



# NORTHERN

# CALIFORNIA



## Includes accident statistics for the following Counties:

Alameda	Glenn	Sacramento
Alpine	Humboldt	San Francisco
Amador	Lake	San Joaquin
Butte	Lassen	San Mateo
Calaveras	Madera	Santa Clara
Colusa	Marin	Santa Cruz
Contra Costa	Mariposa	Shasta
El Dorado	Mendocino	Sierra
Del Norte	Merced	Siskiyou
	Modoc	Solano
	Mono	Sonoma
	Napa	Stanislaus
	Nevada	Sutter
	Placer	Tehama
		Trinity
		Tuolumne
		Yolo
		Yuba

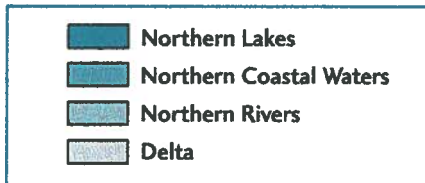


Northern California is defined as North of the Monterey Bay area (including Monterey bay) and the Fresno area further east.

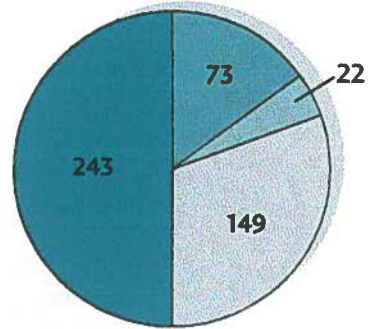
- ◆ Collisions with another vessel was the most common type of accident, accounting for 30% of Northern California accidents, compared with 44% in Southern California and 36% statewide.
- ◆ Inexperience was the most common cause of accidents. (38%)
- ◆ PWC were involved in 23% of all Northern California accidents, compared with 36% in Southern California and 29% statewide.
- ◆ 62% of fatalities occurred on the weekend, compared with 38% statewide.
- ◆ 21% of Northern California accidents occurred during the three summer holiday weekends.
- ◆ Capsizing was the most common type of fatal boating accident (44%), followed by collisions with other vessels (24%).
- ◆ Open motorboats were involved in 64% of all fatal boating accidents in Northern California.
- ◆ 78% of all water skiing accidents occurred in Northern California.
- ◆ Of the victims who drowned, 95% were not wearing a life jacket, compared with 88% statewide.

# NORTHERN

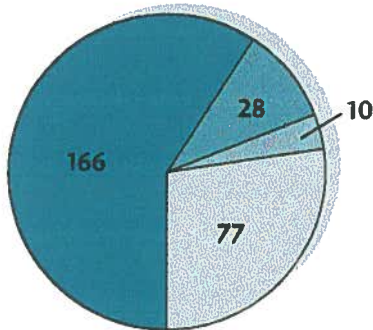
## 1999 Northern California Boating Accidents by Location



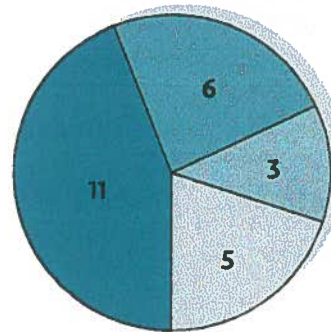
### Accidents by Location Total Accidents = 487



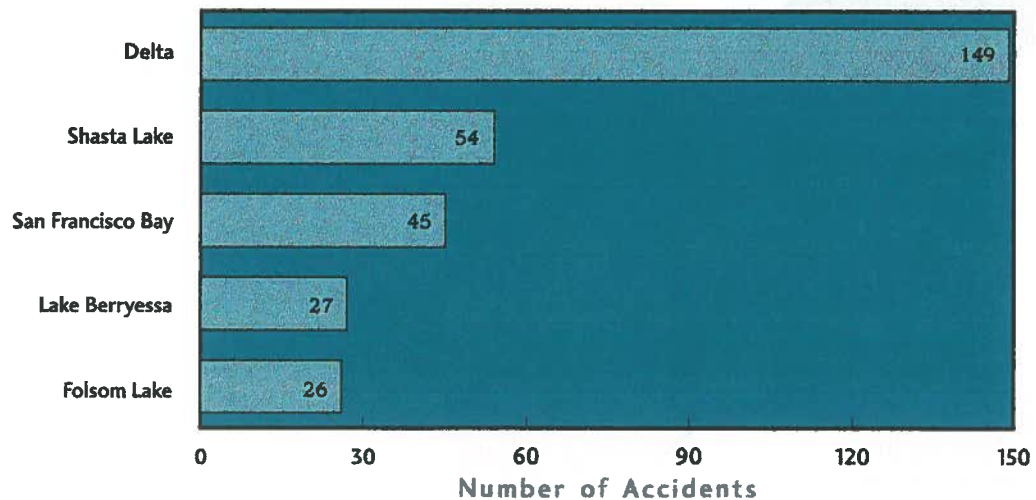
### Injuries by Location Total Injuries = 281



