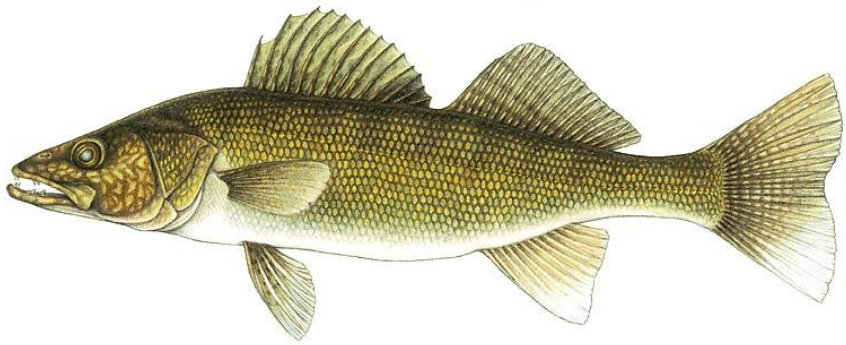
Report for 2024 by the

LAKE ERIE WALLEYE TASK GROUP

March 2025



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***Note**: Data and management summaries contained in this report are provisional. Every effort has been made to ensure their correctness. Contact individual agencies for complete state and provincial data.*

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Charges to the Walleye Task Group, 2024-2025

The charges from the Lake Erie Committee's (LEC) Standing Technical Committee (STC) to the Walleye Task Group (WTG) for the period of April 2024 to March 2025 were to:

1. Maintain and update the centralized time series of datasets:
    a. Required for bi-national population models and assessment and
    b. Produce the annual Recommended Allowable Harvest (RAH)

2. Supply needed technical support throughout the Walleye Management Plan review process.

3. Support LEC walleye management efforts by:
    a. Maintain working knowledge of the most current academic and agency research related to Lake Erie walleye population assessment and modeling including estimating and forecasting:
        i. Abundance
        ii. Age/Size/Spatial Stock structure (migration rates)
        iii. Recruitment and Mortality (M)

4. Work with the LEC/STC and Lake Erie Percid Management Advisory Group (LEPMAG) to provide technical support throughout the Walleye Management Plan review process and support the Quantitative Fisheries Center effort to transition the Walleye model from ADMB to TMB.

Review of Walleye Fisheries in 2024

2024 fishery performance and characteristics

Fishery effort and Walleye harvest data were combined for all fisheries, jurisdictions, and Management Units (MUs) to produce lake-wide summaries (Figure 1). The 2024 total estimated lake-wide harvest was 9.310 million Walleye, of which 8.522 million were harvested in the total allowable catch (TAC) area (Table 1). This TAC-area harvest represents 66% of the 2024 TAC (12.858 million Walleye) and includes Walleye harvested in commercial and sport fisheries in MUs 1-3. An additional 0.788 million Walleye (8% of the lake-wide total) were harvested outside of the TAC area in MUs 4&5 (Table 1).

The estimated sport Walleye harvest was 3.193 million fish in 2024; harvest in 2024 was above the long-term mean (1975-2023 = 2.334 million Walleye; Table 2). The 2024 Ontario angler estimates of harvest and effort were derived from a 2024 lake-wide access point creel survey. A total of 162,000 Walleye were harvested in Ontario within the TAC area, with an additional 14,000 Walleye harvested in MU4-5. Ontario does not conduct annual creel surveys and, as a result, the harvest and effort information is not used in catch-at-age analysis. The estimated harvest in 2024 will be used as the assumed Ontario angler harvest moving forward until another creel is conducted.

The 2024 Ontario commercial harvest was 6.118 million Walleye lake-wide, with 5.764 million caught in the TAC area (Table 2). In 2024, the lake-wide Ontario commercial harvest was above the long-term average (1975-2023 = 2.362 million Walleye; Table 2, Figure 2). Similarly, the TAC area commercial harvest was well above the current Walleye Management Plan's performance metric of at least 4.0 million pounds of commercial yield (2024 TAC area commercial harvest = 13.1 million pounds).

Lake-wide sport fishing effort decreased slightly in 2024 to 3.710 million angler hours. Effort decreased in MUs 1 and 2 but increased in MUs 3 and 4 (Table 3, Figure 3). The 2024 lake-wide average sport harvest per unit effort (HUE) increased substantially to 0.81 Walleye/angler hour, which was tied for the

highest value in the time series and remained above the long-term (1975-2023) mean of 0.46 Walleye/angler hour. The lake-wide sport harvest per angler hour of 0.81 Walleye/angler hour is also well above the current Walleye Management Plan's performance metric of 0.40 Walleye/angler hour (Table 4, Figure 4). In 2024, the sport HUE remained above long-term averages in all MUs (Table 4).

Lake-wide commercial fishing effort increased in 2024 (17,082 km) relative to 2023 (16,619 km) and was below the long-term average (1975-2023 = 18,515 km; Table 3, Figure 5). Commercial effort increased in MUs 2 and 4&5 but decreased in MUs 1 and 3. The total commercial gill net HUE increased in 2024 (358 Walleye/kilometer of gill net) and remained above the long-term (1975-2023) lake-wide average (141 Walleye/kilometer of gill net; Table 4, Figure 4). Commercial gill net harvest rates increased in MUs 1 and 2, and decreased in MUs 3 and 4&5, with all MUs' HUE well above the long-term averages (Table 4).

Lake-wide harvest in the commercial fishery was mostly composed of age 3 Walleye (41%) from the 2021 year class, along with a larger contributions from age 4 (15%) and age 5 (23%) Walleye from the 2020 and 2019 year classes (Table 5; Table 6). The mean age of fish caught in the commercial fishery has remained stable since 2019 and in 2024 (4.05) was near the long-term average (1975-2023 = 3.84; Table 7, Figure 6). Age composition of the lake-wide sport harvest was more variable, with age 3 Walleye (36%; 2021 year class) and age 5 Walleye (23%; 20119 year class) making the largest contributions. Age 4 (13%; 2020 year class) and age 7+ (16%; 2017 year class and older) fish also made sizeable contributions to the sport harvest (Table 6). The mean age of Walleye captured in the sport fishery decreased slightly (4.72) relative to 2023 (5.20) and was above the long-term average (1975-2023 = 4.47; Table 7, Figure 6).

Statistical Catch-at-Age Analysis (SCAA): Abundance

The WTG uses a SCAA model to estimate the abundance of Walleye in Lake Erie from 1978 to 2024. This model estimates population abundance of age 2 and older Walleye using fishery-dependent and fishery-independent data sources, which includes fishery-dependent data from the Ontario commercial fishery (MUs 1-3) and sport fisheries in Ohio (MUs 1-3) and Michigan (MU 1), along with data collected from three fishery-independent gill net surveys (i.e., Ontario Partnership, Michigan, and Ohio).

Summary of 2025 SCAA model results

Based on the 2025 SCAA model, the 2024 west-central population (MUs 1-3) was estimated at 80.9 million age 2 and older Walleye (Table 8, Figure 7). An estimated 20.5 million age 2 (2022 year class) fish comprised 25% of the age 2 and older Walleye population. Fish from the 2021 (age 3) and 2019 (age 5) year classes represented the next most abundant ages. The projected number of age 2 recruits entering the population in 2025 (2023 year class) and 2026 (2024 year class) are 25.1 and 5.2 million Walleye, respectively (Table 9). Age 2 recruitment forecasts were based on August west basin age 0 interagency trawl indices; this survey is integrated within the SCAA model (Table 10). The 2025 abundance of age 2 and older Walleye in the west-central population is projected to be 77.4 million fish, with 52.3 million fish age 3 and older (Table 8; Figure 7).

Harvest Policy and Recommended Allowable Harvest (RAH) for 2025

In March 2025, the WTG applied the following Harvest Control Rule as identified in the Walleye Management Plan (WMP; Kayle et al. 2015; Hartman et al. 2024):

- *Target Fishing Mortality* of **60%** of the fishing mortality Maximum Sustainable Yield (60%F_{MSY});
- Threshold *Limit Reference Point* of **20%** of the Unfished Spawning Stock Biomass (20%SSB_0);

- Probabilistic Control Rule, P-star, P*= **0.05**;
- A limitation on the annual change in TAC of ± **20%**.

