

Section 6:

Accident Data Charts

T*he charts in this section are designed to provide general statewide information on boating accidents. Some charts are organized by the number of accidents or fatalities. Other charts are organized by the number of vessels involved in accidents.*

The totals listed on the charts listing the types of accidents (Charts 8, 15 and 24) and the causes of accidents (Charts 9, 16 and 25) exceed the total number of accidents because many accidents were grouped into more than one category.

The charts listing the ages of operators involved in accidents (Charts 6 and 22) show both the total number of vessels involved in accidents and a smaller total showing the total number of operators involved in accidents, as not all vessels had operators.



Chart 1: Accidents by Month

Total Accidents - 804

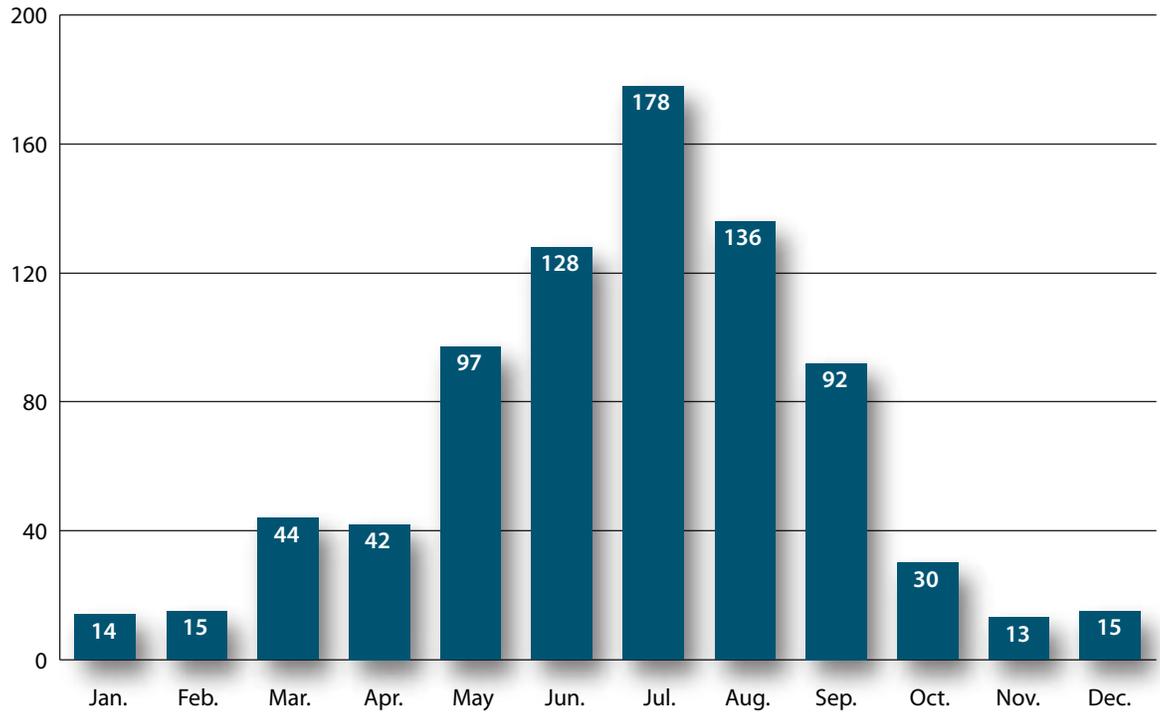


Chart 2: Accidents by Day of the Week

Total Accidents - 804

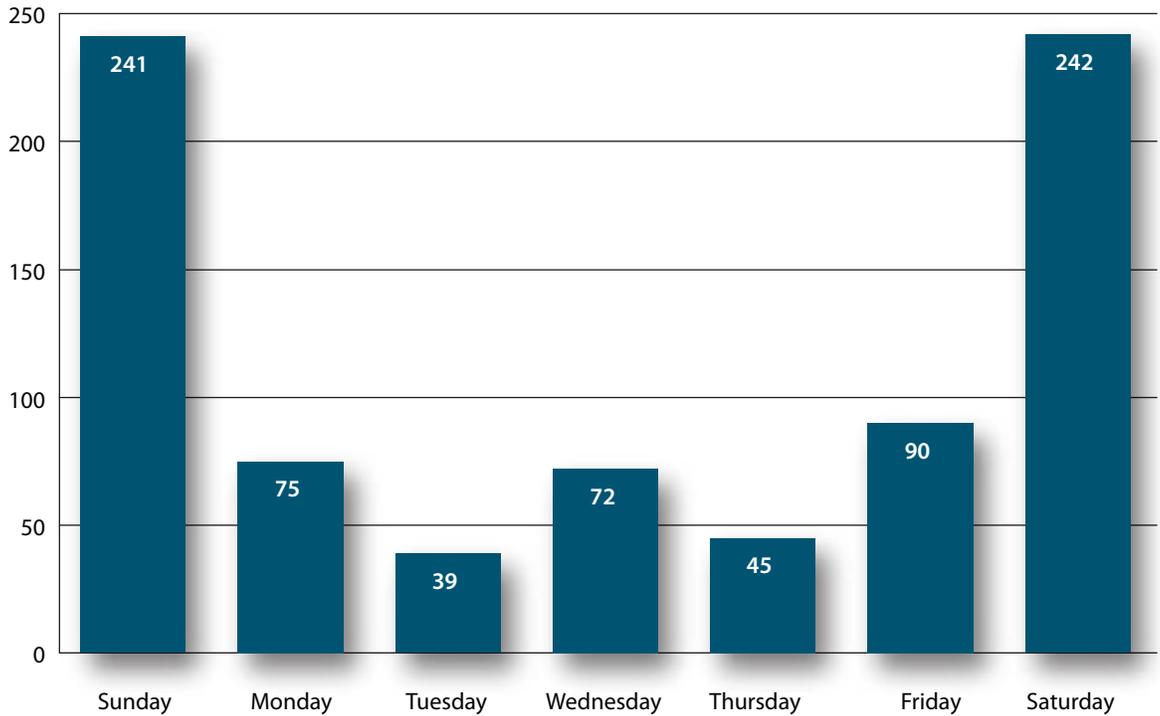




Chart 3: Accidents by Time of Day
Total Accidents - 804

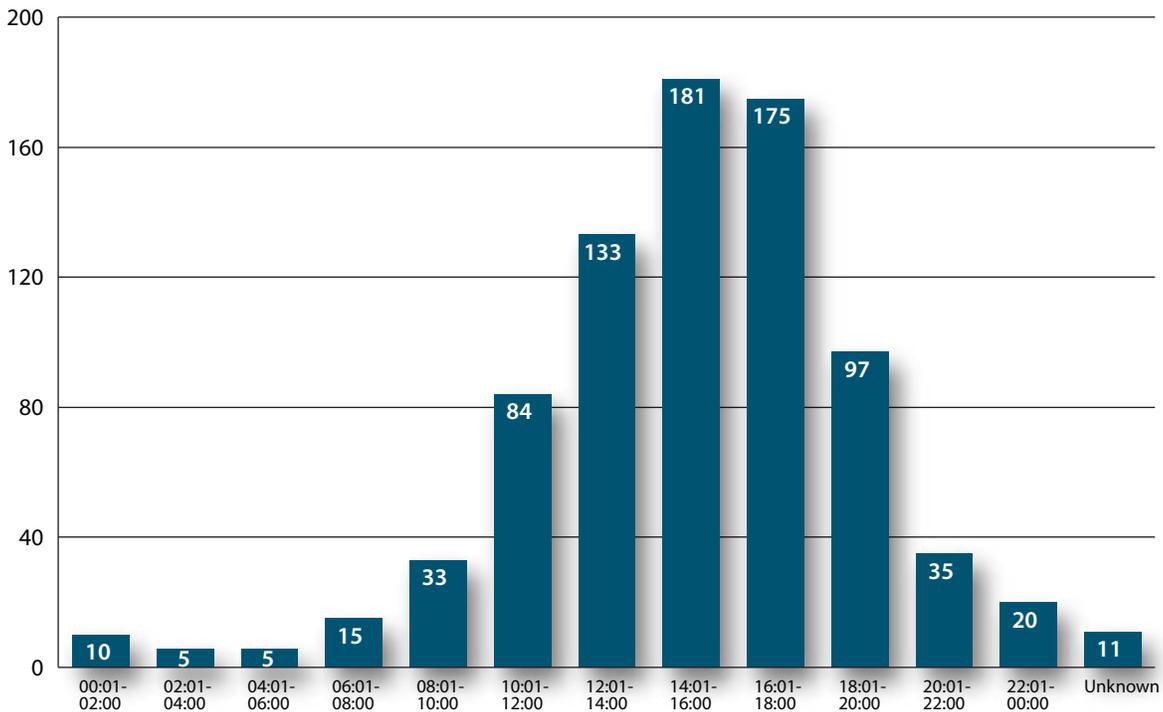


Chart time periods are shown using military time.

