

MAY 2004

2003 CALIFORNIA BOATING SAFETY REPORT

STATE OF CALIFORNIA
THE RESOURCES AGENCY

DEPARTMENT OF BOATING AND WATERWAYS

Arnold Schwarzenegger, Governor
STATE OF CALIFORNIA

Mike Chrisman
SECRETARY FOR RESOURCES

Raynor Tsuneyoshi, Director
DEPARTMENT OF BOATING AND WATERWAYS



DEPARTMENT OF BOATING AND WATERWAYS

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SACRAMENTO, CALIFORNIA 95815-3888
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May 2004

Dear Boating Enthusiast:

California has some of the nation's most beautiful and accessible waterways and ranks second nationally in the number of registered vessels. As crowded recreational waterways lead to an increased chance of mishaps, it is not surprising that California also ranks second in the number of boating accidents. Because of this, it is important that the boating public have the best information possible to enhance safety on the water.

A primary focus of this publication is the analysis of boating accidents that occurred in 2003. This information is compiled to help us direct our efforts to reduce the number of boating accidents, injuries, and fatalities on California's waterways.

The report also includes information about the Department's efforts to promote boating safety through safety education and law enforcement programs that involve essential direct interaction with the boating community.

A priority for the Department is educating boaters about the dangers of carbon monoxide poisoning. To increase awareness, the Department has produced an information brochure and warning sticker for a boat's transom which is currently in distribution. The Department is also producing TV and radio public service announcements to reach additional boaters with this important message. These PSAs will be available later this year.

This report is also available on the Department's website, www.dbw.ca.gov. For more information about this or other accident statistics, please contact Amy Rigby by telephone at (916) 263-8190 or by email at arigby@dbw.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Raynor Tsuneyoshi".

Raynor Tsuneyoshi
Director

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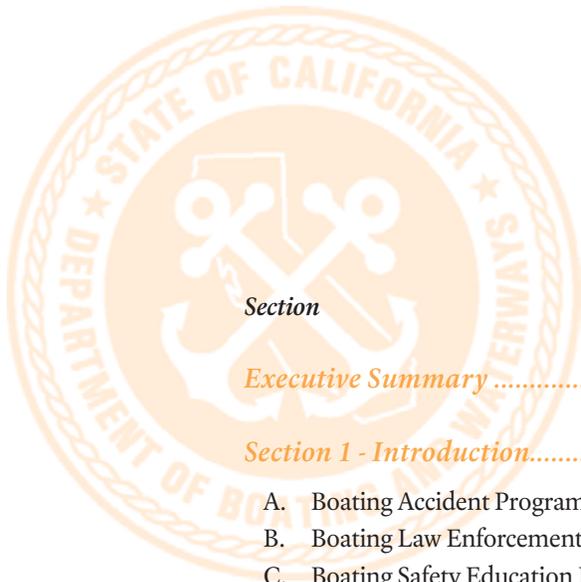


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EXECUTIVE SUMMARY

1

The California Department of Boating and Waterways administers many programs to provide for boating safety on the State's waterways. The *2003 California Boating Safety Report* summarizes activities performed in three key safety program areas:

- Boating accident analysis
- Law enforcement
- Safety education.



California's Safety Campaign Theme

This report also highlights the Department's current program enhancements and future safety initiatives designed to reduce accidents and make California's waterways safer.

Through the boating accident program, the Department provides useful accident information to boaters, law enforcement agencies, and educators. This information is communicated to the general public through the incorporation of relevant safety measures into the Department's safety education programs and law enforcement training programs based on accident analysis. **Exhibit E-1** (*starting on page 2*) provides a summary of key boating accident statistics for 2003.

The Department provides supplemental funding to counties for law enforcement activities and promotes uniform enforcement of boating laws through its law enforcement training program. In 2003, the financial aid program allocated \$8.1 million to 37 counties and two cities for enforcement personnel and operating costs. In turn, the counties provided crucial boating law enforcement, as well as safety training for law enforcement officers and the public. **Exhibit E-2** (*on page 5*) provides a summary of law enforcement activities supported by the Department's financial aid program.

In 2003, the law enforcement training program included seven courses on various boating safety topics, in which Department staff trained approximately 400 marine enforcement officers.

The Department's safety education programs provided nearly two million individuals with boating safety training and materials.

On-going partnerships with educational institutions, aquatic centers, and non-profit organizations provided crucial safety information to students and the general public. Additionally, the Department sponsored a statewide radio and outdoor media campaign to promote life jacket use, environmental stewardship, and boating safety course participation. **Exhibit E-3** (*starting on page 5*) provides a summary of the Department's safety education outreach programs.

New programs developed in 2003 focus on improving public outreach and expanding law enforcement training. Enhancements to existing programs reflect changing accident statistics and key safety concerns. **Exhibit E-4** (*starting on page 6*) presents a summary of 2003 program enhancements and initiatives.

2003 CALIFORNIA BOATING ACCIDENT SUMMARY STATISTICS

2

Overall Boating Accident Highlights

- This year, the number of boating accidents in California is the highest on record. In 2003, a total of 963 boating accidents were reported to the Department, involving 502 injuries, 61 fatalities, and \$3,820,000 in property damage.
- Accidents involving water skiing activities have increased 38% since 2002. 17% of boating accidents occurred during water skiing activities. (In this report, the term “water skiing” refers to all activities involving a vessel towing a person on a towline.)
- About 34% of all vessels and 70% of PWC involved in accidents were operated by someone other than the registered owner. These findings demonstrate the need to emphasize boating education for all vessel operators, not only vessel owners.
- Accidents occurred mostly during the summer months (May through September), on weekends, and during the hours between 2:00 p.m. - 4:00 p.m. The largest number of accidents (51%) occurred on lakes, followed by ocean/bay waters (29%).
- 18% of boating accidents and nearly one quarter of all injuries occurred during the summer holiday periods of Memorial Day, Independence Day, and Labor Day.
- 35% of reported accidents resulted from collisions with other vessels.
- Operator inattention (40%) was the most common cause of boating accidents, followed by operator inexperience (33%), and excessive speed (25%). (Many accidents had more than one cause.)
- Open motorboats were involved in 51% of all accidents. PWC were involved in 27%.
- 70% of vessels involved in all accidents were less than 26 feet in length. 89% of vessels involved in fatal boating accidents were also less than 26 feet in length.
- Of operators whose ages were known, those in the 31-40 age group were involved in more accidents than any other age group, followed very closely by the 21-30 and 41-50 age groups.

PWC Accident Statistics

- Accounting for 19% of registered vessels, PWC were involved in 27% of all accidents, 40% of all injuries, 20% of all fatalities, and 13% of all property damage.
- Fatal accidents involving PWC increased from seven in 2002 to 12 in 2003, the highest number on record, although the overall number of PWC accidents continued to remain significantly lower than years prior to 1998.
- In January 1998, two laws impacting PWC operators took effect. The first law raised the minimum age to operate a vessel over 15 horsepower from 12 to 16 years of age. Since the PWC is the vessel of choice for the vast majority of youth operators, we believe that this law has decreased the number of PWC-related accidents. A second law, prohibiting activities such as wake jumping within 100 feet of another vessel,

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2003 CALIFORNIA BOATING ACCIDENT SUMMARY STATISTICS

spraying down other vessels, and playing “chicken” with another vessel, has also had a positive impact on PWC-related accidents.

- Accidents involving PWC have decreased 33% since January 1998. Trends contributing to this result:
 - Accidents involving youths operating all types of vessels have decreased 31%.
 - PWC accidents involving radical maneuvers (such as wake jumping, donuts, and spraying other vessels) have decreased 28%.

Since changes in law noted above, and the resulting continued decrease of PWC-related accidents, the number of PWC accidents per hours under way has been approaching the rate for traditional vessels, and in 2003, was nearly equal to them. The 2003 data revealed that:

- When controlled for hours under way, there would have been one accident for every 698 traditional vessels operating on California waterways, compared to one accident for every 705 PWC.
- 66% of PWC-related accidents and 50% of PWC-related fatalities resulted from collisions with other vessels.
- In PWC collisions with another vessel, the other vessel was most often another PWC (64%).
- 53% of all PWC-related collisions involved operators who knew each other and were boating together.
- The most common cause of PWC-related accidents involved operator inexperience (66%), operator inattention (63%), and excessive speed (57%). (Many accidents had more than one cause.)
- 35% of PWC operators were age 11-20 and were involved in more accidents than any other age group, followed by the 21-30 age group.
- 70% of PWC involved in accidents were operated by someone other than the registered owner (53% were borrowed and 17% were rented).



Students learning to wakeboard

Youth Accident Statistics (Youth is under 18 years of age)

- Since January 1998, when the minimum age for solo operation of a vessel over 15 HP was raised from 12 to 16 years of age, the number of accidents involving youth operators has decreased 34%, from 120 in 1997 to 83 in 2003.
- During the 2003 boating season, a total of 98 youth operators were involved in 9% of all accidents, 14% of all injuries, and 13% of fatalities.

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2003 CALIFORNIA BOATING ACCIDENT SUMMARY STATISTICS

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- Operator inexperience was a factor in 81% of accidents involving youth operators and was the most common cause of accidents involving them. Operator inexperience was a factor in only 33% of accidents involving operators of all ages.
- 26 operators involved in accidents (26%) were under the age of 16. Four of those operators were under the age of 12.
- Of the 26 operators under 16 years of age, 54% did not have an adult on board.
- Collisions with other vessels accounted for 75% of accidents involving youth operators.
- Most of the collisions involved youth operators colliding with adult operators.
- In collisions between youth and adult operators, youth operators were somewhat more likely to be exclusively at fault.
- 89% of youth operators involved in accidents were operating a PWC.

Fatal Accident Statistics

- Of the 61 fatalities in 2003, 66% occurred between May and September. 46% of all fatalities occurred on weekends.
- 61% of all fatalities drowned. Of that group, 68% were not wearing a life jacket.
- 31% of fatalities in 2003 were fishing-related. 58% of those victims were boating in the off-season of October through April.
- Of all fishing-related fatalities, 89% were the result of vessels capsizing or falls overboard. 89% drowned and only one victim was wearing a life jacket.
- One-third (33%) of the vessels involved in fatal accidents were open motorboats, followed by PWC (27%).
- The majority (89%) of vessels involved in fatal accidents were less than 26 feet in length.
- Vessels capsizing (30%) and falls overboard (23%) were the most common types of fatal accidents.
- The most common causes of fatalities were operator inattention (36%), operator inexperience (31%) hazardous weather/water conditions (25%) and excessive speed (18%) (Many accidents had more than one cause.)
- Operators in the 41-50 age group were involved in more fatal boating accidents than any other age group.
- 46% of fatalities occurred on lakes, 26% occurred on oceans/bays, 20% on rivers throughout the state, 5% on the Sacramento-San Joaquin Delta region, and 3% on the Colorado River.
- 19% of boating fatalities were found to be alcohol-related, where testing could be conducted.

SERVICES SUPPORTED BY THE 2002/2003 FINANCIAL AID PROGRAM

Regulation Enforcement

Verbal Warnings	94,287
Citations.....	5,161
Physical Arrests	5,544

Boater Assistance

Persons Assisted	23,919
Vessels Assisted.....	6,334
Accident Investigations.....	495

Search and Rescue Operations

Searches.....	670
Body Recovery Attempts	94

Education

Boating Safety Presentations	5,908
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Other

Organized Boating Event Supervision	293
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2003 CALIFORNIA BOATING SAFETY EDUCATION PROGRAMS

Education Programs

<i>AquaSMART</i> Elementary Education Program.....	500,000 participating students
<i>AquaSMART</i> Boating High School Education Program	20,000 participating students
Home Study Course (General Public)	40,000 courses distributed
Poster Contest (10 th Annual).....	2,797 entries

Aquatic Center Grant Program

Grants to universities and non-profit organizations for scholarships for the purchase of boats, equipment, and related safety supplies	120,000 individuals trained
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Public Outreach Programs

In 2003, Department representatives:

- Attended numerous events, such as boat shows and safety fairs to distribute boating safety literature and answer questions from the public.
- Continued the Boating Safety Awareness outdoor media campaign, focusing on areas with the greatest number of accidents. This campaign consisted of 50 stationary billboards, 10 mobile billboards, and nearly 500 wall graphics (all-weather framed posters posted at launching ramps, fuel docks, and park

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2003 CALIFORNIA BOATING SAFETY EDUCATION PROGRAMS

6

entrances). The billboards are designed to resemble “road signs” for the waterways. Mobile billboards traveled to high-accident waterways throughout the summer, particularly on major holiday weekends.

- Continued to place special emphasis on educating anglers by placing articles and messages in fishing publications throughout the state.
- Distributed 1.2 million copies of boating safety literature.

Abandoned Watercraft Removal Program

- The Department administers a program for the removal of abandoned watercraft and substantial navigational hazards from California’s waterways. The Abandoned Watercraft Abatement Fund (AWAF) program grants funds to local public agencies for the removal, storage, and disposal of these navigational hazards. In 2003, a total of \$438,000 was allocated to nine public agencies for the removal and disposal of abandoned vessels and other substantial hazards to navigation.

2003 CALIFORNIA BOATING SAFETY PROGRAM ENHANCEMENTS

Life Jacket Use

- The Department continues the *Life Jacket Loan Program* aimed at increasing the use of life jackets by children. In cooperation with fire stations in the Greater Sacramento area, an individual or family can check out life jackets for a day or a weekend simply by completing a loan form.
- The Department continues the *T-Shirt Program*, aimed at increasing the use of life jackets by children. Marine enforcement units, U.S. Coast Guard Stations, U.S. Coast Guard Auxiliary Flotillas and U.S. Power Squadrons are supplied with T-shirts for children. The shirts are used to reward children under the age of 12 found wearing their life jacket while boating. This popular program recognizes safe behavior and reinforces continued use of life jackets by this target group.
- The Department continues placing billboards reminding boaters to wear their life jackets in areas where accidents are most prevalent, along with placing safety messages on posters and refuse barrels at marinas. The billboards and posters look like waterway “road signs” with messages of overall boating safety. The Department continues promoting the use of life jackets at safety fairs and boat shows throughout the state, through the annual *Safe and Wise Water Ways* poster contest for children, and at *National Safe Boating Week* events.
- In 2003, the Department partnered with Infinity Broadcasting, Nor Cal Water, and AM/PM Mini Marts to remind their collective clients in Northern California to “Get Hooked on H2O” and “Boat Smart from the Start...Wear Your Life Jacket.” An estimated 12 million impressions were made on clients as the messages traveled the airwaves and were viewed at purchase points.

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2003 CALIFORNIA BOATING SAFETY PROGRAM ENHANCEMENTS

Personal Watercraft

- The Department provides a short course on PWC operation and safe boat handling. The course is intended for PWC operators of all ages and is available to the general public. It is designed so that it can easily be incorporated into existing safety programs offered by organizations such as the U.S. Coast Guard Auxiliary, the U.S. Power Squadrons, marine law enforcement agencies, and aquatic centers. There is a 20-question exam at the end of the booklet to self-test on the material covered. This basic course does not earn a certificate, but is simply a tool to introduce new PWC operators to laws, requirements, and important safety issues associated with their vessels. This short course is now available online and those who complete the quiz online are rewarded with access to boating-themed screensavers.



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Personal Watercraft Training Class

- The promotion of safe operation of PWC is a component of the Department's outdoor media campaign.
- The Department offers a 32-hour P.O.S.T.-certified PWC handling course specifically for law enforcement.

Youth Operator Safety

- The Department distributes the *AquaSMART Boating* program for high school students throughout California. This course incorporates lessons on key safety concerns identified by accident statistics. Four types of boating are addressed: personal watercraft, powerboating, sailing, and paddling. The course is available to schools, aquatic centers, and youth organizations.

Alcohol

- The Department notifies law enforcement agencies statewide about alcohol-related fatalities and encourages them to strengthen their educational and enforcement efforts in this area. The Department reinforces this message at all of its law enforcement training classes.
- The curriculum for all *AquaSMART* youth programs includes information on the dangers of alcohol and drug use, especially when boating. Zero tolerance is emphasized for all persons engaged in aquatic recreation.
- The Department's "Get H2Ooked on Sober Boating" T-Shirt promotion continued at boat shows and other outreach venues throughout the state.

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2003 CALIFORNIA BOATING SAFETY PROGRAM ENHANCEMENTS

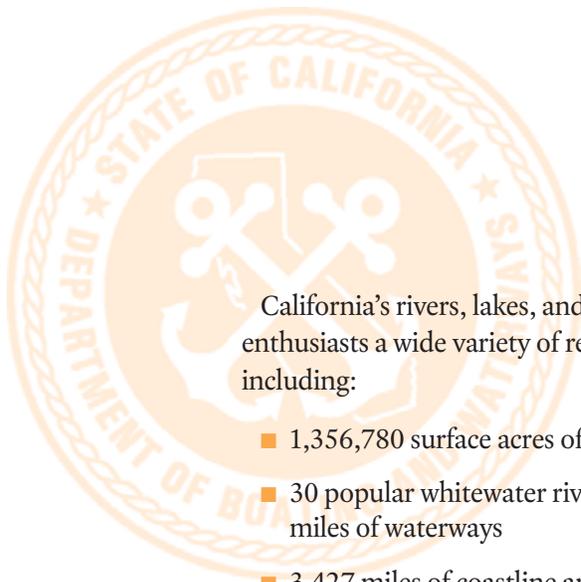
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Carbon Monoxide Education

- In 2003, the Department produced a brochure to educate boaters of the dangers of carbon monoxide poisoning which also includes a warning sticker for a boat's transom. The brochure is distributed at boat shows, safety fairs, and other events and is also available on the Department's Website.
- The Department is producing both a TV and a radio PSA to increase awareness of carbon monoxide poisoning.
- The Department is improving the collection of carbon monoxide boating accident data by increasing training to law enforcement officers who investigate accidents.

Other Safety Enhancements

- In 2003, the Department sponsored 80 *AquaSMART Live* performances. Praised by educators, the traveling puppet show is hosted by Splasher the Frog, mascot of the *AquaSMART* program. *AquaSMART Live* has two programs for grades K-3 and 4-6. The K-3 program uses stunt dummies to demonstrate to children what can happen when you do not play safe in and around the water. The 4-6 program is a game show format where two teams compete for prizes while learning how to stay safe in and around the water.
- The Department has produced a water skiing safety video to cover not only traditional water skiing activities, but also to include wakeboarding, kneeboarding, inner tubing, and other related activities. This video is currently used in boating safety education classes offered by aquatic centers in California.
- In 2003, the Marine Law Enforcement – Training Program continued its mission of providing quality training for peace officers who work California's waterways. Some significant changes to the program were:
 1. Finalizing the draft for the new vessel accident report manual.
 2. Finalizing the draft for the new Boating Intoxication Enforcement vessel stop film.
 3. Upgrading training materials to its Basic Boating Safety and Enforcement class.
 4. Standardizing its pilot Personal Watercraft class.
- The Department produced a two new PSAs, to add to its "The Safety Pirate" radio series for distribution through the National Safe Boating Council. This award-winning radio message was aired throughout the nation in 2003 and was also used in England and Australia.
- In 2003, KCRA/KQCA, the NBC affiliate in Sacramento, partnered with the Department to produce a new 30-second PSA for television promoting safe boating and taking a boating safety course in its viewing area in Northern California.
- The Department is finishing work on a brochure that promotes hands-on boating safety courses and contains information on classes offered by aquatic centers have partnered with the Department. This brochure will be completed in Summer of 2004.



SECTION 1

INTRODUCTION

California's rivers, lakes, and coastal areas offer boating enthusiasts a wide variety of recreational opportunities, including:

- 1,356,780 surface acres of water
- 30 popular whitewater rivers, with approximately 2,600 miles of waterways
- 3,427 miles of coastline and tidal shoreline.

Boating popularity grew steadily over the last decade, as reflected by the increase in the number of registered vessels. As of December 31, 2003, California had 963,379 registered vessels, the second highest in the nation.

The Department's mission is to provide safe and convenient public access to California waterways and to provide leadership in promoting the public's right to safe and enjoyable boating. To accomplish this, the Department administers statewide boating accident, law enforcement, and safety education programs. The *California Boating Safety Report* highlights important statistics and describes current and future program activities to enhance boating safety.



Keep it clean when you boat and fish

A. Boating Accident Program

The Department's boating accident program disseminates accident information to boaters, law enforcement agencies, educational organizations, and the media. The program is mandated by Part 173 of Title 33 of the U.S. Code of Federal Regulations. Annual accident information collected by the Department is forwarded to the U.S. Coast Guard in Washington D.C., and is made a part of the Coast Guard's annual publication, *Boating Statistics*.

California accident statistics are compiled under state law, Section 656 of the *Harbors and Navigation Code*, which requires a boater who is involved in an accident to file a written report with the Department when:

- A person dies, disappears, or is injured requiring medical attention beyond first aid; or
- Damage to a vessel or other property exceeds \$500, or there is complete loss of a vessel.

Department staff review reported accidents, determine the cause(s), and identify preventative measures and specific safety-related problems. Safety education and public information program staff incorporate these safety problems and related solutions into updated course materials, promotional activities, and brochures. Law enforcement staff also communicate these safety problems during Department-sponsored training sessions for law enforcement officers.

B. Boating Law Enforcement Programs

The primary objective of the Department's law enforcement program is to assist law enforcement agencies that provide waterborne law enforcement services. These local agencies enhance boating safety through the enforcement of safety laws and regulations. To this end, the unit offers training to law enforcement officers to ensure uniform enforcement of boating laws, and provides financial support to counties for law enforcement programs and activities.

During FY 2002/03, law enforcement officers from agencies participating in the financial aid program provided nearly 105,000 operators with boating safety education through enforcement activities. Their verbal warnings and written citations were instrumental in helping to prevent accidents and improve boating safety.

C. Boating Safety Education Programs

The Department provides accessible boating safety education through partnerships with educational institutions and non-profit organizations. These entities, in turn, provide crucial aquatic and boating safety education to students and the general public. Both teachers and students praise the boating safety course materials developed by the Department for their exceptional content and ease of use.

Additionally, the Department's Public Information Unit provides safety information to millions of boaters through the Department's website (www.dbw.ca.gov), publication distribution, public service announcements (PSAs), and press releases. The Department has more than 50 different boating safety publications covering many topics, such as boating and alcohol use and proper PWC handling. Basic boating information, including laws and regulations, rules of the road, and safe operation practices, is provided to each person registering a vessel through the Department of Motor Vehicles.

Other safety messages are disseminated through the Department's *Boating Safety Awareness* multimedia campaign. These methods allow the Department to reach boaters who may not otherwise come into contact with other forms of boating safety information the Department provides at safety fairs, boat shows, or in pamphlets.

