1-1-2018

2017 Tennessee Boating Incident Statistical Report, Summary of Reportable Boating Incidents

Tennessee. Wildlife Resources Agency.

Follow this and additional works at: https://digitalcommons.memphis.edu/govpubs-tn-wra-boating-accident-statistics
2017 Tennessee Boating Incident Statistical Report
Summary of Reportable Boating Incidents
Boating & Law Enforcement Division
TABLE OF CONTENTS:

History and Introduction..................................................................................................................3-4
Executive Summary.......................................................................................................................5-7

Boating Incident and Registration Statistics for All Years
   All Years’ Table.........................................................................................................................8
   Totals Graph.............................................................................................................................9
   Rate Totals...............................................................................................................................9

General Information and Statistics for All 2017 Boating Incidents
   Age of Operators...................................................................................................................10
   Vessel Length........................................................................................................................10
   Type of Vessels.......................................................................................................................11
   Type of Incidents....................................................................................................................11
   Operation during Incidents.................................................................................................12
   Activity during Incidents......................................................................................................12
   Primary Causes.....................................................................................................................13
   Times of Accidents...............................................................................................................13
   Incidents by Day of the Week............................................................................................14
   Incidents by Body of Water.................................................................................................14
   Incidents by County............................................................................................................15
   Rented Vessels......................................................................................................................16
   Borrowed Vessels................................................................................................................16
   Operator Education.............................................................................................................17

2017 Statistics on Fatal Incidents
   Age of Operators...................................................................................................................17
   Vessel Length........................................................................................................................18
   Type of Vessels.......................................................................................................................18
   Operation during Incidents.................................................................................................19
   Activity during Incidents......................................................................................................19
   Primary Causes.....................................................................................................................20
   Primary Incident Type.........................................................................................................20
   Incidents by Day of Week....................................................................................................21
   Incidents by Time of Day.....................................................................................................21
   Incidents by Body of Water.................................................................................................22
   Incidents by County............................................................................................................22
   Causes of Death...................................................................................................................23

2017 Statistics on Injury Incidents
   Age of Operators...................................................................................................................23
   Vessel Length........................................................................................................................24
   Type of Vessels.......................................................................................................................24
   Type of Incidents....................................................................................................................25
   Activity during Incidents......................................................................................................25
   Frequency of Operation......................................................................................................26
   Primary Causes.....................................................................................................................26
   Incidents by Body of Water.................................................................................................27
   Incidents by County............................................................................................................27
   Incidents by Day of Week.................................................................................................28
2017 Statistics on Property Damage Incidents

- Age of Operators
- Vessel Length
- Type of Vessels
- Type of Incidents
- Activity during Incidents
- Primary Causes
- Incidents by Body of Water
- Incidents by County
- Incidents by Day of Week
- Incidents by Time of Day

2017 Statistics on Personal Watercraft (PWC) Incidents

- Age of Operators
- Primary Causes
- Incidents by Body of Water
- Incidents by County

2017 Statistics on Recreational Paddling Incidents

- Age of Operators
- Primary Causes
- Incidents by Body of Water
- Incidents by Vessel Type
- Incidents by Incident Type

2017 Statistics on Commercial Whitewater Incidents

- Number of Incidents by Primary Incident Type
- Number of Injured Occupants by Age Category
- Number of Incidents by Day of Week
- Number of Incidents by Primary Injury Type
- Number of Incidents by Rapid Location

Glossary

Reporting Criteria
HISTORY:
The Tennessee Wildlife Resources Agency acquired the state’s boating program in 1965 with the implementation of the ‘Boating Safety Act’. Before this date the United States Coast Guard (USCG) administered the state’s boating program.

INTRODUCTION:
The 2017 Boating Incident Statistical Report is compiled by the Tennessee Wildlife Resources Agency (TWRA), Boating & Law Enforcement Division. The data used in this report is retrieved from “reportable boating incident” reports submitted by TWRA officers who investigate boating incidents and report their findings on TWRA Boating Incident Report forms (BAR). This data is for incidents which occur during the 2017 calendar year.

To be considered a “reportable boating incident”, an incident must involve death, missing person, an injury which requires or should have required treatment beyond first aid, or property damage of $2,000 or more. Tennessee requires operators involved in an incident to immediately notify TWRA and provide certain information to the investigating officer. TWRA officers are required by Agency policy to investigate incidents that meet the reporting criteria.

TWRA officers also investigate commercial whitewater boating incidents that occur throughout the year. Although these incidents are not “recreational”, they are still investigated to capture statistical data and ensure compliance with the law.

