REPORT OF
THE JOINT SUBCOMMITTEE STUDYING

THE FEASIBILITY OF ESTABLISHING AND IMPLEMENTING A MANDATORY BOATING SAFETY EDUCATION COURSE IN VIRGINIA

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA



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I. INTRODUCTION

The 1998 Session of the General Assembly passed House Joint Resolution No. 174, which created a seven-member subcommittee to study the feasibility of establishing and implementing a mandatory boating safety education course in Virginia (Appendix A). The subcommittee was charged with examining the implementation costs, the associated student costs, the benefits of instituting mandatory boating safety education, possible course content, and mandatory training requirements and exemptions. Technical assistance was to be provided to the subcommittee by the Department of Game and Inland Fisheries (DGIF). All agencies of the Commonwealth and the Virginia B.A.S.S. Federation, the Smith Mountain Lake Association, the Hampton Roads Safe Boating Coalition, and the Virginia Association of Marine Industries were requested to provide assistance to the subcommittee.

II. PAST STUDIES

During the last decade, four studies have been conducted on boating safety, two performed by DGIF and two by a legislative subcommittee. In 1986, the Game Commission was requested by the General Assembly (House Joint Resolution No. 60) to conduct a study to determine what measures could be instituted to reduce the number of boating-related injuries and fatalities. The resolution pointed out that the number of individuals using the waters continued to increase, with 10,000 new boats on the waters during 1985. At the time of the study, there were 158,907 registered boats in Virginia and an additional 40,000 unregistered boats. The number of boating accidents had increased from 77 in 1984 to 105 in 1985. The resolution further noted that the most acute crowding problems were found in Smith Mountain Lake where the number of accidents increased from 13 in 1984 to 21 in 1985, compared to the entire Chesapeake Bay, which experienced five accidents.

The methodology adopted by the agency in conducting its study involved a detailed analysis of boating accidents over the most recent two-year period; a survey of 10,000 Virginia recreational boaters to determine their perceptions of safety and the quality of the boating experience; four meetings of the study committee, which included representatives of the U. S. Coast Guard, U. S. Coast Guard Auxiliary, and the Game Commission; aerial observations of high density boating areas on holidays; and a survey to determine the extent to which alcohol contributes to boating accidents.

¹ Boating Safety. Report of the Commission of Game and Island Fisheries, House Document No. 9, 1987.

The study reached a number of conclusions. Poor judgment and lack of attention were the primary causes of boating accidents. However, most people involved in accidents are experienced boaters who should reasonably be expected to exercise sound judgment. The study committee also found that more law enforcement was needed on Smith Mountain Lake and in the Chesapeake Bay. The survey revealed that 84 percent of those surveyed considered boating to be safe or less than a moderate risk. Only 30 percent had attended boating courses. Most respondents believed that a safety course should not exceed three nights. The use of alcohol was seen to be a problem of varying degrees by 85 percent of the boaters contacted, an opinion reinforced by the presence of alcohol on 51 percent of the boats checked during the summer. According to the study, an inspection of the age and hours of experience of boaters offered no support to the concept that licensing would reduce accidents. Only one state, New Jersey, had tried licensing operators, but there were no prerequisites for licensees and no reduction in the number of accidents.

The study made the following legislative recommendations:

- 1. Enact an implied consent law for boaters giving the courts authority to suspend boating privileges if a boater refuses to submit to the appropriate test.
- 2. Establish a blood alcohol standard similar to that for motor vehicle operators, provided that the courts accept readings obtained by the use of an alcometer.
- 3. Permit courts to suspend boating privileges in cases of reckless or intoxicated boat operation or for repeat offenders, and encourage courts to require mandatory boating education for offenders.
- 4. Enact a law requiring coroners to determine blood alcohol levels in victims of boating accidents.
- 5. Authorize the Game Commission to hire four more game wardens, two for Smith Mountain Lake and two for the Chesapeake Bay.

The Game Commission, as a result of the study, planned to take the following actions:

- 1. Through various media campaigns emphasize:
 - Arguments against alcohol use when boating:
 - The need to pay attention; and
 - The wearing of life preservers by all boaters and passengers.
- 2. Produce simplified boating literature.

- 3. Provide first-time boaters with a comprehensive boating booklet.
- 4. Expand the Game Commission's boating safety training program and increase support of the training efforts by the U. S. Coast Guard Auxiliary and the U. S. Power Squadron.

In 1991, the legislature conducted two boating safety/operation studies. House Joint Resolution No. 102 (1990) requested that a joint subcommittee be established to study the licensing of boat operators and examine ways to enhance boating safety.² As part of its study, the subcommittee was asked to determine the feasibility of requiring boating safety courses. At the time of the study, there were 198,000 registered boats and 40,000 unpowered smaller boats operating on Virginia's waters. In the previous year, there were 121 boating-related accidents, 26 fatalities in recreational boating, and one commercial boating fatality.

The subcommittee reviewed the success of current education programs in Virginia as well as in Connecticut, Florida, Maryland, New Jersey, North Carolina, and Vermont. At the time, DGIF officials questioned whether the implementation of a mandatory safety education program was a wise investment, noting that statistics from other states did not show a direct correlation between mandatory safety education and increased boating safety. The Department estimated the cost of providing a mandatory education program patterned after Maryland's would be \$2,610,000. Instead, the Department sought to emphasize the link between accidents and the use of alcohol, for alcohol consumption appears to be involved in about one-half of all fatalities and 25 percent of all boating accidents. Agency officials suggested that the drunk boating statute, coupled with present safety education efforts, is responsible for a decrease in the number of fatalities from the previous year.

As a result of their analysis of the causes of boating fatalities, subcommittee members were not persuaded that mandatory licensing or education would decrease the number of fatalities. Most fatalities resulted from falls overboard, and licensing would not address that problem. The subcommittee found that a better way to reduce the number of fatalities would be to enhance enforcement by allowing citations to be issued for offenses which do not rise to the level of recklessness, but which may be prosecuted as lesser offense. The subcommittee, therefore, recommended that the General Assembly (i) enact legislation establishing improper operation of a motorboat as a lesser included offense of reckless operation of a motorboat (subsequently enacted) and (ii) enact the legislation proposed by the subcommittee studying the operation of personal watercraft (PWC).

² The Licensing of Boat Operators and Ways to Enhance Boating Safety. Report of the Joint Subcommittee, House Document No. 55, 1991.

Because of the increasing popularity of what was referred to at the time as jet skis and the lack of any comprehensive examination of the necessity or advisability of certain safety measures, a joint subcommittee was also established in 1990 to study the use of jet skis (Senate Joint Resolution No. 29; 1990).³ In its study, the subcommittee sought to assess (i) any problems existing with the operation of PWCs, (ii) the current regulations governing the operation of these types of motorboats, and (iii) the advisability or necessity of additional regulations. The study focused on how best to promote safe boating while at the same time enhancing the recreational value of PWCs. Issues considered by the subcommittee included operator age, the wearing of personal flotation devices, hours of operation, distance-to-shore requirements, standards of operation, and noise levels. There was general agreement among riparian landowners, PWC operators, and industry representatives that certain restrictions on the operation of PWCs were necessary.

The subcommittee found that a certain degree of regulation was appropriate for all motorboats. However, PWCs require specific regulation because they have a unique design, lack the stability of traditional boats, and are highly maneuverable. The subcommittee recommended that:

- 1. The General Assembly enact legislation regulating the operation of PWCs, while not being unduly restrictive. The legislation should include the following provisions:
 - A mandatory minimum age of 14 for operators of PWCs;
 - Mandatory wearing of personal flotation devices by operators of PWCs and windsurfers;
 - A prohibition on the operation of PWC between one-half hour after sunset and one-half hour before sunrise, except on Smith Mountain Lake where the prohibition would be effective from sunset to sunrise;
 - A requirement that the operator attach the safety cutoff lanyard to his person, if the PWC is so equipped; and
 - A prohibition on operation of a PWC with a number of passengers in excess of the manufacturer's recommendations.
- 2. Localities be authorized to regulate the operation of motorboats within 50 feet of docks, swimmers, and the shore.

³ The Use of Jet Skis. Report of the Joint Subcommittee, Senate Document No. 14, 1991.

3. The General Assembly enact the legislation proposed by the joint subcommittee studying boating safety, which establishes improper operation of a motorboat as a Class 2 misdemeanor.⁴

During the 1997 Session, a number of boating safety provisions were introduced, including the establishment of a minimum age of 14 to operate a motorboat and requiring a life jacket for children under the age of 12. While neither of these measures passed, the discussion which took place brought to light other boating safety issues. In response to concerns regarding the safety of Virginia recreational boaters, the General Assembly requested DGIF to study boating education in Virginia (House Joint Resolution No. 557). In conducting its study, the Department was to examine the costs and benefits of instituting mandatory boating education in Virginia. DGIF held four focus-group meetings across the state. In addition, a random sample of 3.065 motorboat operators and members, officers, and representatives of 202 boating organizations, businesses, local governments, marine patrols, sportsmen organizations, waterfront homeowners associations, Survey results, written agencies with an interest in boating, was surveyed. comments, boating laws of other states, and information from individuals with expertise in various boating areas were analyzed by department staff. According to the report, the "staff relied heavily on the results of the survey of boater opinions to formulate recommended actions."

The study concluded that there were alternative ways to accomplish safer boating: education incentives, more definitive laws prohibiting the types of operation causing accidents, and strict enforcement of those new laws. It was suggested that legislation which emphasized greater enforcement would have a much faster impact on boating behaviors than education alone. The study recommended that the General Assembly:

- 1. Establish a separate statute for the reckless operation of a PWC to include wording that would make it unlawful to maneuver a PWC in such a manner as to potentially endanger life, limb, or property. The statute would include specific activities which would be prohibited, such as weaving at high speed through congested vessels, following unnecessarily close within the wake of a vessel towing a person, crossing between the tow-boat and a person on water skis, and steering a vessel toward an object or person and turning sharply in close proximity to spray or attempt to spray the person or object.
- 2. Statutorily define "no wake," since no definition existed in the Code of Virginia.

⁴ All of the subcommittee's recommendations were subsequently enacted into law.

⁵ Study of Boating Safety Education and Boating Safety in Virginia. Board of Game and Inland Fisheries, House Document No. 27, 1998.

- 3. Establish statewide requirements for motorboats to slacken speed and control wakes to avoid endangering persons or property when near docks, piers, boathouses, boat ramps, swimmers and downed skiers, knee boarders, tubers, etc.
 - 4. Require rental agents to provide instruction to those renting PWCs.
- 5. Require motorboat salesmen, demonstrators, and rental agents to complete a basic boating safety education class or show proof they have completed the class.
- 6. Consider legislation that would establish a minimum operator age of 16 to operate a motorboat, exempting persons (i) under the age of 16, if they have successfully completed a basic boating education class, (ii) operating commercial vessels, (iii) possessing a valid certification from another state, and (iv) operating on waters where a motorboat registration is not required (i.e., private waters).