### Fatalities by Location Total Fatalities = 25



## Top Five Northern California Boating Accident Areas





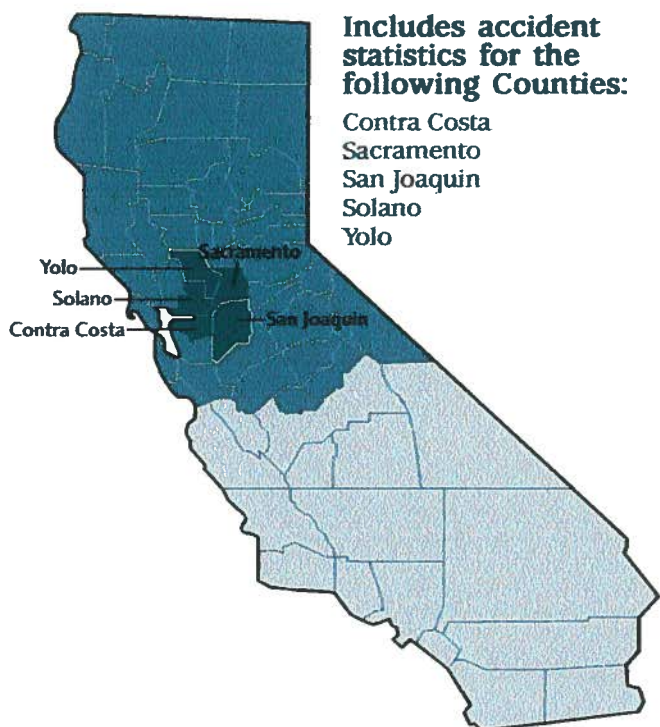
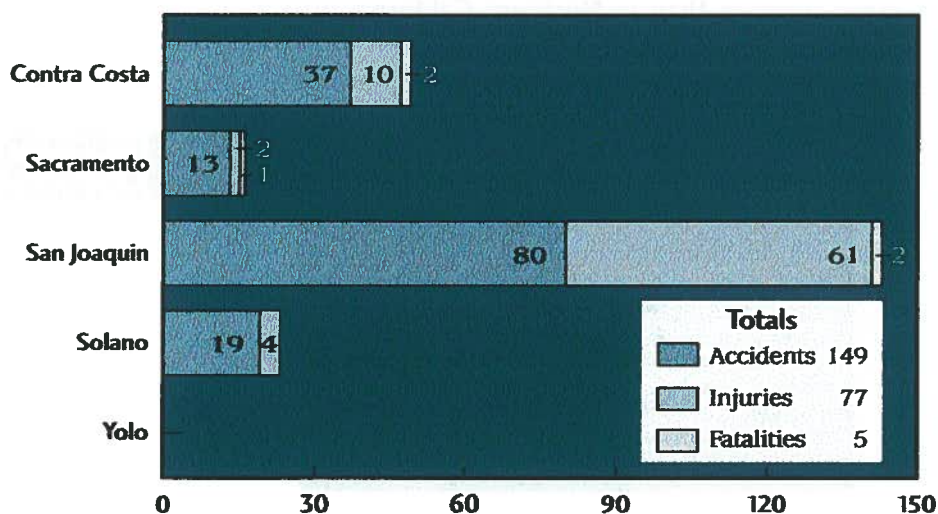


# CALIFORNIA

# DELTA

The Sacramento/San Joaquin Delta  
accounted for 16% of California's accidents  
and injuries, and 12% of fatalities.

