

# 2025 Life Jacket Wear Rate Observation Study

**Featuring National Wear Rate Data  
from 1999 to 2025**

Prepared for the U.S. Coast Guard by JSI Research  
& Training Institute, Inc. in partnership with the U.S.  
Coast Guard Auxiliary



April 2026

## Acknowledgements

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Since 2018, the U.S. Coast Guard (USCG) Auxiliary Life Jacket Wear Observation (AUXLWO) team has served as the primary partner for the Life Jacket Wear Rate Observation Study's data collection effort. To date, a remarkable 233 AUXLWO members from across 20 states have contributed to the study.

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### 2025 State Coordinators    2025 Observers

Best, Paul	Allen, Alissa	Gomez, Michael	Norton, Greg
Chaffee, Pam	Anderson, Kevin	Goodman, Mark	Olgin, Ron
Ellis, Theo	Behe, John	Hague, Charles	Park, Wendy
Gilman, Fred	Best, Paul	Hallam, Laura	Pascale, Michael
Heinz, Janet	Bird, David	Harmon, Daniel	Pearson, Dennis
Hetzel, Fred	Bonnett, Ben	Hartwig, Eric	Rassanito, John
Himes, Mark	Bradley, Joshua	Heibel, Catherine	Reichner, Robert
Huhs, Jeffrey	Bridgman, Robert	Heinz, Janet	Rippel, Robert
Klacik, Mike	Butala, Linnea	Heinz, Robert	Rodriguez, Rene
Koleszar, Janice	Campbell, Guy	Hempelman, Ed	Rosenfeld, Isak
Norton, Greg	Candagon, Ufuk	Hetzel, Fred	Ross, Richard
Pearson, Dennis	Chaffee, David	Himes, Mark	Scamardo, Alex
Statz, Scott	Chaffee, Pam	Hooks, David	Scoffin, James
Stuhr, John	Chichester, Kenneth	Huhs, Jeffrey	Shimmin, David
Swink, John	Clarke, Mitchell	Jones, Chris	Statz, Scott
Wesson, Randy	Clingan, Kathryn	Kenyon, Diane	Stuhr, John
Wong, Anthony	Clingan, Mark	Keobert, Robert	Swink, John
	Cromley, Robert	Kienle, Dan	Sykes, Carol
	Davies, Susan	King, Eustace	Sykes, Homer
	Davis, Carey	Klacik, Michael	Tate, George
	Depasquale, Carl	Koleszar, Jan	Tompkins, Jim
	Desplaces, David	Koleszar, Jay	Wankerl, Jason
	Downing, B.J.	Lai, Edward	Weilbacher, Cybele
	Ellis, Theo	Liming, Daniel	Wesson, Randy
	Flanner, Tim	Long, Miguel	Wong, Anthony
	Fletcher, Stephen	Loupaty, William	Yslas, Catherine
	Fox, Christopher	Lumsden, Lois	Yslas, Robert
	Fransanito, John	Manno, Robert	Zamsoronsen, Jon
	Garvey, William	Marking, B.T.	Zorzi, Alfred
	Gilman, Diane	Marsh, Thomas	
	Gilman, Fred	Martone, Robert	
	Glas, Randy	McCarthy, James	
	Gleeson, Jay	Norrell, Sam	

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## A. Executive Summary

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According to the U.S. Coast Guard (USCG) 2024 Recreational Boating Statistics, boating safety remains a critical concern in the United States. In 2024, 76% of the 556 reported boating-related fatalities resulted from drowning; notably, 87% of those victims were not wearing life jackets.<sup>1,2</sup> These statistics highlight the importance of continuous monitoring of life jacket wear rates to identify trends and provide insights that can inform USCG strategies to increase their use.

Since 1999, the USCG has partnered with JSI Research & Training Institute, Inc. (JSI) to collect data on life jacket wear rates involving the observation of a total of 372,662 recreational boats and over one million (1,045,288) boaters to date. This report presents the findings from the 2025 National Life Jacket Wear Rate Observation Study. This report provides an analysis of the relationship between life jacket usage and operator age, watercraft activity, and boat type. It compares these findings to those collected over the past 26 years (1999–2025), excluding the 2020 national emergency. In Appendix B, there are additional life jacket usage data presented by weather condition.

Results show that the life jacket wear rate for all boaters was 21.3% in 1999 and 21.6% in 2025. Excluding personal watercraft (PWC), for which laws require the use of life jackets, the wear rate for all boaters was 15.4% in 1999 and 17.5% in 2025. While slight variations occur in overall wear rates throughout the study period, notable variations appear when examining wear rates by age and boat type:

- In 2025, the wear rate for adults (ages 18+) was 9.7% and 63.2% for youth (ages 0–17). Within these age groups, trends vary: while observed life jacket use for boaters ages 18–64 was consistent over time, use by the 65+ group increased through 2022, with a drop starting in 2023. Additional observation years will inform this trend more fully. Furthermore, while youth wear rates increased from the beginning of the study through 2021, with an apparent drop starting in 2022, the largest decrease was among the 13–17 age group between 2022 and 2023.
- The trend in wear rates for adults on paddlecraft has steadily increased since the beginning of the study, starting at 41.7% in 1999 and rising to 58.5% in 2025. Additionally, there was a notable increase in the adult wear rate for kayaks in the last year, from 67.9% in 2024 to 76.4% in 2025.
- In contrast, the 58.7% youth wear rate on paddlecraft in 2025 was the lowest youth wear rate to date. From the beginning of the study through 2012, youth wear rates on paddlecraft remained relatively steady; they then rose from 2012 to 2021, followed by a notable drop starting in 2022 that resulted in the lowest wear rate to date.
- Wear rates on sailboats have steadily increased since the inception of the study for both adults and youth. Adult wear rates increased from 13.6% in 1999 to 37.8% in 2025, and youth wear rates increased from 59.7% in 1999 to 74.2% in 2025. There was a notable increase in adult wear rates on cabin sailboats between 2024 (26.4%) and 2025 (28.9%).
- Data suggests a trend shift beginning in 2023 for youth life jacket usage on motorboats. After a decrease that year (66.6% in 2022 to 59.7 in 2023), observed youth wear rates across all motorboats indicate a rebound through 2025 (61.4% in 2024 and 63.2% in 2025). Additional observation years will inform this trend more fully.
- Adult wear rates for all motorboats remained steady with only slight variations throughout the study period. Rates ranged between 3.8% and 6.3% for all motorboats, and between 4.5% and 7.4% for open motorboats.

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<sup>1</sup> U.S. Coast Guard (2024). 2024 recreational boating statistics. <https://uscgboating.org/library/accident-statistics/Recreational-Boating-Statistics-2024.pdf>

<sup>2</sup> Although there are notable and important technical differences between "Personal Floatation Devices" (PFDs) and "Life Jackets", for the purposes of this report the general term "Life Jackets" will be used.

## B. Methods

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To provide reliable and valid measures of change in life jacket wear rates, it is essential for observation procedures to remain consistent with those used in previous years. Since 1999, JSI has worked to preserve consistency in observation site selection, time period and procedures. The majority of the sites observed in each state have also remained the same across all years. This section describes the standard methods used for all years of summer data collection and the changes made in 2025 due to an adjustment in the timing of the grantmaking process for the National Nonprofit Organization Recreational Boating Safety (RBS) Grant Program.

**Time period.** Summer observations began the first weekend in July and ended the first weekend in September.

**State selection.** Observations were conducted in a total of 30 states. These states were originally selected by a stratified random sampling procedure and have remained the same since 1999. About 75% of U.S. coastal states (20 out of 26 states) and 40% of U.S. inland states (10 out of 24 states) are represented.

**Site selection.** Four water bodies from each state were selected as observation locations, except in California, where, given its size, eight sites were selected. Sites were selected in consultation with local USCG offices, local USCG Auxiliary (USCGAUX) or U.S. Power Squadron members, and state boating or fishing law enforcement agencies. The 125 sites represent a wide range of water venues, including lakes, rivers, harbors, bays, and intra-coastal waterways. All sites have suitable shore-based viewing locations for conducting life jacket wear observations using high-powered binoculars. To minimize observer travel time, sites are located in close proximity to one another when possible.

**Observational procedures.** Observations are conducted by JSI staff or USCGAUX staff and volunteers in four-hour shifts on weekends at selected sites. Two-person teams use high-powered binoculars to observe and record recreational boating activity, alternating observation and documentation roles to prevent fatigue. Data recorded include life jacket wear, boater characteristics, boating activity, and site conditions such as apparent water conditions, as well as air and water temperature. To ensure consistent and reliable data collection, all JSI and USCGAUX observers must pass an online training course before conducting observations.

**Observation forms.** Two forms are used to collect data. The Boat Form records information about the boat (i.e., type, size, operation, and activity) and passengers (i.e., sex, age, life jacket wear, and engagement in swimming or towed activity). The Site Form captures weather, water conditions, and other site-specific information. (See the observation forms in Appendix A).

The forms have remained largely unchanged, with updates in 1999, 2004, 2007, 2016, and 2021.

1999	<ul style="list-style-type: none"><li>• The 6–17 year-old age category was split into two groups: 6–12 years and 13–17 years.</li><li>• Canoes and kayaks were also separated into distinct categories.</li></ul>
2004	<ul style="list-style-type: none"><li>• Boat sizes were split into four categories (&lt;16 ft, 16 to &lt;21 ft, 21 to &lt;26 ft, and ≥26 ft).</li></ul>
2007	<ul style="list-style-type: none"><li>• Added an “intent to fish” category to distinguish boats with fishing gear, even if not actively fishing.</li></ul>
2016	<ul style="list-style-type: none"><li>• The boat propulsion type category was removed, and new categories for “powered” and “paddled” inflatables were added.</li><li>• Life jacket wear categories were also updated for clarity, replacing old labels with more explicit terms such as “Buoyant (Traditional),” “Inflatable Suspender or Belt,” and “Not Worn.”</li></ul>
2021	<ul style="list-style-type: none"><li>• In 2021, a new observation about the use of engine cut-off switches (ECOS) was added, with the answer options, “Y [yes],” “N [no],” and “? [unsure].”</li></ul>

**Data processing and data cleaning.** Observation forms are mailed to and processed at JSI's offices in Boston, Massachusetts. First, the forms are scanned into electronic file images; next, the images are evaluated using TeleForm<sup>3</sup>, a form processing application. TeleForm allows JSI to review the data to ensure all marks are captured correctly. JSI then imports the reviewed data into SAS 9.4,<sup>4</sup> a robust and flexible statistical analysis program that allows for more complex and large-scale data analysis.

A series of quality checks is run to identify errors in data processing or recording of observations. Data checks primarily focus on incomplete information regarding boats and boaters and inconsistent or conflicting data elements. Data forms flagged during the quality checks are manually reviewed. When possible, data correction codes are applied; when a correction is not feasible, the record is removed from the analytic files.

**Data analysis.** Cleaned data sets from the most recent observation year are combined with prior years spanning the entire scope of the project. Three comprehensive multi-year files are created for analysis: site-level, boat-level, and person-level. A series of regression analyses that control for study year, boater age, and boat type are conducted, and adjusted means for wear rates are generated based on boat and boater characteristics, as well as environmental conditions. All analyses are conducted in SAS 9.4. Time trend comparisons are made throughout the report between 1999 and 2025, as well as between 2015 and 2025 to provide comparisons over the most recent 10 years. Additional comparisons are described to highlight notable trends in specific subsets of the data.

Findings are presented through graphs and tables, and are differentiated between youth (0–17) and adult (18+) boaters. While the graphs illustrate trends across all years, the tables provide more granular data, with specific years collapsed to facilitate clearer longitudinal comparisons. The last five years of the study are represented individually, and all years prior are collapsed into three-year increments. By combining three years, we mitigate short-term variability and more easily reveal long-term trends.

**2025 observation site changes.** Due to an adjustment to the timing of the grantmaking process for the National Nonprofit Organization RBS Grant Program, observations could not be conducted at 33 of the 125 study sites. Unobserved sites were located in the following states:

- Arizona (1 site)
- California (4 sites)
- Colorado (4 sites)
- Georgia (3 sites)
- Maryland (3 sites)
- Missouri (2 sites)
- Oklahoma (3 sites)
- Rhode Island (1 site)
- South Dakota (4 sites)
- Utah (4 sites)
- Wyoming (4 sites)

A series of sensitivity analyses was conducted to better understand the effect of these missing observations. Unobserved sites represented, on average, 20% of the data collected in previous years. The team identified the sites missed in 2025 that had a consistent history of data from previous years. Using these historical records, JSI ran stepwise modified Poisson regression models to determine if these specific locations typically show different wear patterns than the sites that remained in the 2025 study. Predictor variables included in the model were study year, boater age and sex, and boat type. Results showed that when all

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<sup>3</sup> Cardiff TeleForm Version 22.1 (OpenText) is a forms processing software.

<sup>4</sup> SAS 9.4 (SAS Institute Inc Cary, NC) is an advanced analytics software program.

variables were accounted for, boaters at the missed sites were 1.13 times more likely to wear a life jacket than those at the sites observed in 2025 (CI 1.12–1.14).

In other words, because the missed locations historically have higher usage, the 2025 overall wear rates are likely slightly underestimated. This is partly due to the fact that the unobserved sites have a higher percentage of children and paddlecraft, both of which typically have higher life jacket wear rates.

## C. Results

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### Life Jacket Wear Rates for All Boaters

Figure A shows life jacket wear rate trends over time for all recreational boaters (youth and adults), comparing wear rates for “all boats” including personal watercraft (PWC), and “all boats except PWC” (excluding PWC). The data illustrate how PWC positively influence overall average wear rates, as life jacket use is mandatory for PWC operators and passengers in all states, except for adults in Alaska. To provide a clearer picture of voluntary wear trends, PWC boaters have been excluded from subsequent tables across all years of observation.

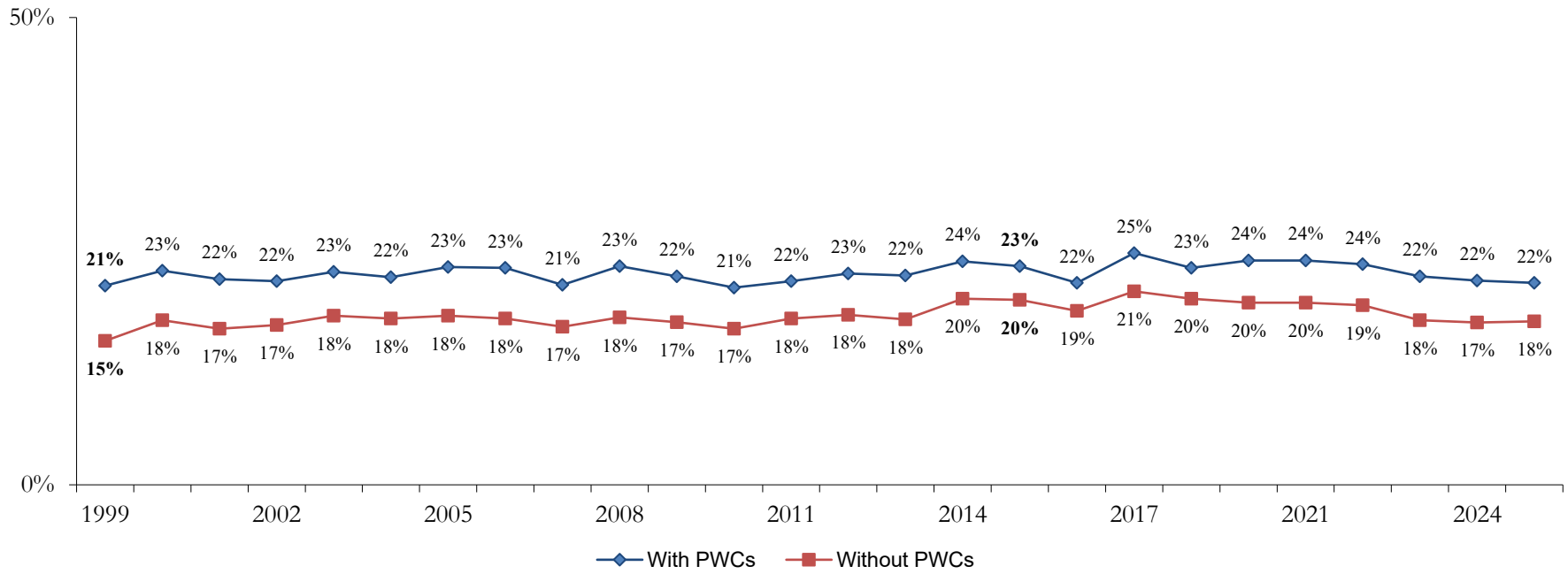
**Wear rates for all boats.** In 2025, the average wear rate for all boaters across all boat types was 21.6%. This compares to 21.3% in 1999 and 23.4% in 2015. The wear rate reached its highest point in 2017 (24.8%) and has slowly declined since 2021 (24.0%).

**Wear rates excluding PWC.** In 2025, the average wear rate for all boaters excluding PWC was 17.5%. This compares to 15.4% in 1999 and 19.7% in 2015. The wear rate reached its highest point in 2017 (20.7%) and has slowly declined since then.