One of the measures that was not recommended was to require operators of motorboats to successfully complete a boating safety course (e.g., mandatory boating safety education). The study suggested that the costs of providing such a course would be approximately \$55 per student. This figure was based on DGIF's estimate of \$100 per student for the eight-hour voluntary course taught to 2,000 students per year, and taking into account the economies of scale involved in providing instruction to a higher number of students. According to the study, basic boating safety education, if mandated, would have to be taught by paid instructors because volunteer instructors number only 500 to 600 and many more instructors would be required to provide the training. With an estimated 405,000 operators not having taken the course, the training cost would be \$22,319,200, plus \$3.2 million in startup costs, for a total cost of \$25,565,600. The study pointed out that "the drawbacks of requiring boating safety education include making it more difficult for a segment of the population to enjoy the recreation of motorboat operation, possibly hurting watercraft sales and rentals, and the costs to address the new requirements." In addition, because of the varying accident rates among states with mandatory education, there is no assurance that accident rates would improve in Virginia.

III. SUBCOMMITTEE DELIBERATIONS

To assist it in determining the feasibility of requiring operators of motorboats to successfully complete a boating safety education course, the subcommittee not only sought testimony from experts in boating safety and boating safety education, but also held two public hearings to solicit the views of the boating public. The subcommittee, in the course of its deliberations, examined (i) the current state of Virginia's boating laws, (ii) boating accident and fatality statistics, (iii) the boating

program administered by DGIF, and (iv) the boating laws and boating safety programs of other states which have instituted some form of mandatory education.

A. VIRGINIA'S BOATING SAFETY LAWS AND STATISTICS

The 1998 Session saw a larger number of watercraft safety bills introduced and enacted than in any previous session. The heightened interest in the safe boating issue was a consequence of widespread concern regarding the safety of Virginia's waterways, as the number of registered boats, accidents, and fatalities continued to increase. The tables below show that the number of registered boats increased from 216.828 in 1994 to 232.936 in 1997 (seven percent increase), while the number of accidents during this period increased from 129 to 225 and the number of fatalities from 14 to 27. The accident rate also increased from one accident per 1.680 registered boats in 1994 to one accident per 1.035 registered boats in 1997. Much of this increase can be attributed to the more than doubling of the number of PWCs operating on Virginia's waters. In 1997, PWCs represented about 7.4 percent of the registered boats but were involved in 40 percent of the accidents and 11 percent of the fatalities. While PWCs were involved in a disproportionate number of accidents, it should be noted that the accident rate for PWCs actually improved from a rate of one accident per 173 registered PWCs in 1994 to one accident per 192 registered PWCs in 1997. However, the 1997 accident rate for PWCs was significantly higher than for other boats (192 for PWCs alone, This statistic demonstrates the greater risk and 1.597 for all other boats). associated with the operation of PWCs.

Table I - 1997 Boating Accident Statistics Virginia Department of Game and Inland Fisheries

	1994	<u> 1995</u>	<u> 1996</u>	1997
Total Registered Boats	216,828	224,795	229,233	232,936
Total Accidents	129	175	208	225
Total Fatalities	14	22	13	27
Total Injuries	77	147	160	206
Total Boats Involved	169	244	267	299
Total Property Damage	\$294,805.	\$775,000	\$1,041,935.	\$1,776,661.

Table II - Summary of Personal Watercraft Accidents

	1994	<u>1995</u>	1996	<u> 1997</u>
Total Registered PWCs	7,076	10,328	14,086	17,286
Total Accidents involving PWCs	41	61	74	90*
Total Fatalities involving PWC's	0	1	1	3
PWC% of Total Accidents	32%	35%	36%	40%
PWC% of Total Registered Vessels	3%	5%	6%	7.42%

* In 1997, 29 rented PWC's were involved in 18 accidents.

The foundation of Virginia boating safety law was established in 1960, when it became "the policy of the State to promote safety for persons and property in and connected with the use, operation, and equipment of vessels and to promote uniformity of laws relating thereto" (Chapter 500, Acts of Assembly of 1960). This act (i) required the numbering of vessels, (ii) mandated warning devices and safety equipment on motorboats, (iii) authorized the Commission of Game and Inland Fisheries to make applicable rules and regulations, and (iv) regulated the towing of water-skiers in connection with the operation of motorboats. It also prohibited the reckless or negligent operation of a motorboat or vessel so as to endanger the life, limb, or property of any person.

A provision of this act made it illegal, for the first time, to operate a motorboat or vessel while intoxicated or under the influence of any narcotic drug, barbiturate, or marijuana. In 1989, the drunk boating statute was extensively amended to conform it to the motor vehicle DUI statute. Six years later a "no tolerance" provision was added which made it unlawful for any person under the age of 21 to operate any watercraft or motorboat after consuming alcohol. Such persons were in violation of the statute if their blood alcohol concentration was 0.02 or more and less than 0.08.

In the early 1990s, two statutes gave localities the authority to regulate the distance that certain vessels were to maintain from structures and people. One statute, § 29.1-744.1, allowed localities to regulate the distance PWCs were to maintain from the shore, docks, and swimmers. Localities could prohibit PWCs from coming within 50 feet of the shore and docks and within 100 feet of swimmers. The other statute, § 29.1-744.2, gave localities surrounding Smith Mountain Lake the authority to require all motorboats equipped with engines above 20 horsepower to remain below planing speed while within 50 feet or less of the shore or docks. This provision could not be implemented unless all of the localities adjacent to the lake adopted the identical ordinance. In fact, there was never agreement on the passage of an ordinance and this section of the Code has never been implemented.

In response to the significant presence of PWCs, the legislature, in 1991, enacted the recommendation of a joint subcommittee to regulate the operation of such watercraft. Among the restrictions placed on their operation were that: (i) persons had to be at least 14 years of age to operate a PWC, (ii) each person riding on one had to wear a personal flotation device, (iii) a lanyard had to be attached to the operator, his clothing, or a personal flotation device, (iv) PWCs could only be operated between sunrise and sunset, and (v) PWCs were to carry only the number of passengers for which the craft was designed.

The 1998 Session of the General Assembly has been characterized as the year of boating safety, in which numerous measures were enacted to enhance Virginia's

ability to protect not only the boating public but other recreational users of the waters. Attributable to the findings and recommendations made in DGIF's 1997 study of mandatory boating safety education, the legislation affected all motorboat operators, PWC operators, watercraft businesses, and relevant governmental entities. As a result of the new laws, motorboat operators must now take notice of what constitutes "no wake" speed. Prior to 1998, there was no statutory definition of "no wake"; effective January 1, 1999, "no wake" means the operation of a motorboat at the slowest possible speed required to maintain steerage and headway (House Bill 903). House Bill 904, also effective January 1, 1999, made it unlawful to operate any motorboat, except a PWC, faster than at a "no wake" speed when within 50 feet or less of docks, piers, boathouses, boat ramps, and people in the water. This statewide distance standard replaced the statute that applied only to Smith Mountain Lake and Lake Anna. That provision allowed localities surrounding each lake to enact an ordinance which required motorboats equipped with engines above 20 horsepower to remain below planing speed while within 50 feet or less of the shore or docks. As mentioned earlier, all the surrounding localities had to adopt the identical ordinance, but none did.

Three measures affected the operators of PWCs. PWC operators, like other motorboat operators, are now prohibited from exceeding "no wake" speed when within 50 feet or less of docks, piers, boathouses, boat ramps, and people in the water. But, in addition, PWCs when within 50 feet of vessels other than PWCs must operate at "no wake" speed (HB 1027, effective 1/1/99). As an incentive for more youth to take a boating safety education course, the minimum age to operate a PWC was increased from 14 to 16 years of age, with a 14- or 15-year-old lawfully able to operate a PWC if he has successfully completed an approved boating education course (HB 1380, effective 1/1/99). Virginia already had a reckless boating statute that applied to operators of all types of motorboats, including PWCs. However, because of the unique operational capabilities of PWCs, it was necessary to be more specific regarding what constituted reckless operation of a PWC. Under the new law, a person is guilty of reckless operation if he operates a PWC so as to endanger the life, limb, or property of any person. "Reckless operation" includes:

- 1. Weaving through vessels that are underway, stopped, moored, or at anchor while exceeding a reasonable speed under the circumstances and traffic conditions at the time;
- 2. Following another vessel or person on water skis or similar device, crossing the path of another vessel, or jumping the wake more closely than is reasonable and prudent, taking into account the speed of both vessels, the traffic, and the conditions of the water;
 - 3. Crossing between the towing vessel and a water skier; and
- 4. Steering toward an object or person and turning sharply in close proximity to the object or person in order to spray or attempt to spray.

A violation of this statute is a Class 1 misdemeanor. A person convicted of a second or subsequent offense will lose his PWC privileges for 12 months (HB 1295, effective 1/1/99).

A number of new requirements were placed on boating-related businesses. As of January 1, 1999, persons who rent PWCs to others and watercraft salesmen and demonstrators will be required to successfully complete a boating safety course that has been approved by the Director of DGIF. Watercraft salesmen and demonstrators have the option of passing a boating safety test approved by the Director. Those watercraft salesmen and demonstrators who received their license after December 31, 1998, will have 60 days from the date of the issuance of the license to complete an approved course (HB 1381, effective 1/1/99). A person who is in the business of renting PWCs must provide to the person renting the vessel, information on the laws governing motorboat operations, specific operating requirements of the PWC being rented, motorboat safety equipment requirements, and accident reporting requirements. The content and methods of instruction have to be approved by the Director of DGIF. There is a \$250 civil penalty for not providing such instruction (HB 905, effective 1/1/99). Specific to Virginia Beach, another provision (§ 29.1-749.1) requires businesses that offer PWCs for rent to place a red or black letter "R" (at least 8.5 x 11 inches) on both sides of each PWC rental (HB 577).

Three measures either authorize or require the action of governmental entities. Local governments are authorized to enact an ordinance that establishes standards for insurance coverage for businesses that provide PWCs for rent (HB 576). Because of congestion on the waters known as the "Narrows" in the City of Virginia Beach, the Department of Conservation and Recreation was given the authority to regulate the launching of PWCs from Seashore/First Landing State Park (HB 575). Boats launched from this site within the state park immediately enter the congested waters of the "Narrows." In an effort to aid in the enforcement of the drunk boating laws, every general district or circuit court is required to forward records of those convicted of violating the drunk boating laws to the Department of Motor Vehicles (DMV). DMV is to maintain these records, which will then be electronically made available to law-enforcement officers (SB 458). Before the passage of this statute, only DGIF maintained such records and the data was never incorporated into the DMV database. If a law-enforcement officer wanted access to a record of prior convictions for drunk boating, he had to contact DGIF.