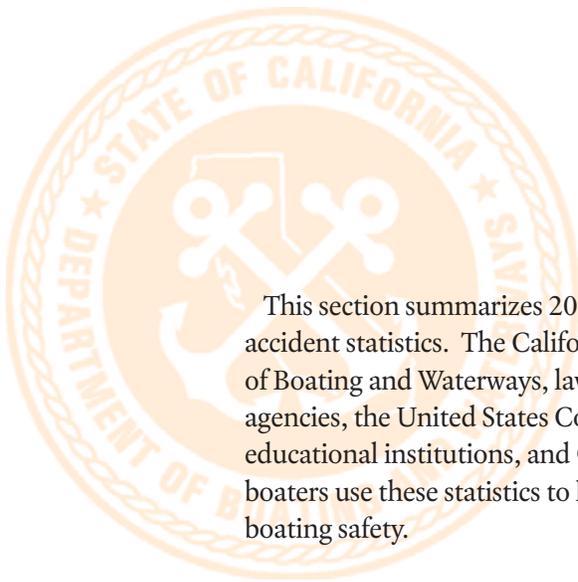
In 2003, the Department received a National Safe Boating Council award for the "Safety Pirate" PSA, which was created by the Department for use as a national public service announcement made available to all states on the Council's website. This radio spot has also been used internationally in Europe and Australia.



El Dorado Sheriff's Department hard at work patrolling the American River



An instructor assists a student learning to water ski



This section summarizes 2003 boating accident statistics. The California Department of Boating and Waterways, law enforcement agencies, the United States Coast Guard, educational institutions, and California boaters use these statistics to help improve boating safety.



A. Limitations of the Analysis

Reportable Accidents

The statistics in this report reflect every reported boating accident in California in 2003. Although the Department believes that all accidents involving fatalities were reported, many non-fatal accidents are never reported to the Department or law enforcement agencies due to noncompliance with, or ignorance of, the reporting law. The U.S. Coast Guard estimates that only about 10% of accidents are actually reported to state programs nationwide.

An outdoor billboard encourages boating education

An increase in the number of reported accidents from year to year might not necessarily reflect an increase in the actual number of accidents, but rather might result from improved reporting efforts or research from other sources (e.g., newsclippings). To improve the accuracy of accident statistics, the Department has increased its efforts to obtain all accident reports by working closely with law enforcement agencies.

Accident Statistics

A total of 963 accidents were reported to the Department in 2003. Some statistics in this report are measured as a percentage of these total accidents. Often, there is more than one cause of an accident, more than one operator involved in an accident, or more than one vessel involved. Therefore, the number of vessels, like the number of operators involved in accidents, usually exceeds the number of accidents. A total of 1,186 operators were involved in boating accidents in 2003. Many statistics presented in this report are measured as a percentage of the number of operators involved or the number of causes - rather than the 963 accidents - in order to provide more accurate comparisons.

Alcohol Use

Analysis of alcohol-related accidents can be complicated for the following reasons:

- **Delayed Accident Reporting** – Often there is significant delay between the time of the accident and the reporting of the accident to law enforcement agencies. Delays can happen for a variety of reasons, including emergency care needs and the desire to avoid legal consequences. (Operators/passengers are reluctant to report themselves as being under the influence of alcohol or drugs.) Unfortunately, these delays can result in the loss of accurate data due to alcohol burn-off.
- **Delayed Body Recovery** – Sometimes, the bodies of boating accident victims are not recovered immediately. A delay of more than two days in recovering a body can result in significantly altered blood alcohol levels due to the process of decomposition, a by-product of which is blood alcohol. 13%

of boating fatalities in 2003 could not be tested for alcohol for the above reasons.

B. 2003 Accident Summary

Findings

The 963 accidents reported to the Department during 2003 involved 502 injuries, 61 fatalities, and over \$3.8 million in property damage. All totals exceed those in 2002 (911 accidents, 468 injuries, 53 fatalities, and \$3.7 million in property damage).

Exhibit II-1 (below) presents boating accident statistics in California from 1980 through 2003.

Exhibit II-2 (on page 13) presents 2003 boating accident statistics by county.

Type and Cause of Accidents

Exhibit II-3 (on page 14) presents types and causes of accidents by vessel type. Overall, the most common type of accident involved collision with another vessel (35%). Open motorboats and personal watercraft were the most common types of vessels involved in accidents and were involved in 51% and 27% of accidents respectively. The most common type of accident involving open motorboats was collision with another vessel (29%), followed by accidents involving skier mishaps (20%). Most accidents involving PWC were collisions with other vessels (66%), followed by falls overboard (16%).

The most frequently stated causes of accidents overall were operator inattention (40%) operator inexperience (33%), and excessive speed (25%). *(A boating accident can have more than one attributable cause.)*

**EXHIBIT II-1
1980-2003 CALIFORNIA BOATING ACCIDENT STATISTICS**

Year	Number of Accidents	Number of Injuries	Number of Fatalities	Amount of Property Damage
1980	657	270	112	\$2,039,800
1981	728	319	87	\$3,655,630
1982	696	323	103	\$2,497,000
1983	648	333	95	\$3,713,100
1984	791	341	93	\$2,491,700
1985	869	403	76	\$4,246,400
1986	741	319	68	\$2,645,500
1987	905	325	54	\$3,381,600
1988	745	333	51	\$2,396,100
1989	632	371	43	\$3,669,800
1990	761	416	50	\$3,131,200
1991	750	421	58	\$2,653,800
1992	689	447	59	\$4,360,100
1993	743	434	67	\$2,052,800
1994	709	386	40	\$1,740,300
1995	833	490	52	\$2,536,500
1996	850	537	56	\$2,241,700
1997	925	526	43	\$3,266,800
1998	772	413	58	\$2,299,600
1999	907	491	42	\$2,864,000
2000	906	524	51	\$3,038,400
2001	907	502	48	\$2,841,900
2002	911	468	53	\$3,732,850
2003	963	502	61	\$3,820,000

2003 CALIFORNIA BOATING ACCIDENTS BY COUNTY

County	Number of Accidents	Number of Injuries	Number of Fatalities	Amount of Property Damage
Alameda	10	2	2	\$22,600
Amador	6	3	0	\$16,300
Butte	18	12	2	\$24,800
Calaveras	10	6	1	\$6,600
Contra Costa	33	20	0	\$335,450
Del Norte	1	0	0	\$2,000
El Dorado	16	8	2	\$38,700
Fresno	25	15	5	\$150,000
Humboldt	4	0	1	\$9,500
Imperial	3	4	0	\$13,400
Kern	23	17	0	\$34,700
Lake	14	12	1	\$63,350
Lassen	2	0	1	\$2,000
Los Angeles	51	27	4	\$389,200
Madera	8	6	0	\$14,500
Marin	13	4	2	\$54,550
Mariposa	10	8	0	\$13,100
Mendocino	6	3	2	\$15,000
Merced	7	2	1	\$18,500
Monterey	20	3	0	\$147,600
Napa	60	33	2	\$66,100
Nevada	8	8	1	\$9,000
Orange	71	3	0	\$376,350
Placer	34	16	4	\$50,250
Plumas	5	2	1	\$3,800
Riverside	42	18	1	\$104,450
Sacramento	20	6	1	\$133,800
San Bernardino	61	44	3	\$257,000
San Diego	80	43	3	\$328,250
San Francisco	20	10	0	\$189,600
San Joaquin	48	22	0	\$319,200
San Luis Obispo	32	28	0	\$21,800
San Mateo	5	2	1	\$6,900
Santa Barbara	7	1	0	\$23,500
Santa Clara	8	7	1	\$9,000
Santa Cruz	7	1	1	\$9,500
Shasta	53	39	2	\$130,100
Sierra	1	1	0	\$5,000
Siskiyou	3	1	2	\$0
Solano	14	4	3	\$95,150
Sonoma	6	1	0	\$14,200
Stanislaus	12	11	0	\$18,000
Sutter	1	3	0	\$22,500
Tehama	1	0	0	\$1,300
Trinity	6	7	0	\$1,000
Tulare	11	7	1	\$38,600
Tuolumne	31	22	2	\$70,300
Ventura	18	4	3	\$71,350
Yolo	12	2	3	\$59,650
Yuba	6	4	2	\$12,500
Total	963	502	61	\$3,820,000

EXHIBIT II-3

TYPES AND CAUSES OF CALIFORNIA BOATING ACCIDENTS BY VESSEL TYPE

14

	Open Motorboats		Personal Watercraft		Other Vessels		All Vessels	
Types of Accidents	Collision with Vessel	29%	Collision with Vessel	66%	Collision with Vessel	38%	Collision with Vessel	35%
	Skier Mishap	20%	Falls Overboard	16%	Flooding/Swamping	13%	Skier Mishap	12%
	Flooding/Swamping	13%	Grounding	5%	Grounding	9%	Flooding/Swamping	11%

	Open Motorboats		Personal Watercraft		Other Vessels		All Vessels	
Causes of Accidents	Operator Inattention	39%	Operator Inexperience	66%	Operator Inattention	33%	Operator Inattention	40%
	Operator Inexperience	22%	Operator Inattention	63%	Operator Inexperience	29%	Operator Inexperience	33%
	Excessive Speed	20%	Excessive Speed	57%	Machinery Failure	17%	Excessive Speed	25%

The leading causes of accidents involving open motorboats were operator inattention and operator inexperience. The leading causes of accidents involving PWC were operator inexperience and operator inattention. Overall, these causes were consistent with previous years.

Time and Location

Accidents occurred mostly during the summer months (May through September), on weekends, and between 2:00 p.m. and 4:00 p.m.

Of the 963 boating accidents, 172 (18%) occurred during the three holiday periods of Memorial Day, Independence Day, and Labor Day. During these periods, 21% of all injuries and 10% of fatalities also occurred.

Of all accidents occurring on lakes throughout the state in 2003, 25% occurred during these holiday periods.

Exhibit II-4 (on page 15) presents the accidents, injuries, and fatalities by location. Overall, most accidents and injuries occurred on lakes, 51% and 65% respectively,

and more occurred on northern lakes. These percentages have increased from 46% and 51% in 2002.

Vessel Type and Length

In 2003, open motorboats accounted for approximately 49% of all vessels registered in California, and PWC accounted for 19%. Open motorboats were involved in 51% of all accidents and PWC were involved in 27% of all accidents. This indicates that PWC were involved in a disproportionately high number of accidents. However, the number of PWC involved in accidents has decreased substantially in the last six years and has decreased 33% since 1997, when accidents involving these vessels were at an all-time high of 391. Most vessels (70%) involved in accidents were less than 26 feet long.

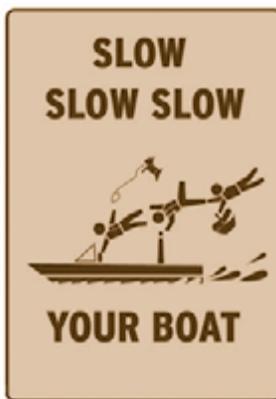


Exhibit II-5 (on page 16) presents registration and accident statistics for open motorboats, PWC, and other vessels during 2003.

Operator Age

Overall, operators in the 31-40 age group were involved in accidents more often than those in any other age

2003 CALIFORNIA BOATING ACCIDENTS BY LOCATION

Location	Number of Accidents	Number of Injuries	Number of Fatalities
Northern Lakes	312	206	22
Southern Lakes	176	119	6
Northern Rivers	34	10	7
Southern Rivers	11	4	5
Northern Coast	29	4	5
Southern Coast	203	57	7
San Francisco Bay Area	48	18	4
Delta	95	44	3
Colorado River	55	40	2
TOTAL	963	502	61

group, followed very closely by operators in the 21-30 and 41-50 age groups. The 41-50 age group was involved most often in open motorboat accidents, followed by the 31-40 age group. Most PWC accidents involved operators in the 11-20 age group, followed by the 21-30 age group.

Operator Owner Status

47% of all vessels involved in accidents were operated by the registered owner. About 34% of vessels were operated by someone other than the registered owner (26% were borrowed and 9% were rented).

C. Accidents Involving Personal Watercraft

Background

A personal watercraft is 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 in the conventional manner of sitting or standing inside the vessel.

The use of a PWC is subject to all state, local, and federal regulations governing the operation of all powerboats of similar size.

As of December 31, 2003, there were 184,105 PWC registered in California, comprising 19% of registered vessels. **Exhibit II-6** (on page 17) shows the total number of PWC registered in California from 1993 through 2003.

Findings

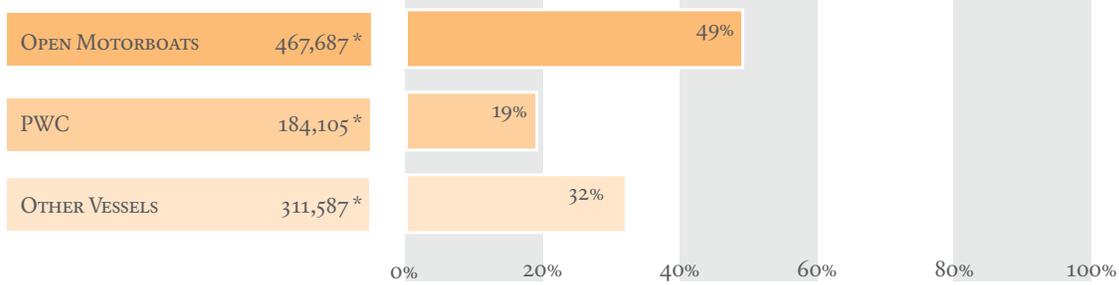
A total of 261 PWC-related accidents were reported in 2003, resulting in 200 injuries, 12 fatalities, and \$483,500 in property damage. The total number of reported accidents, injuries, and fatalities were higher than 2002 levels (253, 188, and 7, respectively), while the number of reported property damage decreased from \$524,250.

Exhibit II-7 (on page 17) presents an eleven-year summary for PWC accidents, injuries, fatalities, and property damage.

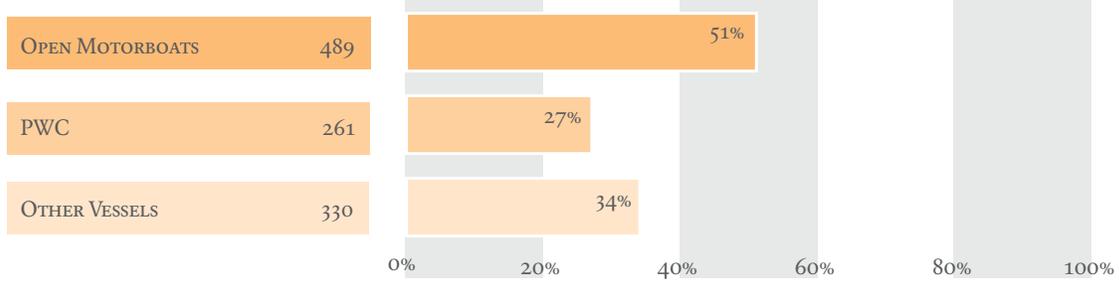
Exhibit II-8 (on page 18) presents 2003 reported PWC-related accidents by county.

2003 CALIFORNIA REGISTRATION AND ACCIDENT STATISTICS FOR OPEN MOTORBOATS, PWC, AND OTHER VESSELS

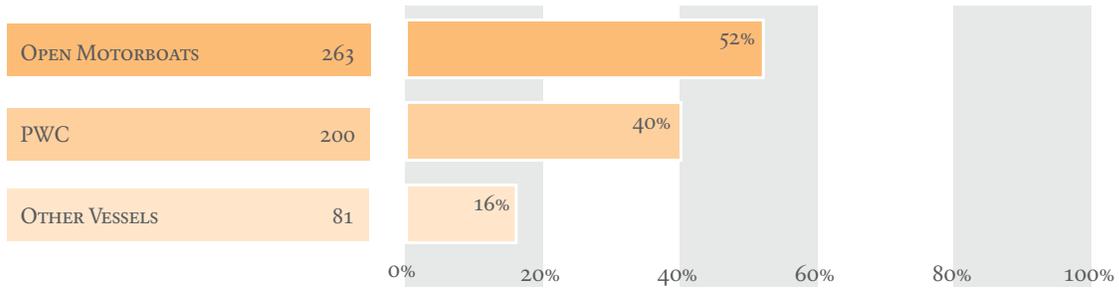
CALIFORNIA REGISTERED VESSELS



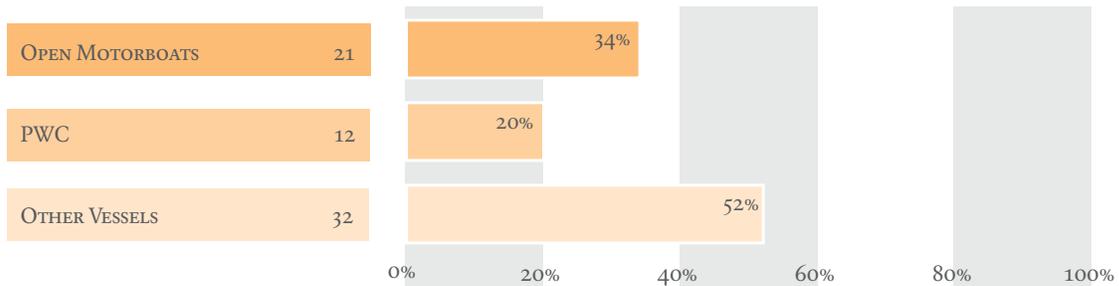
ACCIDENTS**



INJURIES**



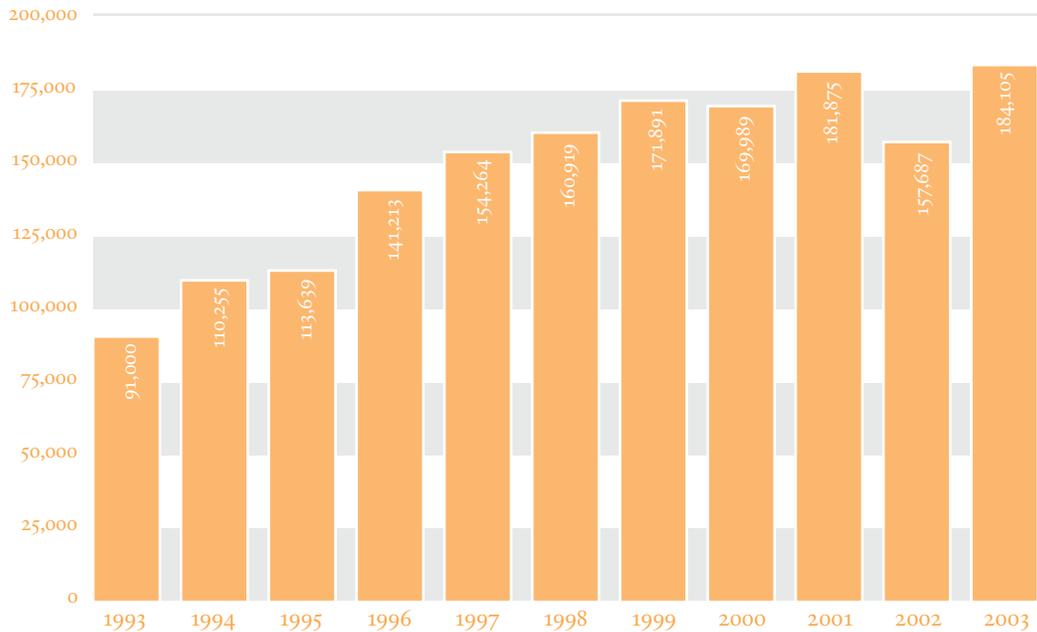
FATALITIES**



* These figures are estimates, based on Department of Motor Vehicles registration categories.

** The sum of the percentages does not equal 100 percent because some accidents, injuries, and fatalities involve multiple types of vessels.

EXHIBIT II-6
1993 - 2003 CALIFORNIA PWC REGISTRATIONS



17

EXHIBIT II-7
1993 - 2003 CALIFORNIA PWC ACCIDENTS, INJURIES, FATALITIES, AND PROPERTY DAMAGE *

Year	Number of Accidents	Number of Injuries	Number of Fatalities	Amount of Property Damage
1993	248	178	5	\$306,900
1994	257	178	7	\$294,800
1995	353	226	6	\$579,550
1996	385	298	8	\$508,300
1997	391	276	8	\$709,450
1998	229	161	9	\$384,050
1999	264	215	6	\$447,550
2000	293	238	6	\$436,650
2001	273	216	5	\$465,200
2002	253	188	7	\$524,250
2003	261	200	12	\$483,500

* An accident is considered reportable if a person dies, disappears, or is injured requiring medical attention beyond first aid; vessel or other property damage exceeds \$500; or there is complete loss of a vessel. Not all accidents are reported to the Department, due either to nonobservance or ignorance of the reporting law.

2003 CALIFORNIA PWC-RELATED ACCIDENTS BY COUNTY

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County	Number of Accidents	Number of Injuries	Number of Fatalities	Amount of Property Damage
Amador	4	2	0	\$2,300
Butte	3	5	0	\$8,700
Calaveras	5	2	1	\$3,600
Contra Costa	7	6	0	\$34,500
El Dorado	3	3	0	\$4,600
Fresno	10	8	0	\$14,400
Imperial	2	4	0	\$8,400
Kern	15	14	0	\$24,600
Lake	6	7	0	\$9,950
Los Angeles	12	13	2	\$16,000
Madera	6	5	0	\$12,350
Mariposa	4	1	0	\$3,000
Mendocino	1	2	0	\$3,000
Merced	2	1	1	\$9,500
Monterey	3	0	0	\$8,700
Napa	21	14	1	\$18,250
Nevada	1	1	0	\$0
Orange	3	2	0	\$1,200
Placer	15	8	2	\$25,700
Plumas	2	0	0	\$3,800
Riverside	30	14	1	\$83,700
Sacramento	6	3	0	\$12,600
San Bernardino	20	18	1	\$24,100
San Diego	22	23	0	\$24,150
San Joaquin	7	3	0	\$23,300
San Luis Obispo	8	7	0	\$5,800
Santa Clara	1	1	1	\$3,000
Shasta	13	9	1	\$26,200
Solano	1	1	0	\$0
Stanislaus	7	7	0	\$11,300
Trinity	1	2	0	\$1,000
Tulare	8	5	0	\$32,100
Tuolumne	9	7	1	\$11,200
Yolo	1	1	0	\$0
Yuba	2	1	0	\$12,500
Total	261	200	12	\$483,500

Accounting for 19% of registered vessels, PWC were involved in 20% of all fatalities and were responsible for 13% of all property damage, but were involved in 27% of all accidents and 40% of all injuries.

Fatal accidents involving PWC increased from seven in 2002 to 12 in 2003, the highest level on record. (See page 25 for further details regarding PWC-related fatalities.)

Despite the increase in fatalities, overall accidents involving PWC continue to remain significantly lower than the 1997 total of 391 accidents, a decrease of 33%.

