

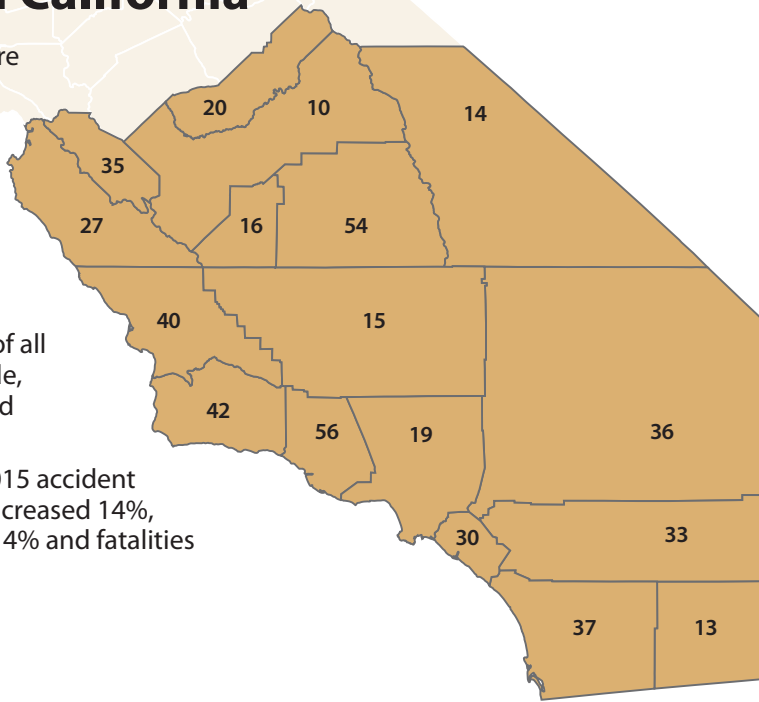


2016 California Recreational Boating Accident General Statistics for Southern California

In 2016, there were 322 boating accidents in Southern California that resulted in 116 injuries and 14 fatalities.

These accidents represented 55% of all accidents statewide, 44% of injuries, and 28% of fatalities.

Compared with 2015 accident totals, accidents increased 14%, injuries decreased 4% and fatalities decreased 26%.



Includes accident statistics for the following counties:

County Number	County
10	Fresno
13	Imperial
14	Inyo
15	Kern
16	Kings
19	Los Angeles
20	Madera
27	Monterey
30	Orange
33	Riverside
35	San Benito
36	San Bernardino
37	San Diego
40	San Luis Obispo
42	Santa Barbara
54	Tulare
56	Ventura

