

# 2013

## California Recreational Boating Accident Statistics

State of California  
Natural Resources Agency

California State Parks  
Division of Boating and Waterways

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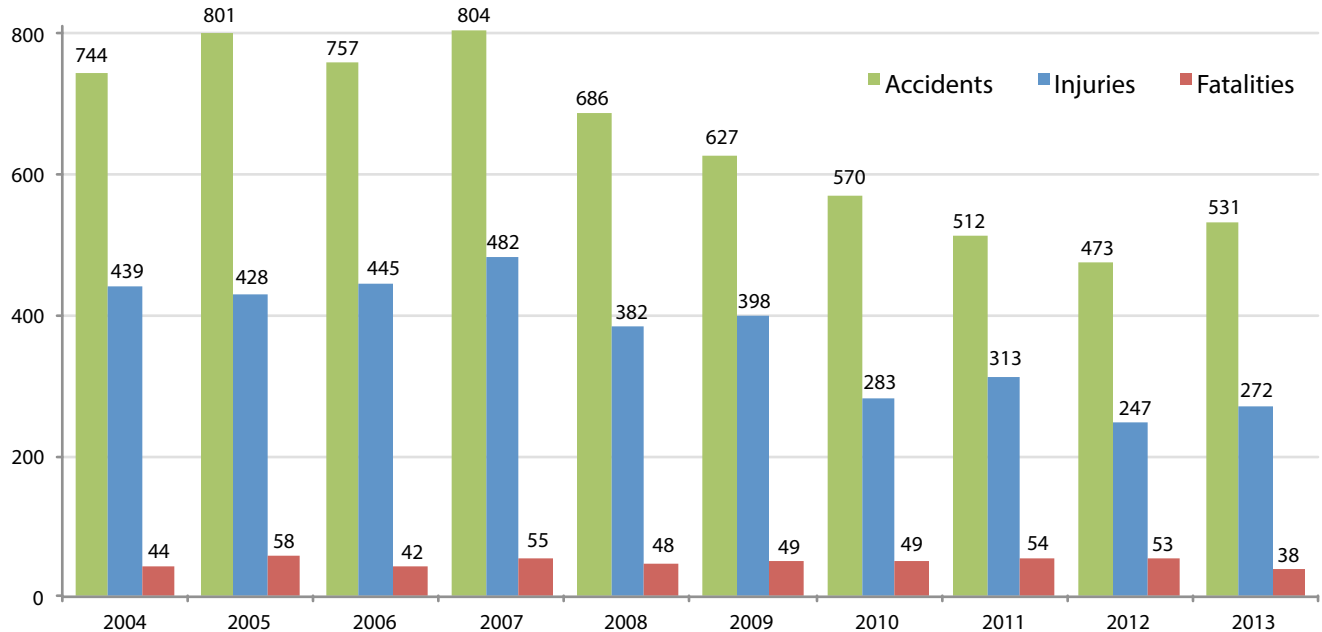




# California

# Boating Accident Statistics

## Accidents, Injuries, and Fatalities 2004-2013



## California Boating Accidents by Location 2012-2013

Waterways	Accidents		Injuries		Fatalities	
	2012	2013	2012	2013	2012	2013
Northern Lake	151	163	96	126	18	15
Southern Lake	48	73	24	42	6	2
Northern Coast	23	31	17	5	9	3
Southern Coast	125	148	39	51	9	4
Northern River	23	20	17	7	5	6
Southern River	2	0	0	0	0	0
SF Bay Area	15	26	6	12	0	3
Delta	66	54	34	22	5	5
Colorado River	20	16	14	7	1	0
<b>Totals</b>	<b>473</b>	<b>531</b>	<b>247</b>	<b>272</b>	<b>53</b>	<b>38</b>

## Property Damage 2004-2013

Year	Property Damage
2004	\$4,073,400
2005	\$3,584,700
2006	\$8,913,375
2007	\$10,643,800
2008	\$5,899,184
2009	\$4,484,105
2010	\$4,040,700
2011	\$2,142,655
2012	\$5,794,000
2013	\$2,407,635



# California

## 2013 Boating Accidents

## Vessel Registration

County	Accidents	Injuries	Fatalities	Property Damage	Number of Personal Watercraft (PWC)	Number of Vessels (includes PWC)
Alameda	7	3	1	\$19,550.00	2,443	22,311
Alpine	0	0	0	\$0.00	4	115
Amador	2	3	0	\$5,000.00	170	3,207
Butte	17	12	0	\$16,550.00	1,088	16,331
Calaveras	3	3	0	\$9,100.00	568	6,251
Colusa	2	0	0	\$19,000.00	108	1,461
Contra Costa	19	3	2	\$102,685.00	3,820	32,536
Del Norte	2	1	1	\$3,000.00	51	1,573
El Dorado	7	5	1	\$13,050.00	1,010	14,145
Fresno	11	2	0	\$45,100.00	1,925	21,623
Glenn	1	0	1	\$0.00	104	1,894
Humboldt	5	1	1	\$31,850.00	390	7,696
Imperial	0	0	0	\$0.00	339	2,116
Inyo	0	0	0	\$0.00	88	1,046
Kern	5	5	1	\$4,300.00	2,368	16,182
Kings	0	0	0	\$0.00	417	2,785
Lake	7	5	1	\$42,500.00	1,483	11,242
Lassen	0	0	0	\$0.00	205	3,122
Los Angeles	36	16	1	\$520,850.00	20,268	98,748
Madera	5	7	0	\$20,000.00	637	6,139
Marin	10	3	3	\$22,225.00	318	7,740
Mariposa	2	2	0	\$35,000.00	123	1,595
Mendocino	2	1	0	\$7,000.00	283	4,949
Merced	3	0	0	\$4,600.00	558	6,424
Modoc	0	0	0	\$0.00	30	737
Mono	1	0	0	\$8,000.00	100	1,431
Monterey	6	3	0	\$19,500.00	668	7,726
Napa	16	8	0	\$33,400.00	393	5,559
Nevada	8	4	2	\$3,150.00	436	9,325
Orange	60	11	0	\$237,800.00	11,810	57,323
Placer	10	16	0	\$23,100.00	1,867	20,189
Plumas	8	7	2	\$6,000.00	287	3,612
Riverside	14	9	0	\$27,000.00	10,273	47,402
Sacramento	16	7	4	\$78,050.00	3,753	41,528
San Benito	0	0	0	\$0.00	178	1,709
San Bernardino	28	9	0	\$80,250.00	10,167	46,063

