	-	-	-	-	-	-	-	
10.50 - 10.99	-	-	-	-	-	-	-	-	-	
11.00 - 11.49	1	-	-	-	-	-	-	-	-	
11.50 - 11.99	-	-	-	-	-	-	-	1	-	
12.00 - 12.99	-	-	-	1	-	-	-	1	-	
13.00 - 13.99	1	-	-	1	-	4	-	-	-	
14.00 - 14.99	-	-	-	-	-	1	-	-	-	
15.00 - 15.99	-	-	-	-	-	1	1	-	-	
16.00 - 16.99	-	-	-	-	-	1	1	-	-	
17.00 - 17.99	-	-	-	-	-	-	-	-	-	
18.00 - 18.99	-	-	-	1	-	1	-	-	-	
19.00 - 19.99	-	-	-	2	-	-	1	-	-	
20.00 - 20.99	-	-	-	6	-	1	-	-	-	
21.00 - 21.99	-	-	-	2	-	1	-	-	-	
22.00 - 22.99	-	-	-	3	-	3	-	-	-	
23.00 - 23.99	-	-	-	6	-	2	-	-	-	
24.00 - 24.99	-	-	-	2	-	2	-	-	-	
25.00 - 25.99	-	-	-	3	-	-	-	-	-	
26.00 - 26.99	-	-	-	-	-	-	-	-	-	
27.00 - 27.99	-	-	-	-	-	-	-	-	-	
28.00 - 28.99	-	-	-	2	-	-	-	-	-	
29.00 - 29.99	-	-	-	1	-	-	-	-	-	
30.00 - 30.99	-	-	-	1	-	-	-	-	-	
31.00 - 31.99	-	-	-	-	-	-	-	-	-	
32.00 - 32.99	-	-	-	1	-	-	-	-	-	
33.00 - 33.99	-	-	-	1	-	-	-	-	-	
34.00 - 34.99	-	-	-	-	-	-	-	-	-	
35.00 - 35.99	-	-	-	-	-	-	-	-	-	
= > 36.00	-	-	-	-	-	-	-	-	-	
	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>LMB</u>	<u>NOP</u>	<u>PMK</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
Total	2	25	111	2	31	1	17	3	2	55
Min. Length	11.14	4.41	3.78	12.20	18.46	5.43	13.19	15.35	11.61	5.20
Max. Length	13.98	8.86	7.56	13.23	33.66	5.43	24.33	19.29	12.20	9.61
Mean Length	12.56	6.89	6.14	12.72	23.90	5.43	19.04	17.19	11.91	6.52
# Measured	2	25	106	2	31	1	17	3	2	54
No Lengths for	0	1	6	0	0	0	0	0	0	2

***See appendix 2 for species abbreviation codes**

Lake: Minnetonka
 Bay/Basin: Northwest Bays

Table 29. Length at Capture of Northern Pike, Walleye, and Yellow Perch Collected in Gill Nets, 2012 (continued on following page)

Species: Northern Pike
Body-Scale Constant: 2.09
Total Sample Size: 31

Year Class	Age	Sample Size	Length At Capture				Length Increments	
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2010	2	4	19.55	20.16	18.46	0.396	3.07	0.430
2009	3	15	22.40	25.67	19.57	0.518	1.77	0.100
2008	4	5	23.97	25.51	22.60	0.511	1.34	0.124
2007	5	5	28.20	30.47	23.62	1.183	1.08	0.201
2006	6	0	--	--	--	--	--	--
2005	7	2	32.87	33.66	32.09	0.787	1.09	0.420

Species: Walleye
Body-Scale Constant: 1.10
Total Sample Size: 16

Year Class	Age	Sample Size	Length At Capture				Length Increments	
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2010	2	6	14.07	15.83	13.19	0.381	2.29	0.237
2009	3	0	--	--	--	--	--	--
2008	4	1	18.11	18.11	18.11	N/A	1.56	N/A
2007	5	0	--	--	--	--	--	--
2006	6	3	22.52	24.09	20.00	1.273	1.40	0.177
2005	7	1	24.33	24.33	24.33	N/A	0.56	N/A
2004	8	2	21.77	22.24	21.30	0.472	0.64	0.117
2003	9	0	--	--	--	--	--	--
2002	10	0	--	--	--	--	--	--
2001	11	2	22.66	22.99	22.32	0.335	0.43	0.052
2000	12	0	--	--	--	--	--	--
1999	13	0	--	--	--	--	--	--
1998	14	0	--	--	--	--	--	--
1997	15	0	--	--	--	--	--	--
1996	16	0	--	--	--	--	--	--
1995	17	0	--	--	--	--	--	--
1994	18	0	--	--	--	--	--	--
1993	19	1	23.43	23.43	23.43	N/A	0.60	N/A