Chart 4: Vessels Involved in All Accidents by Type

Total Vessels - 1137

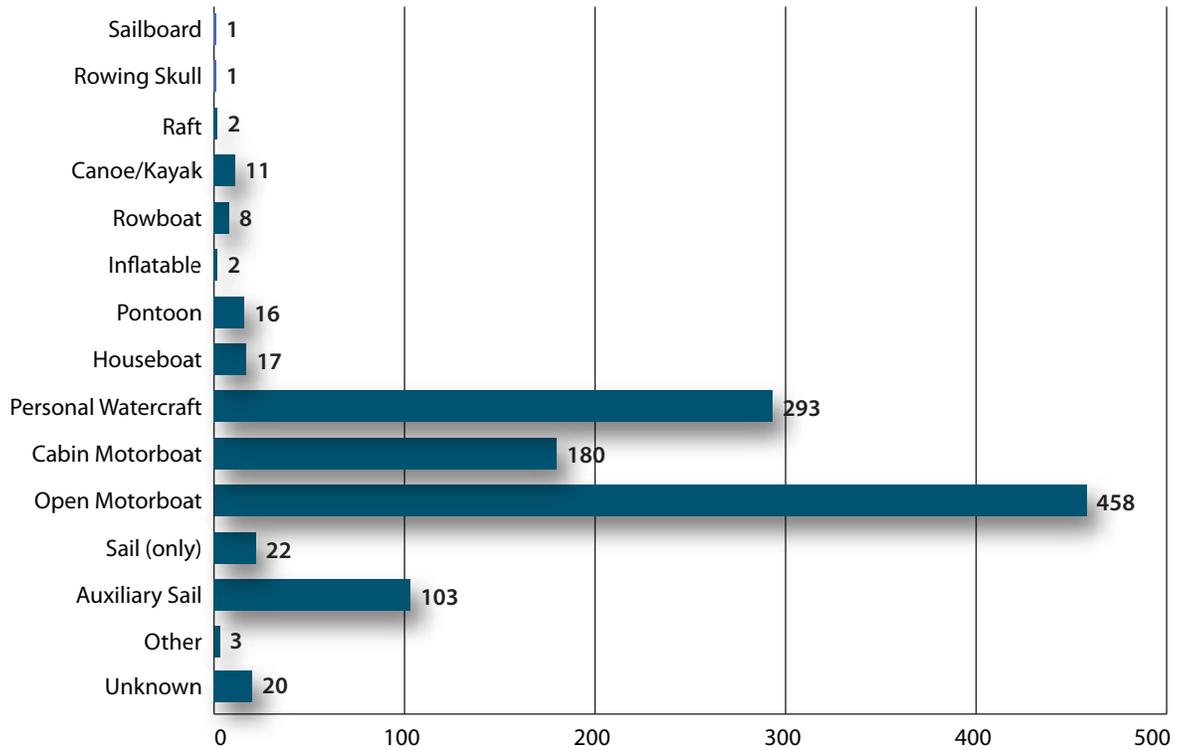


Chart 5: Vessels Involved in All Accidents by Length

Total Vessels - 1137

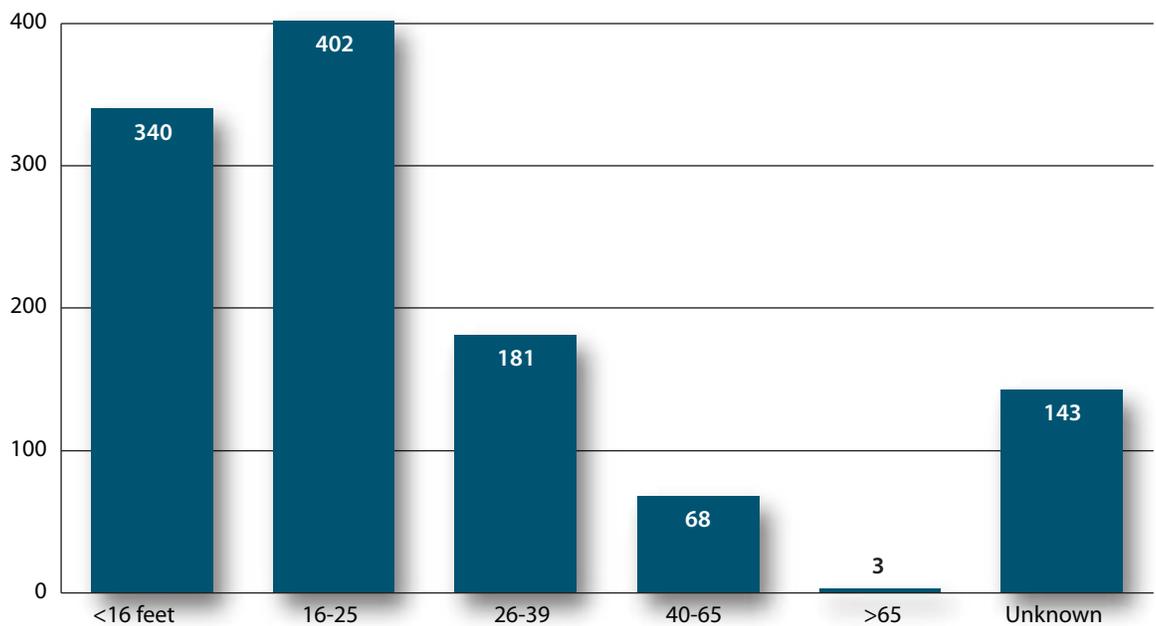
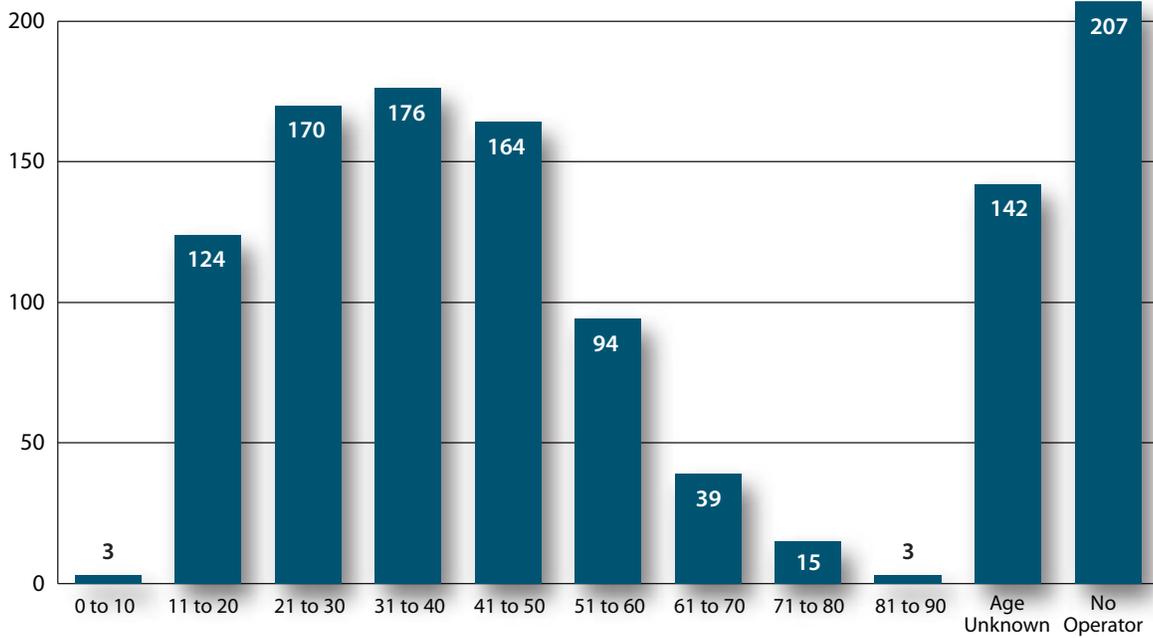


Chart 6: Operators Involved in All Accidents by Age

Total Vessels - 1137



"No Operator" refer to accidents involving vessels where there was no operator present at the time of accident. Most of these vessels were in vessel slips, tied to docks, or moored, and were struck by other vessels. Some accident reports submitted to the department do not include operator age information, as indicated by the "Age Unknown" category.

