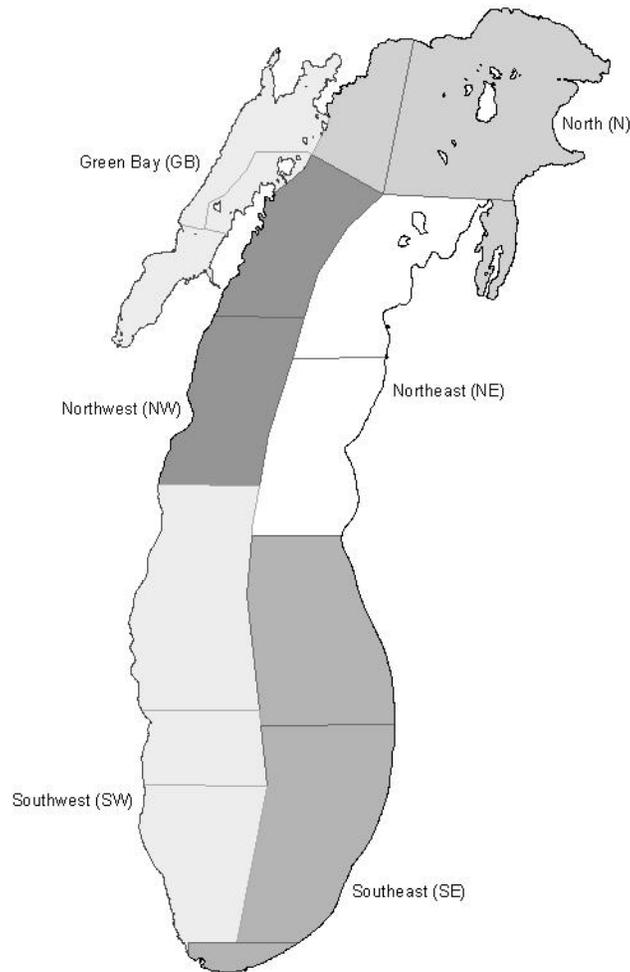


2011 Lake Michigan Recreational Fishery Trends by Region



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Since 1995, Lake Michigan state management agencies have provided standardized recreational fishery creel data which is used to report recreational fishing effort and harvest for seven species of salmonids, walleye, yellow perch and smallmouth bass during the open-water months of April through October. This report summarizes total fishing effort, targeted effort for trout and salmon species and yellow perch, and harvest rates for select species. Harvest rates are also shown in the context of fish stocking numbers to portray trends across regions of Lake Michigan. Species abbreviations used throughout this report are as follows: BKT (brook trout), BNT (brown trout), CHS (Chinook), COS (coho), LAT (lake trout), RBT (rainbow trout), SMB (smallmouth bass), SPL (splake), WAE (walleye) and YEP (yellow perch).

Fishing Effort– Recreational fishing effort totaled 4.8 million angler-hours in 2011. This level of effort is the 2nd lowest (4.6 million angler-hours in 2008) since 1995. Total fishing effort was highest on the western side of Lake Michigan, including Green Bay. In Green Bay, fishing effort was most directed at yellow perch (YEP) and other non-SAT species, presumably walleye. Salmon and trout are primarily targeted in all other areas of Lake Michigan (Figure 1).

