



**South Carolina
Department of Natural Resources
Boating Safety Forums Project**

**FINAL REPORT
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Executive Summary

In response to a tragic incident in which a young woman was killed in a Jet Ski accident, Senator Kevin Johnson of Manning introduced South Carolina Senate Resolution 334 (Appendix 1). This resolution called on the South Carolina Department of Natural Resources (DNR) to “conduct public hearings and gather public input regarding boating safety concerns and to use any and all information gathered to make recommendations to the Senate to improve recreational boating safety for the citizens of this State.” In response, DNR held public meetings in the summer of 2015 at six locations: Manning, Conway, Charleston, Clover, Clemson, and Chapin.

At the beginning of each of the two-hour forums, attendees developed a list of issues related to boating safety and were then led through a facilitated process to address each topic. Topics most frequently discussed included the following

- Boater safety education
- DNR funding
- Boating under the influence of drugs or alcohol
- Wake zones
- Buoys (DNR and private)
- Nighttime speed and vessel lighting

Education emerged as the principal issue on the minds of participants. A repeated sentiment was the notion that requiring boaters to be educated would have a positive impact on many of the other issues identified and discussed. Survey data also indicate the importance of education. Both forum and online respondents agreed with the statement “Boating education should be required for an individual to operate a boat” (Appendix 3).

Another important issue raised at each forum was the need for more officers on the water. This point is supported by aggregate forum survey data. Forum respondents agreed with the statement “More officers are needed to enforce boating laws” (Appendix 3). Participants repeatedly noted that, to be effective, any change in boating laws will likely need to be accompanied by an increase in enforcement and more enforcement means better funding for DNR.

Introduction

In response to a tragic incident in which a young woman was killed in a jet ski accident, Senator Kevin Johnson of Manning introduced South Carolina Senate Resolution 334 (Appendix 1). This resolution called on the South Carolina Department of Natural Resources (DNR) to “conduct public hearings and gather public input regarding boating safety concerns and to use any and all information gathered to make recommendations to the Senate to improve recreational boating safety for the citizens of this State.” In response, DNR held public meetings in the summer of 2015 at six locations: Manning, Conway, Charleston, Clover, Clemson, and Chapin.

In order to avoid driving the results of these forums, the agency hired a professional facilitator from Clemson University, the author of this report, Jae Espey. At the beginning of each of the two-hour forums, attendees developed a list of issues related to boating safety. Once issues were selected, the facilitator guided the discussion. DNR dictated neither the issues discussed nor the process through which comments were elicited. These decisions were left to the participants and the facilitator respectively. Comments at each forum were recorded and transcribed by a professional court reporter. Additionally, a survey was administered at the beginning of every forum and online via the DNR website (Appendix 2). The survey asked respondents about their boat ownership, boating activity, boater education, and attitudes about boating safety.

In addition to concerned community members, DNR Director, Alvin Taylor, and DNR law enforcement officers attended each meeting. Senators Johnson and McElveen attended the forum in Manning and Representative Chip Huggins attended the session in Chapin. Forums were also attended by representatives from the U.S. Coast Guard Auxiliary and local Power Squadrons.

While public input was sought and received by the agency, much of what occurred at these forums was education. Participants asked questions on a variety of topics with respect to state boating laws and DNR policy. Since the purpose of this report is to summarize public input, questions and answers for the agency are not included. Rather, comments received at each forum are summarized along with survey data. Precise detail of the discussions is available in the individual transcripts which are available upon request to DNR. Each forum summary includes survey results for that individual forum. Comparison of online and aggregate forum data is provided in Appendix 3. Overall results for combined online and forum data are provided in Appendix 4.

Testimony from Family Members of Victims

Melissa Grice from Manning attended all but the Clover forum. Melissa lost her nineteen year old daughter, Milli, in a tragic jet ski accident in May of 2014. Since then she has made it her life's mission to work toward the passage of legislation which would require all operators in a boating accident to undergo a breathalyzer test. Currently, SC law only requires a blood alcohol test when there is probable cause to suspect an individual is operating a watercraft under the influence.

Sean Bordeaux of Sumter and his family attended the forum in Manning. Sean lost his twenty-one year old daughter Hailey in a nighttime accident when another individual operating a watercraft collided with the boat in which Hailey was an occupant. He has been working with Senator McElveen to urge passage of Senate Bill S. 162. This bill would make it unlawful to operate a boat in excess of the no wake-idle speed on certain lakes and reservoirs after sunset and would provide for penalties for violations. Sean would also like to see improved lighting on all boats operated after sunset.

Craig Keese of Greenville lost both his son and grandson in a boating accident in Missouri. He has since become a strong advocate for the use of personal flotation devices (PFD). Craig has studied PFD laws across the country and attended all forums to urge South Carolina to make PFD use mandatory.

Cassy Stevens, a student at Winthrop University, lost her brother Brandon when his boat collided with the riverbank in the Cox Ferry Lake area of the Waccamaw River. She spoke passionately at the Chapin forum about the need for mandatory boater safety education.

Key Issues

What follows are the key issues that emerged at the forums. Some topics, such as boater safety education and the need for additional funding to provide for more DNR officers, were discussed at every forum.

Education

Education emerged as the primary issue in every one of the boating safety forums. Many participants expressed frustration with boaters who seemed to ignore boating laws or willfully defy them. Mandatory education was suggested as a remedy for problems such as ignorance of rules of navigation, wake zone violations, wake jumping, speeding, negligent operation, non-use of PFDs, lack of courtesy, diminished swimmer safety, and boating under the influence, just to name a few.

Survey responses compliment forum discussion and provide a quantitative measure of boating safety concerns. Responses measured agreement with several statements regarding boating safety using a five point (Likert) scale where 1 meant “strongly disagree” and 5 meant “strongly agree”. Aggregate survey results for all forums indicate strong agreement with the statement “Boating education should be required for an individual to operate a boat” with a mean response of 4.29. Discussion revealed that not everyone agreed on the point of mandatory education. Some thought it should be mandatory for everyone while others felt it should be required of for young people only. Others thought it was appropriate only for personal watercraft.

Many participants noted that a mandatory education requirement for all boaters regardless of age might face stiff opposition. In that connection, it was frequently suggested that such a requirement be phased in, perhaps beginning with those born before a certain year, in effect grandfathering in current adult boaters. Over time, it was argued, all boaters would be educated. For example, both North Carolina and Florida state law require that any person born on or after January 1, 1988, must complete a National Association of State Boating Law Administrators (NASBLA) approved boating safety course before operating a vessel with a motor of 10 horsepower or greater on state waters.

There was some opposition among participants to the notion of online testing. Many participants felt that a safety course should be administered in person and that testing should be proctored.