# Boating Accident Statistics

## 2013 Boating Accidents

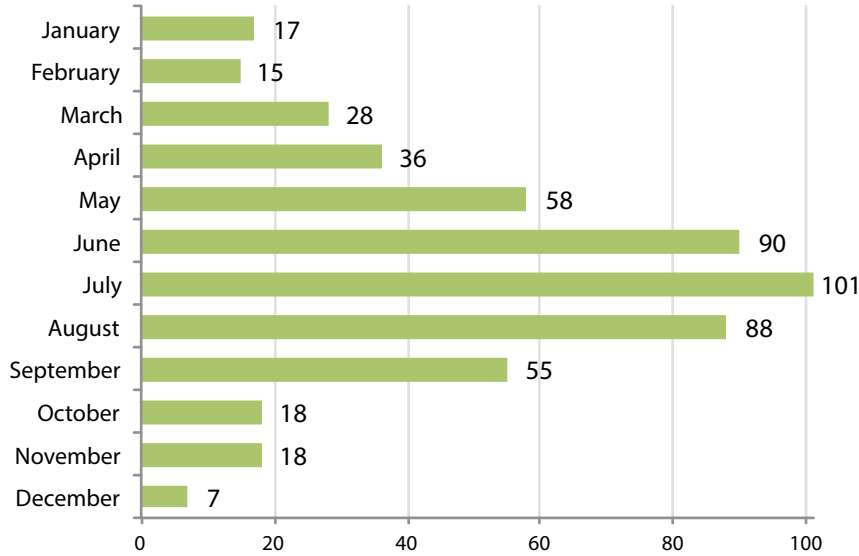
## Vessel Registration

County	Accidents	Injuries	Fatalities	Property Damage	Number of Personal Watercraft (PWC)	Number of Vessels (includes PWC)
San Diego	47	32	1	\$143,650.00	8,345	58,917
San Francisco	7	3	0	\$30,400.00	213	3,613
San Joaquin	27	13	0	\$202,375.00	2,283	24,386
San Luis Obispo	11	5	3	\$66,000.00	1,269	12,659
San Mateo	5	2	0	\$81,000.00	1,258	10,355
Santa Barbara	6	0	0	\$20,900.00	851	9,298
Santa Clara	7	8	2	\$21,000.00	2,779	23,147
Santa Cruz	4	0	0	\$10,000.00	416	7,039
Shasta	28	20	1	\$21,350.00	1,123	19,264
Sierra	0	0	0	\$0.00	16	329
Siskiyou	1	1	1	\$1,000.00	135	4,079
Solano	4	4	1	\$3,000.00	1,162	14,054
Sonoma	21	5	1	\$138,200.00	1,281	16,983
Stanislaus	10	11	1	\$21,000.00	1,557	17,356
Sutter	1	0	0	\$2,100.00	446	5,365
Tehama	1	0	2	\$0.00	256	4,554
Trinity	4	6	0	\$1,500.00	111	2,104
Tulare	3	1	0	\$6,000.00	938	8,765
Tuolumne	12	5	1	\$113,000.00	375	5,922
Ventura	6	1	0	\$7,500.00	3,254	21,470
Yolo	2	0	2	\$0.00	415	5,774
Yuba	11	9	1	\$80,050.00	310	4,523
Out of State	N/A	N/A	N/A	N/A	0	6,699
<b>Totals</b>	<b>531</b>	<b>272</b>	<b>38</b>	<b>\$2,407,635.00</b>	<b>107,523</b>	<b>820,490</b>



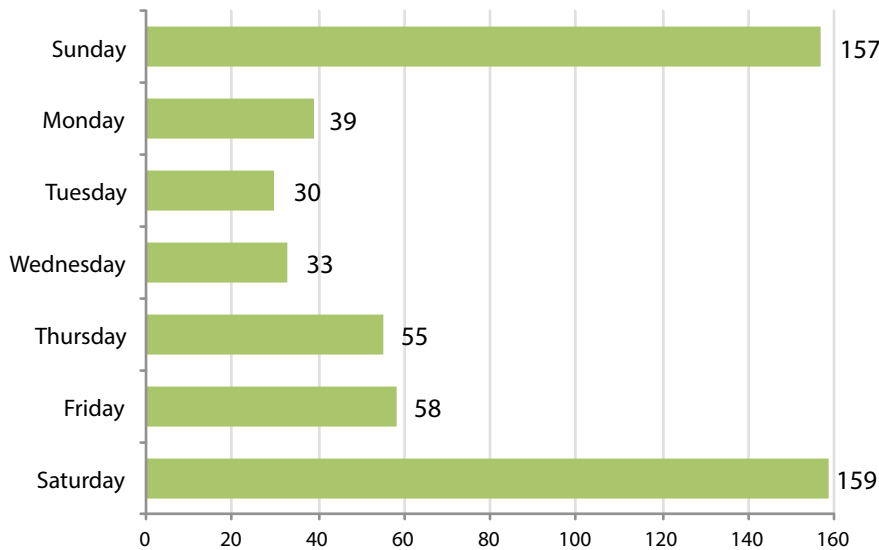
# California

## 2013 Accidents by Month (Total Accidents 531)



## 2013 Accidents by Day of the Week (Total Accidents 531)

(Total Accidents 531)

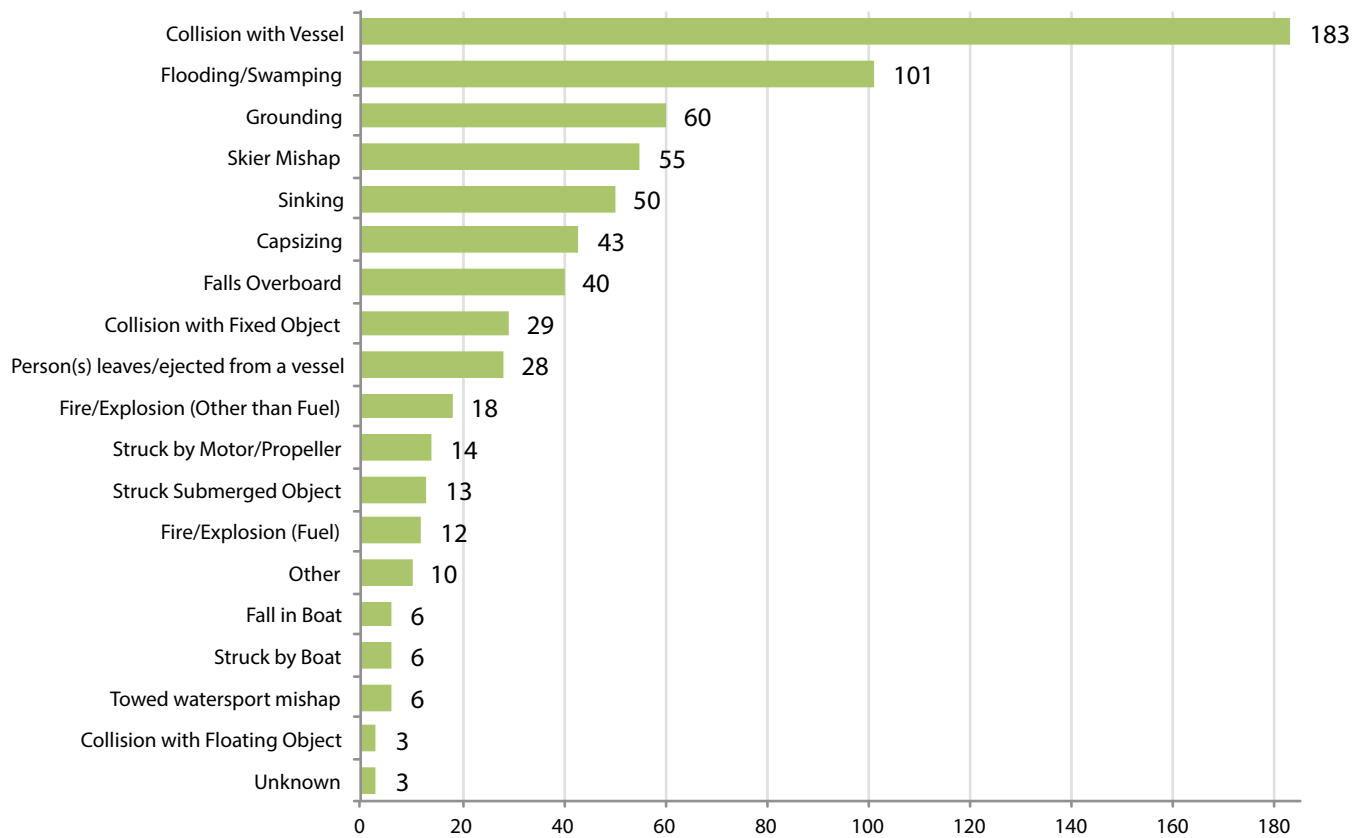


## 2013 Accidents by Time of Day

Time of Day	Number of Accidents
12:00-1:59 a.m.	9
2:00-3:59 a.m.	2
4:00-5:59 a.m.	3
6:00-7:59 a.m.	16
8:00-9:59 a.m.	24
10:00-11:59 a.m.	54
12:00-1:59 p.m.	92
2:00-3:59 p.m.	111
4:00-5:59 p.m.	112
6:00-7:59 p.m.	64
8:00-9:59 p.m.	25
10:00-11:59 p.m.	11
Time Unknown	8
<b>Total Accidents</b>	<b>531</b>