Table 29 (continued). Length at Capture of Northern Pike, Walleye, and Yellow Perch Collected in Gill Nets, 2012

Species: Yellow Perch
Body-Scale Constant: 1.18
Total Sample Size: 34

Year Class	Sample Age	Sample Size	Length At Capture				Length Increments	
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2010	2	13	5.84	6.42	5.20	0.106	1.03	0.059
2009	3	5	6.15	6.89	5.43	0.273	0.72	0.116
2008	4	12	7.30	7.72	6.77	0.088	0.60	0.047
2007	5	1	8.23	8.23	8.23	N/A	0.45	N/A
2006	6	2	8.50	8.90	8.11	0.394	0.30	0.077
2005	7	0	--	--	--	--	--	--
2004	8	1	8.86	8.86	8.86	N/A	0.24	N/A

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

SECTION OF FISHERIES

FISHERIES POPULATION ASSESSMENT

Survey Date: June 25-June 28, 2012

Date Mapped: 1949

Map I.D.No.: B-0122

Lake Identification and Location

Name: LAKE MINNETONKA--LOWER LAKE

Bay/Basin Station No.: 21-33;35-37

D.O.W. Watershed
(2)No.: 27-0133 (3)No.: 20-055

Management Meandered:
Area: 314 (4) Yes

(5) County(ies): Hennepin & Carver
Township: 117N Range: 22,23W
Section: 5-8,17,18;1,2,11-16,21-24, 26-28,33-35



Figure: Lower Lake Minnetonka sampling area (shaded).

(6) Nearest Town: The cities of Minnetonka, Orono, Woodland, Deephaven, Wayzata, Tonka Bay, Shorewood, Greenwood, Excelsior, and Minnetonka Beach make up the shoreline of the Lower Lake basin of Lake Minnetonka.

(7) Accessibility:
(a) Designated Public Access (Location and Ownership): See table access sites.
(b) Other access Areas: See table of access sites.

(8) Requested by/Reason for Survey:
Daryl Ellison, West Metro Area Fisheries Supervisor, as part of ongoing monitoring of Lake Minnetonka.

Lake and Drainage Basin Characteristics and Use

(10) Lake Area: 6,391 acres¹ (Planimetered from 1949 map in 1990) D.O.W. N/A acres

(11) Maximum Depth: 96 ft. Schupp's Lake Type: 22

(12) Littoral Acres: 2,255 acres¹ Percent Littoral: 35.28

(13) Length of Shoreline: 38.58 miles² Greatest length: 6.76 mile(s)

¹ Acreages planimetered from 1949 sounding map by the DNR Aquatic Plant Management program in 1990. That data is used in this assessment so that standardized area is used in various fisheries management programs.

² Length of shoreline does not include channel or dredged harbor shoreline distances. Islands are included in the total.

Table 30. 2012 Gill Net Catch Summary

250 Foot Experimental Gill Nets

Number of net sets: 5

First net set on: 6-25-2012

Last net set on: 6-28-2012

Target species: Northern Pike, Walleye, Yellow Perch

Summary by Numbers

Summary by Weight (lbs.)

Species	Total No.	Number Per Set	Lake Class 22 Quartiles			Total Pounds	Pounds Per Set	Mean Weight	Lake Class 22 Quartiles		
			25%	50%	75%				25%	50%	75%
Black Crappie	10	2.00	0.22	0.42	1.14	2.54	0.51	0.25	0.24	0.38	0.55
Bluegill	120	24.00	N/A	N/A	N/A	23.49	4.70	0.20	N/A	N/A	N/A
Green Sunfish	2	0.40	0.11	0.20	0.46	0.10	0.02	0.05	N/A	N/A	N/A
Hybrid Sunfish	4	0.80	N/A	N/A	N/A	0.36	0.07	0.09	N/A	N/A	N/A
Largemouth Bass	0	0.00	0.25	0.62	1.20	0.00	0.00	0.00	0.55	0.77	1.05
Muskellunge	0	0.00	0.10	0.14	0.29	0.00	0.00	0.00	3.06	3.82	5.25
Northern Pike	74	14.80	3.00	5.00	7.89	186.39	37.28	2.52	1.68	2.25	2.80
Pumpkinseed	4	0.80	N/A	N/A	N/A	0.50	0.10	0.13	N/A	N/A	N/A
Rock Bass	13	2.60	1.00	2.93	6.63	3.03	0.61	0.23	0.30	0.41	0.52
Smallmouth Bass	1	0.20	0.20	0.44	0.87	0.58	0.12	0.58	0.94	1.35	1.81
Walleye	20	4.00	4.01	6.61	9.63	41.31	8.26	2.07	1.12	1.43	1.90
White Sucker	1	0.20	1.02	2.00	3.49	2.51	0.50	2.51	1.52	1.89	2.28
Yellow Bullhead	3	0.60	0.65	2.59	6.43	3.35	0.67	1.12	0.62	0.75	0.95
Yellow Perch	3	0.60	7.06	17.14	33.87	0.37	0.07	0.12	0.12	0.15	0.21