Chart 7: Operation at Time of Accident

Total Accidents - 1137

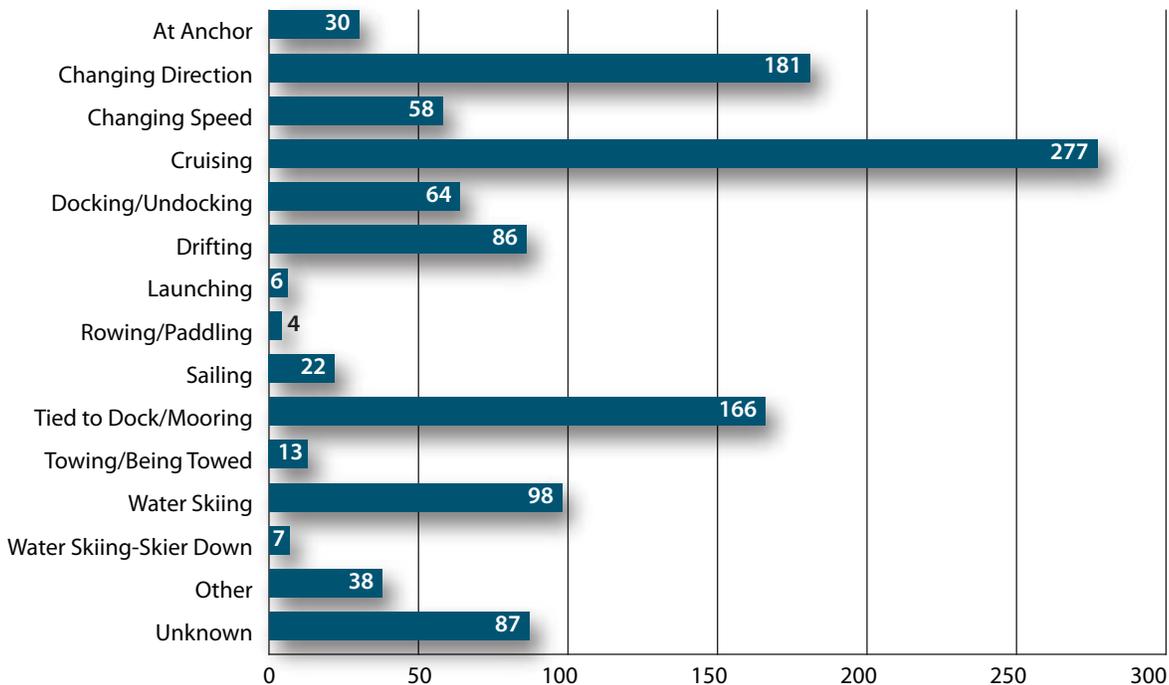


Chart 8: Type of Accident

Total Types - 985 Total accidents - 804

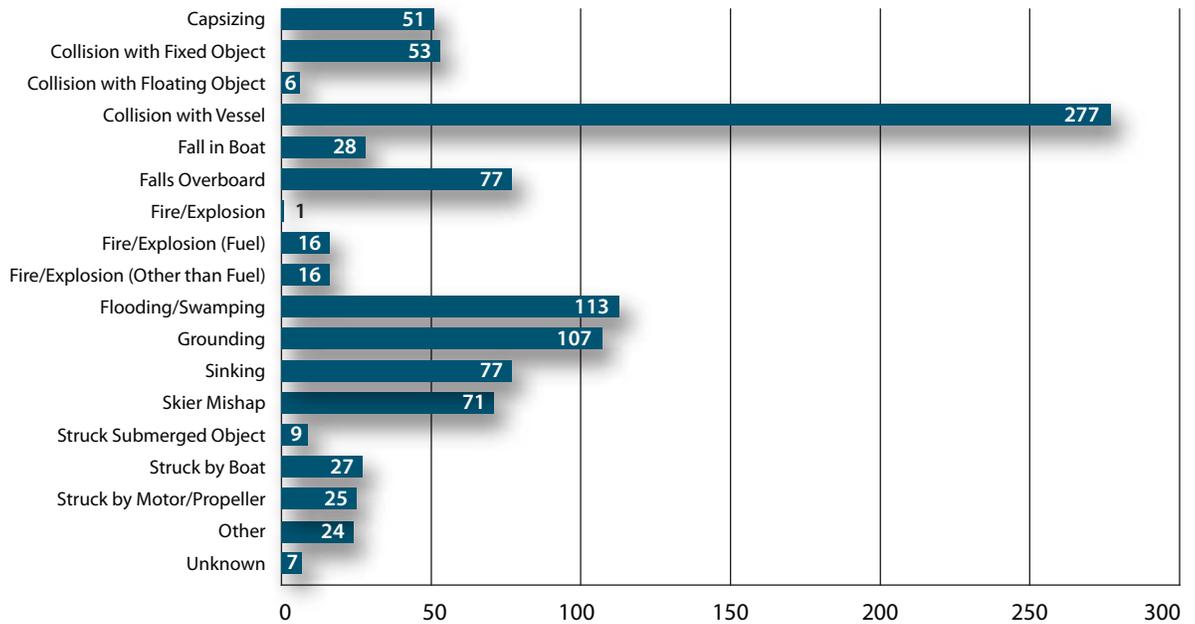


Chart 9: Cause of Accident

Total Causes - 1432 Total accidents - 804

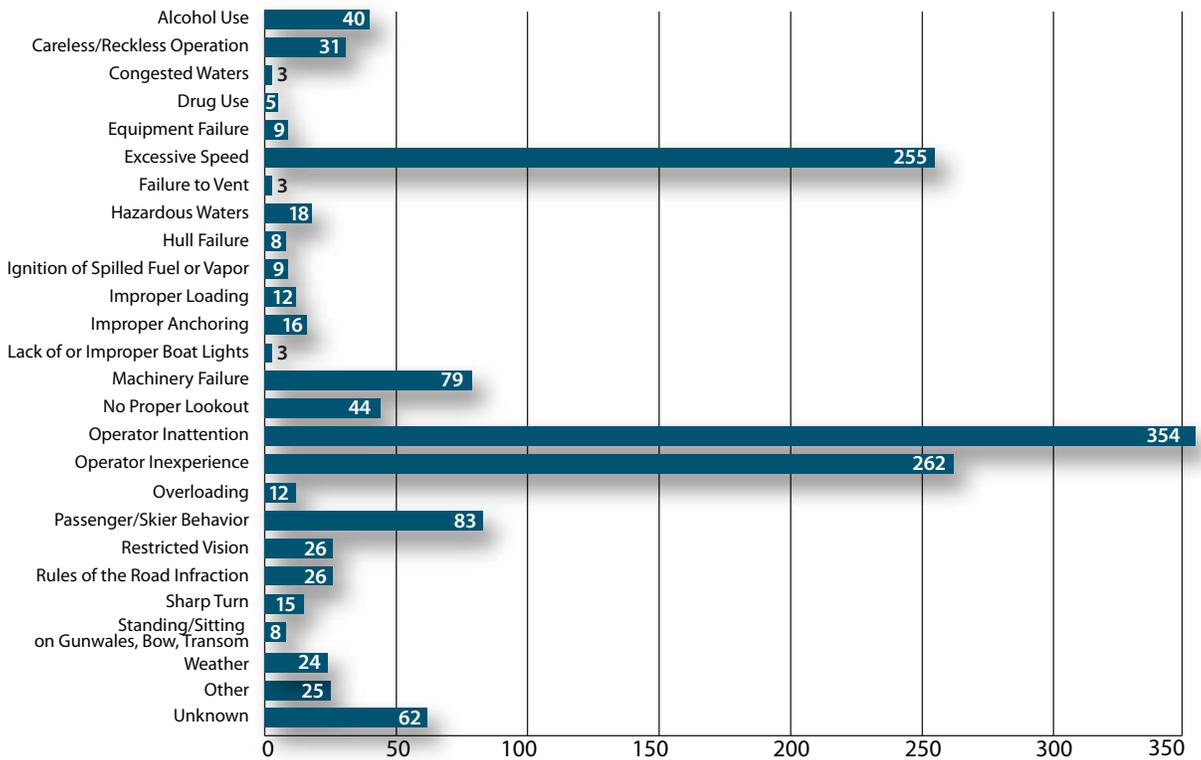
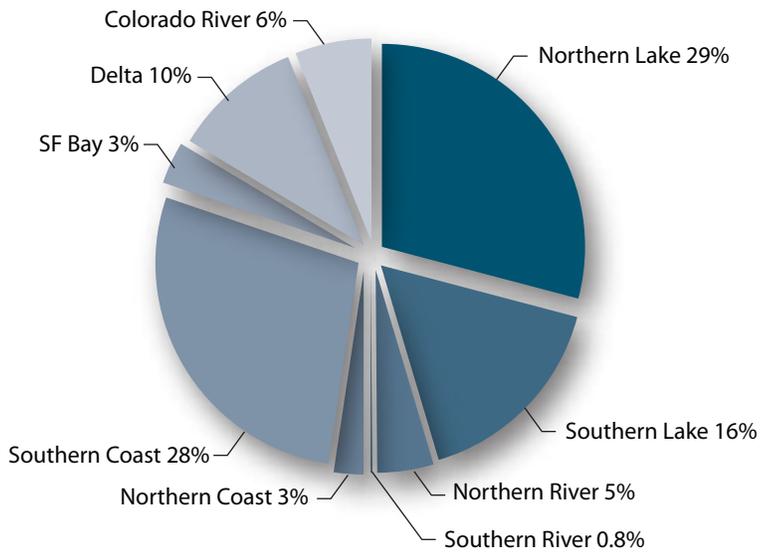




Chart 10: Accident Locations

Total Accidents - 804



Number of Accidents	
Northern Lake	234
Southern Lake	131
Northern River	36
Southern River	1
Northern Coast	19
Southern Coast	224
SF Bay	27
Delta	83
Colorado River	49
Totals	804

Percentages may not add up to 100% due to rounding.

Chart 11: Water Skiing Accidents

Total Accidents - 105

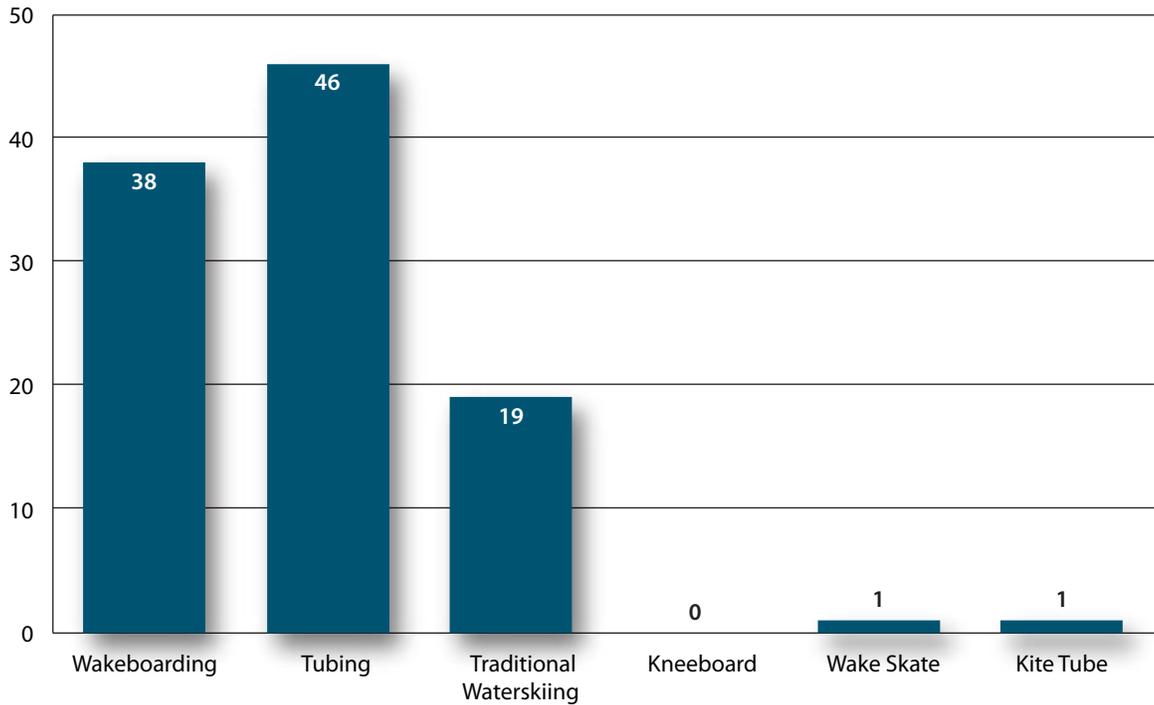
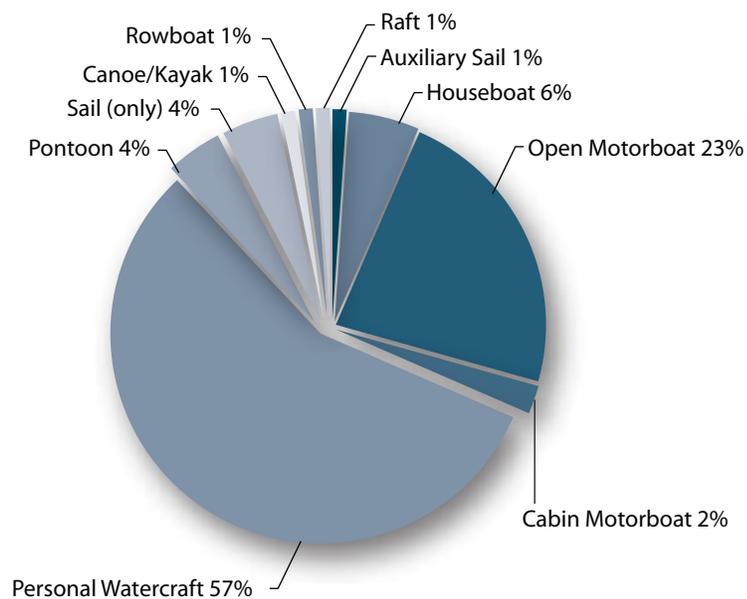


Chart 12: Rented Vessels Involved in All Accidents by Type

Total Vessels - 92

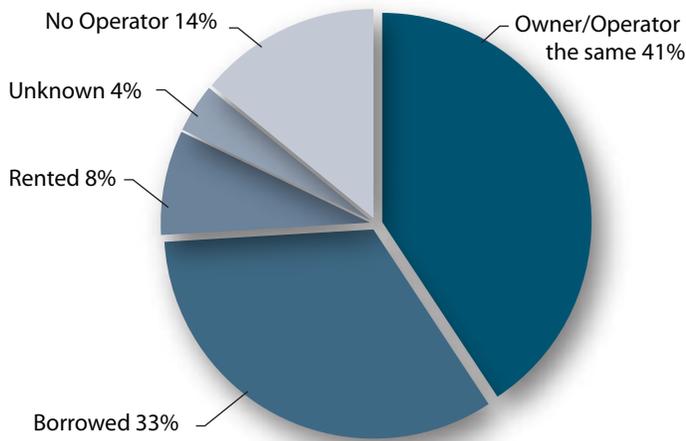


Number of Accidents	
Auxiliary Sail	1
Houseboat	5
Open Motorboat	21
Cabin Motorboat	2
Personal Watercraft	52
Pontoon	4
Sail (only)	4
Canoe/Kayak	1
Rowboat	1
Raft	1
Total	92

Percentages may not add up to 100% due to rounding.

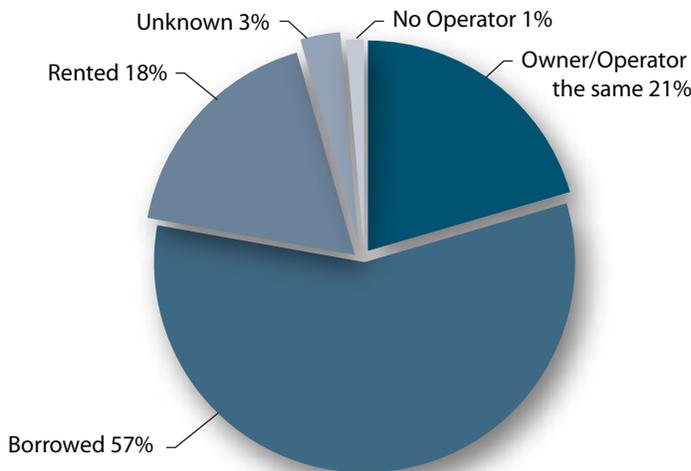
Chart 13: Ownership Status of Vessels, PWC and Open Motorboats Involved in Accidents

13a: All Vessels Involved in Accidents



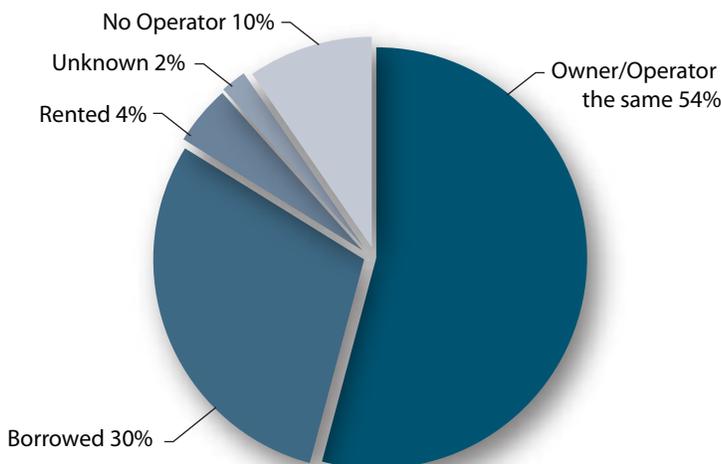
Number of Vessels	
Owner/Operator the same	463
Borrowed	379
Rented	92
Unknown	43
No Operator	160
Total Vessels	1137

13b: PWC Involved in Accidents



Number of PWCs	
Owner/Operator the same	60
Borrowed	168
Rented	52
Unknown	9
No Operator	4
Total Vessels	293