The issue of reciprocity also arose and participants largely agreed that South Carolina should recognize proof of boating safety education in another state, provided it meets minimum standards.

A requirement for a boating license was frequently mentioned in connection with education, Participants felt that once a person had taken training, he or she should be issued a license and should be required to present this to law enforcement officers on the water. The license could also be taken away as a result of violations. Interestingly, survey results show that a majority of respondents agreed that a person operating a watercraft should be required to carry and show photo identification to law enforcement officers when requested.

Funding

Participants at every forum raised the issue of DNR funding. The vast majority of participants want to see more DNR officers on patrol on state waters. Aggregate survey results for all forums indicate agreement with the statement “More officers are needed to enforce boating laws” with a mean response of 4.06. Participants realize that DNR officers not only enforce boating laws but also work to protect our fish and wildlife and feel that an increase in DNR boating safety enforcement should not come at the expense of diminished oversight of hunting and fishing. Accordingly, participants repeatedly said that more funds should be directed to the

agency, especially in light of the ever growing number of vessels on state waters. Attendees came up with several suggestions with respect to increasing funding:

- Sales tax – Increase the sales tax on new boats and direct those funds to DNR for boating safety
- Property tax – Allow a portion of property taxes to be directed to DNR.
- Registration fee – Increase the three year vessel registration fee from the current level of \$30.
- Require a boating license and use at least a portion of fees generated to support boating safety efforts.

Boating Under the Influence of Drugs or Alcohol (BUI)

Participants largely found Melissa Grice’s proposal (Milli’s Law) to require breathalyzer tests for operators in accidents to be a reasonable measure. In fact, no opposition to this was heard at all. Many also agreed that penalties on the water and the highway should be the same. There was widespread agreement that DNR officers should be able to carry and use breathalyzers on state waters.

A distinct minority urged stricter laws with respect to alcohol use by boat operators on state waters. Most participants seemed to think that consumption of alcoholic beverages should be allowed. There was unanimous agreement that a zero tolerance for boating under the influence is appropriate.

Participants frequently made the comment that violations on the water should be tied to one’s (highway) driver’s license. It was felt that those who currently disregard the law might think twice if the consequences were made more severe.

Wake Zones

Current South Carolina law requires that boaters observe a “no wake zone” within 50 feet of a moored or anchored vessel, a wharf, pier or dock, or a person in the water. Participants identified this as an issue of concern. Many suggested that the current zone is too close and would like to see the no wake zone extended. Suggestions ranged from 100 feet to as much as 300 feet. This was consistent throughout the six forums.

Personal Flotation Devices

A consensus opinion as to the mandatory use of PFDs did not emerge. While some participants saw PFD use as the equivalent of a seatbelt in an automobile, others argued that having them

available in the event of trouble was more important than constant use. Still others said PFD requirement should be based on the size of the vessel; they should not be mandatory on vessels on which one is unlikely to fall overboard. Current law requires all persons to wear a USCG approved PFD on personal watercraft. Persons under the age of 12 must wear one at all times on vessels 16 feet in length or shorter.

Personal Watercraft (PWC)

There was widespread agreement that uneducated PWC operators are often a threat to themselves and others. Specifically, participants voiced the opinion that PWC use in a rental setting should be accompanied at a minimum by a mandatory short course in operation and safety. In some cases, it was suggested that guides for PWC rental operations should be required to obtain a Captain's license before leading groups. Another issue is the increasing number of very young operators, in some cases pre-teen or even younger. In that connection, some participants would like to see a minimum age for PWC operation and/or strict educational requirements based on age. Current law requires a person under the age of 16 to have a NASBLA approved boating safety education course before operating any PWC or other watercraft with a motor of 15 HP or greater.

Buoys

The topic of buoys was most prominent at the Clemson forum. Many residents on Lake Keowee in particular are upset over DNR's removal of private buoys. They see this as an affront to their individual efforts to address boating safety. Moreover, they are willing to pay for wake zone buoys at their own expense. However, DNR said it was a matter of state law that an individual cannot regulate the waters of the state. A solution to this problem, aside from allowing the return of the buoys, did not emerge from the discussion, either at Clemson or elsewhere.

Nighttime speeding and vessel lighting

While cognizant of problems in measuring vessel speed, participants nonetheless mentioned the problem of high speed at night. Although there did not seem to be a consensus opinion on this subject, many felt that the problem of nighttime speed can be at least partially addressed by improving vessel lighting. One unique observation that emerged in Chapin was the fact that, contrary to the case of automobiles, current state law does not prohibit the use of constantly illuminated blue lights on vessels. This, it is argued, leads to great confusion as operators often assume a blue light indicates a law enforcement vessel. Everyone at the Chapin forum seemed to agree that the law needs to be changed.

Forum Summaries

The following sections provide a brief overview of key input obtained at each of the six boating safety forums as well as survey data from each. The full text of the survey is included in Appendix 2. Complete meeting transcripts are available upon request. Forums were held in Manning, Conway, Charleston, Clover, Clemson, and Chapin. The Clemson forum was the most attended with upwards of 150 in the audience. The Chapin forum was also well attended with nearly 60 in the audience. Forums in the remaining locations averaged about 25 participants.

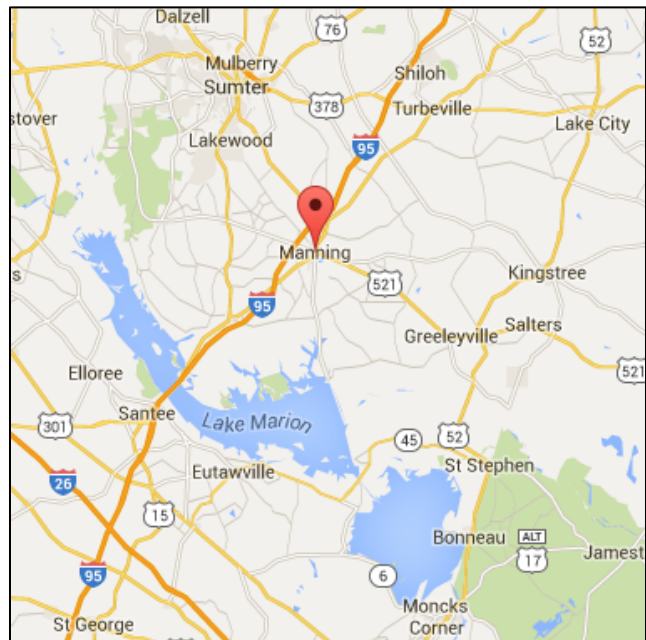
Since topics were selected by participants there is some overlap in the discussion. There are also differences across forums. For example, rentals of personal watercraft was a big issue in Conway but not at Clemson. Clemson participants spent much time discussing the issue of removal of private buoys but this issue was only mentioned in passing at the Clover forum.