B. VIRGINIA'S BOATING SAFETY EDUCATION PROGRAM

Currently, Virginia has 234,000 registered boats and 564,000 motorboat operators plus an undetermined number of boats from adjoining states operating on Virginia waters. As long as the economy remains steady and the price of fuel continues to be reasonable, it is expected that the number of boats will continue to

increase. The ever-increasing number of boats focused new attention on boating safety. DGIF offers two basic boating safety courses at no cost to the public: "Virginia Boating Basics," and the more specialized "Personal Watercraft," which emphasizes the unique operating characteristics of PWCs. Both are eight-hour courses and are taught over several two-hour segments in the evenings, or all-day sessions on weekends. Over 550 volunteer instructors with instructor certifications from the U.S. Coast Guard Auxiliary or the U.S. Power Squadron teach most of the courses. For their assistance in providing courses and instructors, DGIF pays for the advertising costs for all the courses and reimburses the instructors for their private vehicle mileage.

Each approved basic boating course covers common aspects of recreational boating. The National Association of State Boating Law Administrators (NASBLA) establishes guidelines for the content of the courses. NASBLA is a national association of representatives from state government boating agencies, the boating industries, and private boating organizations. To qualify for NASBLA approval, the courses must cover, at a minimum, the legal and equipment requirements, navigational rules, weather, accident prevention, and boat classification. The courses offered by the Department are NASBLA-approved and as such have to be submitted to this organization for review every three years. Boating safety education courses are offered throughout the state and in all months of the year. Because the greatest demand usually occurs just before the boating season so, the most attended courses are in January through April. For the first six months of 1998, 24 courses were offered by DGIF and another 77 were offered by other boating organizations such as the Coast Guard Auxiliary and Power Squadrons. The courses were offered in 51 locations around the state. Last year just over 3,000 students successfully completed these courses.

The Department's boating education program is managed by one salaried coordinator. The coordinator is assisted by a part-time wage employee who is responsible for developing and publishing boating safety articles and public service announcements; a part-time wage employee who prepares lessons that are used in public schools; and six part-time wage regional coordinators located in Springfield, Yorktown, Richmond, Charlottesville, Roanoke and Coeburn. The regional coordinators work an average of 17 hours per month; coordinate the advertising of courses, delivery of materials, and classroom logistics; and provide instructors.

The agency's 1998-1999 budget for the various boating programs includes a two-year capital outlay of \$1.7 million for (new boat landings, and renovated boat landings other boating-related facilities) as well as \$5.1 million in annual operations costs. The largest expense of the operating budget is \$3.4 million expended for law-enforcement activities, which include boat patrols, accident investigations, searches and rescues, education, and equipment. Other categories of expenditures are the following:

Table III - Boating Program Operation Costs (excluding law-enforcement)

Type of Activity	Projected Expenditure (1998-1999)
Boat registration	\$ 851,000
Boat dealer licensing	\$ 60,000
Boat landing maintenance	\$ 491,000
Boating safety administration & coordinators	\$ 52,000
Student training	<u>\$ 298,000</u>
Total	\$1,752,000

The \$298,000 which is budgeted for student training (Table IV) includes a one-time amount of \$75,000 for reprinting most of the instructional materials to reflect the recent changes to the boating laws. The remaining \$223,000 is allocated for student training, as well as boating safety awareness activities, and is broken down in the following manner:

Table IV - Student Training

Type of Activity	Projected Expenditure (1998-1999)
Salaries and benefits	\$42,000
Wages	\$66,000
Materials & printing	\$28,000
Advertising and awareness of educational offerings	\$41,000
Youth programs materials development	\$14,000
Mileage reimbursement for 550 volunteers and staff trevel	\$19,000
Education: supplies	\$ 9,000
Misc. materials, services and supplies	\$ 4,000
Annual student training budget	\$223,000
One-time reprinting costs	<u>75,000</u>
Total	\$298,000

As to whether these funds have been expended in delivering effective boating safety programs, department officials point to several favorable trends which they attribute in some measure to the boating safety program. The accident rate for the last two years has stabilized for both PWCs and all other types of motorboats. If accidents involving PWCs are excluded, the 1998 rate for general boating is on par with what it was 10 to 12 years ago, even though there are 100,000 more boats on the state's waters. In the Department's 1997 study of boating safety, a comparison of accident rates over a three-year period (1994-1996) showed that Virginia, with its voluntary program, had a lower accident rate than seven of 19 states, including the District of Columbia with some type of mandatory boating safety education.

(Appendix B lists these states along with additional information.) Virginia's current accident rate is one accident per 1,356 registered boats per year. However, it must be pointed out that such comparisons are suspect and difficult to assess since the education programs of the other states varied significantly in scope and in the number of years the program had been in affect.

C. OTHER BOATING SAFETY ORGANIZATIONS

1. U.S. Coast Guard Auxiliary

Two organizations, the U.S. Coast Guard Auxiliary and the U.S. Power Squadron, also provide NASBLA-approved boating safety education courses. Representatives of both organizations testified before the subcommittee, each describing his organization's programs. Mr. Jack Nourie, District Staff Officer -Marine Safety and Environmental Protection for the Auxiliary, explained how the Auxiliary's boating safety public education efforts seeks to identify and minimize the factors contributing to boating mishaps. He pointed out that the Chesapeake Bay, the Atlantic Ocean, and many inland lakes and rivers afford Virginians an abundant opportunity to enjoy a vast array of boating-related activities. However, with such vast opportunities, conflicts are bound to occur. The various competing interests have focused more attention on better managing waterway usage. Several studies have been conducted which examine the elements of waterways management. These studies, according to Mr. Nourie, have identified a number of concerns, including the relative lack of awareness among recreational boaters of the impact their activities have on the natural resources, and the recreational boating community's lack of understanding of existing waterways policies and regulations, relevant navigation practices, safety issues, and rules.

The Auxiliary provides a network of volunteer water and boating safety instructors who provide free instruction throughout the nation. The boating education courses vary from a few minutes as part of a courtesy marine examination or PWC safety check to a 26-hour "Boating Skills and Seamanship" course. The courtesy marine examination and PWC safety checks are free examinations of recreational watercraft to see if they meet federal and state legal requirements and carry additional safety equipment considered to be the minimum a safe boater should have on board.

The formal boating education program includes a variety of courses which are geared to local interests and requirements, with age-appropriate formats, and focused on limited as well as general boating issues. "Water and Boats n' Kids" is youth oriented; its audiences are pre-kindergarten through second grade students. The course can be adapted to the interests of students up to the seventh grade. A one-hour introduction to boating safety, "Personal watercraft," is designed for teenagers and adults, and it can also be used as a briefing tool for PWC rental businesses. However, it does not go into sufficient depth to meet the needs of the public for adequate boating safety knowledge.

The multi-level courses form the basis of the Auxiliary boating safety effort. These courses vary in length from six to 26 hours of intensive, safety-oriented classroom work. All of these courses meet both NASBLA and Virginia standards. "Boating Safely" was jointly developed by the Power Squadron and the Auxiliary to meet the need for a short course (eight hours) geared to small boat operators. Like all Power Squadron and Auxiliary multi-lesson classroom courses, it includes a proctored examination. Targeting teenagers and young adults, the course includes material for PWC and traditional boat users. "Boating Skills and Seamanship" and "Sailing and Seamanship" target the needs of the power and sail boaters. They consist of a core of material that is similar to the "Boating Safely" course and also include a series of optional lessons on maintenance, nomenclature, piloting/navigation, docks and dams, etc. "Basic Coastal Piloting and Advanced Coastal Piloting" are 12- and 24-hour advanced classroom courses that amplify the two hours of piloting taught in the "Boating Skills and Seamanship" and "Sailing and Seamanship" courses. The course instructs students on chart reading, voyage planning, winds, tides, currents and chart plotting. The final offering is "Skipper's Safe Boating," a home study course providing a basic introduction to boating. It is designed to reach the busy individual who cannot attend one of the classes. The course requires an examination which is submitted to the Auxiliary for grading.

Regardless of which course level cited all courses should include the following principles of safe boating:

- Be courteous:
- Overlook nothing:
- Always watch your surroundings;
- Take the time to prepare;
- · Remember that speed kills;
- Wear your life jacket. The law requires each vessel to have them on board;
- Expect the unexpected;
- Look around; and
- Tell your loved ones where you are going, when you are delayed and when you will be back.

Mr. Nourie estimated the cost of providing the Auxiliary's DGIF-approved basic boating cost is approximately \$28 per student, with DGIF absorbing \$23 of this total. The Department pays for the text (seven dollars), certification and card (\$.40), instructor kit (\$.75), patch (\$1.82), mileage for instructors (\$.50), and advertising (\$12.50). The Auxiliary's training is attended by approximately one percent of the boating public per year. In 1997, 2,540 boaters successfully completed Auxiliary-offered classes in Virginia. The average course attendance is between 10 and 13 students. If the Commonwealth were to enact mandatory boating safety education requiring all boaters to take a course, the state would be faced with an immediate surge in attendance that would necessitate the use of

contractors and a considerable increase in training costs, according to Mr. Nourie. To accommodate the increased attendance, class size would have to double and the number of course offered would have to increase by 50 percent. This would result in the Auxiliary training about 2.5 percent of the boaters annually. With only about one-third of boaters having completed the current voluntary course, the remaining two-thirds would have to be trained over a short period of time. Rather than experience such a surge in training requests with the attendant high administrative costs, most states with mandatory education have opted for a phase-in program aimed at reaching youthful boaters first. The Auxiliary recommends such an approach. In fact, its nationwide policy advocates mandatory boating safety education for boaters with the requirement applying to persons 16 years of age and younger.

2. U.S. Power Squadron

The U.S. Power Squadron is the largest volunteer boating organization in the world. The organization's only activity, which it has been performing for 85 years, is to teach boating education safety courses. The Power Squadron has 55,000 members nationally. In order to become a member, a person has to successfully complete a boating safety course. In 1997, 35,000 individuals attended courses offered by the Power Squadron. Instruction is free with a minimal charge for course material. All courses are NASBLA-approved. In developing its safety courses, the Power Squadron is mindful of the boating public's concern that the training be convenient, be short and meet the certification requirements. The Power Squadron offers a four-session, eight-hour course. At the end of the course students are required to take a proctored examination. For those who are significant distances from a location where the course is being offered, the Power Squadron provides an eight-session video course accompanied by a book containing all the information covered in the classroom course. An individual, after studying the taped materials, is then required to come in and pass the examination in order to be certified as successfully completing the course. The tape and instructional material are available for about \$24 and the examination is free. In addition to the basic boating safety course, the Power Squadron also offers courses in navigation, radar, boat insurance, and oceanography.

Power Squadrons are found in Richmond; Northern Virginia; the Nansemond River, Elizabeth River, and Mohjack Bay areas; Hampton Roads; the Roanoke Valley; Virginia Beach; and Lynchburg. Volunteers at these locations are available to teach the boating courses. The Power Squadron's operations are supported solely through member dues. While volunteers provide free instruction, there are costs associated with their courses, e.g., rental fees for classroom space and the cost of course materials. In nearly all cases, the students must pay for the material.