13c: Open Motorboats Involved in Accidents

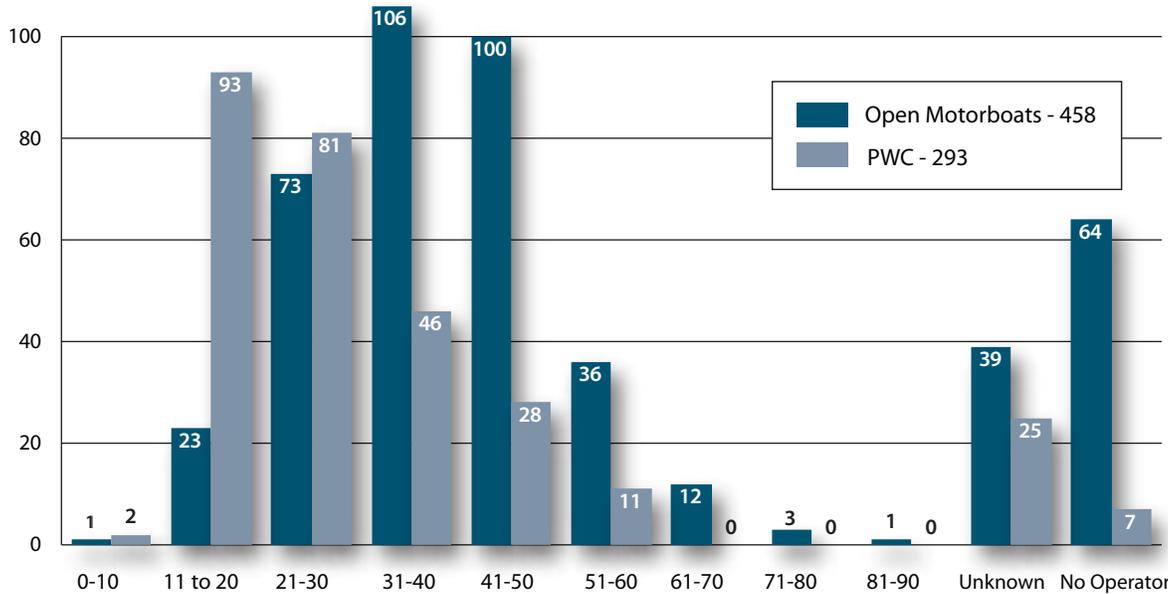


Number of Open Motorboats	
Owner/Operator the same	248
Borrowed	136
Rented	21
Unknown	9
No Operator	44
Total Vessels	458

Percentages may not add up to 100% due to rounding.

Chart 14: Open Motorboats/PWC - Operators Involved in Accidents by Age

Total Open Motorboat Operator - 458 Total PWC Operator - 293



"No Operator" refer to accidents involving vessels where there was no operator present at the time of accident. Most of these vessels were in vessel slips, tied to docks, or moored, and were struck by other vessels. Some accident reports submitted to the department do not include operator age information, as indicated by the "Age Unknown" category.

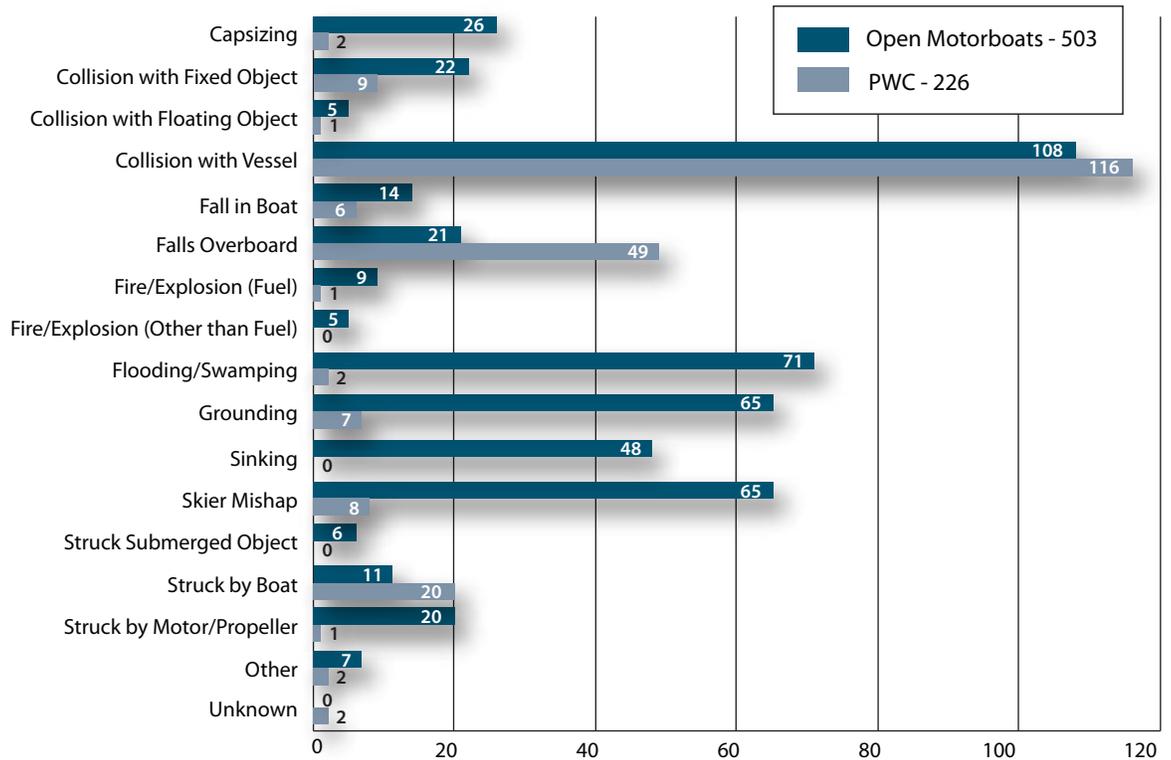
Chart 15: Open Motorboats/PWC - Type of Accident

Total Open Motorboat Types - 503

Total PWC Types - 226

Total Open Motorboat Accidents - 397

Total PWC Accidents - 204

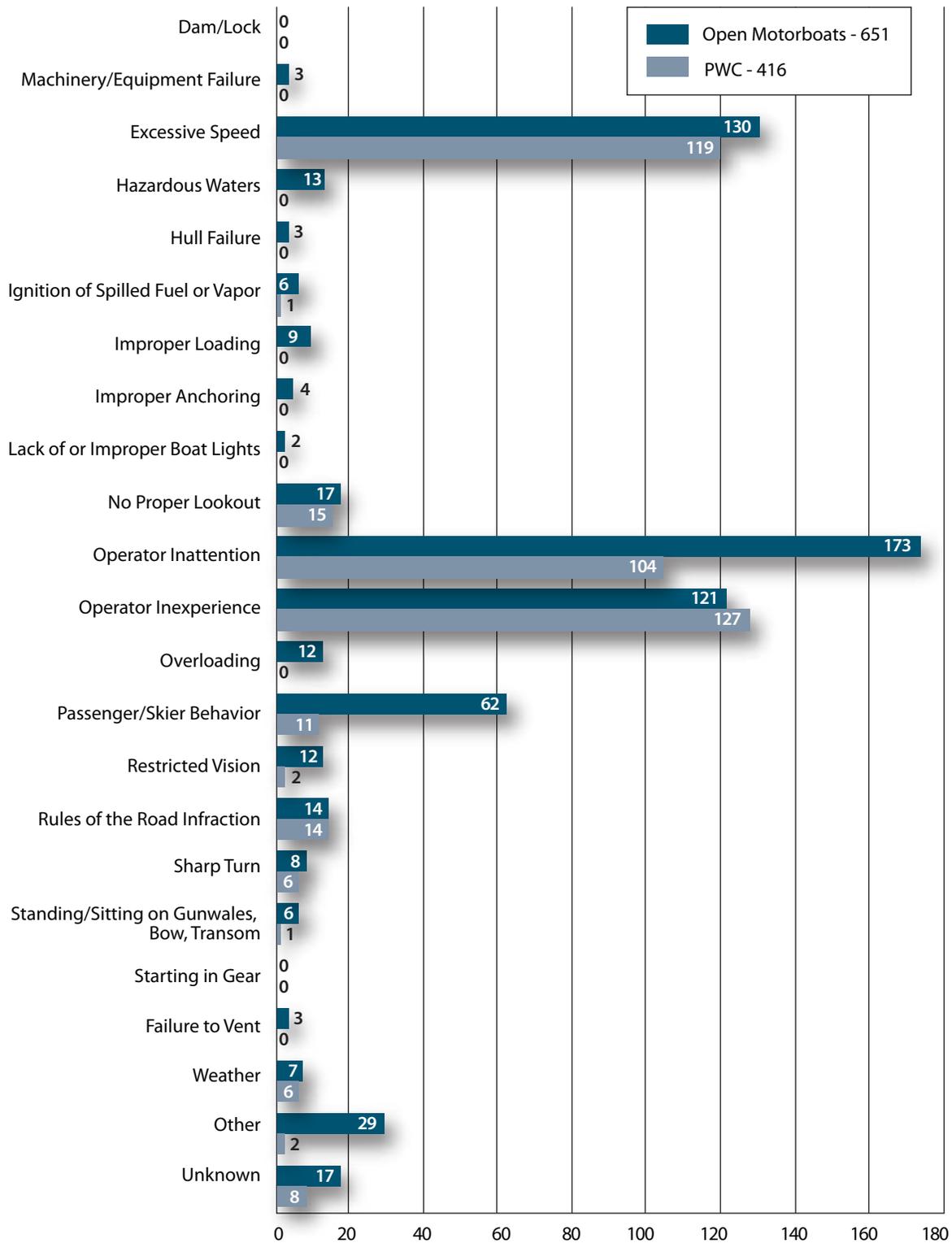


Some accidents are represented by more than one accident type, which accounts for the accident types exceeding the number of accidents.

Chart 16: Open Motorboats/PWC - Cause of Accident

Total Open Motorboat Causes - 651
 Total Open Motorboat Accidents - 397

Total PWC Causes - 416
 Total PWC Accidents - 204



Many accidents had more than one cause, which is reflected in this chart. The "Other" category includes causes that do not fit into any of the other categories listed above.

