

# LAKE ERIE COMMITTEE WALLEYE TASK GROUP EXECUTIVE SUMMARY REPORT MARCH 2025



## Introduction

This summary report highlights elements of the 2025 Walleye Task Group (WTG) annual report. The complete WTG report is available from the Great Lakes Fishery Commission's Lake Erie Committee website at <http://www.glfcc.org/lake-erie-committee.php>, or upon request from a Lake Erie Committee, Standing Technical Committee, or WTG representative.

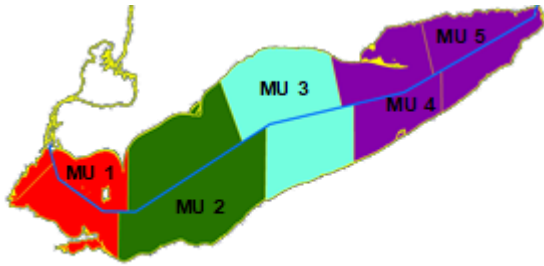


Figure 1. Lake Erie walleye management units

The WTG partitions the lake into five management units (MUs) for data analysis and managing Walleye (Figure 1). A statistical catch-at-age (SCAA) model is run for a combined west-central area (MUs 1 to 3) to produce abundance estimates that are used with reference points and a harvest control rule to generate a Recommended Allowable Harvest (RAH). The WTG assesses the status of Walleye and their resulting fisheries in MUs 4&5, but it does not generate an RAH due to uncertainties around the mixing of western and eastern basin populations.

## 2024 Fishery Review

The total allowable catch (TAC) for 2024 in the quota area (MUs 1 to 3) was 12.858 million fish (Table 1). This allocation represented a 5% decrease from the 2023 TAC. Total harvest in the quota area was 8.522 million fish, or 66% of the 2024 TAC. Harvest in the non-TAC area (MUs 4&5) was 0.788 million fish. Lake-wide Walleye harvest was estimated at 9.310 million fish. Both sport fishery (3.193 million fish) and commercial fishery (6.118 million fish) harvests were above long-term (1975-2023) averages (sport = 2.334 million fish and commercial = 2.362 million fish). Total lake-wide commercial fishery effort was 17,082 km of gill net, which increased from 2023 but remained below the 1975-2023 average (18,515 km). Commercial effort increased in MUs 2 and 4&5 but decreased in MUs 1 and 3 (Table 2). Lake-wide sport effort was 3.710 million angler hours, which is below the 1975-2023 average (4.946 million angler hours). Sport effort decreased in MUs 1 and 2 but increased in MUs 3 and 4&5 (Table 3). The 2024 harvest rates in the lake-wide sport fishery (0.81 fish/hour) remained high, as did those for the commercial fishery (358.2 fish/km gill net). Sport harvest rates increased in all MUs relative to 2023. Gill net harvest rates increased in MUs 1 and 2 but decreased in MUs 3 and 4&5. In all gear types combined, age 3 (39%; 2021 year class), age 5 (23%; 2019 year class and older), and age 4 (14%; 2020 year class) Walleye were the most commonly harvested ages lake-wide.

Table 1. Summary of walleye harvest by jurisdiction in Lake Erie, 2024.

in number of fish	TAC Area (MU-1, MU-2, MU-3)				Non-TAC Area (MU-4 & MU-5)				All Areas
	Michigan	Ohio	Ontario	Total	NY	Penn.	Ontario	Total	Total
TAC	749,621	6,571,724	5,536,655	12,858,000	-	-	-	-	12,858,000
TAC % Share	5.83%	51.11%	43.06%	100.00%	-	-	-	-	100.00%
Harvest	135,921	2,460,453	5,925,663	8,522,037	102,152	318,220	368,075	788,447	9,310,484
Harvest %TAC	18.1%	37.4%	107.0%	66.3%					

Table 2. Ontario Walleye gillnet effort in 2024.

	Unit 1	Unit 2	Unit 3	Units 4 & 5
Effort (km)	5,904	6,827	2,873	1,478
change from 2023	-12%	14%	-3%	53%

Table 3. Summary of sport fishery effort reported in thousands of hours for 2024.