This decrease appears to be attributable mainly to two laws affecting PWC that took effect in January 1998. The first law prohibited activities such as wake jumping within 100 feet of another vessel, spraying down other vessels, and playing "chicken." These activities now constitute endangerment of life, limb, and property. The second law raised the minimum age to operate a vessel of over 15 HP alone from 12 to 16 years of age. Since the vessel of choice of operators between 12 and 16 is the PWC, restricting this group's ability to operate vessels has resulted in a decrease in PWC-related accidents. This

reduction in accidents is also discussed in Accidents Involving Youths, on page 22.

PWC accidents involving radical maneuvers such as wake jumping, donuts, and spraying other vessels fell from 88 in 1997 to 63 in 2002, a decrease of 28%.

Accidents involving youth operators fell from 120 in 1997 to 83 in 2001, a decrease of 31%.

Type and Cause of Accidents

Overall Accidents

Most reported PWC accidents involved collisions with other vessels (66%). 16% of accidents involved falls overboard and 5% involved vessels grounding.

An examination of the 173 collisions involving PWC reveals that 110 (64%) involved a PWC colliding with a second PWC. Of the collisions involving two PWC, 58 (53%) involved two operators who knew each other and were riding together. Behaviors more likely to occur between operators who were riding together, were unsafe following distances and radical maneuvers.

The most common causes of all PWC accidents were operator inexperience (66%), operator inattention (63%), and excessive speed (57%). (*Some accidents have more than one attributable cause.*) All of these causes are operator-controllable factors.

Operator Age

PWC operators in the 11-20 age group were involved in more accidents than any other age group followed by the 21-30 age group.

Operator Owner Status

70% of PWC involved in accidents were operated by someone other than the registered owner (53% were borrowed and 17% were rented).

Boater Use Study

Several years ago, the Department noted the disproportionately high number of PWC-related accidents when compared to their registered numbers. For example, in 1994, PWC constituted 13% of the vessel population, but were involved in 36% of the accidents. However, if PWC spent more time underway than conventional boats, would the accident rate still



A student learns how to properly operate a PWC

be disproportionate? To answer this concern, the Department funded a study that was conducted by California State University Sacramento to survey boat owners to determine the amount of time boats were under way.

The study, conducted in 1995 and 1996, found that, for every day on the water, PWC spent 5.2 hours underway, while conventional vessels only spent 3.6 hours under way. However, when controlled for hours under way (that is, if conventional boats spent the same amount of time on the water as PWC), the study found that the number of accidents and injury-related accidents involving PWC still exceeded those involving conventional boats.

Since changes in law noted earlier in this chapter, the number of PWC-related accidents has decreased substantially in the last six years and the number of PWC accidents per hours under way has been approaching those of traditional vessels, and in 2003, was nearly equal to them. The 2003 data revealed that:

- When controlled for hours under way, there would have been one accident for every 698 traditional vessels operating on California waterways, compared to one accident for every 705 PWC.

Representative Accidents

- Two PWC operators were riding together, on a parallel course. They were trying to converse and maneuvered closer to

each other, but did so unsuccessfully and sideswiped each other. A passenger aboard one vessel sustained a broken leg as a result.

- A PWC operator approached a ski boat in a crossing situation and altered his course in order to cross behind that vessel. He failed to see that the ski boat was towing a tube and struck it. The tuber sustained a severe head injury and a broken elbow.
- An operator was traveling too fast considering her proximity to the shoreline. She attempted to avoid the wake of another vessel and quickly changed course, grounding the vessel. She sustained a broken elbow and the vessel sustained major damage.
- A PWC operator was traveling too fast in a 5 MPH zone. He shut off the engine as he approached shore and then lost steering capability and struck a beached vessel. A person aboard the beached vessel sustained facial and internal injuries.
- The PWC operator executed a donut at a high rate of speed, causing his passenger to lose his grip, fall overboard, and dislocate his shoulder.

Additional Safety Concerns

- Many PWC operators do not realize that when they let off the throttle, they lose steering capability. Numerous accidents have resulted from this lack of knowledge.
- PWC sometimes present a danger to their riders because of the craft's lack of visibility when it capsizes. Riders who are attempting to remount their PWC are often not visible to other watercraft, and are liable to be struck by other vessels.
- Although rare, lanyards sometimes present difficulties for operators. In one case, the operator fell overboard and was injured, rendering him unable to swim back to the craft. Since the lanyard was on his wrist, the passenger was unable to

maneuver the craft to retrieve him. In other cases, lanyards became detached and could not be reattached quickly enough to avoid grounding or colliding with another vessel. These situations are rare, but noteworthy.

D. Accidents Involving Water Skiing

In this report, the term “water skiing” refers to all activities involving a vessel towing a person on a towline.

Findings

In 2003, a total of 161 accidents involving water skiing activities were reported to the Department, resulting in 140 injuries and 6 fatalities. The accidents accounted for 17% of all accidents, 28% of injuries, and 10% of fatalities. Water skiing accidents increased 38% compared with 2002 totals.

In recent years, the sport of water skiing has evolved beyond traditional water skiing and now encompasses the towing of inner tubes, wakeboards, kneeboards, wake skates, and air chairs. This year marked the fourth year that accidents involving wakeboards exceeded accidents involving traditional water skiing. In 2003, accidents involving vessels towing inner tubes also exceeded traditional water skiing accidents. Wakeboarding activities were involved in 45% of water skiing accidents, followed by inner tubing (31%) and traditional water skiing (24%).

Time and Location

96% of water skiing accidents occurred between May and September. 67% of water skiing-related accidents occurred in Northern California and 33% in Southern California. The most popular bodies of water were lakes (86%), followed by the Sacramento-San Joaquin Delta (9%) and the Colorado River (2%).

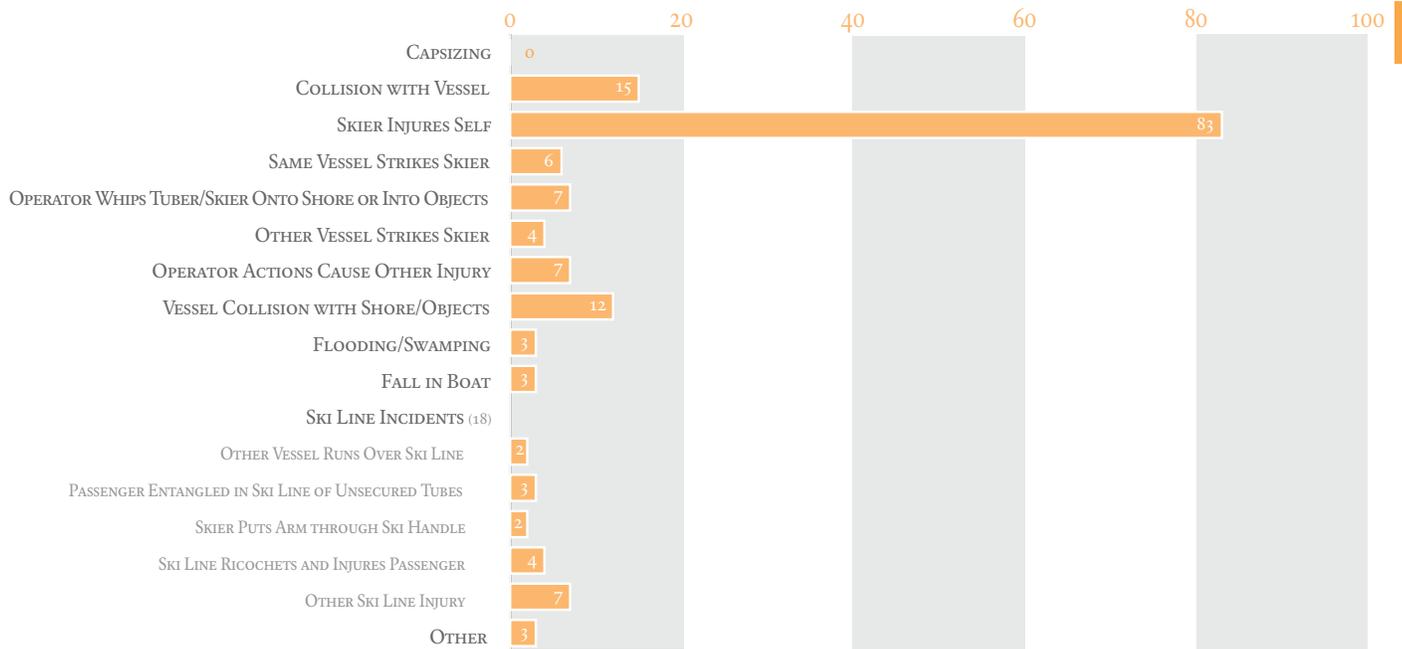
Vessel Type and Length

Most water skiing accidents (90%) involved open motorboats between 16 and 25 feet in length, followed by PWC (4%) and cabin motorboats (4%).

Type and Cause of Accidents

Exhibit II-9 (on page 21) provides a breakdown of the 2003 reported water skiing activities by situation.

2003 CALIFORNIA WATER SKIING ACCIDENTS BY SITUATION



A student learns to wakeboard

Water skiing accidents in which the skier was responsible for the accident accounted for 52% of the accidents. These accidents most often involved inexperienced skiers, who were injured while attempting to stand up or who attempted maneuvers beyond their experience level. Some injuries were caused by skiing with an arm placed through the ski handle.

48% of accidents involved a variety of unsafe behaviors, both by operators towing skiers and also by other vessels operating in the vicinity of vessels towing skiers. A number of accidents involved inappropriate handling of ski lines by operators and skiers. Consistent with other years, the most common situations involved:

- Vessels not keeping appropriate distances from drifting vessels involved in assisting fallen skiers, thereby running over ski lines.
- Operators commencing operation of vessels while ski lines are still in the water, causing the lines to become entangled in the propellers.
- Operating too close to the shoreline while towing tubes, not realizing that the tubers cannot maneuver the tubes and causing them to strike the shoreline.

- Operators towing tubes in donuts to provide the tubers with more exciting rides, but instead, running over the ski lines and pulling the tubes into the propellers.
- Operators failing to notice that other vessels are towing skiers, causing collisions with skiers.
- Operators looking over their shoulders, watching skiers instead of relying on the observers, resulting in collisions with other vessels or the shoreline.
- Operators failing to secure tubes, resulting in their blowing overboard, tangling people in lines or wakeboards so that they fall off racks and injure people.

Representative Accidents

- A passenger was on the swim step attempting to free the ski line which had become tangled in the propeller. The vessel was drifting toward the shoreline and the operator started the engine and attempted to maneuver away from the shore. This caused the person on the swim step to become tangled in the line and then to be jerked overboard and pulled into the propeller.
- The operator was towing a tube at a high rate of speed in an area that was not safe for water skiing activities. He made a sudden sharp turn, swinging the tube into a mooring buoy. The tuber sustained a fractured pelvis and head injuries that rendered her unconscious.
- The victim was learning to water ski and as she stood up, her hand became pinched between the ski and the handle, amputating her finger.
- The operator had the vessel in neutral while a wake boarder climbed back aboard. Waves rocked the vessel and the operator fell against the gear shift, causing the vessel to spring into gear and the wake boarder to be struck by the propeller.

- The operator was towing a wake boarder and the vessel's bow was raised. The operator's vision was blocked by people sitting in the bow. His attention was also partially focused on the wakeboarder. These factors caused him to strike a drifting vessel in his path, injuring three people aboard that vessel.

E. Accidents Involving Youths

Background

Throughout this report, "youths" refers to persons under 18 years of age.

From 1987 through 1997, California law required a person to be at least 12 years of age to operate a craft of more than 10 HP. If an operator was under 12, a person 18 years of age or older had to be on board the vessel.

In 1998, the law changed; it now requires the operator of a craft of more than 15 HP to be at least 16 years of age. Persons 12-15 may operate if a person of at least 18 years of age is attentively supervising aboard the vessel.

Note: Exceptions to this law include the operation of a sailboat that does not exceed 30 feet in length or a dinghy used directly between a moored boat and the shore, or between two moored boats.

Findings

During the 2003 boating season, youth operators were involved in 9% of all accidents, 14% of injuries, and 13% of fatalities.



A sailing lesson

1993 - 2003 CALIFORNIA YOUTH OPERATOR ACCIDENTS, INJURIES, AND FATALITIES

Year	Number of Operators	Number of Accidents	Number of Injuries	Number of Fatalities
1993	77	67	51	7
1994	99	86	63	3
1995	135	110	80	1
1996	136	117	95	3
1997	140	120	87	2
1998	81	70	51	6
1999	73	63	56	2
2000	94	80	72	2
2001	107	88	92	0
2002	90	79	68	2
2003	99	83	72	8

Exhibit II-10 (above) presents an 11-year summary for youth operator accident statistics.

The number of accidents involving youths had remained consistent for three years prior to the 1998 boating season. However, since the previously mentioned operator age limit increase took effect in January 1998, there has been a substantial decrease in the number of accidents involving operators under 16 years of age. The total number is 31% lower than the number reported in 1997.

Of the 99 youth operators involved in accidents, 26 (26%) were under the age of 16, and five were under the age of 12. Of the operators younger than 16 years of age, 54% were operating illegally by either not having an adult on board, or, when the operator was younger than 12, operating the vessel under any circumstance. The percentage of underage operators operating illegally has decreased from 84% in 2002.

Type and Cause of Accidents

Collisions (75%) were the primary type of accident involving youth operators, followed by falls overboard (6%) and persons struck by boats (6%).

The most common cause of accidents involving youth operators was operator inexperience (81%). Operator inexperience was a factor in only 33% of accidents involving operators of all ages. Operator inattention was

the second most common cause, followed by excessive speed.

Vessel Type

The vast majority (89%) of youth operators involved in accidents were operating PWC. An additional 8% were operating open motorboats.

Fault Assessment

Youth operators were involved in 62 collisions with other vessels. Most of these collisions (74%) involved youth operators colliding with adult operators. Youth operators were exclusively at fault in 39% of these collisions, compared to 30% for adult operators. An additional 24% of accidents between youth and adult operators involved shared fault.

Representative Accidents

- A 14-year-old operator was operating without an adult on board. He retrieved a ball for a swimmer in the water and as he approached her, his vessel struck her in the head and neck, causing spinal, neck, and head trauma. Both the operator and his father received citations.
- Two 15-year-old PWC operators were riding together, one in front of the other. Operator 1, who was in the lead, swerved to avoid an approaching vessel



*Law enforcement patrolling
the San Francisco Bay*

and Operator 2, who was following at an unsafe distance, could not avoid rear-ending the other boat. Operator 1 sustained a head injury resulting in temporary amnesia.

- A 17-year-old operator was overtaking a second vessel which sprayed water in his eyes, causing him to misjudge his distance from Vessel 2 and cause a collision. Both occupants of Vessel 2 sustained multiple contusions.
- A 16-year-old PWC operator decided to spray down friends on another PWC. He misjudged his speed and distance and collided with the second vessel. The passenger aboard Vessel 2 sustained internal injuries and both vessels sustained major damage.
- A 16-year-old operator of an open motorboat, trying to assist some people whose canoe had capsized, approached at too great a speed and ran over one person with the propeller.

Additional Safety Concern

Very young children riding on PWC can present serious safety problems. While riding in front of an operator, a child has easy access to the vessel controls and can easily manipulate them. Such situations have resulted in accidents. Seating a young child behind a PWC

operator is unsafe as well, because he or she can easily fall overboard.

Additionally, a lanyard was left attached on a drifting, unoccupied PWC. A small child playing in the area climbed aboard, pressed the start button and shot across the water, striking a swimmer, who later died of serious head injuries.

F. Fatal Boating Accidents

Findings

In 2003, 61 fatalities occurred on California waterways. This represents 6.3 fatalities per 100,000 registered vessels. The number of fatalities increased from 53 in 2002 (5.9 per 100,000 registered vessels).

Type and Cause of Accidents

The most common type of fatal accident involved vessels capsizing (30%) and falls overboard (23%). Operator inattention (36%), operator inexperience (31%), hazardous weather/water conditions (25%) and excessive speed (18%), were the primary causes of fatalities. 61% of the victims drowned. Of that group, 68% were not wearing a life jacket.

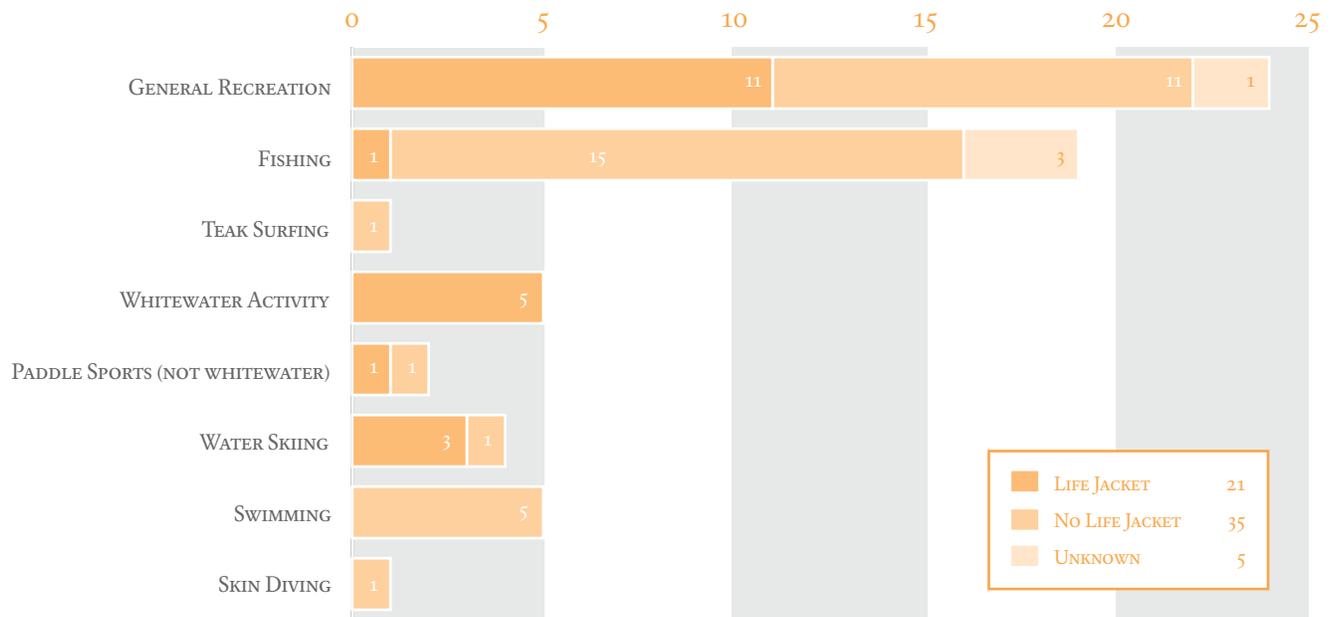
Time and Location

The largest number of fatalities occurred in June. 34% of fatalities occurred during the off-season of October through April. 54% of fatalities occurred during weekends. 46% of fatalities occurred on lakes, 26% occurred on oceans/bays, 20% on rivers throughout the State (excluding the Colorado River), 5% occurred in the Sacramento-San Joaquin Delta region and 3% on the Colorado River. 67% of fatalities occurred in Northern California, compared with 33% in Southern California, unlike the 2002 boating season in which fatalities were nearly evenly split between the two regions.

Vessel Type and Length

One-third (33%) of the vessels involved in fatal accidents were open motorboats, followed by PWC (26%), paddle craft (17%), and cabin motorboats (15%). Even though PWC were involved in 27% of all accidents, they were not involved in as many fatalities, although they were involved in significantly more fatalities than previous years. PWC operators are more likely to wear life jackets, which may explain the lower fatality rate.

2003 CALIFORNIA BOATING FATALITIES BY TYPE OF ACCIDENT AND LIFE JACKET USAGE



Nearly all vessels involved in fatal accidents were less than 26 feet in length (89%).

Victim Activity

Exhibit II-11 (above) presents boating fatalities by type of activity and life jacket usage.

PWC-Related Fatalities

Fatal accidents involving PWC increased from seven in 2002 to 12 in 2003, the highest on record.

50% of the accidents involved collisions with other vessels. The majority of these accidents involved operators who were riding together and were not keeping a proper distance between vessels, and some were engaged in horseplay activities. Collisions were followed by accidents involving falls overboard, (17%) and PWC operators striking persons in the water (17%).

33% of all PWC fatalities in 2003 involved horseplay activities, the majority of which resulted in collisions with the other PWC riding with them.

The largest number of operators involved in fatal PWC-related accidents were in the 11-20 age group. All occurred between May and September and 58% occurred on the weekends.

Fishing-Related Fatalities

Fishing-related fatalities accounted for 31% of boating fatalities in 2003. Of these victims, 89% drowned and of that group, only one victim was wearing a life jacket.

The majority (58%) of victims of fishing-related accidents were boating in Northern California. The most common location of these accidents were northern lakes, followed by coastal areas and northern rivers.

The majority of the fishing-related fatalities occurred as a result of vessels capsizing (58%) or victims falling overboard (32%).

Carbon Monoxide-Related Fatalities

The inhalation of carbon monoxide fumes was a factor in four fatalities in 2003. During the last several years, some victims have died as a result of carbon monoxide poisoning. Dangerous behaviors include:

- Leaning over the stern of the vessel while the engine is engaged
- Teak surfing (body surfing by holding onto the swim step of a vessel that is under way and then letting go and surfing the vessel's wake.)

- Improper ventilation in an enclosed cabin
- Swimming near the stern of a vessel whose engine is engaged.

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Boating fatalities involving carbon monoxide may be much higher than reported. In the past, some drowning accidents thought to be swimming-related may have involved carbon monoxide. The Department is increasing educational efforts to educate boaters and accident investigators about carbon monoxide in the boating environment.

Representative Accidents

- The occupants of a vessel were fishing and had been drinking. A very drunken passenger stood up, causing the vessel to capsize. Both he and a passenger who had not been drinking drowned as a result of his actions.
- The operator of a ski boat was towing a person on a tube. Instead of relying on the observer, the operator turned around to watch the skier, and struck a second vessel that was idling in his path, killing a passenger.
- Two PWC operators were boating together. One operator decided to spray down the second vessel and in doing so, turned so sharply that he spun around and came to a stop in the path of the second vessel. Operator 2 was blinded by the wall of water caused by this maneuver and stuck the Vessel 1. Operator 1 sustained blunt force trauma to his chest and neck and died from his injuries.
- A motorboat operator and two passengers were fishing along the coast. The operator failed to notice that the vessel drifted into the surf line, causing the vessel to capsize. Only the child aboard the vessel was wearing one. A Good Samaritan assisted the passengers to shore but the operator drowned. Both survivors were treated for hypothermia and the surviving adult needed additional hospital treatment for injuries related to near-drowning.



Helicopter rescue drill

- A kayaker was negotiating a rapid and his kayak became wedged between two boulders. He fell overboard and became trapped in the churning rapids. He drowned despite his life jacket due to the force of the water.