Manning

The first forum was held in Manning at the F.E. DuBose Career Center on Tuesday, July 28, 2015. The sign-in sheet indicates that 25 people attended.

Discussion

General topic areas selected by attendees were education, boating under the influence (BUI), nighttime speeding/vessel lighting, funding, and wake zones. Participant comments are included under each topic heading.



Boater safety education

- Creating more laws will not prevent accidents from happening. Educating people on how to operate whatever vessel it is they're using might be a better option.
- Require a driver's license, just as you do with an automobile. If we were required to have a license, the education would come.
- At least move the requirement to pass a course up to age 16.
- An operator of a personal watercraft (PWC) should not be younger than 16, period.
- State law should require a boater education course. It will reduce the problems tenfold.
- Education should be required for all ages.
- Everybody that gets behind the boat steering wheel and pushes the throttle needs an education.

Boating under the influence

- Rules regarding boating under the influence should be the same as on the highway.
- A breathalyzer test should be mandatory for anyone involved in an accident resulting in bodily injury or more than \$2,000 in total damage (combination of both vessels).
- Open containers should not be allowed.
- Focus on impairment, not open containers.
- Not allowing open containers would lead to more littering.

Nighttime Speeding/ Vessel Lighting

- We need speed limits on the lake at night.
- LED lights should be required as they are more visible than incandescent.
- Lights on boats are antiquated. We should look into updating the lights on boats that are required after sunset.
- If the agency was better funded, we would stand a better chance of catching people who speed in the dark.
- Other states such as Alabama have speed limits on the water. We should as well.

Funding

- We have got to have some more money allocated for DNR, because they have got to get some help up there. There aren't enough of them to go around. The lake is entirely too big.
- They (DNR) definitely need more funding to have more guys out there. There are not enough of them and it's not their fault.
- A portion of the property taxes we pay on our boat should go toward DNR.
- Charge more for out-of-state people. Increased (DNR law enforcement) presence would lead to safer waterways.
- Allocate a portion of the boating sales tax to go toward DNR to help them put more officers on the water.
- Find a way to charge everyone who uses the water. Make everyone pay \$10, not just fishermen.
- Increase the boat registration fee (sticker).

Wake Zones

- Do more to set and enforce no wake zones at docks

Manning Survey Results (n=24)

Level of agreement or disagreement with the statements

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

	Mean
Boating education should be required for an individual to operate a boat.	4.29
Most boat operators seem to understand the rules of navigation on the water.	2.35
Boating under the influence of drugs or alcohol is a problem where I boat.	3.96
Boating laws are adequately enforced in the areas in which I boat.	3.50
More officers are needed to enforce boating laws.	4.17
Anyone operating a boat should be required to carry a photo ID.	4.50

Manning Issues and Solutions

Issue	Solution(s)
Ignorance/Lack of education	Education Require a boating license
Boating under the influence	More officers Make BUI penalty same as DUI
PWC	Education Require an adult to be onboard Require a license Require paddleboards to be 50' from shore
Wake zones	Education Post wake zones
Nighttime speeding	Establish speed limits

Conway

The second forum was held in Conway at the Horry Georgetown Technical College on August 6, 2015. The sign-in sheet indicates that 53 people attended. This includes representatives from the Coast Guard Auxiliary and local Power Squadron. However, 58 surveys were collected.

Discussion

General topic areas selected by attendees were education, boating under the influence (BUI), personal watercraft use and rental, funding, wake zones, and personal flotation devices (PFD). Participant comments are included under each topic heading.



Boater safety education

- Require a license to show that you have passed a boating safety course.
- Anyone leading a group of PWCs for hire should be required to have a Captain's license.
- People don't even know what red and green lights mean on the water. We need to educate them about the rules of the road.
- Educational requirements should extend to visitors from out of state.
- Look to other states such as Virginia. Everyone should have a boating safety course.
- Require education but use hunting licensing as a model. Require education if one is born after a certain year. Eventually, all boaters will be trained.
- Education should be required. If one has a boater education class from another state that matches our guidelines, they should be required to show proof if asked by a DNR officer.
- Our state should look to what North Carolina has done with respect to boating education. Require it for everyone.
- Mandatory education is a good thing. Look to New Jersey's efforts in this area.
- There should be mandatory education in public schools beginning at the junior high school level.
- Any course should be approved by the National Association of State Boating Law Administrators (NASBLA)
- Require a minimum 8-hour nationally certified boater safety course, proctored in person for all boaters on South Carolina waters.
- Boats are often overcrowded (too many passengers). If boaters were better educated, this would be less of a problem.

Opposing viewpoint:

- Mandatory education will not work. There will always be idiots out on the water. Why make this mandatory for everyone just because of a few idiots?

Boating under the influence

- A breathalyzer test should be mandatory for anyone involved in an accident resulting in bodily injury or more than \$2,000 in total damage (combination of both vessels).
- Intoxicated boaters are a problem where I boat. The presence of more officers would discourage this behavior.
- DNR law enforcement should be allowed to have and use breathalyzers on the water.
- The initial fine for BUI is \$475. That's the same as not having a life jacket. We should increase the BUI fine.
- Many of the deaths on the water are attributable to alcohol. We can't disregard that.
- Being convicted of BUI should put your driver's license in jeopardy.

Personal Watercraft (PWC) Use and Rental

- We need to examine the requirements for someone to rent a PWC. Renters should be required to have had some sort of training before rental.
- Rental operators should be required to provide education to PWC renters.
- The state should update the livery statute with respect to PWCs. It has not been amended in 100 years.
- Guides for PWCs on the Little River and elsewhere should be required to have a captain's license.
- Rental operators should be held responsible for any damage caused by their renters.
- Set aside certain exclusive areas on the state's waters for PWCs.
- More should be done to force rental guides to make renters observe no wake zones.

Funding

- Funding education takes money. Increase penalties for BUI or negligent operation to raise funds for education.
- Increase boat registration fees.
- Start taxing boat trailers to raise funds.
- The City of Myrtle Beach has more officers than DNR does statewide. And DNR officers do much more than just enforce boating regulations. We need better funding to get more officers on the water.
- Our state has the highest property tax on boats in the nation. Those funds should be devoted to boating.
- Write more tickets, this will address funding issues.
- We need more police out there. A Blue light stops a lot of problems.

Wake Zones

- People don't observe wake zones because they are largely ignorant about boating safety in general.
- Signage regarding wake zones needs to be required or improved at all public boat launches. The majority of boaters don't even know about wake zone regulations.