Source: Shutterstock

Figure A. Life Jacket Wear Rates for All Boaters



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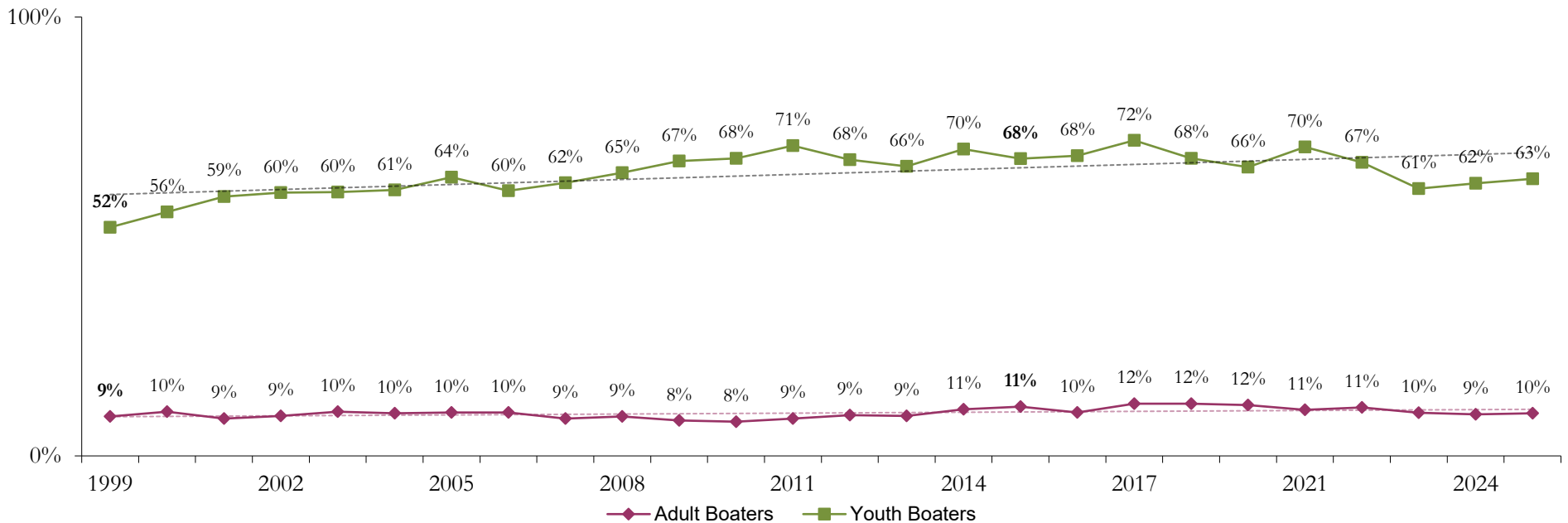
## Life Jacket Wear Rates for Adults and Youth Boaters

Figure B shows the life jacket wear rate trends for adults and youth on all boats excluding PWC; Table 2.1 presents wear rates by the age categories captured in the study.

**Adult wear rates.** In 2025, the wear rate for adults was 9.7%. This compares to 9.0% in 1999 and 11.2% in 2015. While wear rates for boaters ages 18–64 and 18+ remained consistent over time, the 65+ rate seems to have increased through 2022, with an apparent drop starting in 2023. Additional observation years will inform this trend more fully.

**Youth wear rates.** In 2025, the wear rate for youth was 63.2%. This compares to 52.1% in 1999 and 67.7% in 2015. The overall wear rate for youth appears to have increased from the beginning of the study through 2021, with an apparent drop starting in 2022. As shown in Table 2.1, youth wear rates decreased across most categories; however, the drop appears to be most pronounced in the 13–17 age group between 2022 and 2023.

**Figure B. Life Jacket Wear Among Adult and Youth Boaters\***  
(Excluding PWC)



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\*Factors controlled for: Age & Boat Type

**Table 2.1. Life Jacket Wear Rates by Age\***  
(Excluding PWC)

Age	Observation Year											
	1999–2001	2002–04	2005–07	2008–10	2011–13	2014–16	2017–19	2021	2022	2023	2024	2025
	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)
<b>Adult Wear Rates</b>												
<b>18–64</b>	8.7% (83687)	8.9% (92947)	8.7% (91593)	7.8% (101615)	8.8% (96408)	10.8% (94976)	11.8% (96924)	10.3% (26365)	10.8% (23978)	9.7% (28177)	9.3% (26733)	9.7% (19205)
<b>65+</b>	9.2% (3459)	7.7% (3349)	10.1% (2507)	7.6% (3082)	8.9% (3164)	12.3% (4205)	12.1% (3187)	14.6% (1522)	16.2% (982)	11.8% (1438)	12.5% (1295)	11.1% (814)
<b>18+</b> (all adults)	8.7% (87146)	8.9% (96296)	8.8% (94100)	7.8% (104697)	8.9% (99572)	10.9% (99181)	11.8% (100111)	10.5% (27887)	11.0% (24960)	9.8% (29615)	9.4% (28028)	9.7% (20019)
<b>Youth Wear Rates</b>												
<b>0–5</b>	87.8% (1921)	91.9% (2077)	93.2% (2568)	93.9% (2603)	95.0% (2325)	93.2% (2071)	92.6% (1960)	91.3% (368)	90.1% (444)	88.9% (586)	91.9% (528)	86.7% (308)
<b>6–12</b>	73.2% (7917)	80.2% (8111)	81.4% (7707)	87.6% (8200)	86.9% (7719)	86.3% (7168)	85.1% (7179)	88.6% (1889)	84.8% (1807)	81.5% (2117)	80.0% (2006)	82.2% (1164)
<b>13–17</b>	28.9% (7652)	29.4% (7682)	33.2% (7264)	35.3% (7054)	38.2% (5913)	40.4% (5206)	41.3% (6391)	40.7% (2099)	38.7% (1808)	30.3% (2281)	33.2% (2038)	34.7% (1158)
<b>0–17</b> (all youth)	57.1% (17490)	60.8% (17870)	62.6% (17539)	66.8% (17857)	68.1% (15957)	68.5% (14445)	68.0% (15530)	70.4% (4356)	66.9% (4059)	60.9% (4984)	62.1% (4572)	63.2% (2630)

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 \*Factors controlled for: Age & Boat Type

## Life Jacket Wear Rates by Boat Type

The National Life Jacket Wear Rate Observation Study classifies boats into three primary categories: motorboats, paddlecraft, and sailboats. Boater life jacket wear rates vary across these categories. The subsequent pages provide data on the wear rates for adult and youth boaters, both in aggregate for each category and disaggregated by the specific boat types within them.



Source: iStock



Source: iStock



Source: iStock

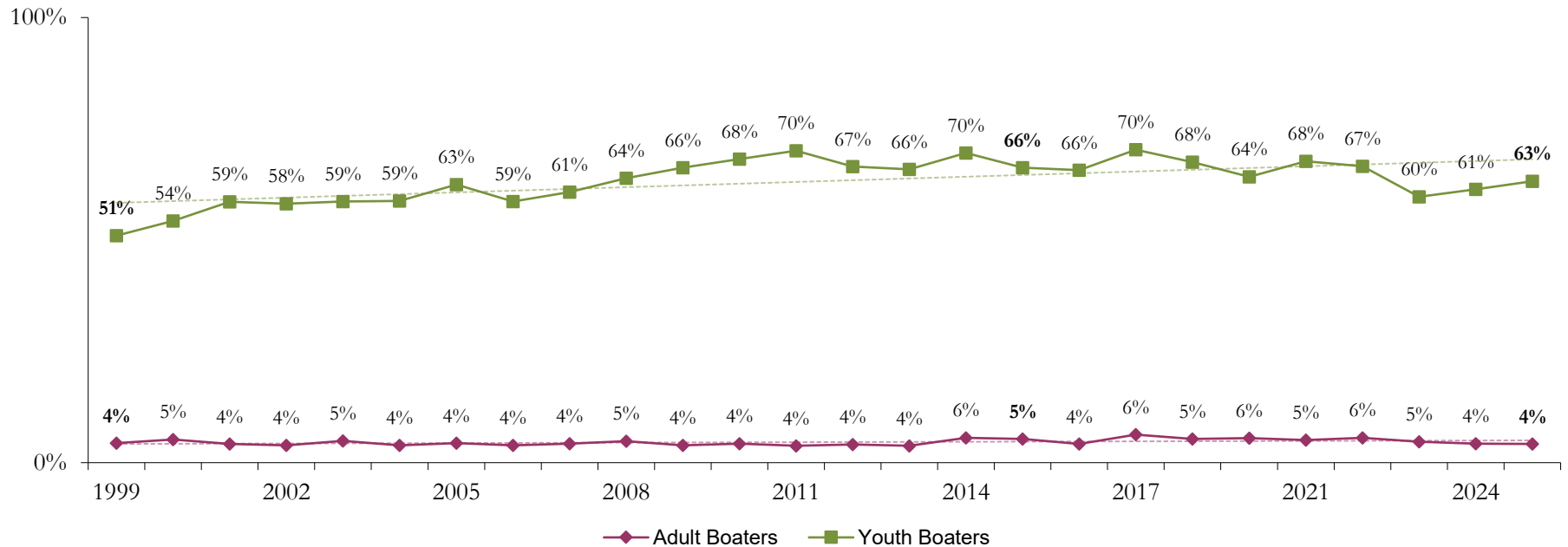
## Motorboat

This section summarizes motorboat life jacket wear rate trends. For the purpose of this study, motorboats include skiffs, runabouts, cabin cruisers, houseboats, pontoons, PWC, and powered inflatables/rafts. Figure C shows the wear rate trends for adults and youth on all motorboats; Table 2.2 presents wear rates by the specific types of motorboats captured in the study.

**Adult wear rates.** In 2025, the adult wear rate for all motorboats, excluding PWC, was 4.2%. This compares to 4.4% in 1999 and 5.3% in 2015. Overall, adult wear rates have remained largely unchanged since the study's onset.

**Youth wear rates.** In 2025, the youth wear rate for all motorboats, excluding PWC, was 63.2%. This compares to 51.0% in 1999 and 66.3% in 2015. There appears to be an increasing trend in wear rates from the beginning of the study through 2022. However, a marked drop occurred in 2023, with rates increasing since that time. As shown in Table 2.2, it appears that the largest drop in 2023 youth wear rates was seen among boaters on cabin cruisers. Additionally, there was a notable decrease in youth wear rates on powered inflatables/rafts in 2024, which has continued into 2025. Additional observation years will inform this trend more fully.

**Figure C. Wear Rates for All Motorboats\***  
(Excluding PWC)



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2025 Observational Life Jacket Wear Rate Study  
\*Factors controlled for: Age & Boat Type.

**Table 2.2. Life Jacket Wear Rates by Motorboat Type\***

Motorboat Type	Observation Year											
	1999–2001	2002–04	2005–07	2008–10	2011–13	2014–16	2017–19	2021	2022	2023	2024	2025
	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)
<b>Adult Wear Rates</b>												
<b>All</b> (no PWC's)	4.4% (69526)	4.1% (78221)	4.2% (78344)	4.3% (88049)	3.9% (83878)	5.1% (81995)	5.6% (84217)	5.1% (23561)	5.6% (21814)	4.7% (25450)	4.3% (24232)	4.2% (17724)
<b>Skiff</b>	9.8% (6241)	8.2% (11833)	7.6% (14456)	8.6% (20524)	7.5% (20697)	10.2% (20706)	7.8% (24911)	8.2% (7392)	8.5% (7127)	6.7% (7702)	6.6% (7388)	7.1% (6112)
<b>Runabout</b> (with towed participants)	4.6% (44643)	4.2% (43754)	4.0% (42563)	3.6% (43629)	3.2% (39508)	3.7% (36629)	4.0% (32552)	3.9% (8766)	3.8% (7877)	3.2% (9248)	3.4% (9036)	2.4% (5489)
<b>Runabout</b> (without towed participants)	4.0% (44332)	3.6% (43409)	3.1% (42169)	2.6% (43172)	2.3% (39127)	2.9% (36327)	3.3% (32317)	3.3% (8706)	3.3% (7832)	2.6% (9184)	2.7% (8966)	2.0% (5469)
<b>Cabin Cruiser</b>	1.5% (14012)	1.6% (17468)	1.6% (14682)	1.5% (15672)	1.4% (14687)	2.1% (13869)	2.5% (13404)	2.7% (2839)	4.7% (2617)	3.0% (3681)	2.7% (3027)	3.1% (2660)
<b>Houseboat</b>	0.2% (529)	1.9% (668)	0.3% (377)	0.0% (222)	0.0% (106)	0.7% (288)	0.0% (180)	0.0% (55)	0.0% (57)	0.0% (74)	0.0% (40)	0.0% (25)
<b>Pontoon</b>	3.6% (4630)	2.7% (5166)	2.8% (6275)	1.6% (7409)	1.7% (8275)	2.2% (10007)	2.9% (12370)	2.4% (4291)	3.3% (3994)	2.4% (4445)	1.8% (4521)	1.3% (3226)
<b>PWC</b>	96.0% (5740)	95.3% (5108)	96.2% (5557)	97.5% (6023)	96.9% (5240)	96.8% (4613)	97.4% (5068)	97.0% (1673)	97.2% (1412)	97.5% (1796)	97.6% (1566)	97.0% (1052)
<b>Powered Inflatable/Raft</b>	.	.	19.2% (368)	15.3% (815)	18.1% (711)	19.9% (784)	17.9% (980)	15.0% (273)	22.1% (199)	35.8% (374)	21.1% (260)	22.8% (237)
<b>Youth Wear Rates</b>												
<b>All</b> (no PWC's)	55.5% (14548)	59.1% (15396)	61.3% (15313)	66.5% (15795)	67.4% (13992)	66.9% (12572)	66.7% (13700)	67.4% (3681)	66.4% (3524)	59.6% (4539)	61.4% (4131)	63.2% (2409)
<b>Skiff</b>	62.4% (1149)	61.4% (1965)	62.1% (2388)	69.1% (2947)	68.6% (2887)	68.2% (2720)	68.7% (3184)	68.8% (1017)	66.2% (987)	62.4% (1090)	65.3% (1003)	64.2% (654)
<b>Runabout</b> (with towed participants)	56.5% (10507)	60.9% (10422)	62.9% (9831)	67.9% (9332)	70.0% (7850)	68.2% (6751)	67.3% (6784)	67.4% (1641)	65.6% (1528)	57.9% (1995)	60.7% (1987)	61.9% (937)
<b>Runabout</b> (without towed participants)	54.8% (9983)	59.4% (9924)	60.0% (9114)	63.5% (8293)	66.6% (7064)	64.9% (6129)	64.0% (6172)	64.7% (1524)	64.0% (1458)	55.9% (1884)	58.0% (1848)	60.7% (899)
<b>Cabin Cruiser</b>	47.1% (1779)	48.4% (1878)	51.7% (1667)	52.3% (1749)	52.4% (1489)	56.8% (1203)	52.4% (1332)	54.6% (279)	62.7% (269)	47.8% (451)	46.5% (303)	54.4% (267)
<b>Houseboat</b>	16.9% (154)	24.0% (128)	22.2% (83)	19.4% (23)	42.5% (11)	30.0% (20)	.	.	17.5% (13)	77.7% (13)	.	.
<b>Pontoon</b>	50.9% (1113)	55.8% (1131)	59.3% (1359)	68.0% (1638)	66.5% (1672)	67.0% (1806)	70.3% (2272)	72.8% (721)	71.3% (718)	65.4% (967)	64.8% (809)	69.5% (517)
<b>PWC</b>	98.3% (1884)	98.5% (1607)	98.8% (1754)	99.1% (1663)	98.6% (1148)	99.2% (811)	98.9% (946)	99.6% (245)	99.2% (234)	99.7% (295)	100.0% (316)	97.6% (125)
<b>Powered Inflatable/Raft</b>	.	.	73.7% (68)	77.9% (129)	67.2% (94)	76.4% (92)	72.9% (128)	58.0% (23)	69.5% (22)	82.8% (36)	43.1% (29)	50.5% (34)

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\*Factors controlled for: Age & Boat Type.

Cells with a "." depict when there were too few boats to report.

## Life Jacket Wear Rates on Open Motorboats 2006 to 2025

In 2005, the National Boating Safety Advisory Council (NBSAC) proposed the development of a comprehensive strategic plan for the National Recreational Boating Safety Program, with the goal of reducing preventable fatalities, injuries, and property damage associated with recreational boating. A primary objective implemented in 2006 was to increase the observed wear rate among adults operating open motorboats. An open motorboat is a vessel equipped with propulsion machinery and an open load-carrying area without a continuous deck to protect the boat from water entry. For the purposes of this initiative, "open motorboats" refers to a combination of the skiff/utility and runabout/speedboat categories.