Using results from the 2025 SCAA model, the projected abundance of 77.4 million age 2 and older Walleye in 2025, and the harvest policy described above, the calculated mean RAH for 2025 was 11.373 million Walleye, with a range from 9.209 (minimum) to 13.537 (maximum) million Walleye (Table 9). The WTG RAH range estimate is an AD Model Builder (ADMB, Fournier et al. 2012) generated value based on estimating ± one standard deviation of the mean RAH. AD Model Builder uses a statistical technique called the delta method to determine this standard deviation for the calculated RAH, incorporating the standard errors from abundance estimates at age and combined gear selectivity at age. The target fishing rate ($60\%F_{MSY}$ = 0.262) in the harvest policy was applied because the probability ($p < 0.001$) of the projected spawner biomass in 2026 (59.196 million kg; Figure 8) being equal to or below the limit reference point (20% SSB_0 = 13.901 million kg) after fishing at 60% of F_{MSY} in 2025 was less than the P* (0.05). Thus, the probabilistic control rule (P*) to reduce the target fishing rate and conserve spawner biomass was not invoked during the 2025 determination of RAH.

In addition to the RAH, the Harvest Control Rule adopted by LEPMAG limits the annual change in TAC to ± 20% of the previous year's TAC. According to this rule, the maximum change would be ± 20% of the 2024 TAC (12.858 million fish) with a range from 10.286 to 15.430 million Walleye. Because P* was not invoked, the 20% TAC constraints along with the RAH min/max produce a range in 2024 TAC for LEC consideration from 10.286 to 13.537 million Walleye.

Other Walleye Task Group Activities

The following represents WTG progress and developments on Charge 3a and 3b. During 2024–2025, this work focused on *(1) Unaccounted/missing harvest*.

Unaccounted/missing harvest reporting

Within each jurisdiction and management unit, Walleye harvest occurs that is presently unaccounted for in the current SCAA model and not incorporated into the lake-wide harvest summary. The reason for this information being excluded from the current SCAA model is multifaceted. In the TAC area, several angler creel surveys are historically sporadic while other creel surveys lack the age structure data needed for use by the current model. East basin creel and commercial harvest data are excluded from the SCAA model because harvest occurs outside of the TAC area. Although genetic and telemetry analyses have been informative, there remains uncertainty regarding the proportion of west/central migrants in the east basin harvest. To address these deficiencies, the WTG began to document unaccounted harvest in its 2024 annual report by compiling current and historical Walleye harvest data from previously overlooked sources and leveraging new research to estimate harvests from mixed stock fisheries, such as those occurring in the east basin (WTG 2024). Here, we report 2024 estimates of walleye harvest that is not presently accounted for in the SCAA model or included in annual harvest summaries.

Tributary fisheries for Walleye, which typically occur during the spring spawn, are an additional source of Walleye harvest. In Ohio, spring fisheries in the Maumee and Sandusky rivers have been assessed annually since 2001 and periodically back to 1975. In 2024, a total of 50,934 and 8,329 Walleye were harvested in the Maumee and Sandusky Rivers, respectively. Harvest in the Detroit River is monitored periodically by Michigan and Ontario using creel surveys that last occurred in 2022 (Michigan) and 2023 (Ontario). Additionally, Michigan requires charter fishers to report harvest in Michigan waters of both Lake Erie and its connecting waters (i.e., Detroit River, Lake St. Clair, and St. Clair River), which accounted for an additional 35,796 Walleye from the Detroit River, 11,480 Walleye from Lake St. Clair,

and 1,857 Walleye from the St. Clair River in 2024. New York also supports a nighttime fishery during the spring spawning period, and in 2024 these anglers harvested an estimated 5,862 Walleye.

Ohio's creel survey also estimates harvest by anglers who leave from Ohio ports but harvest fish in other jurisdictions. In 2024, these estimates included 3,396 Walleye from Michigan, 60,384 Walleye in Ontario, and 2,291 Walleye in Pennsylvania waters of Lake Erie.

During the 2024-2025 winter, Lake Erie experienced its highest maximum ice cover since 2015. This allowed for an ice fishery to develop around the Bass Islands and nearshore areas in Ohio waters of the western basin. Harvest was not assessed due to the unpredictable nature of fishable ice formation on Lake Erie in recent decades.

WTG Centralized Datasets

WTG members currently manage several databases that consist of fishery-dependent and fishery-independent surveys conducted by the respective agencies. Annually, data are compiled by WTG members to form spatially-explicit versions of agency-specific harvest data (e.g., harvest-at-age and fishery effort by management unit) and population assessment (e.g., the interagency trawl program and gill net surveys) databases. These databases are used for trends and status evaluations, estimating population abundance, and to inform the decision-making process regarding RAH. Ultimately, annual population abundance estimates are used to assist LEC members with setting TACs for the upcoming year and evaluate past harvest policy decisions. Use of WTG databases by non-members is only permitted following a specific protocol established in 1994, described in the 1994 WTG Report and reprinted in the 2003 WTG Report (WTG 2003).

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Table 1. Annual Lake Erie walleye total allowable catch (TAC, top) and measured harvest (Har; bottom, bold), in numbers of fish from 2014 to 2024. TAC allocations are based on water area: Ohio, 51.11%; Ontario, 43.06%; and Michigan, 5.83% (Standing Technical Committee 2007). New York and Pennsylvania do not have assigned quotas, but are included in annual total harvest.

		TAC Area (MU-1, MU-2, MU-3)				Non-TAC Area (MUs 4&5)				All Areas
Year		Michigan	Ohio	Ontario [a]	Total	NY	Penn.	Ontario	Total	Total
2014	TAC	234,774	2,058,200	1,734,026	4,027,000				0	4,027,000
	Har	**42,142**	**1,303,133**	**1,324,201**	**2,669,476**	**61,982**	**84,843**	**52,675**	**199,500**	**2,868,977**
2015	TAC	239,846	2,102,665	1,771,488	4,114,000				0	4,114,000
	Har	**65,740**	**1,073,263**	**1,382,600**	**2,521,603**	**55,201**	**46,523**	**89,882**	**191,606**	**2,713,209**
2016	TAC	287,827	2,523,301	2,125,872	4,937,000				0	4,937,000
	Har	**65,816**	**855,820**	**1,959,573**	**2,881,209**	**50,963**	**32,937**	**112,743**	**196,643**	**3,077,852**
2017	TAC	345,369	3,027,756	2,550,874	5,924,000				0	5,924,000
	Har	**56,938**	**1,261,327**	**3,232,817**	**4,551,082**	**70,010**	**162,949**	**129,217**	**362,176**	**4,913,258**
2018	TAC	414,455	3,633,410	3,061,135	7,109,000				0	7,109,000
	Har	**176,089**	**1,972,295**	**3,478,713**	**5,627,097**	**123,503**	**270,189**	**263,204**	**656,896**	**6,283,993**
2019	TAC	497,357	4,360,194	3,673,449	8,531,000				0	8,531,000
	Har	**153,171**	**2,558,359**	**3,362,053**	**6,073,583**	**174,466**	**419,975**	**229,466**	**823,907**	**6,897,490**
2020	TAC	596,817	5,232,131	4,408,052	10,237,000				0	10,237,000
	Har	**191,490**	**1,973,038**	**3,680,335**	**5,844,863**	**84,615**	**208,760**	**243,175**	**536,550**	**6,381,413**
2021	TAC	716,000	6,278,352	5,289,490	12,284,000				0	12,284,000
	Har	**177,948**	**2,492,386**	**4,940,829**	**7,611,163**	**43,772**	**145,261**	**186,192**	**375,225**	**7,986,388**
2022	TAC	847,274	7,427,816	6,257,910	14,533,000				0	14,533,000
	Har	**114,465**	**2,581,307**	**6,047,336**	**8,743,108**	**75,774**	**232,780**	**217,116**	**525,670**	**9,268,777**
2023	TAC	788,566	6,913,139	5,824,296	13,526,000				0	13,526,000
	Har	**142,619**	**2,089,520**	**5,680,932**	**7,913,071**	**80,582**	**239,353**	**308,428**	**628,363**	**8,541,434**
2024	TAC	749,621	6,571,724	5,536,655	12,858,000				0	12,858,000
	Har	**135,921**	**2,460,453**	**5,925,663**	**8,522,037**	**102,152**	**318,220**	**368,075**	**788,447**	**9,310,484**

[a] Ontario sport harvest values from 2014 to 2023 were estimated from the 2014 lake-wide aerial creel survey. Ontario sport harvest values in 2024 were estimated fror lake-wide access point creel survey. These values are included in Ontario's total walleye harvest, but are not used in catch-at-age analysis.