Personal Flotation Devices (PFDs)

- Everyone should be required to wear a PFD at all times.

Conway Survey Results (n=46)

Although a total of 58 surveys were collected, only 46 included responses to the following statements.

Level of agreement or disagreement with the statements

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

	Mean
Boating education should be required for an individual to operate a boat.	4.57
Most boat operators seem to understand the rules of navigation on the water.	2.20
Boating under the influence of drugs or alcohol is a problem where I boat.	3.61
Boating laws are adequately enforced in the areas in which I boat.	2.71
More officers are needed to enforce boating laws.	4.00
Anyone operating a boat should be required to carry a photo ID.	4.59

Conway Issues and Solutions

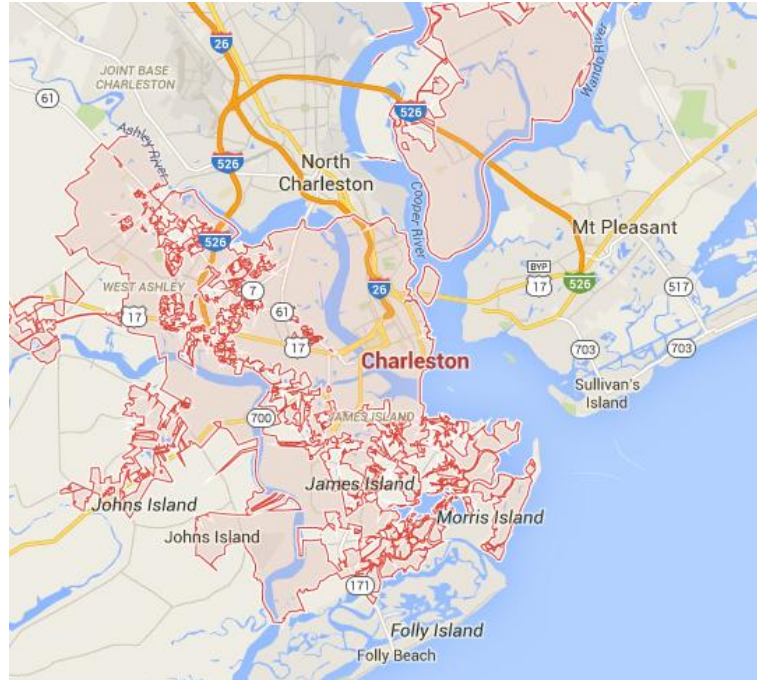
Issue	Solution(s)
Ignorance/Lack of education	Mandatory Education
PWC	Mandatory education
Wake zones	More buoys More funding for DNR
Speeding in coves	More buoys More officers Increase no wake zones More swimmer protection in coves

Charleston

The third forum was held near Charleston at the Fort Johnson Marine Center Auditorium, James Island, on August 11, 2015. The sign-in sheet indicates that 23 people attended.

Discussion

General topic areas selected by attendees were education, boating under the influence (BUI), PWC use and rental, funding, and wake zones, speeding, vessel safety checks, personal flotation devices (PFD), enforcement, and kayaks. Participant comments are included under each topic heading.



Boater safety education

- One has to have a license to drive a car. It should be the same for boats.
- The state of Virginia requires a boater education course. We should too. At a minimum, we should make it mandatory for PWCs.
- We should phase-in mandatory education. Perhaps make anyone born before 1955 exempt as the state of Washington has done. British Columbia also has mandatory education.
- People can cheat on online courses. Education should be done in person.
- Education should not be mandatory but marinas that sell a boat should be required to provide information about boating safety to anyone who buys a boat.
- We should start with rentals. Anyone renting a boat should be required to complete a boating safety course.
- We could encourage education if violations were assessed against the boat owner's driver's license.
- I took an online course and really didn't learn anything.
- An education requirement tied to the horsepower of the boat might not work since newly developed electric boat motors are not rated in horsepower.
- Boaters, especially the younger ones don't seem to know the rules of navigation. Education should be mandatory.
- If boater education is mandatory, a license that proves one has completed a course in another state should be honored by DNR. New Jersey does this.

- Any new legislation we make is not proactive unless it involves education. Any other type of legislation is simply going to be after the fact the accident has occurred. The only way to make people safer is to act proactively.
- Most boat dealers will offer personal education if one is buying a new boat.
- We should utilize educational resources such as the local Power Squadrons and the US Coast Guard Auxiliary (USCGA).
- The USCGA will teach classes if they are large (at least 50).
- I think the Navy will help too. I took a course at the Naval Weapons Station in 2003.
- We should have more public service announcements regarding boating safety.
- We could make an impact if we showed wrecked boats at public boat landings. We do this for cars at high schools and it gets the message across.
- Use the reader boards on highways to advertise boating safety. They are often not being used at all. Use them during commuter times.
- Utilize homeowners associations to get information out there.
- We should model boater education after hunter education. Boating should require a license and a getting a license should involve education. We need it for cars or motorcycles. Why not boats?
- A phase in of licensing makes sense. Requiring everyone to get a license after a date certain would be a nightmare.
- DNR should sponsor an online forum devoted to boating safety.
- We should tie boating infractions to one's driver's license. This would really bring the consequences to actions.
- Boating licenses could be administered by the DMV. We already have the backbone of a system that could be adapted.

Boating under the influence

- Alcohol should not be allowed on any vessel at all. The legal blood alcohol level for boats should be either zero or at least lower than it is for drunk driving.
- A breathalyzer test should be mandatory for anyone involved in an accident resulting in bodily injury or more than \$2,000 in total damage (combination of both vessels).

Funding

- If DNR had better funding, we could have more officers on the water. I would be willing to see some sort of tax increase.
- Fees, fines, and perhaps a portion of property taxes should go to DNR boating safety efforts.
- Require trailers to be licensed. All or part of those revenues could be directed to boating safety.

Wake Zones

- The wake zone law should be changed from 50 feet to 100 feet.
- If wake zones cannot be enforced, people will ignore them.
- You can put up buoys but if you don't have DNR to enforce them it does no good.

Speeding and Reckless Operation

- Speed limits make sense in congested areas.

Rentals

- Rental companies seem to be more concerned with running the credit card than being concerned about who the customer is.
- Rental companies should be required to make renters show they have passed a boater education course.

Vessel Safety Checks

- We should consider making safety checks mandatory.
- As part of the boat licensing process, owners should be required to have their vessel checked. We should require annual safety checks. Safety checks could also be required when a vessel changes hands.
- A dealer should certify that a vessel is USCG approved, that it's got all the equipment. After that DNR could do this annually. After all, it's free.
- Any vessel that is sold should be able to pass a vessel safety check.
- Safety equipment must be replaced when expired and must be accessible or it is often of no use.