3. U.S. Coast Guard

Representatives of the U.S. Coast Guard presented the federal perspective on boating safety. The Coast Guard performs a dual role in boating safety. It acts as program coordinator for the National Recreational Boating Safety (RBS) program and is a partner with the states and their agencies in the nationwide boating safety effort. Its role as partner with the Commonwealth is defined in a detailed cooperative agreement that covers such areas as law enforcement, search and rescue, boating accident reporting and marine events. Under the agreement the Coast Guard has primary responsibility for coastal regions and high seas, with Virginia responsible for inland waters. An important provision of the agreement allows the use of the Coast Guard Auxiliary on all waters of the Commonwealth and in support of all state boating-safety activities.

As national program coordinator, the Coast Guard is mandated by Congress to:

- 1. Establish and enforce national standards for boats and equipment;
- 2. Allocate and distribute funds from the Aquatic Resources Trust Fund to the states, to assist them in developing, carrying out, and financing boating safety programs; and
- 3. Establish a uniform state boating-accident reporting system, and to collect, analyze, and publish boating accident statistics.

The purpose of the RBS program is to minimize the loss of life, personal injury, and property damage associated with the use of recreational boats, through preventive means, in order to provide the public with maximum safe use and enjoyment of the nation's waters. Three broad strategies are employed to meet the objective of making recreational boating safer: (i) improve boat and related equipment safety; (ii) improve the boating environment; and (iii) improve boaters' knowledge, abilities and attitudes. Success has been achieved in two of these three objectives, according to Coast Guard officials. Vast improvement in the design safety of boats and equipment, more efficient and effective law-enforcement measures, and better analysis of accident data have led to measurable improvements in the nation's boating fatality rate; but there is a point of diminishing returns. These officials warned that increasing the federal government's and states' efforts and resources in support of these two strategies will no longer have the significant effect on the fatality rate that these actions once had. They will also likely have little effect on the rising number of accidents and injuries. The Coast Guard is convinced that it will be necessary to dramatically improve boaters' knowledge, abilities and attitude in order to curb the rising number of accidents and injuries. Officials believe the most effective and efficient way to accomplish this is through mandatory boating education.

The Coast Guard recently solicited public comment in the Federal Register on boater education. The notice was designed to obtain public opinion only. According to its representative who spoke before the subcommittee, the Coast Guard has no plans at this time to pursue any rule-making related to mandatory boating education at the federal level. The agency's position is that education and licensing issues are best dealt with at the state and local level.

While the Coast Guard has no plans to initiate any national requirements for boater education, it urged the members of the subcommittee to consider mandatory education, especially for those at most risk-new boaters and PWC operators. Noting that boating has changed dramatically over the years, with added congestion in the waterways, watercraft now operating at speeds in excess of 70 miles per hour, and different operational characteristics, Coast Guard officials suggested that mandatory boating education is the answer, because voluntary compliance is not enough. They point to the agency's boating records, which show that only a small percentage of boaters have ever received any formal boat training and the fact that nationally 85 percent of all boating accidents involve an untrained operator, as evidence that the mandatory approach is preferable.

D. MANDATORY BOATING SAFETY EDUCATION LAWS AND PROGRAMS OF OTHER STATES

The following is a description of the boating safety education statutes and program of those states requiring certain persons to successfully complete a boating safety education course before operating a motorboat or vessel.

Alabama

Alabama statutorily declares that it is the policy of the state to promote safety for persons and property in the use, operation, and the equipping of vessels. Vessels are defined as watercraft greater than 12 feet. In 1994, the state passed the Alabama Boating Safety Reform Act. It requires every person within five years of April 28, 1994, to obtain a boating safety certification before operating a motorized vessel. Certification can be obtained by either successfully completing a sanctioned boating safety course or passing a 25-question multiple-choice test. The test is locally administered, with the Commissioner of Conservation and Natural Resources empowered to establish the type of examination to be given. calls for the tests to be patterned after the motor vehicle driver's license exam in terms of length, content, method and manner of grading. A resident 16 years of age or older who has not been issued a safety certification may, for 30 days following the date of the sale of the vessel, operate it so long as the vessel is registered in his name and a notarized bill of sale is in his possession while operating the boat. In addition, any new residents must obtain certification within 30 days of establishing The boater's certification, if issued at same time as or prior to the expiration of his driver's license, will expire at the same time as the driver's license. In all other situations, the certification expires after four years. It can be renewed

without an examination. There is a 60-day grace period after the expiration date in which the old certification is valid. If an application for renewal is not made within the specified time period, the applicant is required to pass a written or oral examination. The State Department of Education is mandated by law to include boating safety segments in the approved driver education curricula.

Several classes of individuals are exempted from having to obtain a boating certificate. Any person who is operating a vessel for commercial purposes does not have to obtain a certificate. However, this exemption does not extend to recreational boating. A person who is operating a rental vessel is exempt, but only if he rents from a rental business licensed by the city or county and (i) the rental contract specifies the lessee has received safe boating instructions from the lessor or his agent and (ii) the lessee signs a statement that he is not under suspension or revocation of any boater safety certification or vessel operation privileges in Alabama.

The statute specifically states that it is the intent of the legislature to implement and maintain the program at the lowest possible cost to the citizens. Thus, no payment is required if certification is obtained at the time of issuance of a motor vehicle driver's or learner's license, and one card is issued for both purposes. For those obtaining a certificate at other times, to defray the costs of issuing the certificates, the charge is \$20 for a four-year certification.

Certification cannot be issued to any person (i) under 12 years of age, (ii) whose vessel-operating right or privilege is suspended or revoked, (iii) who is a habitual drunkard or addicted to the use of narcotic drugs, (iv) adjudged insane or an idiot, imbecile, or feeble-minded until restored to competency as determined by a judge or released from a mental institution and certified as competent, or (v) afflicted or suffering from a physical or mental disability which prevents him from exercising reasonable and ordinary control over a vessel, as judged by the Director of Public Safety or examining officer. The statute authorizes the head of the Department of Conservation and Natural Resources to establish a point system by which certification may be suspended or revoked as well as hearing procedures for such suspensions or revocations. Any person whose certification has been withdrawn has to pay \$50 to apply for reinstatement. No one who has been convicted of a crime related to operation of a vessel is eligible to receive a certificate.

<u>Arkansas</u>

In Arkansas, the regulation of boating is the primary responsibility of the Arkansas State Game and Fish Commission under Amendment 35 of the Arkansas Constitution. The Commission is authorized by statute to establish and operate a boating safety and training program. The statute specifically states that the program should include, but is not limited to, a course of instruction designed to teach the safe and proper handling of boats and related matters. The course can be offered in cooperation with schools, private clubs, and organizations, and may be

offered by the Commission in areas where no sponsorship is available. The Commission can adopt and enforce rules and regulations to carry out its mandate. Beginning July 1, 2001, all state residents born on or after January 1, 1986, of legal age to operate a motorboat must complete an approved course. An out-of-state resident, who has not taken an approved course may, by successfully completing a questionnaire, obtain a temporary boater education certificate which is valid for 30 days. Since the law does not become effective for another 2 1/2 years, many of the specifics regarding penalties, revocations, suspensions, and course specifics have not been decided and probably will be taken up during the next legislative session.

Colorado

Colorado law prohibits anyone under 16 from operating a motorboat; however, a person 14 or 15 years of age can operate a motorboat if he (i) completes an approved boating safety course and (ii) has a boating safety certificate in his possession when operating a motorboat. The owner or operator of a rental operation cannot lease or rent a motorboat to anyone under 16 unless the 14- or 15-year-old has met the boating safety requirements. The Division of Parks and Outdoor Recreation is authorized to establish the certification process. An eighthour study guide has been prepared and is mailed to any minor for home study. After reviewing the guide materials, the person contacts the agency for enrollment in a two-hour review course, after which he is given a test. Parents are also required to attend the two-hour review. The cost is \$15 per student. By statute, no general funds can be used for the boating safety training program. According to Colorado officials, the training program is tailored after Utah's course.

Connecticut

By October 1, 1997, all residents of Connecticut, persons owning any real property in the state, or persons owning a vessel had to obtain a safe boating certificate (SBC) to operate a vessel on state waters or a Certificate of Personal Watercraft Operation (CPWO), unless the person had a valid U.S. Coast Guard operator's license. This requirement had been phased in based on the age of the operator, with the youngest person having to obtain a certificate first. An SBC allows a person to operate any recreational vessel, except a PWC. The SBC is issued if a person has either completed a course approved by the Commissioner of Environmental Protection or passed an equivalency examination testing knowledge of safe boating. Any person who rents a vessel other than a PWC for 14 days or less does not have to obtain a SBC. To obtain an SBC, a person has to complete an application and submit it along with a \$25 fee and proof that he has met all the certificate requirements (i.e., successfully completed approved course or passed the equivalency examination).

A CPWO allows an individual to operate any recreational vessel, including a PWC. An applicant for a PWC certificate must meet the requirements for SBC and complete a PWC handling course. The special course in safe PWC handling covers

the operator's responsibilities, laws and regulations, as well as riding and maintenance instructions. The course is sponsored by PWC dealers and is free. The Commissioner is authorized by statute to establish the content of courses in safe boating. Such regulations may include provisions for examinations, issuance of certificates for PWC operations and establishment of a reasonable fee for the course and examination. Any person who is less than 12 and who has been issued a SBC or CPWO cannot operate a vessel with a motor greater than 10 horsepower unless he is accompanied by a person at least 18 years old who has been issued a certificate.

If a person purchases a boat, he can apply for a temporary SBC which is valid for six months. Within this time, the person must qualify for and obtain a permanent SBC in order to operate a vessel. Similarly, if someone purchases a PWC, he can apply for a temporary CPWO after he has registered the vessel and has completed an approved safe PWC handling course. Within the six-month period, the person must qualify for and obtain a CPWO in order to operate a PWC after the temporary certificate expires. The fee for the temporary SBC or temporary CPWO is \$25.

Delaware

In Delaware, persons born on and after January 1, 1978, cannot operate a registered vessel without first successfully completing a course of study and obtaining a certificate of boating safety education. The state recognizes any certificate issued by any state which has a NASBLA-approved course. certificate must be in the operator's possession and be presented upon the demand of a Fish and Wildlife agent. Persons who hold a valid Coast Guard captain's license or Delaware River and Bay pilot's license or its equivalent are exempted from having to obtain a certificate. The Department of Natural Resources and Environmental Control is directed, by statute, to coordinate and provide a statewide course of instruction in boating safety education for certification and ensure that courses are available at regular intervals within each county. The course does not have to exceed six classes, nor exceed a cumulative total of 12 hours. The tests can be administered orally. Once issued, the certification is valid for a person's lifetime and cannot be revoked by the agency or a court. The penalty for operating a vessel without certification is a fine of not less than \$25 nor more than \$500, or up to 10 days in jail for each violation.

Florida

Beginning in October 1996, Florida required persons born after September 30, 1980, either to (i) have successfully completed a NASBLA-approved boating course or (ii) have passed a course equivalency or temporary certificate examination. The age requirement increases one year each October 1 for the five years following 1996, extending to the year 2001 when all persons 21 years of age or younger must comply with the statute. These persons must have in their

possession a boating education ID card and a photo ID while operating a vessel with a motor of 10 horsepower or more. The fee for the course or examination is two dollars.