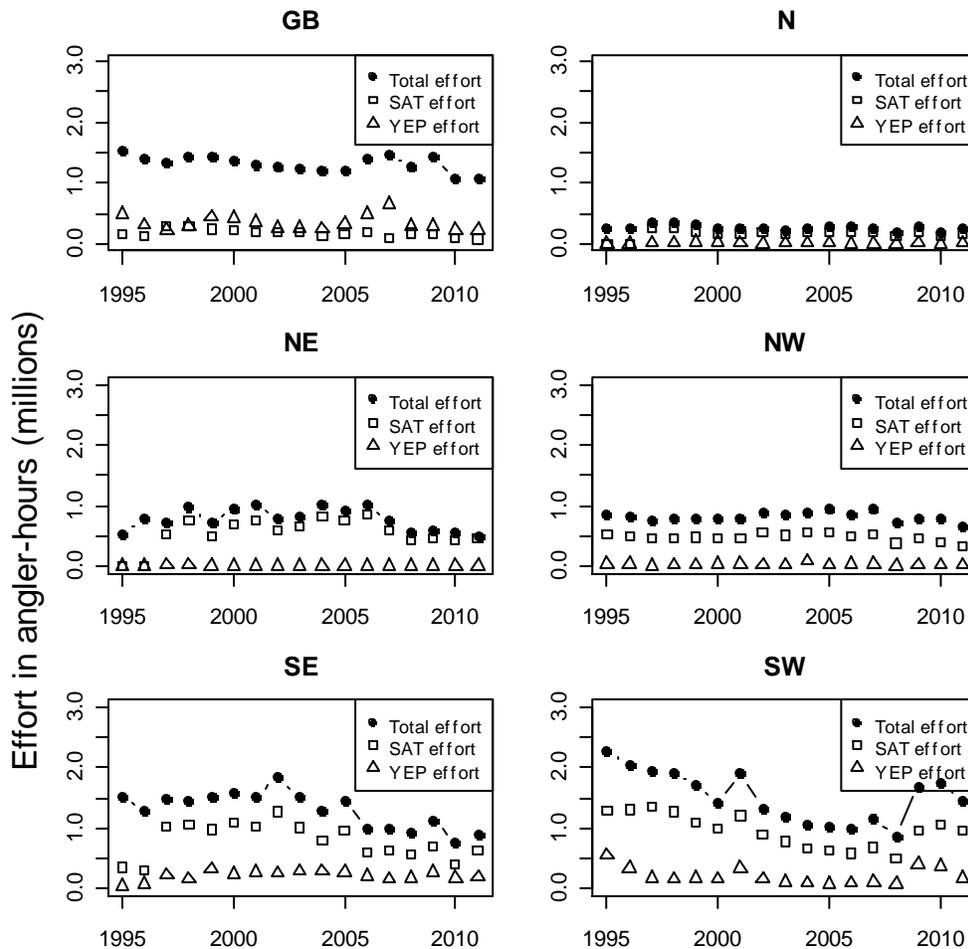


Figure 1. Total fishing effort and targeted effort for yellow perch (YEP) and salmon and trout (SAT) in millions of angler-hours for six regions of Lake Michigan, 1995-2011.

Recreational harvest— Anglers harvested over 1.88 million fish from Lake Michigan in 2011. The number of Chinook salmon harvested in 2011 declined to less than 400,000 fish and was roughly half the harvest levels observed during the peak years of 2005 and 2006. Numbers of coho salmon, lake trout, and rainbow trout harvested were up from recent years. Numbers of fish harvested during the 2011 Lake Michigan recreational fishery are shown in Table 1. More detailed trends for select species are described within this report.

Table 1. Number of fish, by species, harvested by recreational anglers in Lake Michigan, 1995 to 2011.

Year	BKT	BNT	CHS	COS	LAT	RBT	SMB	SPL	WAE	YEP
1995	2,006	92,529	240,257	190,096	189,550	172,728	42,393	8,423	100,169	3,254,560
1996	592	82,508	330,707	254,159	122,752	156,488	60,560	26,504	86,459	2,133,809
1997	355	113,004	277,041	433,027	151,964	163,573	61,650	11,492	58,820	818,069
1998	159	56,136	310,904	256,377	236,150	218,653	32,825	8,568	50,720	709,223
1999	618	67,399	312,113	184,684	106,140	153,463	32,702	4,622	50,122	1,384,318
2000	254	99,657	348,579	350,290	100,748	135,100	23,790	5,271	48,845	882,820
2001	263	49,620	376,038	261,780	102,205	154,762	22,980	2,308	80,646	995,248
2002	178	62,779	534,836	304,773	81,853	153,889	24,722	2,249	65,913	778,297
2003	126	35,905	580,676	154,855	46,883	96,784	25,484	865	47,442	935,838
2004	3	29,368	720,705	142,444	34,068	55,679	24,032	232	49,432	810,790
2005	18	39,953	826,940	113,160	35,340	95,009	13,021	59	31,827	1,239,088
2006	9	23,942	826,149	105,753	35,991	83,822	12,572	12	52,128	1,579,890
2007	62	44,228	773,470	149,652	48,233	94,847	17,757	-	88,341	1,183,060
2008	13	29,481	508,269	78,036	50,604	70,246	12,953	205	68,228	754,707
2009	27	25,157	458,214	164,119	58,055	94,119	14,194	39	99,965	1,471,443
2010	-	25,802	531,170	136,559	60,009	87,247	53,551	-	79,405	908,399
2011	26	15,989	392,877	279,718	75,623	123,163	18,120	0	90,313	876,115