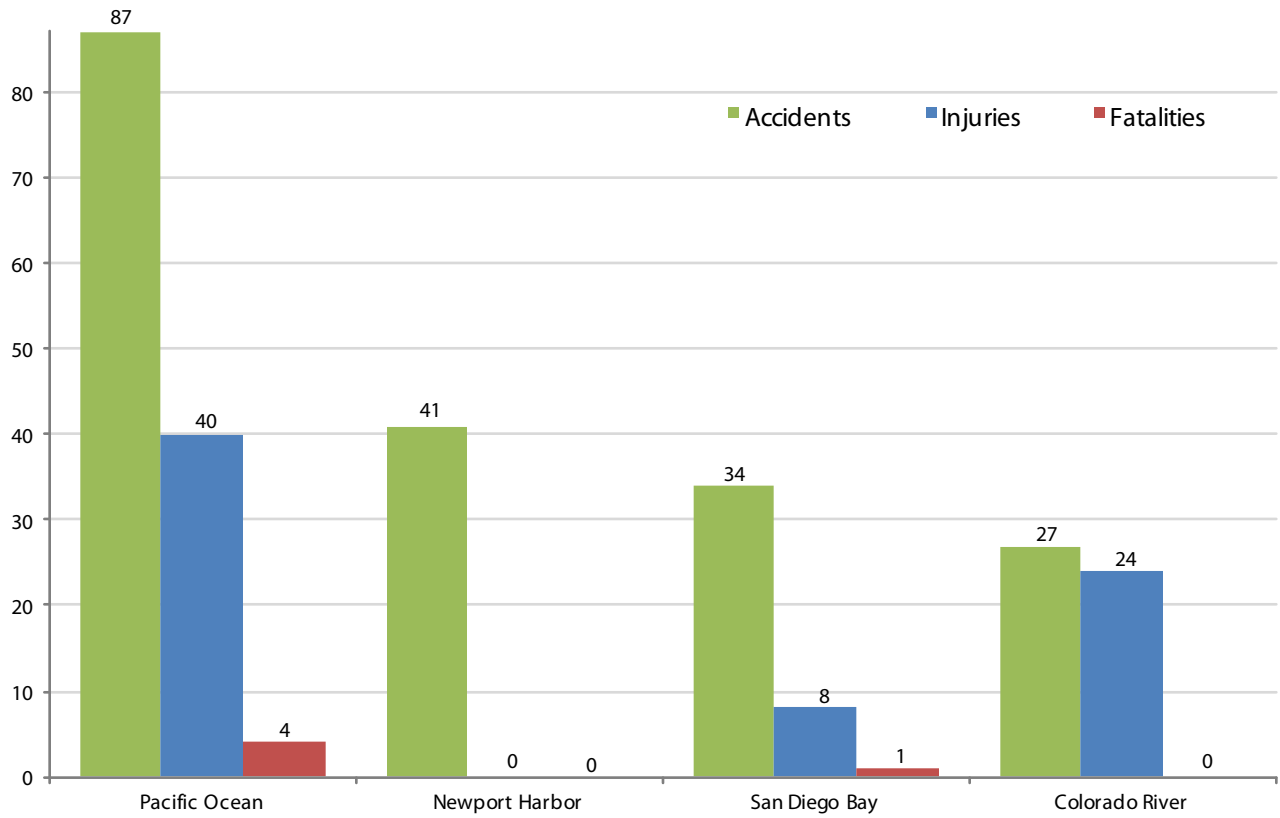
Southern California Boating Accidents by Location 2015-2016

Waterway Categories	2015			2016		
	Accidents	Injuries	Fatalities	Accidents	Injuries	Fatalities
Southern Coast	195	51	10	231	58	6
Southern Lake	58	36	7	61	32	6
Southern River	2	6	0	3	2	2
Colorado River	27	28	2	27	24	0
Totals	282	121	19	322	116	14



SOUTHERN CALIFORNIA

2016 Top Southern California Boating Accident Areas



Colorado River

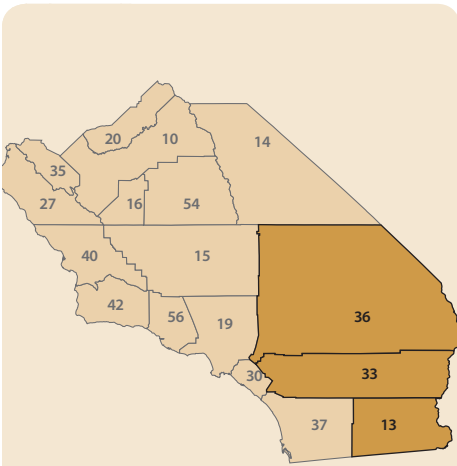
Colorado River

The Colorado River forms the border between California and Arizona. San Bernardino, Riverside and Imperial Counties all share a piece of the river.

In 2016, 27 accidents occurred on the Colorado River. These accidents resulted in 24 injuries. There were no boating fatalities in California waters on the Colorado River in 2016.

These accidents represented 8% of all accidents in Southern California and 21% of injuries.