The Department of Environmental Protection is authorized to appoint liveries, marinas, and other persons as agents to administer the course and issue ID cards under guidelines established by the Department. An ID card which has been issued to a person who has completed a course or a course equivalency exam is valid for life.

The following are exempted from the requirements of boating education:

- 1. Persons licensed by the U.S. Coast Guard as a master of a vessel;
- 2. Persons operating on a private pond;
- 3. Persons accompanied in a vessel by a person who is exempt, holds an ID card, or is 18 years of age or older; or
- 4. Persons who are nonresidents and have proof of completion of NASBLA-approved course from another state and are visiting 60 days or less in an out-of-state boat.

Businesses may not rent PWCs to anyone under 16 years of age and cannot rent any vessel powered by a motor of 10 horsepower or more unless they provide boating safety instruction and display boating safety information to all persons renting vessels.

A violation of the boating safety education statute is a noncriminal \$50 infraction. Any person who is convicted of a criminal violation or noncriminal infraction of the boating statutes is required to enroll and successfully complete at his own expense an approved boat safety course.

Georgia

Until July 1998, Georgia's boating safety education requirements applied solely to the operation of PWC. No person under the age of 16 was permitted to operate a PWC unless a person age 12 through 15 (i) had completed a PWC safety-program approved by the Department of Natural Resources, (ii) was under the direct supervision of a sober adult 18 years of age or older, or (iii) had a sober adult on board. However, the old law had no minimum age for persons operating other motorized vessels. Effective July 1, 1998, no one under the age of 12 may operate any vessel with propulsion exceeding 30 horsepower, but such a person may operate a Class A vessel (less than 16 feet), other than a PWC, which does not exceed 30 horsepower, if he (i) is accompanied (on board) by a sober adult, (ii) has completed a safe boating course, or (iii) is under direct supervision (within sight of and within

400 yards) of a sober adult. A person over the age of 16 may operate any vessel or PWC. Persons 14 or 15 years old are prohibited from operating a vessel other than a PWC or nonmotorized Class A vessel. However, they (14- and 15-year-olds) may operate other vessels if one of the three previous conditions is met. A 12- or 13-year-old may operate a Class A vessel which is propelled by mechanical means of no more than 30 horsepower if he meets one of the three conditions. Any person who violates the safe boating law is subject to a fine not to exceed \$1,000 or to confinement of up to 12 months in jail, either or both.

The Department of Natural Resources is authorized, but is not required, to conduct or provide safety courses for the public. There is no charge for the training offered; however, if a person chooses to take a home study course, the cost is \$24.95 and \$5 for the exam. Although Georgia has been classified as a "mandatory training" state, minors have the option of being accompanied by or under the direct supervision of an adult when operating a vessel in lieu of completing a training course.

Idaho

It is unlawful for any person to operate a rented or leased PWC in Idaho before being instructed on the laws, rules, and safe operation of the PWC by the lessor. Any person operating a rental or leased PWC must carry on board the written acknowledgment of instruction. A person who violates any of these provisions is guilty of an infraction and subject to a fine not to exceed \$100. In addition, any person who pleads or is found guilty of drunk boating is required to attend and successfully complete a safe boating course. Any person who offers a PWC for lease, hire, or rent is required to (i) provide, at no additional cost, Coast Guard-approved personal flotation devices and any other required safety equipment, (ii) display information provided by the Department of Parks and Recreation describing laws, rules, and safety measures pertaining to PWCs which is clearly visible from the operator's position in the vessel, (iii) instruct each person who will be operating the PWC on the laws, rules, and safe operation of the PWC prescribed by the Department, and (iv) provide a written copy of acknowledgment of instruction received on a form developed by the Department. Each copy must contain the names and physical description of those eligible to operate the PWC during the rental or lease period.

Illinois

In Illinois, no person under 10 years of age may operate a motorboat. Persons at least 10 and less than 12 years of age may operate a motorboat only if they are accompanied by and under the direct control of a parent, guardian, or a person at least 18 years of age who has been designated by the parent or guardian. Persons at least 12 and less than 18 years of age may operate a motorboat if they (i) are accompanied by a parent, guardian, or a designated person at least 18 years old or (ii) possess a boating safety certificate issued by the Department of Natural

Resources or a valid certificate from another state, a province of Canada, the U.S. Coast Guard Auxiliary, or U.S. Power Squadron. In Illinois, a PWC is considered a motorboat and is subject to the same rules as any other motorized vessel.

The Department is required to establish a program of instruction on boating safety, laws, regulations and administrative laws, and any other subject matter which might be related to general boating safety. The statute states that the course has to be at least eight hours and the Department has the authority to revoke the certification of any instructor who has shown an inability to conduct the course. The Department may cooperate with schools, private clubs, and other organizations in offering the course throughout the state. The Department can issue a certificate of boating safety to persons 10 years of age or older and may charge each person who enrolls in a safety course a fee not to exceed five dollars. The Department, by statute, can authorize instructors conducting the course to charge for the rental of facilities or for the costs of materials utilized in the course.

Kansas

Kansas law prohibits any owner or person in possession of a vessel from allowing a person under 12 years of age to operate a motorboat unless accompanied and under the direct audible supervision of a parent or other person over 17 years of age. Regulations, which became effective January 1, 1995, prohibit a person under 16 years of age from operating a PWC unless another person 17 years of age or older is aboard, except persons ages 12 to 15 can operate a PWC, if they have successfully completed a Department of Wildlife-approved course and have been issued a valid boating safety certificate. Businesses may not lease, hire, or rent a PWC to, or for the operation by, anyone under 16; however, the business can rent a PWC to persons between the ages of 12 and 15 if they have obtained a boating safety certificate. If the under-age individual is participating in an authorized or permitted regatta, race, marine parade, or tournament, he does not have to obtain a boating safety certificate. A nonresident who has been in the state for less than 30 consecutive days and anyone who has been a resident for less than 60 days are exempt from having to obtain a certificate.

During a recent session, legislation was introduced which would have required every person born after January 1, 1986, who operates a motorboat or sailboat to possess a boating safety certificate. The Secretary of Wildlife and Parks was directed to prescribe an approved boating safety education course of not less than eight hours. The Secretary was also charged with instituting and coordinating the course instruction through the use of Department personnel, as well as in cooperation with local political subdivisions, federal government agencies and reputable individuals or organizations having boating safety education as an objective. The Secretary would have the discretion of providing a correspondence course with a written examination. The statute authorized the imposition of a fee to cover the costs of services, material, and supplies. Upon the approval of the Secretary, persons who have previously successfully completed a course would be

grandfathered. The certificate could be revoked if a person violated any of the boating laws, and that person would have to successfully complete another course in order to operate a motorboat or a sailboat.

Kentucky

The 1988 Session of the Kentucky legislature enacted emergency PWC legislation, noting in the bill's enactment clause that "...it is imperative that the carnage caused by personal watercraft on the waters of the Commonwealth be curbed as soon as possible...." The legislation prohibited persons under the age of 12 from operating a PWC or motorboat over 10 horsepower. Beginning January 1, 1999, persons 12 through 17 years of age were not to be allowed to operate a PWC or motorboat over 10 horsepower unless they possessed a safe boating certificate or were accompanied on board by a person 18 years of age or older, or by a person who possesses a certificate. Nonresidents 12 through 17 years of age have to possess a Kentucky safe boating certificate or a recognized and equivalent boat operator licensing or safe boating certificate from another state or country.

The penalties for violating the boating safety laws or administrative regulations were increased from a fine of not less than \$15 nor more than \$100 to not less than \$50 nor more than \$200. Drunk boating criminal penalties were also increased. In addition to, or in lieu of, penalties imposed for violation of boating safety or drunk boating laws, a person can be required to take a safe boating course and present a certificate documenting the successful completion of the course to the court.

Maryland

Beginning July 1, 1988, all boaters born on and after July 1, 1972, must complete an approved safe boating course and have in their possession proof of completion while operating a numbered or documented vessel. Any numbered vessel operated for pleasure must have at least one person on board who either possesses a certificate or is exempt from certification requirements. The following persons are exempt from having to complete a boating safety course:

- 1. A person operating a vessel in connection with commercial purposes;
- 2. A person who is a resident of another state and who is visiting Maryland for 60 days or less in a numbered vessel if the person (a) is 16 years of age or older, or (b) has been issued a certificate for completing an approved course;
- 3. A person visiting the state for 90 days or less in a vessel from another country;
 - 4. A person operating a vessel on private property; or

5. Any other person exempted by regulation of the Department of Natural Resources.

The statute requires the Department to (i) adopt regulations that establish criteria for a course of instruction in boating safety, (ii) administer a verbal test when appropriate, (iii) coordinate a statewide program and ensure that the course is available within each county, and (iv) ensure that a course of boating safety education is available at the earliest practicable age for children in boating communities. Any course that is offered through a public school is not required to be more than six classes or exceed a total of eight hours. The statute stipulates that the following may offer the course if approved by the Department: the U. S. Coast Guard Auxiliary, the U. S. Power Squadron, a political subdivision, a municipal corporation, an agency, a public or nonpublic school, a group, a firm, an association, or any other person. The certificate is valid for a lifetime and cannot be revoked by the Department or a court. A 30-day temporary certificate can be issued if a person signs an affidavit stating that he has read and understood the boating safety education materials. The temporary certificate may be renewed for one additional 30-day period.

A violation of the boating education statute is a misdemeanor. For the first offense a fine not exceeding \$25 can be assessed. For any subsequent violation of this law that occurs within two years, the penalty increases to a fine not to exceed \$500. Juveniles charged with violating the statute are subject to penalties provided for in the Juvenile Code.

Massachusetts

The Division of Law Enforcement within the Massachusetts Department of Fisheries and Wildlife is directed, by statute, to establish an educational safety program for the operation of jet skis, surf jets, and wetbikes (vessels designed to travel over water, supported by skis propelled by machinery). A person must be 16 years of age or older to operate such vessels. Operators who are 16 or 17 years of age are required to participate in the safety program. The Director of the Division is to establish program criteria and is responsible for determining the minimum safety skills necessary to operate such watercraft. A violation of the boating education law or regulations is punishable by a fine of not more than \$50. However, any person who has a complaint filed against him may waive a trial and plead guilty by mailing a \$10 payment plus court costs to the clerk of the court. The processing of a fine by the clerk is not seen as a criminal offense and no record of the case is entered into the probation records.

Michigan

The Michigan Department of Natural Resources is required, by statute, to put into effect a program to train youthful boat operators and to issue a boating safety certificate to those who satisfactorily complete the program. The agency is

authorized to designate as its agent any person it considers qualified to give the courses of instruction and award boating safety certificates. Michigan law places age restrictions on who can operate a motorboat. A person less than 12 years of age is prohibited from operating a motorboat unless (i) he is under the direct supervision of a person on board who is 16 years of age or older and (ii) the motorboat is powered by a motor or motors totaling no more than 35 horsepower. A person 12 through 15 years of age may operate a motorboat only if he (i) is accompanied by at least one person 16 years of age or older or (ii) is in possession of a boating safety certificate. A 12-to 15-year-old is required to present the certificate upon the demand of any peace officer. These various age limitations only apply to the operation of a motorboat powered by a motor of more than six horsepower.