Personal Flotation Devices (PFDs)

- PFD use should be mandatory, just as seatbelts are required in cars. Statistically, it would save a lot of lives from drowning because most people who drown are not wearing them.
- The newer PFDs are easier to wear. Auto-inflatable PFDs are actually comfortable.
- Auto-inflatable PFDs are too expensive. Let's be realistic.
- I disagree with making people wear them all the time. It's perfectly safe to not wear them the majority of the time unless a storm blows up and it's going to roll your boat over.
- We should consider making PFDs mandatory for kids and anyone on a sailboat.

Enforcement

- DNR should be encouraged to work with other local law enforcement agencies.
- DNR should be encouraged to target problem areas with many officers.

Kayaks

- Kayaks are increasingly popular and associated fatalities have increased. DNR should do more to patrol kayaks.
- Maybe people who buy a kayak should be required to show they have completed a safety course.

Charleston Survey Results (n=21)

Although a total of 24 surveys were collected, only 21 included responses to the following statements.

Level of agreement or disagreement with the statements

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

	Mean
Boating education should be required for an individual to operate a boat.	4.52
Most boat operators seem to understand the rules of navigation on the water.	2.14
Boating under the influence of drugs or alcohol is a problem where I boat.	3.24
Boating laws are adequately enforced in the areas in which I boat.	3.14
More officers are needed to enforce boating laws.	3.48
Anyone operating a boat should be required to carry a photo ID.	4.29

Charleston Issues and Solutions

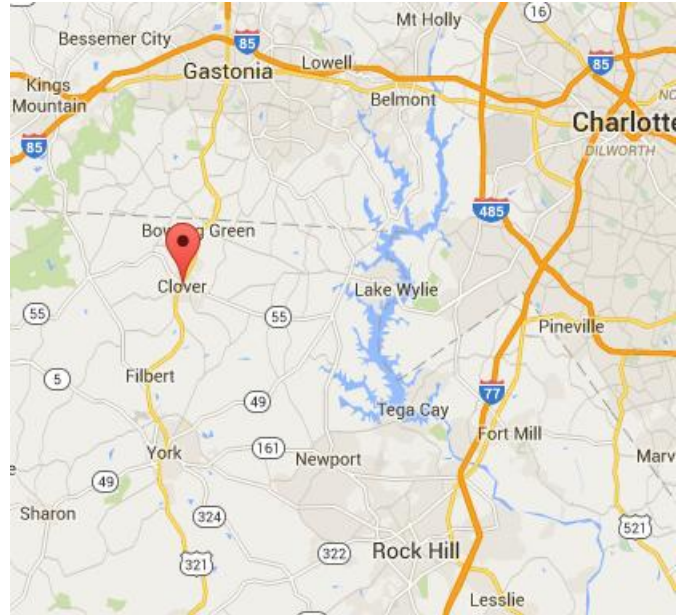
Issue	Solution(s)
Ignorance/Lack of education(16)	Mandatory education Mandatory education for youth only
Speeding (2)	Mandatory education Increased fines

Clover

The fourth forum was held in Clover at the Clover School District Resource Center on August 13, 2015. The sign-in sheet indicates that 14 people attended.

Discussion

General topic areas selected by attendees were education, boating under the influence (BUI), wake zones, rentals, buoys, and personal flotation devices (PFD). Participant comments are included under each topic heading.



Boater safety education

- We can't swim off our dock because people come closer than the 50 foot buffer. They just don't seem to know the rules. Education could address this. If you're not educated, you don't know the rules of navigation.
- Most boaters don't understand the wake zone rules. Education would help.
- Education is going to have to be for all ages. Maybe it's time now where it might be required.
- We have had a buoy near our dock for years but people just ignore it. The solution is education. Start with the young folks and gradually make everyone get educated.
- Boater education resources need to be made more available to the public.
- Online courses are prone to cheating. We should follow the NASBLA requirement that there be a proctored exam.
- You've got to have a driver's license for a car. Boats are faster, more powerful, and there are lots of them out there. I am for boater education. We need a proctored exam, or sitting in on a live course.
- Even long time boaters learn things they didn't know in a good boating course. Boater safety courses should be mandatory.
- We need to educate people who don't know the rules, perhaps at boat shows. Make sure prospective buyers know there are rules.
- I believe education ought to be a requirement. At least get them the education and then from there enforcement is the second part of that.
- The only way to get people who have a lot of boating experience to take a course is to have some sort of monetary incentive. Perhaps insurance companies could be encouraged to offer a discount for those who have taken a course. Change the minimum age for operating a boat to 14 years old. That would conform to NC law.

- SC should emulate NC law whereby anyone born after 1988 must have boater education to operate a boat over 10 horsepower. This could be phased in over several years. Perhaps start with PWCs.
- DNR should be encouraged to allow groups who educate to put notices on the agency website.

Boating under the influence

- DNR should be encouraged to conduct more enforcement on holiday weekends. Perhaps with the equivalent of road blocks on the highway. This might affect alcohol problems.

Funding

- The state charges for a hunting license, you've got to take a safety course. They charge for a fishing license. There are roughly half a million boaters in South Carolina. Charge everybody \$10 a year for a boating license. Other states have done this successfully.
- You've got five or six organizations here that would be willing to help with testing. This would help defray costs.

Wake Zones

- We can't swim off our dock because people come closer than the 50 foot buffer. They just don't seem to know the rules. Education could address this.
- South Carolina should change the no wake zone from 50 to 100 feet. This would conform to North Carolina law. On Lake Wylie where both states have shoreline, it is important that the rules are the same for both states.
- Consider allowing the Marine Commission to have more input on wake zones. DNR should enforce Marine Commission rules.

Rentals

- North Carolina does not require boating safety class for an operator of a rental boat. And I feel that is a flaw. And I would love to see South Carolina not put that exemption in there. You operate a boat – I don't care if it's yours or a rental -- the same hazard is there for you. Don't give that exemption because North Carolina does.

Buoys

- I would like to see more official DNR buoys near docks.
- Buoys have disappeared where I boat. DNR should investigate. Perhaps they are being stolen.
- The process for getting a DNR wake buoy should be simplified.
- We have had a buoy near our dock for years but people just ignore it.

Personal Flotation Devices (PFDs)

- The South Carolina rules are very lax. A class A boat, children must wear life jackets. Class 1, 2, 3 boats, if it's anything over 16 feet, they don't need to. I would like to see

the South Carolina standard come up to the federal standard, which is also the standard in most states.