Table 2. Annual harvest (thousands of fish) of Lake Erie walleye by gear, management unit, and agency from 2014 to 2024. Means contain data from 1975 to 2023.

	Sport Fishery														Commercial Fishery					
	Unit 1				Unit 2			Unit 3			Units 4 & 5					Unit 1	Unit 2	Unit 3	Unit 4		Grand
Year	OH	MI	ON[a]	Total	OH	ON[a]	Total	OH	ON[a]	Total	ON[a]	PA	NY	Total	Total	ON	ON	ON	ON	Total	Total
2014	909	42	45	996	177	13	190	218	13	231	13	85	62	160	1,577	756	259	238	40	1,292	2,869
2015	746	66	45	857	187	13	200	140	13	153	13	47	55	115	1,325	633	354	325	77	1,388	2,713
2016	577	66	45	688	139	13	152	140	13	153	13	33	51	97	1,090	946	594	348	100	1,988	3,078
2017	592	57	45	694	316	13	330	353	13	367	13	163	70	246	1,636	1,735	918	508	116	3,277	4,913
2018	955	176	45	1,177	666	13	679	351	13	365	13	270	124	407	2,627	1,523	1,433	451	250	3,657	6,284
2019	1,297	153	45	1,495	947	13	960	314	13	328	13	420	174	607	3,391	1,666	1,237	387	217	3,507	6,897
2020	537	191	45	774	908	13	921	528	13	541	13	209	85	306	2,543	1,938	1,185	486	230	3,839	6,381
2021	1,318	178	45	1,541	810	13	824	364	13	377	13	145	44	202	2,944	2,750	1,375	745	173	5,042	7,986
2022	1,298	114	45	1,458	771	13	784	513	13	526	13	233	76	321	3,089	3,222	1,976	778	204	6,180	9,269
2023	1,099	143	45	1,287	677	13	690	313	13	326	13	239	81	333	2,636	2,981	1,556	1,073	295	5,905	8,541
2024	979	136	25	1,140	732	76	808	749	61	810	14	318	102	435	3,193	2,724	2,201	839	354	6,118	9,311
Mean	1,421	238	41	1,701	333	11	340	201	12	211	9	109	49	103	2,334	1,486	572	343	85	2,362	4,696

[a] Ontario sport harvest values from 2014 to 2023 were estimated from the 2014 lake-wide aerial creel survey. Ontario sport harvest values in 2024 were estimated from a lake-wide access point creel survey. These values are included in Ontario's total walleye harvest, but are not used in catch-at-age analysis.

Table 3. Annual fishing effort for Lake Erie walleye by gear, management unit, and agency from 2014 to 2024. Means contain data from 1975 to 2023.

	Sport Fishery [a]															Commercial Fishery [b]				
	Unit 1				Unit 2			Unit 3			Units 4 & 5					Unit 1	Unit 2	Unit 3	Units 4&5	
Year	OH	MI	ON [c,d]	Total	OH	ON [c,d]	Total	OH	ON [c,d]	Total	ON [c,d]	PA	NY	Total	Total	ON	ON	ON	ON	Total
2014	1,552	131	101	1,683	459	85	459	441	71	441	70	171	187	358	2,940	7,351	4,426	2,911	254	14,943
2015	1,430	165	--	1,595	564	--	564	341	--	341	--	162	215	377	2,876	6,980	6,487	5,379	792	19,637
2016	1,514	236	--	1,750	439	--	439	397	--	397	--	141	217	358	2,944	6,980	7,969	4,523	1,448	20,920
2017	1,351	187	--	1,538	726	--	726	501	--	501	--	228	213	441	3,207	8,056	7,239	3,636	1,527	20,458
2018	1,239	261	--	1,500	813	--	813	354	--	354	--	248	229	477	3,144	5,215	7,421	2,636	1,896	17,168
2019	1,739	265	--	2,004	1,036	--	1,036	307	--	307	--	439	297	736	4,083	4,165	6,365	2,402	1,353	14,285
2020	1,111	301	--	1,413	1,511	--	1,511	659	--	659	--	395	279	674	4,257	5,759	6,576	3,049	1,738	17,122
2021	2,148	325	--	2,473	1,430	--	1,430	584	--	584	--	258	183	441	4,928	7,279	6,528	3,168	1,236	18,212
2022	1,891	275	--	2,166	1,219	--	1,219	498	--	498	--	306	224	530	4,412	7,017	7,013	2,642	924	17,596
2023	1,855	266	--	2,121	1,018	--	1,018	376	--	376	--	285	198	483	3,998	6,691	6,000	2,965	963	16,619
2024	1,352	249	52	1,601	944	147	944	651	108	651	74	303	211	514	3,710	5,904	6,827	2,873	1,478	17,082
Mean	2,754	618	102	3,426	799	62	812	423	111	450	106	233	231	303	4,946	8,502	5,746	4,260	831	18,515

[a] Ohio, Michigan, Pennsylvania and New York sport units of effort are thousands of angler hours.

[b] Estimated Standard (Total) Effort in kilometers of gill net = (walleye targeted effort x walleye total harvest) / walleye targeted harvest.

[c] Ontario sport effort values were estimated with a lake-wide aerial (2014) and access point (2024) creel surveys. Values are in thousands of rod hours

[d] Ontario sport fishing effort is not included in area and lake-wide totals due to effort reporting in rod hours

Table 4. Annual catch per unit effort for Lake Erie walleye by gear, management unit, and agency from 2014-2024. Means contain data from 1975 to 2023.

	Sport Fishery [a]															Commercial Fishery [b]				
	Unit 1				Unit 2			Unit 3			Units 4 & 5					Unit 1	Unit 2	Unit 3	Unit 4	
Year	OH	MI	ON [c,d]	Total	OH	ON [c,d]	Total	OH	ON [c,d]	Total	ON [c,d]	PA	NY	Total	Total	ON	ON	ON	ON	Total
2014	0.59	0.32	0.45	0.56	0.39	0.16	0.39	0.49	0.19	0.49	0.18	0.50	0.33	0.41	0.51	102.8	58.4	81.8	156.8	86.5
2015	0.52	0.40	--	0.51	0.33	--	0.33	0.41	--	0.41	--	0.29	0.26	0.27	0.43	90.6	54.5	60.3	97.3	70.7
2016	0.38	0.28	--	0.37	0.32	--	0.32	0.35	--	0.35	--	0.23	0.23	0.23	0.34	135.5	74.6	77.0	69.0	95.0
2017	0.44	0.30	--	0.42	0.44	--	0.44	0.70	--	0.70	--	0.71	0.33	0.53	0.48	215.3	126.9	139.6	76.2	160.2
2018	0.77	0.67	--	0.75	0.82	--	0.82	0.99	--	0.99	--	1.09	0.54	0.83	0.81	292.0	193.1	171.0	132.0	213.0
2019	0.75	0.58	--	0.72	0.91	--	0.91	1.02	--	1.02	--	0.96	0.59	0.81	0.81	399.9	194.4	161.3	160.1	245.5
2020	0.48	0.64	--	0.52	0.60	--	0.60	0.80	--	0.80	--	0.53	0.30	0.44	0.58	336.5	180.2	159.3	132.5	224.2
2021	0.61	0.55	--	0.60	0.57	--	0.57	0.62	--	0.62	--	0.56	0.24	0.43	0.58	377.7	210.6	235.0	140.1	276.9
2022	0.69	0.42	--	0.65	0.63	--	0.63	1.03	--	1.03	--	0.76	0.34	0.58	0.68	459.1	281.8	294.3	221.0	351.2
2023	0.59	0.54	--	0.59	0.67	--	0.67	0.83	--	0.83	--	0.84	0.41	0.66	0.64	445.5	259.3	361.9	306.3	355.3
2024	0.72	0.55	0.48	0.70	0.78	0.52	0.78	1.15	0.56	1.15	0.20	1.05	0.48	0.82	0.81	461.4	322.4	292.0	239.5	358.2
Mean	0.50	0.39	0.40	0.48	0.38	0.26	0.38	0.46	0.19	0.45	0.11	0.43	0.21	0.30	0.46	197.9	103.7	94.5	95.2	140.5

[a] Ohio, Michigan, Pennsylvania and New York sport CPE = Number/angler hour

[b] Commercial CPE = Number/kilometer of gill net

[c] Ontario sport fishing CPE was estimated from the 2024 lake-wide access point creel survey values are in number/rod hour

[d] Ontario sport fishing CPE is not included in area and lake-wide totals due to effort reporting in rod hours

Table 5. Catch at age of walleye harvest by management unit, gear, and agency in Lake Erie during 2024. Units 4 and 5 are combined in Unit 4.