There are also age limitations which specifically apply to the operation of a PWC. A person under the age of 12 is prohibited from operating a PWC, unlike those under 12 who are allowed to operate other types of motorboats if they meet certain conditions, (adult supervision or operate a motorboat having 35 horsepower or less). A person 12 through 15 years of age can operate a PWC so long as he is accompanied by a person 16 years of age or older or if he possesses a boating safety certificate.

Minnesota

In Minnesota, except in the case of an emergency, a person under age 12 may not operate a watercraft propelled by a motor of more than 25 horsepower unless a person age 21 or older is present and within immediate reach of the controls. In no instance can such a person operate a watercraft of more than 75 horsepower. Persons age 12 to 17 may not operate a motorboat over 25 horsepower without possessing a valid watercraft operator's permit unless there is a person age 21 or older in the motorboat and within immediate reach of the controls. In order to obtain a valid watercraft operator's permit, persons 12 to 17 are required to successfully complete a home study course and pass an unproctored watercraft safety test or successfully complete an approved safety education course. The Commission of Natural Resources is directed, by statute, to establish the educational course and testing program. The participant brings his test into a state agency's office for grading. If he passes, a temporary permit is issued and is valid until he receives the operator's permit.

An operator's permit is also required for persons 13 to 17 years of age who want to operate a PWC. In addition to the permit requirement, which entails passing the boating safety course test, a person 13 years of age must be directly observed by a person 18 or older. Any operator of a motorboat (including PWC) age 13 or older, but younger than 18, if adjudicated by a juvenile court as having violated the general rules of safe watercraft operation or the drunk boating law, will have his operator's permit revoked by the Commissioner. The Commissioner may issue a new permit to the operator one year after revocation upon the successful completion of a watercraft safety course. The judge who adjudicates the offense is

to take possession of the permit and forward it to the Commissioner with a record of the adjudication.

PWC dealers are required to distribute a summary of the laws governing PWC operation. Upon request by a purchaser, they must also provide instruction regarding the laws and safe operation of the craft. People who provide PWCs for rent must also provide a summary of the PWC laws and instruction for the safe operation of the craft. PWC dealers and rental businesses are required to keep a signature record of people who buy or rent PWCs, which acknowledges that they have been provided a copy of the PWC laws and rules. Persons under the age of 18 who rent PWCs must show their watercraft operator's permit before renting a PWC and the rental agency must record this information on the signature record.

Mississippi

In Mississippi, no person under the age of 12 is allowed to operate a motorboat unless he possesses a certificate and is accompanied by a parent, guardian, or other person who is at least 21 years of age and qualified, and capable of operating the motorboat. Beginning July 1, 1997, a person born after June 30, 1980, cannot operate a motorized vessel unless he (i) has completed a course in boating safety conducted or approved by the Department of Wildlife, Fisheries and Parks and (ii) has in his immediate possession while operating a motorboat a certificate of satisfactory completion of the boating safety course. A person does not have to possess a certificate for operating a rented motorboat. The statute does not authorize the agency to charge a fee for the course, so the Department-offered course is free to the public. A violation of the boating age and safety education requirements is punishable by a fine of not less than \$25 nor more than \$50.

Montana

In Montana, unless accompanied by a person 18 years of age or older, a person 12 years of age or younger may not operate a motorboat or PWC that is powered by a motor of more than 10 horsepower. A person 13 or 14 years of age may not operate a vessel or PWC powered by a motor of more than 10 horsepower without possessing a valid Montana motorboat operator's safety certificate of completion of a Montana-approved water safety course, unless accompanied by someone 18 years of age or older. A person who owns or has charge or control of a motorboat or PWC powered by a motor of more than 10 horsepower may not allow or knowingly permit a person who does not meet the aforementioned qualification to operate such a motorboat or PWC. A person may not rent a motorboat or PWC powered by a motor of more than 10 horsepower to a person under 18 years of age. Any person who violates any of these provisions is subject to a fine of not less than \$50 nor more than \$500 or by imprisonment in a county jail for not more than six months, either or both.

The Department of Fish, Wildlife and Parks is directed by statute to coordinate a statewide boat safety education program, including a home study testing program for motorboat operators. The Department may use available state funds and federal matching funds to contract with counties to implement designated parts of the state recreational boating safety program. If a county accepts a grant, the county has to implement a program that is certified by the Department as fulfilling the requirements of the state program. This provision expires June 30, 2002.

New Jersey

A person under 16 years of age is prohibited from operating a power vessel except that:

- 1. A person 13 to 15 years of age who possesses a certificate of completion of a boating safety course approved by the Supervisor of State Police may operate (i) a small power vessel (12 volts or less or one horsepower) or (ii) a power vessel 12 feet or more with less than 10 horsepower.
- 2. A person who is under 16 but who has successfully completed a safety course prior to July 1, 1996, may operate any power vessel on the tidal waters. This has the effect of grandfathering in those who under a previous law were required to have a certificate.

A person who is 18 years of age or older and who has a valid driver's license may operate a power vessel, other than a PWC, that is 10 horsepower or less without having completed a boating course. An out-of-state resident who is 18 years of age or older and who will be in the state for less than 90 days may operate a power vessel (excluding a PWC) that is registered in that person's state or country of residence. A person 18 years of age or older may operate a rented power vessel of more than 10 horsepower, that is not a PWC, without having to obtain a boating safety certificate if (i) he successfully completes a state-approved, pre-rental instruction course provided by the owner or lessor and (ii) the owner of the power vessel rental business is experienced in the operation of power vessels and has completed an approved boating safety course.

With respect to PWCs, after July 1, 1997, no person may operate a PWC without first having successfully completed a boating safety course. Whenever a person who is required to have completed a boating safety course operates a power vessel or PWC, he must have a boating safety certificate in his possession. The failure to exhibit such a certificate is presumptive evidence that the person has not completed an approved course.

Any person who violates any of these provisions is subject to a fine of not less than \$100 nor more than \$500. Any person who is convicted of operating a vessel that endangers or is likely to endanger a person or property, in addition to other

penalties, is required to complete a boating safety course. If he fails to successfully complete the course, his privilege to operate a vessel is immediately revoked.

New York

In New York, no person under the age of 18 is allowed to operate a mechanically propelled vessel unless the operator is accompanied by a person who is 18 years of age or older or he is 10 years of age or older and is the holder of a boating safety certificate issued to him by the Commission of Parks, Recreation and Historic Preservation, the U. S. Power Squadron, or the U. S. Coast Guard Auxiliary. A person is prohibited from operating a PWC unless he is the holder of a boating safety certificate or is accompanied by a certificate holder over 18 years of age. In addition, an owner of a PWC is prohibited from knowingly permitting a person who does not meet one of the two previous criteria to operate his PWC. The operator requirements for vessels including PWCs do not apply to persons certified by the Commissioner as boating safety instructors, instructors of U. S. Power Squadrons, members of the Coast Guard Auxiliary, holders of public vessel licenses, police officers performing their assigned duties, fire and rescue personnel, and persons licensed to operate vessels. The Commissioner is authorized to grant additional exemptions.

The failure of an operator to exhibit the required certificate upon demand of any law-enforcement officer is presumptive evidence that the person is not a holder of a certificate. A violation of any of the previous prohibitions subjects a person for a first conviction to a fine of not less than \$25 nor more than \$100 or by imprisonment for not more than seven days or both; for a second violation committed within 24 months, a fine of not less than \$100 nor more than \$250 or imprisonment of not more than 15 days or both; and a third or subsequent conviction, all of which were committed with 24 months, a fine of not less than \$200 nor more than \$500 or imprisonment for not more than 30 days or both.

The statute requires the Commissioner to initiate and put into effect a comprehensive educational program designed to advance boating safety, including the training of youthful boat operators and an adult education program for the safe operation of vessels, including PWCs. The program is to include the preparation and dissemination of water safety information. The Commissioner is authorized to make rules and regulations designed to result in the further knowledge and observance of the principles of safe boat operation and he can collect a fee not to exceed \$10 for the issuance of the certificate. However, a person 18 years of age or under cannot be charged a fee.

The Commissioner may designate as his agent, for the purpose of giving such courses or awarding certificates, those persons he deems to be qualified including: certified instructors of the U. S. Coast Guard Auxiliary, U. S. Power Squadron, American Power Boat Association, Boy Scouts of America, and the Red Cross. The

revenue generated from the fee is placed in a special fund to be used solely to support the administration of PWC safety training and enforcement.

Any insurance carrier who provides yacht or boating liability insurance is authorized, by statute, to grant rate reductions to anyone who has successfully completed an approved boating safety course.

North Dakota

In North Dakota, no person under the age of 12 may operate a motorboat propelled by a motor over 10 horsepower, unless he is accompanied by a person 18 years of age or older. Any person who violates this provision is subject to Class 2 noncriminal \$25 fee. No person 12 through 15 years of age may operate a motorboat of more than 10 horsepower, unless accompanied by a person 18 years of age or older or the operator has taken and passed a boating course approved by the Department of Fish, Wildlife and Parks. The penalty for a violation of this provision is also a \$25 fee. The Department is required to develop and administer a comprehensive statewide boating safety program and administer state and federal funds provided to the state for the purpose of implementing and supporting improved boating safety.

Pennsylvania

In Pennsylvania, the boating education course is required for persons born on or after September 1, 1984, who are operating a vessel powered by a motor of 10 horsepower or more or a windblown vessel over 14 feet in length. A person is exempt from the safety course or the equivalency if he:

- 1. Holds a U. S. Coast Guard license:
- 2. Is supervised by a person who (i) is exempt by statute or possesses a boater ID card and (ii) is at least 18 years of age:
 - 3. Is at least 18 years of age;
- 4. Is a nonresident with proof of completion of an approved program given by another state; or
 - 5. Is exempt by rules of the Department.

No person may operate a motorboat of over 15 horsepower or a PWC unless he is 16 years of age or older or (i) is accompanied by a person 18 years of age or older or (ii) is at least 13 years of age and has passed a boating safety course prescribed and approved by the state agency.

The Fish and Boat Commission is charged with adopting rules to:

- Administer a boater education program that is designed to educate persons about the safe operation of vessels;
- Approve boater education courses that meet or exceed the minimum instruction requirement, established by NASBLA;
- Create an equivalency examination that may be taken, as the Commission determines is consistent with promoting public safety in the operation of vessels, instead of the boater education course; and
- Ensure that boater education courses and examinations are available in each county.

The Commission may, by rule, create exemptions from boater education requirements imposed by statute to the extent the exemptions are consistent with promoting public safety in the operation of vessels. The Commission, again by rule, is to create a standard form for a boater education card to be issued to a person who successfully completes a boater education course or course equivalency exam. The Bureau of Boating within the Commission may appoint agents to administer the course or course equivalency exam. The cost of the exam or course fee is five dollars if the course is provided by the Commission. If offered by an agent, the course costs \$10 and the agent can charge an additional three-dollar service fee, which he may keep.