	Unit 1 - MI	Unit 1 - OH	Unit 2 - OH	Unit 3 - OH	Units 4&5- PA	Units 4&5- NY
Effort (1000s hrs)	249	1,352	944	651	303	211
change from 2023	-7%	-27%	-7%	73%	6%	7%

### Catch-at-Age Abundance Estimate and Projected 2025 and 2026 Recruitment

Based on the 2025 SCAA model, the 2024 population estimate was 80.9 million age 2 and older Walleye (Figure 2). The abundance of age 2 (2022 year class) fish was estimated to be 20.5 million and was 2<sup>nd</sup> most abundant year class in 2024, with age 3 (2021 year class) being the most abundant. Using the 2025 SCAA model, the number of age 2 recruits entering the population in 2025 (2023 year class) and 2026 (2024 year class) were projected to be 25.1 million and 5.2 million fish, respectively. The projected abundance of age 2 and older Walleye in the MU 1 to 3 population is 77.4 million Walleye in 2025 (Table 4). Age 2 Walleye from the 2023 cohort (25.1 million fish) are projected to be the most abundant year class in 2025 followed by age 4 (17.1 million; 2021 year class) and age 3 fish (14.1 million; 2022 year class). The projected spawning stock biomass (SSB) for 2025 and 2026 is 69.732 and 59.196 million kilograms, respectively (Table 4).

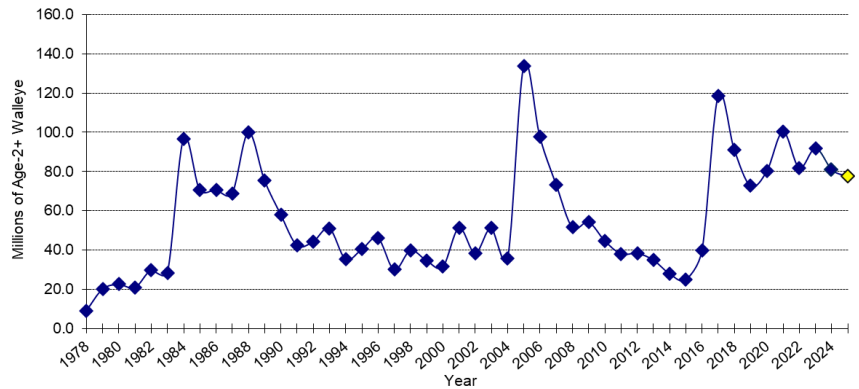


Figure 2. Population estimates of Lake Erie Walleye ages 2 and older from 1978 to 2024 (blue points), and the projection for 2025 (yellow point), from the WTG's SCAA model.

### 2025 Harvest Strategy and Recommended Allowable Harvest (RAH)

Beginning in 2015, the current Walleye management plan was implemented and includes the WTG's SCAA model and a probabilistic harvest control rule (HCR). The HCR sets the target fishing rate at 60% of the instantaneous fishing mortality rate at maximum sustainable yield ( $F_{msy}$ ), with an accompanying limit reference point that will reduce the target fishing rate beginning at 20% of the unfished spawning stock biomass (20%SSB<sub>0</sub>). A probabilistic control rule, P-star (P\*), was set at 0.05 and was incorporated to ensure that SSB in 2026 is not below the 20% SSB<sub>0</sub> threshold after fishing in 2025. In addition, there is a limitation of TAC variation from one year to the next of  $\pm 20\%$  to implement a measure of fishery stability. Using results from the 2025 SCAA model, the harvest policy, and selectivity estimates from the current fisheries, a mean RAH of 11.373 million fish was calculated for 2025, with a range of 9.209 to 13.537 million fish (Table 4). The TAC range for 2025 based on the SCAA model, the harvest policy, and the  $\pm 20\%$  TAC constraint from the previous year is 10.286 to 13.537 million fish.

Table 4. Estimated harvest of Lake Erie walleye for 2025, and population projection for 2026 when fishing with 60%  $F_{msy}$ . 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  $\pm$  one standard deviation from the mean RAH.

SSB<sub>0</sub>= 69.507 million kilograms  
 20% SSB<sub>0</sub>= 13.901 million kilograms  
 $F_{msy}$  = 0.437

Age	2025 Stock Size (millions of fish)		Rate Functions							Projected 2026 Stock Size (millions)	
	Mean	60% $F_{msy}$	(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	
<b>Total (2+)</b>	<b>77.441</b>	<b>0.262</b>				<b>0.147</b>	<b>9.209</b>	<b>11.373</b>	<b>13.537</b>	<b>51.823</b>	
<b>Total (3+)</b>	<b>52.304</b>						<b>8.129</b>	<b>9.948</b>	<b>11.768</b>	<b>46.641</b>	
SSB	69.732	mil. kgs								59.196 mil. kgs	

probability of 2024 spawning stock biomass being less than 20% SSB<sub>0</sub> = 0.000%