Chart 17: Fatalities by Month
Total Fatalities - 55

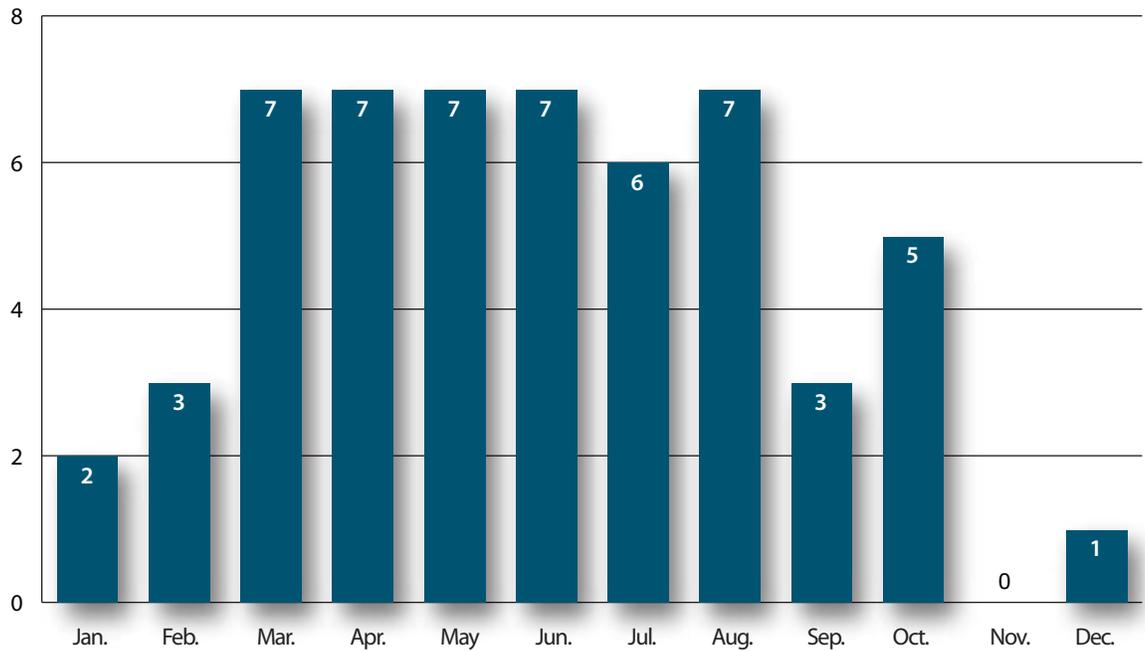


Chart 18: Fatalities by Day of the Week
Total Fatalities - 55

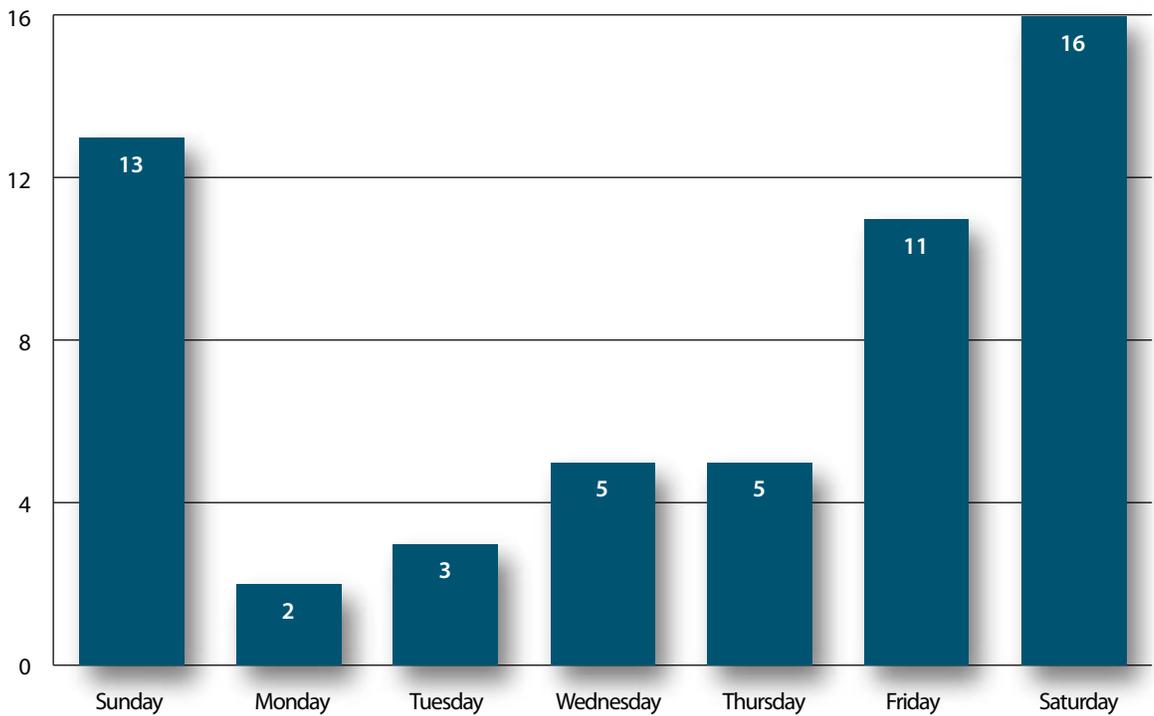




Chart 19: Fatalities by Time of Day
Total Fatalities - 55

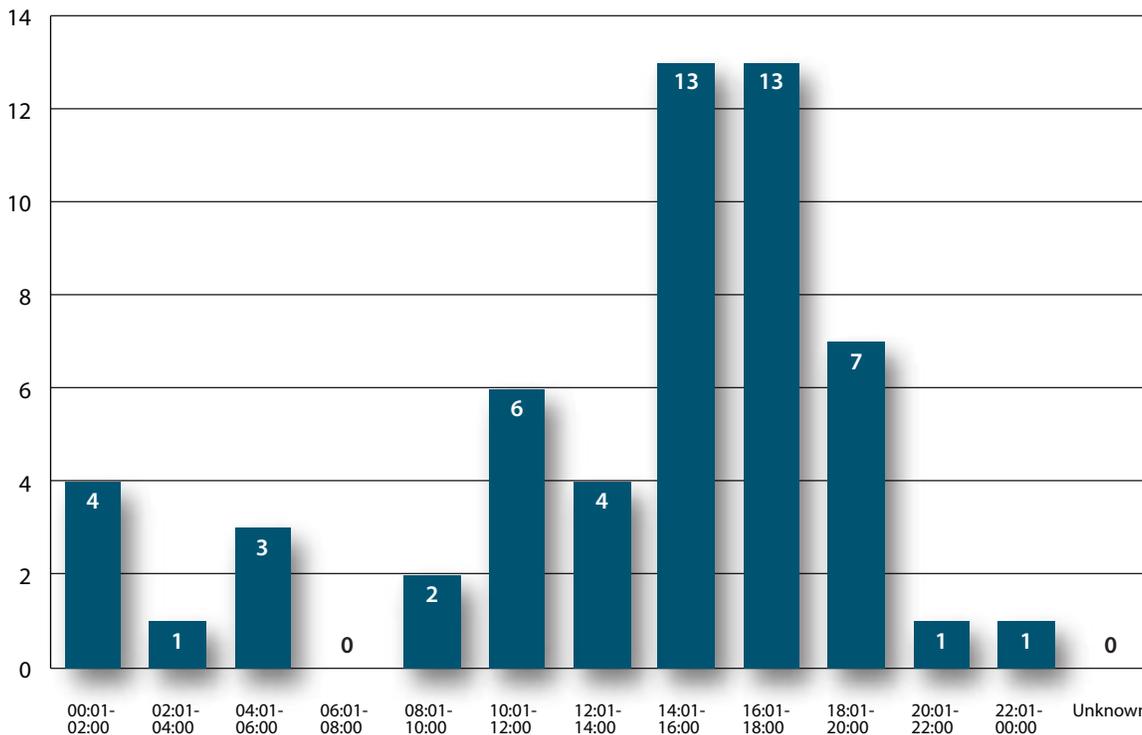


Chart time periods are shown using military time.