# Boating Accident Statistics

## 2013 Type of Accidents (Total Types: 680\* Total Accidents: 531)



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

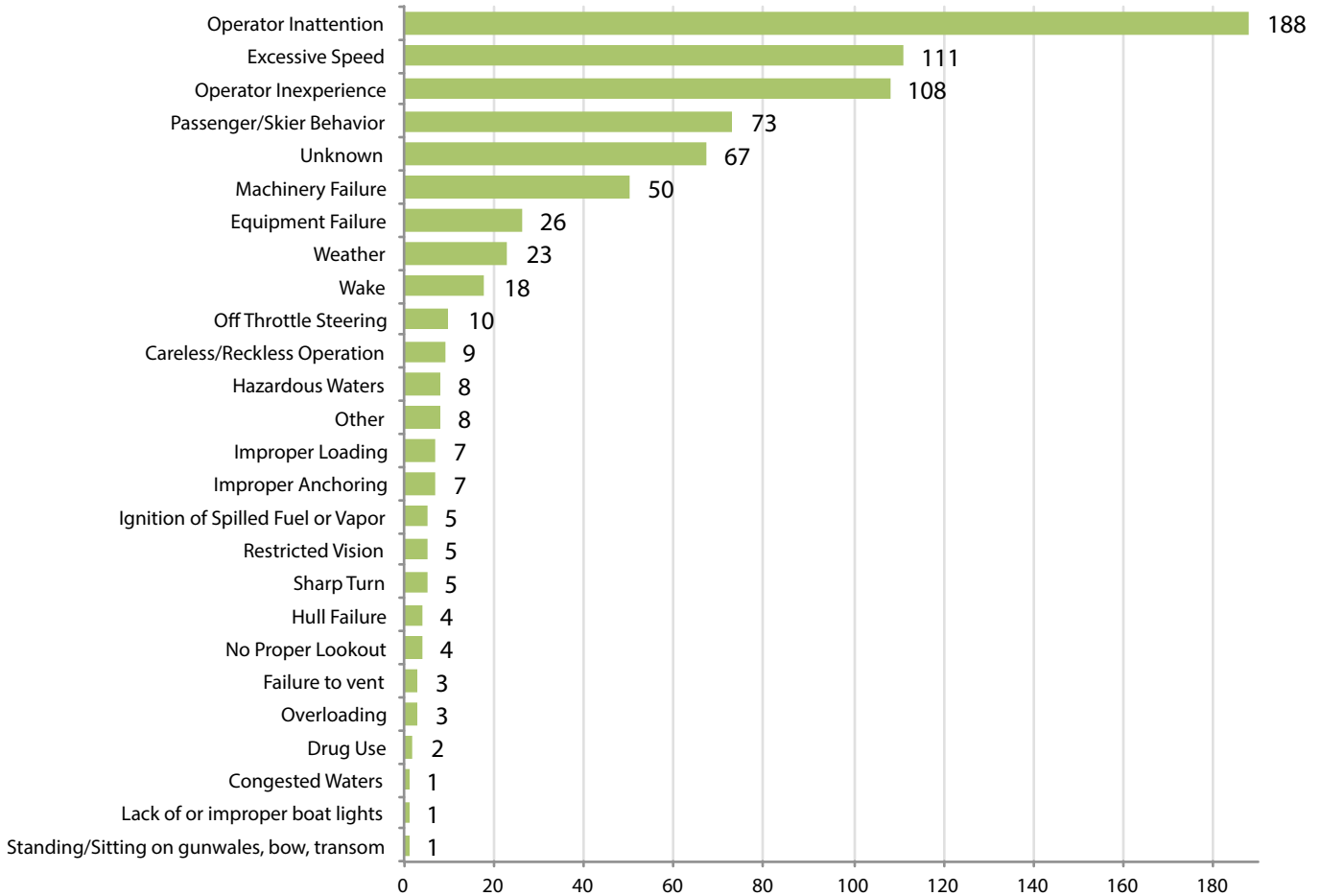
## 2013 Type of Accident by Vessel Type

Type of Accident	All Vessels	Open Motorboat	Cabin Motorboat	Personal Watercraft	All Sailboats	Houseboat/Pontoon	Canoe/Kayak
Collision with Vessel	34%	29%	58%	63%	59%	47%	6%
Flooding/Swamping	19%	22%	23%	8%	8%	13%	6%
Grounding	11%	11%	6%	5%	20%	0%	13%
Skier Mishap	10%	18%	0%	2%	0%	3%	0%
Sinking	9%	11%	14%	2%	4%	3%	0%
Capsizing	8%	7%	2%	6%	3%	0%	50%
Falls Overboard	8%	8%	2%	8%	1%	9%	19%
Collision with Fixed Object	5%	5%	7%	0%	9%	3%	6%
Person(s) leaves/ejected from a vessel	5%	4%	1%	12%	3%	16%	6%
Fire/Explosion (Other than Fuel)	3%	3%	5%	0%	3%	6%	0%



# California

## 2013 Cause of Accidents (Total Causes: 747\* Total Accidents: 531)



\*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.

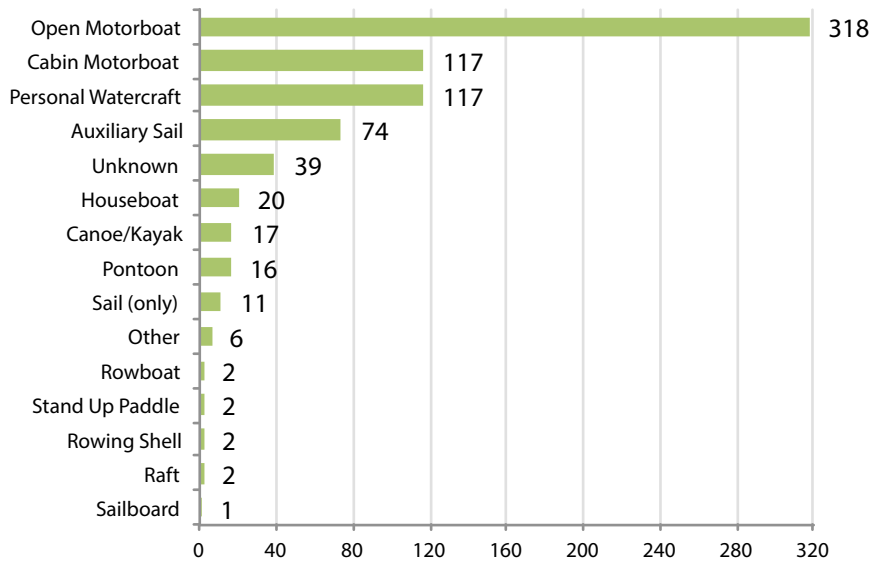
## 2013 Cause of Accident by Type of Vessel