At the end of each calendar year, boating incident data is compiled and assembled into Tennessee’s annual report. These statistics are analyzed in an effort to formulate pro-active plans to reduce the number of boating incidents and their related fatalities, injuries, and
property damage. The incident information is also reported to the USCG Office of Boating Safety in Washington, D.C. to be included in the National Boating Accident Database consisting of data from all U.S. states, commonwealths, and territories.

Any questions concerning this report should be directed to:

Tennessee Wildlife Resources Agency
Boating & Law Enforcement Division – Investigations
P.O. Box 40747
Nashville, TN 37204
Telephone: (615) 781-6682
2017 TENNESSEE BOATING INCIDENT STATISTICAL REPORT
EXECUTIVE SUMMARY

2017 REPORTABLE BOATING INCIDENTS

- The total number of registered vessels in 2017 was 248,475. That was a decrease of 6,005 from 2016.
- The total number of reportable incidents in 2017 was 105. That was a decrease from 2016 which had 132.
- The incident rate for 2017 was 42.3 per 100,000 registered vessels. This was a decrease from 2016 which was 51.9 per 100,000.
- The bodies of water that reported the most incidents were Kentucky Lake and Norris Lake with 12 incidents each.
- The county that reported the most incidents was Franklin County with 8.
- The monetary amount of damage resulting from boating incidents in 2017 was $584,016. This was a decrease from 2016 which reported $1,252,545.
- The most common type of boat involved in an incident was an open motorboat.
- The leading type of incident was Collision with Vessel with 48 occurrences.
- The most common operation during an incident was recreational cruising.
- The leading primary cause of incidents was improper lookout.
- Alcohol and/or drug use was a primary cause in 9.1% of incidents in 2017. This was an increase from 2016 which was 5.8% of incidents.
• *Rented or borrowed vessels* were involved in **12.4%** of incidents in 2017. This was a **decrease** from 2016 which was **20.5%** of incidents.
• The most likely **time** to be involved in an incident was between the hours of **4pm to 8pm**.
• The most likely **day of the week** to be involved in an incident was **Sunday**.
• The leading **age group** of operators to be involved in an incident was **46 through 50** years old.

### 2017 BOATING FATALITIES
The **number** of recreational boating fatalities for 2017 was **16**. This was a **decrease** from 2016 which reported **22**.

- The **type of incident** that resulted in the most fatalities was **Collision with fixed object** with **5** occurrences.
- The **type of vessel** that was most common in fatal incidents was the **Open Motorboat** with **8** incidents.
- The **length of vessel** that was most common in fatal incidents was **16’ through 26’** with **10** incidents.
- The body of water that was most likely to involve a fatal incident was **Kentucky Lake** with **5** incidents.

### 2017 INJURY INCIDENTS
- The **number** of injury incidents in 2017 was **38** resulting in **53 injuries**.
- The leading **contributing cause** of injury incidents was **improper lookout**.
- The **type of incidents** that resulted in the most injuries was **collision with vessel** with **14** occurrences.
- The **body of water** that produced the most injury incidents was **Kentucky Lake** with **6** incidents.

### 2017 PROPERTY DAMAGE INCIDENTS
- The **number** of property damage incidents in 2017 was **49**. This was a **decrease** from 2016 which reported **63**.
- The **type of incident** that most commonly resulted in property damage was **Collision with Vessel** with **33** occurrences.
- The **body of water** that reported the most property damage incidents was **Norris Lake** with **8** incidents.

### 2017 PERSONAL WATERCRAFT (PWC) INCIDENTS
- The **number** of PWC’s involved in incidents in 2017 was **10**, a decrease from 2016 which reported **12**.
- The **number** of PWC’s involved in injury incidents in 2017 was **8**, a **decrease** from 2016 which reported **9**.
- The **number** of PWC’s involved in fatal incidents in 2017 was **0**, which is a **decrease** from 2016 which reported **2**.
- The leading **primary cause** for PWC incidents was **Improper Lookout** with 2 occurrences each.
- The **body of water** with the most PWC accidents was **Kentucky Lake** with **2** incidents.
The most common operator age group to be involved in PWC incidents was 16-20 and 21-25 with 4 operators each.

**2017 RECREATIONAL PADDLECRAFT INCIDENTS**
- The number of recreational paddle craft incidents in 2017 was 8. This was a **increase** from 2016 which reported 6.
- The number of recreational paddle craft fatalities in 2017 was 2. This was a **decrease** from 2016 which reported 4.
- The type of incident that resulted in the most fatalities was Capsizing with 1 occurrence. The incident type for the other fatality is unknown.
- The number of injuries from recreational paddle craft incidents in 2017 was 4. This was an **increase** from 2016 which reported 2.