Chart 20: Types of Vessels Involved in Fatal Accidents

Total Vessels - 58

Total Fatalities - 55

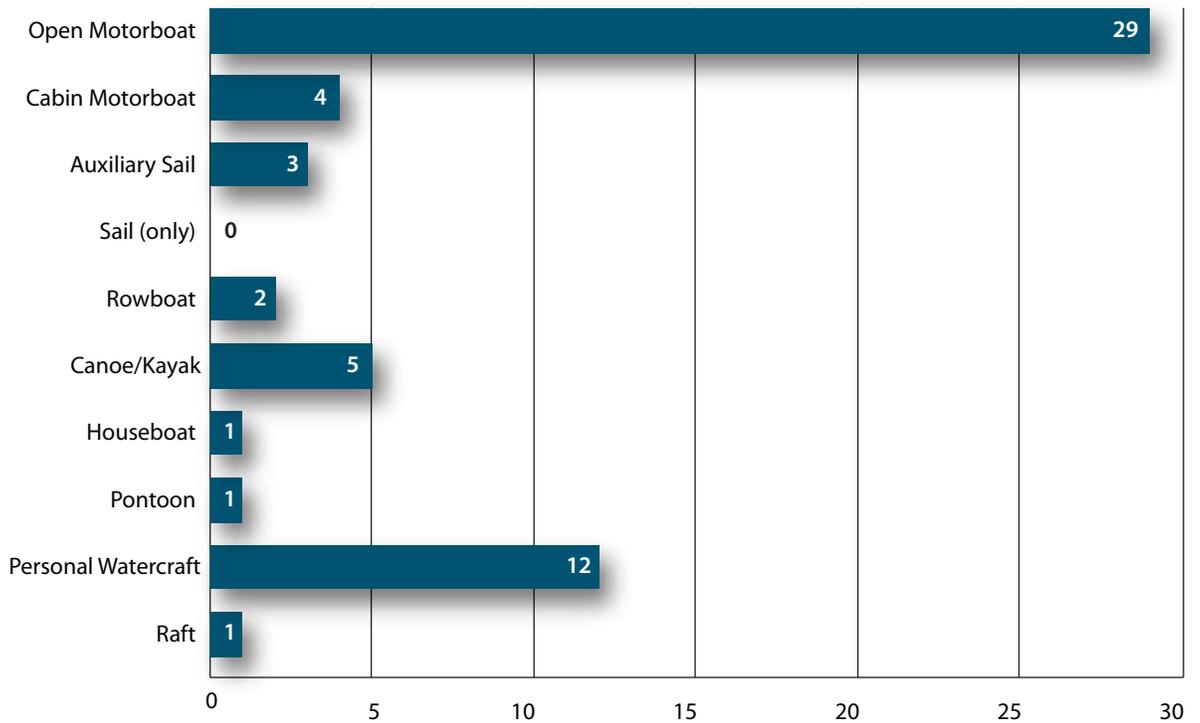


Chart 21: Fatalities by Length of Vessel

Total Vessels - 58

Total Fatalities - 55

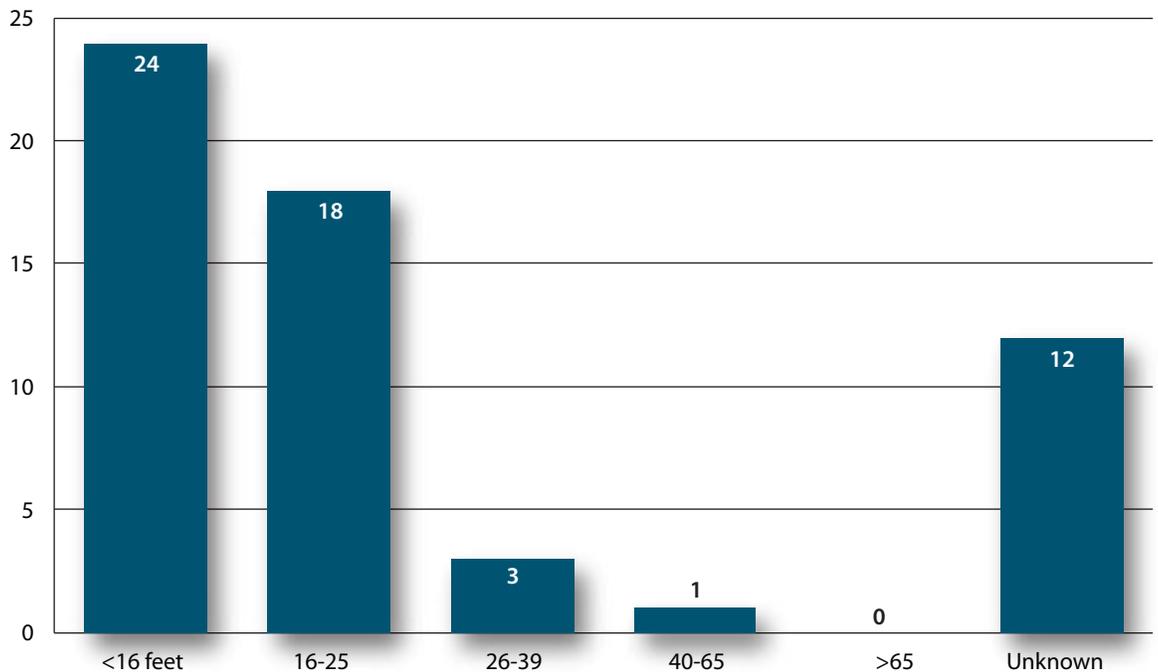


Chart 22: Operators Involved in Fatal Accidents by Age

Total Vessels - 58

Total Operators - 55

Total Fatalities - 55

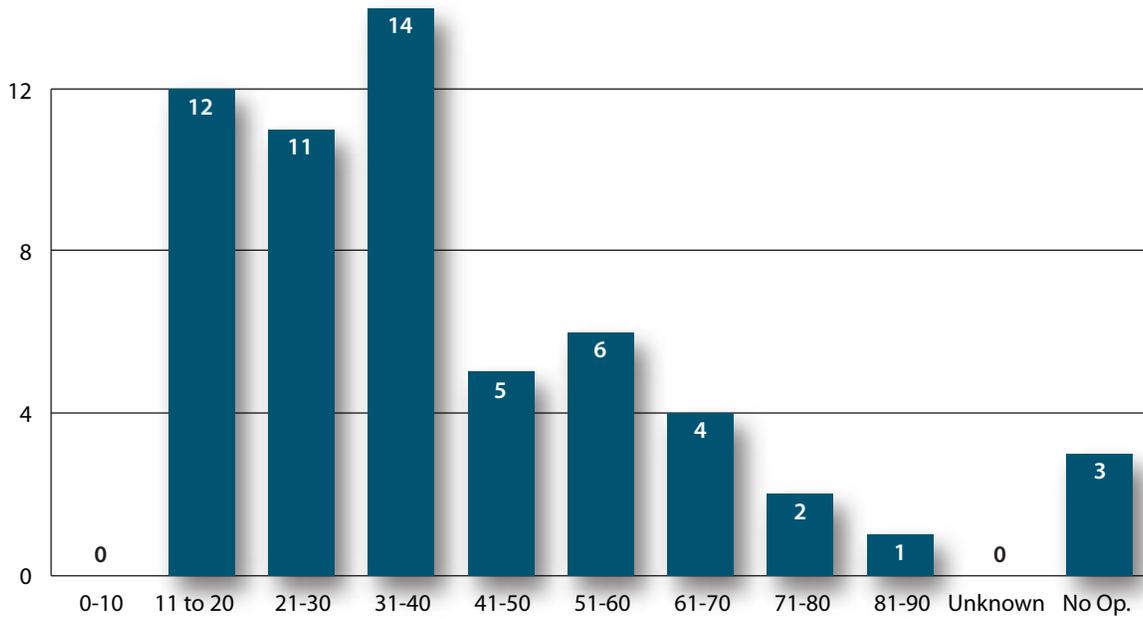


Chart 23: Fatalities by Operation at Time of Accident

Total Vessels - 58

Total Fatalities - 55

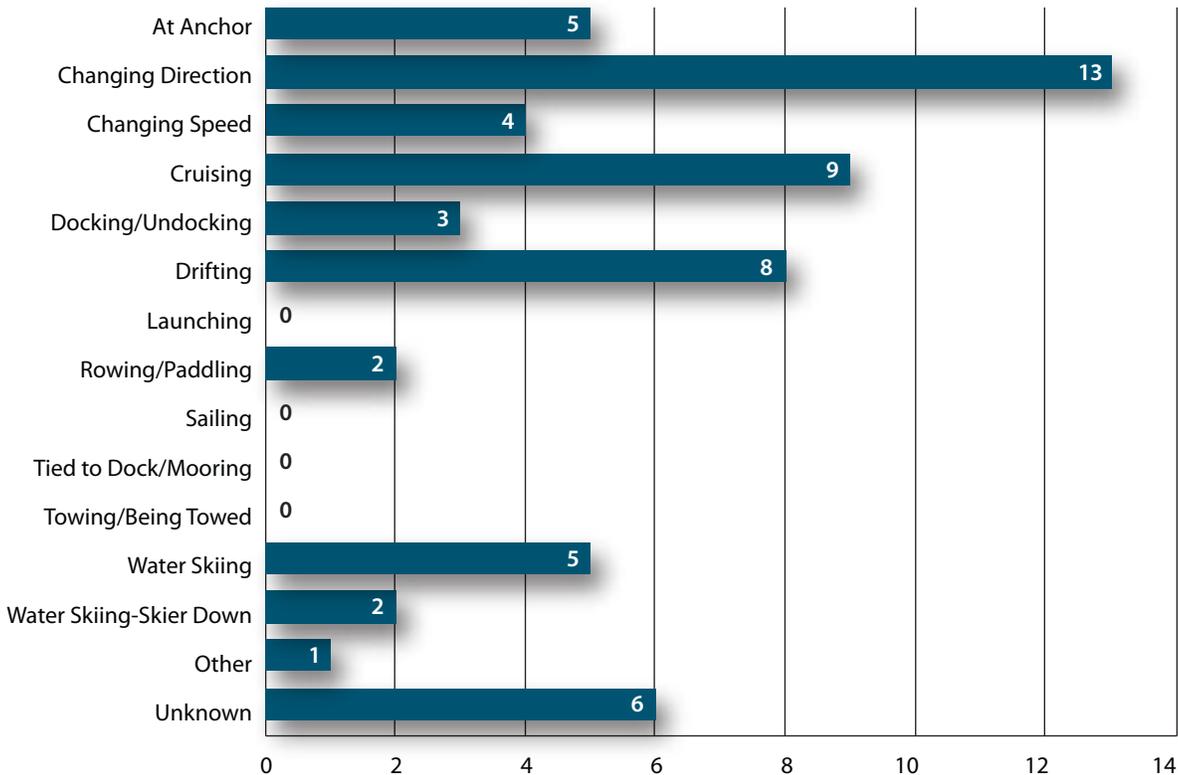
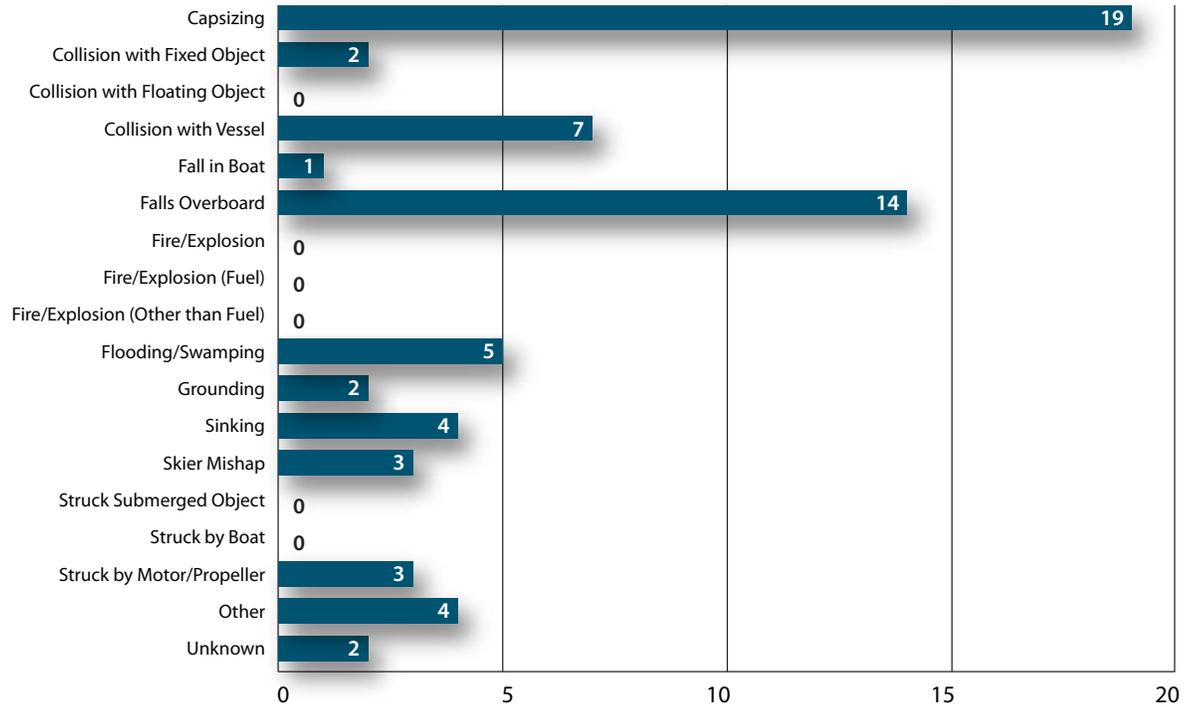


Chart 24: Fatalities by Type of Accident

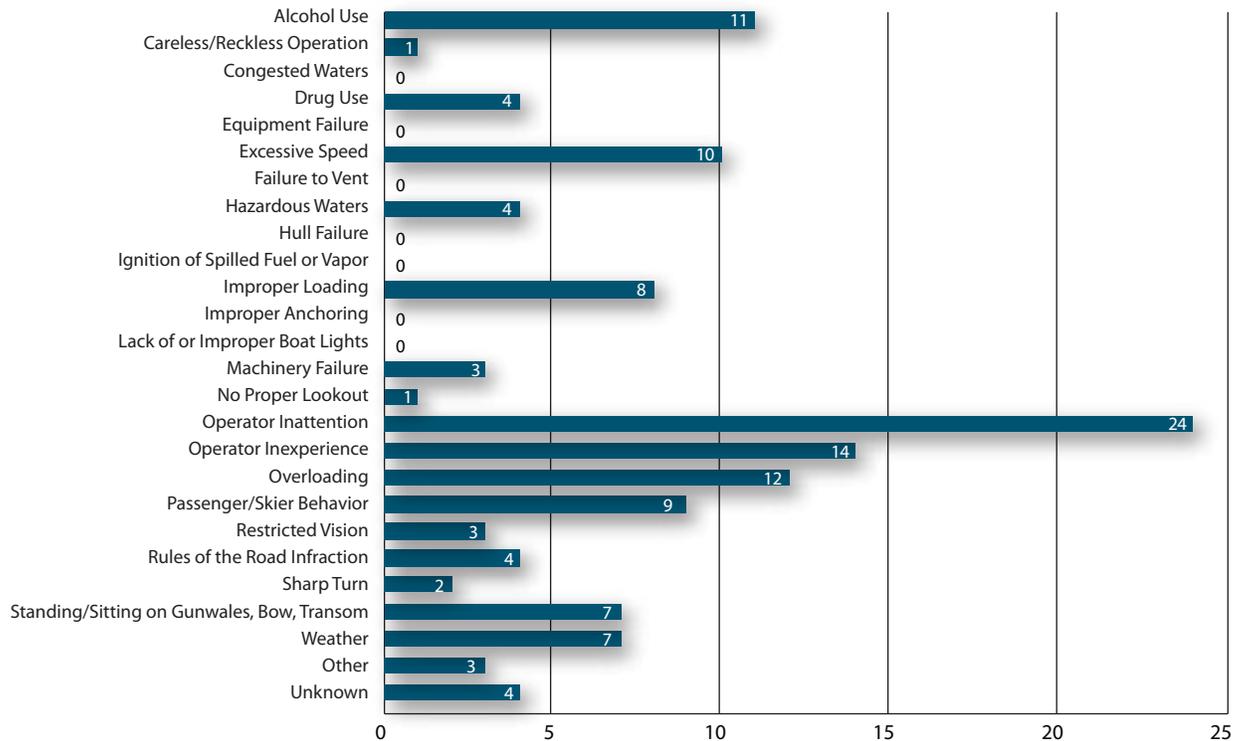
Total Types - 66 Total Fatalities - 55



Some accidents are represented by more than one accident type, which accounts for the fatal accident types exceeding the number of fatalities.