Cause of Accident	All Vessels	Open Motorboat	Cabin Motorboat	Personal Watercraft	All Sailboats	Houseboat/Pontoon	Canoe/Kayak
Operator Inattention	35%	37%	42%	46%	39%	22%	19%
Excessive Speed	21%	21%	15%	57%	12%	6%	0%
Operator Inexperience	20%	14%	19%	51%	25%	38%	19%
Passenger/Skier Behavior	14%	21%	0%	2%	1%	31%	0%
Machinery Failure	9%	10%	16%	2%	15%	0%	0%
Equipment Failure	5%	4%	9%	1%	7%	3%	0%
Weather	4%	4%	4%	0%	8%	3%	13%



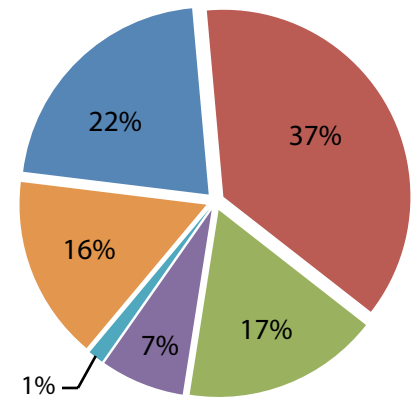
# Boating Accident Statistics

## 2013 Vessels Involved in All Accidents by Type (Total Vessels 744)



## 2013 Vessels Involved in All Accidents by Length

Length of Vessels	Number of Vessels
Vessels <16 feet	161
Vessels 16-25 feet	275
Vessels 26-39 feet	126
Vessels 40-65 feet	54
Vessels over 65 feet	10
Unknown	118
<b>Total Vessels</b>	<b>744</b>



## 2013 Ownership Status of Vessels Involved in Accidents

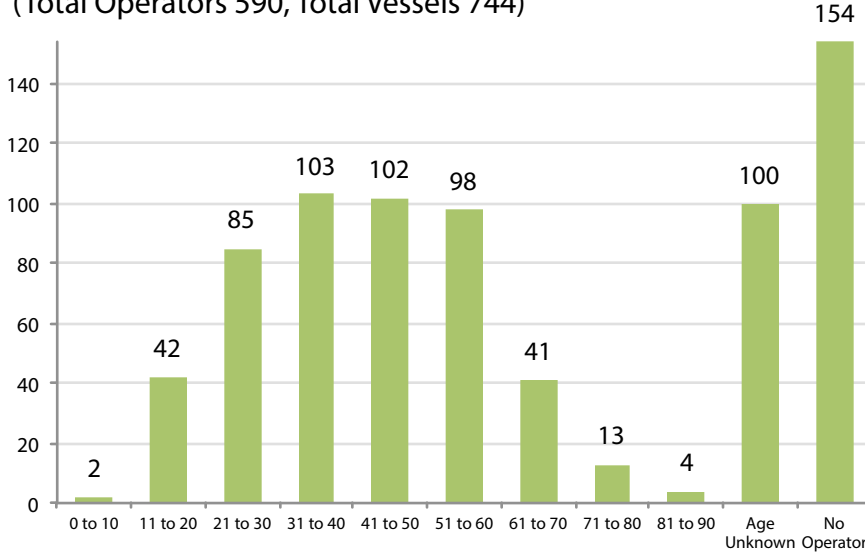
Operated By	All Vessels		Open Motorboats		Personal Watercraft	
	Number of Vessels	Percent of Vessels	Number of Vessels	Percent of Vessels	Number of Vessels	Percent of Vessels
Operated by Owner	303	41%	169	53%	25	21%
Operated by Borrower	171	23%	75	24%	49	42%
Operated by Renter	68	9%	20	6%	35	30%
Unknown	48	6%	11	3%	4	3%
No Operator	154	21%	43	14%	4	3%
<b>Total Vessels</b>	<b>744</b>	<b>100%</b>	<b>318</b>	<b>100%</b>	<b>117</b>	<b>100%</b>



# California

## 2013 Operators Involved in All Accidents by Age

(Total Operators 590, Total Vessels 744)



The category No Operator reflects situations in which vessels were anchored or docked with no operator in command.

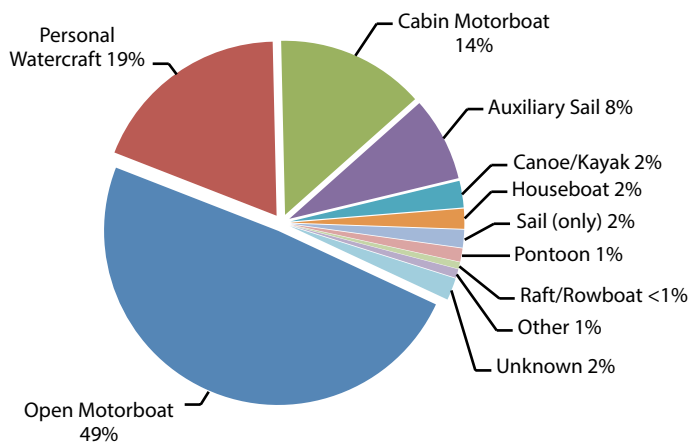
## 2013 Operator Education

Type of Education	Number of Operators
American Red Cross	7
State Course	26
U.S. Power Squadron	2
USCG Auxiliary	11
Other	2
Informal	207
None	166
Unknown	169
No Operator	154
<b>Total</b>	<b>744</b>

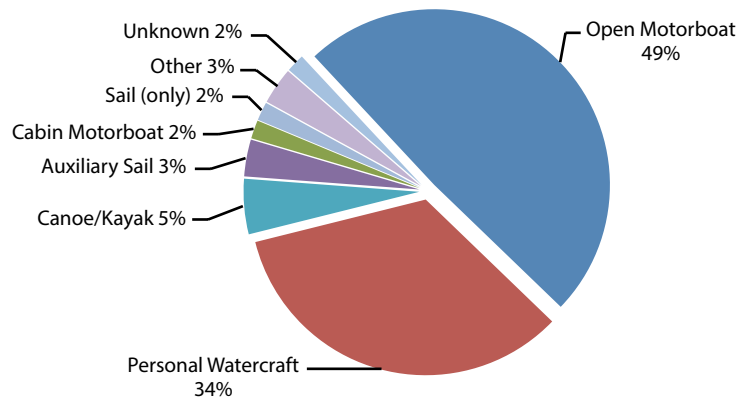
## 2013 Gender of Operators Involved in Accidents

Gender	Number of Operators
Male	485
Female	59
Gender Unknown	46
No Operator	154
<b>Total</b>	<b>744</b>