**2017 WHITewater COMMERCIAL INCIDENTS**
- The number of commercial whitewater incidents in 2017 was 9. This was a **decrease** from 2016 which reported 11.
- The number of commercial whitewater boating fatalities for 2017 was 0. This **stayed the same** from 2016 which reported 0.
- The number of injuries resulting from commercial whitewater activities in 2017 was 9. This was a **decrease** from 2016 which reported 11.
- All commercial whitewater incidents investigated occurred in Polk County on the Ocoee River.

**2017 LAW ENFORCEMENT SUMMARY**
- Total boating law enforcement hours 88,473
- On-Water law enforcement hour(boat log hours) 56,365
- Boating citations issued 2,353
- BUI arrests 118
- Warning citations issued 1,813
- Vessels inspected by law enforcement 64,037
- Search and rescue missions 80
- Total number of boating enforcement officers 186 full time 45 part time 231 total
- Officers trained in BUI detection in 2017 10
- Officers trained in accident investigation in 2017 10

**2017 BOATING EDUCATION SUMMARY**
In 2005 a law went into effect that required vessel operators born after January 1, 1989 to have onboard the Tennessee Wildlife Resources Agency (TWRA)-issued Boating Safety Education Certificate. Students must pass a monitored exam administered by appointed volunteers or TWRA personnel. All exams are approved by the National Association of State Boating Law Administrators (NASBLA).
- Number of persons successfully completing exam in 2017 6,627
- Number of persons successfully completing exam since 2005 61,133
<table>
<thead>
<tr>
<th>YEAR</th>
<th>REGISTERED VESSELS</th>
<th>INJURED</th>
<th>FATALITIES</th>
<th>INCIDENTS</th>
<th>INJURED</th>
<th>FATAL</th>
<th>INCIDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>70,899</td>
<td>6</td>
<td>2</td>
<td>13</td>
<td>8.5</td>
<td>2.8</td>
<td>18.3</td>
</tr>
<tr>
<td>1966</td>
<td>81,987</td>
<td>13</td>
<td>8</td>
<td>33</td>
<td>15.9</td>
<td>9.6</td>
<td>40.3</td>
</tr>
<tr>
<td>1967</td>
<td>90,844</td>
<td>11</td>
<td>29</td>
<td>51</td>
<td>12.1</td>
<td>31.9</td>
<td>56.2</td>
</tr>
<tr>
<td>1968</td>
<td>97,785</td>
<td>16</td>
<td>18</td>
<td>54</td>
<td>16.4</td>
<td>18.4</td>
<td>55.2</td>
</tr>
<tr>
<td>1969</td>
<td>122,958</td>
<td>16</td>
<td>27</td>
<td>40</td>
<td>13</td>
<td>21.9</td>
<td>32.5</td>
</tr>
<tr>
<td>1970</td>
<td>120,292</td>
<td>18</td>
<td>40</td>
<td>51</td>
<td>14.9</td>
<td>33.3</td>
<td>42.4</td>
</tr>
<tr>
<td>1971</td>
<td>140,370</td>
<td>22</td>
<td>18</td>
<td>8</td>
<td>0.7</td>
<td>15.7</td>
<td>12.8</td>
</tr>
<tr>
<td>1972</td>
<td>153,227</td>
<td>25</td>
<td>48</td>
<td>5.9</td>
<td>18.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>174,729</td>
<td>47</td>
<td>72</td>
<td>16.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1974</td>
<td>189,290</td>
<td>37</td>
<td>64</td>
<td>19.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td>204,499</td>
<td>30</td>
<td>95</td>
<td>40.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td>169,543</td>
<td>26</td>
<td>90</td>
<td>51.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>182,752</td>
<td>35</td>
<td>102</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>215,292</td>
<td>29</td>
<td>84</td>
<td>13.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>183,224</td>
<td>37</td>
<td>84</td>
<td>53.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>185,298</td>
<td>30</td>
<td>92</td>
<td>49.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>186,221</td>
<td>38</td>
<td>78</td>
<td>41.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>187,850</td>
<td>32</td>
<td>71</td>
<td>37.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>192,018</td>
<td>32</td>
<td>93</td>
<td>48.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>196,446</td>
<td>24</td>
<td>69</td>
<td>35.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>200,582</td>
<td>22</td>
<td>74</td>
<td>36.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>207,409</td>
<td>28</td>
<td>82</td>
<td>39.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>214,646</td>
<td>26</td>
<td>90</td>
<td>41.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>224,709</td>
<td>15</td>
<td>89</td>
<td>39.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>233,403</td>
<td>24</td>
<td>73</td>
<td>31.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>241,632</td>
<td>19</td>
<td>72</td>
<td>29.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>247,661</td>
<td>16</td>
<td>91</td>
<td>36.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>255,043</td>
<td>11</td>
<td>90</td>
<td>35.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>264,194</td>
<td>14</td>
<td>82</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>275,597</td>
<td>11</td>
<td>109</td>
<td>39.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>288,834</td>
<td>7</td>
<td>151</td>
<td>52.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>297,719</td>
<td>31</td>
<td>154</td>
<td>51.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>306,215</td>
<td>16</td>
<td>119</td>
<td>38.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>312,030</td>
<td>11</td>
<td>168</td>
<td>53.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>314,620</td>
<td>19</td>
<td>186</td>
<td>59.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>269,583</td>
<td>19</td>
<td>221</td>
<td>81.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>256,670</td>
<td>11</td>
<td>174</td>
<td>67.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>259,235</td>
<td>21</td>
<td>182</td>
<td>70.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>261,636</td>
<td>17</td>
<td>213</td>
<td>80.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>261,465</td>
<td>31</td>
<td>210</td>
<td>80.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>267,567</td>
<td>10</td>
<td>189</td>
<td>63.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>271,687</td>
<td>16</td>
<td>222</td>
<td>67.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>274,914</td>
<td>17</td>
<td>189</td>
<td>81.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>271,455</td>
<td>20</td>
<td>159</td>
<td>58.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>269,361</td>
<td>22</td>
<td>158</td>
<td>58.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>266,185</td>
<td>19</td>
<td>167</td>
<td>62.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>258,096</td>
<td>24</td>
<td>162</td>
<td>62.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>259,632</td>
<td>18</td>
<td>171</td>
<td>65.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>257,451</td>
<td>25</td>
<td>154</td>
<td>59.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>256,862</td>
<td>17</td>
<td>134</td>
<td>52.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>257,172</td>
<td>14</td>
<td>136</td>
<td>52.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>254,480</td>
<td>22</td>
<td>132</td>
<td>51.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>248,475</td>
<td>16</td>
<td>105</td>
<td>42.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Averages**