		Commercial	Sport					All Gear
Unit	Age	Ontario	Ohio	Michigan	New York	Pennsylvania	Total	Total
1	1	54,218	0	0			0	54,218
	2	233,744	35,623	5,776			41,399	275,143
	3	970,919	368,285	22,259			390,544	1,361,463
	4	305,615	121,376	30,343			151,719	457,334
	5	766,516	230,805	29,605			260,410	1,026,926
	6	185,008	79,172	13,988			93,160	278,168
	7+	208,109	143,867	33,951			177,818	385,927
	Total	2,724,129	979,128	135,922	--	--	1,115,050	3,839,179
2	1	6,248	0				0	6,248
	2	93,294	38,028				38,028	131,322
	3	1,084,029	314,593				314,593	1,398,622
	4	431,684	94,003				94,003	525,687
	5	401,319	148,538				148,538	549,857
	6	70,191	62,855				62,855	133,046
	7+	114,284	74,057				74,057	188,341
	Total	2,201,049	732,074	--	--	--	732,074	2,933,123
3	1	1,971	0				0	1,971
	2	174,731	35,326				35,326	210,057
	3	358,683	262,705				262,705	621,388
	4	89,115	83,779				83,779	172,894
	5	113,889	179,449				179,449	293,338
	6	42,187	68,084				68,084	110,271
	7+	58,097	119,908				119,908	178,005
	Total	838,673	749,251	--	--	--	749,251	1,587,924
4	1	1,171				0	0	1,171
	2	57,187			0	0	0	57,187
	3	73,317			21,892	108,444	130,336	203,653
	4	62,423			17,542	42,666	60,208	122,631
	5	96,678			28,307	79,111	107,418	204,096
	6	26,005			4,718	23,111	27,829	53,834
	7+	36,908			29,692	64,888	94,580	131,488
	Total	353,689	--	--	102,151	318,220	420,371	774,060
All	1	63,608	0	0	0	0	0	63,608
	2	558,956	108,977	5,776	0	0	114,753	673,709
	3	2,486,948	945,583	22,259	21,892	108,444	1,098,178	3,585,126
	4	888,837	299,158	30,343	17,542	42,666	389,709	1,278,546
	5	1,378,402	558,792	29,605	28,307	79,111	695,815	2,074,217
	6	323,391	210,111	13,988	4,718	23,111	251,928	575,319
	7+	417,398	337,832	33,951	29,692	64,888	466,363	883,761
	Total	6,117,540	2,460,453	135,922	102,151	318,220	3,016,746	9,134,286

Table 6. Age composition (in percent) of walleye harvest by management unit, gear, and agency in Lake Erie during 2024. Units 4 and 5 are combined in Unit 4.

		Commercial	Sport					All Gears
Unit	Age	Ontario	Ohio	Michigan	New York	Pennsylvania	Total	Total
1	1	2.0	0.0	0.0	--	--	0.0	1.4
	2	8.6	3.6	4.2	--	--	3.7	7.2
	3	35.6	37.6	16.4	--	--	35.0	35.5
	4	11.2	12.4	22.3	--	--	13.6	11.9
	5	28.1	23.6	21.8	--	--	23.4	26.7
	6	6.8	8.1	10.3	--	--	8.4	7.2
	7+	7.6	14.7	25.0	--	--	15.9	10.1
	Total	100.0	100.0	100.0	--	--	100.0	100.0
2	1	0.3	0.0	--	--	--	0.0	0.2
	2	4.2	5.2	--	--	--	5.2	4.5
	3	49.3	43.0	--	--	--	43.0	47.7
	4	19.6	12.8	--	--	--	12.8	17.9
	5	18.2	20.3	--	--	--	20.3	18.7
	6	3.2	8.6	--	--	--	8.6	4.5
	7+	5.2	10.1	--	--	--	10.1	6.4
	Total	100.0	100.0	--	--	--	100.0	100.0
3	1	0.2	0.0	--	--	--	0.0	0.1
	2	20.8	4.7	--	--	--	4.7	13.2
	3	42.8	35.1	--	--	--	35.1	39.1
	4	10.6	11.2	--	--	--	11.2	10.9
	5	13.6	24.0	--	--	--	24.0	18.5
	6	5.0	9.1	--	--	--	9.1	6.9
	7+	6.9	16.0	--	--	--	16.0	11.2
	Total	100.0	100.0	--	--	--	100.0	100.0
4	1	0.3	--	--	0.0	0.0	0.0	0.2
	2	16.2	--	--	0.0	0.0	0.0	7.4
	3	20.7	--	--	21.4	34.1	31.0	26.3
	4	17.6	--	--	17.2	13.4	14.3	15.8
	5	27.3	--	--	27.7	24.9	25.6	26.4
	6	7.4	--	--	4.6	7.3	6.6	7.0
	7+	10.4	--	--	29.1	20.4	22.5	17.0
	Total	100.0	--	--	100.0	100.0	100.0	100.0
All	1	1.0	0.0	0.0	0.0	0.0	0.0	0.7
	2	9.1	4.4	4.2	0.0	0.0	3.8	7.4
	3	40.7	38.4	16.4	21.4	34.1	36.4	39.2
	4	14.5	12.2	22.3	17.2	13.4	12.9	14.0
	5	22.5	22.7	21.8	27.7	24.9	23.1	22.7
	6	5.3	8.5	10.3	4.6	7.3	8.4	6.3
	7+	6.8	13.7	25.0	29.1	20.4	15.5	9.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 7. Annual mean age (years) of Lake Erie walleye by gear, management unit, and agency from 2014 to 2024. Means include data from 1975 to 2023.

	Sport Fishery														Commercial Fishery					All Gears
	Unit 1				Unit 2			Unit 3			Units 4 & 5					Unit 1	Unit 2	Unit 3	Unit 4		
Year	OH	MI	ON	Total	OH	ON	Total	OH	ON	Total	ON	PA	NY	Total	Total	ON	ON	ON	ON	Total	Total
2014	5.79	6.05	--	5.80	7.13	--	7.13	8.30	--	8.30	--	8.29	8.00	8.17	6.57	5.26	5.80	8.29	8.35	6.02	6.31
2015	6.23	5.85	--	6.20	6.88	--	6.88	8.73	--	8.73	--	7.43	8.29	7.89	6.74	4.57	6.30	8.58	8.08	6.14	6.42
2016	5.17	4.98	--	5.15	5.46	--	5.46	6.91	--	6.91	--	7.48	8.06	7.83	5.68	3.25	4.07	4.97	8.69	4.07	4.61
2017	4.54	4.39	--	4.52	3.52	--	3.52	3.67	--	3.67	--	4.17	5.68	4.63	4.14	2.90	2.65	2.86	5.86	2.93	3.32
2018	3.91	3.73	--	3.88	3.56	--	3.56	3.95	--	3.95	--	4.09	4.92	4.35	3.88	3.25	3.18	3.18	4.19	3.28	3.53
2019	4.36	4.12	--	4.33	4.37	--	4.37	4.53	--	4.53	--	4.70	5.10	4.82	4.45	3.82	3.99	3.86	4.29	3.91	4.17
2020	NA	NA	--	--	NA	--	--	NA	--	--	--	4.95	6.05	5.27	NA	3.83	4.11	4.12	3.63	3.94	NA
2021	5.05	5.16	--	5.06	4.54	--	4.54	4.65	--	4.65	--	4.59	5.99	4.91	4.85	4.21	4.32	3.11	3.38	4.05	4.34
2022	4.82	4.65	--	4.80	4.62	--	4.62	5.03	--	5.03	--	4.26	5.47	4.56	4.77	3.79	3.81	3.66	3.42	3.77	4.10
2023	5.13	4.84	--	5.10	4.99	--	4.99	5.38	--	5.38	--	5.84	5.90	5.86	5.20	4.23	4.08	3.36	3.14	3.98	4.35
2024	4.66	5.49	4.45	4.75	4.33	4.31	4.33	4.76	5.14	4.79	7.90	5.07	5.78	5.33	4.73	4.20	3.92	3.74	4.41	4.05	4.27
Mean	4.26	3.95	--	4.21	4.50	--	4.51	5.45	--	5.46	--	6.28	7.16	6.69	4.47	3.63	3.87	4.77	6.16	3.84	4.09

Table 8. Estimated abundance at age, survival (S), fishing mortality (F) and exploitation (u) for Lake Erie walleye, 1988-2025 (from ADMB 2025 catch at age analysis recruitment integrated model, M=0.32).