## 2013 Type of Vessels Operated by Men Involved in Accidents

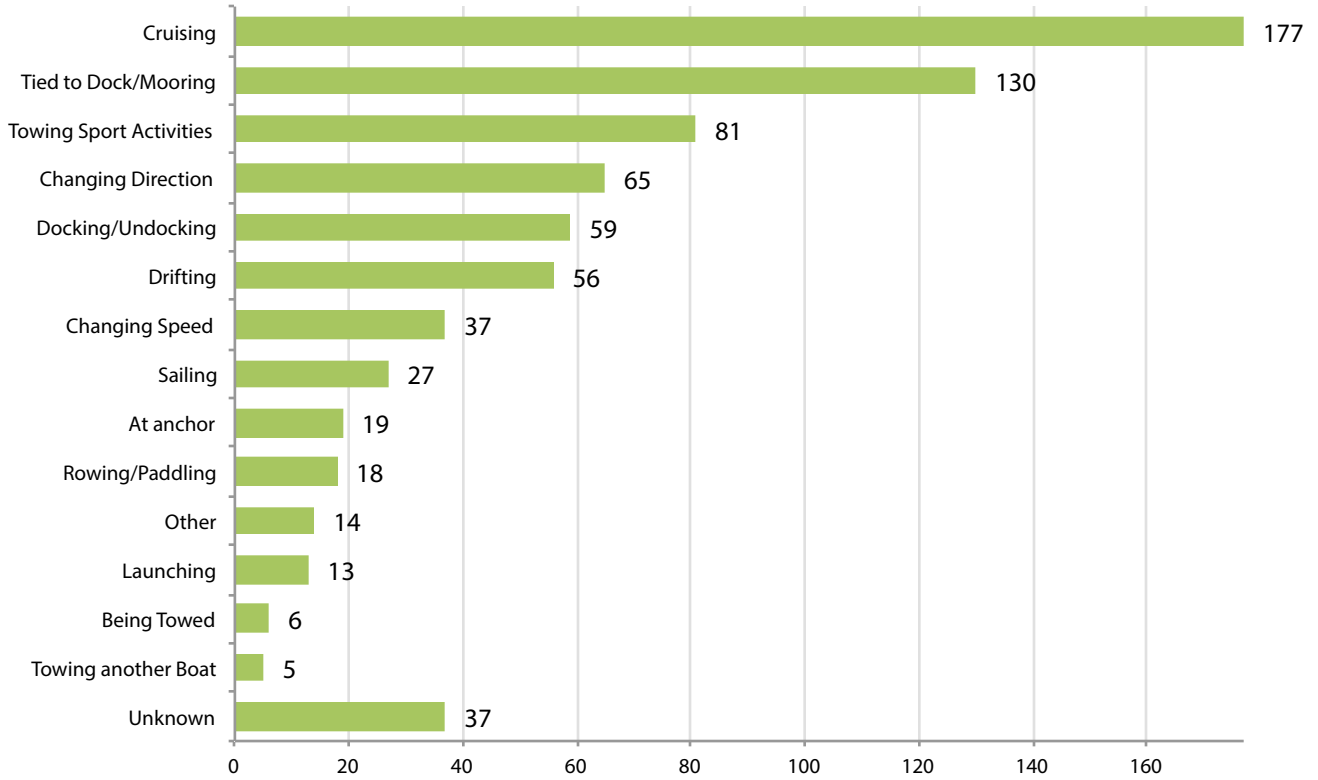


## 2013 Type of Vessels Operated by Women Involved in Accidents

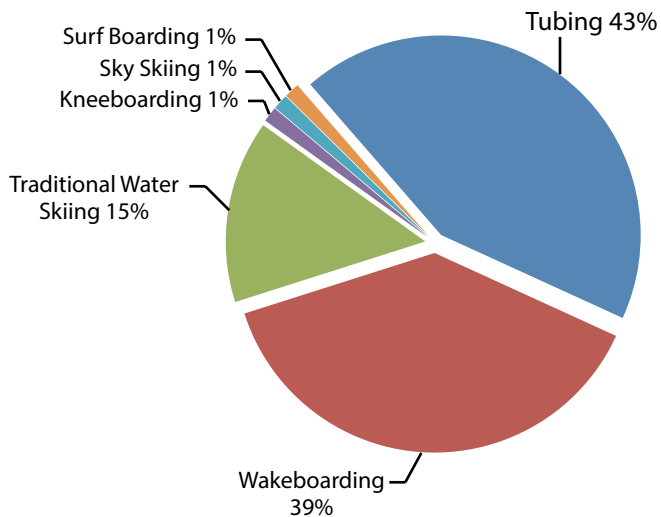


# Boating Accident Statistics

## 2013 Operation at Time of Accident (Total Vessels 744)



## 2013 Accidents Involving Towing Sports\*



Activity	Vessels Engaged in Activity
Tubing	35
Wakeboarding	31
Traditional Water Skiing	12
Kneeboarding	1
Sky Skiing	1
Surf Boarding	1
<b>Total</b>	<b>81</b>

\*Towing sports include persons being towed on lines behind vessels on water skis, wakeboards, wake skates, kneeboards, skurf boards, tubes and parasails.

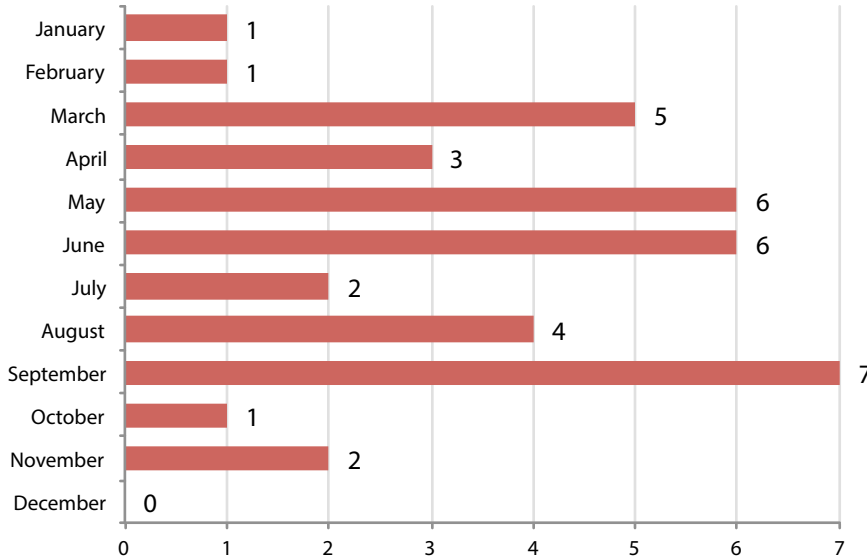
There was one accident involving 2 wakeboarding vessels. Consequently there were 81 vessels involved in 80 accidents involving tow sports.



# California

## 2013 Fatalities by Month

(Total Fatalities 38)

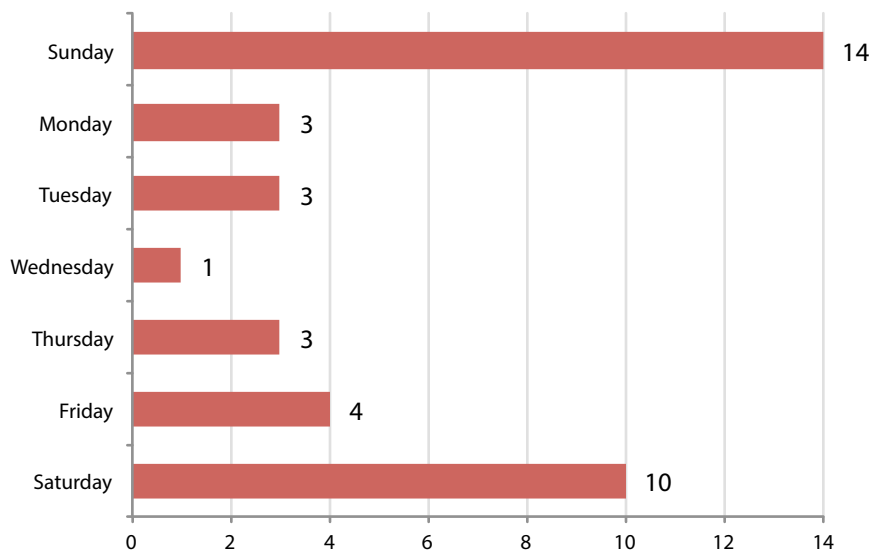


## 2013 Accidents by Time of Day

Time of Day	Number of Fatalities
12:00-1:59 a.m.	0
2:00-3:59 a.m.	0
4:00-5:59 a.m.	0
6:00-7:59 a.m.	2
8:00-9:59 a.m.	2
10:00-11:59 a.m.	3
12:00-1:59 p.m.	7
2:00-3:59 p.m.	10
4:00-5:59 p.m.	8
6:00-7:59 p.m.	1
8:00-9:59 p.m.	3
10:00-11:59 p.m.	2
Time Unknown	0
<b>Total Accidents</b>	<b>38</b>