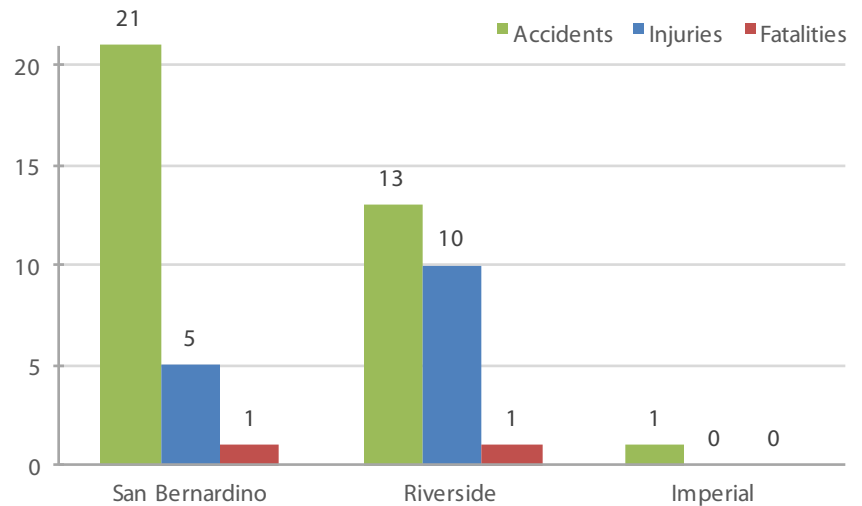
Accidents on the Colorado River accounted for 5% of all accidents in California and 9% of injuries.



Includes accident statistics for the following counties:

County Number	County
13	Imperial
33	Riverside
36	San Bernardino

2016 Colorado River Boating Accidents by Location



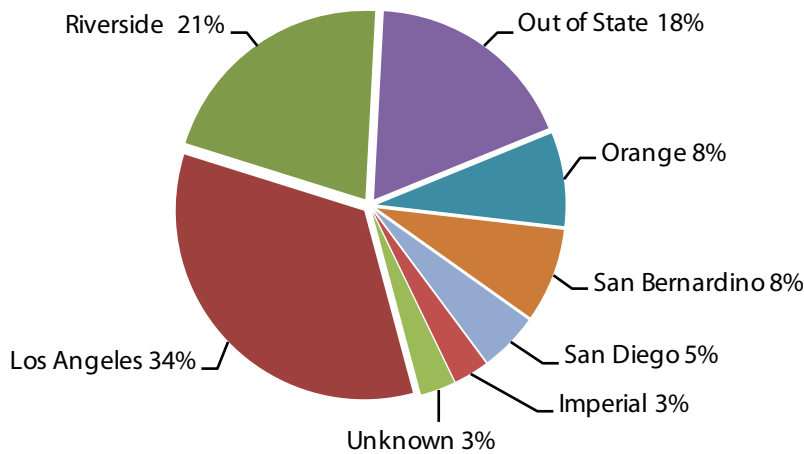
Colorado River County	2012			2013			2014			2015			2016			5-Year Total		
	Acc.	Inj.	Fat.	Acc.	Inj.	Fat.	Acc.	Inj.	Fat.	Acc.	Inj.	Fat.	Acc.	Inj.	Fat.	Acc.	Inj.	Fatalities
San Bernardino	19	13	7	14	6	0	12	12	0	19	19	2	21	13	0	85	63	9
Riverside	1	1	0	2	1	0	3	4	0	6	8	0	5	10	0	17	24	0
Imperial	0	0	0	0	0	0	3	1	0	2	1	0	1	1	0	6	3	0
Total Colorado River Combined	20	14	7	16	7	0	18	17	0	27	28	2	27	24	0	108	90	9



Noteworthy Accident Statistics

Colorado River	Colorado River	Southern California	California
Percent of Accidents Involving...			
Falls Overboard	19%	7%	9%
Excessive Speed	44%	13%	15%
Open Motorboats	70%	41%	45%
Personal Watercraft	37%	14%	17%
Percent of Operators that are...			
The Owner of the Vessel	50%	31%	36%
Percent of Accidents Occurring on..			
Weekends	67%	51%	54%
Holiday Weekends	30%	10%	15%

2016 Residence of Operator/Owner Involved in Accidents on the Colorado River



Distance Traveled

(Residence to Accident Location)

Distance Traveled	Percent of Operators
Under 20 miles	11%
20-100 miles	0%
101-200 miles	26%
201-300 miles	55%
Over 300 miles	5%
Unknown	3%

Only 11% involved in accidents were from local areas along the river.