- Any child under 13 should be required to wear a life jacket at all times.
- South Carolina should drop their (PFD) rule and adopt the federal rule officially.
- The Coast Guard will soon drop PFD types and will instead approve them for certain applications. South Carolina should adjust PFD laws so that they conform to new USCG rules. The existing PFDs will likely be grandfathered in but the state should be prepared to make changes.
- Requiring PFD use should be based on the size of the boat. Wearing PFDs should not be required on larger vessels where one is much less likely to fall overboard. But people on vessels with a low gunnel height should be required to wear a PFD. Look at those vessels that are more likely to put someone in danger of falling over. For example, sailboats, bass boats, etc.

Clover Survey Results (n=13)

Although a total of 14 surveys were collected, only 13 included responses to the following statements.

Level of agreement or disagreement with the statements

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

	Mean
Boating education should be required for an individual to operate a boat.	5.00
Most boat operators seem to understand the rules of navigation on the water.	1.85
Boating under the influence of drugs or alcohol is a problem where I boat.	3.85
Boating laws are adequately enforced in the areas in which I boat.	3.17
More officers are needed to enforce boating laws.	3.67
Anyone operating a boat should be required to carry a photo ID.	4.15

Clover Issues and Solutions

Issue	Solution(s)
Boating under the influence	More officers More enforcement Stiffer fines
Ignorance/Lack of education	Mandatory education
Negligent operators	Mandatory education (not online)

Clemson

The fifth forum was held in Clemson at Strom Thurmond Institute Auditorium at Clemson University on August 25, 2015. The sign-in sheet indicates that 85 people attended. However, the audience appeared to be considerably larger. In fact, 116 surveys were collected at this forum.

Many of those who attended this forum were motivated by DNR's removal of private buoys on Lakes Keowee and Hartwell. Participants included members of the Friends of Lake Keowee (FOLKS) and the Lake Hartwell Association. Many of the questions for DNR centered on private buoys and the reasons behind their removal by DNR. The agency's response was that state law is specific: An individual cannot regulate the waters of the state.



Discussion

General topic areas selected by attendees were private buoys, education, BUI, funding, wake zones, swimmer safety, enforcement, PWCs, and conformity with Georgia laws on Lake Hartwell. Participant comments are included under each topic heading.

Private Buoys

- Something has to be done to change what we are we doing on this lake, Lake Keowee, so that people know what the rules are, like putting out buoys, so that people are aware of the danger that they are putting other people in, without having to call DNR, because they can't respond to that.
- The average boater is not the problem. The problem is people in fishing tournaments who go crazy. Please let me put my buoys back.
- There is very little safety concern {on the part of DNR} for swimmers or paddle boarders, kayakers, etc. Taking the buoys out made the situation worse.
- When we had a buoy at the front of our cove, instead of the lake, the vast majority of people and boat owners who are responsible in our area respected it. DNR came out and moved the buoy and all of a sudden our cove has become unsafe.
- Since our buoy has been removed our cove has become more dangerous. DNR should designate certain coves as residential, with protected swimming.
- DNR can't man the lakes, can't get laws passed, can't do anything. Let's have our buoys back.

- We talked about distances that people should stay away from your docks, 50 feet or under it, but I don't care what they are, they're not enforced. It doesn't matter what you make them. Put the buoys back, will you?
- I don't want to see 3,000 buoys off of everybody's dock, because they think that they should have a buoy 50 feet off the dock to warn people. It's just going to be an eyesore. I think it could be ugly.
- In the cove we had a buoy up there for 22 years. We didn't have problems. We need a process that allows people to put in a buoy at their own expense.
- DNR buoys should be lighted. Duke Energy does this.
- I believe DNR will, upon request, supply a no wake sign that you can put on your dock.

Boater safety education

- A breathalyzer test should be mandatory for anyone involved in an accident resulting in bodily injury or more than \$2,000 in total damage (combination of both vessels).
- The only good answer we have and that is doable, is education. And somehow you've got to enforce that. You got to enforce it, like having an operators' license, just like you have a driver's license for an automobile.
- The key to boating safety problems is licensing and mandatory education. It's enforceable, it's observable and you can hang all the rest of these important subjects on it.
- Would it be possible to work with insurance companies and get them to increase the rate on people that don't pass education courses?
- We need licensure and education for all personal watercraft operators in this state.
- DNR cannot make people take a boating safety course. This has got to come from our legislators.
- Education should be tied to vessel registration. If it's the first time, they have to go through the class or they don't get registered.
- Our neighboring states, North Carolina and Georgia, require boater safety education. They also require proof of such education. We should do this as well.
- Consider addressing safety education by reaching people through homeowner's associations.

Boating under the influence

- A breathalyzer test should be mandatory for anyone involved in an accident resulting in bodily injury or more than \$2,000 in total damage (combination of both vessels).
- We could look to Canada for guidance. They do not allow open containers unless one has a cabin cruiser with sleeping accommodations.

Funding

- If we do not have officers out on the waters, it doesn't matter what goes on whether they're operating recklessly or not, because they're not going to get caught. We really need to get more funding to get more people on the water.

Wake Zones

- Current wake zone laws were created before we had boats designed specifically to make bigger wakes, wake board boats and surf boats. The 50 foot wake zone law is outdated. It needs to be 100 or 150 feet.
- We live on a point, and to address all of the swimming and the non-motorized boating, I think if we moved the wake zone to 300 feet -- we might have a start.

Swimmer Safety

- It upsets me that swimmer safety is not a fundamental criterion for establishing buoys in coves.
- My daughter is a triathlete and they have devices that they attach -- it's like a buoy that they tow along in the waters they swim. It seems like this should be joint problem to be solved. The swimmer has a responsibility to make themselves more identifiable as well the boat driver looking for the obstacles.

Enforcement

- The public needs to know how they can help with enforcement.
- There are not enough officers in all the six counties, if they were all in the water at the same, it still wouldn't cover the entire lake.

Personal Watercraft

- There needs to be a minimum age for operating a PWC. Small children should not be allowed to be passengers on a PWC.

Conformity with Georgia Laws on Hartwell

- If we do something here, we should have the same thing done on the Georgia side. Because we're on Lake Hartwell and we don't have a wall going down through that lake. You don't know what side you're on sometimes. Okay -- but we need the same laws, the same regulations and the same officers should be able to give tickets on either side, check for DUIs on either side.

Clemson Survey Results (n=104)

Although a total of 116 surveys were collected, only 104 included responses to the following statements.