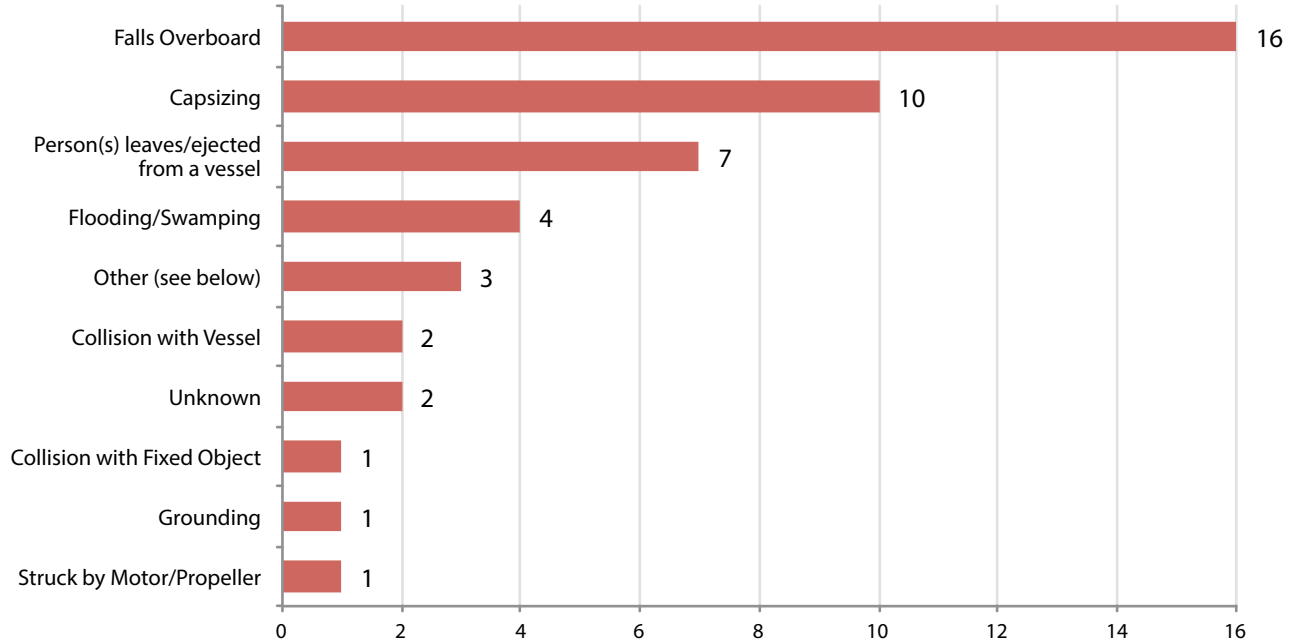
## 2013 Fatalities by Day of the Week

(Total Fatalities 38)



# Boating Accident Statistics

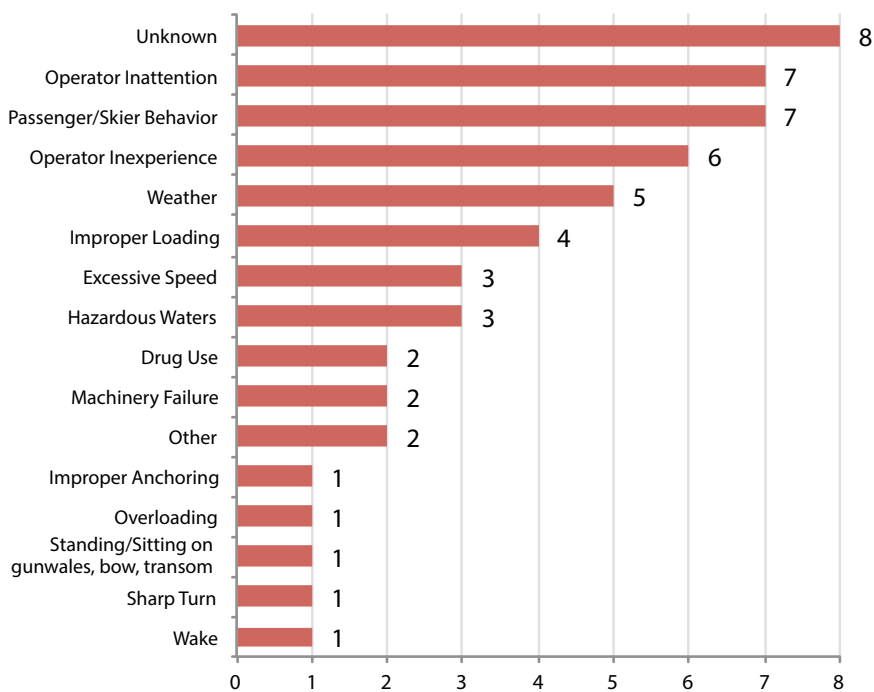
## 2013 Fatalities by Type of Accident (Total Types: 47\* Total Fatalities: 38)



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

## 2013 Fatalities by Cause of Accident

(Total Causes: 54\* Total Fatalities: 38)



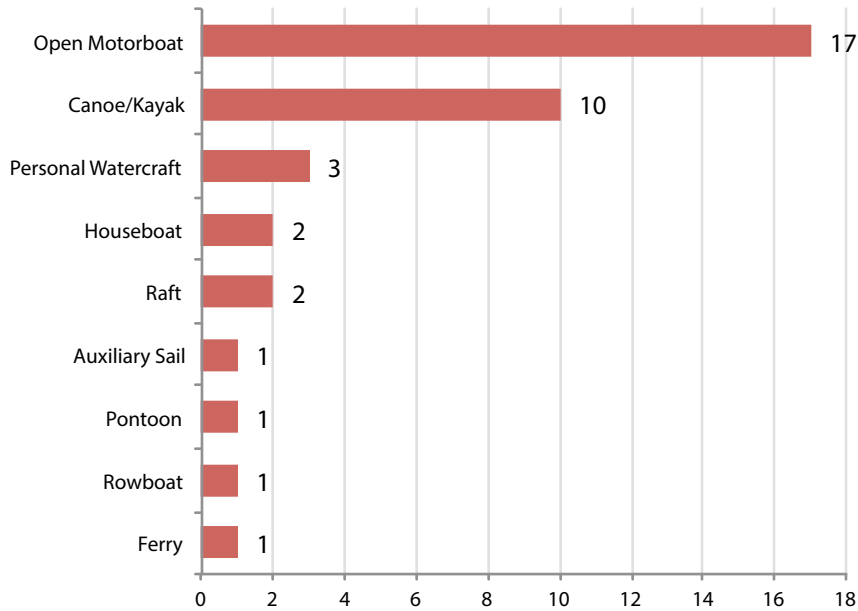
\*Many accidents had more than one cause, which is reflected in this chart. The "Other" category includes causes that do not fit into any of the other categories listed left.