	Age							Ages 2+		
Year	2	3	4	5	6	7+	Total	S	F	u
1988	55,894,000	16,017,000	10,456,300	1,685,690	13,259,300	2,685,260	99,997,550	0.640	0.127	0.102
1989	11,580,500	37,163,900	9,818,580	6,249,180	1,019,420	9,703,550	75,535,130	0.635	0.134	0.108
1990	10,147,600	7,827,600	23,473,500	6,081,890	3,912,920	6,673,870	58,117,380	0.641	0.124	0.100
1991	5,187,920	6,915,400	4,995,090	14,767,900	3,863,790	6,726,800	42,456,900	0.652	0.108	0.088
1992	16,678,100	3,571,350	4,487,290	3,208,560	9,552,530	6,850,610	44,348,440	0.647	0.116	0.094
1993	22,374,100	11,315,800	2,248,970	2,789,020	2,013,410	10,322,800	51,064,100	0.623	0.153	0.122
1994	3,602,780	14,792,100	6,719,580	1,314,970	1,654,840	7,326,370	35,410,640	0.611	0.172	0.136
1995	18,695,400	2,405,190	8,946,000	4,015,240	798,085	5,477,140	40,337,055	0.618	0.161	0.128
1996	21,241,300	12,299,500	1,401,730	5,154,830	2,356,660	3,710,590	46,164,610	0.596	0.197	0.154
1997	2,429,290	13,649,600	6,813,770	764,997	2,877,890	3,420,610	29,956,157	0.585	0.216	0.167
1998	22,241,000	1,591,810	7,902,320	3,893,100	445,178	3,693,850	39,767,258	0.599	0.193	0.151
1999	10,902,300	14,221,800	870,732	4,260,060	2,149,550	2,307,720	34,712,162	0.614	0.168	0.133
2000	10,119,000	7,211,050	8,390,480	508,231	2,532,600	2,673,290	31,434,651	0.625	0.150	0.120
2001	31,660,700	6,764,000	4,356,970	5,021,820	309,537	3,198,030	51,311,057	0.677	0.070	0.058
2002	3,692,170	21,898,700	4,429,100	2,828,650	3,284,390	2,292,570	38,425,580	0.676	0.071	0.059
2003	25,332,300	2,587,530	14,755,000	2,965,190	1,905,800	3,766,410	51,312,230	0.685	0.058	0.048
2004	367,036	17,744,300	1,741,220	9,863,110	1,992,070	3,811,370	35,519,106	0.683	0.061	0.051
2005	109,528,000	261,787	12,128,900	1,183,340	6,730,690	3,960,460	133,793,177	0.702	0.034	0.029
2006	3,648,210	77,546,100	176,555	8,147,120	799,723	7,246,860	97,564,568	0.676	0.072	0.060
2007	7,439,560	2,589,100	52,291,700	118,321	5,489,410	5,419,900	73,347,991	0.676	0.072	0.060
2008	1,997,410	5,293,310	1,750,430	35,088,600	79,694	7,347,720	51,557,164	0.681	0.064	0.053
2009	19,154,800	1,421,020	3,601,710	1,184,930	23,868,200	5,051,140	54,281,800	0.694	0.045	0.038
2010	7,040,750	13,659,600	971,741	2,449,590	809,085	19,792,300	44,723,066	0.691	0.050	0.042
2011	7,156,970	5,036,220	9,407,320	665,498	1,682,230	14,108,700	38,056,938	0.691	0.049	0.041
2012	12,046,700	5,100,820	3,456,690	6,433,600	457,213	10,861,400	38,356,423	0.677	0.070	0.058
2013	8,991,900	8,503,140	3,387,680	2,280,150	4,271,650	7,514,270	34,948,790	0.672	0.078	0.064
2014	4,472,700	6,351,870	5,628,660	2,223,110	1,504,180	7,770,440	27,950,960	0.648	0.114	0.093
2015	6,788,840	3,128,410	4,075,540	3,571,810	1,420,500	5,909,520	24,894,620	0.649	0.112	0.091
2016	23,686,400	4,728,780	1,985,230	2,557,090	2,259,780	4,631,140	39,848,420	0.675	0.073	0.060
2017	91,706,500	16,551,500	3,034,010	1,260,750	1,637,120	4,413,940	118,603,820	0.691	0.049	0.041
2018	9,036,050	64,434,700	10,807,100	1,963,600	821,305	3,940,270	91,003,025	0.670	0.080	0.066
2019	11,666,300	6,392,370	42,987,600	7,158,360	1,307,800	3,168,890	72,681,320	0.666	0.086	0.071
2020	31,754,500	8,246,370	4,237,530	28,249,100	4,728,040	2,952,810	80,168,350	0.671	0.079	0.065
2021	46,522,500	22,291,000	5,373,100	2,736,910	18,379,900	5,011,490	100,314,900	0.664	0.089	0.073
2022	15,194,800	32,413,900	14,185,900	3,383,480	1,738,550	14,930,800	81,847,430	0.645	0.119	0.096
2023	39,010,400	10,553,800	20,559,900	8,917,480	2,148,210	10,598,400	91,788,190	0.659	0.097	0.080
2024	20,454,800	27,071,500	6,689,270	12,921,400	5,663,510	8,117,150	80,917,630	0.646	0.116	0.094
2025	25,137,200	14,159,500	17,056,300	4,179,220	8,163,690	8,744,870	77,440,780			

Table 9. Estimated harvest of Lake Erie walleye for 2025, and population projection for 2026 when fishing with 60% Fmsy. The 2025 and 2026 projected spawning stock biomass values are from the ADMB-2025 recruitment-integrated model. The range in the RAH was calculated using ± one standard deviation from the mean RAH.

SSB_0= 69.507 million kilograms
20% SSB_0= 13.901 million kilograms
F_{msy} = 0.437

	2025 Stock Size (millions of fish)	60% F_{msy}		Rate Functions			2025 RAH (millions of fish)			Projected 2026 Stock Size (millions)	
Age	**Mean**	**F**	**Sel(age)**	**(F)**	**(S)**	**(u)**	**Min.**	**Mean**	**Max.**	**Mean**	
2	25.137		0.261	0.068	0.678	0.057	1.080	1.425	1.769	5.181	
3	14.160		0.907	0.238	0.573	0.182	2.113	2.580	3.047	17.047	
4	17.056		1.000	0.262	0.559	0.199	2.793	3.390	3.987	8.106	
5	4.179		0.945	0.248	0.567	0.189	0.642	0.790	0.939	9.529	
6	8.164		0.897	0.235	0.574	0.180	1.198	1.473	1.748	2.368	
7+	8.745		0.985	0.258	0.561	0.196	1.383	1.715	2.046	9.591	
Total (2+)	77.441	0.262				0.147	9.209	11.373	13.537	51.823	
Total (3+)	52.304						8.129	9.948	11.768	46.641	
SSB	69.732	mil. kgs								59.196	mil. kgs

probability of 2024 spawning stock biomass being less than 20% SSB_0 = 0.000%

Table 10. Mean catch per hectare of age-0 Walleye observed in bottom trawls towed in the western basin by the Ontario Ministry of Natural Resources (ONT) and Ohio Department of Natural Resources (OH) between 2000 and 2024.