| 66 | 22 | 113 | 27 | 12 | 49 |
Number of Vessels by Vessel Type
All Incidents 2017

Number of Vessels Involved by Incident Type
All Incidents 2017
### Number of Vessels by Operation Type

**All Incidents 2017**

- Wake/Surf jumping: 2
- Rowing/Paddling: 4
- Other: 7
- Launching/Loading: 3
- Drifting: 16
- Docking/Undocking: 12
- Docked (moored): 15
- Cruising: 60
- Changing speed: 6
- Changing direction: 19
- At anchor: 5

### Activity at Time of Incident

**All Incidents 2017**

- Fishing (recreational): 16
- Hunting: 2
- Making repairs: 4
- None: 27
- Recreational cruising: 58
- Recreational paddling: 5
- Skiing, surfing, etc.: 6
- Starting engine: 6
- Swimming, snorkeling: 5
- Tournament fishing: 7
Percentage of Incidents by Day of Week
All Incidents 2017

Number of Incidents by Body of Water
All Incidents 2017
Number of Operators by Education Type
All Incidents 2017

Number of Operators by Age Category
Fatal Incidents 2017
Operation at Time of Incident
Fatal Incidents 2017

- Changing Direction: 23%
- Cruising: 35%
- Rowing/Paddling: 12%
- Drifting: 18%
- Other: 12%

Number of Vessels by Activity at Time of Incident
Fatal Incidents 2017

- Fishing (Recreational): 3
- Making Repairs: 1
- None: 2
- Recreational Cruising: 4
- Recreational Paddling: 2
- Skiing: 1
- Swimming/Snorkeling: 1
### Number of Incidents by Primary Cause
#### Fatal Incidents 2017

- **Undetermined**: 1
- **Weather/Wind Creating Haz Waters**: 1
- **Standing/Sitting on Gunwales**: 1
- **Other Cause**: 1
- **Operator Inexperience**: 2
- **Operator Inattention**: 3
- **Improper Lookout**: 2
- **Departed Vessel Voluntarily**: 1
- **Cold Water Immersion**: 1
- **Careless/Reckless Operation**: 1
- **Alcohol Impairment**: 2

### Number of Incidents by Primary Incident Type
#### Fatal Incidents 2017

- **Capsizing**: 3
- **Collision with fixed Object**: 5
- **Departed Vessel Voluntarily**: 1
- **Ejected from Vessel**: 1
- **Falls Overboard**: 1
- **Sinking**: 3
- **Struck by, Skag/Prop**: 1
- **Unknown**: 1
Number of Incidents by Day of Week
Fatal Incidents 2017