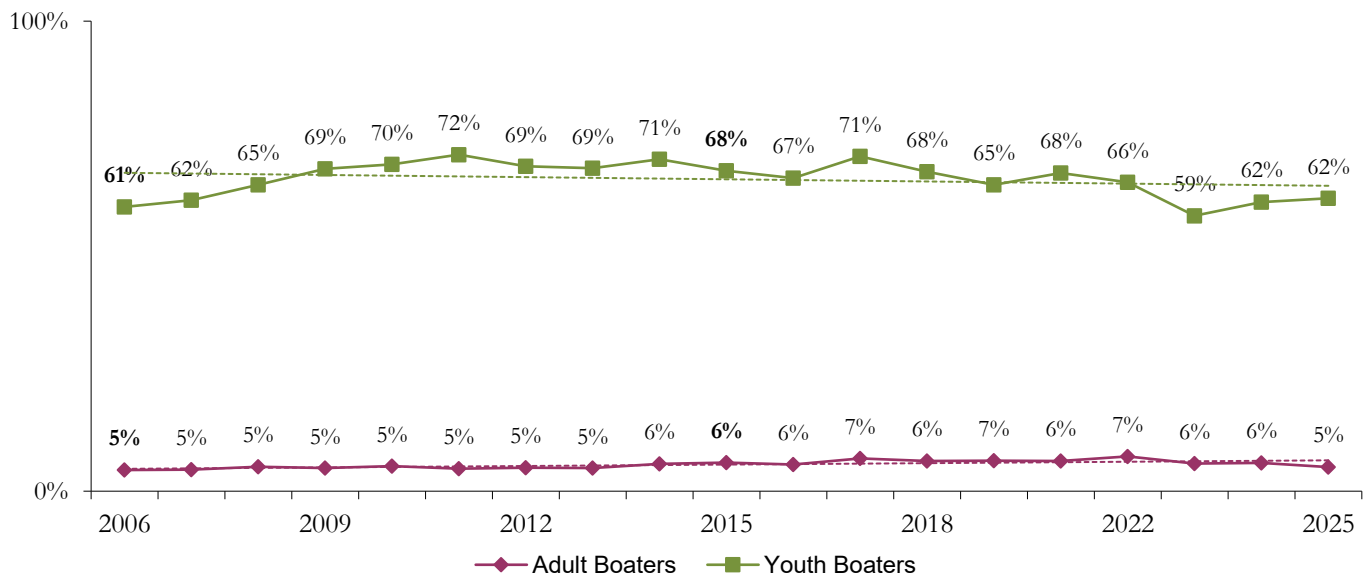
To ensure valid comparisons over time, the data are adjusted (weighted) each year so that the proportion of skiffs versus speedboats matches the 2006 baseline. This is necessary because life jacket usage behavior is inherently different between these two boat types; specifically, people in skiffs typically wear life jackets more often than people in speedboats. For example, if a higher percentage of skiffs were observed in 2025 than in 2006, the overall wear rate might appear to have improved even if actual boater behavior remained the same. In this case, the apparent increase would simply be due to the different mix of boats on the water in 2025. Standardizing these proportions ensures that the results reflect the real change in life jacket usage rather than just a change in the types of boats observed. These proportions are expected to vary annually across states, requiring ongoing adjustments to maintain consistency in comparisons.

Figure D and Table 2.3 show wear rates in open motorboats, weighted to align with the 2006 proportions.

**Adult wear rates.** In 2025, the adult life jacket wear rate for open motorboats was 5.1%. This compares to 4.5% in 1999 and 6.1% in 2015. Adult wear rates increased slightly from 2006 to 2022, before declining in 2023.

**Youth wear rates.** In 2025, the youth wear rates for open motorboats was 62.3%. This compares to 60.5% in 2006 and 68.2% in 2015. Wear rates appear to have increased from 2006 to 2011, held relatively steady through 2022, dropped off in 2023, and had an apparent rebound in 2024.

**Figure D. Wear Rates on Open Motorboats\***  
(Weighted to 2006 Skiff-Speedboat Proportions for Each State)



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\* The Open Motorboat category is created by grouping "skiffs" and "speedboat/runabouts" together. Two factors are controlled for in this chart: Age (proportions of 18 to 64 and 65+ adults), and the proportion of skiffs to speedboat/runabouts, which has been set each year within each state to reflect the proportions observed in 2006, the year in which the Strategic Plan goals were first measured. In addition, each state's contribution to the average is weighted to reflect the 2006 proportions.

\*\*Note that life jacket wear of towed passengers is included in the wear rates.

**Table 2.3. Life Jacket Wear Rates on Open Motorboats\***

Motorboat Type	Observation Year																		
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021	2022	2023	2024	2025
	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)
<b>Adult Wear Rates</b>																			
<b>Open Motorboat**</b>	4.5% (18603)	4.6% (19754)	5.2% (20534)	4.9% (21892)	5.3% (21727)	4.8% (20911)	5.0% (20377)	4.9% (18917)	5.8% (19816)	6.1% (18445)	5.7% (19074)	7.0% (17750)	6.4% (19684)	6.5% (20029)	6.4% (16158)	7.4% (15004)	5.9% (16803)	6.0% (16424)	5.1% (11601)
<b>Youth Wear Rates</b>																			
<b>Open Motorboat**</b>	60.5% (4009)	61.9% (4464)	65.2% (4244)	68.6% (4230)	69.5% (3805)	71.6% (3553)	69.1% (3766)	68.7% (3418)	70.6% (3597)	68.2% (3069)	66.6% (2805)	71.2% (2019)	68.0% (3345)	65.2% (3624)	67.7% (2658)	65.7% (2515)	58.6% (3085)	61.5% (2990)	62.3% (1591)

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\*Factors controlled for: Age & Boat Type.

\*\* The data are weighted to ensure that age groups and types of boat (i.e., skiffs and roundabout/speedboats) are set for each year within each state to reflect the proportions first measured in 2006.

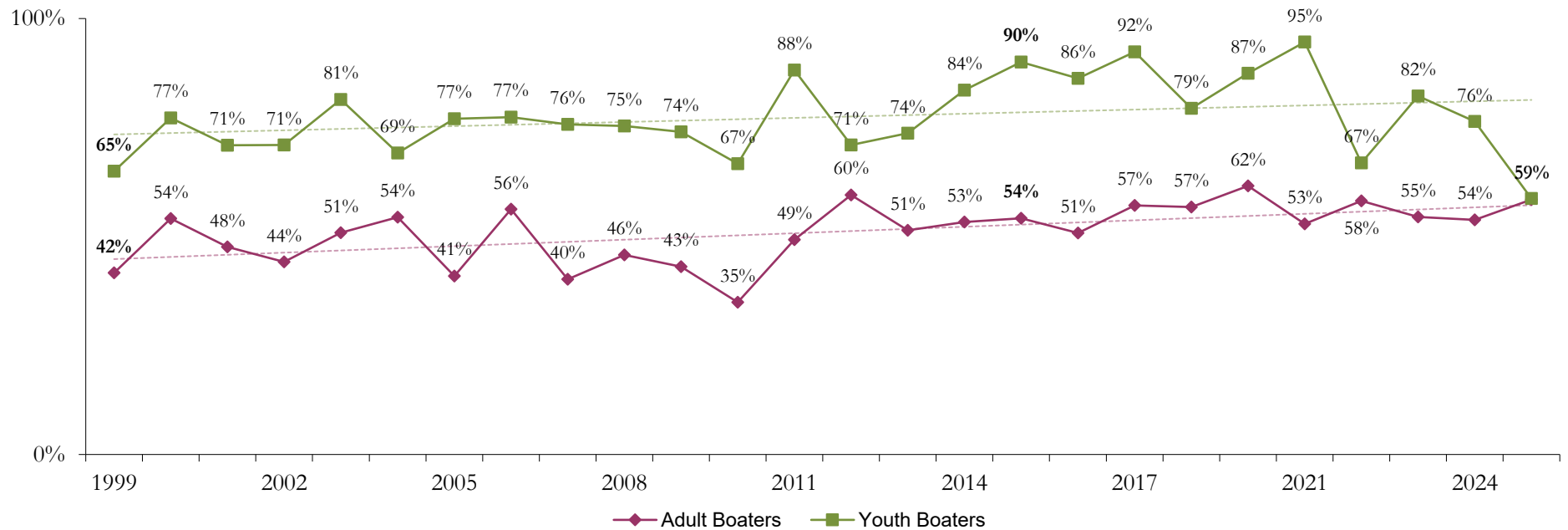
## Paddlecraft

This section summarizes paddlecraft life jacket wear rate trends. For the purpose of this study, paddlecraft includes paddled inflatables/rafts, rowboats/dinghies, canoes, kayaks, and paddleboards (i.e., stand up paddleboards (SUPs)). Figure E shows the wear rate trends for adults and youth on all paddlecraft, and Table 2.4 presents wear rates by the types of paddlecraft captured in the study.

**Adult wear rates.** In 2025, the adult wear rate for all paddlecraft was 58.5%. This compares to 41.7% in 1999 and 54.2% in 2015. The overall adult wear rate was the highest on paddlecraft, and has increased over the the duration of the study period, including in 2025. As shown in Table 2.4., a notable increase was observed in the adult kayak wear rate from 2024 to 2025.

**Youth wear rates.** In 2025, the youth wear rate for all paddlecraft was 58.7%. This compares to 65.0% in 1999 and 90.0% in 2015. From the beginning of the study through 2012, youth paddlecraft wear rates remained relatively steady. Rates then rose from 2012 to 2021, with a notable drop in 2022 that has ended in the lowest wear rate to date. This drop appears to be most pronounced for canoes, canoe/kayak combined, and paddleboards. Changes in these wear rates should be viewed with caution due to the lower number of youth boaters on paddlecraft observed in 2025.

Figure E. Wear Rates for All Paddlecraft\*



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 \*Factors controlled for: Age & Boat Type.

**Table 2.4. Life Jacket Wear Rates by Paddlecraft**

Paddlecraft Type	Observation Year											
	1999–2001 % (N)	2002–04 % (N)	2005–07 % (N)	2008–10 % (N)	2011–13 % (N)	2014–16 % (N)	2017–19 % (N)	2021 % (N)	2022 % (N)	2023 % (N)	2024 % (N)	2025 % (N)
<b>Adult Wear Rates</b>												
<b>All Paddlecraft</b>	47.7% (4540)	49.5% (4290)	44.5% (4569)	40.3% (5902)	53.8% (5377)	52.6% (7311)	58.4% (6690)	52.9% (2523)	58.2% (1853)	54.5% (2023)	53.8% (1953)	58.5% (1074)
<b>Paddled Inflatable/Raft</b>	.	.	23.5% (475)	14.5% (1371)	28.8% (916)	34.3% (997)	52.1% (810)	38.6% (516)	40.4% (265)	29.5% (253)	31.9% (358)	51.1% (29)
<b>Rowboat/Dinghy</b>	27.5% (314)	22.6% (345)	23.5% (220)	30.1% (162)	32.5% (197)	31.0% (172)	28.5% (211)	8.4% (62)	33.3% (25)	11.9% (36)	17.8% (11)	49.9% (20)
<b>Canoe</b>	24.8% (2273)	23.9% (1930)	19.7% (1811)	21.3% (2233)	35.4% (1393)	23.7% (2065)	27.4% (1707)	32.6% (360)	28.7% (250)	29.8% (291)	34.3% (220)	25.8% (178)
<b>Kayak</b>	84.3% (1953)	84.7% (2015)	74.6% (2063)	71.5% (2136)	70.7% (2871)	72.3% (4077)	75.0% (3962)	64.1% (1179)	77.5% (816)	70.1% (983)	67.9% (909)	76.4% (623)
<b>Canoe/Kayak Combined</b>	59.7% (4226)	60.0% (3945)	52.9% (3874)	52.0% (4369)	56.1% (4264)	53.5% (6142)	56.4% (5669)	48.1% (1539)	57.7% (1066)	52.6% (1274)	51.8% (1129)	57.1% (801)
<b>Paddleboard** (SUPs)</b>	.	.	.	.	54.1% (505)	53.6% (1152)	52.8% (1382)	52.7% (406)	48.5% (497)	50.9% (460)	46.8% (455)	45.1% (224)
<b>Youth Wear Rates</b>												
<b>All Paddlecraft</b>	71.9% (871)	74.6% (678)	76.3% (837)	71.8% (1173)	75.7% (1043)	86.8% (1018)	86.9% (1044)	94.6% (605)	66.9% (396)	82.2% (272)	76.4% (339)	58.7% (147)
<b>Paddled Inflatable/Raft</b>	.	.	58.3% (220)	55.2% (381)	56.9% (304)	85.1% (283)	80.2% (288)	94.0% (293)	45.3% (101)	72.5% (49)	67.5% (92)	.
<b>Rowboat/Dinghy</b>	58.6% (55)	69.2% (64)	64.4% (55)	86.5% (48)	91.5% (35)	83.5% (42)	76.3% (14)	.	.	66.0% (13)	.	.
<b>Canoe</b>	69.1% (545)	70.8% (374)	76.9% (273)	73.8% (459)	80.7% (310)	78.0% (205)	81.3% (250)	80.0% (66)	52.0% (86)	94.4% (33)	83.3% (44)	56.0% (41)
<b>Kayak</b>	91.0% (271)	91.2% (240)	90.5% (289)	85.7% (285)	83.8% (394)	89.2% (488)	91.9% (492)	86.8% (165)	87.1% (114)	87.6% (108)	88.3% (114)	76.8% (53)
<b>Canoe/Kayak Combined</b>	78.9% (816)	80.3% (614)	84.5% (562)	80.3% (744)	81.9% (704)	83.8% (693)	86.5% (742)	82.2% (231)	71.0% (200)	85.6% (141)	83.7% (158)	66.7% (94)
<b>Paddleboard** (SUPs)</b>	.	.	.	.	67.6% (70)	75.6% (168)	72.1% (234)	78.7% (75)	80.5% (87)	78.3% (69)	67.0% (81)	37.0% (46)

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2025 Observational Life Jacket Wear Rate Study

\*Factors controlled for: Age & Boat Type.

\*\*First observed in 2010.

Cells with a "." depict when there were too few boats to report.



Source: Shutterstock



Source: Shutterstock

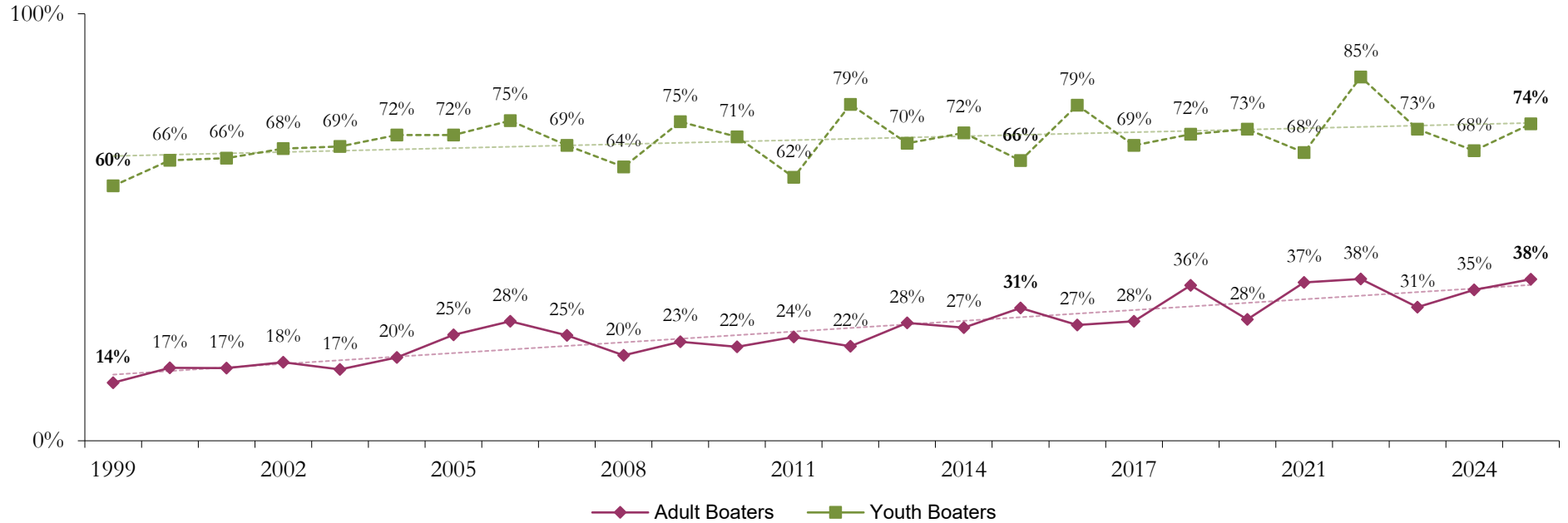
## Sailboats

This section summarizes sailboat life jacket wear rate trends. For the purpose of this study, sailboats include sailboards, daysailers, and cabin sailboats. Figure F shows the wear rate trends for adults and youth on all sailboats, and Table 2.5 presents wear rates by the types of sailboats captured in the study.

**Adult wear rates.** In 2025, the adult wear rate for all sailboats was 37.8%. This compares to 13.6% in 1999 and 31.1% in 2015. Wear rates have varied since the study's onset, particularly starting in 2005; however, even with this variation, the overall trend shows a consistent increase through 2025. In Table 2.5, we can see that wear rates on cabin sailboats have increased steadily over time, with a notable increase in 2024 and 2025.

**Youth wear rates.** In 2025, the youth wear rate for all sailboats was 74.2%. This compares to 59.7% in 1999 and 65.6% in 2015.

Figure F. Wear Rates for All Sailboats\*



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\*Factors controlled for: Age & Boat Type.