Year Class	Year of Recruitment to Fisheries	OH+ONT Trawl Age-0 CPHa
2000	2002	4.113
2001	2003	28.499
2002	2004	0.139
2003	2005	183.015
2004	2006	5.402
2005	2007	12.665
2006	2008	2.051
2007	2009	25.408
2008	2010	7.238
2009	2011	7.107
2010	2012	26.260
2011	2013	6.502
2012	2014	6.417
2013	2015	10.584
2014	2016	29.050
2015	2017	84.105
2016	2018	9.224
2017	2019	22.852
2018	2020	255.581
2019	2021	225.310
2020	2022	97.480
2021	2023	345.599
2022	2024	83.413
2023	2025	132.474
2024	2026	19.048

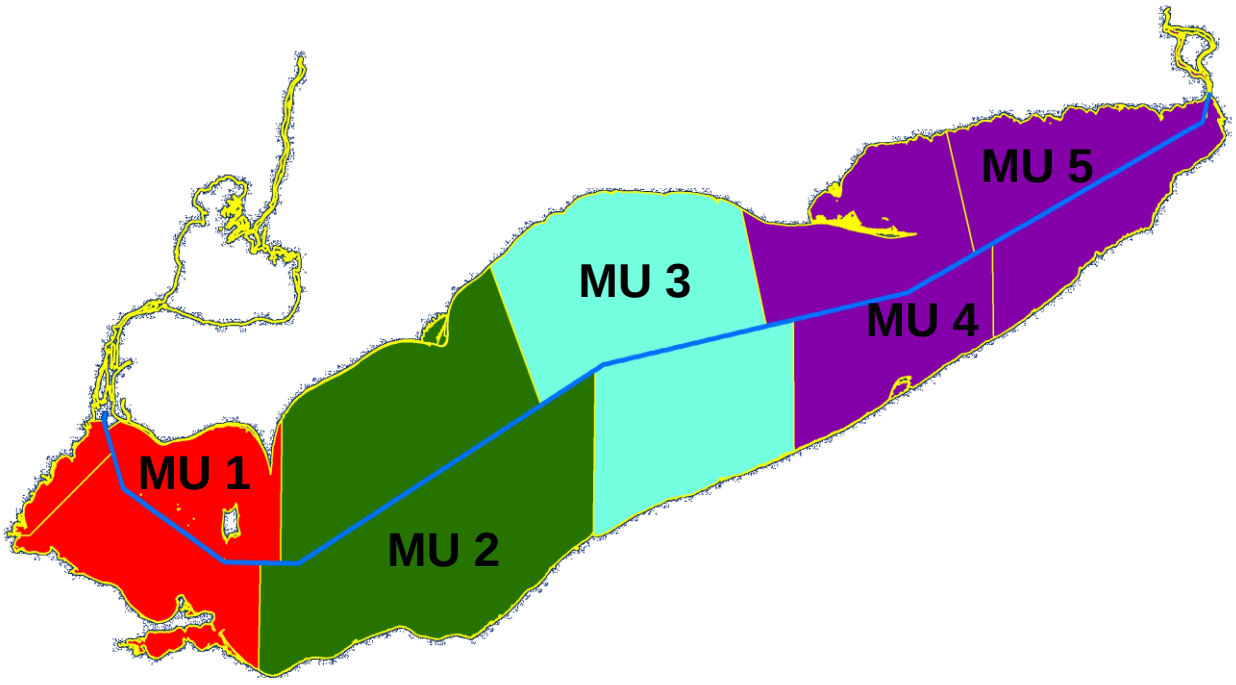

Figure 1. Map of Lake Erie with management units (MU) recognized by the Walleye Task Group for interagency management of Walleye.

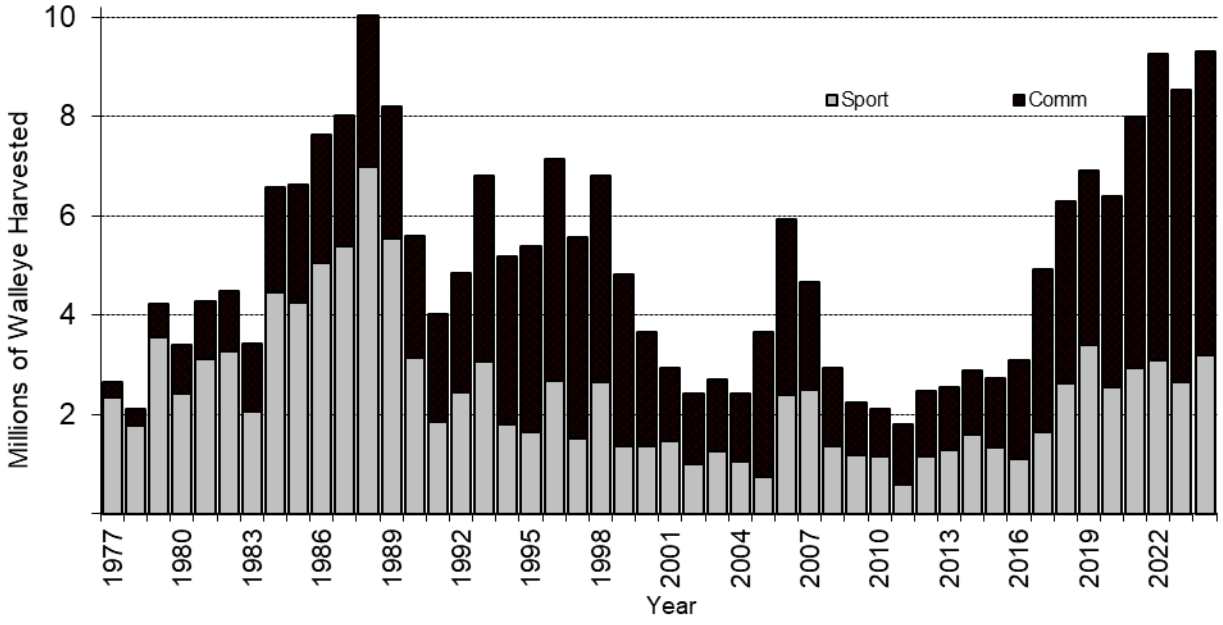

Figure 2. Lake-wide harvest of Lake Erie Walleye by sport and commercial fisheries during 1977-2024.

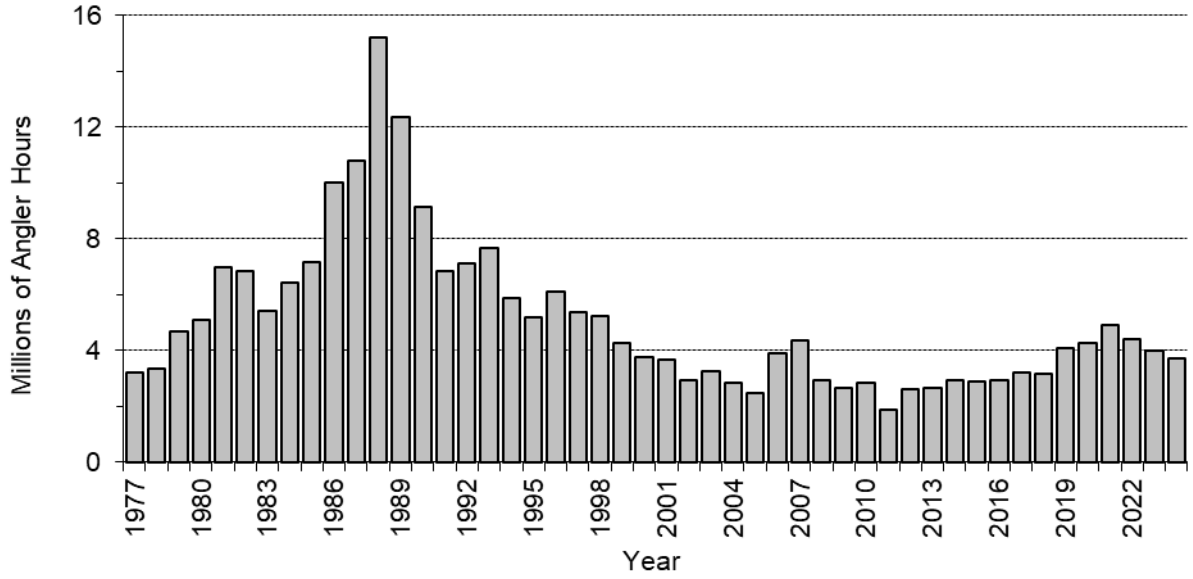

Figure 3. Lake-wide total effort (angler hours) by U.S. sport fisheries for Lake Erie Walleye during 1977-2024.