## 1999 Delta Boating Accidents by Location



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## Noteworthy Accident Statistics



Registered Owner	Delta	Northern California	California
Accidents Involving Grounding	21%	15%	12%
Accidents Involving Cabin Motorboats	23%	13%	18%
Accidents Involving Houseboats	11%	6%	3%
Accidents Involving Open Motorboats	56%	57%	48%
Accidents Involving Vessels Operated by the Owner	52%	46%	45%
Operators 40 and Under Involved in Accidents	63%	65%	66%



# SAN FRANCISCO

and Surrounding Coastline

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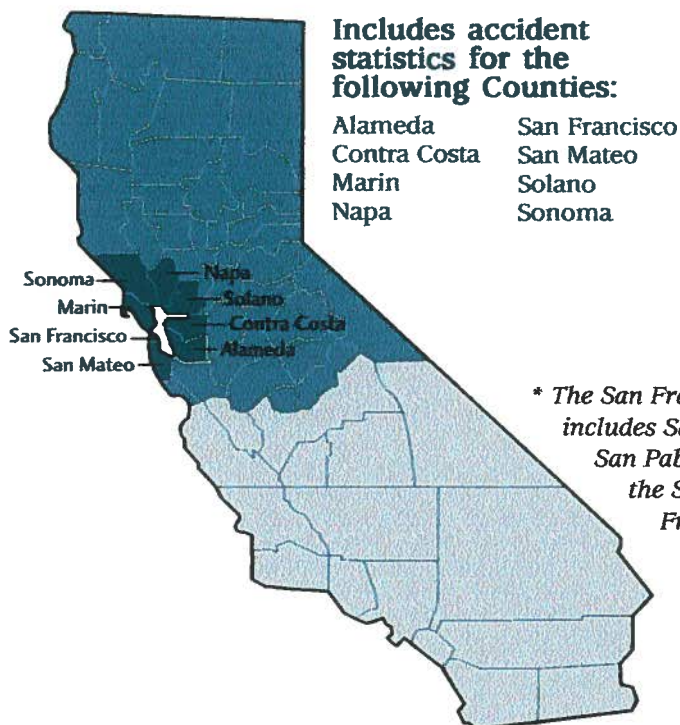
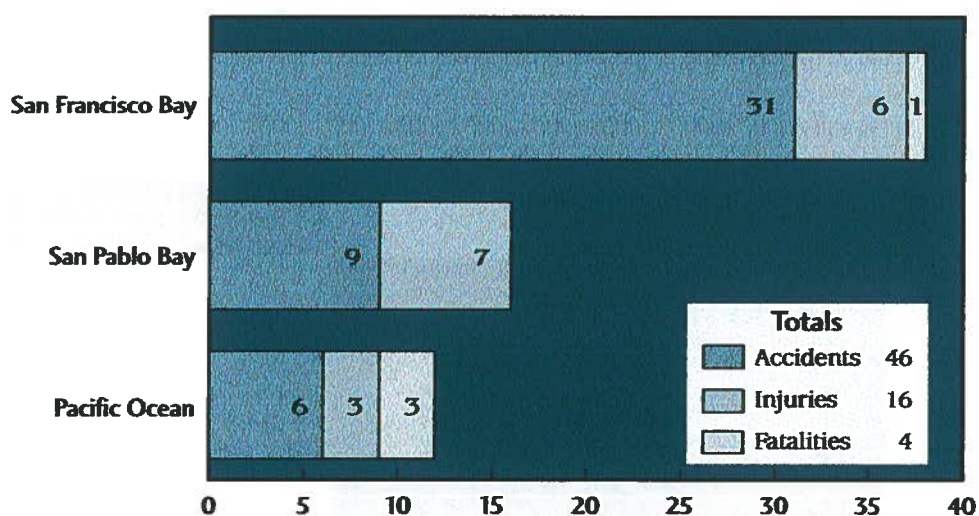
## Safety Tips

Check the  
Weather

The San Francisco Bay Area accounted for

10% of the State's fatalities.

## 1999 San Francisco Bay Area Boating Accidents by Location



\* The San Francisco Bay Area includes San Francisco and San Pablo Bays, as well as the San Mateo and San Francisco County Coastlines and the Marin County Coastline North to Point Reyes.





# SAN FRANCISCO

## Noteworthy Accident Statistics

The vast majority of accidents in the San Francisco Bay area involved operators who were over 40 years of age, many of whom were also the owners of the craft. These accidents were more likely to be the result of vessels capsizing and involve hazardous weather/water situations. The most common vessels involved in these accidents were auxiliary sailboats, followed by cabin motorboats.