**Table 2.5. Life Jacket Wear Rates by Sailboats\***

Sailboat Type	Observation Year											
	1999–2001 % (N)	2002–04 % (N)	2005–07 % (N)	2008–10 % (N)	2011–13 % (N)	2014–16 % (N)	2017–19 % (N)	2021 % (N)	2022 % (N)	2023 % (N)	2024 % (N)	2025 % (N)
<b>Adult Wear Rates</b>												
<b>All Sailboats</b>	15.6% (10825)	17.6% (11390)	25.7% (9586)	21.7% (10148)	24.4% (9368)	28.2% (8143)	31.1% (7603)	37.1% (1742)	37.9% (1154)	31.3% (2057)	35.4% (1763)	37.8% (1195)
<b>Sailboard</b>	52.8% (91)	89.0% (117)	82.1% (45)	85.2% (53)	97.2% (33)	93.6% (30)	89.9% (74)	92.8% (13)	76.3% (26)	90.5% (10)	.	.
<b>Daysailer</b>	34.5% (2134)	45.5% (2927)	55.9% (1742)	55.9% (2032)	60.1% (1887)	62.0% (1727)	69.2% (1527)	80.1% (249)	79.7% (251)	78.8% (348)	68.0% (344)	70.7% (191)
<b>Cabin Sailboat</b>	10.3% (8600)	9.9% (8346)	17.2% (7799)	12.3% (8063)	14.5% (7448)	18.7% (6386)	20.8% (6002)	26.6% (1480)	26.9% (877)	19.3% (1699)	26.4% (1410)	28.9% (1001)
<b>Youth Wear Rates</b>												
<b>All Sailboats</b>	63.5% (1100)	69.3% (1027)	71.7% (969)	69.8% (781)	70.4% (752)	72.0% (576)	71.5% (532)	67.5% (64)	85.2% (101)	73.0% (153)	67.9% (93)	74.2% (70)
<b>Sailboard</b>	58.7% (16)	.	87.5% (13)	.	.	.	.	.	.	.	.	.
<b>Daysailer</b>	78.2% (280)	83.6% (346)	85.4% (243)	88.2% (241)	94.2% (259)	95.0% (184)	94.6% (134)	85.7% (11)	100.0% (55)	88.3% (37)	100.0% (17)	92.2% (25)
<b>Cabin Sailboat</b>	58.3% (804)	63.2% (672)	65.6% (713)	62.4% (536)	58.8% (492)	61.3% (392)	61.4% (394)	61.6% (52)	67.5% (46)	66.4% (116)	55.6% (75)	66.4% (45)

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\*Factors controlled for: Age & Boat Type.

Cells with a "." depict when there were too few boats to report.



Source: iStock



Source: Shutterstock

## Life Jacket Wear Rates by Boat Type and Size

Table 2.6 shows adult life jacket wear rates by boat size for motorboats, sailboats, and paddlecraft. This data covers the period since 2004, when observations were split into four size categories (<16 ft, 16–20.9 ft, 21–25.9 ft, and ≥26 ft). Note that the tenths decimal place in this report refers to tenths of a foot.

There is an inverse relationship between life jacket wear rates and boat size. That is, as boat size increased across all three boat types, wear rates declined. In 2025, the wear rate for motorboats <16 ft was 11.7% and dropped steadily to 2.5% for boats ≥26 ft. The wear rate for paddlecraft under 16 ft was 69.8% compared to 33.0% for crafts 16–20.9 ft. Finally, wear rates for sailboats <16 ft was 90.8% and dropped steadily to 22.3% for boats ≥26 ft.

Wear rates appear to be relatively consistent over time for most boat types and sizes, however, the wear rates for sailboats and paddlecraft smaller than 16 ft appears to have increased to its highest level in 2025 (90.8% and 69.8%, respectively). Additional observation years will inform these trends more fully.

**Table 2.6. Life Jacket Wear Rates by Boat Type and Size for Adults\***

Boat Size	Observation Year										
	2004 % (N)	2005–07 % (N)	2008–10 % (N)	2011–13 % (N)	2014–16 % (N)	2017–19 % (N)	2021 % (N)	2022 % (N)	2023 % (N)	2024 % (N)	2025 % (N)
<b>Motorboats (excluding PWC)</b>											
<16 ft.	8.7% (2131)	8.1% (7922)	9.6% (6438)	9.1% (5879)	9.1% (7124)	12.4% (5260)	16.5% (1623)	13.6% (958)	18.8% (1203)	9.9% (1142)	11.7% (751)
16–20.9 ft.	4.7% (16276)	4.9% (39413)	5.4% (39655)	4.9% (37575)	6.8% (35319)	7.3% (35553)	6.0% (8322)	7.2% (9332)	6.0% (9155)	5.5% (11028)	5.7% (6617)
21–25.9 ft.	2.4% (6218)	3.1% (21094)	2.7% (29260)	2.4% (27471)	3.3% (26851)	3.9% (29632)	3.2% (9957)	2.9% (8532)	2.4% (10940)	2.9% (8894)	2.6% (7350)
≥26 ft.	0.8% (3407)	1.5% (9915)	1.5% (12669)	1.8% (12948)	1.9% (12692)	2.3% (13739)	2.1% (3659)	5.2% (2982)	2.6% (4121)	2.2% (3167)	2.5% (3000)
<b>Paddlecraft (excluding SUPs)</b>											
<16 ft.	60.7% (1212)	57.9% (2910)	41.9% (4483)	53.7% (4036)	55.9% (5799)	64.4% (5087)	66.4% (1284)	62.4% (1188)	55.6% (1253)	61.2% (1212)	69.8% (655)
16–20.9 ft.	45.8% (490)	25.5% (1302)	57.2% (583)	52.2% (1337)	35.4% (1502)	36.6% (1558)	30.1% (783)	49.1% (166)	52.2% (304)	30.3% (280)	33.0% (190)
<b>Sailboats</b>											
<16 ft.	75.2% (481)	75.6% (718)	69.0% (709)	75.7% (490)	82.0% (662)	76.1% (662)	70.3% (75)	72.8% (79)	83.4% (88)	78.3% (68)	90.8% (72)
16–20.9 ft.	34.1% (357)	54.0% (1114)	53.5% (873)	59.2% (1083)	49.9% (848)	63.3% (954)	74.9% (357)	80.9% (186)	75.2% (270)	63.6% (285)	56.7% (122)
21–25.9 ft.	11.6% (1428)	23.1% (3117)	16.9% (2626)	25.7% (2571)	31.2% (1806)	35.1% (1954)	43.8% (462)	52.0% (253)	35.7% (538)	32.8% (539)	38.6% (453)
≥26 ft.	9.6% (1864)	11.6% (4637)	12.1% (594)	10.3% (5224)	15.4% (4818)	14.9% (4030)	14.7% (848)	17.6% (636)	12.5% (1159)	23.6% (871)	22.3% (548)

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\*Factors controlled for: Age & Boat Type.

## D. Engine Cut-off Switch

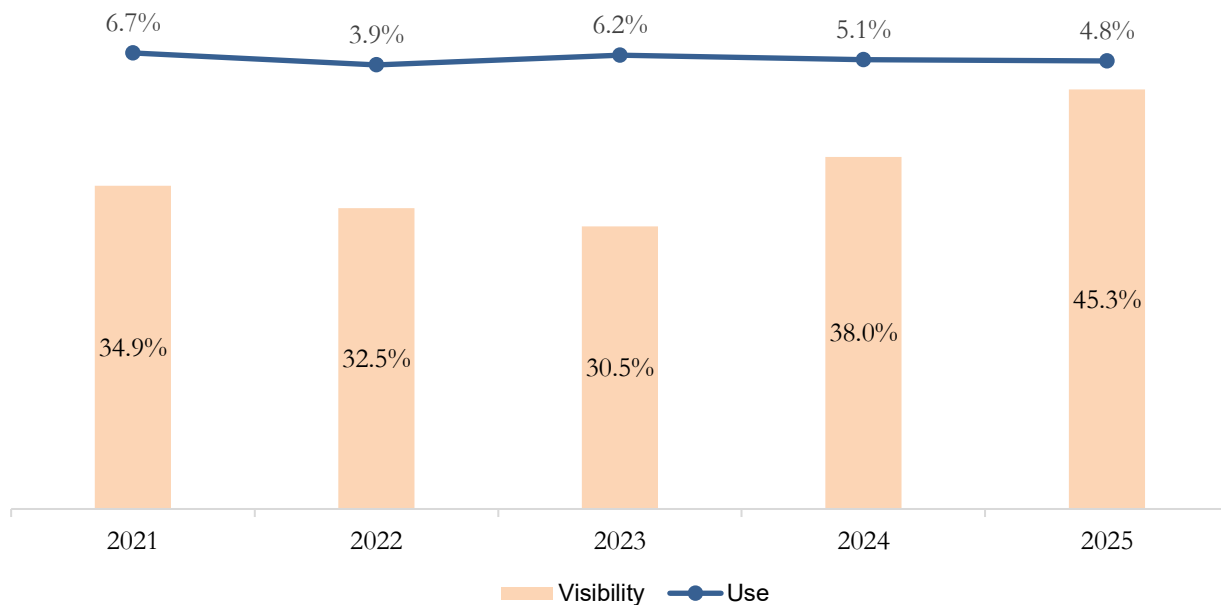
Since December 2019, the USCG has required engine cut-off switches (ECOS) on recreational motorboats under 26 ft in length to prevent propeller strikes and runaway or circling boats (the “Circle of Death”) if the operator goes overboard. Additionally, federal law effective April 1, 2022 mandates that operators of motorboats under 26 ft use an ECOS while on plane (i.e., when the boat reaches a speed that allows it to ride over its bow wave rather than plowing through it) when the helm is not located within the cabin\*\*. ECOS use is not required while docking, launching, loading on a trailer, or trolling. In 2021, observers began tracking ECOS use on motorboats of all sizes and activities.

Figure G shows the trend of ECOS visibility and use, and Table 2.7 presents these data by the types of motorboats captured in the study. Findings should be viewed with caution due to the difficulty of observing whether an ECOS is being used.

**ECOS visibility.** The data highlight the challenge in observing ECOS use due to obstructions such as the vessel itself, operator positioning, or the rise of wireless systems.

**ECOS use.** In 2025, when ECOS use was clearly observed, 4.8% of operators were using it. This is consistent with prior years.

Figure G. ECOS Visibility and Actual Use\*



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\*Factors controlled for: Age & Boat Type.

\*\*Applicable to vessels with ECOS installed by the manufacturer on waters of federal jurisdiction. Some states have not incorporated an ECOS requirement for vessels other than PWC operating on sole state waters.

**Table 2.7. ECOS Visibility and Actual Use by Boat Type\***  
(2021 to 2025)

Boat Type	Observation Year				
	2021	2022	2023	2024	2025
	% (N)	% (N)	% (N)	% (N)	% (N)
<b>Visible</b>					
<b>PWC</b>	87.1% (1334)	85.6% (1177)	73.1% (1438)	84.0% (1321)	87.2% (815)
<b>Skiff</b>	46.6% (2960)	43.2% (2864)	42.3% (3040)	49.7% (2802)	53.0% (2332)
<b>Runabout</b>	22.8% (2868)	22.5% (2619)	22.0% (2999)	28.9% (2969)	37.7% (1763)
<b>Cabin Cruiser</b>	22.6% (403)	20.9% (277)	19.0% (464)	20.8% (438)	25.7% (319)
<b>Houseboat</b>	. (3)	. (3)	. (4)	. (2)	. (2)
<b>Pontoon</b>	36.9% (1019)	29.3% (1052)	23.9% (1047)	38.5% (1133)	45.8% (811)
<b>Powered Inflatable/Raft</b>	53.8% (145)	48.1% (129)	42.9% (76)	43.4% (152)	55.3% (123)
<b>Total**</b>	34.9% (7398)	32.5% (6944)	30.5% (7731)	38.0% (7496)	45.3% (3241)
<b>Using</b>					
<b>PWC</b>	90.5% (1162)	94.5% (1007)	91.3% (1051)	95.3% (1109)	94.0% (711)
<b>Skiff</b>	5.0% (1380)	5.4% (1237)	6.4% (1285)	5.8% (1392)	6.2% (1237)
<b>Runabout</b>	10.4% (653)	1.5% (589)	5.0% (660)	4.1% (859)	2.9% (664)
<b>Cabin Cruiser</b>	1.1% (91)	0.0% (58)	6.8% (88)	4.4% (91)	3.7% (82)
<b>Houseboat</b>	. (1)	. (1)	. (1)	. (2)	. (2)
<b>Pontoon</b>	8.0% (376)	2.9% (308)	6.4% (250)	4.8% (436)	2.7% (371)
<b>Powered Inflatable/Raft</b>	7.7% (78)	6.5% (62)	10.5% (76)	7.6% (66)	10.3% (68)
<b>Total**</b>	6.7% (2579)	3.9% (2255)	6.2% (2360)	5.1% (2846)	4.8% (2424)

JSI Research & Training Institute, Inc.

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\*Data are for boats not boaters; n's are denominators.

\*\*Totals do not include PWC data.

Cells with a "." depict when there were too few boats to report.

## E. Conclusion

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Results show the life jacket wear rate for all boaters was 21.3% in 1999 and 21.6% in 2025. Excluding PWCs, where life jacket use is required by law, the rate was 15.4% in 1999 and 17.5% in 2025. While slight variations occur in overall wear rates throughout the study period, more notable variations appear when examining wear rates by age and boat type. These findings are detailed below:

- In 2025, the wear rate for adults (ages 18+) was 9.7% and 63.2% for youth (ages 0–17). Within these age groups, trends vary: while observed life jacket use for boaters ages 18–64 was consistent over time, use by the 65+ group increased through 2022, with a drop starting in 2023. Additional observation years will inform this trend more fully. Furthermore, while youth wear rates increased from the beginning of the study through 2021, with an apparent drop starting in 2022, the largest decrease was among the 13–17 age group between 2022 and 2023.
- The trend in wear rates for adults on paddlecraft has steadily increased since the beginning of the study, starting at 41.7% in 1999 and rising to 58.5% in 2025. Additionally, there was a notable increase in the adult wear rate for kayaks in the last year, from 67.9% in 2024 to 76.4% in 2025.
- In contrast, the 58.7% youth wear rate on paddlecraft in 2025 was the lowest youth wear rate to date. From the beginning of the study through 2012, youth wear rates on paddlecraft remained relatively steady; they then rose from 2012 to 2021, followed by a notable drop starting in 2022 that resulted in the lowest wear rate to date.
- Wear rates on sailboats have steadily increased since the inception of the study for both adults and youth. Adult wear rates increased from 13.6% in 1999 to 37.8% in 2025, while youth wear rates increased from 59.7% in 1999 to 74.2% in 2025. There was a notable increase in adult wear rates on cabin sailboats between 2024 (26.4%) and 2025 (28.9%).
- Data suggests a trend shift beginning in 2023 for youth life jacket usage on motorboats. After a decrease that year (66.6% in 2022 to 59.7 in 2023), observed youth wear rates across all motorboats indicate a rebound through 2025 (61.4% in 2024 and 63.2% in 2025). Additional observation years will inform this trend more fully.
- Adult wear rates for all motorboats remained steady with only slight variations throughout the study period. Rates ranged between 3.8% and 6.3% for all motorboats, and between 4.5% and 7.4% for open motorboats.

Further investigation of the increase in adult wear rates and the simultaneous decrease in youth wear rates on paddlecraft may reveal important dynamics that could inform different intervention strategies for adults versus youth in this boat category. Continued increases in wear rates for adults and youth on sailboats suggest that current strategies targeted at this boat type have been successful and should continue. Regarding motorboats, additional data will be needed to interpret the extent to which the apparent 2023 downward shift in youth wear rates will continue or reverse. Finally, because adult wear rates on motorboats have shown little change over the study period, there is a clear value in investigating new or additional approaches that could lead to higher life jacket usage among this group.