Chart 25: Fatalities by Cause of Accident

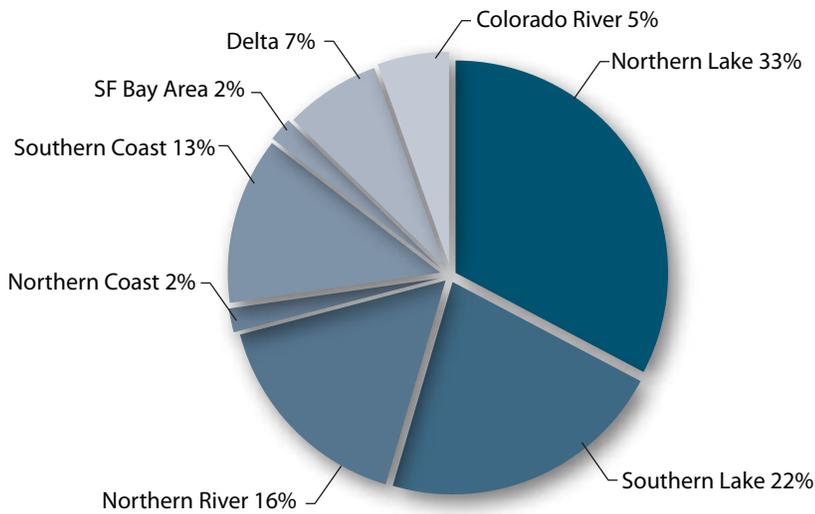
Total Causes - 131 Total Fatalities - 55



Many fatal accidents had more than one cause, which is reflected in this chart. The "Other" category includes causes that do not fit into any of the other categories listed above.

Chart 26: Fatalities by Accident Location

Total Fatalities - 55



Number of Fatalities	
Northern Lake	18
Southern Lake	12
Northern River	9
Southern River	0
Northern Coast	1
Southern Coast	7
SF Bay Area	1
Delta	4
Colorado River	3
Totals	55

Chart 27: Fatalities by Age of Victim

Total Fatalities - 55

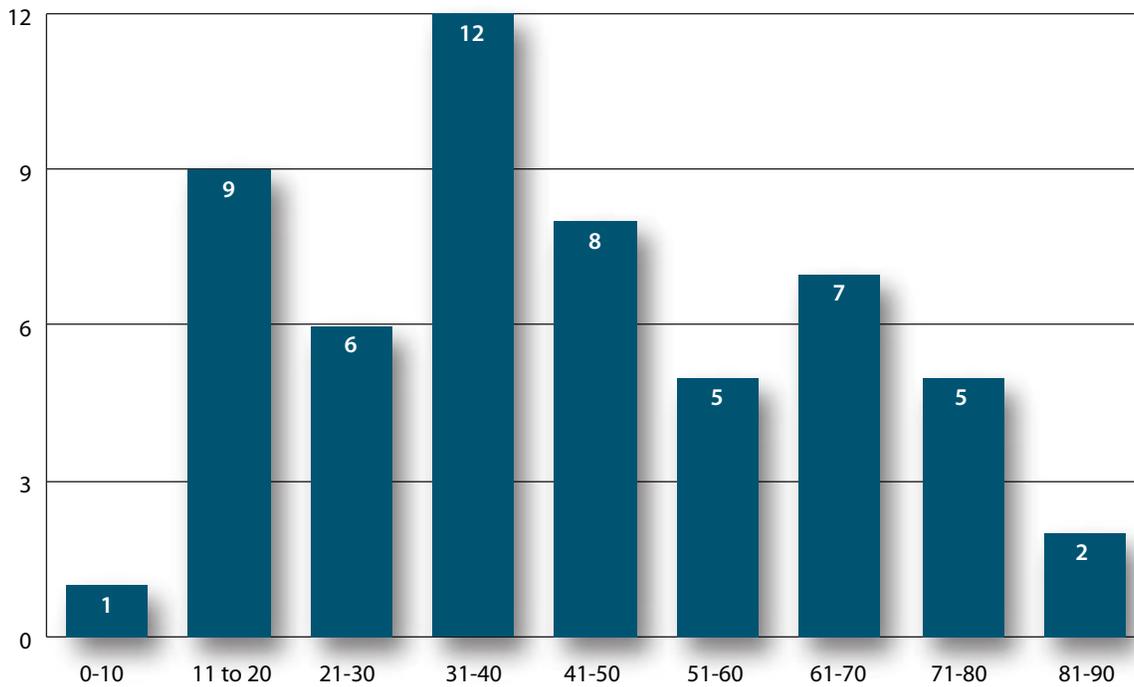
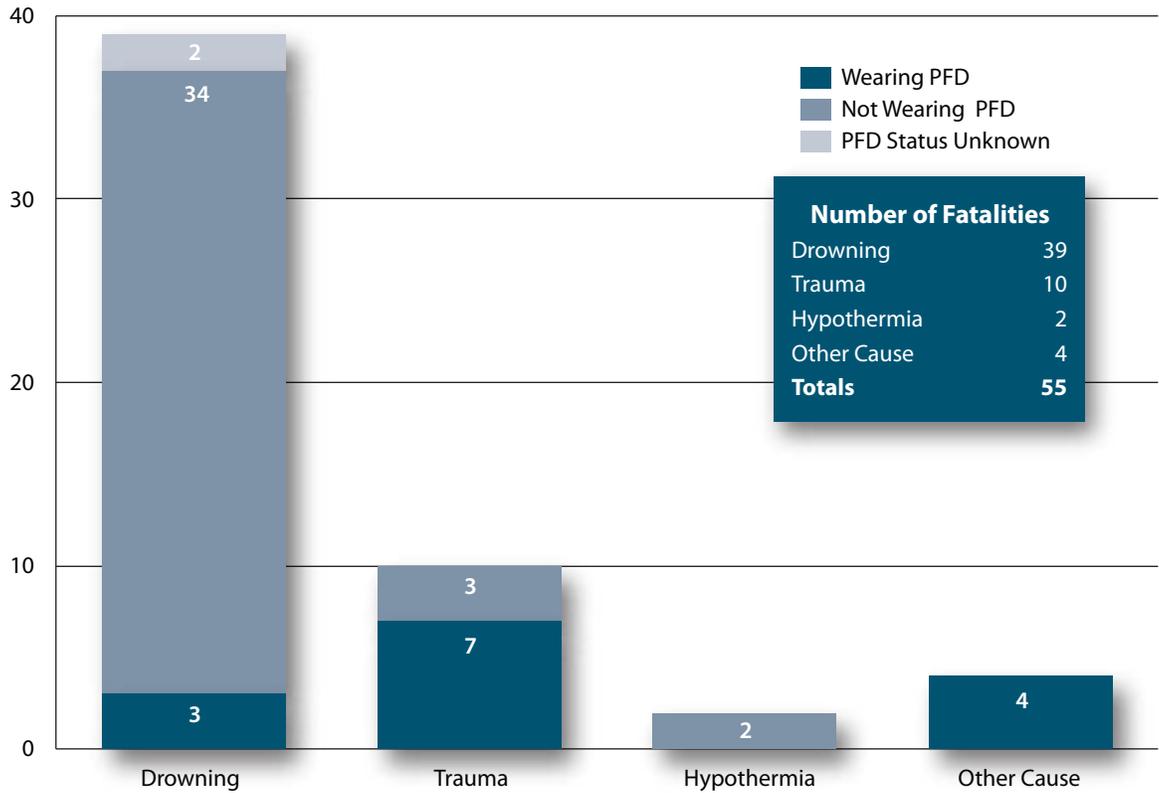


Chart 28: Fatalities by Cause of Death

Total Causes - 55 Total Fatalities - 55



CALIFORNIA BOATING ACCIDENT REPORT

CALIFORNIA DEPARTMENT OF BOATING AND WATERWAYS

The operator of every recreational vessel is required by Section 656 of the Harbors and Navigation Code to file a written report whenever a boating accident occurs which results in death, disappearance, injury that requires medical attention beyond first aid, total property damage in excess of \$500, or complete loss of a vessel. Reports must be submitted within 48 hours in case of death occurring within 24 hours of an accident, disappearance, or injury beyond first aid. All other reports must be submitted within 10 days of the accident. Reports are to be submitted to the California Department of Boating and Waterways at 2000 Evergreen Street, Suite 100, Sacramento, California 95815-3888, (916) 263-8189. Failure to submit this report as required is a misdemeanor and is punishable by a fine not to exceed \$1000 or imprisonment not to exceed 6 months or both.

DATE OF ACCIDENT (M/D/Y)		TIME OF ACCIDENT <input type="checkbox"/> AM <input type="checkbox"/> PM		COUNTY	BODY OF WATER	LOCATION ON WATER							
# INJURED	# DEAD	TOTAL \$\$		LAW ENFORCEMENT ON ACCIDENT SCENE? <input type="checkbox"/> YES <input type="checkbox"/> NO		AGENCY NAME							
WEATHER (CHECK ALL THAT APPLY): <input type="checkbox"/> CLEAR <input type="checkbox"/> RAIN <input type="checkbox"/> CLOUDY <input type="checkbox"/> SNOW <input type="checkbox"/> FOG <input type="checkbox"/> HAZY		WATER CONDITIONS <input type="checkbox"/> CALM (waves less than 6") <input type="checkbox"/> CHOPPY (waves 6"-2') <input type="checkbox"/> ROUGH (waves 2'-6") <input type="checkbox"/> VERY ROUGH (waves >6')		WIND CONDITIONS <input type="checkbox"/> NONE <input type="checkbox"/> LIGHT (0-6 mph) <input type="checkbox"/> MODERATE (7-14 mph) <input type="checkbox"/> STRONG (15-25 mph) <input type="checkbox"/> STORM (over 25 mph)		TEMPERATURE <table style="width:100%; border:none;"> <tr> <td style="border:none;">WATER</td> <td style="border:none;">AIR</td> </tr> <tr> <td style="border:none;">VISIBILITY</td> <td style="border:none;">STRONG CURRENT</td> </tr> <tr> <td style="border:none;"><input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> POOR</td> <td style="border:none;"><input type="checkbox"/> YES <input type="checkbox"/> NO</td> </tr> </table>		WATER	AIR	VISIBILITY	STRONG CURRENT	<input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> POOR	<input type="checkbox"/> YES <input type="checkbox"/> NO
WATER	AIR												
VISIBILITY	STRONG CURRENT												
<input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> POOR	<input type="checkbox"/> YES <input type="checkbox"/> NO												

TYPE OF ACCIDENT (CHECK ALL THAT APPLY):				CAUSE OF ACCIDENT (CHECK ALL THAT APPLY):			
<input type="checkbox"/> CAPSIZING	<input type="checkbox"/> FIRE / EXPLOSION (fuel)	<input type="checkbox"/> IMPROPER LOOKOUT / INATTENTION	<input type="checkbox"/> HAZARDOUS WEATHER / WATER	<input type="checkbox"/> COLLISION WITH VESSEL	<input type="checkbox"/> FIRE / EXPLOSION (other than fuel)	<input type="checkbox"/> OPERATOR INEXPERIENCE	<input type="checkbox"/> RESTRICTED VISION
<input type="checkbox"/> COLLISION WITH FIXED OBJECT	<input type="checkbox"/> FLOODING / SWAMPING	<input type="checkbox"/> EXCESSIVE SPEED	<input type="checkbox"/> IGNITION OF SPILLED FUEL / VAPOR	<input type="checkbox"/> COLLISION WITH FLOATING OBJECT	<input type="checkbox"/> SINKING	<input type="checkbox"/> MACHINERY FAILURE	<input type="checkbox"/> IMPROPER ANCHORING
<input type="checkbox"/> FALL OVERBOARD	<input type="checkbox"/> STRUCK BY BOAT / PROPELLER	<input type="checkbox"/> EQUIPMENT FAILURE	<input type="checkbox"/> ALCOHOL USE	<input type="checkbox"/> FALL IN BOAT	<input type="checkbox"/> SKIER MISHAP	<input type="checkbox"/> IMPROPER LOADING	<input type="checkbox"/> FAILURE TO VENT
<input type="checkbox"/> OTHER _____		<input type="checkbox"/> OVERLOADING	<input type="checkbox"/> OTHER _____				

DESCRIBE WHAT HAPPENED AND WHAT YOU COULD HAVE DONE TO PREVENT THIS ACCIDENT
 (Explain the cause of death or injury, medical treatment, etc. Use sketch if helpful. If needed, continue description on additional paper.)

