



**US Army Corps
of Engineers®**

Strategic Campaign Plan for Reducing Public Fatalities

24 April 2012

**Enclosure 2
Public Fatality Reduction Initiative**

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EXECUTIVE SUMMARY

This strategic campaign plan developed by the National Operations Center (NOC) for Water Safety was designed to provide an analysis of U.S. Army Corps of Engineers (Corps) public recreation fatality statistic trends nationwide, identify key educational messages for target groups, and recommend actions that can lead to reducing public fatalities. The main focus of this safety campaign is to reduce the number of public recreation fatalities by 50%, using the total of 197 fatalities as the baseline from fiscal year 2011. This plan serves as vital management tool to assist by providing ways to accomplish our campaign goals.

The plan includes goals, strategies, and actions most of which have already been effective throughout the agency. Campaign actions are described in a variety of categories to include interpretation services and outreach, public education, media/public affairs/technology, employee professional development & training, safety campaign management, visitor assistance/regulations, recreation facility/equipment management and partnership coordination.

A review of current public fatality statistics clearly shows which gender, age group and recreational activities that are most often involved in incidents. This trend data identifies our most at-risk visitor group and helps determine where the focus of our educational outreach should be. Trends analyzed since 1998 tell us our typical victim is male (88.4%), not wearing a life jacket (89.3%), swimming in a non-designated areas (47.2%), who is between 18 and 35 years old (39%). The second highest cause of recreation fatality or serious injury is from falls off vessels, docks, or shore at 18.4%. Falls are also the significant contributing factor in non-water related fatalities (e.g. ATVs, bicycles, motorcycles, and tree stands).

From May 2007 through October 2011, the Corps conducted a life jacket policy study, in which measures of mandatory life jacket wear on selected agency recreational waters were tested. This test was driven by command consideration that more lives would be saved if life jackets were required to be worn while boating. Decisions on the final recommendations that were presented as part of this study to MG Michael Walsh, Deputy Commander of Civil Works and Emergency Management are still pending; however, it was clear in the test findings that life jacket wear did increase more significantly when policy was applied than through educational means alone.

Getting the target age group of adult males to wear a life jacket through simple educational messaging without policy has proven challenging. Because the target group has little perception of risk and the fact that no law requires it, little motivation exists to change life jacket wear behaviors in adult males. However, recent studies have shown that “influencers” (i.e. spouses and children) can be instrumental in gaining behavioral change. By incorporating interpretive messaging designed to capture emotional connections, you can reach people in intangible ways and research shows that can increase our chances to provoke them to change risky behavior.

Those who support the promotion of water safety are encouraged to use the methods in this plan and to continue to discover and disseminate innovative ways to achieve our campaign goals and objectives of minimizing and eliminating preventable public accidents.

I. PURPOSE. This strategic campaign plan developed by the NOC analyzes the Corps public fatality statistical trends nationwide, identifies key educational messages for target groups, and provides goals, strategies and actions for preventing public recreation fatalities. The primary goal of this safety campaign is to reduce the number of public fatalities by 50% using the total of 197 fatalities as the baseline from fiscal year 2011.

II. INTRODUCTION.

A. Background. The Corps is the leading provider of outdoor recreation and has averaged 354 million visits per year in the past five years; visitation has been decreasing in the past couple of years. The Corps manages more than 420 lake and river projects in 43 states and the majority of visitors engage in aquatic recreational pursuits such as swimming, boating, or fishing. Unfortunately, accidents happen and too often, some of them result in the death of a visitor.

B. Corps Policies and Directives.

1. CECW-CO memorandum, dated 31 Mar 2011, Subject: U.S. Army Corps of Engineers National Recreation Program Strategic Plan. Goal 1 of this plan is to implement effective, reliable and adaptive operation and maintenance of resources that provide safe and healthy recreation experiences to meet the needs of current and future generations.