Before releasing possession of a rented vessel, a vessel livery is required to provide boating safety instruction. After providing the instruction, the rental business is required to have each operator sign an acknowledgment form indicating that the operator has received the instruction.

A person who violates PWC-related operating laws and water ski towing statutes must pay a fine imposed for the specific violation and successfully complete a boating safety course within 90 days of the date he is found guilty. For a first-time violation of other boating operation laws, a court may defer imposition of a fine and place a defendant on probation for a period not to exceed 60 days, if the dependent pleads nolo contendere or is found guilty and requests permission to attend a boating education course. If the person successfully completes the course, the court has to waive the imposition of the fine.

Rhode Island

In Rhode Island, no person under the age of 16 is allowed to operate a PWC unless he (i) is accompanied by an adult or (ii) has passed a Department of Environmental Management-approved or U.S. Coast Guard-approved safety course. It is also unlawful for the owner of a PWC or any person having charge over, or control of, a PWC to authorize or knowingly permit the PWC to be operated by a

person under 16 unless he meets one of the two previous conditions. The Department's Division of Boating Safety, all local law-enforcement officers, and harbormasters are authorized to enforce this law. Any person who violates the statute, or rule or regulation promulgated pursuant to the statute, is guilty of a misdemeanor and subject to a fine not to exceed \$500 or imprisonment not to exceed six months. Persons who are convicted of a felony relating to the operation of a watercraft are required, in addition to any criminal penalties, to take an approved boating safety course.

South Carolina

In South Carolina, a person under the age of 16 cannot operate a PWC with a 15-horsepower or more motor without first successfully completing a boating safety course approved by the South Carolina Department of Natural Resources, unless he is accompanied by an adult age 18 years or older who is not under the influence of alcohol, drugs, or a combination of them. It is unlawful for anyone who has temporary or permanent responsibility for a child to knowingly or willfully violate this provision, as it is for the person who owns or has charge over or control of a PWC. Any person who violates this provision is guilty of a misdemeanor and must be fined not less than \$50 nor more than \$300.

The Department is authorized by statute to inaugurate a comprehensive boating safety and boating education program and to seek the cooperation of boatmen, the federal government, and other states. The state agency has primary enforcement responsibility, but both local law-enforcement officers and the state police are authorized to enforce the boating laws.

Utah

A person under 16 years of age may operate a motorboat in Utah if he is accompanied by a person who is at least 18 years of age. A person who is 12 to 15 years of age may operate a PWC if he meets all three of the following conditions: (i) is under the direct supervision of a person who is at least 18 (direct supervision means oversight at a distance within which visual contact is maintained), (ii) completes an approved boating safety course, and (iii) has in his possession a boating safety certificate. A person 16 or 17 years of age may operate a PWC if he completes an approved boating safety course and has the certificate in his possession. A 16- or 17-year-old who is taking an approved course need not be accompanied by a parent, guardian, or responsible party while completing a boating safety course.

The state agency is authorized to collect a fee not to exceed \$12 from each person who takes the course to help defray the cost of the boating safety course. Money collected is required to be deposited into the Boating Account.

Vermont

In Vermont, a person under the age of 12 is prohibited from operating a motorboat powered by a motor of more than six horsepower. In 1989, a law was enacted that required any person born after January 1, 1974, to obtain a certificate of boating education before operating a motorboat. A person required to have a certificate must (i) possess the certificate when operating a motorboat on public waters and (ii) show the certificate on the demand of an enforcement officer. However, a person charged with not having a certificate will not be convicted if he produces in court, to the officer, or to a state's attorney a certificate which was valid at the time the violation occurred. The following persons are exempt from having to obtain a certificate: a person who is licensed by the U. S. Coast Guard to operate a vessel for commercial purposes, a person operating a vessel on a body of water located on private property, and any other person exempted by rules of the Department of Public Safety.

The Department of Public Safety is directed, by statute, to (i) adopt rules that establish criteria for a course of instruction in boating safety education, (ii) adopt rules relating to transient boaters and persons who hire chartered vessels, (iii) administer a verbal test when appropriate. (iv) coordinate a statewide program of boating safety instruction and certification and ensure that a course of boating safety education is available within each county, and (v) ensure that a course of boating safety education is available at the earliest practicable age for children. The course is to be a minimum of eight hours of instruction. The following entities may offer the course if approved by the Department: the Department of Public Safety, the U.S. Coast Guard Auxiliary, the U.S. Power Squadron, a political subdivision, a municipal corporation, a state agency, a public or nonpublic school, or any group, firm, association, or person. The Department of Public Safety is empowered to issue the certificate to anyone who passes the Department prescribed course or passes an equivalency examination administered by an authorized person. Upon request, the Department is to provide, without charge, boating safety education materials to persons who plan to take the equivalency exam. Once issued, the certificate is valid for the lifetime of the person to whom it was issued and may not be revoked by the Department or a court. The Department is to replace, without charge, a lost or destroyed certificate. A certificate issued in another state or county in accordance with or substantially equivalent to the NASBLA approved program or certificate is sufficient to comply with the requirements of Vermont law.

Wisconsin

In Wisconsin, no person under the age of 10 years may operate a motorboat, and persons 10 and 11 years of age may operate a motorboat only if they are accompanied in the boat by a parent, guardian or a person at least 18 years of age designated by a parent or guardian. However, no person under the age of 12 years may operate, lease, or rent a PWC. Persons at least 12 and less than 16 years of age may operate a motor of any horsepower (except a PWC) if they are either (i)

accompanied by a parent, guardian, or a person at least 18 years of age designated by a parent or guardian or (ii) in possession of a boating safety certificate. Persons of this age who wish to operate a PWC must possess a boating safety certificate. A person in the business of renting or leasing any PWCs may not (i) rent or lease a PWC to any person who will be operating a PWC for the first time and who does not hold a valid certificate, unless he provides instruction on how to operate a PWC, or (ii) rent or lease a PWC to anyone under 16 years of age. The Department may promulgate rules to establish minimum standards for the instruction given by rental businesses.

A person who violates any of these provisions is subject to a penalty of not more than \$50 for a first offense and not more than \$100 upon conviction of the same offense a second or subsequent time within one year. In addition, any person who is convicted of (i) knowingly permitting an under-age or unauthorized person to operate a motorboat or (ii) negligent operation of a motorboat is required to obtain a boating safety certificate.

The Department of Natural Resources is required to create comprehensive courses on boating safety. These courses are to be offered in cooperation with schools, private clubs, and organizations, and may be offered by the Department in areas where requested and where other sponsorship is unavailable. Department may issue certificates to persons 10 years of age or older. The Department is empowered to prescribe the course content and the form of the certificate, and to collect a fee from each person who enrolls in the course. It can allow instructors to retain a portion of the fee to defray expenses incurred locally to operate the program. The remainder of fee is to be retained by the Department to defray a part of its expenses incurred in operating the program. Beginning May 1, 1999, the Department will be able to collect only two dollars from each person, with one dollar going to instructors and one dollar retained by the Department. Currently, certificates issued by the states or provinces held by persons between the ages of 10 and 16 years are honored if the course content substantially meets that established by the Department. Beginning May 1, 1999, any valid certificate issued by the states or provinces held by a person of any age will be honored.

E. PUBLIC HEARINGS

To gauge public sentiment on the question of whether Virginia should require operators of motorboats to successfully complete a boating safety course, the subcommittee held two public hearings in communities (Smith Mountain Lake and Norfolk/Hampton Roads) whose waterways are becoming increasingly congested. Each hearing was attended by approximately 60 individuals and about one-third of those in attendance spoke or submitted written testimony. The positions of those commenting generally fell into two categories: those who favored some form of mandatory boating safety education for motorboat operators and those who opposed such a requirement, favoring instead the current voluntary efforts.

1. Comments Of Those Favoring Mandatory Education.

Supporters of some form of mandatory education included residents of the Smith Mountain Lake area and Hampton Roads, and representatives of such organizations as the Smith Mountain Lake Association, the Smith Mountain Lake Advisory Board, the Tidewater Personal Watercraft Club, the Hampton Roads Boating Safety Coalition, local U.S. Power Squadron and Coast Guard Auxiliary chapters, and the National Transportation Safety Board. Their comments in support of such a policy included the following:

- It is necessary to dramatically increase boaters' knowledge, abilities and attitudes in order to curb the rising number of accidents and injuries. The most effective way to accomplish this is through mandatory boater education.
- Boat operator ignorance of basic rules of the water greatly affects the quality of life on the water, which in turn negatively impacts the boating experience for tourists, residents and regular visitors.
- A study conducted by the National Transportation Safety Board suggests
 that the individuals involved in fatal boating accidents, regardless of the
 level of experience, operated their vessels in a manner inconsistent with a
 basic knowledge of the rules of the water, and an understanding of safe
 boating practices.
- A phased-in boating education program would not only reduce accidents but, equally important, enhance water safety, making boating a more pleasurable experience for everyone.
- Between 1996-1997, the number of registered boats in Virginia increased by only 1.52 percent, but the number of boating accidents increased by almost nine percent and the number of boats involved in accidents increased by 12 percent.
- Fifty-eight percent of the boat operators surveyed by DGIF and 86 percent of the boating organizations surveyed believed that state law should require boating education.
- Implementing a mandatory education program is financially feasible. The Department currently has a full-time boating safety coordinator on staff. The other operating costs can be financed through a combination of the following: (i) increasing the registration on watercraft by one dollar, which would raise \$100,000 per year in additional revenue, (ii) funds from the federal boating safety program, and (iii) a dedication of a portion of the sales and use tax on watercraft.

- A cadre of instructors is in place. In 1997, the Coast Guard Auxiliary taught 58 percent of the classes, the Power Squadron taught 23 percent of the classes, and the Department taught seven percent of the classes.
- Just as safety courses are required before a person can drive or hunt, so should boating safety classes be required before a person can operate a mechanically powered watercraft. Boating can be as dangerous as hunting or driving.
- The number of boats on the water is ever increasing, and as a result boating accidents involving personal injury and property damage are also increasing. However, there is no education, and/or competency requirement as there is for operation of a motor vehicle. Currently, anyone with money or credit can operate a vessel weighing hundreds to thousands of pounds with hundreds of horse power and the capability of causing tremendous destruction to life and property.
- The insurance industry has recognized the risk of high-powered boats by imposing high premiums on these types of vessels, particularly PWCs
- Any process of mandatory education must attempt to ensure that all
 boaters have the same knowledge of vessel operation and use the same set
 of rules. Any educational requirements cannot discriminate against a
 particular form of boating activity or group of boaters.
- Educational requirements should not impair or restrict the business activity that supports boating, or discourage tourism that depends on water recreational activities.
- Coast Guard statistics indicate that approximately 85 percent of all fatal boating accidents involved boaters with no formal boating education.
- Because the voluntary education courses have been offered for at least 10 years and only one-third of the boating public has enrolled in these courses, it appears the voluntary approach has not been effective in training boat operators.