Level of agreement or disagreement with the statements

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

	Mean
Boating education should be required for an individual to operate a boat.	4.36
Most boat operators seem to understand the rules of navigation on the water.	2.29
Boating under the influence of drugs or alcohol is a problem where I boat.	3.40
Boating laws are adequately enforced in the areas in which I boat.	2.19
More officers are needed to enforce boating laws.	4.26
Anyone operating a boat should be required to carry a photo ID.	4.19

Clemson Issues and Solutions

Issue	Solution(s)
Private buoy removal	Allow private buoys Simplify the buoy application process
Ignorance/Lack of education	Mandatory Education
Boating under the influence	More enforcement More officers
PWC	Minimum age for PWC operators Mandatory education of operators under 21
Wake zones	Mandatory education Increase wake zone to 100' More buoys Tell people how to report violators Wake/surf boat regulations Tax increase to pay for more officers
Speeding in coves	More buoys More officers Increase wake zones More swimmer protection in coves

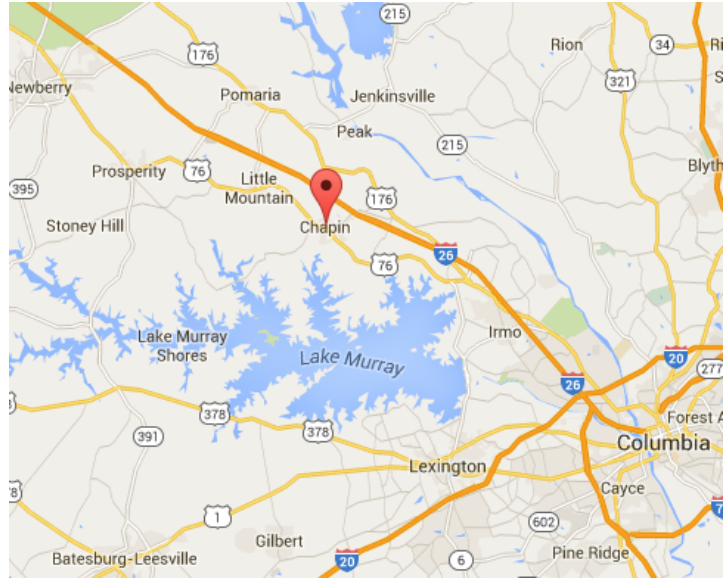
Chapin

The sixth and final forum was held in Chapin at the Center for Advanced Technical Studies on September 8, 2015. The sign-in sheet indicates that 36 people attended.

Discussion

General topic areas selected by attendees were education, BUI, funding, enforcement, wake zones, PFD use, and vessel lighting.

Participant comments are included under each topic heading.



Boater safety education

- Allowing anyone to operate a watercraft without proper education is a threat not only to that person but others as well. Make education mandatory, not just encouraged.
- Every one of the topics we are discussing tonight, with the exception of funding and navigational lights, can be addressed through education.
- A boating license should be tied to boating privileges, not tied to a driver's license. The first logical step is to require a boating license.
- A lot of it comes down to education and understanding. Ignorance is bliss. And if they think they don't have to know the rules, they are not going to abide by any rules. Education is a cheap way to accomplish a lot of that.
- Having a rule that says you have got to be educated will help to alleviate a lot of problems associated with alcohol, PFDs, noise, wake zones and things like that.
- It doesn't matter whether you take a course from DNR, Coast Guard Auxiliary, or a Power Squadron. They all teach the same thing and it creates awareness. That's what I recommend. It would help alleviate a lot of the problems we have in our state.
- If someone needs to have education and a license, we could take away that license in the event of violations.

Boating under the influence

- A breathalyzer test should be mandatory for anyone involved in an accident resulting in bodily injury or more than \$2,000 in total damage (combination of both vessels).
- Current BUI laws are largely toothless. It needs to be tied into the driver's license. That way it will make you have mandatory education.
- Police on the highways can do breathalyzer tests. Why can't DNR do that too?
- DNR should be encouraged to increase targeted patrolling at night when people are leaving bars, restaurants, or special events.

Funding and Enforcement

- Increase the boat registration fee and direct that additional money toward funding.
- A lot of it is enforcement, alcohol enforcement, in a lot of cases, drug enforcement, and of course that's going to take more law enforcement and more funding so we can get more officers on the lake.
- If it takes an increase in fees to get breathalyzers, to get more officers, it's still the cheapest thing I do. So surely, if they look at some of the funding, if it needs to be increased for some of those things, I say go for it.
- When DNR shows up in one of their boats it's like a shark swimming into a school of fish. They all swim away.
- If it takes more fees to address BUI problems, I'm all for it. People will spend \$25 on a case of beer for the day. Let them go ahead and spend \$50 to add to DNR funding.
- In light of funding issues, DNR should be encouraged to work with local law enforcement entities.
- Since the number of DNR officers on the water has decreased, I'd support increase in fees to get the numbers back up.
- Fines, especially for BUI, should be increased and a majority of those fines should go back into the enforcement side.
- As a part of the funding side, we should have a boating license. We should look to what other states have done. There should be a feasibility study.

Wake Zones

- People who make large wakes cause damage and prevent us from enjoying our floating dock. When DNR shows up in one of their boats it's like a shark swimming into a school of fish. They all swim away. Just having a little presence is a big help to those of us who fight that battle.
- A 50 foot wake zone is too short. It needs to be extended.

Personal Flotation Devices (PFDs)

- PFDs should be mandatory. People say it can't be done but many other states have this requirement. For example, Mississippi and Washington state.
- One often cannot get to a PFD in time when there is an emergency. They need to be worn.

Vessel Lighting

- Blue lights on vessels are confusing as they can be misinterpreted as a law enforcement vessel.
- We have seen a recent trend of using blue lights at the waterline on boats. I am also concerned about too many lights at homes on the lake.
- When I see blue lights I immediately begin to make sure I have all my safety equipment. I also assume I can go toward blue lights to get help in the event that I have a problem on the water. We need to do something about all those extra blue lights. If they want lights on their boats, let them have yellow lights or some color other than blue.

- Although current law only prohibits strobing blue lights, one can be led to believe a light is strobing as boats hit waves or pass towers. It can get confusing.
- We teach our kids to go to a blue light for safety. How does it look when we tell our kids about safety and where to go to find help?

Buoys

- DNR should start a program whereby individuals or companies could sponsor specific buoys and be recognized for doing so.
- Buoys need to be better marked so one can easily report where they are in the event of a problem.

Fishing Tournaments

- Boats involved in fishing tournaments speed out as they leave a cove. I think something or someone at Dreher Island could offer some kind of educational material to tournament participants.

Chapin Survey Results (n=23)

Although a total of 26 surveys were collected, only 23 included responses to the following statements.