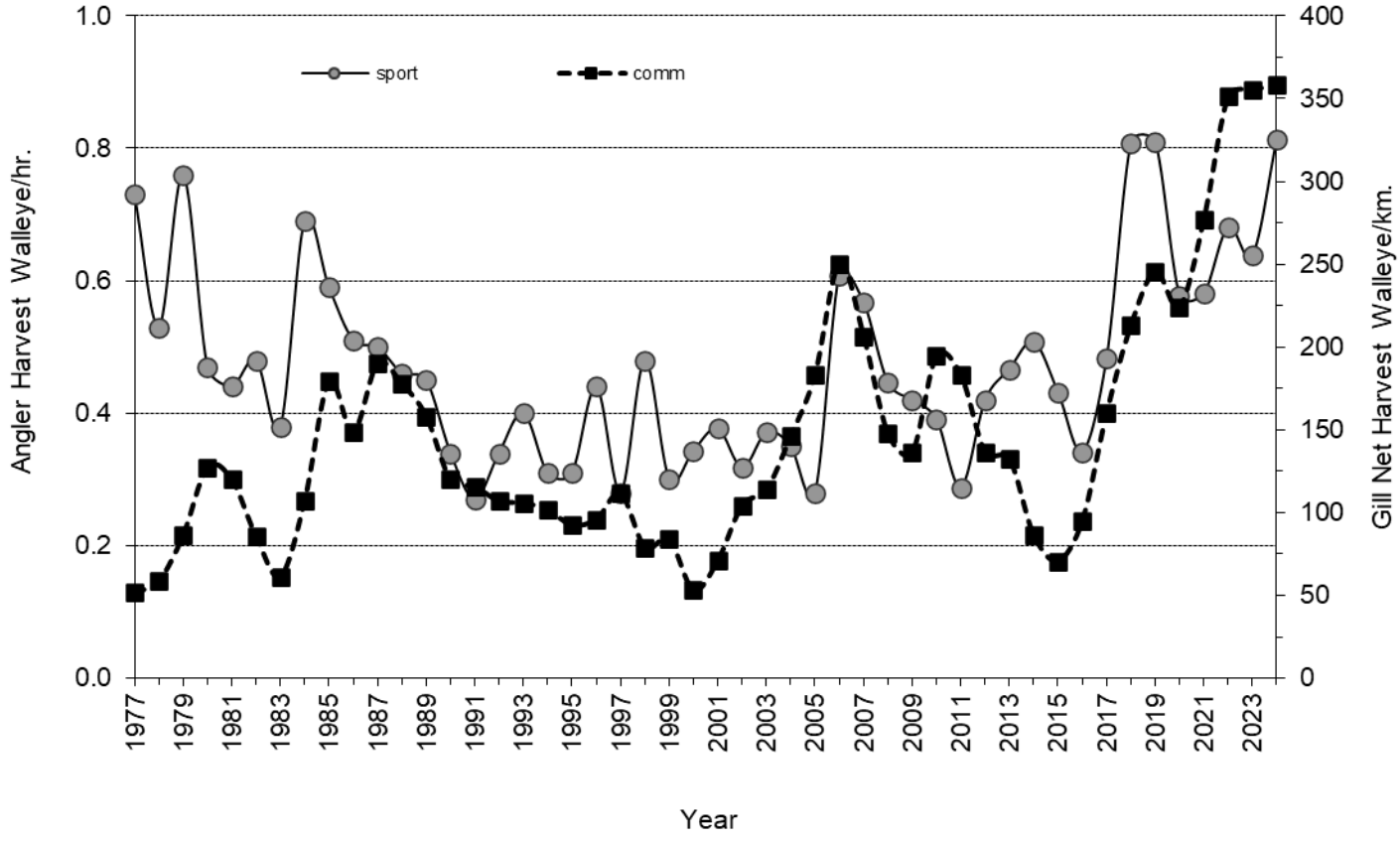

Figure 4. Lake-wide harvest per unit effort (HPE) for Lake Erie sport and commercial Walleye fisheries during 1977-2024.

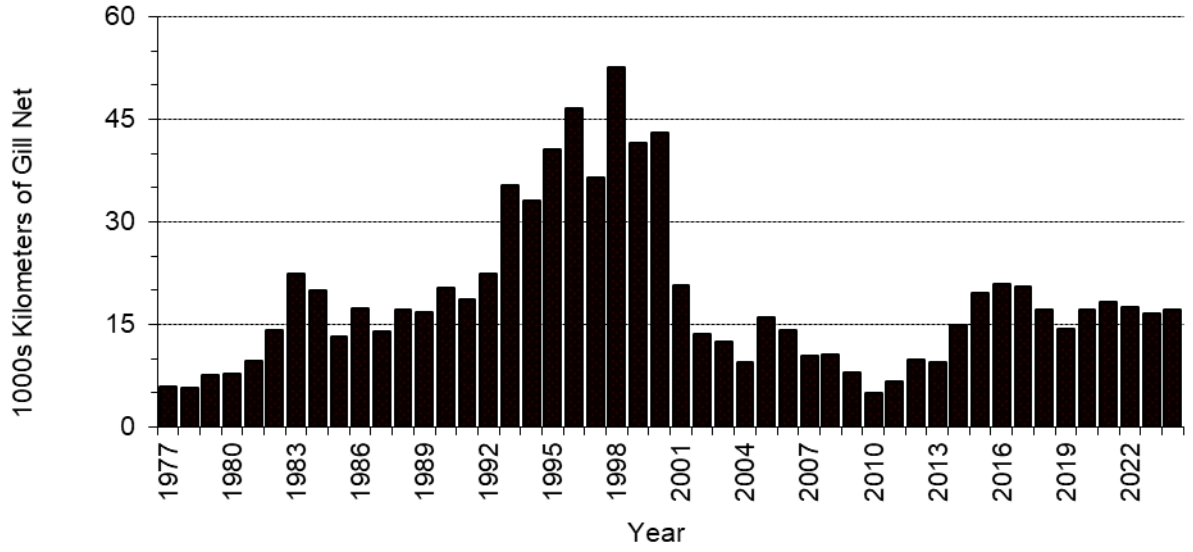

Figure 5. Lake-wide total effort (thousand kilometers of gill net) by Ontario commercial fisheries for Lake Erie Walleye during 1977-2024.