Total fish per set:	51.00	Total pounds per set:	52.91
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Lake: Minnetonka
 Bay/Basin: Lower Lakes

Table 31. Historic Catch per Gill Net Set

Species	Year																
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1992
Black Bullhead	--	--	0.20	--	0.50	--	--	0.20	0.30	0.30	0.50	0.10	0.00	0.00	0.10	0.27	1.41
Black Crappie	2.00	4.40	5.40	2.70	1.63	5.80	2.80	1.10	2.60	1.40	2.00	0.90	2.80	1.80	1.60	0.39	1.47
Bluegill	24.00	45.70	92.80	41.40	129.38	48.20	74.10	28.70	41.70	43.20	56.88	32.90	12.80	20.80	13.70	69.24	46.26
Bowfin	--	--	--	--	--	0.10	--	0.10	--	0.10	--	--	--	--	0.10	0.03	--
Brown Bullhead	--	--	--	--	--	--	0.10	--	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.12	0.56
Common Carp	--	--	0.10	--	--	--	0.10	--	0.40	0.10	--	--	0.10	0.20	0.10	0.09	0.12
Green Sunfish	0.40	0.60	1.60	0.30	0.63	0.90	0.30	--	--	0.10	0.10	0.10	0.10	0.00	0.00	0.06	0.06
Hybrid Sunfish	0.80	0.40	0.70	--	2.13	0.50	1.40	0.80	--	0.80	0.50	0.00	0.10	0.20	0.10	0.24	0.53
Largemouth Bass	--	0.20	--	--	--	--	--	--	--	0.10	--	0.20	--	0.10	--	0.18	0.24
Muskellunge	--	0.10	0.10	0.10	--	--	0.10	0.10	--	--	0.10	0.10	0.40	0.00	0.10	0.03	0.00
Northern Pike	14.80	7.00	7.80	10.10	10.38	13.50	7.60	10.00	12.80	14.80	23.50	19.20	10.70	7.10	6.80	12.61	9.09
Pumpkinseed	0.80	1.40	0.60	2.20	1.25	3.50	1.50	1.00	1.60	0.20	0.60	0.40	0.20	0.60	0.20	0.70	0.76
Rock Bass	2.60	2.00	2.70	0.70	3.25	1.70	1.20	0.30	1.40	1.10	0.90	0.80	0.50	0.80	0.80	1.09	2.74
Smallmouth Bass	0.20	0.20	--	--	0.25	--	0.20	0.10	--	0.20	0.20	0.00	0.40	0.20	0.00	0.12	0.38
Walleye	4.00	4.10	3.50	4.30	4.25	5.10	3.00	1.90	2.40	4.00	6.30	5.90	8.00	10.00	5.40	4.36	5.32
White Sucker	0.20	0.30	--	--	0.13	0.10	--	--	--	0.10	--	--	--	--	0.30	0.06	0.35
Yellow Bullhead	0.60	0.10	--	0.10	0.13	--	0.10	--	0.20	0.20	0.10	0.10	0.00	0.10	0.20	1.09	5.91
Yellow Perch	0.60	8.70	6.10	3.10	2.00	4.00	6.90	9.20	2.20	3.60	0.20	1.60	0.00	3.10	5.80	1.64	1.18