2. CECW-CO memorandum, dated 2 May 2012, Subject: Public Fatality Reduction Initiative.

3. CECW-CO memorandum, dated 2 May 2012, Subject: Life Jacket Mandatory-Wear Policy Selective Expansion

C. CDC Drowning Findings. According to the Center for Disease Control's (CDC) Web-based Injury Statistics Query and Reporting System (WISQARS) available at <http://www.cdc.gov/ncipc/wisqars>, drowning is our nation's sixth leading cause of unintentional injury death for all ages from 1999-2009. It is the second leading cause for those in the 1-14 year old age groups. It is the third leading cause for those less than 1 and 15-34 years old. CDC data includes all drownings regardless of source or activity and averages 3,457 drownings per year. This includes home accidents (drownings in bathtubs; toilets; laundry tubs; swimming pools), occupational drowning and drowning as a result of recreational activity. While it is this last category (recreational activity) that the Corps is most concerned with, no archival data was found that provides breakouts. Therefore, CDC statistics can only be used as an indicator of trends.

III. PUBLIC FATALITY DATA AND TRENDS ANALYSIS. Corps public recreation fatality statistics have been analyzed in this section to identify current trends. The data allows us to identify target groups specifically for boating and water safety outreach. At the National level, Corps statistics on water-related fatalities have been kept by the NOC since 1998; therefore, the analysis refers to a 14-year time period between FY98 and FY11. U.S. Coast Guard data referenced pertains to their Recreational Boating Statistics 2010 report.

A. Fatality Cause. The Corps data shows a total of 2,290 water-related fatalities in the 14-year period. Drowning accounted for 86% of these deaths. Other causes include 9% trauma, 2% cold water/hypothermia, 1% medical, and 2% unknown. Tracking of all public recreation fatalities began in 2007, but non-water related fatalities have always been minimal in number. Non-water related fatalities are primarily caused by falls (ATVs, bicycles, motorcycles, tree stands etc), and firearms (hunting accidents). Based on this information, a focus on drowning prevention is the most effective method to achieve the desired reduction in fatalities.

B. Fatality Occurrences. The majority of drownings reported at Corps projects occurred during times of heaviest visitation. The greatest number of fatalities occurred on weekends between the months of April and Sept. The bulk of all incidents happened on Saturday and Sunday, during June and July. This supports perception that when recreation areas are the busiest and water temperatures are warmest, the potential for fatalities involving visitors increases.

C. Activity. Swimming and boating constituted the two largest categories of recreational activities that led to drowning. Between FY98 and FY11, 47% of the deaths were swimming-related and 43% were boating-related. However, 9% of the boating category involved people swimming around boats, therefore boating-related fatalities were 33% of the overall fatalities and swimming-related fatalities could be viewed as 52%.

1. Boating: According to U.S. Coast Guard statistics, collisions are the main types of boating accidents. However, falling overboard and the vessel capsizing are the main types of boating-related fatalities. They also report that in all boating-related fatalities only 9% of the operators had received boating safety instruction.

The Corps data shows falls from vessels accounted for 12.05% of all water-related fatalities. Other falls from docks and shoreline areas accounted for 6.38 %. Unintentional entrance to the water by falling, either from a boat or another structure, was the 2nd leading cause of public fatalities at 18.4%. Capsizing was 8.2% and collisions were 8.1%. Capsizing was primarily caused by weather or from overloaded boats.

2. Swimming: Swimming is categorized in our statistics for recreational purposes, as anyone who intentionally enters the water. Based on anecdotal information received from rangers, exceeding a person's swimming ability is the main reason for swimming-related fatalities.

Corps data show swimming in non-designated areas was the single highest type (47%) of all water-related fatalities that occurred during the review period. Of all swimming-related fatalities 83% occurred while swimming in non-designated swim areas near campgrounds or day use areas. Only 17% of swimming-related fatalities occurred at designated swimming beaches.

3. Diving: Diving-related injuries paralyze thousands of people each year. However, Corps statistics for these non-fatal accidents are not documented on a national basis and detailed information from any reliable source was not found.