Los Angeles County

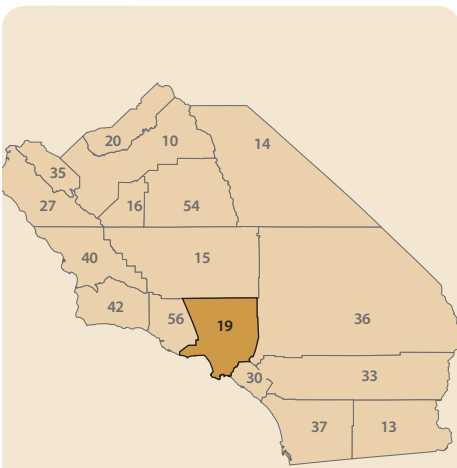
Los Angeles County

As of December 31, 2016, there were 80,815 vessels registered in Los Angeles County—more than any other county—12% of the statewide total.

Sixty-four accidents occurred in Los Angeles County, resulting in 20 injuries, and 2 fatalities.

These accidents represented 20% of all accidents in Southern California, 17% of injuries, and 14% of fatalities.

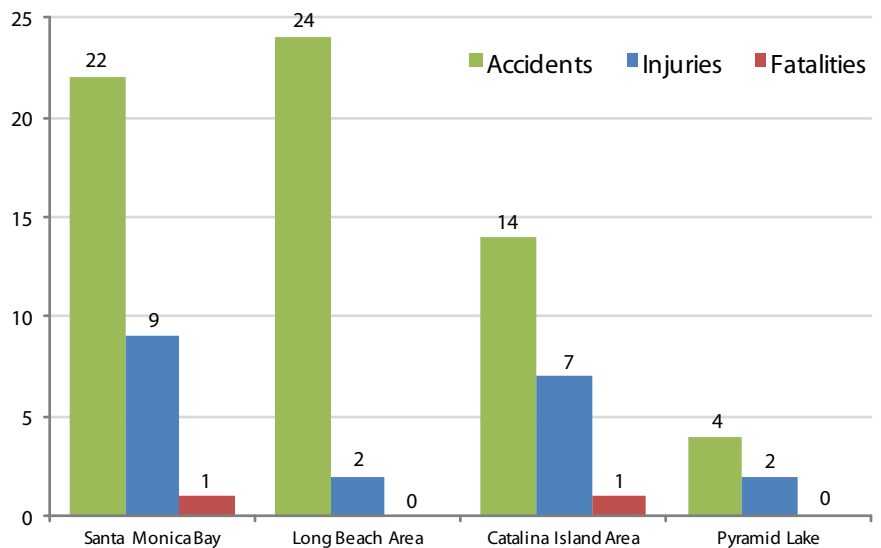
Accidents in Los Angeles County accounted for 11% of accidents in California, 8% of injuries, and 4% of fatalities.



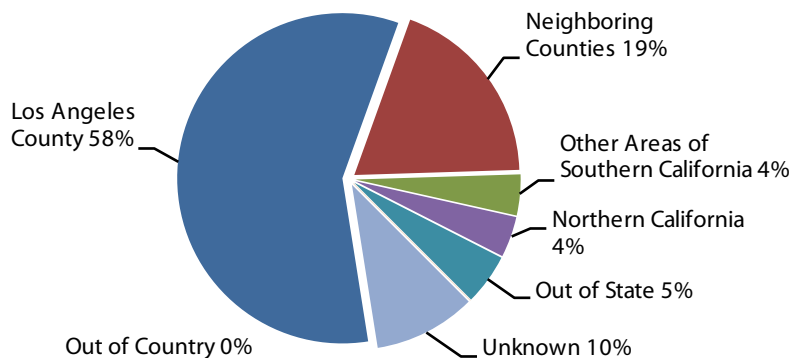
Includes accident statistics for the following county:

County Number	County
19	Los Angeles

2016 Los Angeles County Boating Accidents by Location



2016 Residence of Owners/Operators Involved in Accidents in Los Angeles County





Noteworthy Accident Statistics

Los Angeles Coast	Los Angeles Coast	Southern California	California
Percent of Accidents Involving...			
Flooding/Swamping	23%	16%	19%
Grounding	23%	11%	12%
Operator Inattention	47%	29%	36%
Operator Inexperience	35%	30%	24%
Cabin Motorboats	30%	29%	20%
Auxiliary Sailboats	40%	19%	13%
Percent of Operators that are...			
Over 40 Years Old	68%	54%	53%