G. Alcohol Use and Fatal Boating Accidents

Background

In 1987, state law made it illegal to operate a recreational vessel with a blood alcohol level of 0.10% or more. In 1991, the legal limit was decreased to 0.08%. Furthermore, a “boating under the influence” conviction now appears on Department of Motor Vehicles records and can be used to suspend or revoke a vehicle driver’s license.

For the purpose of this analysis, only fatal boating accidents were analyzed for alcohol-relatedness. A person with a blood alcohol level of 0.035% or higher is assumed to be “under the influence.” The National Transportation Safety Board has determined that when the concentration of alcohol in a person’s bloodstream reaches this level, noticeable changes in judgment and operational competency occur.

As was discussed earlier (on page 11), testing was not conducted on all victims due to delayed accident reporting or delayed body recovery, which can alter blood alcohol levels.

Findings

Of the 61 fatalities, blood alcohol information was available in 53 of the cases. Of these 53 victims, ten (19%) had blood alcohol levels equal to or greater than 0.035%.

Type and Cause of Accidents

The majority of alcohol-related boating fatalities were the result of vessels capsizing (40%) and falls overboard (30%). Operator inattention (60%), operator inexperience (50%) improper loading (40%), and hazardous weather/water (30%) were the leading causes of accidents. (Some accidents had more than one cause.)

The majority (80%) of the victims drowned. Of this group, 88% were not wearing life jackets.

Type of Vessel

A total of 11 vessels were involved in these accidents, ten of which were motorized. The two most common types

of vessels involved were open motorboats (45%) and PWC (19%). 91% of all vessels involved were less than 26 feet in length.

Time and Location

Of the ten alcohol-related fatalities, 90% occurred on weekends throughout the year and 80% occurred in Northern California.

Activity

Three alcohol-related fatalities took place during fishing trips, one took place during water skiing activities, and one during a paddling expedition. The rest of the victims were engaged in general boating recreation.

Profile of Intoxicated Boaters

An examination of the ten alcohol-related fatalities reveals that five were operators, three were passengers, one was a water skier, and one a swimmer. As in previous years, all of the passengers contributed to their deaths due to poor judgment related to alcohol consumption. Furthermore, the actions of one intoxicated passenger resulted in the death of a sober passenger.

These findings relating to intoxicated passengers were consistent with

findings from other years. Passengers who are under the influence often put themselves in dangerous positions in the boating environment, engaging in activities such as leaning over or sitting on gunwales or jumping from one vessel to another. Additionally, intoxicated passengers often stand in or move about in vessels, causing them to fall overboard, or the vessel to capsize, placing all aboard



Sober boating message directed at those who fish



Going overboard with alcohol – BAD CALL!

in danger. Persons also swim too close to propellers, causing danger to themselves.

These situations underscore the Department’s long-held view that a sober operator

does not ensure passenger safety. Intoxicated persons in or around vessels are exposed to dangers that would not affect the safety of intoxicated passengers in a vehicle. The “designated driver” concept, which is popular in some boating safety literature, has its roots in automobile safety where the possibility of falling overboard and drowning (or in some years, swimming too close to the propeller) is not a factor. Therefore, based upon the findings of these fatalities and others from other years, the Department recommends that neither operators nor passengers drink alcoholic beverages while boating.

Alcohol-Related Fatalities Involving Motorized Vessels

In January 1986, the Department submitted the *Boating Safety Report* to the California Legislature. This report analyzed alcohol-related boating accidents between November 1, 1983 and October 31, 1985, and concluded that 59% of all fatalities involving motorized vessels were alcohol-related (where testing could be conducted).

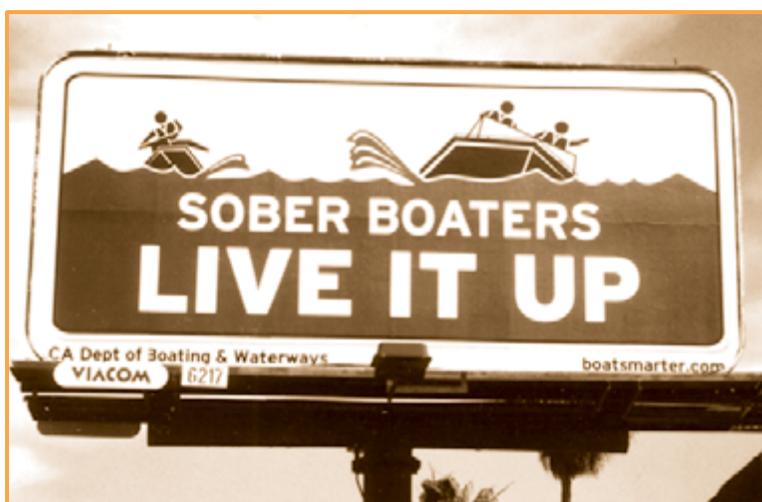
The Department conducted a second alcohol-related boating accident study between January 1, 1993, and December 31, 1994. This study concluded that 23% of all fatalities involving motorized vessels were alcohol related, a significant reduction from the 1986 study.

Table II-1 (below) shows the percentage of alcohol-related fatalities involving motorized vessels (where alcohol-related testing could be conducted) from 1993 to 2002. In 2003, 43 of the 53 victims tested for alcohol-relatedness were killed in accidents involving motorized vessels. Of that group, nine (21%) were alcohol-related.

Table II-1

1993-2003 California Alcohol-Related Fatalities Involving Motorized Vessels

Year	Percentage of Alcohol-Related Fatalities Involving Motorized Vessels
1993	33%
1994	11%
1995	34%
1996	39%
1997	48%
1998	14%
1999	25%
2000	39%
2001	28%
2002	53%
2003	21%



Boating sober enhances your life

BOATING LAW ENFORCEMENT PROGRAMS

In support of the California Department of Boating and Waterways' mission to provide leadership in promoting the public's right to safe and enjoyable boating on California waterways, the Enforcement Unit's primary objectives are:

- To provide for adequate boating law enforcement through local agencies
- To ensure that the enforcement of California boating laws is uniform throughout the State.

The Enforcement Unit meets these objectives through programs that provide officer training and financial aid to local boating law enforcement agencies.



*Law Enforcement
Marine Patrol*

A. Financial Aid Program (Subvention Program)

The purpose of the Boating Safety and Enforcement Financial Aid Program is to provide State financial aid to local governmental agencies whose waterways have high usage by transient boaters and an insufficient tax base to fully support a boating safety and enforcement program. The program is intended to augment existing local resources for boating safety and enforcement activities on California waterways. These funds also support enforcement of state laws, regulations and local ordinances affecting boating activities, vessel inspection, supervision of water events, search and rescue operations, and recovery of drowned bodies.

During 2002/2003, the Department allocated \$8.1 million in funding to 37 counties and two cities for boating law enforcement operations including maintenance, equipment, and personnel costs.

Exhibit III-1 (on page 30) presents a summary of services supported during this period by the financial aid program.

Boating law enforcement officers provide important safety education to the boating public. The Department's partnerships with the law enforcement community provide the Department with an excellent resource to help educate and communicate with the recreational boater.

In FY 2002/03, law enforcement officers provided boating safety education to nearly 105,000 vessel operators, primarily by means of public contact and verbal warnings, which act as teaching tools to educate boaters and help prevent accidents.

B. Marine Law Enforcement Training Program

In California, boating law enforcement is performed at the local level. This unique and efficient method of serving the recreational boater can present challenges at times.

To ensure that boating law is being properly interpreted and enforced, the Department offers an extensive marine law enforcement-training program. This program services over 100 public agencies tasked with

SERVICES SUPPORTED BY THE 2002/2003 FINANCIAL AID PROGRAM

Regulation Enforcement
 Verbal Warnings 94,287
 Citations..... 5,161
 Physical Arrests 5,544

Boater Assistance
 Persons Assisted 23,919
 Vessels Assisted..... 6,334
 Accident Investigations..... 495

Search and Rescue Operations
 Searches..... 670
 Body Recovery Attempts 94

Education
 Boating Safety Presentations 5,908

Other
 Organized Boating Event Supervision 293

providing public safety on the water. As a result, boaters can expect uniform law enforcement on waterways throughout the State.

In 2003, the Department conducted 23 Commission on Peace Officer Standards and Training (POST) certified classes (832 hours) throughout the State and trained approximately 400 marine patrol officers. Officers learned how to apply a multitude of skills emphasizing their roles of maintaining safety on public waterways. The courses are designed for law enforcement personnel and are taught by law enforcement specialists who bring great expertise and credibility to the training program.

Recent improvement to the Accident Investigation/ Reconstruction (new *Vessel Accident Report Manual*) and Boating Intoxication Enforcement (new *Boating Under the Influence* video) continue to keep California on the cutting edge of marine law enforcement training.

The Department offers training classes in the following areas:

Basic Boating Safety and Enforcement – Newly assigned Marine Patrol Officers are introduced to California Boating law and its interpretation as it pertains to vessel registration, operation and equipment requirements.

Boating Accident Investigation / Reconstruction – Officers develop the ability to understand and practice technical accident reconstruction procedures and how to manage accident scenes.

Boating Intoxication Enforcement – This course updates officers on current laws regarding intoxicated vessel operation, with emphasis on current arrest procedures, chemical testing, report preparation, and courtroom procedures.

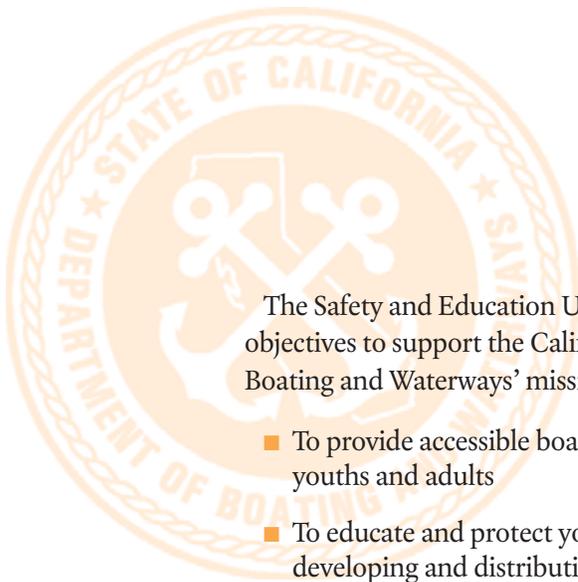
Boating – Basic Skills Training – This course is for marine patrol officers entering the water rescue and enforcement field.

Coastal Piloting and Navigation – Necessary background in the fundamentals of Piloting and Navigation are learned in this course.

Marine Firefighting – This course gives officers first hand knowledge of marine firefighting practices.

Personal Watercraft – Marine Patrol Officers utilizing PWC in patrol operations learn basic slow speed maneuvers, handling characteristics, rescue board usage, and related enforcement issues.

Seamanship – Rescue Boat Operations – Marine patrol officers learn how to handle emergency rescue boats under varying conditions.



BOATING SAFETY EDUCATION PROGRAMS

The Safety and Education Units have two primary objectives to support the California Department of Boating and Waterways' mission:

- To provide accessible boating safety education for youths and adults
- To educate and protect youth operators by developing and distributing boating and aquatic safety material to California schools.

The Department relies on partnerships with several organizations (educational institutions, aquatic centers, the U.S. Coast Guard Auxiliary and the U.S. Power Squadrons) to provide boating safety education. The Department provides educational institutions with free course materials on boating and aquatic safety information. Aquatic centers that offer on-the-water safety education are eligible for Department grants and scholarships. Last year, these partnerships provided 693,000 individuals with boating safety education.



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Students learn techniques through dry-land instruction before heading out on the water

A. Educational Outreach to School-Age Children

AquaSMART

The Department developed the *AquaSMART* curriculum to educate school-age children about water safety. The course is a three-part series for K-2, 3-5, and 6-8 grades. Course materials cover a variety of topics involving boating and aquatic safety. Nearly 500,000 elementary school students benefit from the *AquaSMART* education programs annually.

The Department also disseminates the *AquaSMART Boating* program for high school students. Key safety concerns identified by accident statistics are incorporated into the curriculum. Four types of boating are addressed: personal watercraft, powerboating, sailing, and paddling. The course is available to schools, aquatic centers, and youth organizations. In 2003, over 20,000 high school students were educated using the *AquaSMART Boating* program.

Poster Contest

Public and private school children in the K-8 grade levels are invited every year to participate in the Department's *Safe & Wise Water Ways* poster calendar contest. It is the Department's philosophy that safety lessons learned and practiced at an early age serve to protect individuals throughout their lifetime. A poster contest designed to promote boating and aquatic safety among children is a good way to convey such lessons.

A contest advertisement is sent directly to all California elementary and middle schools. Entry information is also posted on our Department web site, www.boatsmarter.com, and promoted by local radio and/or television stations. Nine statewide winning entries are chosen (one for each grade level) and

featured on an annual poster calendar produced and distributed by the Department.

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Corporate sponsors contribute to the success of this program by providing awards for the winners. In 2003, sponsors included Kawasaki, Northern California Marine Association, Radio Disney, Southern California Marine Association and Yamaha. Prizes are distributed when Department representatives and our boating safety puppet show—*AquaSMART Live!*—personally congratulates the poster contest winners. *AquaSMART Live!* is a professionally produced multimedia program designed to teach students how to stay safe in and around California waterways. Splasher the Frog hosts the show. Besides congratulating the winner and the school, he shows them what can happen if we fail to practice safety in and around the water using the *AquaSMART Stunt Dummies*.

The uniqueness of this program is that it allows different State organizations to work together as a group to reach one goal—boating and water safety. The State provides the information to schools, the teachers become the program directors, and children have the opportunity to become teachers.

The award-winning poster contest is now in its 11th year and most recently won the 2002 National Safe Boating Council's Boating Education Advancement Award. In addition, the Although this program is not mandatory, many teachers find it important enough to incorporate it into their already demanding curriculum requirements.

Interactive Tools

The Department uses SeaMore and Sea Lily, two interactive robotic boats, to communicate boating and water safety information to children and adults at safety fairs, schools, or boating events. These boats are available to boating safety organizations and marine law enforcement agencies.

B. Educational Outreach to the General Public

Aquatic Center Grant Program

The Department provides grant monies to aquatic centers throughout the state to enhance their programs. Grants can be used either for scholarships or for the purchase of equipment to be used in boating and

education classes. This grant program allows the Department to increase the number of boaters who receive hands-on boating safety training.

Aquatic centers, operated by universities, cities, counties, and nonprofit organizations, provide on-the-water boating safety education in kayaking, canoeing, water skiing, power boating, sailing, windsurfing, and personal watercraft operation. These programs target university students, the general public, persons with disabilities, and disadvantaged youths.

During the 2003/04 fiscal year, the Department allocated \$620,000 in grants to 36 aquatic centers, which then provided nearly 120,000 individuals with hands-on aquatic and boating education.

Home Study Course

California Boating: A Course for Safe Boating is a free correspondence course. This course is designed for home study, allowing students to progress at their own pace. This comprehensive course covers State and federal boating law, rules of the road, boat handling, required and recommended equipment, navigational aids, and other topics. The revised course for 2003/3004 contains an optional exam to be completed on a Scantron form and mailed to the Department for grading. Those who pass the course with a score of 80% or better are awarded with certificates that are recognized by many insurance companies for boat insurance discounts. In 2003, about 40,000 copies of *California Boating* were distributed to the general public. Of these, 2,040 exams were completed and mailed to the Department, with a passing rate of 92%.

Many boating organizations, marine dealers, and aquatic centers use the *California Boating* course with their audiences as an introduction to safety for new boaters. Marine law enforcement units also like to hand them out waterside during their patrols and at community service events.

National Safe Boating Week

Each year, the President and the Governor proclaim the week before Memorial Day as National Safe Boating Week. The Department organizes a number of boating safety events during this week designed not only to promote safe boating, but also to promote the sport of boating. Activities featured during this week include:



*Dangerous life jackets
from Trade-In Event*

- Highlights of annual boating accident statistics
- News releases featuring boating safety tips
- Interviews with the media
- Life jacket trade-ins

In 2003, the Department was asked by the National Safe Boating Council to host one of two National events—the other took place in New York City. The National Safe Boating Week kick-off event took place at Burton Chace Park in Marina Del Rey. It included representatives from the National Safe Boating Council, the U.S. Coast Guard, the Department of Beaches and Harbors, the Los Angeles County Sheriff’s Department and Lifeguards and the California Secretary for Resources. Several rescue demonstrations were held, showing the process of rescuing someone out on the waterway. Rescue boats were dispatched to the site, and a helicopter from the Los Angeles County Lifeguards dropped a rescuer into the water to pull the victim to a boat and safely onboard. A number of radio stations conducted live station appearances and a total of 100 announcements were made in the Los Angeles area promoting the event. Other features: two Lakers’ Girls were available to sign autographs, a 10-second ad playing on radio stations throughout the country promoting National Safe Boating Week and the Cal Boating Safety team (who promote boating and water safety) made their debut at this event. Several organizations such as the U.S. Coast Guard Auxiliary, the U.S. Power Squadrons, UCLA’s Aquatic

Center and the Pat McCormick Foundation also aided in the National effort to “Boat Smart. Boat Safe. Wear It.”

Boat Shows

California state law does not require boaters to be licensed, nor does it require them to take a boating safety course. As a consequence, a significant number of accidents and deaths occur. This is why boat shows are so critical.

Boat shows provide an excellent arena in which the Department and law enforcement officials can reduce accident and fatality numbers by educating the public on boating and water safety by handing out pamphlets, scheduling boating safety puppet shows, giving out promotional items with inscribed boating safety messages, or simply answering questions.

Boat shows give boaters the chance to talk to representatives of local law enforcement agencies, their boating associations, and the State, and see them working together to provide safer recreational waterways.

Media Outreach to Boaters

California’s Multimedia Boating Safety Awareness Campaign

Boaters across the state were exposed to safety messages as part of the boating environment on billboards, all-weather posters, and marina trash receptacles and over the airwaves. In fact, billboards and radio messages have been used to educate California boater since 1998.

In the summer of 2003, the outdoor media campaign’s *Road Signs for the Waterways* launched the **Safe Boating is BIG FUN** Safety Team program. From Memorial Day to Labor Day, the **Safe Boating is BIG FUN** recreational vehicle carried the Department’s Safety Team, making appearances at nearly 40 marinas and launching ramps statewide to help raise boaters’ awareness of safety concerns and solutions, and lower the boating accident and injury rate in California. Boating information was distributed along with prizes for playing the Safety Trivia Quiz were distributed at all of the Safety Team’s events.

Because many boaters do not perceive themselves as failing to practice boating safety, the Department developed and continues to place positive messages encouraging defensive boat operation. Just as road signs

on the highways caution drivers to watch out for hazards on the roads, similar signs for the waterways can be used to caution boaters of the hazards that are often present when boating. Many of the signs use humor to convey a safety message in an entertaining manner. In 2003, the Department added messages about safe speed and sober boating to its Road Sign campaign. Overall, the campaign impacted 2 million boaters.

Reinforcement came during the summer's holiday weekends of Memorial Day, Independence Day, and Labor Day on mobile billboards decorated with the *Road Signs for the Waterways*. The traveling billboards placed at marinas and park entrances throughout California reminded boaters of safety on the waterways.

The Department also continued to target anglers with safety messages in popular fishing publications between April and September across the state, reaching nearly 300,000 anglers and boaters.

The campaign's multi-media approach ensures that safety messages reach boaters at the critical moment, just before, and as, they hit the water.

Boating Safety Awareness Radio Campaign

In conjunction with the Department's outdoor media campaign, the Department continues a statewide radio campaign, which highlights the following safety tips:

- The importance of wearing life jackets.
- The dangers of mixing alcohol and boating.
- River safety.
- Environmental Stewardship—Keep it Clean When You Boat.
- Overall “common sense” boating message that combines general boating safety preparedness.
- Responsible operation with an emphasis on defensive driving.
- Taking a boating safety course.

The campaign runs year-round in Southern California and from May through October statewide, targeting California's top ten boating accident areas. Approximately 35 radio stations across the State air safety messages reminding boaters to “Boat Smart from the Start.”



Boat Show display

Televised Message Campaign

In 2003, KCRA/KQCA, the NBC affiliate in Sacramento, partnered with the Department to produce a new 30-second public service announcement for television promoting safe boating and taking a boating safety course in its viewing area in Northern California.

Special Programs

In June 2003, the Department participated in *The Best of California* (TBOC) statewide television series with integrated boating safety messages that encouraged viewers to wear a life jacket while fishing or to be cautious of carbon monoxide poisoning when on a houseboat. In addition to television, the Department also received a one-page micro site on TBOC's Web page. At the site, visitors found safety messages and information on how to receive free online education materials from the Department, along with links to other helpful Websites.

Special Awards

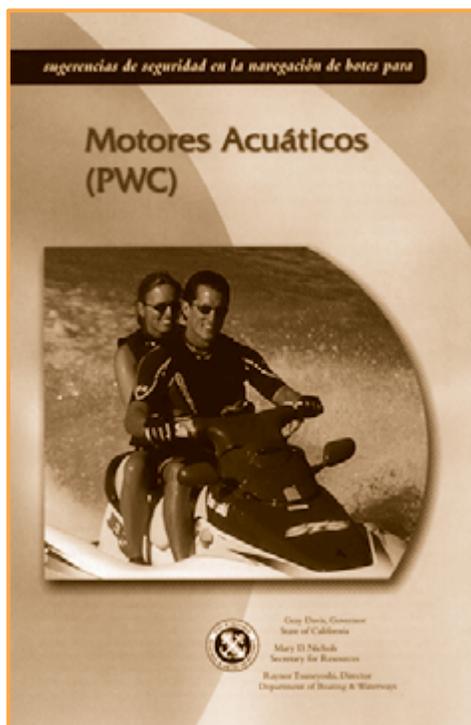
- *Road Signs for the Waterways* won first place in the Media Contest at the 2003 International Boating and Water Safety Summit.
- The National Safe Boating Council awarded the Department a 2003 Silver Burgee for the “Safety Pirate” PSA, which was created by the Department for use as a national public service announcement made available to all states on the Council's Website. This radio spot has also been used internationally in Europe and Australia.

- In 2003, public relations firm Glass McClure received the National Public Service award for their work on the Department’s boating safety campaign.

C. Public Information Education through Pamphlets

In 2003, the Department distributed 1.2 million copies of boating safety literature to the public. The Department’s Public Information Unit publishes and distributes more than 50 different boating safety publications. The publications cover a variety of topics emphasizing boating safety on California waterways and are also available on the department’s websites, www.dbw.ca.gov or www.boatsmarter.com.

Materials focus on subjects such as key safety issues for individual waterways, required equipment, and operational laws. The unit mails these publications directly to individuals and provides various organizations with materials for distribution. Department representatives also attend numerous safety fairs and boat shows, distributing literature and answering questions. Currently, the Department of Motor Vehicles mails the Department of Boating and Waterways’ safety brochures with each new vessel registration and each renewal.