# Appendix A. Data Collection Forms

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**JSI Data Collection Form: 2025 Boat Form**

**TIME:**  7:59 or earlier  8:00 - 9:59 am  10:00 - 11:59 am  12:00 - 1:59 pm  2:00 - 3:59 pm  4:00 - 5:59 pm  6:00 or later

POWER BOAT:		SAIL:	PADDLE:	GENDER			AGE(years)					PFD			WS
<input type="radio"/> Skiff/Utility <input type="radio"/> Pontoon <input type="radio"/> Runabout <input type="radio"/> Inflatable/Raft <input type="radio"/> Cabin cruiser <input type="radio"/> Houseboat <input type="radio"/> PWC <input type="checkbox"/> ECOS <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> ?		<input type="radio"/> Day sailor <input type="radio"/> Cabin sailboat <input type="radio"/> Sailboard	<input type="radio"/> Kayak <input type="radio"/> Paddle board <input type="radio"/> Canoe <input type="radio"/> Inflatable <input type="radio"/> Rowboat	M	F	?	0-5	6-12	13-17	18-64	65+	Buoyant (Trad)	Inflatable Susp Belt	Not Wear	SW Yes
<b>SIZE:</b>		<b>OPERATION:</b>		<b>ACTIVITY:</b>			OP								
<input type="radio"/> Under 16 <input type="radio"/> 16 - 20.9 <input type="radio"/> 21 - 25.9 <input type="radio"/> 26 - 45.9 <input type="radio"/> 46 +	<input type="radio"/> Cruising/Motoring <input type="radio"/> Sailing <input type="radio"/> Rowing/Paddling <input type="radio"/> Drifting <input type="radio"/> Anchored	<input type="radio"/> Pleasure <input type="radio"/> Water skiing <input type="radio"/> White water <input type="radio"/> High Speed	<input type="radio"/> Fishing <input type="radio"/> Intent to Fish <input type="radio"/> Swimming <input type="radio"/> Other	P1											
				P2											
				P3											
				P4											
				P5											
				P6											
				P7											
				P8											



POWER BOAT:		SAIL:	PADDLE:	GENDER			AGE(years)					PFD			WS
<input type="radio"/> Skiff/Utility <input type="radio"/> Pontoon <input type="radio"/> Runabout <input type="radio"/> Inflatable/Raft <input type="radio"/> Cabin cruiser <input type="radio"/> Houseboat <input type="radio"/> PWC <input type="checkbox"/> ECOS <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> ?		<input type="radio"/> Day sailor <input type="radio"/> Cabin sailboat <input type="radio"/> Sailboard	<input type="radio"/> Kayak <input type="radio"/> Paddle board <input type="radio"/> Canoe <input type="radio"/> Inflatable <input type="radio"/> Rowboat	M	F	?	0-5	6-12	13-17	18-64	65+	Buoyant (Trad)	Inflatable Susp Belt	Not Wear	SW Yes
<b>SIZE:</b>		<b>OPERATION:</b>		<b>ACTIVITY:</b>			OP								
<input type="radio"/> Under 16 <input type="radio"/> 16 - 20.9 <input type="radio"/> 21 - 25.9 <input type="radio"/> 26 - 45.9 <input type="radio"/> 46 +	<input type="radio"/> Cruising/Motoring <input type="radio"/> Sailing <input type="radio"/> Rowing/Paddling <input type="radio"/> Drifting <input type="radio"/> Anchored	<input type="radio"/> Pleasure <input type="radio"/> Water skiing <input type="radio"/> White water <input type="radio"/> High Speed	<input type="radio"/> Fishing <input type="radio"/> Intent to Fish <input type="radio"/> Swimming <input type="radio"/> Other	P1											
				P2											
				P3											
				P4											
				P5											
				P6											
				P7											
				P8											

POWER BOAT:		SAIL:	PADDLE:	GENDER			AGE(years)					PFD			WS
<input type="radio"/> Skiff/Utility <input type="radio"/> Pontoon <input type="radio"/> Runabout <input type="radio"/> Inflatable/Raft <input type="radio"/> Cabin cruiser <input type="radio"/> Houseboat <input type="radio"/> PWC <input type="checkbox"/> ECOS <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> ?		<input type="radio"/> Day sailor <input type="radio"/> Cabin sailboat <input type="radio"/> Sailboard	<input type="radio"/> Kayak <input type="radio"/> Paddle board <input type="radio"/> Canoe <input type="radio"/> Inflatable <input type="radio"/> Rowboat	M	F	?	0-5	6-12	13-17	18-64	65+	Buoyant (Trad)	Inflatable Susp Belt	Not Wear	SW Yes
<b>SIZE:</b>		<b>OPERATION:</b>		<b>ACTIVITY:</b>			OP								
<input type="radio"/> Under 16 <input type="radio"/> 16 - 20.9 <input type="radio"/> 21 - 25.9 <input type="radio"/> 26 - 45.9 <input type="radio"/> 46 +	<input type="radio"/> Cruising/Motoring <input type="radio"/> Sailing <input type="radio"/> Rowing/Paddling <input type="radio"/> Drifting <input type="radio"/> Anchored	<input type="radio"/> Pleasure <input type="radio"/> Water skiing <input type="radio"/> White water <input type="radio"/> High Speed	<input type="radio"/> Fishing <input type="radio"/> Intent to Fish <input type="radio"/> Swimming <input type="radio"/> Other	P1											
				P2											
				P3											
				P4											
				P5											
				P6											
				P7											
				P8											

**PFD Study 2025**

**CODE**

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
State	Site	Block	Group	Phase	Page Number

# JSI Data Collection Form: 2025 Site Form

PFD Study 2025

ID

# of Boats Observed      State      Site      Block      Group      Phase

## 1. Site Information

Observer Names: \_\_\_\_\_ City: \_\_\_\_\_  
 Site Name: \_\_\_\_\_ Water: \_\_\_\_\_  
 Date of Observation:   /   /   Day of the week:  Sat.  Sun.  
 Observation start time:   :    AM  PM Observation end time:   :    AM  PM

★★ Loaner Board:  Yes (COMPLETE 'Loaner Board' section on back of page.)  No

## 2. Type of Body of Water

Bay, inlet or sound       River, stream, creek or canal       Other: \_\_\_\_\_  
 Harbor       Lake, pond, or reservoir (not Great Lakes)  
 Intracoastal waterway       Great lake (not including tributaries)

## 3. Site Conditions

Water temperature:   degrees F

### A. First Weather Observation (to be completed during 1st time block of boat observations)

Time:  7:59 or before  8-9:59 AM  10-11:59 AM  12-1:59 PM  2-3:59 PM  4-5:59 PM  6 PM or later

Air Temp. <input type="text"/> <input type="text"/> <input type="text"/> F	Water Conditions <input type="radio"/> Calm (less than 6") <input type="radio"/> Choppy (6" to 2') <input type="radio"/> Rough (over 2')	Current <input type="radio"/> Strong <input type="radio"/> Moderate <input type="radio"/> Weak/None	Visibility <input type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor	Weather Conditions <input type="radio"/> Sunny <input type="radio"/> Raining <input type="radio"/> Partly Cloudy <input type="radio"/> Stormy <input type="radio"/> Cloudy
Wind Speed <input type="text"/> <input type="text"/> knots				

### B. Second Weather Observation (to be completed during 2nd time block of boat observations)

Time:  7:59 or before  8-9:59 AM  10-11:59 AM  12-1:59 PM  2-3:59 PM  4-5:59 PM  6 PM or later

Air Temp. <input type="text"/> <input type="text"/> <input type="text"/> F	Water Conditions <input type="radio"/> Calm (less than 6") <input type="radio"/> Choppy (6" to 2') <input type="radio"/> Rough (over 2')	Current <input type="radio"/> Strong <input type="radio"/> Moderate <input type="radio"/> Weak/None	Visibility <input type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor	Weather Conditions <input type="radio"/> Sunny <input type="radio"/> Raining <input type="radio"/> Partly Cloudy <input type="radio"/> Stormy <input type="radio"/> Cloudy
Wind Speed <input type="text"/> <input type="text"/> knots				

### C. Third Weather Observation (to be completed during 3rd time block of boat observations)

Time:  7:59 or before  8-9:59 AM  10-11:59 AM  12-1:59 PM  2-3:59 PM  4-5:59 PM  6 PM or later

Air Temp. <input type="text"/> <input type="text"/> <input type="text"/> F	Water Conditions <input type="radio"/> Calm (less than 6") <input type="radio"/> Choppy (6" to 2') <input type="radio"/> Rough (over 2')	Current <input type="radio"/> Strong <input type="radio"/> Moderate <input type="radio"/> Weak/None	Visibility <input type="radio"/> Good <input type="radio"/> Fair <input type="radio"/> Poor	Weather Conditions <input type="radio"/> Sunny <input type="radio"/> Raining <input type="radio"/> Partly Cloudy <input type="radio"/> Stormy <input type="radio"/> Cloudy
Wind Speed <input type="text"/> <input type="text"/> knots				

TURN TO BACK PAGE FOR ADDITIONAL QUESTIONS →

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## LOANER BOARD

If a loaner board was present at this site, please answer the following questions:

A. Number of available life jackets:

Infant

Child

Youth

Adult

B. Distance from boat launch:  Right next to launch area  Within 50 yards  More than 50 yards

C. Provides instructions on how to put on a lifejacket:  Yes  No

D. Information is provided in additional languages:  Yes  No

If yes, which languages:  Spanish  Other, please specify: \_\_\_\_\_

E. PLEASE TAKE A PHOTO OF THE LOANER BOARD SIGN AND EMAIL TO JSI.

Took photo and will email to JSI.

1. DID YOU HAVE ANY TROUBLE GETTING TO THE OBSERVATION POINT AT THIS SITE?

Yes  No

If yes, please email JSI with issue(s) encountered and updates to the current directions.

2. WAS A FISHING TOURNAMENT HAPPENING AT THIS SITE DURING YOUR OBSERVATIONS?

Yes  No  Don't know/Not sure

3. DID THE WEATHER AFFECT YOUR ABILITY TO CONDUCT YOUR OBSERVATIONS AT THIS SITE IN ANY WAY?

Yes  No

If yes, please specify:

---

---

4. TO YOUR KNOWLEDGE, DID THE WEATHER AFFECT THE LEVEL OF BOATING ACTIVITY AT THIS SITE IN ANY WAY?

Yes  No

If yes, please specify:

---

---

5. Please note any special events (e.g., a race or regatta) or other conditions (e.g., the presence of a Coast Guard boat, harbor master or enforcement boat) that may have influenced the type of boats, volume of boats, or boaters' use of PFDs.

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## **Appendix B. Information on Boats and People Observed**

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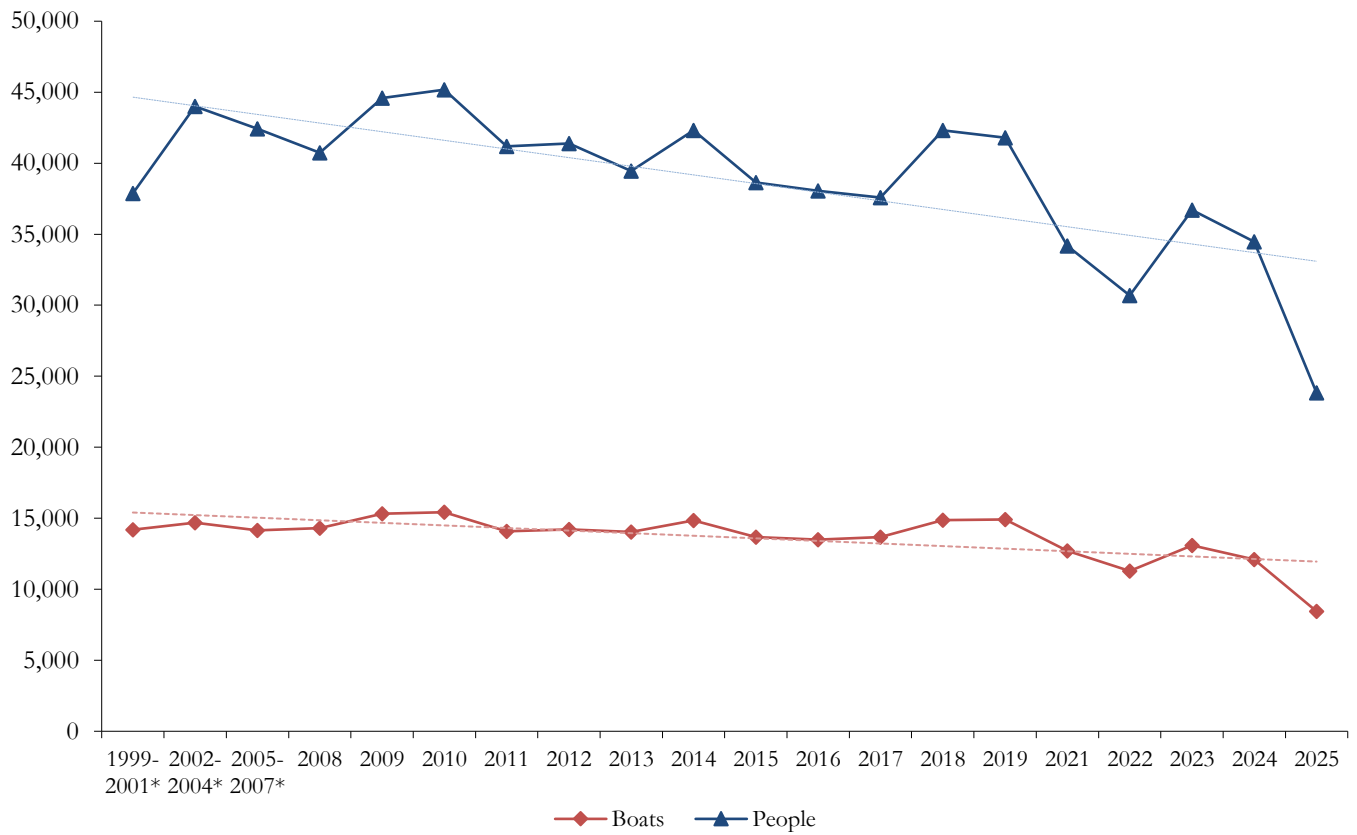
Appendix B examines the consistency of observed boat types, boater demographics, and environmental conditions across years.

Figures H–P detail the proportions of different boat types, boat lengths, operations, activities, and the age and sex of boaters. These data show that the diversity and representativeness of boats and boaters at the observed sites have remained mostly stable over the lifespan of the study.

Figures Q–W present the weather and water conditions at observation sites. Similar to the boat and boater data, these figures demonstrate that weather and water conditions were consistent across years, meaning they did not skew overall changes in life jacket wear rates. However, fluctuations in these factors at individual sites may have contributed to wear rate variations locally. .

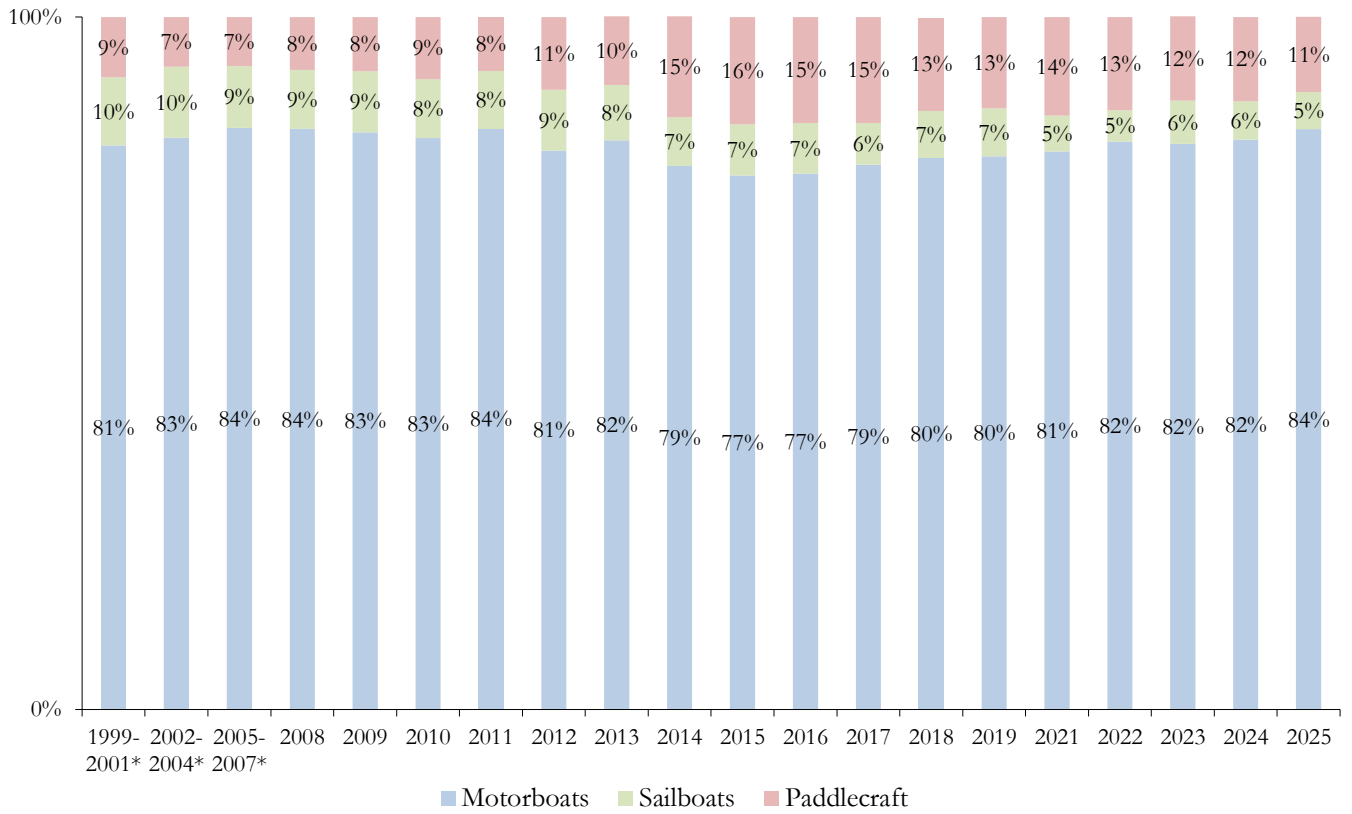
Lastly, the figures in this section use a slightly different calculation than reports prior to 2011. Percentages now exclude missing observations for specific characteristics; however, because missing data is so rare, this change has a minimal impact on the results.