VICTIM OR WITNESS INFORMATION

VICTIM / WITNESS NAME & ADDRESS	VICTIM / WITNESS STATUS	RIDING IN VESSEL #	AGE	INJURY DESCRIPTION	CAUSE OF DEATH	COULD VICTIM SWIM?	LIFE JACKET WORN?
	<input type="checkbox"/> INJURED <input type="checkbox"/> DEAD <input type="checkbox"/> WITNESS ONLY				<input type="checkbox"/> DROWNING <input type="checkbox"/> TRAUMA <input type="checkbox"/> OTHER	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
	<input type="checkbox"/> INJURED <input type="checkbox"/> DEAD <input type="checkbox"/> WITNESS ONLY				<input type="checkbox"/> DROWNING <input type="checkbox"/> TRAUMA <input type="checkbox"/> OTHER	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
	<input type="checkbox"/> INJURED <input type="checkbox"/> DEAD <input type="checkbox"/> WITNESS ONLY				<input type="checkbox"/> DROWNING <input type="checkbox"/> TRAUMA <input type="checkbox"/> OTHER	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
	<input type="checkbox"/> INJURED <input type="checkbox"/> DEAD <input type="checkbox"/> WITNESS ONLY				<input type="checkbox"/> DROWNING <input type="checkbox"/> TRAUMA <input type="checkbox"/> OTHER	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO

CALIFORNIA BOATING ACCIDENT REPORT

CALIFORNIA DEPARTMENT OF BOATING AND WATERWAYS

INFORMATION: OPERATOR #1

OPERATOR NAME AND ADDRESS AGE	IS OWNER DIFFERENT THAN OPERATOR? <input type="checkbox"/> YES <input type="checkbox"/> NO OWNER NAME AND ADDRESS	OPERATOR EXPERIENCE <input type="checkbox"/> UNDER 10 HOURS <input type="checkbox"/> 10 TO 100 HOURS <input type="checkbox"/> OVER 100 HOURS	OPERATOR EDUCATION <input type="checkbox"/> AMERICAN RED CROSS <input type="checkbox"/> USCG AUXILIARY <input type="checkbox"/> US POWER SQUADRON <input type="checkbox"/> STATE COURSE <input type="checkbox"/> INFORMAL <input type="checkbox"/> NONE
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INFORMATION: VESSEL #1

(YOUR VESSEL)

THIS VESSEL ONLY	# INJURED	# DEAD	ESTIMATED DAMAGE	RENTED BOAT <input type="checkbox"/> YES <input type="checkbox"/> NO	# OF PERSONS ON BOARD	# OF PERSONS TOWED	
BOAT NUMBER (CF OR DOC #)		MFR. HULL ID #		BOAT NAME		LENGTH	
BOAT MANUFACTURER		BOAT MODEL		YEAR BUILT	TYPE OF FUEL	# OF ENGINES HORSEPOWER	
ACTIVITY <input type="checkbox"/> RECREATIONAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> OTHER _____			FIRE EXTINGUISHER ON BOARD <input type="checkbox"/> YES <input type="checkbox"/> NO	FIRE EXTINGUISHER USED <input type="checkbox"/> YES <input type="checkbox"/> NO	LIFE JACKETS ON BOARD <input type="checkbox"/> YES <input type="checkbox"/> NO	LIFE JACKETS ACCESSIBLE <input type="checkbox"/> YES <input type="checkbox"/> NO	
LIFE JACKETS WORN <input type="checkbox"/> YES <input type="checkbox"/> NO		TYPE OF BOAT		HULL MATERIAL		PROPULSION	
<input type="checkbox"/> OPEN MOTORBOAT <input type="checkbox"/> CABIN MOTORBOAT <input type="checkbox"/> PERSONAL WATERCRAFT <input type="checkbox"/> HOUSEBOAT <input type="checkbox"/> SAILBOAT (aux. engine) <input type="checkbox"/> SAILBOAT (sail only) <input type="checkbox"/> CANOE / KAYAK <input type="checkbox"/> RAFT <input type="checkbox"/> ROWBOAT <input type="checkbox"/> OTHER (specify) _____		<input type="checkbox"/> WOOD <input type="checkbox"/> ALUMINUM <input type="checkbox"/> FIBERGLASS <input type="checkbox"/> PLASTIC <input type="checkbox"/> RUBBER / VINYL <input type="checkbox"/> OTHER (specify) _____		<input type="checkbox"/> OUTBOARD <input type="checkbox"/> INBOARD <input type="checkbox"/> INBOARD / OUTBOARD <input type="checkbox"/> JET <input type="checkbox"/> SAIL ONLY <input type="checkbox"/> PADDLE / OARS <input type="checkbox"/> OTHER (specify) _____		OPERATION AT TIME OF ACCIDENT <input type="checkbox"/> CRUISING <input type="checkbox"/> CHANGING DIRECTION <input type="checkbox"/> CHANGING SPEED <input type="checkbox"/> TOWING SKIER / TUBER <input type="checkbox"/> TOWING SKIER- SKIER DOWN <input type="checkbox"/> TOWING ANOTHER VESSEL <input type="checkbox"/> BEING TOWED BY ANOTHER VESSEL SPEED _____ MPH	
				<input type="checkbox"/> DRIFTING <input checked="" type="checkbox"/> AT ANCHOR <input type="checkbox"/> TIED TO DOCK <input type="checkbox"/> LAUNCHING <input type="checkbox"/> DOCKING / LEAVING DOCK <input type="checkbox"/> SAILING <input type="checkbox"/> OTHER (specify) _____			

INFORMATION: OPERATOR #2

OPERATOR NAME AND ADDRESS AGE	IS OWNER DIFFERENT THAN OPERATOR? <input type="checkbox"/> YES <input type="checkbox"/> NO OWNER NAME AND ADDRESS	OPERATOR EXPERIENCE <input type="checkbox"/> UNDER 10 HOURS <input type="checkbox"/> 10 TO 100 HOURS <input type="checkbox"/> OVER 100 HOURS	OPERATOR EDUCATION <input type="checkbox"/> AMERICAN RED CROSS <input type="checkbox"/> USCG AUXILIARY <input type="checkbox"/> US POWER SQUADRON <input type="checkbox"/> STATE COURSE <input type="checkbox"/> INFORMAL <input type="checkbox"/> NONE
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INFORMATION: VESSEL #2

(OTHER VESSEL INVOLVED)

THIS VESSEL ONLY	# INJURED	# DEAD	ESTIMATED DAMAGE \$\$	RENTED BOAT <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO	# OF PERSONS ON BOARD	# OF PERSONS TOWED	
BOAT NUMBER (CF OR DOC #)		MFR. HULL ID#		BOAT NAME		LENGTH	
BOAT MANUFACTURER		BOAT MODEL		YEAR BUILT	TYPE OF FUEL	# OF ENGINES HORSEPOWER	
ACTIVITY <input type="checkbox"/> RECREATIONAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> OTHER _____			FIRE EXTINGUISHER ON BOARD <input type="checkbox"/> YES <input type="checkbox"/> NO	FIRE EXTINGUISHER USED <input type="checkbox"/> YES <input type="checkbox"/> NO	LIFE JACKETS ON BOARD <input type="checkbox"/> YES <input type="checkbox"/> NO	LIFE JACKETS ACCESSIBLE <input type="checkbox"/> YES <input type="checkbox"/> NO	
LIFE JACKETS WORN <input type="checkbox"/> YES <input type="checkbox"/> NO		TYPE OF BOAT		HULL MATERIAL		PROPULSION	
<input type="checkbox"/> OPEN MOTORBOAT <input type="checkbox"/> CABIN MOTORBOAT <input type="checkbox"/> PERSONAL WATERCRAFT <input type="checkbox"/> HOUSEBOAT <input type="checkbox"/> SAILBOAT (aux. engine) <input type="checkbox"/> SAILBOAT (sail only) <input type="checkbox"/> CANOE / KAYAK <input type="checkbox"/> RAFT <input type="checkbox"/> ROWBOAT <input type="checkbox"/> OTHER (specify) _____		<input type="checkbox"/> WOOD <input type="checkbox"/> ALUMINUM <input type="checkbox"/> FIBERGLASS <input type="checkbox"/> PLASTIC <input type="checkbox"/> RUBBER / VINYL <input type="checkbox"/> OTHER (specify) _____		<input type="checkbox"/> OUTBOARD <input type="checkbox"/> INBOARD <input type="checkbox"/> INBOARD / OUTBOARD <input type="checkbox"/> JET <input type="checkbox"/> SAIL ONLY <input type="checkbox"/> PADDLE / OARS <input type="checkbox"/> OTHER (specify) _____		OPERATION AT TIME OF ACCIDENT <input type="checkbox"/> CRUISING <input type="checkbox"/> CHANGING DIRECTION <input type="checkbox"/> CHANGING SPEED <input type="checkbox"/> TOWING SKIER / TUBER <input type="checkbox"/> TOWING SKIER- SKIER DOWN <input type="checkbox"/> TOWING ANOTHER VESSEL <input type="checkbox"/> BEING TOWED BY ANOTHER VESSEL SPEED _____ MPH	
				<input type="checkbox"/> DRIFTING <input type="checkbox"/> AT ANCHOR <input type="checkbox"/> TIED TO DOCK <input type="checkbox"/> LAUNCHING <input type="checkbox"/> DOCKING / LEAVING DOCK <input type="checkbox"/> SAILING <input type="checkbox"/> OTHER (specify) _____			

NAME OF PERSON COMPLETING THE REPORT _____ SIGNATURE OF PERSON COMPLETING THE REPORT _____	QUALIFICATION OF PERSON COMPLETING REPORT <input type="checkbox"/> OPERATOR <input type="checkbox"/> OWNER <input type="checkbox"/> OTHER (specify) _____
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Glossary of Boating Terms

At Anchor

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

Cabin Motorboat

Motorboat with a cabin that can be completely closed by means of doors or hatches.

Capsizing

Overturning of a vessel. The bottom must become uppermost, except in the case of a sailboat, which may lie on its side.

Collision with Fixed Object

The striking by a vessel 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 of the water.

Cruising

Proceeding normally, unrestricted, with an absence of drastic rudder or engine changes.

Drifting

Under way, but proceeding without use of engines, oars, or sails; carried along only by the tide, current, or wind.

Excessive Speed

Operating at a speed that is not responsible, prudent, or legal considering the circumstances.

Fire/Explosion (Fuel)

Accidental combustion of vessel fuel or liquids, including their vapors.

Flooding/Swamping

Filling with water, but retaining sufficient buoyancy to remain on the surface.

Grounding

The running aground of a vessel; striking or pounding on the rocks, reefs, or shoals.

Improper Lookout

No proper watch; the failure of an operator to perceive danger because no one was serving as a lookout, or the person so serving failed to do so. *For purposes of this report, this term refers only to accidents where the ski observers were not present or failed to do their job, or sailboat accidents where a lookout was not posted or failed to perceive danger. All other accidents involving inattentive operators fall under “Operator Inattention.”*

Maneuvering

Changing of course, speed, or similar boat handling action during which a high degree of alertness is required.

Open Motorboat

Craft of open construction specifically built for operating with a motor, including boats canopied or fitted with temporary partial shelters.

Personal Floatation Device (PFD)

Commonly known as a life jacket or life saving device, a PFD can be a jacket, vest, cushion, or ring buoy designed to serve as a lifesaving aid.

Personal Watercraft (PWC)

A small vessel that uses an internal combustion engine powering a jet pump or propeller. It is designed to carry from one to four persons, and to be operated by a person sitting, standing, or kneeling on the vessel rather than the conventional manner of sitting or standing inside the vessel.

Rules of the Road

Statutory and regulatory rules governing the navigation of vessels.



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