- Saturday: 4
- Friday: 1
- Thursday: 2
- Wednesday: 4
- Tuesday: 0
- Monday: 1
- Sunday: 4

Number of Incidents by Time of Day
Fatal Incidents 2017

- Midnight to 4 am: 0
- 4 am to 8 am: 1
- 8 am to 12 pm: 5
- 12 pm to 4 pm: 2
- 4 pm to 8 pm: 4
- 8 pm to Midnight: 3
Number of Incidents by Body of Water
Fatal Incidents 2017

Number of Incidents by County
Fatal Incidents 2017
Cause of Death for 2017 Fatal Incidents
(16 Fatalities Reflected)

- Trauma 25%
- Drowning 75%
* 1 victim was wearing a PFD

Number of Operators by Age Groups
Serious Injury Incidents 2017

- Over 65: 3
- 61 through 65: 3
- 56 through 60: 2
- 51 through 55: 4
- 46 through 50: 5
- 41 through 45: 4
- 36 through 40: 4
- 31 through 35: 2
- 26 through 30: 1
- 21 through 25: 2
- 16 through 20: 6
- 12 through 15: 5
- Less Than 12: 0
Number of Vessels by Length Category
Serious Injury Incidents 2017

- Under 16': 6%
- 16' to 26': 48%
- 26' to 40': 8%
- 40' to 65': 0%
- Over 65': 0%
- Unknown: 38%

Number of Vessels by Vessel Type
Serious Injury Incidents 2017

- Cabin Motorboat: 1
- Canoe: 1
- Houseboat: 1
- Kayak: 3
- Open Motorboat: 15
- Personal Watercraft: 6
- Pontoon Boat: 20
Number of Vessels by Type of Incident
Serious Injury Incidents 2017

- Unknown/undetermined: 1
- Struck underwater object: 3
- Struck by skeg/prop(person): 5
- Struck by boat(person): 4
- Skier hit object: 2
- Occupant impacts vessel: 1
- Grounding: 5
- Flooding/Swamping: 2
- Fire/Explosion(fuel): 6
- Falls Overboard: 5
- Fall In Boat: 6
- Ejected from vessel: 2
- Departed vessel voluntarily: 3
- Collision with Vessel: 4
- Collision with Floating Object/Person: 6
- Collision-fixed object: 3
- Capsizing: 3

Number of Vessels by Activity During Incident
Serious Injury Incidents 2017

- Fishing(recreational): 4
- Hunting: 1
- Making repairs: 1
- None: 6
- Recreational cruising: 22
- Recreational paddling: 3
- Skiing/surfing, etc: 4
- Starting engine: 4
- Swimming/snorkeling: 3
- Tournament Fishing: 2
Number of Operators by Age Categories
Property Damage Incidents 2017

Number of Vessels by Length Category
Property Damage Incidents 2017
Number of Vessels by Vessel Type
Property Damage Incidents 2017

Number of Vessels by Primary Incident Type
Property Damage Incidents 2017
Number of Incidents by Body of Water
Property Damage Incidents 2017

Number of Incidents by County
Property Damage Incidents 2017
Number of Incidents by Day of Week
Property Damage Incidents 2017

Number of Incidents by Time of Day
Property Damage Incidents 2017
Number of Operators by Age Category
Incidents Involving PWCs 2017

- Over 65: 0
- 61 through 65: 0
- 56 through 60: 0
- 51 through 55: 0
- 46 through 50: 2
- 41 through 45: 0
- 36 through 40: 0
- 31 through 35: 0
- 26 through 30: 1
- 21 through 25: 4
- 16 through 20: 4
- 12 through 15: 1
- Less Than 12: 0

Number of Incidents by Primary Cause
Incidents Involving PWCs 2017

- Careless Operation: 15%
- Improper Lookout: 29%
- Negligent Operation: 14%
- Operator inattentive: 14%
- Restricted vision aboard: 14%
- Started in Gear: 14%
- Restricted vision aboard: 14%
- Started in Gear: 14%
Number of Incidents by Body of Water
Incidents Involving PWCs 2017

DALE HOLLOW LAKE
DOUGLAS LAKE
KENTUCKY LAKE
OLD HICKORY LAKE
WATAUGA LAKE
WATTS BAR LAKE

Number of Incidents by County
Incidents Involving PWCs 2017

BENTON CARTER HOUSTON JEFFERSON PICKETT ROANE WILSON
Number of Incidents by Age Category
Recreational Paddlecraft Incidents 2017