Orange County

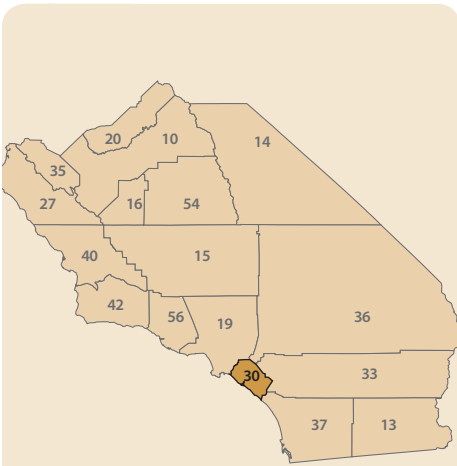
Orange County

As of December 31, 2016, there were 48,144 vessels registered in Orange County, 7% of the statewide total.

Eighty-seven accidents occurred in Orange County, resulting in 15 injuries. No boating fatalities occurred in Orange County in 2016. These

accidents represented 27% of all accidents in Southern California and 13% of injuries.

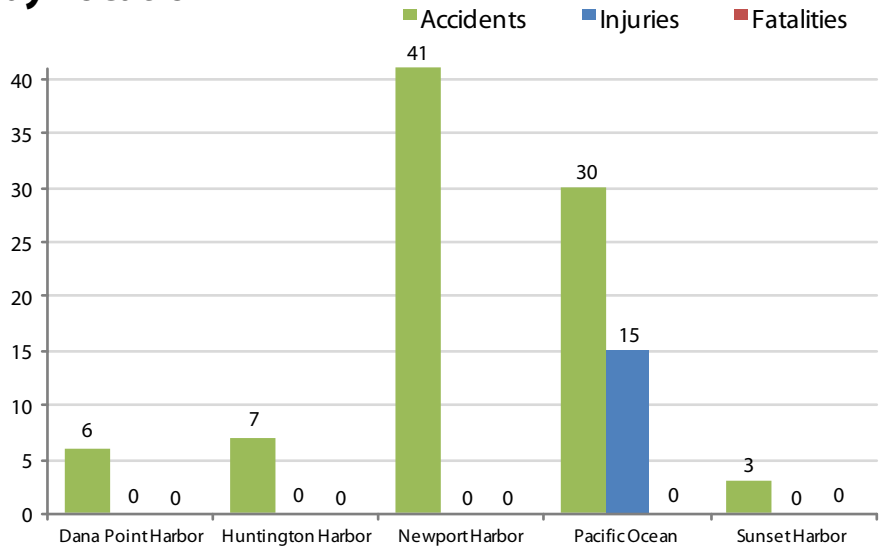
Accidents in Orange County accounted for 15% of accidents in California and 6% of injuries.



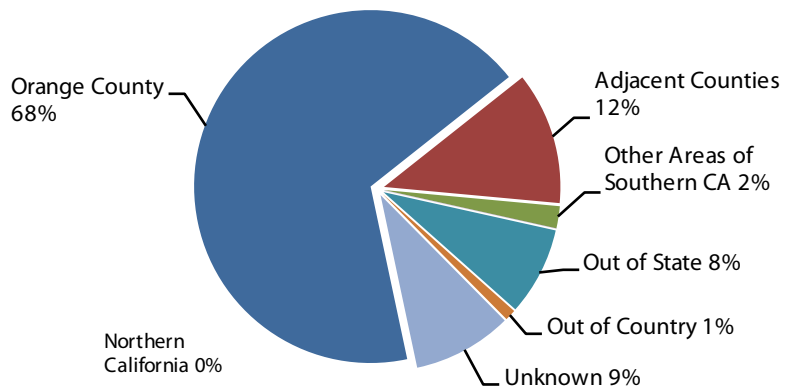
Includes accident statistics for the following county:

County Number	County
30	Orange

2016 Orange County Boating Accidents by Location



2016 Residence of Owners/Operators Involved in Accidents in Orange County





Noteworthy Accident Statistics

Newport Harbor	Newport Harbor	Southern California	California
Percent of Accidents Involving...			
Collision with Vessel	78%	42%	36%
Operator Inattention	39%	30%	32%
Open Motorboats	63%	41%	45%
Cabin Motorboats	49%	28%	
Percent of Operators that are...			
Over 40 Years Old	76%	55%	55%

Orange County Coast	Orange County Coast	Southern California	California
Percent of Accidents Involving...			
Capsizing	27%	7%	10%
Grounding	40%	13%	14%
Personal Watercraft	40%	14%	17%
Percent of Operators that are...			
Operating Rented Vessels	41%	12%	10%

San Diego County

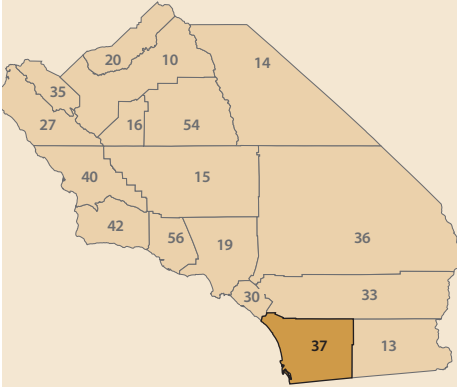
San Diego County

As of December 31, 2016, there were 51,185 vessels registered in San Diego County, 7% of the statewide total.

Fifty accidents occurred in San Diego County, resulting in 14 injuries and 3 fatalities.

Accidents in San Diego County represented 16% of accidents in Southern California, 12% of injuries, and 21% of fatalities.

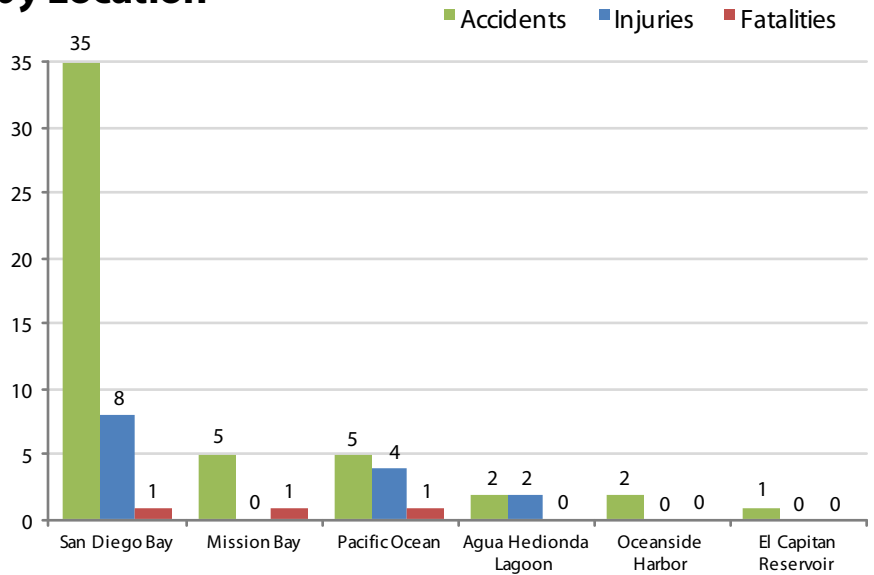
These accidents represented 9% of all accidents in California, 5% of injuries, and 6% of fatalities.