Chinook salmon— Chinook salmon stocking levels were reduced by roughly 25% in 1999, and again in 2006, to address concerns of a dwindling forage base. Hence the number of Chinook stocked declined from 6.5 million in 1995 to 3.2 million in 2011. Chinook salmon harvest has declined since the 2006 stocking reduction and compared to 2010, harvest rates (per angler-hour fished) declined in all Lake Michigan regions except the northern region (Figure 2). Chinook harvest rates were highest in northwestern Lake Michigan at nearly 0.3 chinook per angler-hour in 2011 with no clear correlation between Chinook harvest rates and levels of fish stocking (Figure 3). Such relationships are likely masked by natural reproduction, migrations between stocking regions and possibly Lake Huron, and the response of fishing effort to altered stocking numbers.

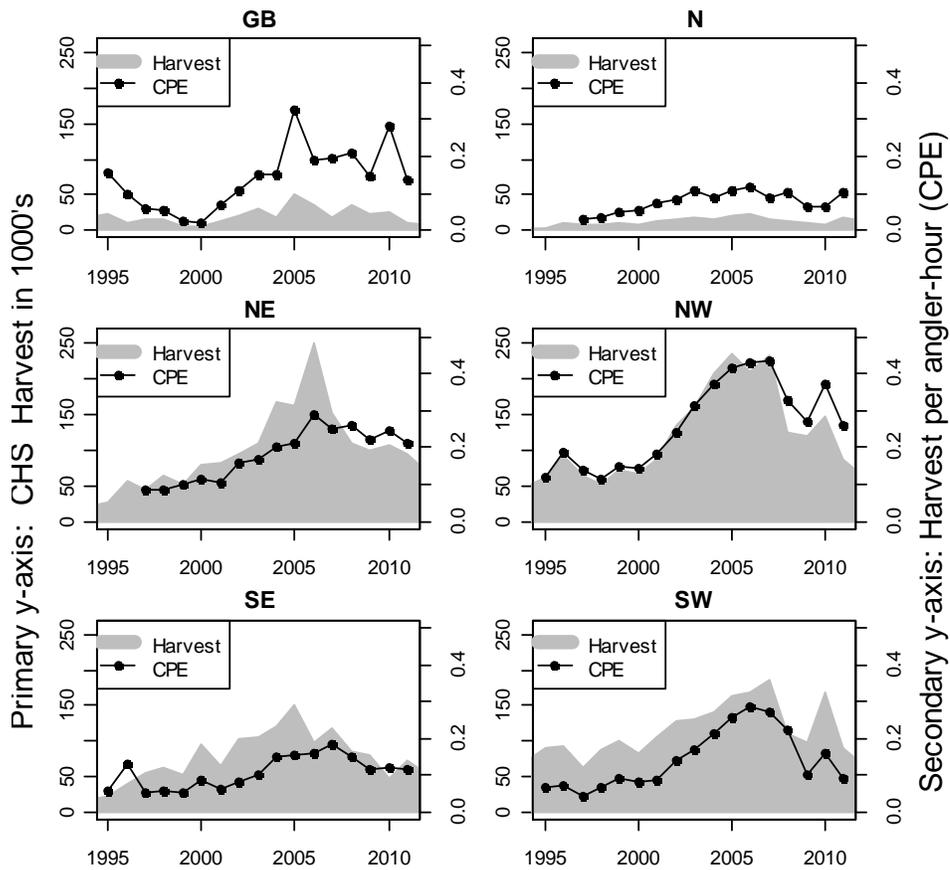


Figure 2, left. Thousands of Chinook salmon harvested (primary y-axis) in the Lake Michigan recreational fishery by region with corresponding harvest per angler-hour of SAT targeted effort (secondary y-axis).