Percentage of Incidents by Primary Cause
Recreational Paddlecraft Incidents 2017
Number Of Incidents by Body of Water
Recreational Paddlecraft Incidents 2017

- CHICKAMAUGA LAKE: 1 incident
- NORTH CHICKAMAUGA CREEK: 1 incident
- Collins river: 1 incident
- NOLICHUCKY RIVER: 2 incidents
- Elk River: 1 incident
- DALE HOLLOW LAKE: 1 incident
- SOUTH HOLSTON LAKE: 1 incident

Percentage of Incidents by Vessel Type
Recreational Paddlecraft Incidents 2017

- Kayak: 63%
- Canoe: 37%
Number of Incidents by Age Category
Commercial Whitewater Incidents 2017

Number of Incidents by Day of Week
Commercial Whitewater Incidents 2017
Number of Incidents by Primary Injury Type
Commercial Whitewater Incidents 2017

Number of Incidents by Ocoee River Location
Commercial Whitewater Incidents 2017
**2017 GLOSSARY**

**Alcohol Impairment:** When alcoholic beverages are consumed and the investigating official has determined that the operator was impaired or affected while operating the vessel -- or -- the vessel’s passengers were impaired and such impairment contributes to the resultant accident. This includes alcohol consumption that may have occurred outside of the vessel and the occupants are now under the influence.

**At Anchor:** Held in place in the water by an anchor; includes “moored” to a buoy or anchored vessel and “dragging” anchor.”

**Cabin Motorboat:** Motorboats with a cabin which can be completely closed by means of doors or hatches. Large motorboats with cabins, even though referred to as yachts, are considered to be cabin motorboats.

**Capsizing:** Overturning of a vessel. The bottom must become uppermost, except in the case of a sailboat, which lies on its side.

**Carbon Monoxide Poisoning:** Death or injury resulting from an odorless, colorless gas generated from auxiliary vessel equipment (stoves, heaters, refrigerators, generators, hot water heaters, etc.), another vessel’s exhaust, or the exhaust of the vessel on which persons were either aboard or in close proximity.

**Collision with Vessel:** Any striking together of two or more vessels, regardless of operation at time of accident, is a collision. Also includes colliding with the tow of another vessel, regardless of the nature of the tow (e.g., surfboard, ski ropes, skier, tow line). A vessel does not have to be underway to be involved in a collision, but a collision with a vessel moored to a dock or pier is not considered be a collision with a vessel (considered Collision with Fixed Object).

**Collision with fixed object:** The striking of any fixed object, above or below the surface of the water.

**Collision with floating object:** Collision with any waterborne object above or below the surface that is free to move with the tide, current, or wind, except with another vessel.

**Commercial Activity:** The vessel is being used for commercial activity. This type of activity includes carrying passengers for hire; fishing, crabbing, or shrimping in support of one’s business; or charging a fee to tow a vessel.

**Cruising:** Proceeding normally, unrestricted, with an absence of drastic rudder or engine changes.
**Departed Vessel Voluntarily:** Acting of their own free will, and as a first event, occupant departs from the vessel, and the departure results in occupant's injury or death. The vessel from which the occupant departed is not moored, beached or anchored,

**Documented yacht:** A vessel of five or more net tons owned by a citizen of the United States and used exclusively for pleasure with a valid marine document issued by the Coast Guard. Documented vessels are not numbered.

**Drifting:** Underway, but proceeding over the bottom without use of engines, oars or sails; being carried along only by the tide, current, or wind.

**Environmental Conditions Affecting Visibility:** Operator’s ability to discern other vessels or hazards is affected by an external condition in the surrounding environment (e.g., sun glare, fog, background lighting (lights on docks and shorelines, etc.), rain, snow, minimal night visibility due to overcast skies or moon phase, etc.)

**Excessive Speed:** Speed above that which a reasonable and prudent person would have operated under the circumstances that existed. It is not necessarily a speed in excess of a posted limit.

**Falls Overboard:** Falls from the vessel with resulting injury or death. Any unintentional spilling out of person(s) into the water without completely overturning the vessel. Using the vessel as a swimming platform and/or voluntarily departing the vessel as a first event whether the vessel was underway or not, should not be considered a reportable boating accident.

**Fallen Skier:** A person who has fallen off their water skies.

**Fiberglass (plastic) hull:** Hulls of fiber reinforced plastic. The laminate consists of two basic components, the reinforcing material (glass filaments) and the plastic or resin in which it is embedded.

**Fire/explosion (fuel):** Accidental combustion of vessel fuel, liquids, including their vapors, or other substances, such as wood or coal.