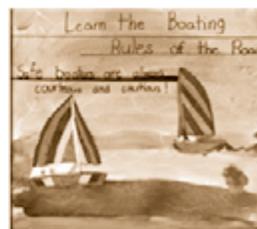


Spanish PWC brochure

D. Abandoned Watercraft Removal Program

The Department administers a program for the removal of abandoned watercraft and substantial navigational hazards from California’s waterways. For fiscal year 2002/03, \$750,000 was available to local agencies. The Abandoned Watercraft Abatement Fund (AWAF) program grants funds to local public agencies for the removal, storage, and disposal of these navigational hazards. In 2003, the Department made the following grants:

Agency Name	Number of Hazards	Amount
City of Long Beach	6 abandoned vessels	\$40,000
Martinez Marina	3 abandoned vessels	\$7,000
City of Berkeley	10 abandoned vessels	\$50,000
City of Monterey Harbor Marina Division	15 abandoned vessels	\$53,000
San Joaquin County Sheriff’s Dept.	15 abandoned vessels	\$148,000
County of Los Angeles Sheriff’s Department	25 abandoned vessels	\$40,000
Port San Luis Harbor District	5 abandoned vessels	\$60,000
Ventura Port District	7 abandoned vessels	\$10,000
Sonoma County Sheriff’s Department/ Marine Unit	7 abandoned vessels	\$30,000
Total Statewide AWAF Grant Funding		\$438,000



Winners – Safe & Wise Water Ways 2004

2003 PROGRAM ENHANCEMENTS, INITIATIVES, AND NEW LAWS

A. New Laws

Boating Safety Course

State law provides that any person convicted of any moving violation in the *Harbors and Navigation Code*, the Federal Rules of the Road and regulations adopted by the Department of Boating and Waterways, while operating a vessel, shall be ordered by the court to complete and pass a boating safety course approved by the Department. Proof of completion and passage of the course must be submitted to the court within seven months of the time of conviction.

PWC Operation

As of January 1, 2003, the prohibition hours for personal watercraft operation have been adjusted to mirror the hours of prohibited water skiing. Personal watercraft operation and water skiing are prohibited from sunset to sunrise.

Life Jacket Use

Persons using any underwater maneuvering device are exempt from wearing a personal flotation device. An underwater maneuvering device is any towed or self-powered apparatus designed for underwater use that a person can pilot through diving, turning, and surfacing maneuvers.

False Search and Rescue Calls

Under existing law, it is a misdemeanor for a person to knowingly make a false report concerning an emergency to a governmental agency where the emergency results in, or could result in, the response of a public official in an emergency aircraft or vessel. The law now further provides that it is a felony for any individual to report, or cause any report to be made, to any state or local government agency that an emergency exists, if that individual knows or should know that the response to the report is likely to cause death or great bodily injury and such injury or death is sustained by any person as a result of the false report.

Vessel Sewage

A state or local peace officer who reasonably suspects that a vessel is discharging sewage in an area where the discharge is prohibited may board that vessel if the owner or operator is aboard, for the purpose of inspecting the marine sanitation device for proper operation and placing a dye tablet in the holding tank.

B. Life Jacket Use

- The Department continues the *Life Jacket Loan Program* aimed at increasing the use of life jackets by everyone in the community planning a boating or other waterside activity. The life jacket loan program promotes the use of life jackets by offering free short term life jacket use for the public. The Department has partnered with fire stations in the Greater Sacramento area to house and check out life jackets to the public. Fire stations have proved to be convenient locations where residents can go to borrow life jackets. One fire station in Elk Grove reported 168 loans to the public from May through August 2003. The success and popularity of the program for this Elk Grove station has prompted them to expand the program to a second fire station in their district.
- The Department continues its *T-Shirt Program*, aimed at increasing the use of life jackets by children. Marine enforcement units, U.S. Coast Guard Stations, U.S. Coast Guard Auxiliary Flotillas, and U.S. Power Squadrons are supplied with T-shirts for children. The shirts are used to reward children under

the age of 12 found wearing their life jacket while boating. This popular program recognizes safe behavior and reinforces continued use of life jackets by this target group.

- The Department continues a radio ad campaign informing boaters of new laws requiring that persons aboard PWC, persons towed behind boats, and children under 12 on vessels 26 feet or less to wear life jackets. This safety message is being aired on radio stations throughout California and targets boaters in areas where high numbers of accidents occur.
- The Department continues placing billboards in areas where accidents are most prevalent and has added to this outreach effort by placing safety messages on posters and refuse barrels at marinas. These “road signs for the waterways,” increase boating safety awareness throughout the State.
- The Department continues promoting the use of life jackets at safety fairs and boat shows throughout the state, through the annual *Safe and Wise Water Ways* poster contest for children, and at National Safe Boating Week events. In 2003, KCRA/KQCA, the NBC affiliate in Sacramento, partnered with the Department to produce new a 30-second public service announcement for television promoting safe boating and taking a boating safety course in its viewing area in Northern California.
- In 2003, the Department partnered with Infinity Broadcasting, Nor Cal Water, and AM/PM Mini-Marts to remind their collective clients in Northern California to “Get Hooked on H2O” and “Boat Smart from the Start...Wear Your Life Jacket.” An estimated 12 million impressions were made on clients as the messages traveled the airwaves and were viewed at purchase points.

C. Personal Watercraft

- The Department distributes a short course on PWC operation and safe boat handling, and last year, made it available online. The course is intended for PWC operators of all ages and is available to the general public. It is designed so that it can easily be incorporated into existing safety programs offered by organizations such as the U.S. Coast Guard Auxiliary, the U.S. Power Squadrons, marine law enforcement agencies, and aquatic centers. There is a 20-question exam at the end of the booklet to self-test on the material covered. The promotion of safe operation of PWC is a component of the Department’s outdoor media campaign. This basic course does not earn

a certificate, but is simply a tool to introduce new PWC operators to laws, requirements, and important safety issues associated with their vessels. Those who complete the quiz online are rewarded with access to some boating-themed screensavers.

- The Department continues to offer a PWC-handling course specifically for law enforcement. This course has been P.O.S.T.-certified.
- The Department continues a radio ad campaign informing boaters of the new laws requiring that persons aboard PWC wear life jackets. This safety message is being aired on radio stations throughout California and targets boaters in high accident areas.

D. Youth Operator Safety

- The *AquaSMART Boating* program for high school students continues to be distributed to schools throughout California. This course incorporates key safety concerns identified by accident statistics. Four types of boating are addressed: personal watercraft, power boating, sailing, and paddling. The course is available to schools, aquatic centers, and youth organizations.
- The curriculum for youth programs includes information on the dangers of alcohol and drug use, especially when boating. Zero tolerance is emphasized anyone engaged in aquatic recreation.

E. Alcohol

- The Department’s radio campaign continues to promote the dangers of drinking alcohol while boating. This safety message is airing on radio stations throughout California and targets boaters in areas with the highest accident rates.
- The Department continues to notify law enforcement agencies statewide about alcohol-related fatalities and encourage them to strengthen their educational and enforcement efforts in this area. The Department reinforces this message at all of its law enforcement training classes.
- The Department’s “Get H2Ooked on Sober Boating” T-Shirt promotion continued at boat shows and other outreach venues throughout the state.

F. Carbon Monoxide Education

- In 2003, the Department produced a brochure to educate boaters of the dangers of carbon monoxide poisoning which also includes a warning sticker for a boat’s transom. The brochure is distributed at

boat shows, safety fairs, and other events and is also available on the Department's Website.

- The Department is producing both a TV and a radio PSA to increase awareness of carbon monoxide poisoning.
- The Department is improving the collection of carbon monoxide boating accident data by increasing training to law enforcement officers who investigate accidents.

G. Improved Internet Access

- The *AquaSMART* Internet education pages (www.dbw.ca.gov/aquasmart) supplement the Department's *AquaSMART* curriculum series. The design is bright and content addresses boating safety in a fun manner, as the web page is targeted primarily at children exposed to the *AquaSMART* curriculum series. The secondary audience includes teachers, parents, and other boaters. A link to the Department's homepage is provided for persons seeking more detailed boating safety information.
- The Department experiences continued success with its web page, www.boatsmarter.com. This web page is publicized through the Department's radio and outdoor media campaign and is easy to remember. Visitors to the site can click on "road sign" billboards for more information on boating safety.

H. Other Safety Enhancements

- In 2003, the Department partnered with Infinity Broadcasting, Nor Cal Water, and Chevron to remind their collective clients/audiences in Northern California to "Get Hooked on H2O" and "Boat Smart from the Start...Wear Your Life Jacket." During the months of May, July, and August, radio stations KNCI and KHTK ran radio announcements over three-week spans for the major holidays of Memorial Day, Fourth of July, and Labor Day. These announcements proclaimed boating safety messages and directed listeners to Chevron stations to obtain safety literature and purchase Nor Cal water. Three live remote broadcasts were sponsored by the Department and produced by KNCI to take boating material to the public and offer a life jacket trade-in – old for new. Chevron stations in the Greater Sacramento area offered the pamphlet, "ABC's of California Boating Law," to their customers and hosted the live remote broadcasts. An estimated 30 million message impressions were made in this

partnership via the airwaves and were viewed at purchase points.

- In 2003, the Department sponsored 40 *AquaSMART Live* performances. The traveling puppet show is hosted by Splasher the Frog, mascot of the *AquaSMART* program. *AquaSMART Live* has two programs for grades K-3 and 4-6. The K-3 program uses stunt dummies to demonstrate to the children what can happen when you do not play safe in and around the water. The 4-6 program is a game show format where two teams compete for prizes while learning how to stay safe in and around the water.
- To further enhance river safety, the Department offers an assortment of river guides to California rivers that have been designated as boating trails. The Department continues to warn boaters about hazardous water conditions on California's rivers, especially during spring and early summer when water levels are high from snow pack run-off.
- The Department's new water skiing safety video is now in distribution. The updated version includes not only traditional water skiing activities, but also wake boarding, knee boarding, inner tubing, and air chair activities.
- The Department continues outreach efforts to anglers by placing safety articles and messages in fishing publications throughout the state.
- The Law Enforcement Unit continues to conduct the Accident Reconstruction Course on the water, providing staged accidents for reconstruction by students. Many law enforcement officers believe this course helps them reconstruct accidents more accurately.
- The Department produced two new radio PSAs for its "The Safety Pirate" radio series on angler safety and Homeland Security for distribution through the National Safe Boating Council.
- A television PSA on boating and alcohol was distributed to TV stations throughout the state.

Spanish Outreach Campaign

California has a large Spanish-speaking population who account for a disproportionately high number of water-related accidents. In order to address this problem, the Department created a Spanish Website, an alcohol public service announcement, and translated some of the Department's publications into Spanish: 1) ABC's of the California Boating Law, 2) Drowning Prevention Checklist 3) Facts About Boating and Alcohol, 4) Rescue

Breathing Card, 5) Safe Boating Hints for Personal Flotation Devices, and 6) Safe Boating Hints for Personal Watercraft.

40

The Spanish Website and the alcohol PSA were created to enhance the effectiveness of the Department's Spanish outreach campaign. The Website contains information such as: 1) How to register your boat, 2) boating law, 3) safety hints, 4) resources, 5) how/when to report an accident, 6) rules of the road, and 7) the marking system. There is also a link to the Department of Motor Vehicles and the Governor's Spanish Websites.

By reaching this Spanish-speaking population, the Department hopes to reduce the number of water-related accidents in which they are involved.

Life Jacket Trade-In

The life jacket trade-in program continued in grander scope for National Safe Boating week of 2003. The Department partnered with Infinity Broadcasting and six greater Sacramento area Sam's Club stores to host consecutive trade-ins. Infinity Broadcasting aired promotion for the events on their family of stations in the Sacramento area market and held a live remote broadcast at one of the stores during the event.

Life jackets were given free to the first 50 persons at each store who brought in their old deteriorated life vests during a two-hour window. The adult-sized jackets were donated by Mustang Survival. Children's life jackets were obtained at discounted rates from Stearns, FINIS, and K-Mart. Safety experts at each location examined the life jackets brought in to determine if they were serviceable or in need of replacement. A limit of one free life jacket was allowed per family while supplies lasted. For others, Sam's Club handed out \$10 discount coupons toward the purchase of a new life jacket.

A second life jacket trade-in with Infinity Broadcasting, was conducted at a Folsom Lake media day the Department participates in each Memorial Day with California State Parks. In addition to the trade-in and broadcast, there was an information booth on boating safety, rescue demonstrations by marine law enforcement and firefighters, vessel safety checks by the U.S. Coast Guard Auxiliary, and a simulated vessel rescue with an airdrop demonstration by the U.S. Coast Guard.

A total of 350 new life jackets were exchanged for those found to be unserviceable during these trade-in events.

Curriculum Revision

The Department began revision of its *AquaSMART* curriculum series. The curriculum for Kindergarten-Second Grade was updated with the new title "Champion of the Waterways." *AquaSMART* hero Splasher the Frog guides students through the 10 *AquaSMART* lessons on water and boating safety. The program consists of a video and teacher's guide with reproducible student worksheets. The video is also available in Spanish along with a set of reproducible Spanish student worksheets. The teacher's guide also contains a chart indicating how the lessons fit into the California Curriculum Standards, a recommended reading list, and a list of additional video resources.

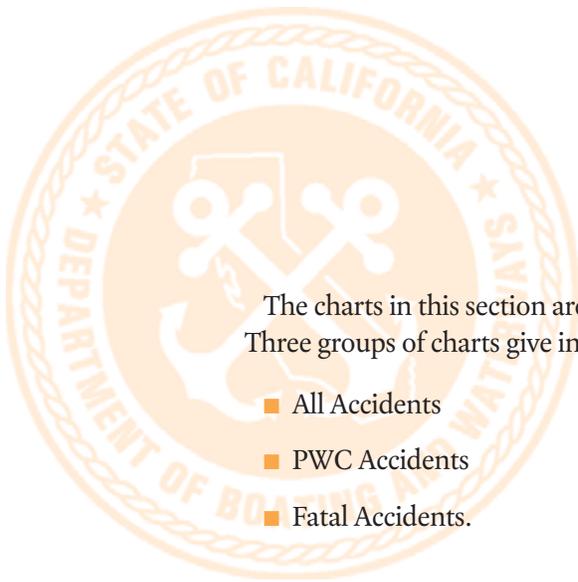
Curriculum materials are made available to schools, youth groups, aquatic centers, and other educators at no cost. Revisions will continue through the series of three elementary school programs and high school program.

ABC Radio San Francisco

The Department ran a San Francisco region summer safe boating campaign from June to August 2003. Three stations – KGO, KSFO, and KMKY (Radio Disney) – were contracted to run boating safety promotional messages on a prime-time schedule. The KGO and KSFO stations showcased a link from their Websites to the Department's Website, generating a million page views each month. Radio Disney featured the Department's material and the *AquaSMART* campaign at three remote appearances. At the three Radio Disney venues, the Department distributed 100 children's life jackets (donated by Marine Max), and copies of the Department's boating safety tips and materials were distributed to visitors of the Radio Disney booth.

Safe Kids Coalition

The Department participates on the Greater Sacramento Safe Kids Coalition under the Drowning Prevention subcommittee. As a river city that also has a number of lakes and the Sacramento-San Joaquin Delta in close proximity, Sacramento has a need to protect its children from drowning when boating or recreating near the water. The Department provides educational materials for outreach to the community and expertise on open water activities and incidents.



SECTION 6

ACCIDENT DATA CHARTS

The charts in this section are designed to provide general statewide information on boating accidents. Three groups of charts give information on:

- All Accidents
- PWC Accidents
- Fatal Accidents.

Charts for All Accidents

Some charts are organized by the number of accidents, which totaled 963. Other charts are organized by the number of vessels involved in accidents, which totaled 1,344. The totals listed on the charts *Type of Accident* (Chart 8) and *Cause of Accident* (Chart 9) exceed the total number of accidents because many accidents fell into more than one category. The chart *Operators Involved in All Accidents by Age* (Chart 6) shows a total of 1,344 vessels. The chart also shows a total of 1,186, which indicates the total number of operators, as 158 vessels involved in accidents did not have operators.

Charts for PWC Accidents

The totals listed on the charts *Open Motorboat/PWC – Type of Accident* (Chart 15) and *Open Motorboat/PWC – Cause of Accident* (Chart 16) exceed the total number of PWC accidents, which was 261, because many accidents fell into more than one category.

Charts for Fatal Accidents

Totals on most of the charts containing information for fatal accidents add up to the total number of fatalities, which was 61. Other charts are organized by the total number of vessels involved in fatal accidents, which was 66. The total listed on the chart *Fatalities by Cause of Accident* (Chart 25) exceeds the total number of fatalities because many accidents involving fatalities fell into more than one category.

CHART 1
ACCIDENTS BY MONTH

Most boating accidents occurred from May through September, with the greatest number occurring in July.

Total Accidents = 963

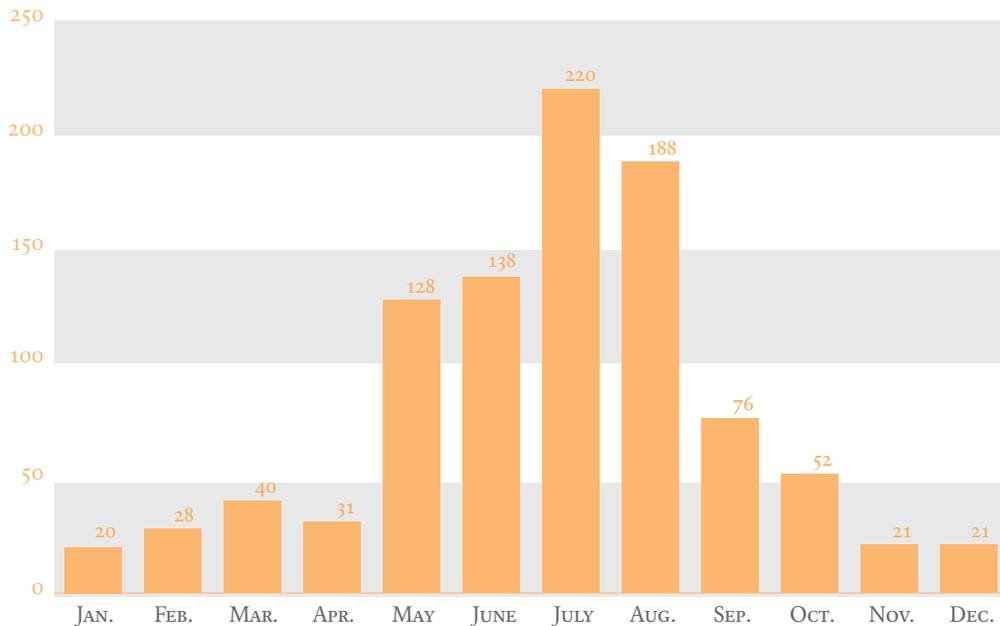
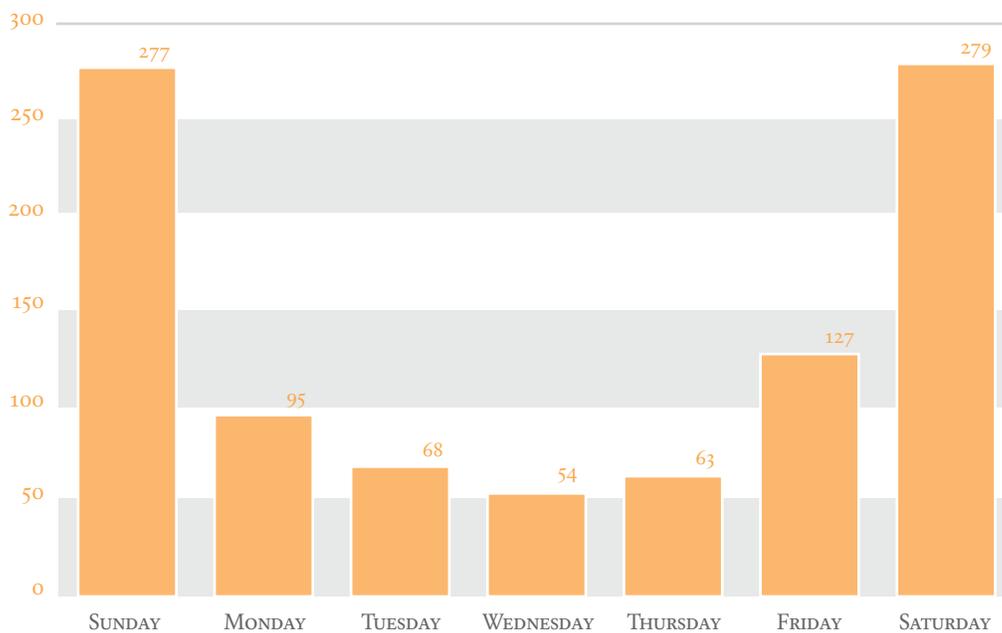


CHART 2
ACCIDENTS BY DAY OF THE WEEK

Total Accidents = 963



58% of boating accidents occurred on weekends (Saturday & Sunday).

The majority of boating accidents occurred between 12:00 p.m. and 6 p.m., with the largest percentage occurring between 2:00 p.m. and 4:00 p.m.

CHART 3
ACCIDENTS BY TIME OF DAY
 Total Accidents = 963

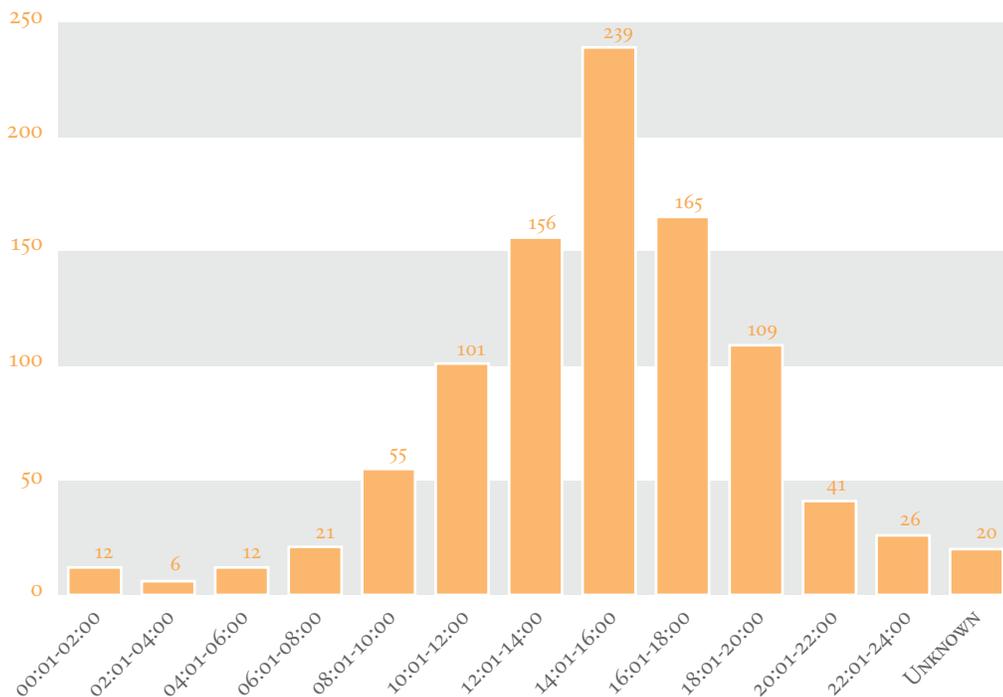


Chart time periods are shown using military time.