**Table 32. Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish
 (continued on following page)**

Species	2012			2011			2010			2009			2008		
	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight
Black Bullhead	--	--	--	--	--	--	2	11.0	0.72	--	--	--	4	8.1	0.34
Black Crappie	10	7.9	0.25	44	8.6	0.35	54	7.9	0.29	27	8.1	0.29	13	8.3	0.30
Bluegill	120	6.4	0.20	457	5.9	0.16	928	5.9	0.16	414	5.9	0.16	1034	5.9	0.17
Bowfin	--	--	--	--	--	--	--	--	--	--	--	--			
Common Carp	--	--	--	--	--	--	1	30.3	12.55	--	--	--	--	--	--
Brown Bullhead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Green Sunfish	2	4.3	0.05	6	4.5	0.05	16	4.5	0.07	3	4.5	0.06	5	4.4	0.06
Hybrid Sunfish	4	5.0	0.09	4	5.2	0.12	7	4.9	0.1	--	--	--	17	5.5	0.13
Largemouth Bass	--	--	--	2	11.3	0.72	--	--	--	--	--	--	--	--	--
Muskellunge	--	--	--	1	35.4	10.39	1	43.3	20.36	1	36.0	10.98	--	--	--
Northern Pike	74	22.1	2.52	70	22.2	2.80	78	25.0	3.69	101	23.3	3.00	81	24.0	3.21
Pumpkinseed	4	5.1	0.13	14	4.4	0.07	6	4.7	0.1	22	4.1	0.06	10	4.2	0.06
Rock Bass	13	6.7	0.23	20	6.7	0.26	27	6.9	0.27	7	8.5	0.48	26	8.0	0.41
Smallmouth Bass	1	10.5	0.58	2	11.7	1.16	--	--	--	--	--	--	2	15.4	1.59
Walleye	20	17.2	2.07	41	18.0	2.43	35	19.1	2.74	43	18.0	2.45	34	15.2	1.64
White Sucker	1	17.9	2.51	3	13.7	1.3	--	--	--	--	--	--	1	17.6	2.37
Yellow Bullhead	3	12.7	1.12	1	11.0	0.73	--	--	--	1	10.0	0.55	1	9.1	0.45
Yellow Perch	3	6.6	0.12	87	6.3	0.11	61	6.3	0.11	31	6.0	0.09	16	6.3	0.11

**Table 32 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish
 (continued on following page)**

Species	2007			2006			2005			2004			2003		
	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight
Black Bullhead	--	--	--	--	--	--	2	7.9	0.28	3	9.4	0.63	3	11.3	0.87
Black Crappie	58	7.3	0.22	28	7.3	0.26	11	7.8	0.23	26	7.8	0.25	14	7.6	0.32
Bluegill	482	6.1	0.17	741	5.9	0.16	287	6.0	0.17	417	5.9	0.16	432	5.8	0.15
Bowfin	1	24.6	5.05	--	--	--	1	22.4	3.15	--	--	--	1	20.2	2.54
Common Carp	--	--	--	1	28.7	12.35	--	--	--	4	28.6	11.01	1	28.5	12.57
Brown Bullhead	--	--	--	1	14.0	1.41	--	--	--	1	14.1	--	--	--	--
Green Sunfish	9	4.3	0.05	3	4.3	0.07	--	--	--	--	--	--	--	--	--
Hybrid Sunfish	5	4.8	0.10	14	5.6	0.14	8	6.7	0.24	--	--	--	8	4.7	0.07
Largemouth Bass	--	--	--	--	--	--	--	--	--	--	--	--	1	6.3	0.11
Muskellunge	--	--	--	1	42.1	15.00	1	38.7	16.89	--	--	--	--	--	--
Northern Pike	135	22.2	2.56	76	24.2	3.57	100	23.9	3.22	128	21.4	2.15	148	21.5	2.60
Pumpkinseed	35	4.6	0.08	15	4.9	0.09	10	3.8	0.06	16	4.1	0.06	2	5.3	0.13
Rock Bass	17	7.7	0.38	12	7.4	0.34	3	9.1	0.59	14	7.7	0.39	11	8.3	0.98
Smallmouth Bass	--	--	--	2	12.4	1.17	1	14.4	1.69	--	--	--	2	15.9	1.93
Walleye	51	16.9	1.99	30	17.3	2.20	19	18.4	2.56	24	18.4	2.45	40	15.8	1.77
White Sucker	1	16.1	1.91	--	--	--	--	--	--	--	--	--	1	17.6	2.09
Yellow Bullhead	--	--	--	1	10.0	52.00	--	--	--	2	12.0	0.96	2	12.1	1.03
Yellow Perch	40	6.2	0.09	69	5.9	0.10	92	5.9	0.10	22	5.8	0.09	36	5.6	0.08