**Fire/explosion (other):** Accidental burning or explosion of any material on board except vessel fuels or their vapors.

**Flooding:** Filling with water, by means of entry of the water through a fitting, a drain plug, a hole or crack in the hull, or other means that allows ingress of water through the hull, not over the top of the gunwale, transom, or decking of the vessel. Vessel retains sufficient buoyancy to remain on the surface of the water.

**Fueling:** Any stage of the fueling operation, primarily concerned with the introduction of explosive or combustible vapors or liquids on board.
**Grounding**: Bringing vessel’s keel into contact with the bottom so that she ceases to be completely waterborne.

**Hull Failure**: Defect or failure of the structural body of a vessel (i.e., hull material, design, or construction) not including superstructure, masts, or rigging.

**Ignition of Spilled Fuel or Vapor**: Accidental combustion of vessel fuel, liquids, and/or their vapors, regardless of the cause of the spill.

**Improper loading**: Loading, including weight shifting, of the vessel causing instability, limited maneuverability, or dangerously reduced freeboard.

**Improper lookout**: No proper watch; the failure of the operator to perceive danger because no one was serving as lookout, or the person so serving failed in that regard.

**Inboard-outboard**: Propulsion system consisting of an inboard engine connected through the transom to an outboard drive unit. Also known as Inboard/Outdrive.

**Maneuvering**: Changing of course, speed, or similar boat handling action during which a high degree of alertness is required or the boat is imperiled because of the operation, i.e. docking, mooring, undocking, etc.

**Motorboat**: Any vessel equipped with propulsion machinery, not more than sixty-five feet in length.

**Motor vessel**: Any vessel equipped with propulsion machinery (other than steam) more than 65 feet long.

**Navigation Rules Violation**: Violation of the statutory and regulatory rules governing the navigation of vessels other than those listed.

**Numbered vessel**: An undocumented vessel numbered by a state with an approved numbering system or by the Coast Guard under Chapter 123 of title 46, U.S.C.

**Off Throttle Steering**: A term used to describe the lack of steering ability on a jet drive vessel that has no rudder. Steering is accomplished by directing the flow of water from the drive. When no water is flowing from the drive (off throttle) steering ability is lost. Common to Personal Watercraft.

**Open Motorboat**: Craft of open construction specifically built for operating with a motor, including boats canopied or fitted with temporary partial shelters.
**Outboard**: An engine not permanently affixed to the structure of the craft, regardless of the method or location used to mount the engine, e.g. motor wells, “kicker pits”. Motor pockets, etc.

**Overloading**: Excessive loading of the vessel causing instability, limited maneuverability, dangerously reduced freeboard, etc.

**Personal Watercraft (PWC)**: Craft less than 13 feet in length designed to be operated by a person or persons sitting, standing or kneeling on the craft rather than within the confines of a hull.

**Rules of the Road**: Statutory and regulatory rules governing navigation of vessels.

**Sailboat or auxiliary sailboat**: Craft intended to be propelled primarily by sail, regardless of size or type.

**Sharp Turn**: An immediate or abrupt change in the vessel’s course or direction

**Skier Mishap**: A person who suffers injury or death by

(1) falling off their water-skis,

(2) striking a fixed or submerged object, or by

(3) becoming entangled or struck by the tow line.

NOTE: Also includes mishaps involving inner-tubes and other devices on which a person can be towed behind a vessel, or surfing on the wake created by the vessel, even if not being towed behind the vessel.

**Sinking**: Losing enough buoyancy to settle below the surface of the water.

**Speeding**: Operating at a speed, possibly below the posted limit, above that which a reasonable and prudent person would operate under the circumstances.

**Steel hull**: Hulls of sheet steel alloy, not those with steel ribs and wood, canvas, or plastic hull coverings.

**Struck by boat or propeller**: Striking of a victim who is outside of the boat, but not necessarily a swimmer.

**Swamping**: Ingress of water over the top of the gunwale, transom, or deck of the vessel. Vessel retains sufficient buoyancy to remain on the surface of the water.

**Towing**: Engaged in towing any vessel or object, other than a person.

**Undetermined**: After thorough investigation, the officer was unable to reach a conclusion as to a contributing cause, due to lack of witnesses or insufficient evidence
**White water Sports:** This vessel was traveling in white water “rapids” where the water conditions were rough and the current very strong (Class 3+).