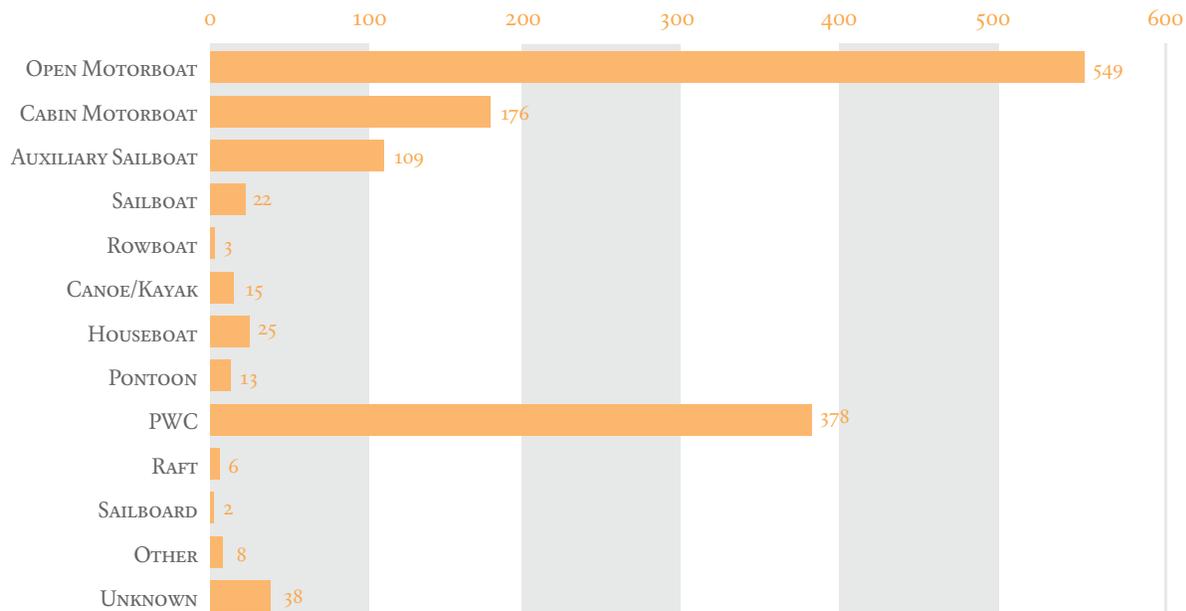


Practicing for a sailboat race

CHART 4
VESSELS INVOLVED IN ALL ACCIDENTS BY TYPE

Open motorboats and personal watercraft (PWC) comprised 69% of all vessels involved in accidents.

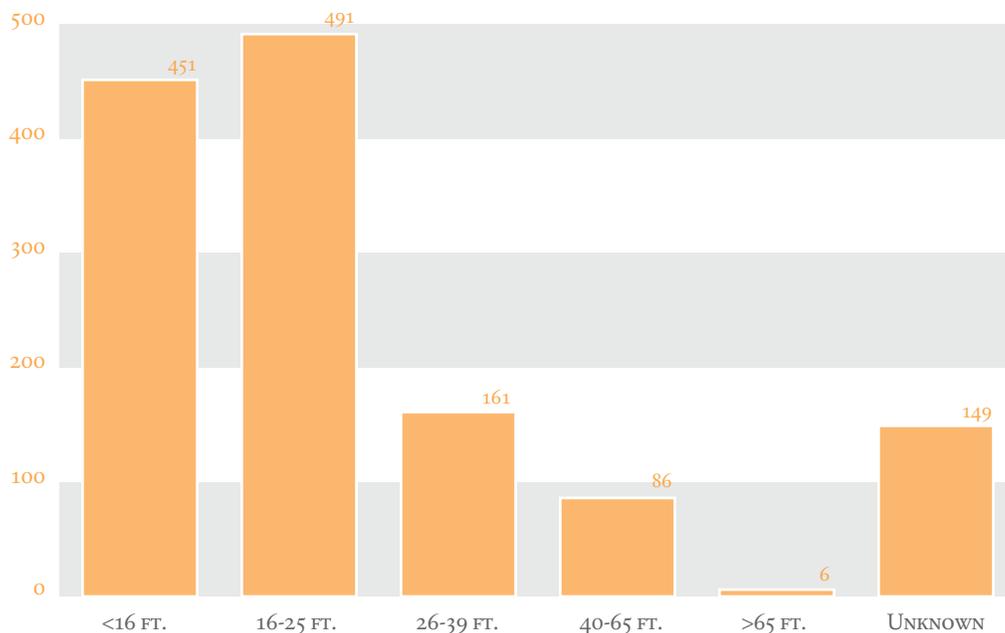
Total Vessels = 1,344



44

CHART 5
VESSELS INVOLVED IN ALL ACCIDENTS BY LENGTH

Total Vessels = 1,344



Vessels 16-25 feet in length were involved in more accidents than any other category, followed closely by vessels less than 16 feet in length. These two categories accounted for 70% of all vessels involved in accidents.

Operators in the 31-40 age group were involved in more accidents than any other age group, followed closely by operators in the 21-30 and 41-50 age groups.

CHART 6

OPERATORS INVOLVED IN ALL ACCIDENTS BY AGE

Total Operators = 1,186
Total Vessels = 1,344

“No Operator” refers to accidents involving vessels where there was no operator present at the time of the 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.

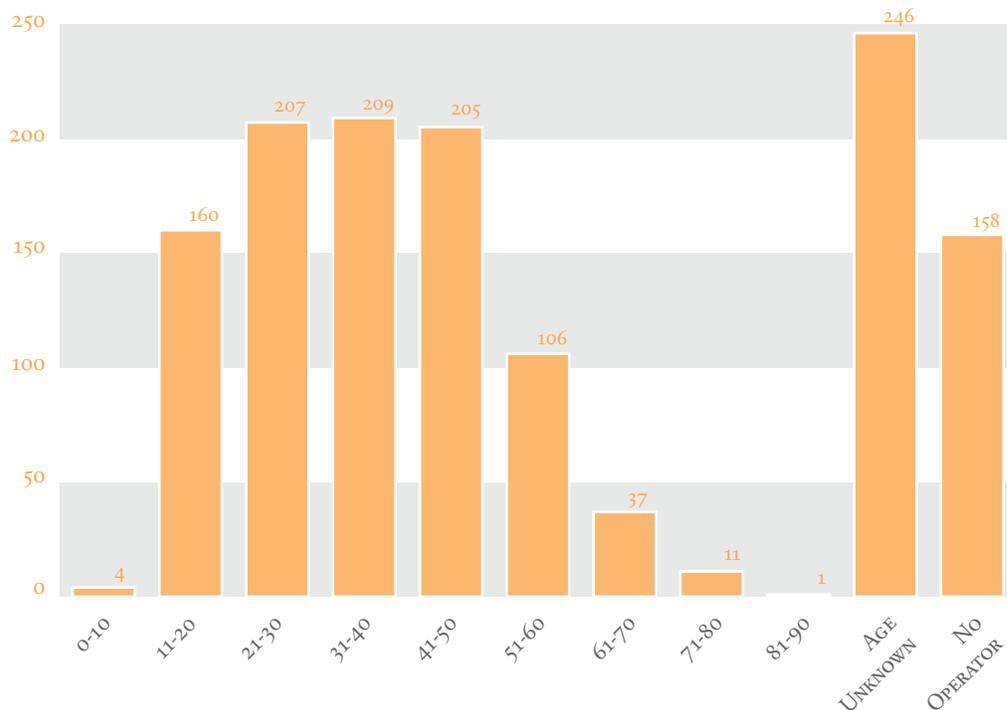
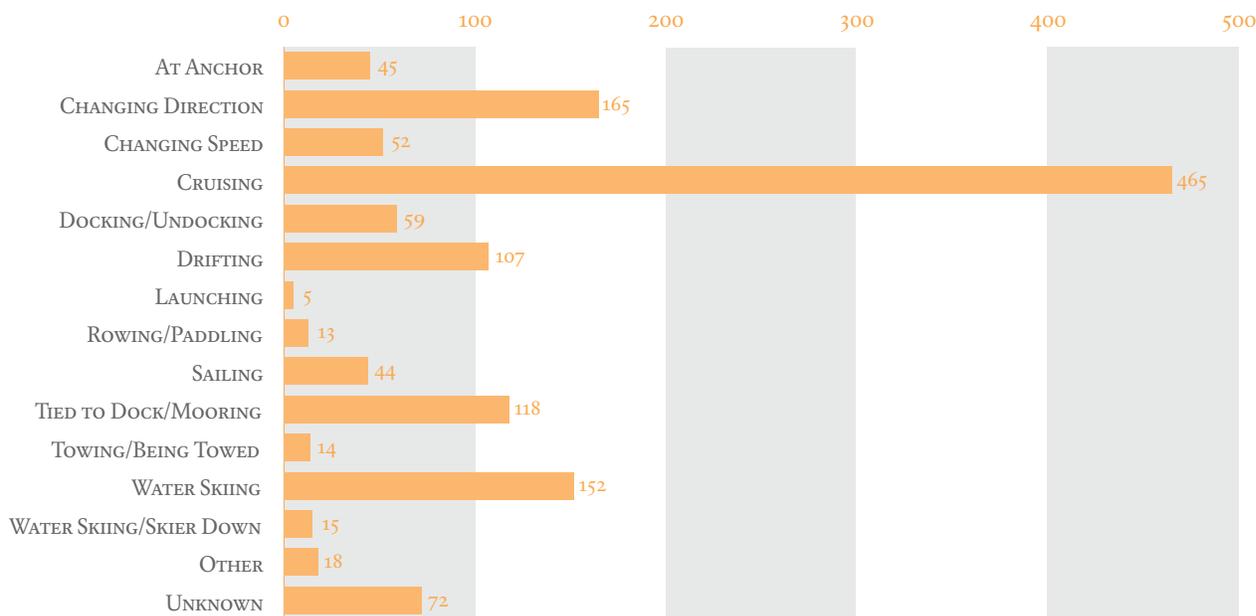


CHART 7

OPERATION AT TIME OF ACCIDENT

Total Vessels = 1,344



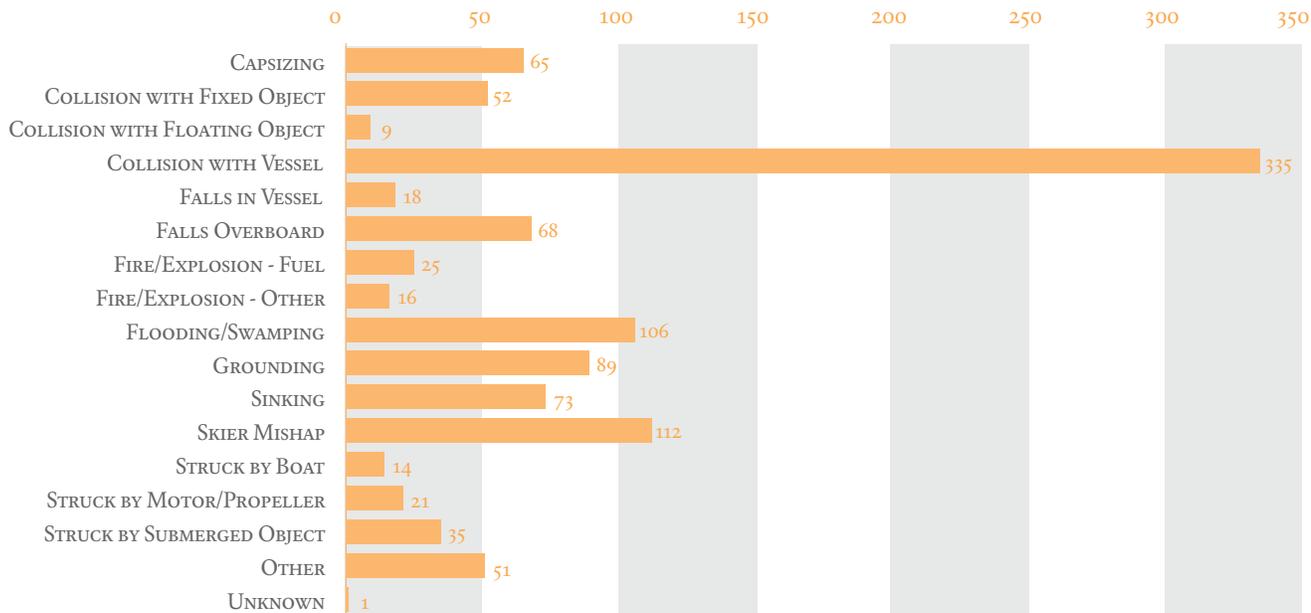
The most common type of vessel operation preceding an accident was cruising.

CHART 8
TYPE OF ACCIDENT

By far, collisions with another vessel was the most common type of accident, accounting for 35% of all accidents.

Total Types = 1,090
Total Accidents = 963

46

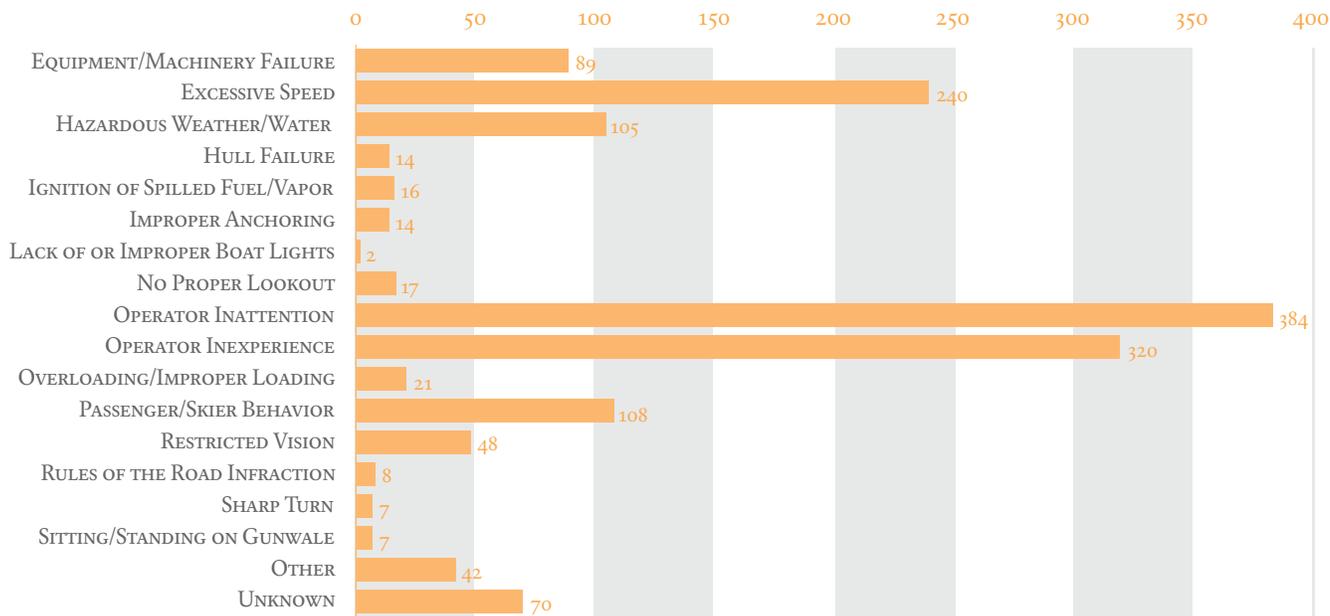


Some accidents are represented by more than one accident type, which accounts for the accident types exceeding the number of accidents.

CHART 9
CAUSE OF ACCIDENT

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 categories listed above.

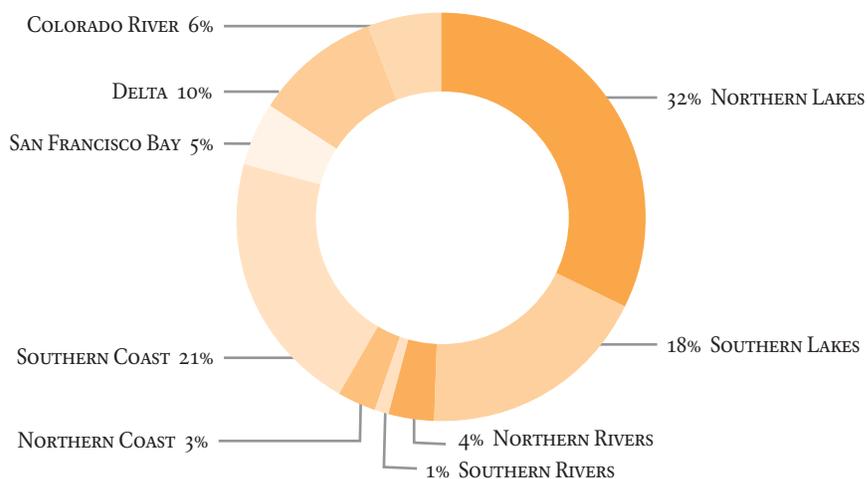
Total Causes = 1,512
Total Accidents = 963



Operator inattention was the most common cause of all accidents (40%), followed by operator inexperience (33%) and excessive speed (25%).

Most accidents occurred on lakes (51%), followed by oceans/bays (24%).

CHART 10
ACCIDENT LOCATIONS
Total Accidents = 963



NUMBER OF ACCIDENTS	
NORTHERN LAKES	312
SOUTHERN LAKES	176
NORTHERN RIVERS	34
SOUTHERN RIVERS	11
NORTHERN COAST	29
SOUTHERN COAST	203
SAN FRANCISCO BAY	48
DELTA	95
COLORADO RIVER	55
TOTAL	963



A student learns to operate a sailboat



Students enjoy a sailing class

CHART 11
WATER SKIING ACCIDENTS

Total Activities = 166
Total Accidents = 161

Wakeboarding accidents accounted for 45% of all water skiing accidents, followed by inner tubing (31%) and traditional water skiing (24%).

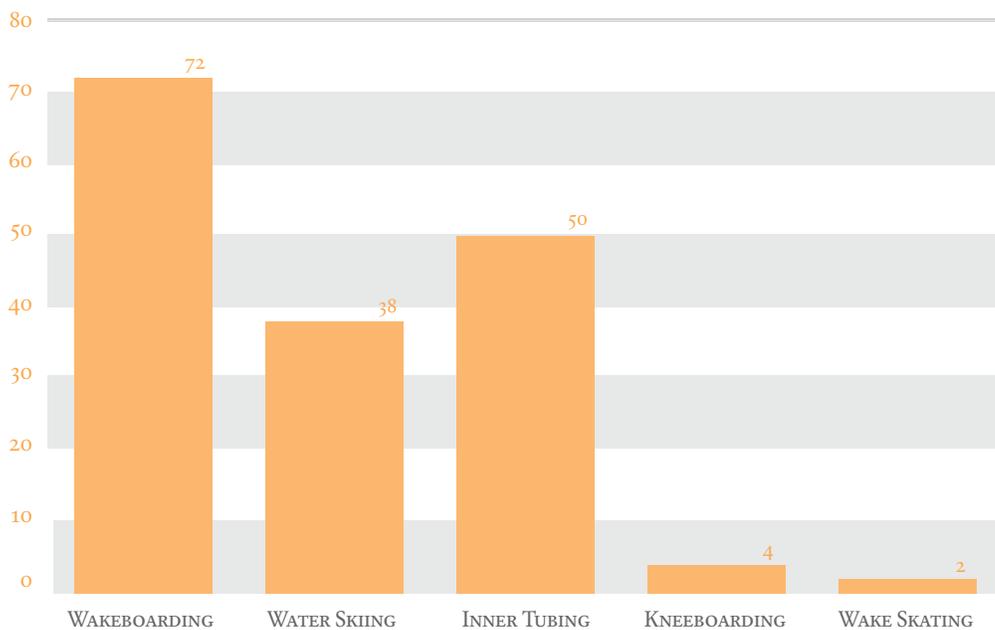
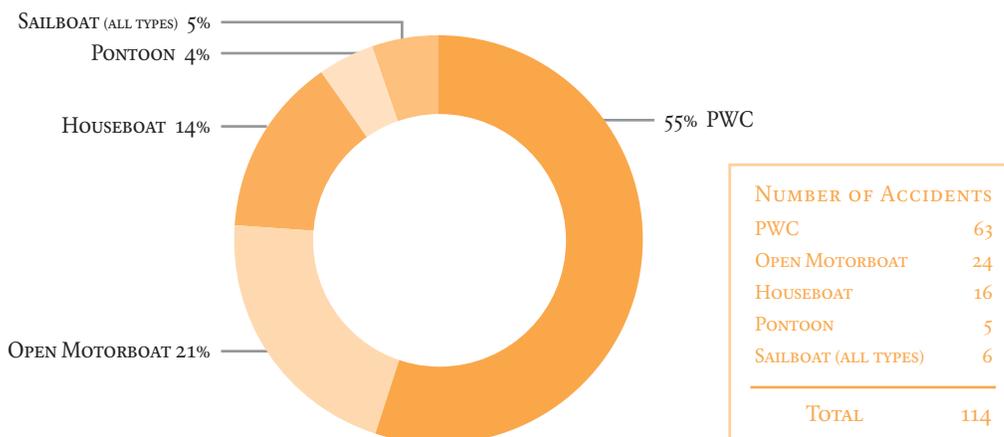