Lake: Minnetonka
 Bay/Basin: Lower Lakes

**Table 32 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish
 (continued on following page)**

Species	2002			2001			2000			1999			1998		
	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight
Black Bullhead	5	10.3	0.17	1	9.4	0.48	--	--	--	--	--	--	1	11.3	0.94
Black Crappie	16	8.8	0.38	9	6.7	0.17	28	7.8	0.28	18	8.0	0.32	16	8.0	0.27
Bluegill	455	5.5	0.12	329	5.4	0.13	128	5.1	0.10	208	5.6	0.12	137	6.2	0.17
Bowfin	--	--	--	--	--	--	--	--	--	--	--	--	1	24.0	3.58
Common Carp	--	--	--	--	--	--	1	30.8	13.17	2	28.8	11.00	1	26.2	8.76
Brown Bullhead	1	13.7	1.50	--	--	--	--	--	--	--	--	--	--	--	--
Green Sunfish	1	4.9	0.1	1	5.7	0.13	1	4.6	0.05	--	--	--	--	--	--
Hybrid Sunfish	5	5.3	0.13	--	--	--	1	5.7	0.15	2	5.0	0.09	1	7.2	0.28
Largemouth Bass	--	--	--	2	10.1	0.57	--	--	--	1	8.1	0.24	--	--	--
Muskellunge	1	30.9	6.8	1	27.9	4.63	4	21.6	1.73	--	--	--	1	42.4	17.36
Northern Pike	188	20.0	1.77	192	20.5	1.88	107	20.6	1.90	71	20.7	2.12	68	22.0	2.53
Pumpkinseed	6	4.1	0.06	4	4.3	0.06	2	4.8	0.08	6	5.3	0.11	2	3.8	0.04
Rock Bass	9	8.2	0.48	8	8.4	0.54	5	9.5	0.65	8	8.7	0.55	8	8.6	0.51
Smallmouth Bass	2	16.1	2.05	--	--	--	4	16.9	2.39	2	13.5	1.39	--	--	--
Walleye	63	17.5	2.17	59	17.2	2.04	80	16.0	1.60	100	14.7	1.42	54	16.1	1.59
White Sucker	--	--	--	3	16.3	1.76	--	--	--	--	--	--	3	18.5	2.70
Yellow Bullhead	1	12.4	1.17	1	12.0	0.95	--	--	--	1	12.2	0.95	2	13.6	1.23
Yellow Perch	2	6.4	0.1	16	5.7	0.08	--	--	--	31	6.2	0.09	58	5.7	0.08

Table 32 (continued). Mean Length (in.) and Weight (lbs.) of Gillnet-Sampled Fish

Species	1997			1992		
	No.	Mean Length	Mean Weight	No.	Mean Length	Mean Weight
Black Bullhead	9	8.4	0.38	48	9.7	0.54
Black Crappie	13	7.1	0.22	50	7.5	0.25
Bluegill	2285	6.1	0.18	1573	6.3	0.20
Bowfin	1	20.9	3.31	--	--	--
Common Carp	3	27.4	9.70	4	27.5	11.70
Brown Bullhead	4	13.1	1.09	19	11.0	0.68
Green Sunfish	2	5.7	0.12	2	4.2	0.10
Hybrid Sunfish	8	6.0	0.18	18	5.1	0.13
Largemouth Bass	6	9.3	0.51	8	11.8	0.89
Muskellunge	1	31.1	6.08	--	--	--
Northern Pike	416	21.0	2.12	309	21.3	2.30
Pumpkinseed	23	4.3	0.07	26	4.7	0.10
Rock Bass	36	7.2	0.32	93	6.7	0.26
Smallmouth Bass	4	15.7	2.15	13	14.0	1.61
Walleye	144	17.0	1.76	181	17.2	2.04
White Sucker	2	17.8	2.62	12	17.9	2.55
Yellow Bullhead	36	11.2	0.84	201	11.2	0.79
Yellow Perch	54	5.8	0.08	40	5.9	0.10