# California

## 2013 Vessels Involved in Fatal Accidents

(Total Vessels 38)

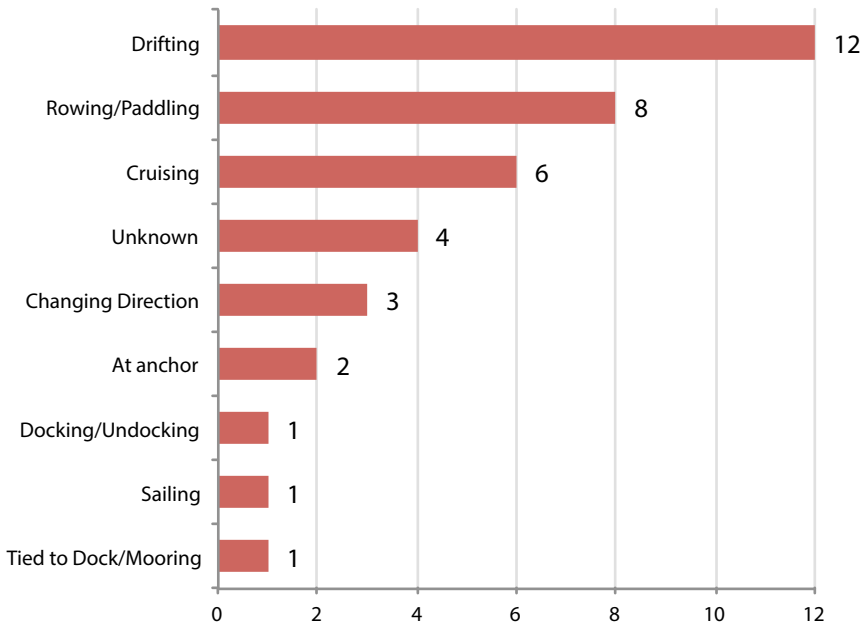


## 2013 Vessels Involved in Fatal Accidents by Length

Length of Vessels	Number of Vessels
<16 feet	13
16-25 feet	10
26-39 feet	2
40-65 feet	0
>65 feet	1
Unknown	12
<b>Total Vessels</b>	<b>38</b>

## 2013 Operation at Time of Fatal Accident

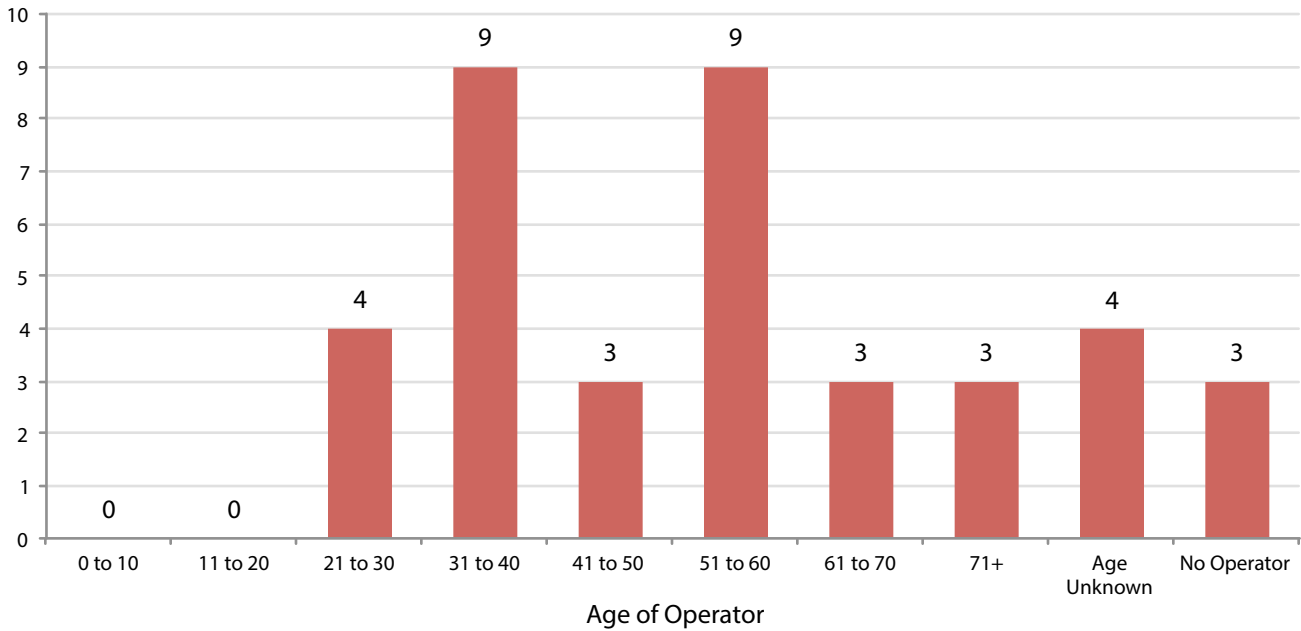
(Total Vessels 38)



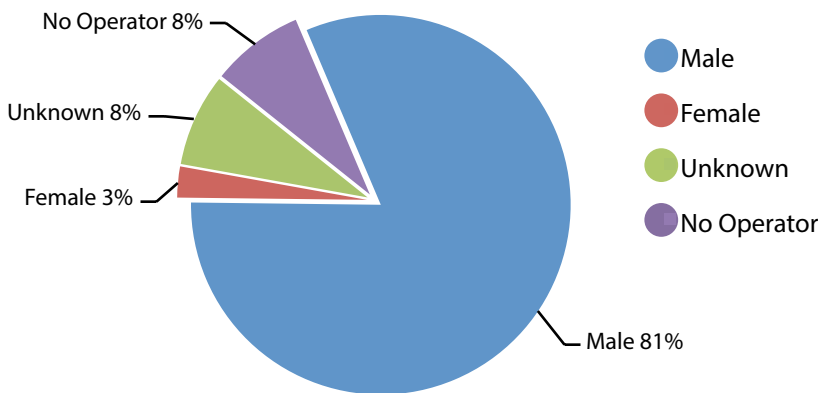
# Boating Accident Statistics

## 2013 Operators Involved in Fatal Accidents by Age

(Total Operators: 35, Total Vessels: 38)



## 2013 Gender of Operators Involved in Fatal Accidents



## 2013 Operator Education

Type of Education	Number of Operators
American Red Cross	0
State Course	0
U.S. Power Squadron	0
USCG Auxiliary	0
Other	1
Informal	3
None	4
Unknown	27
No Operator	3
<b>Total Vessels</b>	<b>38</b>

The category No Operator reflects situations in which vessels were anchored or docked with no operator in command.