**Wood hull:** Hulls of plywood, molded plywood, wood planking, or any other fiber in its natural consistency, including those of wooden construction that have been “sheathed” with fiberglass or sheet metal.
Reporting Criteria and Guidelines for Recreational Vessel Incidents

I. Title 33 Code of Federal Regulations, Subchapter S – Boating Safety, Part 173 – Vessel Numbering and Casualty and Accident Reporting, Subpart C – Casualty and Accident Reporting, applies to vessels that are used by their operators for recreational purposes, or that are required to be numbered, except for those vessels required by law to have a Certificate of Inspection.

II. Recreational vessel means any vessel manufactured or operated for pleasure; or leased, rented, or chartered to another for the latter’s pleasure that is propelled or controlled by machinery, sails, oars, paddles, poles, or another vessel.

III. A recreational boating Incident means a recreational vessel, a numbered vessel, or a documented vessel is being used by its operator for recreational purposes AND one or more of the following events occur involving the vessel or its equipment:

- Grounding;
- Capsizing;
- Flooding / Swamping;
- Falls within or overboard a vessel;
- Person(s) ejected from a vessel;
- Person leaves a vessel that is underway to swim for pleasure;
- Person leaves a vessel in an attempt to retrieve a lost item, another person, or another vessel;
- Sinking;
- Fire or Explosion;
- Skier Mishap;
- Collision with another vessel or object;
- Striking a submerged object;
- The vessel, propeller, propulsion unit, or steering machinery strikes a person;
- Carbon Monoxide asphyxiation.

As a general guideline, if any of the above events occur and there is a reasonable likelihood that as a result of the event(s) – an injury, death, or property damage occurs – the incident is a recreational boating incident. More than likely, the boating trip would have been successfully completed without incident had any of the above event(s) not occurred.

IV. The operator of a vessel involved in a recreational boating incident as defined in Section III must submit a casualty or accident report to the reporting authority in the State where the accident occurred when:

a. A person dies;
b. A person is injured and requires medical treatment beyond first aid;
c. Damage to vessels and other property totals $2000 or more or there is a complete loss of any vessel; or
d. A person disappears from the vessel under circumstances that indicate death or injury.
The following guidelines list occurrences directly or indirectly involving a vessel where vessel activities or operation DID NOT contribute to a boating accident as defined in Section III. The occurrences alone are considered to be outside the scope of a boating safety program. While these occurrences may be reported in a State and subsequently captured by the Boating Accident Report Database (BARD) system, they will be classified as “non-reportable recreational boating accidents” in the National BARD system at Coast Guard Headquarters.

a. A person dies or is injured from self-inflicted wounds, alcohol poisoning, ingestion of drugs, controlled substances or poison; or from gunshot wounds.

b. A person dies or is injured from assault by another person or persons while aboard a vessel.

c. A person dies or is injured from natural causes while aboard a vessel.

d. A person dies or is injured while swimming for pleasure from a vessel that IS NOT underway (the vessel is anchored, moored, or docked).

CAUTION needs to be exercised to confirm that the vessel was used as a swimming platform only. The following are REPORTABLE boating incidents involving a swimmer, a recreational vessel and its operation:

- A person dies or is injured while swimming because of Carbon Monoxide asphyxiation;
- A person dies or is injured while swimming because a vessel is improperly connected to shore power and resultant stray electrical current enters the water causing electrocution;
- A person dies or is injured after leaving a vessel that is underway to swim for pleasure because the vessel IS NOT anchored, moored or docked and the vessel drifts away from the swimmer and the swimmer is unable to get back to the vessel.

e. A person dies or is injured in swimming to retrieve an object or a vessel that is adrift from its mooring or dock, having departed from the shore or pier.

f. A person dies, or is injured after falling or jumping from a swim raft that is moored or anchored for use as a swimming platform or other purpose.

g. A person dies, is injured, or property damage occurs while preparing a vessel for launching or retrieving a vessel AND the vessel is not in or upon the water.

h. Damage, injury or death results from a fire on shore or a pier that spreads to a vessel or vessels.
i. A person dies, is injured, or property damage results from an “ice boat” incident. [An “ice boat” is a device that is designed to travel primarily over the ice on lakes and rivers on runners/blades, carrying at least one person and using a sail for propulsion. It is not designed for use nor has the ability to navigate on open water.]

j. Damage, injury or death on a docked or moored vessel resulting from storms, unusual tidal, sea or swell conditions; or when a vessel gets underway in those conditions in an attempt to rescue persons put in peril.

k. Damage to a docked or moored vessel due to theft or any vandalism.

l. Deaths, injury or damage on a docked or moored or anchored non-propelled houseboat or other vessel used primarily as a permanent residence.

m. A person dies or is injured while using underwater breathing apparatus (i.e., snorkeling or scuba diving) and the vessel did not contribute to the casualty.