**Figure H. Number of Boats and People (1999-2025)**



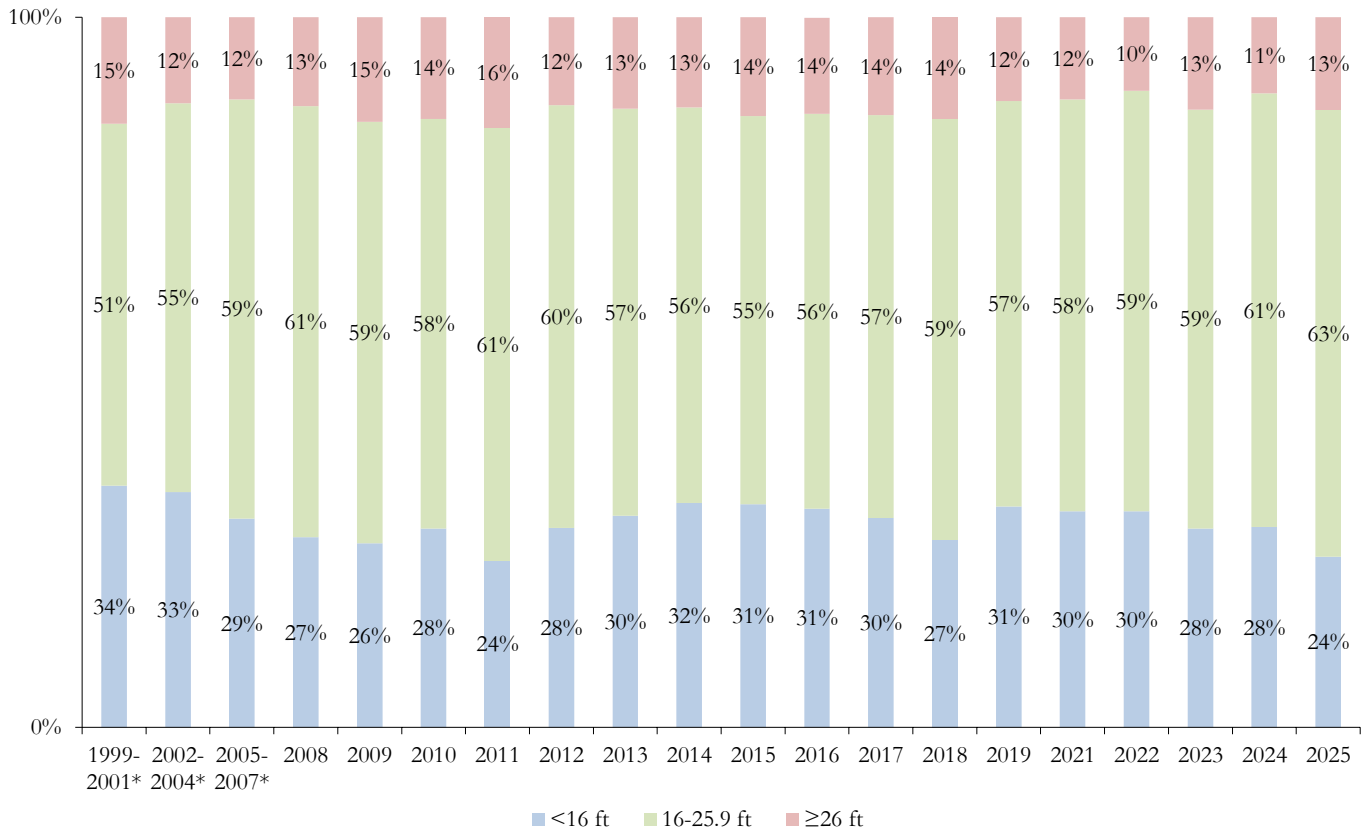
\*Three-year average

**Figure I. Types of Boats (1999–2025)**



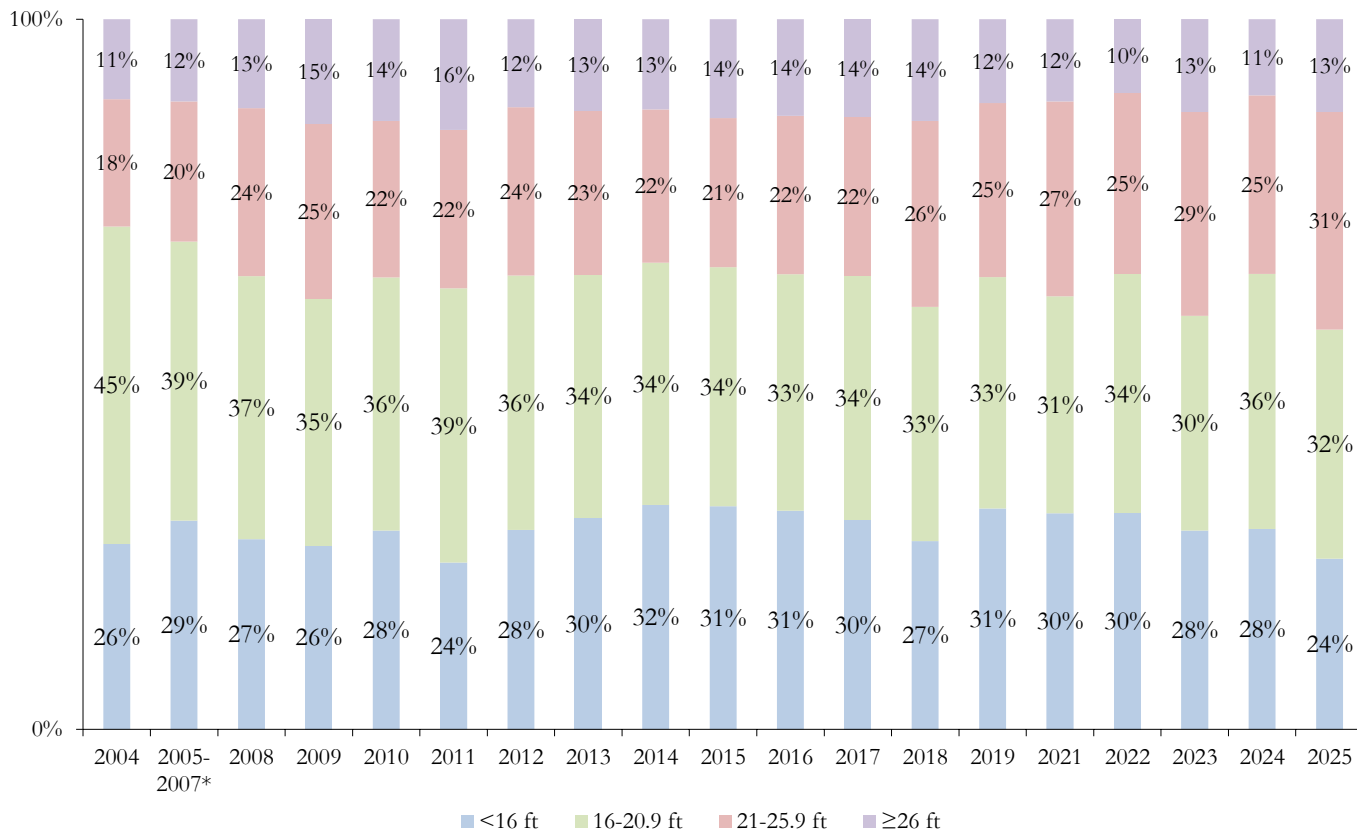
\*Three-year average

**Figure J. Length of Boats (1999-2025)**

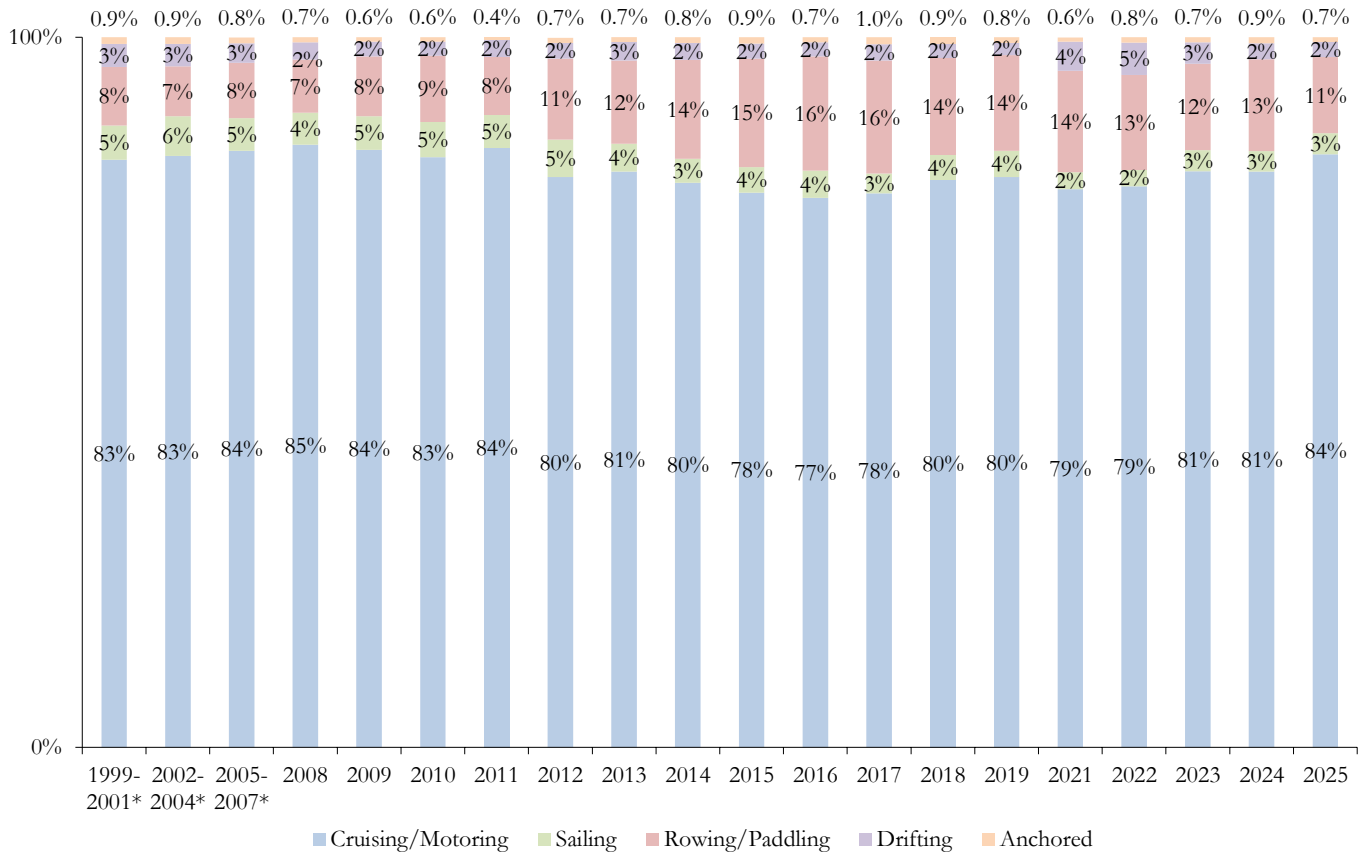


\*Three-year average

**Figure K. Length of Boats (2004–2025)**

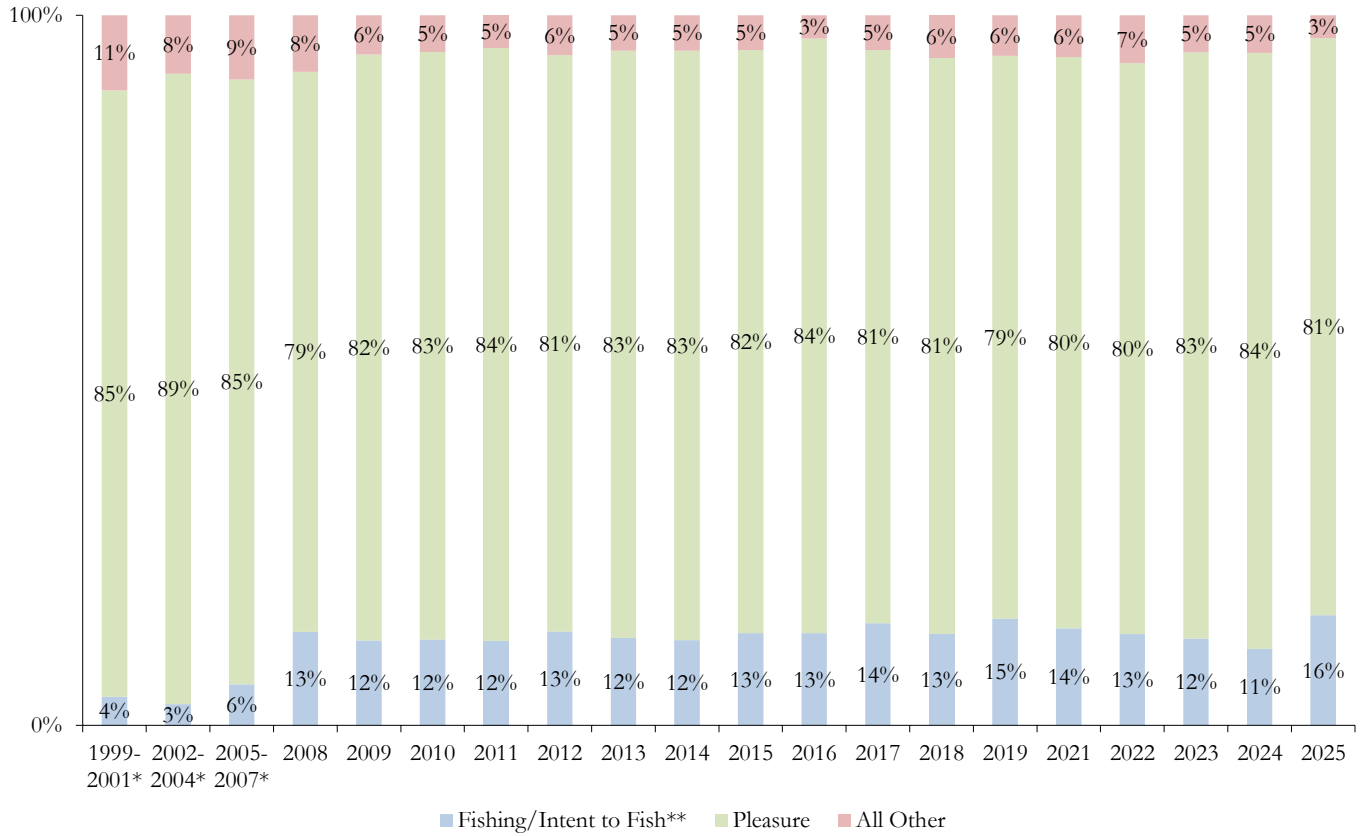


**Figure L. Operation of Boats (1999-2025)**



\*Three-year average

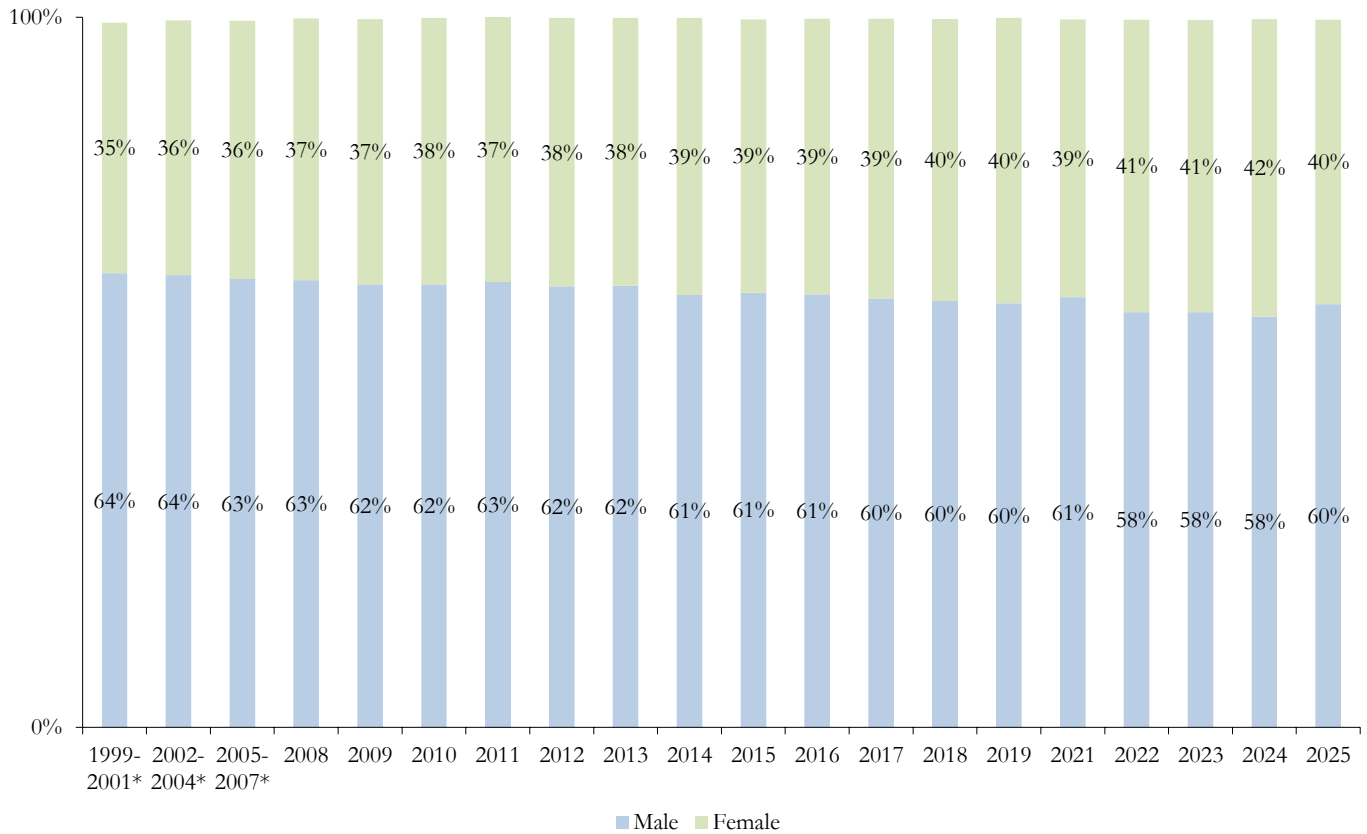
**Figure M. Activity of Boaters (1999-2025)**