2. Comments Of Those Opposed To Mandatory Education

Opponents of mandatory education included residents of the Lake area and Hampton Roads and representatives of such organizations as the Smith Mountain Lake Boating Association, marina operators, Smith Mountain Lake Chamber Partnership, the Virginia Association of Marine Industries, and boat sales and rental businesses. They opposed the requirement so for the following reasons:

- Educational requirements would impair or restrict the business activity that supports boating, and discourage tourism that depends on waterbased recreation activities.
- The imposition of mandatory education may result in a decrease in the sales of boats.
- If mandatory education is recommended by the subcommittee, there should be an exemption in the law for visitors to the state, tourists, and boat sales and rental businesses.
- Virginia boating accident statistics, when broken down by accidents involving boaters who have passed a boating education course and those who have not, do not indicate a lower accident rate for those who have passed the course.
- Accident rates in states that require mandatory education do not reflect
 that boating is safer in those states than in states, like Virginia, which do
 not mandate such boating education courses.
- Because Virginia's accident rate per registered boat is comparable to that of states having mandatory education programs and in light of the newly enacted boating laws, a mandatory program cannot be justified at this time. These laws, enacted in 1998, should also be given time to work.
- With the new funding that the General Assembly has provided to the Department of Game and Island Fisheries, the agency will be able to extend the hours that game wardens are on the water, and this will have a greater impact on boating safety than mandatory training.
- The cost of implementing mandatory boating education would require significantly more funding than is being allocated currently to boating safety programs.
- The boating community, including the boat rental industry, will continue to voluntarily provide boat safety training and to emphasize common courtesy.
- A massive, long-term advertising boating safety campaign should be instituted rather than a one-time mandatory educational experience.
 Such a campaign would have a lasting affect on boating attitudes and would be more effective than a simple safety class attendance.
- The effectiveness of any mandatory boating safety education policy must be measurable and cost effective.

IV. FINDINGS AND RECOMMENDATIONS

DGIF statistics indicate that the typical boating accident occurs on a clear day with good visibility, when a 16- to 26-foot open motorboat, operated by a person 21 to 40 years of age, with 500 hours of operating experience, is going too fast and collides with another boat. While a majority of the accidents are due to boat collisions, less than 10 percent of the boat-related fatalities are the direct result of a collision. Rather, almost three-quarters of the deaths are due to drownings, where the victim was not wearing a life jacket. During its deliberations, the subcommittee sought to determine whether requiring Virginia boat operators to successfully complete a boating course was the most effective strategy for improving safety on Virginia waters. The subcommittee believes that injuries and damage to property will only be avoided when boat operators are familiar with the vessel, know the rules of the water, and have the ability to make decisions based on present circumstances, past experiences and considerations of possible consequences. In its discussion of ways to attain this goal, a range of options were considered. These options included (i) requiring mandatory training of all operators, but with exceptions for certain classes of individuals, such as tourists, master pilots, short-term renters of boats, etc., (ii) phasing in mandatory boating safety course which would be required for the most inexperienced operators. (iii) requiring the viewing of a 45-minute video followed by a open-book examination and immediate certification, and (iv) requiring familiarity with the basic "rules of the water" as printed on a boating safety card, distributed by DGIF, to be carried on board a vessel while its in operation.

After reviewing the various options, the subcommittee was unable to reach a consensus on what it believed would be the most effective approach to enhancing boating safety. No state had conducted a study measuring the effectiveness of boating safety education. Typically, what states have done is analyze their accident rates in terms of one accident per number of registered vessels, before and after the imposition of mandatory education. Using this approach, even though a number of variables are not controlled for, any reduction in rates after mandatory education would be attributable, in some measure, to such education. This type of analysis is acknowledged by boating program administrators as not particularly rigorous. In fact, one of the subcommittee's concerns is that if one analyzes the accident rates among states with mandatory education and compares them to states like Virginia, where operators are not required to complete a boating safety course, the results are mixed. In its 1998 study, DGIF examined the accident rates for 19 states which have mandatory education. (Appendix B presents the DGIF data.) Of the 19 states, 11 had lower accidents than Virginia: however, eight states had more accidents per registered boats. Minnesota, with one accident

per 4,864 registered vessels, and Vermont, with one accident per 3,686 registered vessels, have the lowest accident rates; Rhode Island, with one accident per 498 registered vessels, and Florida, with one accident per 566 registered vessels, have the highest rate. Virginia's rate of 1,356 fell in the middle range. Again, the interpretation given these rates must be approached with caution since the type and length of the course and the age and experience of those required to attend a safety course varies among the states.

In light of the new boating laws enacted during the 1998 Session, most of which did not become effective until January 1, 1999, the subcommittee believes that the appropriate policy option is to give these new statutes the opportunity to work. Those measures (i) provide a new definition of reckless PWC operation, (ii) establish statewide standards for "no wake" zones in which motorboats have to slow down to "no wake" speed when within 50 feet of people in the water, structures and other boats, (iii) require those who are in the PWC rental business to complete a boating safety course and to provide boating safety instruction to rentees, (iv) require those in the business of selling or demonstrating a watercraft to complete an approved course or pass a competency test, and (v) establish an incentive for education by increasing the minimum age for PWC operators from 14 to 16 years of age, but exempting those 14 and 15 from the new age requirement if they complete a boating safety course. The subcommittee believes that, through strict enforcement of these new laws, boating-related behaviors will be changed in a way that will have a more immediate impact on accident and injury rates than the long-term prospect of attempting to change attitudes through mandatory education.

Respectfully submitted,

Delegate Lacey E. Putney, Chairman Senator Warren E. Barry, Vice Chairman Delegate I. Vincent Behm, Jr. Delegate M. Kirkland Cox Delegate Donald L. Williams Senator Steven D. Newman Senator W. Roscoe Reynolds

V. APPENDICES

APPENDIX A

HOUSE JOINT RESOLUTION NO. 174

Establishing a joint subcommittee to study the feasibility of establishing and implementing a mandatory boating safety education course in Virginia.

Agreed to by the House of Delegates, March 12, 1998 Agreed to by the Senate, March 10, 1998

WHEREAS, boating is a significant recreational activity which continues to increase annually, with approximately 230,000 recreational boats presently registered to operate on Virginia's waters; and

WHEREAS, recreational boating accidents and fatalities continue to be a cause for concern within the recreational boating community, with 28 fatalities occurring in Virginia in 1997; and

WHEREAS, providing boating safety education is one of the important responsibilities of the Department of Game and Inland Fisheries; and

WHEREAS, more than 18 states have implemented some form of mandatory boating safety education. with several of these reporting a reduction in the number of boating accidents and fatalities; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That a joint subcommittee be established to study the feasibility of establishing and implementing a mandatory boating safety education course in Virginia. The joint subcommittee shall be composed of 7 legislative members as follows: 4 members of the House of Delegates to be appointed by the Speaker of the House in accordance with the principles of Rule 16 of the House Rules; and 3 members of the Senate to be appointed by the Senate Committee on Privileges and Elections.

In conducting its study, the joint subcommittee shall examine the following: costs associated with implementation, associated student costs, benefits of instituting mandatory boating safety education, possible course content, and mandatory training requirements and exemptions.

The direct costs of this study shall not exceed \$4,500.

The Division of Legislative Services shall provide staff support for the study. Technical assistance shall be provided by the Department of Game and Inland Fisheries. All agencies of the Commonwealth and the Virginia B.A.S.S. Federation, the Smith Mountain Lake Association, the Hampton Roads Safe Boating Coalition, the Virginia Association of Marine Industries, and other appropriate organizations are requested to provide assistance to the joint subcommittee.

The joint subcommittee shall complete its work in time to submit its findings and recommendations to the Governor and the 1999 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Implementation of this resolution is subject to subsequent approval and certification by the Joint Rules Committee. The Committee may withhold expenditures or delay the period for the conduct of the study.

APPENDIX B

BOATING ACCIDENT RATES FOR STATES WITH MANDATORY EDUCATION OR LICENSING

(Three-Year Average, 1994-96)

(Rates Are Number of Registered Vessels Per Accident)

State (# boats)	Mandatory Education	Mandatory Licensing	Year Effective	Age Groups or Other Restrictions	Accident Rate All Motorboats	Rate Without Personal Watercraft	Personal Water- craft Rate
D.C. (2,400)	Yes	No	1977	All operators	181	187	22
Rhode Island (32,000)	Yes	No	No Data	Under age 16 for personal watercraft	498	488	678
Florida (730.000)	Yes	No	1996	Born after Sept. 1980 and more than 10 hp.	566	No Data	126
Utah (75,000)	Yes	No	1994	Ages 12-17 for personal watercraft	567	905	131
New Jersey (190,000)	Yes	Yes	1988	Born after 1979 and all personal watercraft	614	2.114	447
Maryland (190.000)	Yes	No	1988	Born after July 1972	699	836	539
Idaho (80,000)	Yes	No	1996	Personal watercraft only	786	No Data	No Data
Indiana (200,000)	Yes	Yes	1995	Over age 14 and more than 10 hp.	1.280	1.903	380
Virginia (224,000)	NO	NO	NONE	NA	1,356	1,975	175

State (= boats)	Mandatory Education	Mandatory Licensing	Year Effective	Age Groups or Other Restrictions	Accident Rate All Motorboats	Rate Without Personal Watercraft	Personai Water- craft Rate
Connecticut (100,000)	Yes	Yes	1993	All plus extra 2.5 hours for personal watercraft	1,362	1,435	585
Michigan (950,000)	Yes	No	1968	Ages 12-15 and more than 6 hp.	1,529	2,409	264
Delaware (40.000)	Yes	No	1993	Born after Jan. 1978	1,575	2,137	137
New York (450.000)	Yes	No	1960	Ages 10-18	1,658	2,114	447
Alabama (260.000)	No	Yes	1994	Over age 11	1,711	2,405	292
North Dakota (40.000)	Yes	Y'es	1982	Ages 12-15 and more than 10 hp.	2,042	5,356	139
Illinois (370.000)	Yes	No	1978	Ages 11-17	2,239	No Data	No Data
Wisconsin (540,000)	Yes	No	1975	Ages 12-15	2.584	3,363	320
Pennsylvania (335,000)	Yes	No	1996	Ages 12-15 and more than 10 hp.	2.886	3,826	4+1
Texas (600.000)	Yes	No	1997	Born after Sept. 1984 and more than 10 hp.	3.506	5,663	780
Vermont (40.000)	Yes	No	1989	Bom after Jan. 1974	3,686	No Data	No Data

State (# boats)	Mandatory Education	Mandatory Licensing	Year Effective	Age Groups or Other Restrictions	Accident Rate All Motorboats	Rate Without Personal Watercraft	Personal Water- craft Rate
Minnesota (750,000)	Yes	Yes	1975	Ages 12-17 and more than 25 hp.	4,864	6,333	489
South Carolina (360,000)	Yes	No	No Report	No Report	No Report	No Report	No Report

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