### San Francisco Bay Area



	San Francisco	Northern California	California
Accidents Involving Capsizing	20%	10%	9%
Accidents Involving Hazardous Weather/Water	26%	16%	15%
Accidents Involving Auxiliary Sailboats	44%	7%	11%
Accidents Involving Cabin Motorboats	24%	13%	18%
Accidents Involving Vessels Operated by the Owner	64%	46%	45%
Operators Over 40 Involved in Accidents	81%	55%	34%

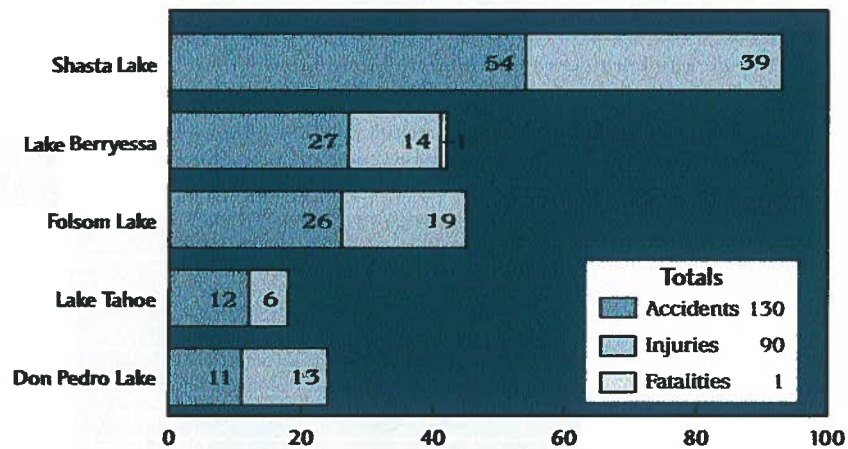


# NORTHERN

# LAKES

## Safety Tips Education

### 1999 Northern Lakes Boating Accidents by Location



14% of California's accidents occurred on Northern Lakes. The percentage of many accident trends on Northern Lakes exceeded both regional and statewide percentages. Several lakes had a number of accident factors in common, while other accident factors were unique to certain lakes. The lakes with the largest number of accidents are included below.

### Noteworthy Accident Statistics

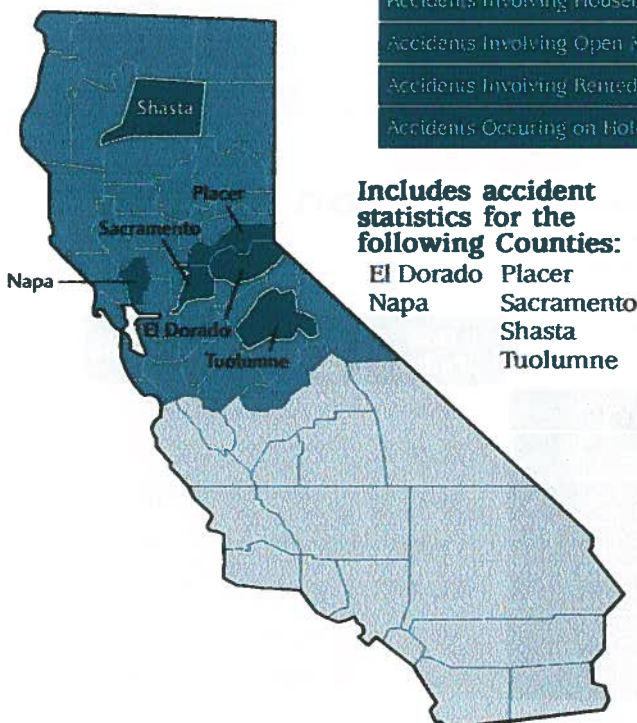


## Shasta Lake

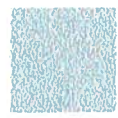
	Shasta Lake	Northern California	California
Accidents Involving Water Skiing	39%	17%	12%
Accidents Involving Houseboats	15%	6%	3%
Accidents Involving Open Motorboats	72%	57%	48%
Accidents Involving Rented Vessels	18%	11%	10%
Accidents Occuring on Holiday Weekends	31%	21%	20%

Includes accident statistics for the following Counties:  
 El Dorado Placer  
 Napa Sacramento  
 Shasta Tuolumne

The percentage of accidents on Shasta Lake occurring during summer holiday weekends exceeded those in both Northern California and statewide. Accidents were also more likely to involve rented vessels, houseboats, open motorboats, and water skiing activities than elsewhere in the state.