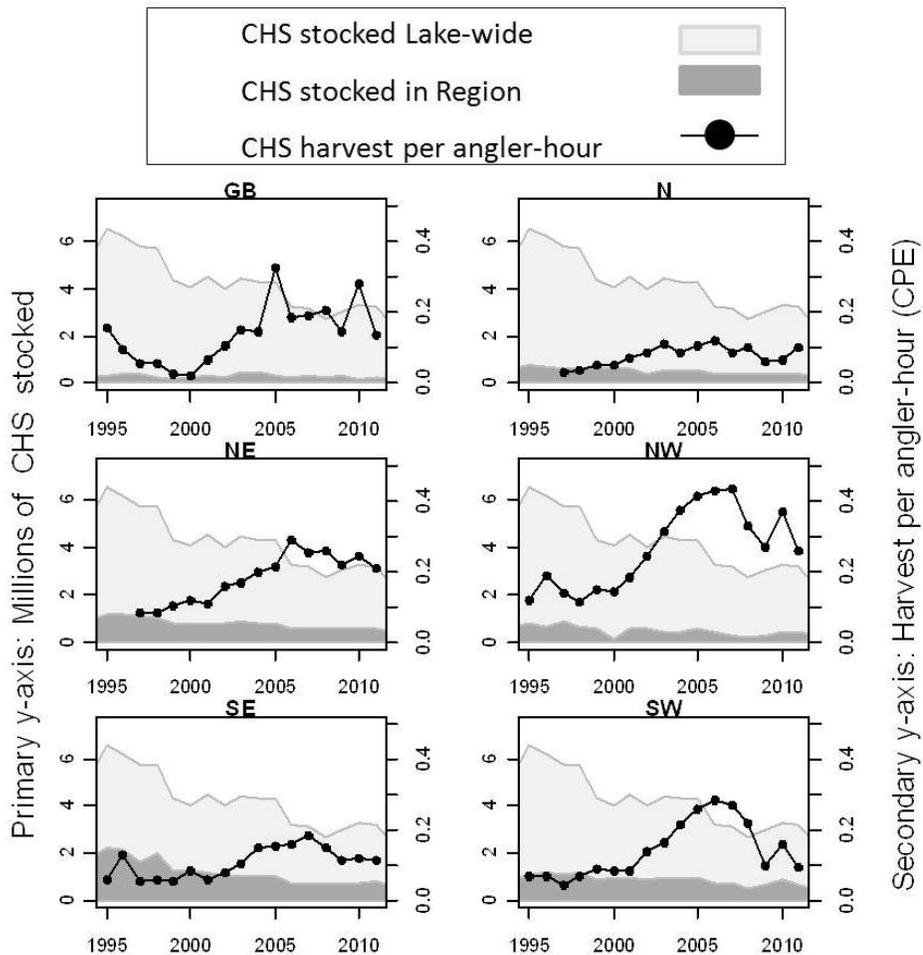
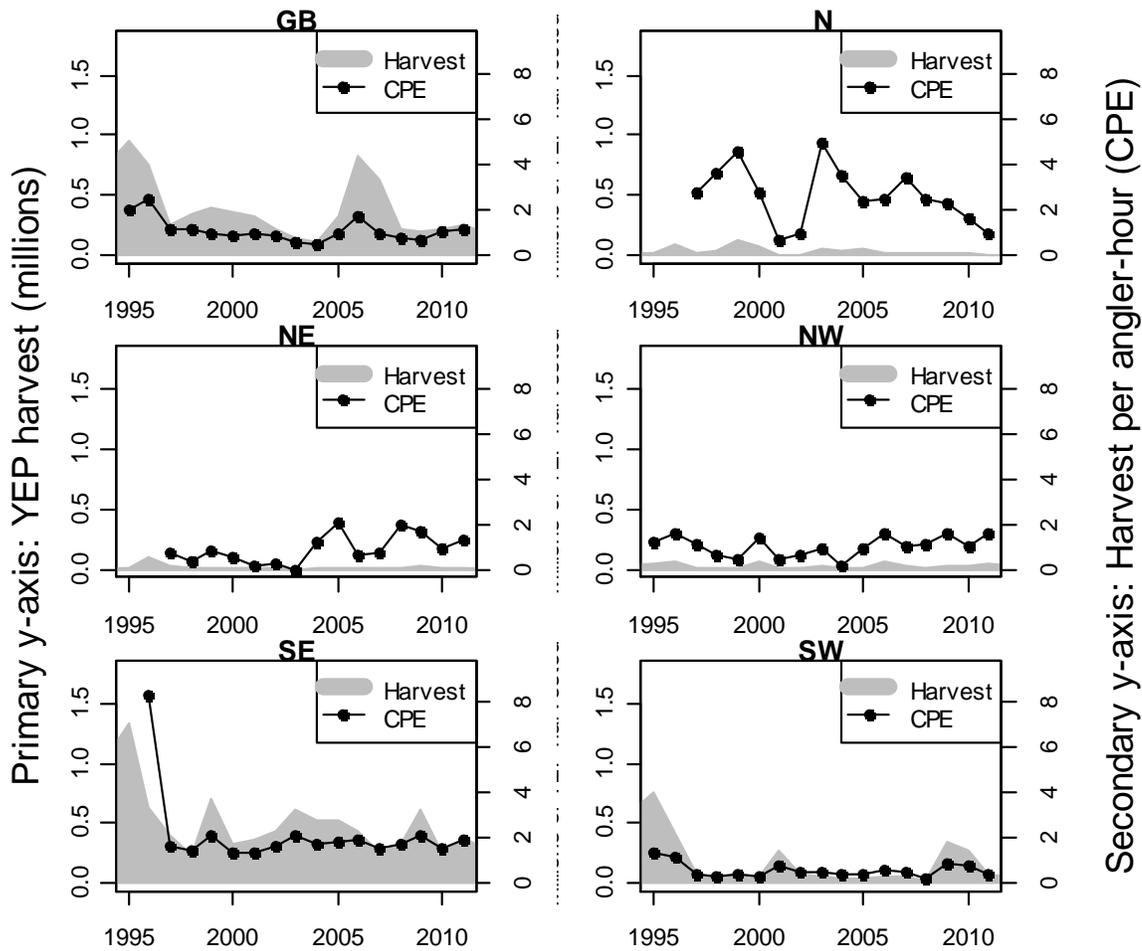