CHART 12
RENTED VESSELS INVOLVED IN ALL ACCIDENTS BY TYPE

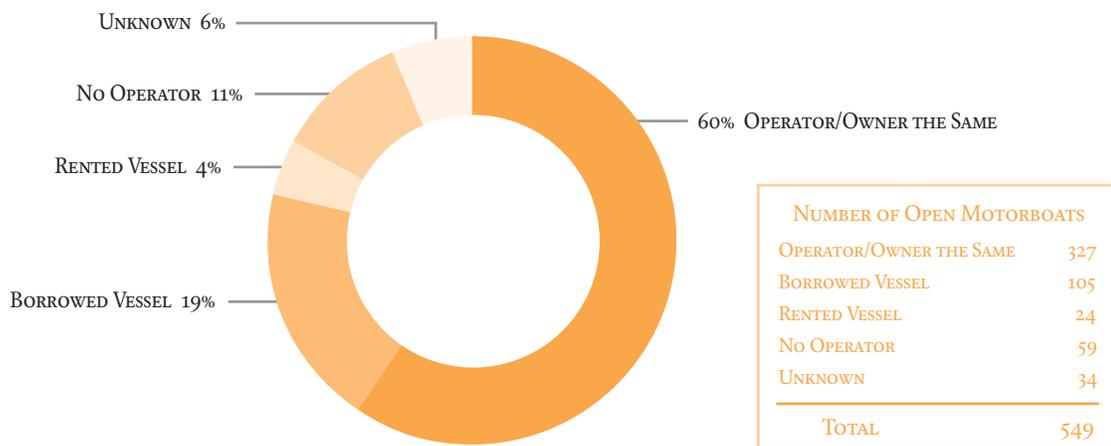
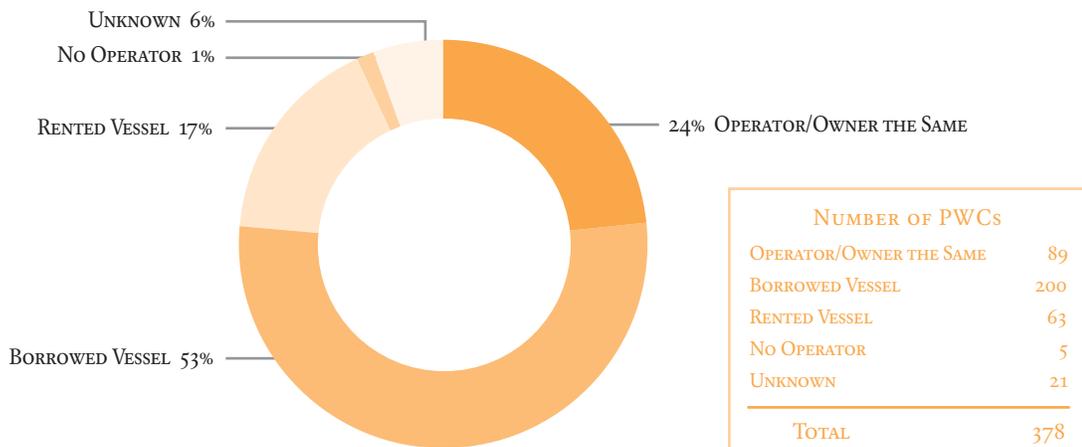
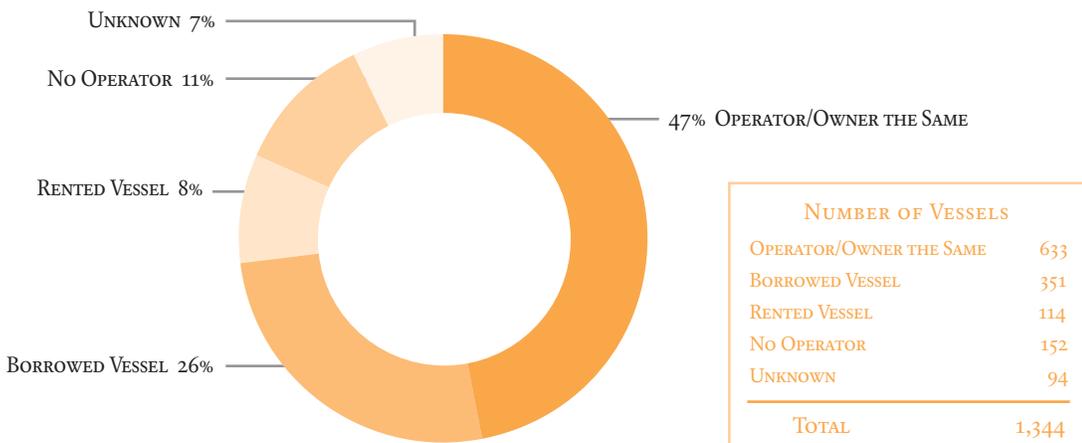
Total Accidents = 114



The majority of rented vessels involved in accidents were PWC.

Most accidents occurred on lakes (51%), followed by oceans/bays (24%).

VESSELS, PWC, AND OPEN MOTORBOATS INVOLVED IN ACCIDENTS



Percentages may not add to 100 percent due to rounding.

CHART 14

OPEN MOTORBOATS/PWC – OPERATORS INVOLVED IN ACCIDENTS BY AGE

Total Open Motorboat Operators = 490

Total PWC Operators = 372

Operators in the 11-20 age group accounted for 35% of PWC operators involved in accidents. Operators in the 41-50 age group accounted for 23% of open motorboats involved in accidents.

“No Operator” refers to accidents involving vessels where there was no operator present at the time of the accident. Most of these vessels were in vessel slips, tied to docks, or moored, and were struck by other vessels. Because PWC do not tend to be housed in slips, due to their small size, the number of vessels in this category is much smaller than the “No Operator” category for overall boating accidents. Some reports submitted to the Department do not include operator age information, as indicated by the “Age Unknown” category.

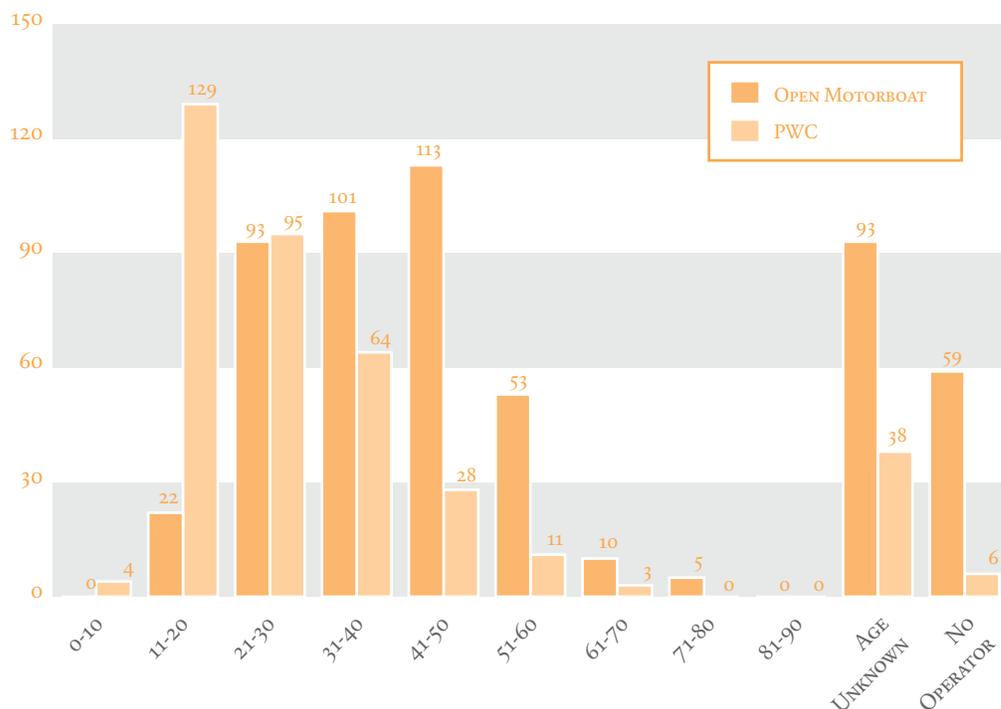


CHART 15

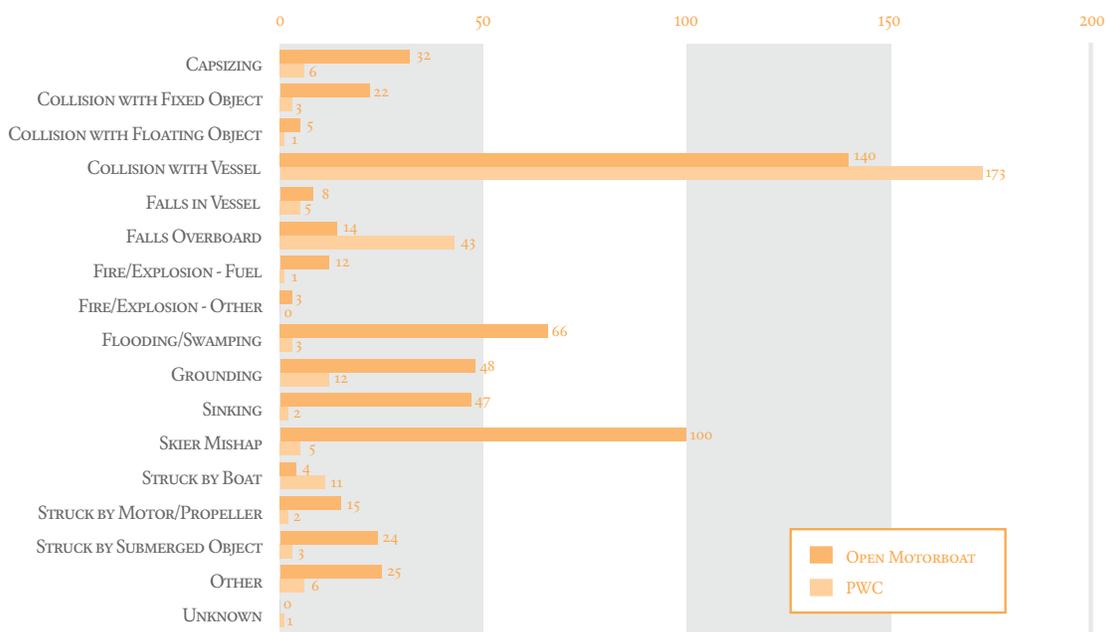
OPEN MOTORBOATS/PWC – TYPE OF ACCIDENT

Total Open Motorboat Types = 565

Total Open Motorboat Accidents = 489

Total PWC Types = 277

Total PWC Accidents = 261



Some accidents are represented by more than one accident type, which accounts for the accident types exceeding the number of accidents. An example of such an accident is when an operator falls overboard and is then struck by another vessel. Such an accident would be represented in both the “Falls Overboard” category and the “Struck by Boat/Propeller” category, since both of these occurrences were significant components of the accident.

Collision with another vessel was the most common type of accident involving both types of vessels.

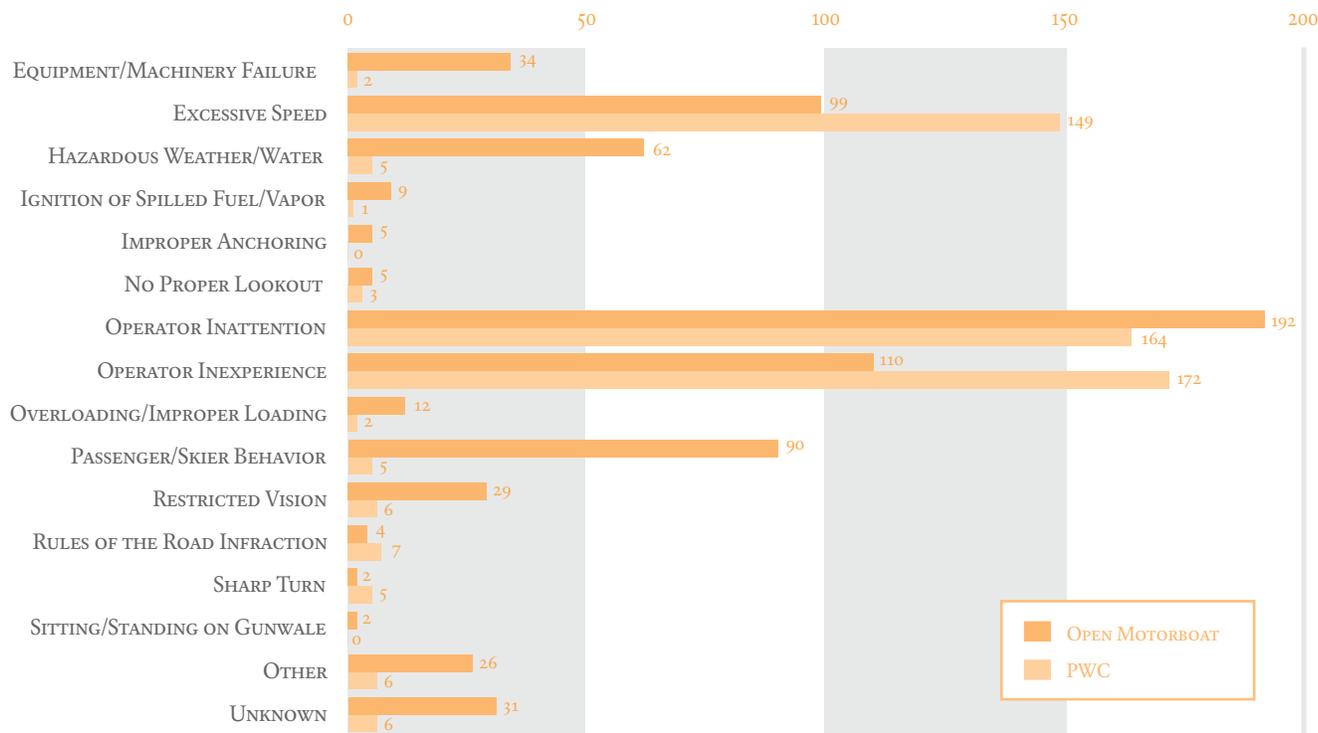
Operator inexperience was the most common cause of accidents involving PWC, occurring in 66% of those accidents. Operator inattention was the most common cause of accidents involving open motorboats, occurring in 39% of such accidents.

CHART 16

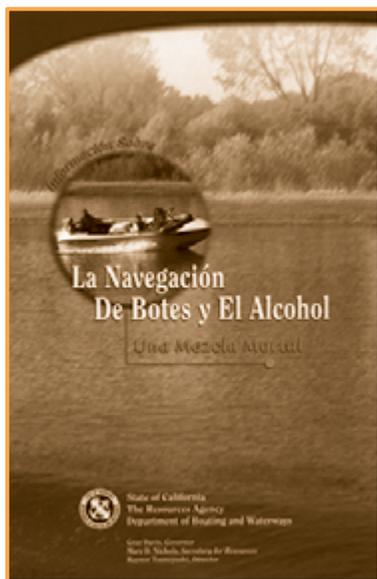
OPEN MOTORBOATS/PWC – CAUSE OF ACCIDENT

Total Open Motorboat Causes = 712
Total Open Motorboat Accidents = 489

Total PWC Causes = 533
Total PWC Accidents = 261



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 categories listed above.



Spanish alcohol brochure



A sailing class in progress

CHART 17
FATALITIES BY MONTH

The largest number of fatalities occurred in June.

Total Fatalities = 61

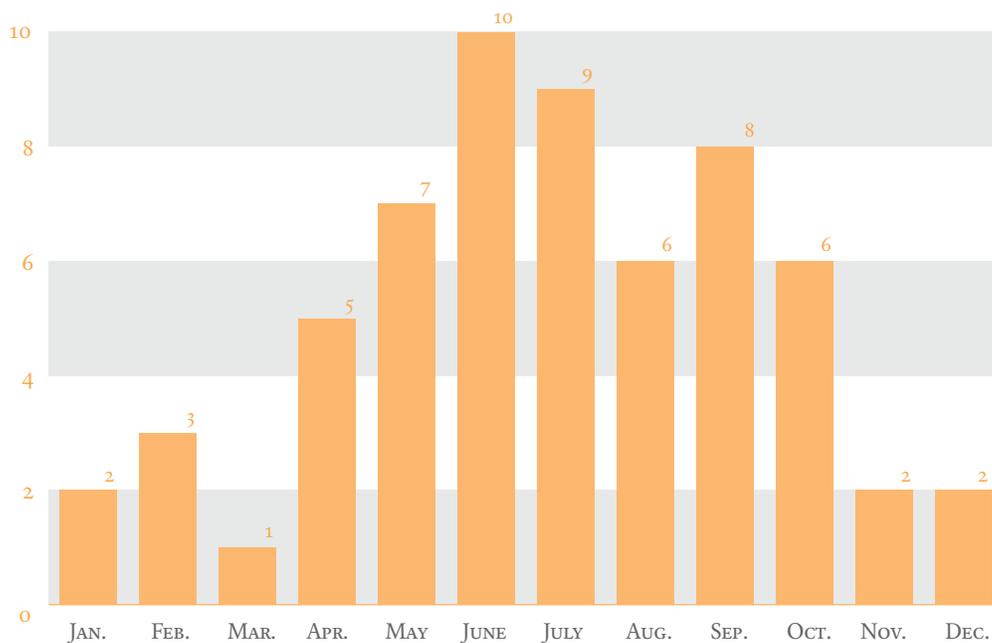
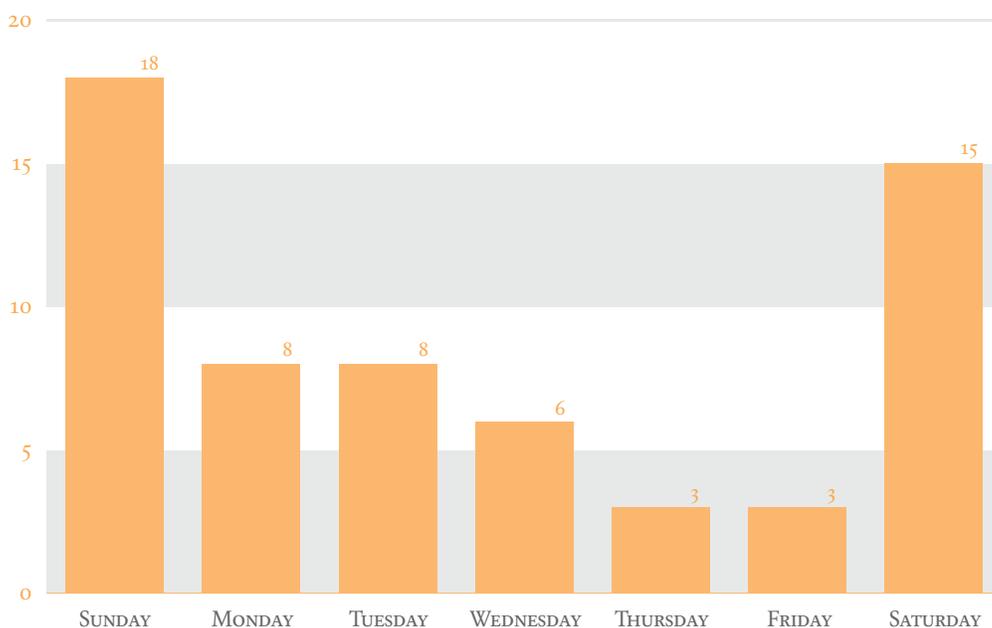


CHART 18
FATALITIES BY DAY OF THE WEEK

Total Fatalities = 61



54% of fatal boating accidents occurred on the weekends (Saturday & Sunday).

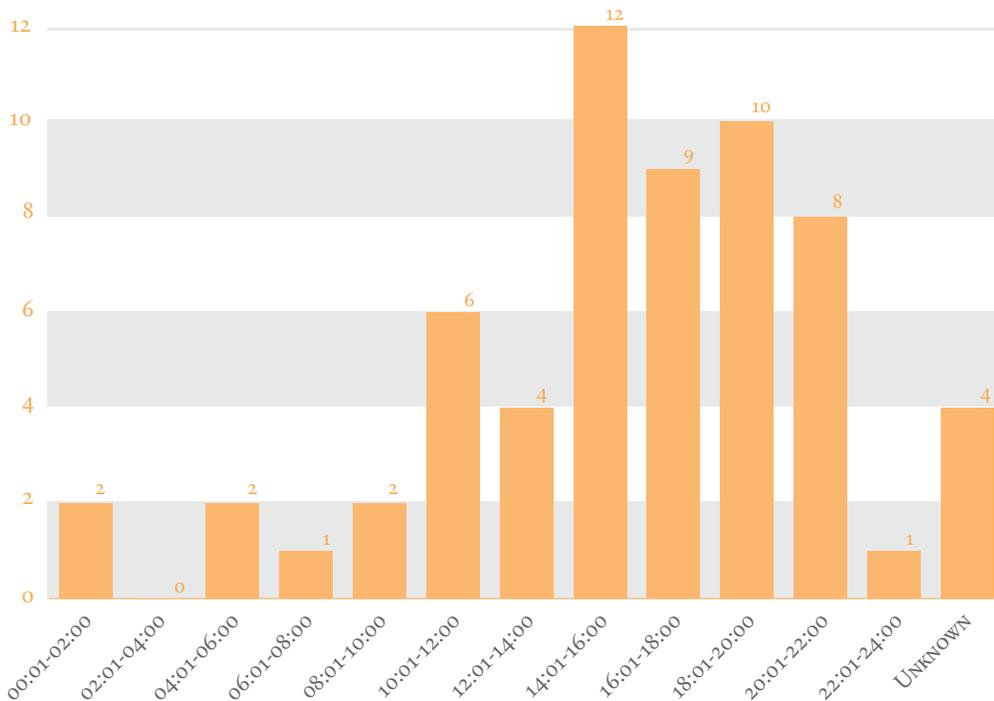


San Diego State University's Mission Bay Aquatic Center teaches Department-sponsored education courses

CHART 19
FATALITIES BY TIME OF DAY

Total Fatalities = 61

Chart time periods are shown using military time.



The largest number of fatalities occurred between 2:00 p.m. and 4:00 p.m.

CHART 20

FATALITIES BY TYPE OF VESSEL

Open motorboats and PWC were the most common types of vessels involved in fatal boating accidents.