# NORTHERN

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## Noteworthy Accident Statistics *(Continued)*

Accidents on Folsom Lake were more likely to occur on weekends, and involve operators 40 years of age or younger. The percentage of accidents involving operator inexperience, vessels that were borrowed and accidents occurring during water skiing activities were higher than regional or statewide percentages. Open motorboats accounted for the largest percentage of vessels involved in accidents.

### Folsom Lake



	Folsom Lake	Northern California	California
Accidents Involving Water Skiing	39%	17%	12%
Accidents Involving Operator Inexperience	54%	39%	39%
Accidents Involving Open Motorboats	69%	57%	48%
Accidents Involving Borrowed Vessels	35%	24%	26%
Operators 40 and Under Involved in Accidents	79%	65%	66%
Accidents Occuring on Weekends	31%	62%	60%

### Lake Berryessa



Accidents on Lake Berryessa were more likely to involve operators 40 years of age or younger. Percentages of accidents involving open motorboats, PWC, rented and borrowed vessels, and water skiing activities all exceeded Regional and statewide percentages.

	Lake Berryessa	Northern California	California
Accidents Involving Collisions Between Two Vessels	44%	30%	36%
Accidents Involving Water Skiing	22%	17%	12%
Accidents Involving Open Motorboats	56%	57%	48%
PWC-Related Accidents	48%	23%	29%
Accidents Involving Borrowed Vessels	32%	24%	26%
Accidents Involving Rented Vessels	20%	11%	10%
Operators 40 and Under Involved in Accidents	81%	65%	66%

### Don Pedro Lake



Accidents on Don Pedro Lake were more likely to involve operators 40 years of age or younger and almost all occurred on weekends. Percentages of accidents involving open motorboats and PWC, accidents inexperience, water skiing, and borrowed vessels also exceeded both Northern California and statewide percentages.

	Don Pedro	Northern California	California
Accidents Involving Water Skiing	45%	17%	12%
Accidents Involving Operator Inattention	55%	31%	31%
Accidents Involving Open Motorboats	64%	57%	48%
PWC-Related Accidents	36%	23%	29%
Accidents Involving Borrowed Vessels	50%	24%	26%
Operators 40 and Under Involved in Accidents	75%	65%	66%
Accidents Occuring on Weekends	91%	62%	60%



# CALIFORNIA

## 1999 Northern California Boating Accident Comparisons



# NORTHERN

	CA	No. CA	Delta	San Francisco	Shasta Lake	Folsom Lake	Lake Berryessa	Don Pedro
Types - % of accidents involving...								
Capsizeing	9%	10%	5%	20%	2%	8%	4%	0%
Collision Between Two Vessels	36%	50%	26%	33%	24%	31%	44%	36%
Grounding	13%	11%	14%	13%	11%	8%	7%	0%
Swamping/Sinking	12%	15%	21%	22%	9%	8%	4%	18%
Water Skiing	12%	17%	9%	0%	39%	27%	22%	45%
Causes - % of accidents involving...								
Excessive Speed	25%	22%	20%	7%	13%	23%	19%	27%
Hazardous Weather/Water	15%	16%	12%	26%	17%	8%	7%	0%
Machinery Failure	10%	8%	11%	11%	6%	0%	7%	0%
Operator Inattention	31%	31%	23%	35%	15%	35%	30%	55%
Operator Inexperience	39%	39%	36%	28%	41%	64%	44%	18%
Types of Vessels - % of accidents involving...								
Auxiliary Sailboats	11%	7%	3%	44%	0%	0%	0%	0%
Cabin Motorboats	18%	13%	23%	24%	2%	4%	0%	9%
Houseboats	3%	6%	11%	2%	15%	0%	0%	0%
Open Motorboats	48%	57%	56%	38%	72%	69%	56%	64%
Personal Watercraft	29%	23%	17%	2%	20%	27%	48%	36%
Borrowed Vessels	26%	24%	18%	6%	28%	35%	32%	50%
Rented Vessels	10%	11%	9%	5%	18%	8%	20%	6%
Operated by Owner	45%	46%	52%	64%	35%	35%	39%	38%
Operator Age - % of operators involved in accidents (does not include unknown)								
Operators 40 and Under	66%	65%	63%	19%	69%	79%	81%	75%
Operators Over 40	34%	35%	27%	81%	31%	21%	19%	25%
Other Factors - % of accidents occurring on...								
Holiday Weekends	20%	21%	21%	22%	31%	15%	19%	18%
Weekends	60%	62%	66%	61%	44%	77%	74%	91%