Level of agreement or disagreement with the statements

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

	Mean
Boating education should be required for an individual to operate a boat.	4.52
Most boat operators seem to understand the rules of navigation on the water.	2.09
Boating under the influence of drugs or alcohol is a problem where I boat.	3.48
Boating laws are adequately enforced in the areas in which I boat.	2.91
More officers are needed to enforce boating laws.	3.87
Anyone operating a boat should be required to carry a photo ID.	4.05

Chapin Issues and Solutions

Issue	Solution(s)
Ignorance/Lack of education	Mandatory education
Wake zones	Mandatory education More enforcement Increase the wake zone to 150'
Night speeding	Increased nighttime enforcement
Incorrect vessel lighting	Education
Negligent operators	Mandatory education More DNR officers
PFDs	Mandatory PFD use

Conclusion

South Carolina Senate Resolution S. 334, sponsored by Senator Kevin Johnson of Manning, called upon DNR to conduct public hearings and gather public input regarding boating safety concerns. The six forums held in locations throughout the state accomplished this goal. This document has summarized those comments in both a qualitative and quantitative fashion.

Both discussion and survey results revealed that a majority of participants at all forums and online respondents feel that

- boating education should be required for an individual to operate a boat on state; waters;
- more DNR officers and additional funding are needed to enforce boating laws;
- boat operators are largely ignorant of the rules of navigation; and
- anyone operating a boat should be required to carry a photo ID.

The project had another outcome that was not necessarily anticipated. Much of what occurred at the forums was education. Participants at every forum appreciated that fact that DNR Director Alvin Taylor attended and that he was happy to answer questions about agency policy. Having senior DNR law enforcement staff on hand allowed participants to ask questions about state law as it pertains to boating. The fact that local DNR officers were attendance at each forum was also appreciated by participants.

Appendix 1: S. 334

A SENATE RESOLUTION

TO REQUEST THAT THE DEPARTMENT OF NATURAL RESOURCES CONDUCT A STATEWIDE STUDY OF BOATING SAFETY ISSUES AND MAKE RECOMMENDATIONS TO THE GENERAL ASSEMBLY TO IMPROVE BOATING SAFETY ON THE WATERS OF THE STATE.

Whereas, the Senate of the State of South Carolina recognizes the recreational, social, and economic benefits of the natural resources and the recreational boating opportunities they provide for the citizens of the State, and is grateful for the work and diligence of the Department of Natural Resources in managing boating opportunities for the enjoyment of the citizens of this State; and

Whereas, the Senate appreciates the exceptional work of the department's law enforcement and educational efforts involved in boating safety; and

Whereas, in response to several recent tragic boating incidents involving the deaths of individuals there is a heightened awareness and concern for safety on our state waterways related to recreational boating. Now, therefore,

Be it resolved by the Senate:

That the members of the Senate of the State of South Carolina, by this resolution, request that the Department of Natural Resources conduct public hearings and gather public input regarding boating safety concerns and to use any and all information gathered to make recommendations to the Senate to improve recreational boating safety for the citizens of this State.

Be it further resolved that a copy of this resolution be forwarded to the Department of Natural Resources.

Appendix 2: Boating Safety Survey

SC Dept. of Natural Resources Boating Safety Forum Program Survey

Demographic Information

- Gender: M F
- City/County of residence: _____ , _____
- Age:
 - Under 18
 - 18 to 24
 - 25 to 34
 - 35 to 44
 - 45 to 54
 - Age 55 to 64
 - Age 65 or older
- Number of people in your household: _____
- Household income:
 - Up to \$50K
 - \$50K – \$100K
 - Over \$100K

Boat ownership/Boating activity

- Do you own a boat? Y / N (If no skip to the **Education** section – next page)
- Type of boat:
 - Open Motorboat
 - Cabin Motorboat
 - Open sail
 - Cabin sail
 - Pontoon
 - Jet Ski / Personal watercraft
 - Row Boat / Canoe / Kayak
- Type of propulsion:
 - Outboard
 - Inboard / Outboard
 - Inboard
 - Sail
 - Other
- Length of boat?
 - Less than 16 feet
 - 16 feet to 25 feet
 - 26 feet to 40 feet
 - 40 feet to 65 feet
- How do you use your boat? (check all that apply)
 - Pleasure cruising
 - Skiing/tubing/wakeboarding
 - Fishing
 - Commercial
- Where do you boat most often in SC?
 - River
 - Lake
 - ICW (Inter-coastal Waterway)
 - Ocean
- On average, how many days per year do you use your boat on SC waters? _____
- How many hours do you typically spend on the water on a given boating day? _____
- What is the average number of passengers on your boat on a given boating day? _____

Education

- Have you completed an SCDNR approved boater education course? Y / N
- Have any members of your household under age 16 completed an SCDNR approved boater education course? Y / N
- How much experience do you have operating a watercraft?
 - Over 100 hours
 - 10 - 100 hours
 - Under 10 hours
 - None

Please indicate your level of agreement or disagreement with the following statements using the scale to the left	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Boating education should be required for an individual to operate a boat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most boat operators seem to understand the rules of navigation on the water.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boating under the influence of drugs or alcohol is a problem where I boat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boating laws are adequately enforced in the areas in which I boat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More officers are needed to enforce boating laws.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anyone operating a boat should be required to carry a photo ID.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- What do you see as the largest boating safety issue in South Carolina?

- What do you think should be done to address this concern?

Would you like to be placed on a list to receive boating safety updates from the SCDNR?

If so, please provide an email address where we may contact you: _____

Appendix 3: Online Survey Summary Results

In addition to the six forums, DNR collected data through its website. Results of that survey tend to mirror the survey data collected at the forums. However, when compared to forum data in the aggregate (i.e., combined data from all forums) the intensity of responses vary. Although there was a total of 977 online surveys collected, only 931 included responses to the following statements. Similarly, only 231 of 262 forum surveys included these responses.

Level of agreement or disagreement with the statements

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

	Online Survey n=931	Aggregate Forum Surveys n=231
	Mean	Mean
Boating education should be required for an individual to operate a boat.	3.82	4.46
Most boat operators seem to understand the rules of navigation on the water.	2.62	2.22
Boating under the influence of drugs or alcohol is a problem where I boat.	3.05	3.52
Boating laws are adequately enforced in the areas in which I boat.	3.26	2.64
More officers are needed to enforce boating laws.	3.42	4.06
Anyone operating a boat should be required to carry a photo ID.	3.81	4.30

Appendix 4: Combined Summary Results

Results for combined forum and online responses are summarized below.

Level of agreement or disagreement with the statements

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

	Combined Summary Results n=1162 Mean
Boating education should be required for an individual to operate a boat.	3.95
Most boat operators seem to understand the rules of navigation on the water.	2.54
Boating under the influence of drugs or alcohol is a problem where I boat.	3.14
Boating laws are adequately enforced in the areas in which I boat.	3.14
More officers are needed to enforce boating laws.	3.54
Anyone operating a boat should be required to carry a photo ID.	3.90