Table 33. Length Frequency Distribution of Fish in Gill Nets, 2012

	<u>BLC</u>	<u>BLG</u>	<u>GSF</u>	<u>HSF</u>	<u>NOP</u>	<u>PMK</u>	<u>RKB</u>	<u>SMB</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	1	-	-	-	1	-	-	-	-	-	-
4.00 - 4.49	-	6	2	-	-	1	2	-	-	-	-	-
4.50 - 4.99	-	3	-	2	-	-	-	-	-	-	-	-
5.00 - 5.49	-	10	-	2	-	-	2	-	-	-	-	-
5.50 - 5.99	2	11	-	-	-	1	2	-	-	-	-	-
6.00 - 6.49	1	18	-	-	-	-	-	-	-	-	-	1
6.50 - 6.99	1	31	-	-	-	1	-	-	-	-	-	2
7.00 - 7.49	-	34	-	-	-	-	1	-	-	-	-	-
7.50 - 7.99	1	5	-	-	-	-	2	-	-	-	-	-
8.00 - 8.49	1	-	-	-	-	-	4	-	-	-	-	-
8.50 - 8.99	1	-	-	-	-	-	-	-	-	-	-	-
9.00 - 9.49	2	-	-	-	-	-	-	-	-	-	-	-
9.50 - 9.99	-	-	-	-	-	-	-	-	-	-	-	-
10.00 - 10.49	-	-	-	-	-	-	-	1	-	-	-	-
10.50 - 10.99	1	-	-	-	-	-	-	-	1	-	1	-
11.00 - 11.49	-	-	-	-	-	-	-	-	1	-	-	-
11.50 - 11.99	-	-	-	-	-	-	-	-	1	-	-	-
12.00 - 12.99	-	-	-	-	-	-	-	-	1	-	1	-
13.00 - 13.99	-	-	-	-	2	-	-	-	1	-	-	-
14.00 - 14.99	-	-	-	-	-	-	-	-	-	-	1	-
15.00 - 15.99	-	-	-	-	1	-	-	-	-	-	-	-
16.00 - 16.99	-	-	-	-	4	-	-	-	1	-	-	-
17.00 - 17.99	-	-	-	-	4	-	-	-	3	1	-	-
18.00 - 18.99	-	-	-	-	7	-	-	-	2	-	-	-
19.00 - 19.99	-	-	-	-	8	-	-	-	3	-	-	-
20.00 - 20.99	-	-	-	-	7	-	-	-	3	-	-	-
21.00 - 21.99	-	-	-	-	8	-	-	-	2	-	-	-
22.00 - 22.99	-	-	-	-	3	-	-	-	-	-	-	-
23.00 - 23.99	-	-	-	-	3	-	-	-	-	-	-	-
24.00 - 24.99	-	-	-	-	8	-	-	-	-	-	-	-
25.00 - 25.99	-	-	-	-	5	-	-	-	-	-	-	-
26.00 - 26.99	-	-	-	-	4	-	-	-	-	-	-	-
27.00 - 27.99	-	-	-	-	1	-	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	3	-	-	-	-	-	-	-
29.00 - 29.99	-	-	-	-	3	-	-	-	-	-	-	-
30.00 - 30.99	-	-	-	-	1	-	-	-	-	-	-	-
31.00 - 31.99	-	-	-	-	1	-	-	-	-	-	-	-
32.00 - 32.99	-	-	-	-	-	-	-	-	-	-	-	-
33.00 - 33.99	-	-	-	-	-	-	-	-	-	-	-	-
34.00 - 34.99	-	-	-	-	-	-	-	-	-	-	-	-
35.00 - 35.99	-	-	-	-	-	-	-	-	-	-	-	-
= > 36.00	-	-	-	-	-	-	-	-	-	-	-	-
	<u>BLC</u>	<u>BLG</u>	<u>GSF</u>	<u>HSF</u>	<u>NOP</u>	<u>PMK</u>	<u>RKB</u>	<u>SMB</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
Total	10	119	2	4	73	4	13	1	19	1	3	3
Min. Length	5.75	3.94	4.21	4.61	13.46	3.78	4.21	10.47	10.94	17.87	10.83	6.14
Max. Length	10.83	7.68	4.41	5.43	31.61	6.77	8.43	10.47	21.46	17.87	14.61	6.97
Mean Length	7.93	6.42	4.31	5.00	22.06	5.07	6.67	10.47	17.23	17.87	12.65	6.63
# Measured	10	114	2	4	73	4	13	1	19	1	3	3
No Lengths for	0	6	0	0	1	0	0	0	1	0	0	0

*See Appendix 2 for species abbreviation codes

Table 34. Length-at-Capture of Northern Pike, Walleye, and Yellow Perch Collected in Gill Nets, 2012

Species: Northern Pike
Body-Scale Constant: 2.09
Total Sample Size: 64

Year Class	Age	Sample Size	Length At Capture			Length Increments		
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2011	1	2	13.62	13.78	13.46	0.157	3.84	0.003
2010	2	25	18.60	21.89	15.35	0.331	1.88	0.123
2009	3	14	22.51	26.22	19.88	0.506	1.24	0.102
2008	4	7	24.30	28.54	21.26	0.872	1.22	0.224
2007	5	12	26.41	30.51	20.94	0.815	1.02	0.132
2006	6	3	24.65	28.94	19.80	2.651	0.64	0.151
2005	7	0	-	-	-	-	-	-
2004	8	1	31.61	31.61	31.61	N/A	0.92	N/A