# California

## 2009-2013 Life Jacket Use by Cause of Death

Cause of Death	Wearing Life Jacket	Not Wearing Life Jacket	Life Jacket Use Unknown	Total
Drowning	34	116	5	155
Trauma	23	19	1	43
Carbon Monoxide	0	1	1	2
Hypothermia	1	0	0	1
Other	2	5	2	9
Unknown Cause	7	18	8	33
<b>Total Fatalities</b>	<b>67</b>	<b>159</b>	<b>17</b>	<b>243</b>

## 2009-2013 Life Jacket Use by Victim Activity

Activity	Wearing Life Jacket	Not Wearing Life Jacket	Life Jacket Use Unknown	Total
General Recreation	31	70	5	106
Fishing	7	61	4	72
Hunting	0	2	0	2
Paddle Sports	12	6	5	23
Towing Sports	6	1	0	7
Swimming	0	13	0	13
Sailing/Windsurfing	9	6	2	17
Other	2	0	1	3
<b>Total Fatalities</b>	<b>67</b>	<b>159</b>	<b>17</b>	<b>243</b>

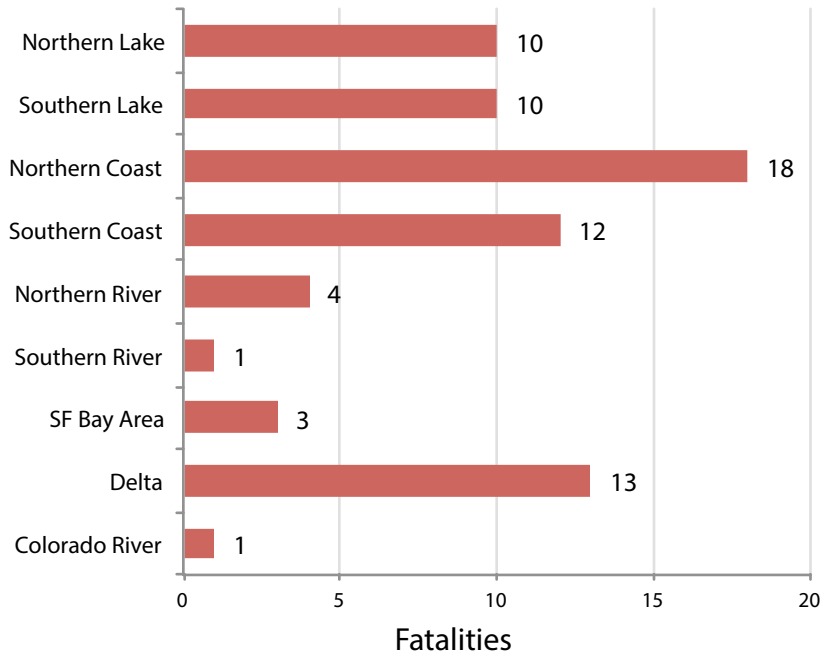
## 2009-2013 Life Jacket Use by Victim's Type of Vessel

Type of Vessel	Wearing Life Jacket	Not Wearing Life Jacket	Life Jacket Use Unknown	Total
Open Motorboat/Pontoon	18	80	4	102
Cabin Motorboat	0	20	2	22
Personal Watercraft	19	4	0	23
Canoe/Kayak/Raft/Row	20	35	7	62
Sailboats/Sailboards	10	8	2	20
Other	0	5	0	5
Unknown	0	7	2	9
<b>Total Fatalities</b>	<b>67</b>	<b>159</b>	<b>17</b>	<b>243</b>



# Boating Accident Statistics

## 2009-2013 Boating-Related Fishing Fatalities by Waterway Categories (Fatalities 72)



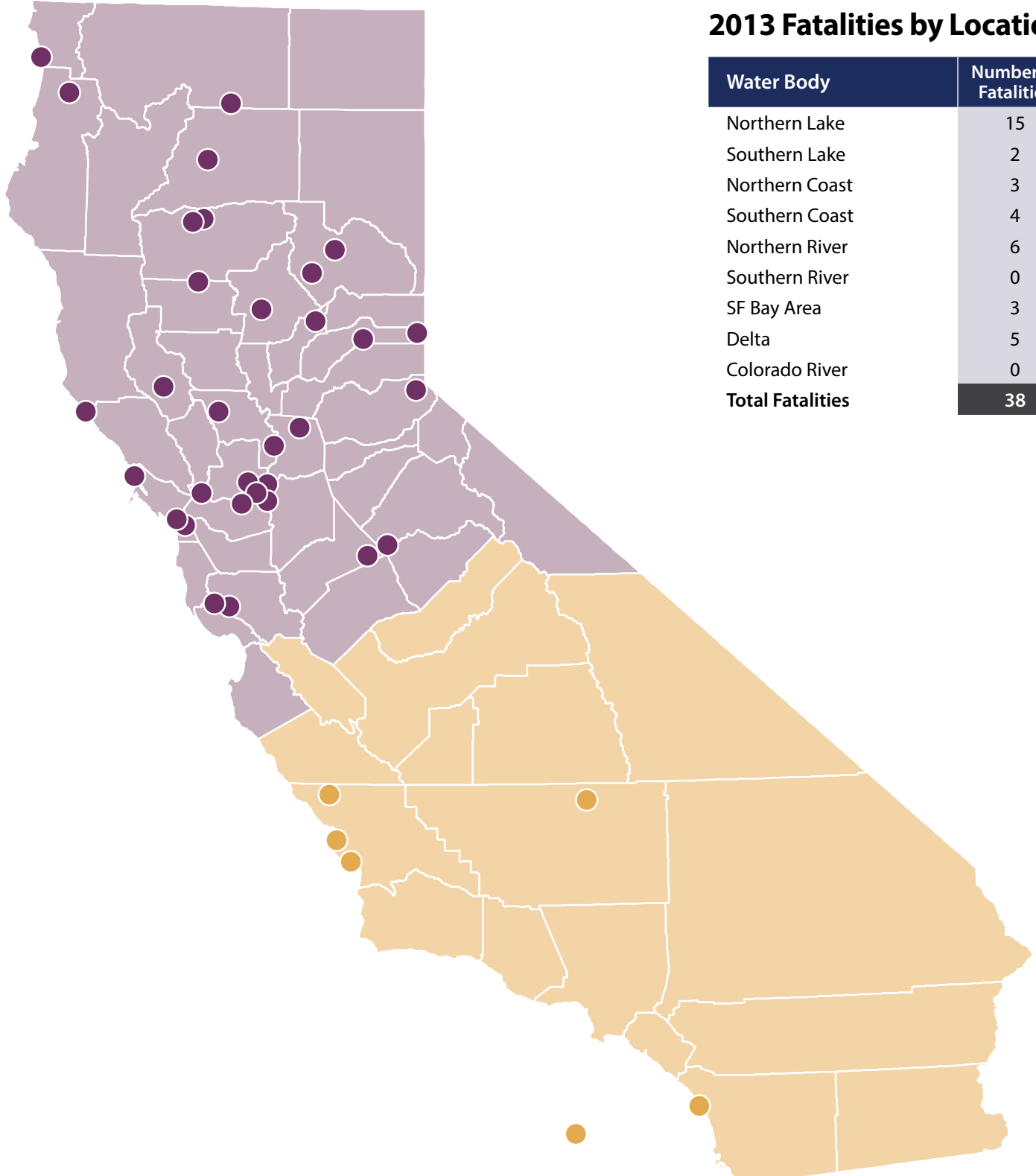
## 2009-2013 Alcohol Involvement in Boating-Related Fatalities

Year	Alcohol Involved	Alcohol not Involved	% Involving Alcohol Where Alcohol Testing was Conducted	Alcohol Testing not Conducted	Total Fatalities
2009	14	22	39%	13	49
2010	9	26	26%	14	49
2011	10	25	29%	19	54
2012	12	22	35%	19	53
2013	7	16	30%	15	38
<b>Total Fatalities</b>	<b>52</b>	<b>111</b>	<b>32%</b>	<b>80</b>	<b>243</b>



# California

## 2013 California Recreational Boating Fatalities



### 2013 Fatalities by Location

Water Body	Number of Fatalities
Northern Lake	15
Southern Lake	2
Northern Coast	3
Southern Coast	4
Northern River	6
Southern River	0
SF Bay Area	3
Delta	5
Colorado River	0
<b>Total Fatalities</b>	<b>38</b>