\*Three-year average

\*\*Includes recreational fishing only

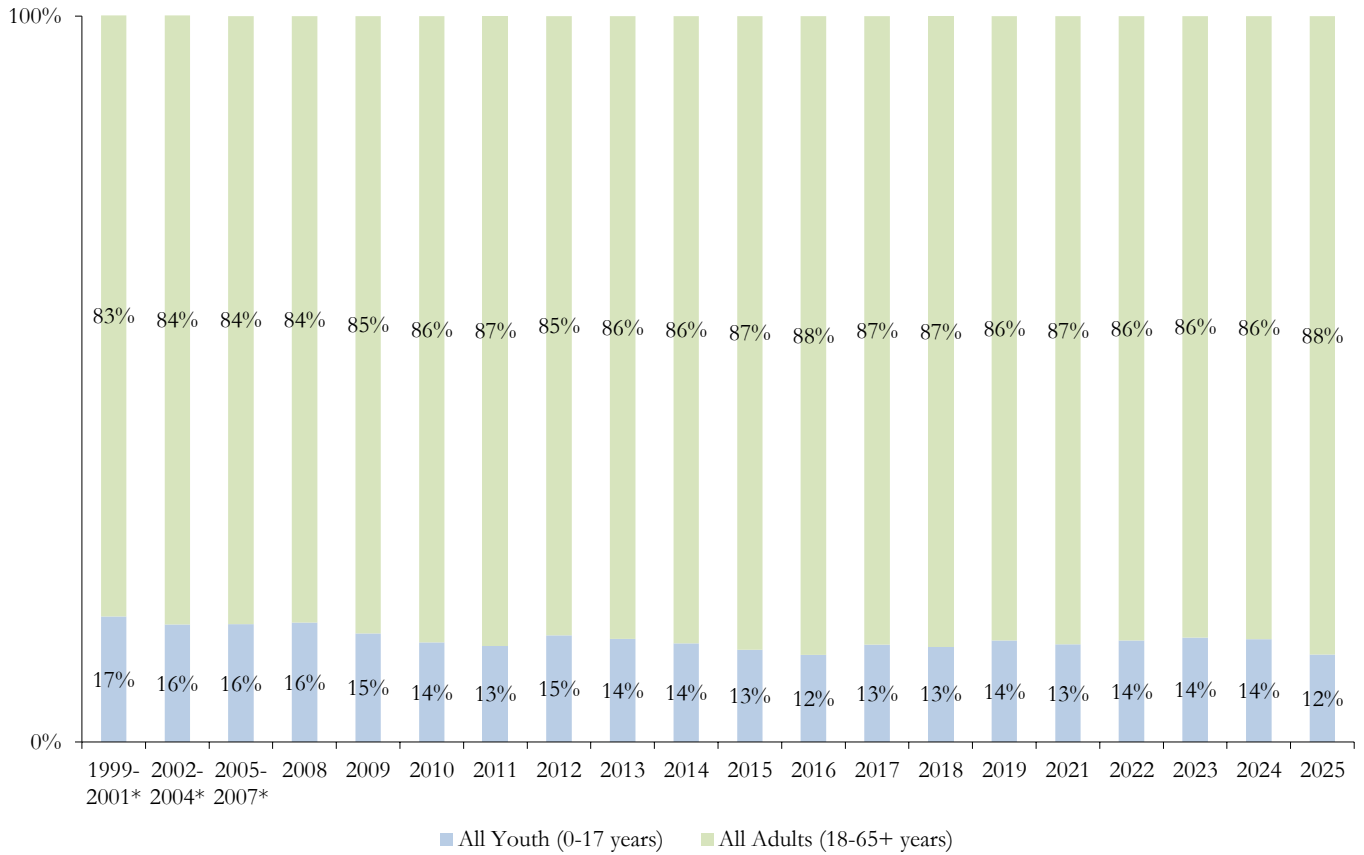
**Figure N. Sex of Boaters (1999-2025)**



\*Three-year average

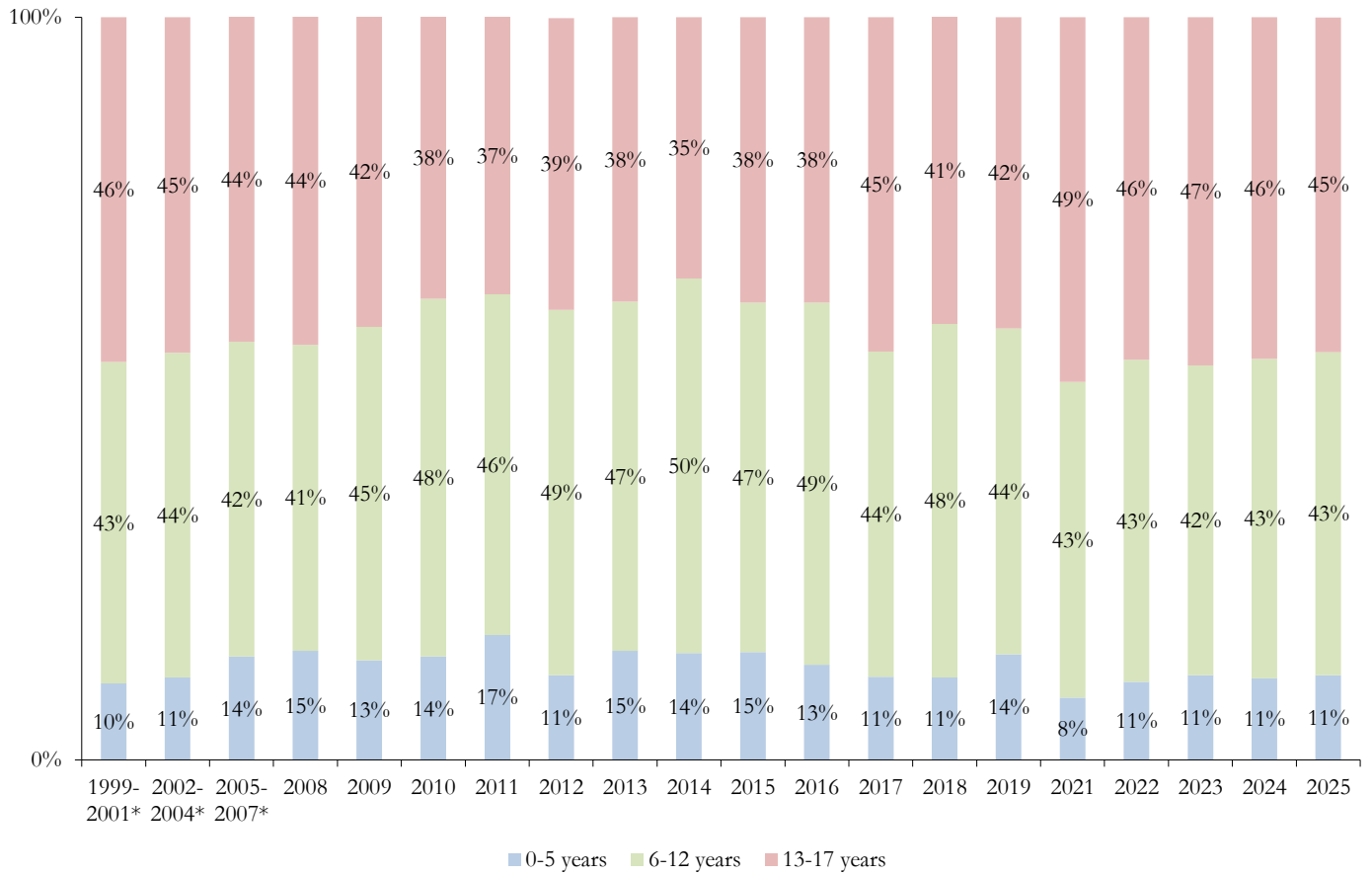
\*\*Percentages do not add up to 100% due to instances where the sex of the boater could not be identified due to visibility issues.