Total Vessels = 66
Total Fatalities = 61

54

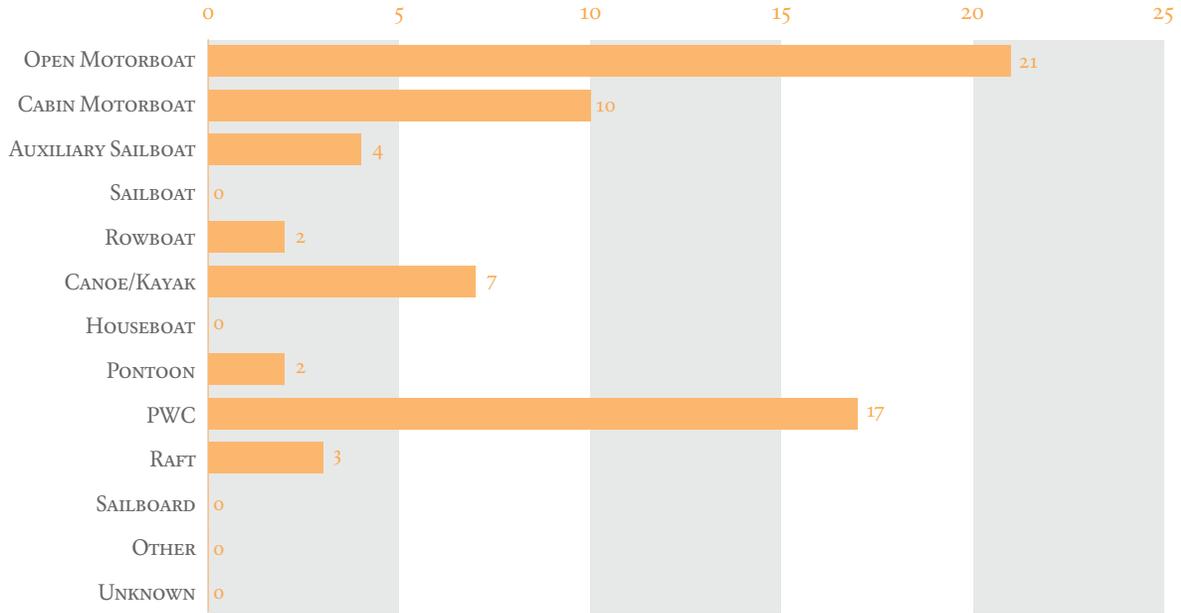
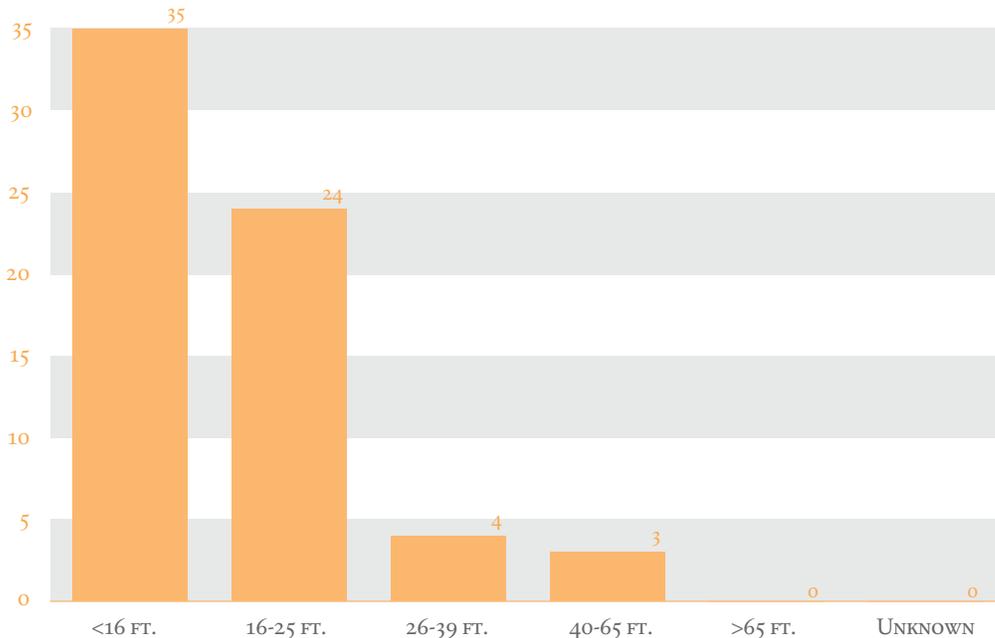


CHART 21

FATALITIES BY LENGTH OF VESSEL

Total Vessels = 66
Total Fatalities = 61



The majority of vessels (89%) involved in fatal boating accidents were less than 26 feet in length.

Operators from the 41-50 age group were involved in more fatal boating accidents than any other age group, followed by operators in the 21-30 age group.

CHART 22

OPERATORS INVOLVED IN FATAL ACCIDENTS BY AGE

Total Vessels = 66
 Total Operators = 64
 Total Fatalities = 61

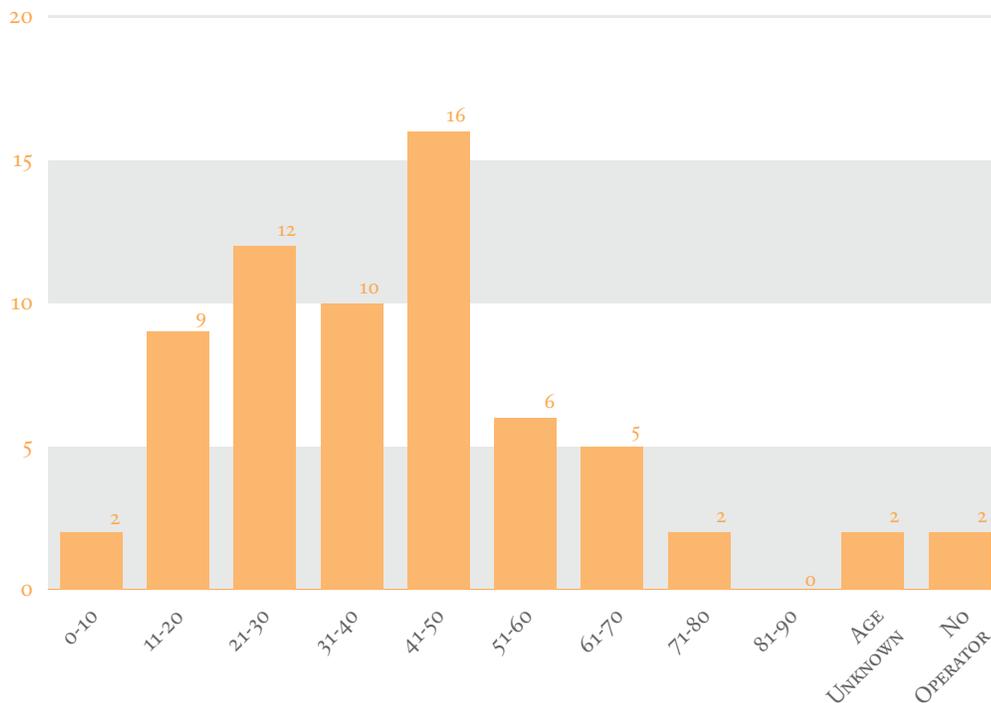
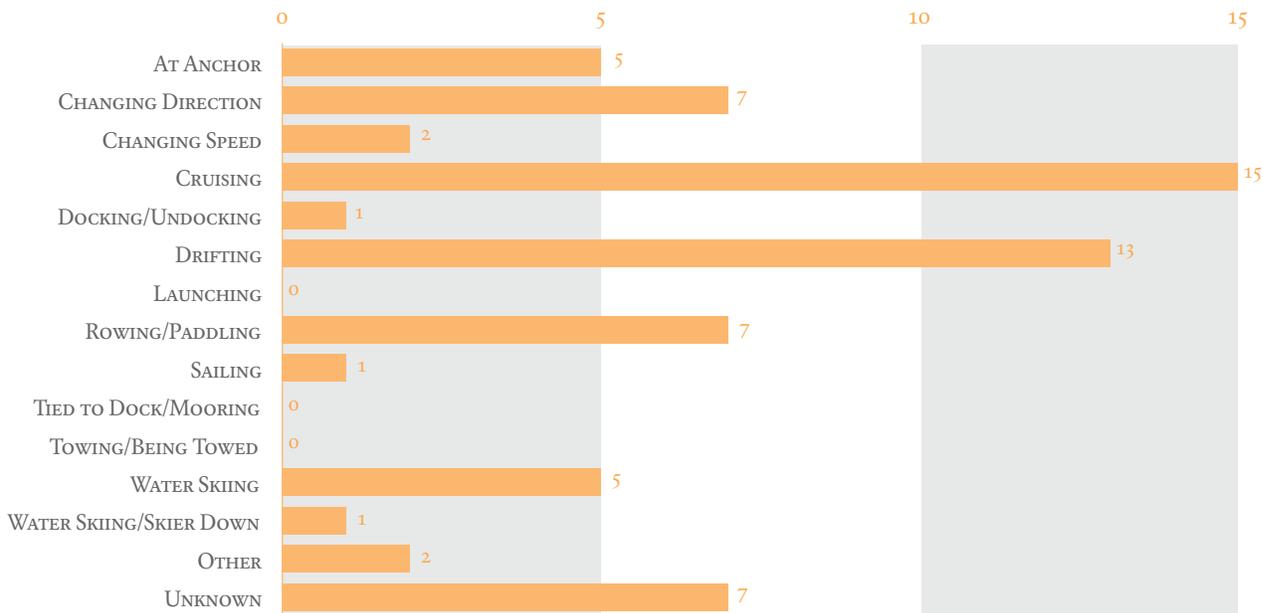


CHART 23

FATALITIES BY OPERATION AT TIME OF ACCIDENT

Total Vessels = 66
 Total Fatalities = 61



Cruising was the most common type of vessel operation in fatal boating accidents, followed by drifting.



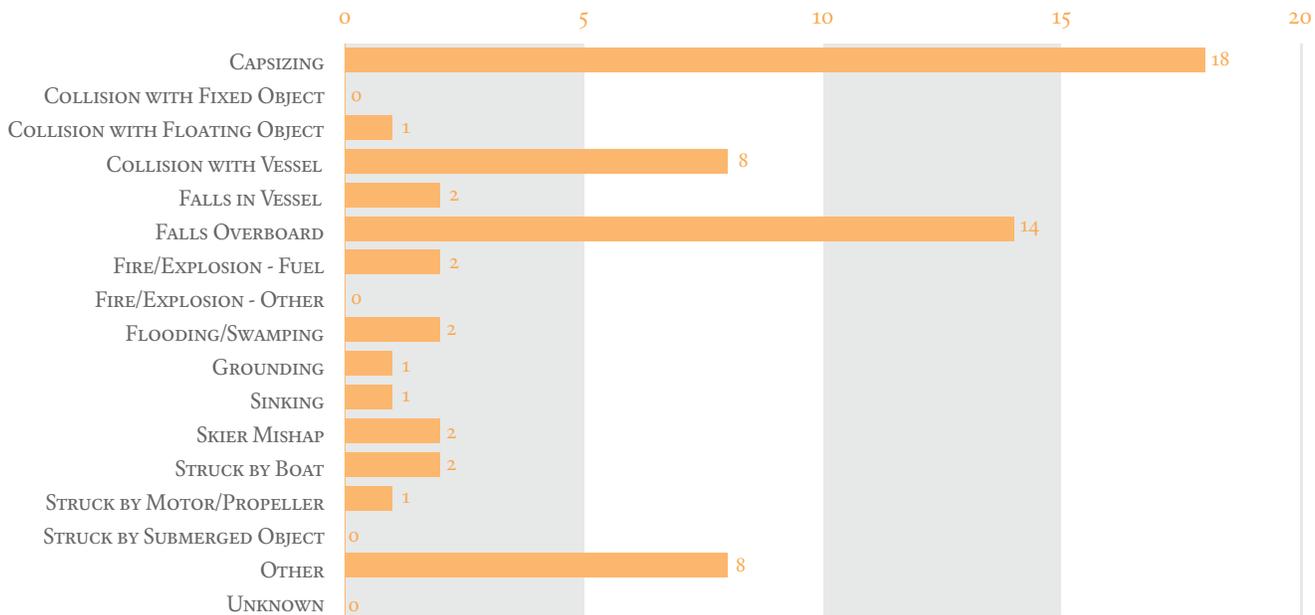
Performance of AquaSMART Live!

CHART 24

FATALITIES BY TYPE OF ACCIDENT

Total Types = 62

Total Fatalities = 61



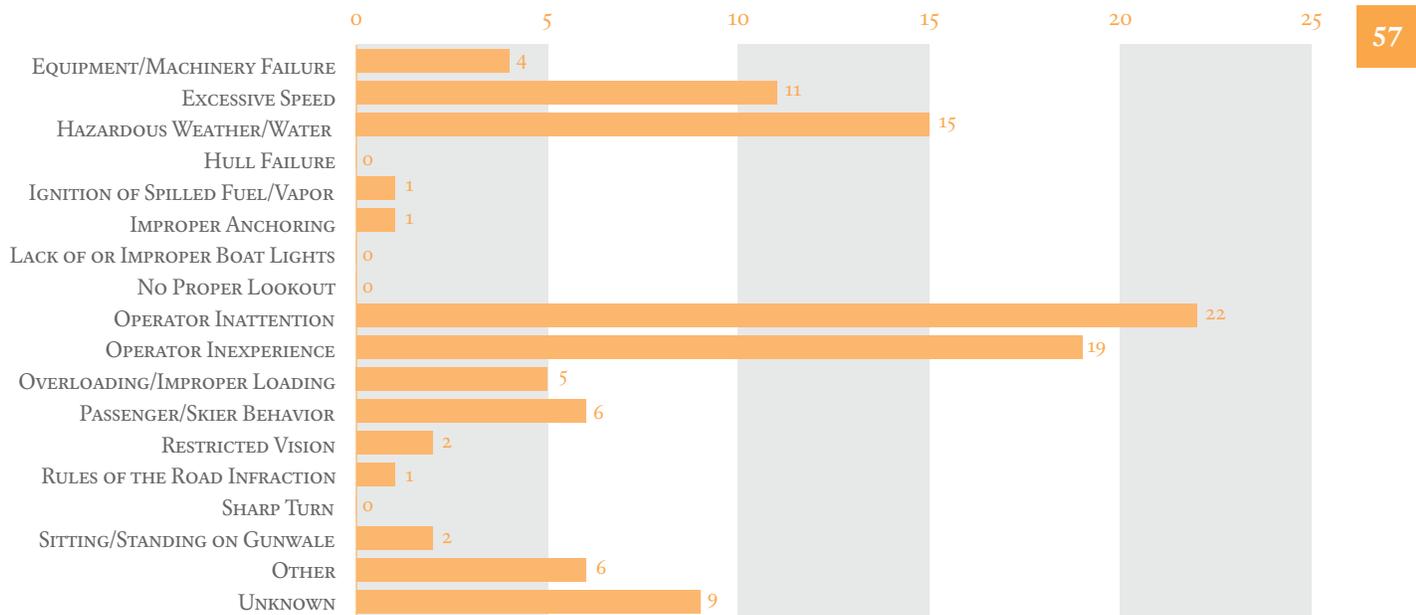
Capsizing and falls overboard were the most common types of fatal boating accidents.

Operator inattention played a role in 36% of fatalities, followed by operator inexperience (31%).

CHART 25

FATALITIES BY CAUSE OF ACCIDENT

Total Causes = 104
Total Fatalities = 61

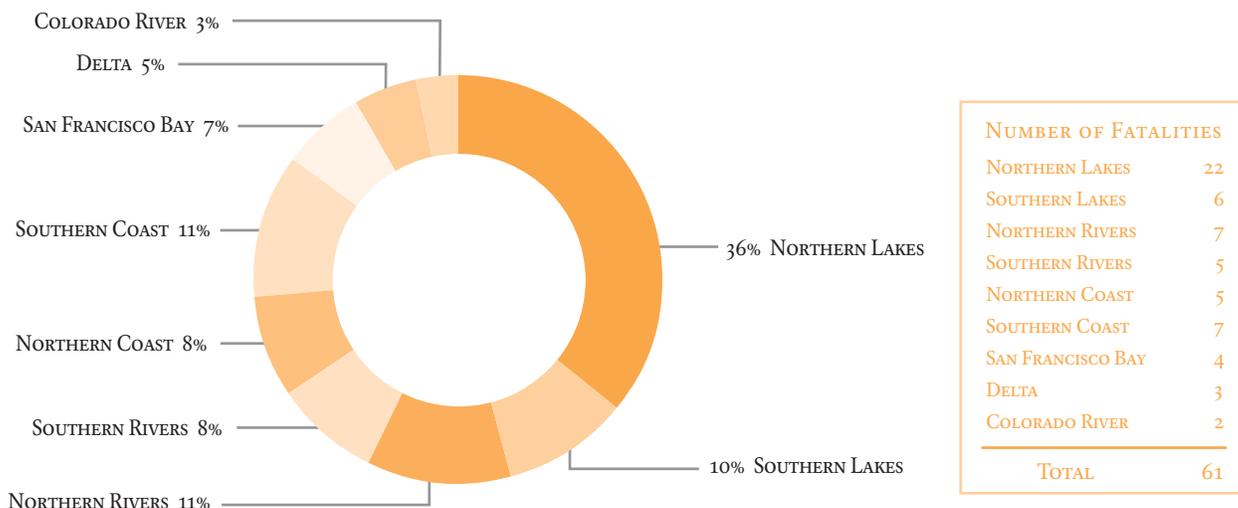


Many accidents had more than one cause, which is reflected in this chart. The "Other" category includes causes that do not fit into any of the categories listed above.

CHART 26

FATALITIES BY ACCIDENT LOCATION

Total Fatalities = 61



Percentages may not add to 100 percent due to rounding.

The largest number of fatalities occurred on lakes throughout the state, followed by rivers throughout the state, and coastal waters.

CHART 27
FATALITIES BY AGE OF VICTIM

Victims in the 41-50 age group accounted for the largest number of boating fatalities.

Total Fatalities = 61

58

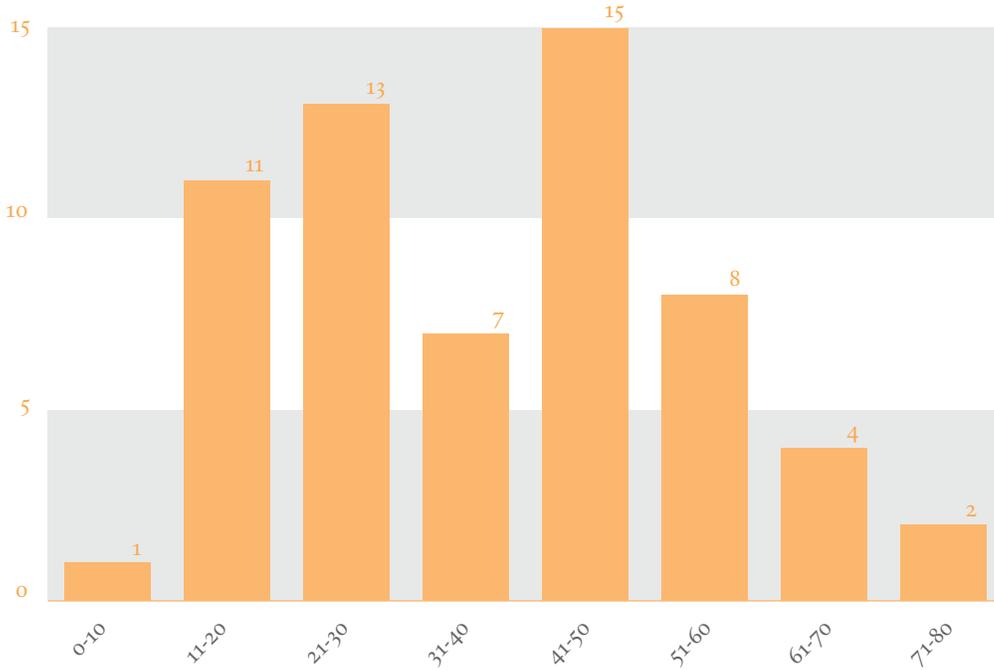
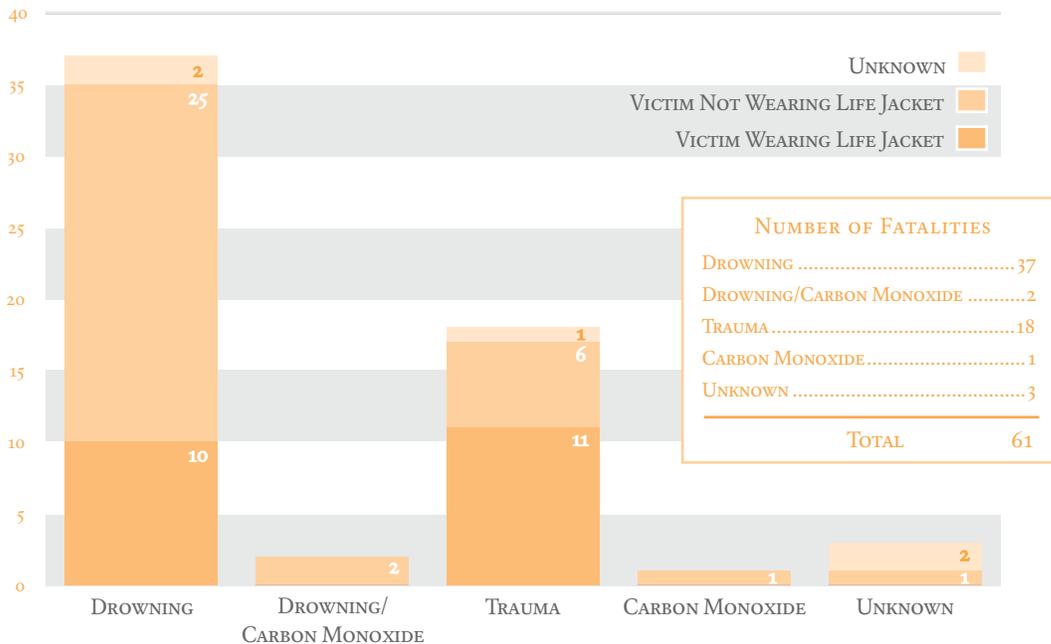


CHART 28
FATALITIES BY CAUSE OF DEATH

Total Causes = 61
Total Fatalities = 61



Drowning was the leading cause of death in fatal accidents. The chart shows the effectiveness of life jacket usage. Of the victims who drowned, 69% were not wearing a life jacket.

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	
			WATER VISIBILITY <input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> POOR	AIR STRONG CURRENT <input type="checkbox"/> YES <input type="checkbox"/> NO

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

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

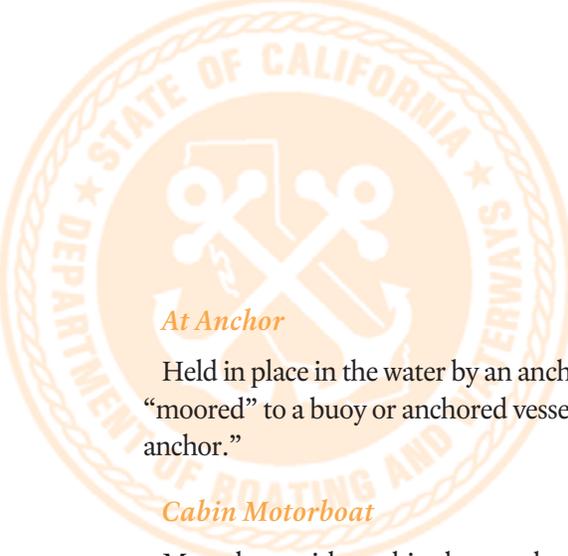
(OTHER VESSEL INVOLVED)

THIS VESSEL ONLY	# INJURED	# DEAD	ESTIMATED DAMAGE \$\$	RENTED BOAT <input 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
<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			SPEED _____ MPH			
<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			<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
 OPERATOR OWNER OTHER (specify) _____

GLOSSARY OF 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.

Collision with Fixed Object

The striking by a vessel of any stationary 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 current, or wind.

Excessive Speed

Operating at a speed that is not reasonable, 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 course, speed, or both 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 Flotation 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 in the conventional manner of sitting or standing inside the vessel.

Rules of the Road

Statutory and regulatory rules governing the navigation of vessels.



CALIFORNIA DEPARTMENT OF BOATING AND WATERWAYS
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