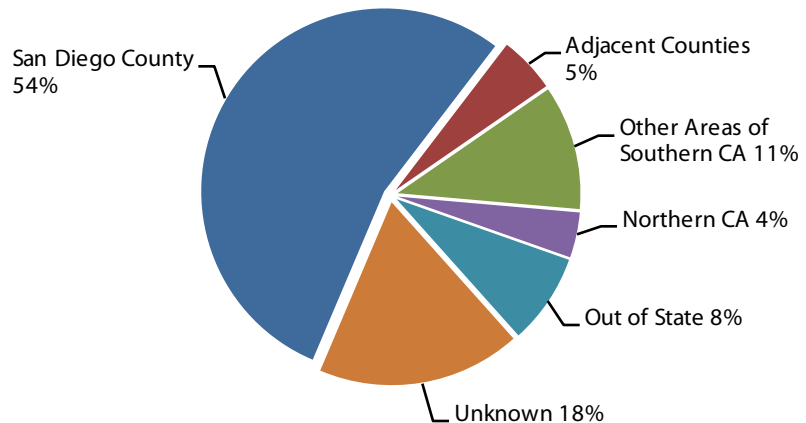
Includes accident statistics for the following county:

County Number	County
37	San Diego

2016 San Diego County Boating Accidents by Location



2016 Residence of Owners/Operators Involved in Accidents in San Diego County





Noteworthy Accident Statistics

San Diego Bay	San Diego Bay	Southern California	California
Percent of Accidents Involving...			
Collision with Vessel	57%	42%	36%
Operator Inattention	43%	30%	32%
Cabin Motorboats	46%	28%	21%
Auxiliary Sailboats	34%	22%	16%
Percent of Operators that are...			
Over 40 Years Old	59%	55%	55%

SOUTHERN CALIFORNIA



	Calif.	So. Calif.	Colorado River	L. A. County	L. A. Coast	Orange County	Newport Bay	O. C. Coast	San Diego County	San Diego Bay
Types-Percent of Accidents Involving...										
Collisions with Other Vessels	36%	42%	37%	34%	37%	49%	78%	20%	54%	57%
Capsizings	10%	7%	7%	2%	2%	9%	0%	27%	8%	3%
Flooding/Swamping	14%	15%	15%	12%	13%	22%	15%	20%	8%	3%
Grounding	14%	13%	11%	17%	15%	14%	0%	40%	8%	6%
Falls Overboard	9%	7%	19%	3%	3%	7%	0%	20%	6%	0%
Fires (all types)	6%	8%	11%	8%	7%	7%	0%	0%	18%	23%
Towing Sport Accidents	7%	4%	0%	3%	2%	0%	0%	0%	2%	0%
Causes-Percent of Accidents Involving...										
Operator Inexperience	25%	27%	26%	35%	33%	30%	20%	30%	14%	20%
Operator Inattention	32%	30%	37%	25%	27%	29%	39%	15%	46%	43%
Excessive Speed	15%	13%	44%	6%	5%	5%	0%	6%	14%	17%
Machinery/Equipment Failure	14%	16%	7%	18%	18%	17%	7%	15%	8%	9%
Hazardous Weather/ Water	11%	12%	7%	11%	10%	16%	14%	11%	6%	6%
Types of Vessels-Percent of Accidents Involving...										
Open Motorboats	45%	41%	70%	23%	25%	45%	63%	40%	26%	23%
Cabin Motorboats	21%	28%	0%	38%	52%	40%	49%	10%	38%	46%
Personal Watercraft	17%	14%	37%	5%	3%	14%	0%	40%	12%	3%
Auxiliary Sailboats	16%	22%	0%	40%	47%	16%	22%	7%	30%	34%
Ownership-Percent of Vessels...										
Operated by Owner	36%	31%	50%	39%	40%	23%	20%	24%	23%	25%
Borrowed	22%	20%	24%	17%	16%	12%	9%	15%	20%	19%
Rented	10%	12%	5%	5%	6%	20%	9%	41%	13%	12%
No Operator or Unknown	32%	37%	21%	39%	38%	36%	61%	19%	44%	44%
Operator Age-Percent of Operators Involved in Accidents (does not include unknowns)										
Under 18 Years Old	4%	4%	0%	0%	0%	0%	0%	0%	0%	0%
40 Years Old and Under	45%	45%	52%	33%	33%	37%	24%	38%	41%	41%
Over 40 Years Old	55%	55%	48%	67%	67%	63%	76%	42%	59%	59%
Other Factors-Percent of Accidents Occurring on...										
Weekends	54%	51%	67%	67%	38%	52%	51%	57%	44%	46%
Holiday Weekends	15%	10%	30%	5%	5%	9%	10%	13%	6%	9%