**Figure 0. Age of Boaters (1999–2025)**



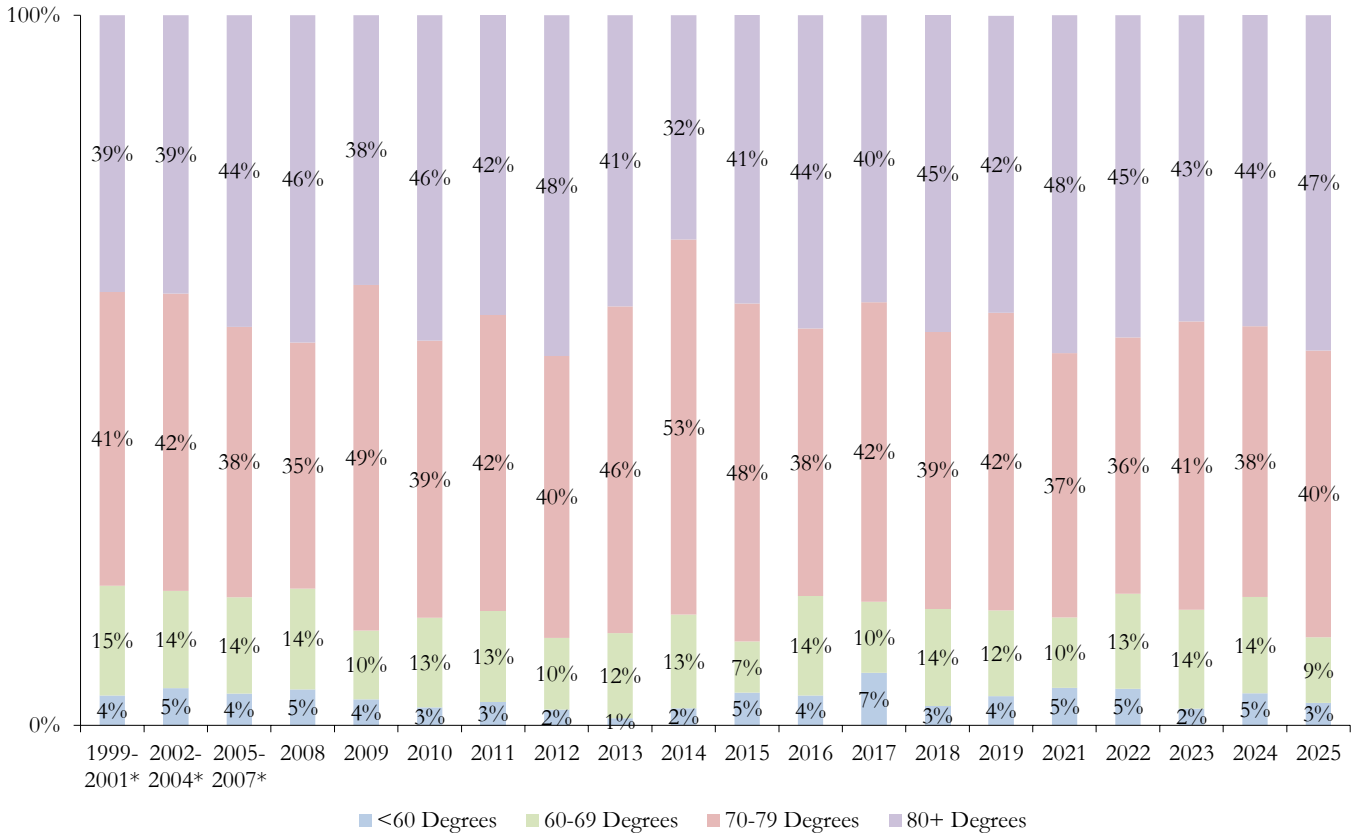
\*Three-year average

**Figure P. Age of Youth Boaters (1999–2025)**



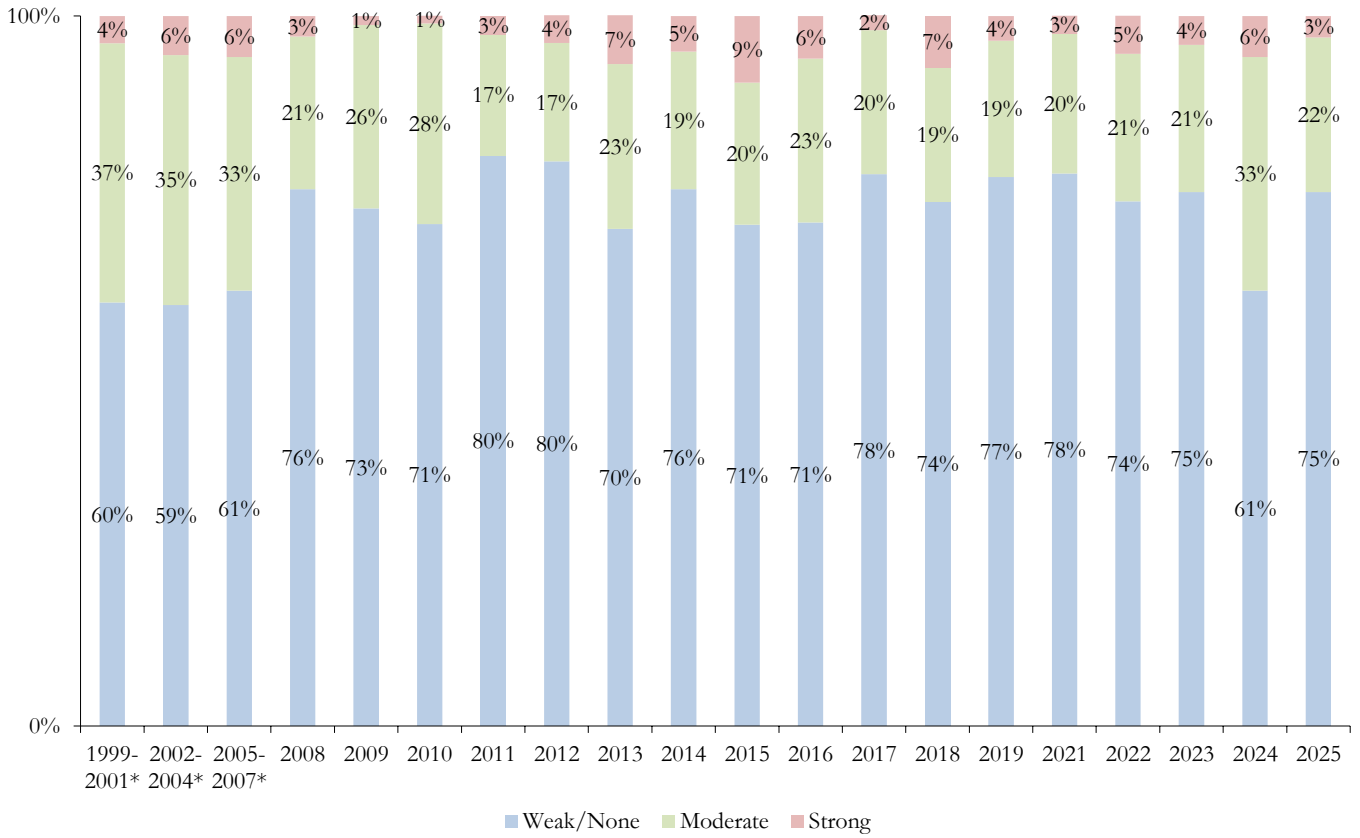
\*Three-year average

**Figure Q. Water Temperature in which All Boaters were Observed (1999–2025)**



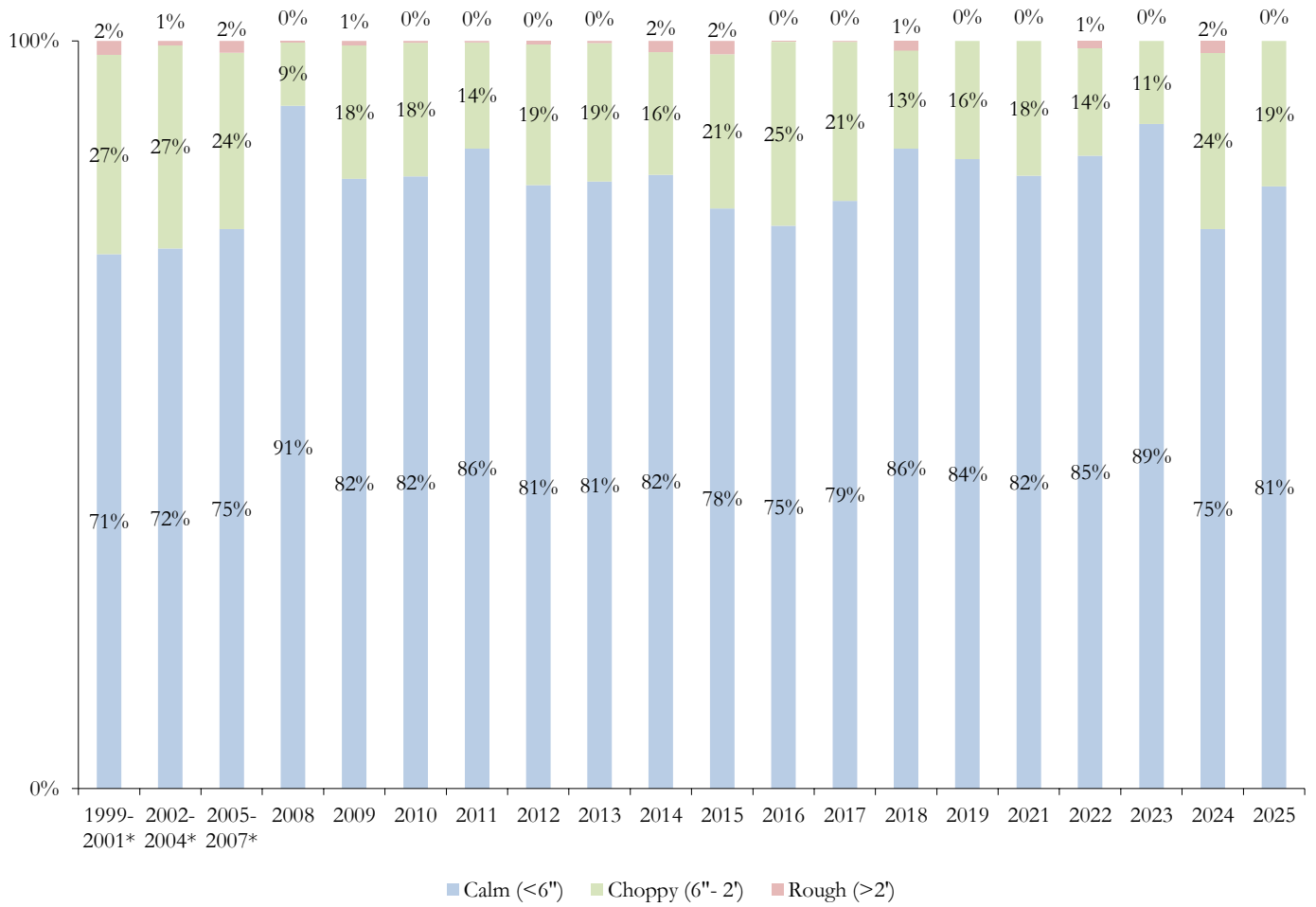
\*Three-year average

**Figure R. Water Current in which All Boaters were Observed (1999-2025)**



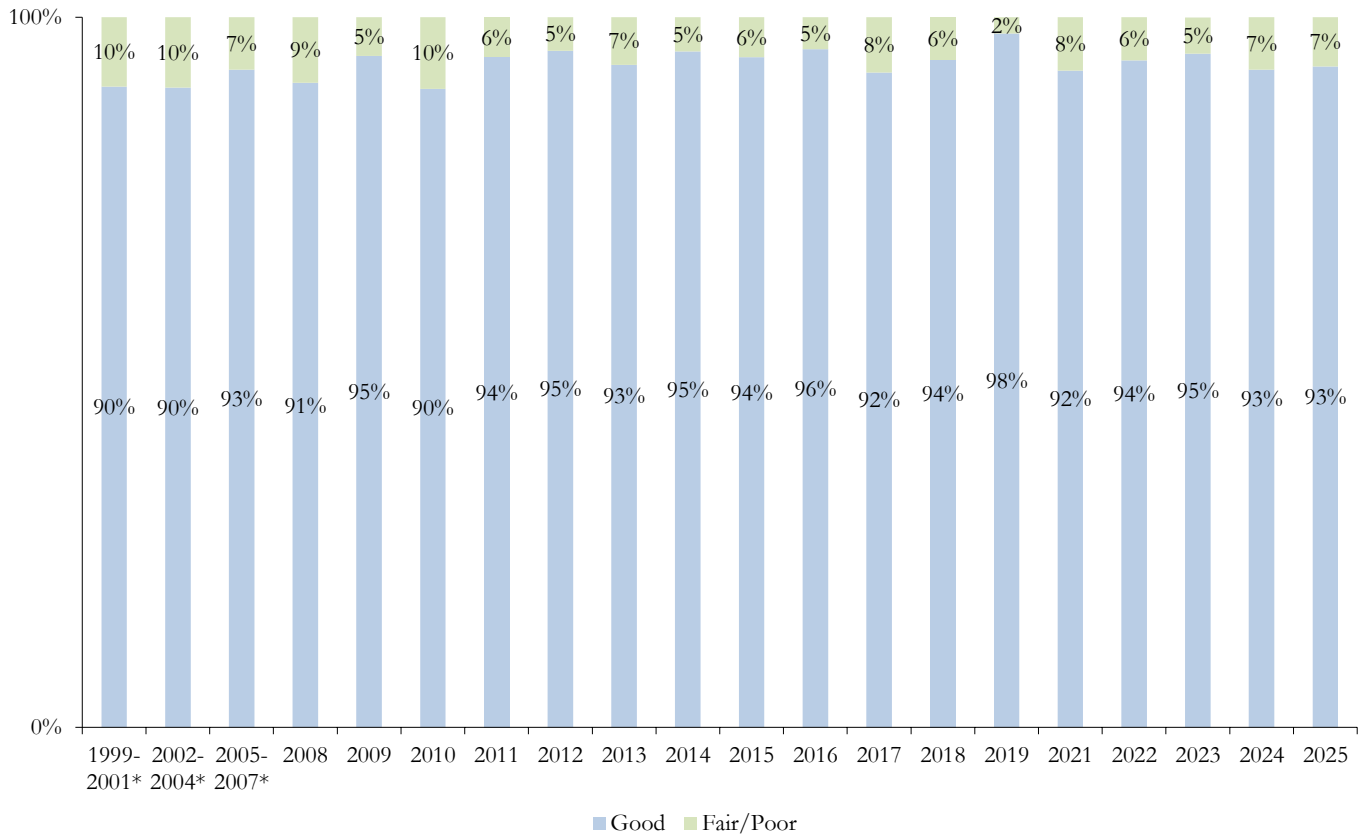
\*Three-year average

**Figure S. Wave Height in which All Boaters were Observed (1999-2025)**



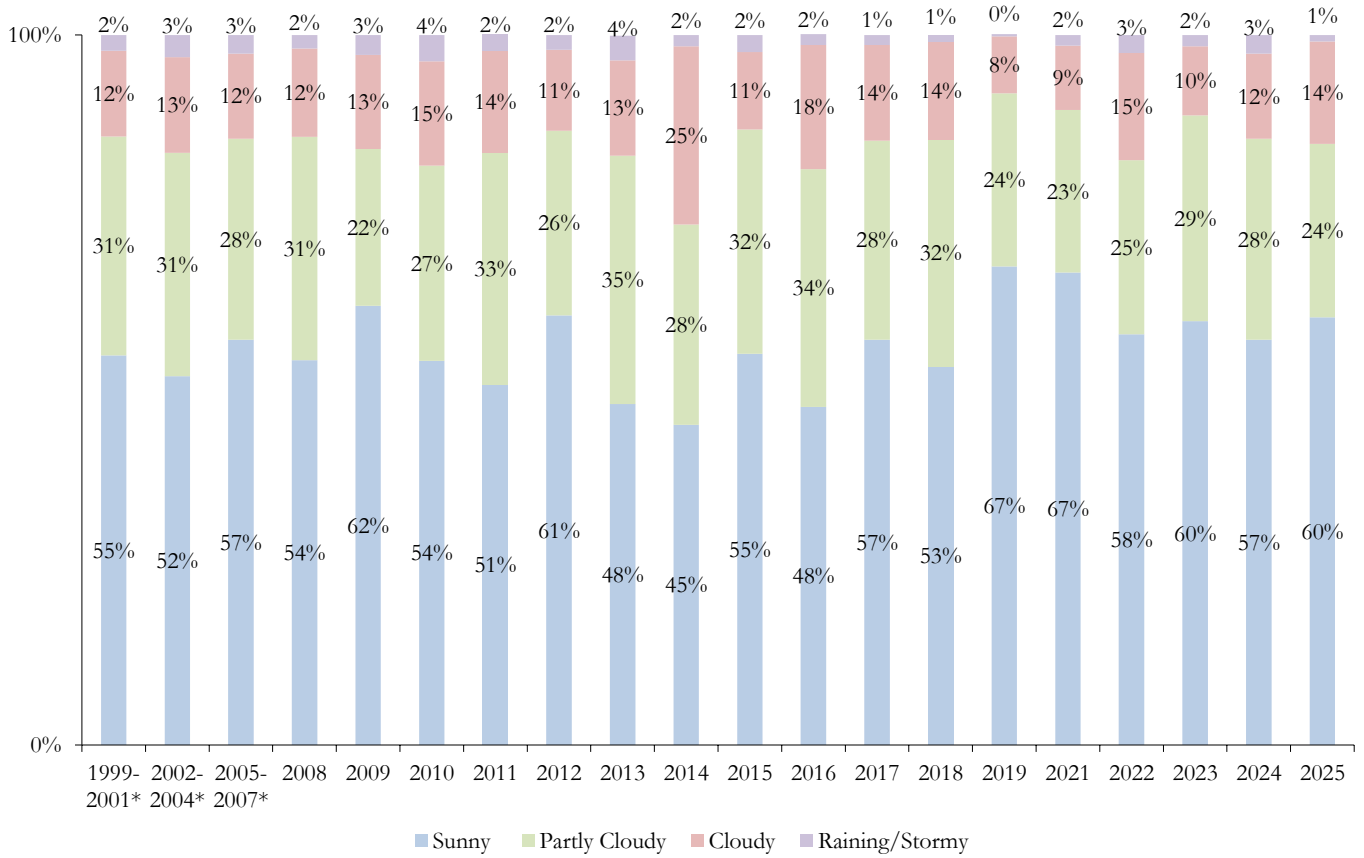
\*Three-year average

**Figure T. Visibility in which All Boaters were Observed (1999–2025)**



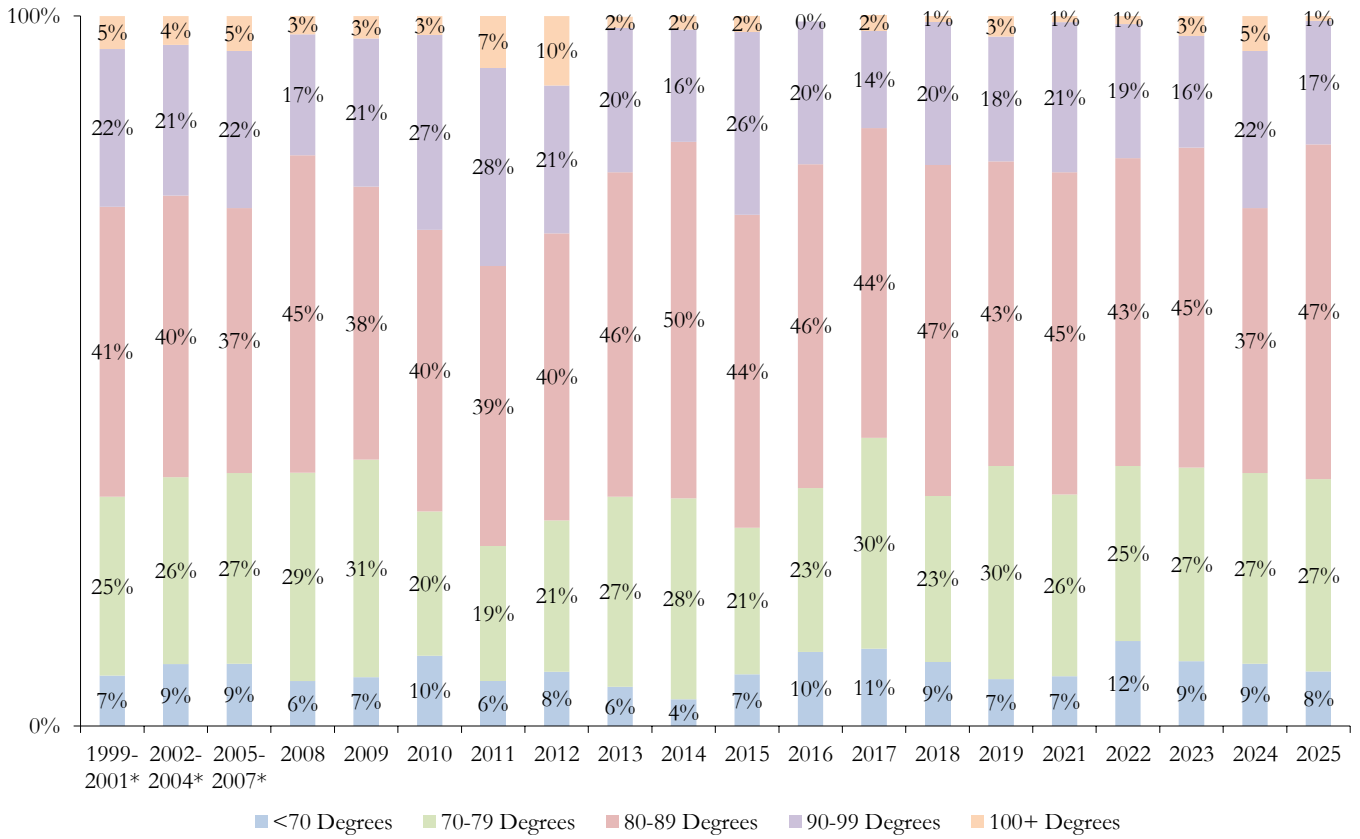
\*Three-year average

**Figure U. Weather in which All Boaters were Observed (1999–2025)**



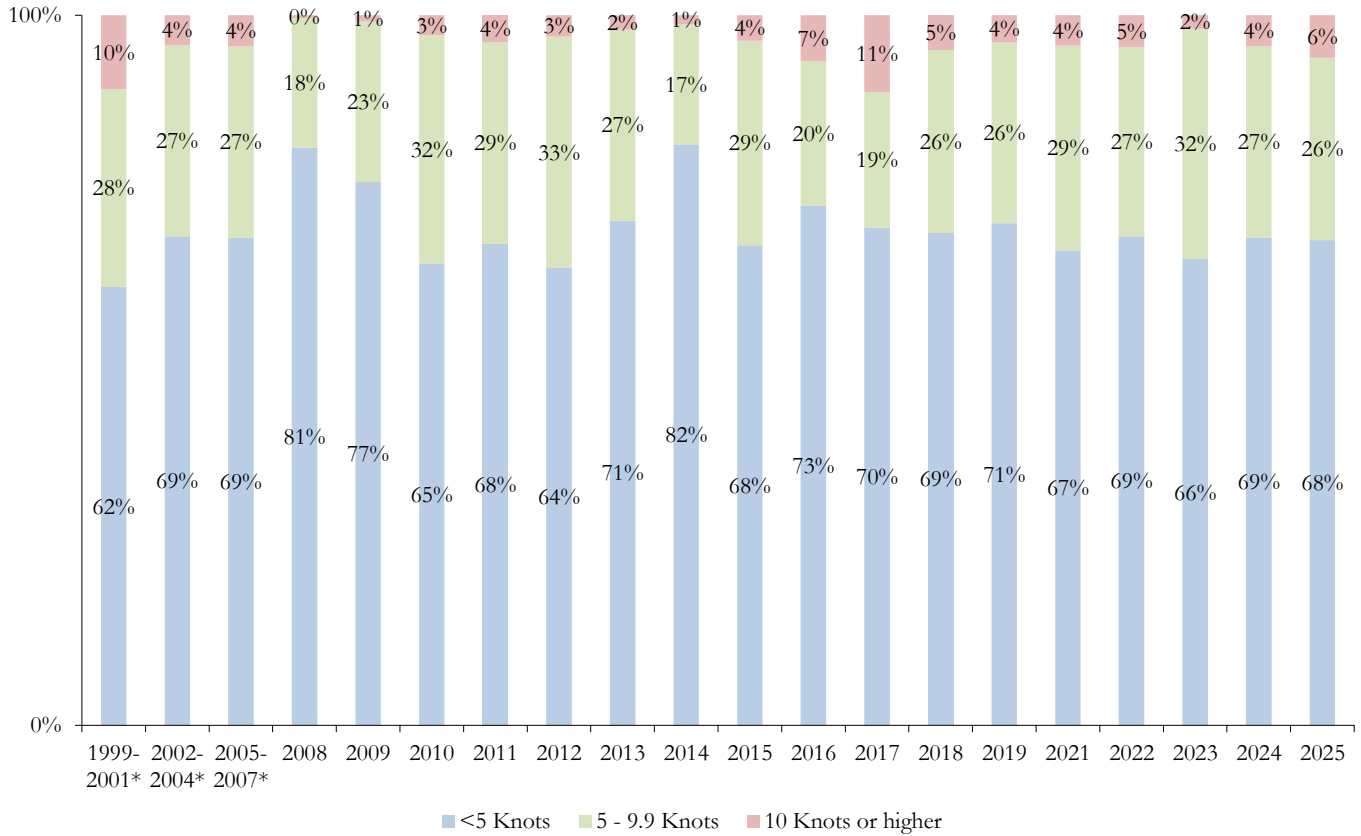
\*Three-year average

**Figure V. Air Temperature in which ALL Boaters were Observed (1999-2025)**



\*Three-year average

**Figure W. Wind Speed in which ALL Boaters were Observed (1999–2025)**



\*Three-year average