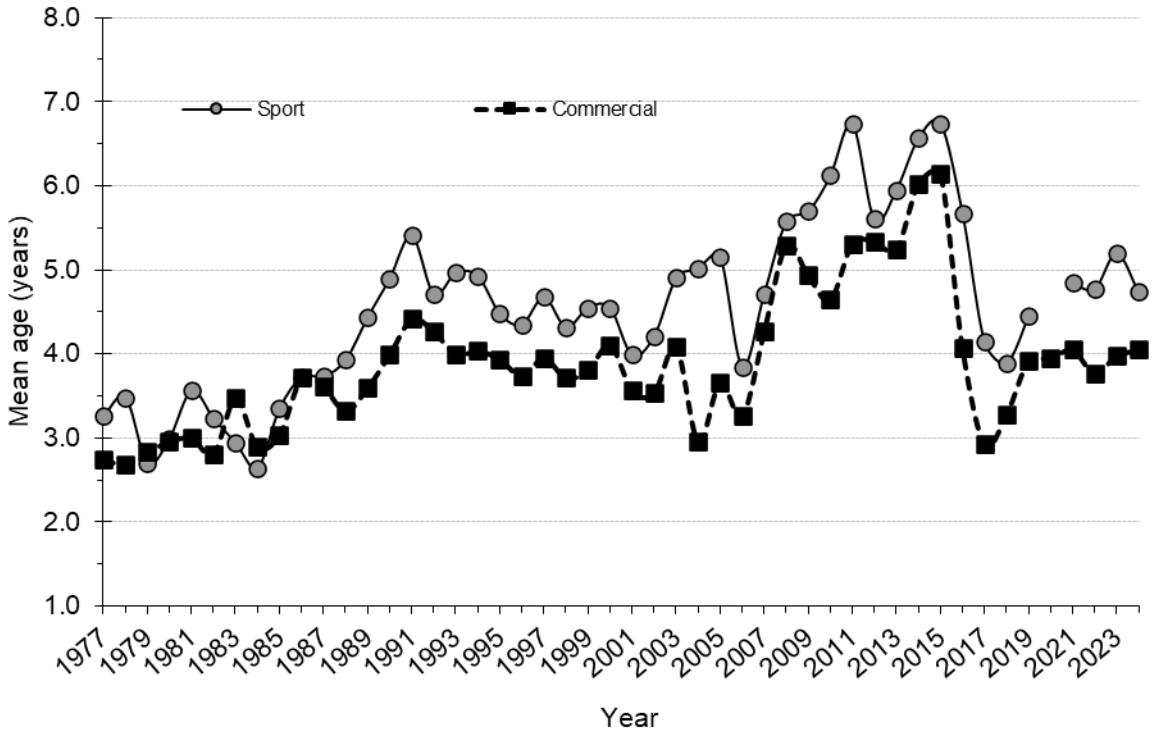

Figure 6. Lake-wide mean age of Lake Erie Walleye in sport and commercial harvests during 1977-2024.

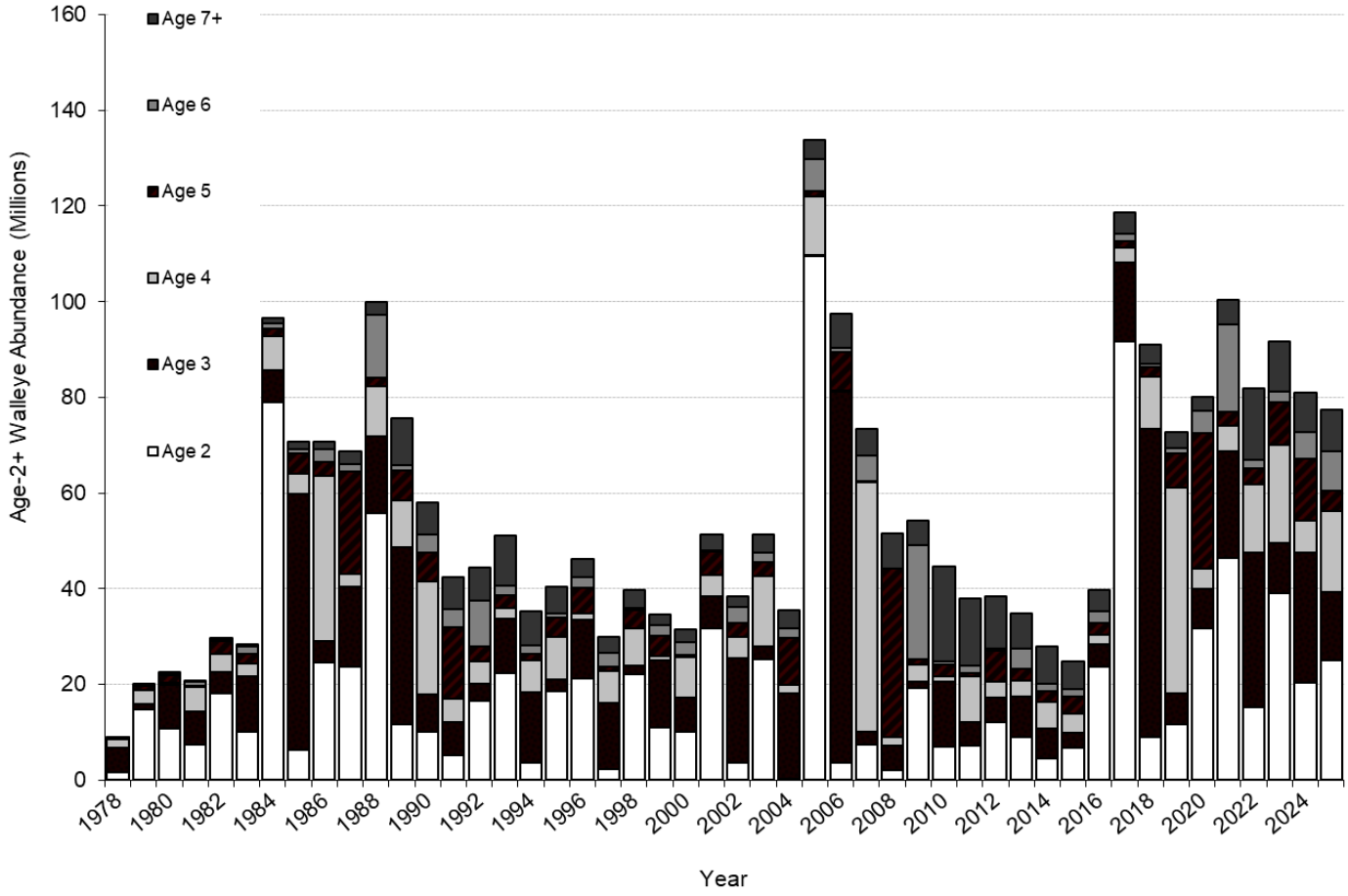

Figure 7. Abundance at age for age-2 and older Walleye in Lake Erie's west and central basins during 1978-2024 and the 2025 projection estimated from the ADMB model. Data shown are from Table 8.

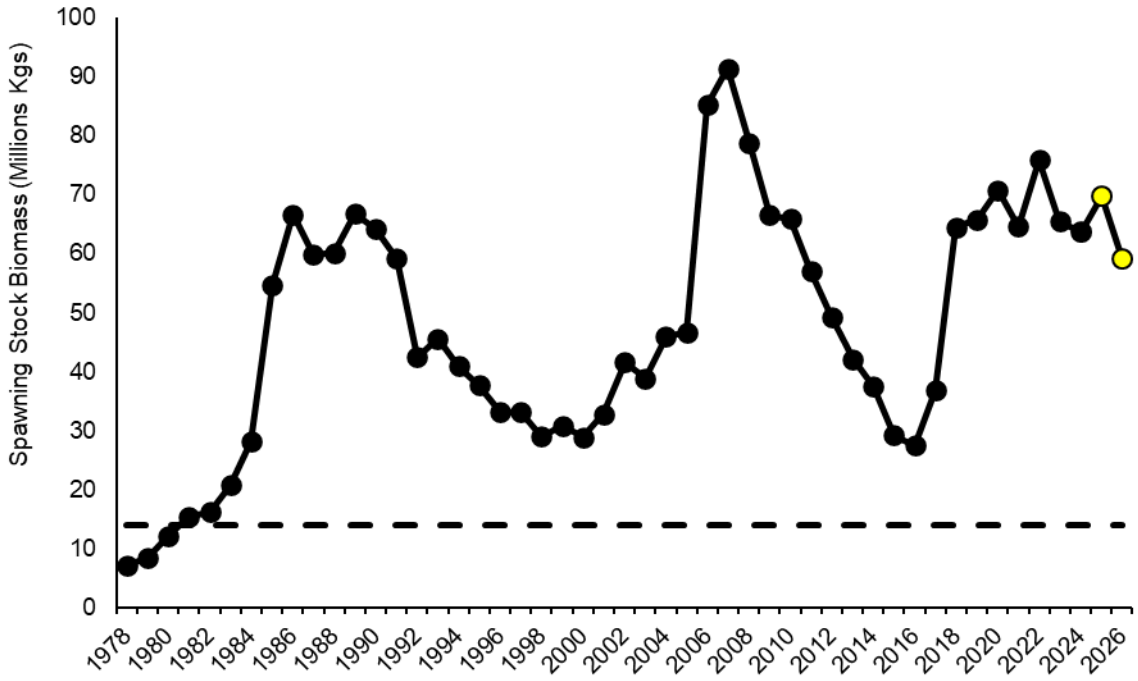

Figure 8. Spawning stock biomass of Walleye in Lake Erie's west and central basins during 1978-2024, with the 2025 and 2026 projections (yellow), estimated from the ADMB model.