Species: Walleye
Body-Scale Constant: 1.10
Total Sample Size: 18

Year Class	Age	Sample Size	Length At Capture			Length Increments		
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2010	2	5	11.84	13.03	10.98	0.365	2.10	0.446
2009	3	0	-	-	-	-	-	-
2008	4	6	17.90	19.29	16.93	0.369	1.82	0.285
2007	5	1	19.02	19.02	19.02	N/A	1.11	N/A
2006	6	3	20.68	21.46	19.33	0.678	0.75	0.051
2005	7	0	-	-	-	-	-	-
2004	8	1	20.71	20.71	20.71	N/A	0.68	N/A
2003	9	0	-	-	-	-	-	-
2002	10	2	20.04	20.08	20.00	0.039	0.50	0.032

Species: Yellow Perch
Body-Scale Constant: 1.18
Total Sample Size: 3

Year Class	Age	Sample Size	Length At Capture			Length Increments		
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2009	3	2	5.84	6.46	6.77	0.315	0.76	0.139
2008	4	1	6.96	6.97	6.97	N/A	0.45	N/A

Table 35. Length-Frequency Distribution of Largemouth Bass Collected by Night Electrofishing, Spring 2011

<u>Length Group</u>	<u>No.</u>
< 3.00	-
3.00 - 3.49	-
3.50 - 3.99	-
4.00 - 4.49	-
4.50 - 4.99	-
5.00 - 5.49	2
5.50 - 5.99	3
6.00 - 6.49	5
6.50 - 6.99	16
7.00 - 7.49	14
7.50 - 7.99	19
8.00 - 8.49	17
8.50 - 8.99	24
9.00 - 9.49	13
9.50 - 9.99	18
10.00 - 10.49	15
10.50 - 10.99	26
11.00 - 11.49	9
11.50 - 11.99	11
12.00 - 12.99	45
13.00 - 13.99	30
14.00 - 14.99	50
15.00 - 15.99	30
16.00 - 16.99	17
17.00 - 17.99	14
18.00 - 18.99	5
19.00 - 19.99	1
20.00 - 20.99	1
21.00 - 21.99	-
22.00 - 22.99	-
23.00 - 23.99	-
24.00 - 24.99	-
25.00 - 25.99	-
26.00 - 26.99	-
27.00 - 27.99	-
28.00 - 28.99	-
29.00 - 29.99	-
30.00 - 30.99	-
31.00 - 31.99	-
32.00 - 32.99	-
33.00 - 33.99	-
34.00 - 34.99	-
35.00 - 35.99	-
= > 36.00	-

<u>LMB</u>	
Total	385
Min. Length	5.08
Max. Length	20.91
Mean Length	11.79
# Measured	385
<u>No Lengths for</u>	<u>0</u>

Table 36. Size Structure Indices and Condition Metrics for Largemouth Bass Sampled in Spring, 2011

Size Distribution		Relative Weight (Wr)	
PSD	59	S-Q	92
RSD-P	21	Q-P	94
RSD-M	0.3	P-M	99
		Average	95

*Stock (S), Quality (Q), Preferred (P), and Memorable (M) lengths (inches) are, respectively: 8, 12, 15, and 20.

Table 37. Length at Capture of Largemouth Bass Collected by Night Electrofishing, Spring 2011

Species: Largemouth Bass
Body-Scale Constant: 0.79
Total Sample Size: 212

Year Class	Age	Sample Size	Length At Capture			Length Increments		
			Average Length	Maximum Length	Minimum Length	Standard Error	Increment	Standard Error
2009	2	19	6.55	7.64	5.08	0.153	1.35	0.098
2008	3	54	8.25	10.91	5.24	0.163	0.96	0.059
2007	4	49	9.89	13.98	7.80	0.177	0.72	0.039
2006	5	17	11.14	14.65	9.57	0.284	0.59	0.037
2005	6	20	12.87	14.92	11.10	0.230	0.51	0.034
2004	7	14	14.43	15.91	11.61	0.318	0.46	0.039
2003	8	10	14.72	16.22	13.03	0.339	0.48	0.025
2002	9	15	16.70	20.91	14.17	0.378	0.46	0.030
2001	10	8	17.71	18.82	16.34	0.321	0.37	0.033
2000	11	5	17.88	18.98	16.97	0.449	0.43	0.047
1999	12	1	19.69	19.69	19.69	N/A	0.31	N/A