Figure 3, left. The primary y-axis portrays millions of Chinook salmon stocked lake-wide (light gray) and regionally (dark gray). Chinook harvest per angler-hour of SAT targeted effort is plotted on the secondary y-axis.

Yellow perch– Thirty thousand fewer yellow perch were harvested in 2011 compared to 2010, and this is a 40% decline from the 2009 harvest. Generally yellow perch CPE’s were between 1 and 2 fish per angler-hour except for the southwest region where recent harvest rates have declined to less than 0.5 fish per angler-hour.

Figure 4. Millions of yellow perch harvested in the Lake Michigan recreational fishery by region (primary y-axis) with corresponding harvest per angler-hour of YEP targeted effort (secondary y-axis).



Lake trout– Seventy five thousand lake trout were harvested in 2011, roughly double the harvest of 2004 – 2006 levels. Harvest rates are highest in the northern region and approaching 1 lake trout per 10 angler-hours fished (Figure 5). Notably this increased harvest rate coincides with the increase in stocking rates for northern Lake Michigan Reefs. Since 2005, lake trout stocking in this region has ramped up with more than 1.8 million lake trout stocked in northern waters in 2011 (Figure 6).

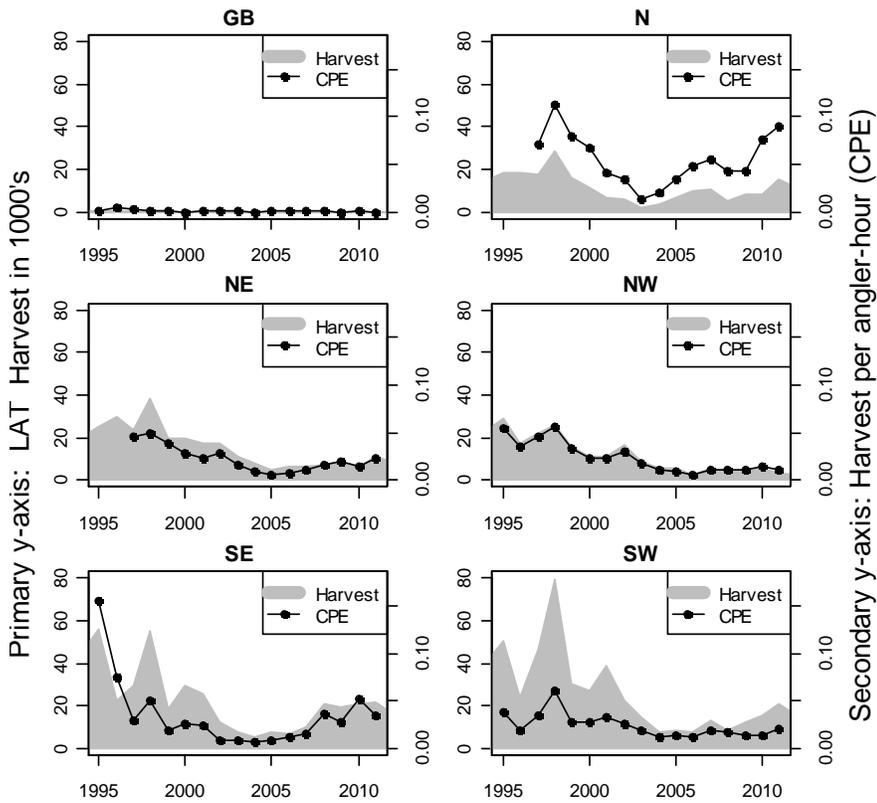


Figure 5, left. Thousands of lake trout harvested in the Lake Michigan recreational fishery by region (primary y-axis) with corresponding harvest per angler-hour of SAT targeted effort (secondary y-axis).

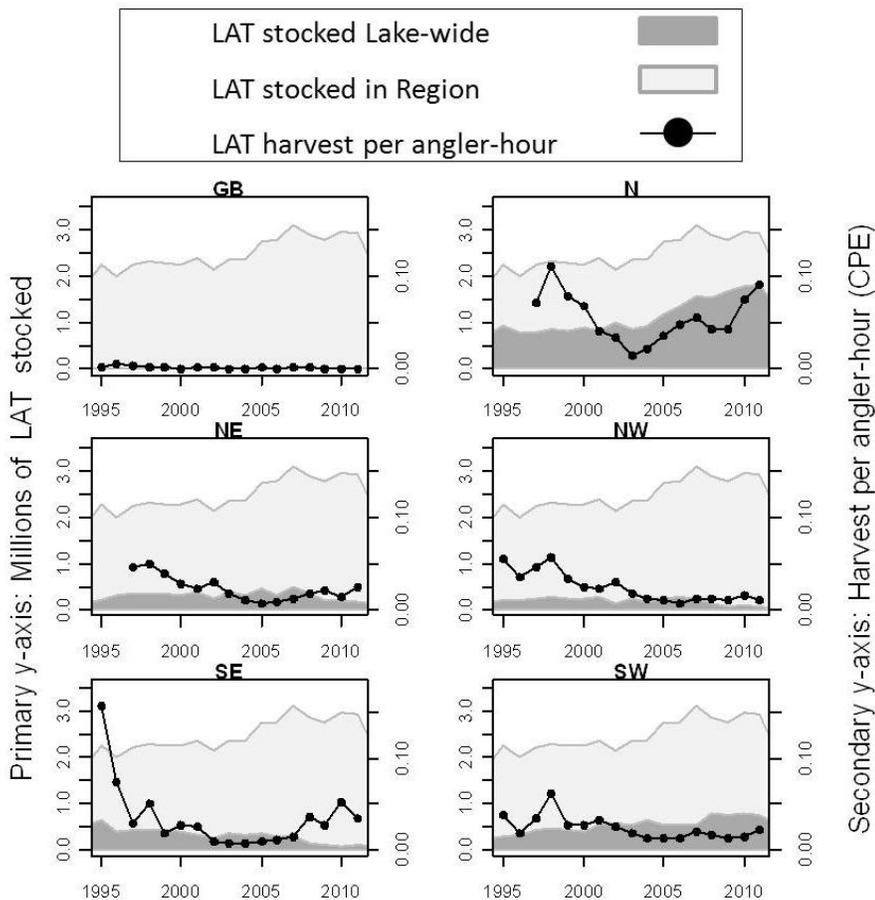


Figure 6, left. The primary y-axis portrays millions of lake trout stocked lake-wide (light gray) and regionally (dark gray). Lake trout harvest per angler-hour of SAT targeted effort is plotted on the secondary y-axis.