Table 38. Back-Calculated Lengths for Each Age Class and Average Annual Increments of Back-Calculated Lengths of Largemouth Bass Collected by Night Electrofishing, Spring 2011

Class	Age	N	1	2	3	4	5	6	7	8	9	10	11	12
2009	2	19	2.74 2.74	5.20 2.45	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
2008	3	54	2.69 2.69	5.06 2.38	7.29 2.23	- -	- -	- -	- -	- -	- -	- -	- -	- -
2007	4	49	2.61 2.61	5.26 2.65	7.44 2.18	9.17 1.73	- -	- -	- -	- -	- -	- -	- -	- -
2006	5	17	2.52 2.52	4.78 2.25	6.82 2.04	8.87 2.04	10.56 1.69	- -	- -	- -	- -	- -	- -	- -
2005	6	20	2.86 2.86	5.27 2.40	7.74 2.47	9.85 2.12	11.30 1.45	12.36 1.06	- -	- -	- -	- -	- -	- -
2004	7	14	2.92 2.92	5.14 2.22	7.81 2.67	10.04 2.23	11.83 1.79	13.11 1.28	13.97 0.86	- -	- -	- -	- -	- -
2003	8	10	2.52 2.52	4.74 2.22	6.91 2.17	8.99 2.08	10.78 1.79	12.31 1.53	13.41 1.10	14.25 0.84	- -	- -	- -	- -
2002	9	15	2.72 2.72	5.07 2.34	7.47 2.40	9.76 2.29	11.58 1.82	13.14 1.56	14.47 1.33	15.48 1.01	16.24 0.76	- -	- -	- -
2001	10	8	2.69 2.69	5.13 2.44	7.66 2.53	9.98 2.32	12.13 2.15	13.52 1.40	14.77 1.25	15.80 1.03	16.66 0.86	17.34 0.68	- -	- -
2000	11	5	3.10 3.10	5.32 2.22	7.13 1.81	9.16 2.03	11.19 2.03	12.97 1.78	14.15 1.18	15.18 1.03	16.04 0.86	16.85 0.81	17.45 0.60	- -
1999	12	1	2.79 2.79	6.83 4.04	9.75 2.92	12.13 2.38	13.93 1.80	15.05 1.12	16.28 1.23	17.11 0.83	17.85 0.74	18.57 0.72	19.09 0.52	19.37 0.28
Mean Length			2.70	5.12	7.39	9.44	11.33	12.86	14.19	15.23	16.38	17.25	17.73	19.37
Mean Increment			2.70	2.43	2.27	2.01	1.75	1.36	1.13	0.97	0.80	0.73	0.59	0.28
Total N			212	212	193	139	90	73	53	39	29	14	6	1

Appendix 1. Major Boat Launch Locations on Lake Minnetonka

Lake Access

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	County	Open to Public use	Concrete	Spring Park Bay Access.
AC - 2	N/A	Open to Public use	Concrete	Three Rivers Park District-Lake Minnetonka Regional Park.
AC - 3	City	Open to Public use	Concrete	Cook's Bay Access.
AC - 4	DNR	Open to Public use	Concrete	Gray's Bay Access.
AC - 5	DNR	Open to Public use	Concrete	North Arm Access.
AC - 6	DNR	Open to Public use	Concrete	Maxwell Bay Access.
AC - 7	City	Fee/Permit needed	Concrete	Carson's Bay Access.

Appendix 2. Three-Letter Codes for the Abbreviation of Common Fish Names

Common Name	Abbreviation
Black Bullhead	BLB
Black Crappie	BLC
Bluegill	BLG
Bowfin	BOF
Brown Bullhead	BRB
Comon Carp	CAP
Golden Shiner	GOS
Green Sunfish	GSF
Hybrid Sunfish	HSF
Largemouth Bass	LMB
Muskellunge	MUE
Northern Pike	NOP
Pumpkinseed	PMK
Rock Bass	RKB
Smallmouth Bass	SMB
Walleye	WAE
White Crappie	WHC
White Sucker	WTS
Yellow Bullhead	YEB
Yellow Perch	YEP

State of Minnesota
Department of Natural Resources
Division of Fish and Wildlife
Section of Fisheries

Completion Report

Lake Minnetonka

Fisheries Population Assessment—2012

June 18-June 28, 2012

Part of Federal Aid Project F-29-R(P)-30

Compiled by:

B.J. Bauer, Fisheries Specialist

West Metro Fisheries Management Area

Field Sampling Performed by:

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Approved by: _____
Area Fisheries Manager Date

Approved by: _____
Regional Fisheries Manager Date