D. Gender. The majority of water-related fatality victims were male. Males constituted 88% of Corps water-related fatalities.

E. Life Jackets. U.S. Coast Guard data indicate that 88% of boating-related fatalities in 2010 were not wearing a life jacket. Nationally, Corps data indicated over 89.3% of all water-related fatality victims did not wear a life jacket. Current U.S. Coast Guard law requires life jackets be easily accessible for each person riding in a vessel, but generally adults do not actually wear them. Corps projects that have implemented life jacket mandatory wear requirements at their projects under the District Engineer's Title 36 authority, section 327.12.a (posted restrictions) have found that the majority of people comply with these requirements when it is adequately enforced.

F. Age. Throughout the Corps, statistics showed 39% of all drownings involved individuals between the ages of 18 and 35. Corps records in 10-year age groups showed the highest percentage of fatalities (23%) were in the 10-20 year old category. Other statistic categories and percentages are charted below.

Public Fatality 10-Yr Age Groupings		
Age 0-9	6%	135
Age 10-20	23%	520
Age 21-30	22%	492
Age 31-40	15%	350
Age 41-50	13%	295
Age 51-60	9%	215
Age 61-70	6%	126
71 & Over	4%	95
Age Unknown	3%	60

G. Alcohol. The U.S. Coast Guard reported in 2010 that alcohol was a leading factor in 19% of all boating fatalities. According to Corps statistics since 1998, drugs and/or alcohol were factors in 20% of the fatalities and 1% were suspected and 25% unknown. The new “suspected” category was added as an option in ENGLink fatality reporting in 2010 as an indicator only. Involvement of alcohol or drugs is difficult to determine with any certainty by Corps park rangers at the scene and generally such facts are established off-site through autopsy or other non-Corps investigations. Anecdotal evidence suggests a much higher impact from alcohol or drugs but because of the Healthcare Insurance Portability and Privacy Act (HIPPA) regulations, the Corps has limited access to this type of information. It is very important for those entering incident report data into ENGLink to code alcohol use as “Unknown” or “Suspected” unless clear evidence shows otherwise. To ensure accurate data, ENGLink must be updated when information changes. Field office personnel and safety office staff must proactively work to obtain accurate information and update the data.

H. Minorities. According to the Center for Disease Control WISQARS, drowning is the fourth leading cause of unintentional injury deaths in the U.S. for Hispanics of all ages, as compared with the sixth leading cause when all ethnicities are included. Forty-six percent of these Hispanic drowning deaths are in the 15-34 year old age group and 18% are ages 1-4. Ethnicity has not historically been tracked in Corps fatality statistics; however, there is speculation that swimming-related fatalities are on the rise among those of Hispanic origin.

I. Recreation/Navigation Conflict. There is a growing concern over conflicts on our nation’s waterways between recreational boaters and commercial navigation traffic. The U.S. Coast Guard responds to accidents on navigable rivers that often involve fatalities. Unfortunately, Corps Safety Offices and our river projects are seldom made aware of river incidents unless someone hears about them through their contacts with local agencies or through the media (newspapers, radio etc).

IV. KEY MESSAGES FOR PROMOTING BOATING & WATER SAFETY. Fatality statistics serve as the basis in determining the main focus of these key messages. These messages provide critical safety points that our visitors should know to avoid being the next victim; modify as necessary to fit unique conditions found in your region.

A. **Are You Next? Expect the Unexpected!** Everyone who recreates on or near the water must ask themselves the question “Are You Next?” Anticipate that you could be the next

person to drown because accidents happen when you least expect it. Preparing for things that could happen by learning to swim well and wearing a life jacket are your best defenses against the unexpected. *The NOC initiated this campaign to target those in our highest-risk group for water-related fatalities and materials depict the typical causes of fatal accidents.*

B. Wearing a Life Jacket Can Save Your Life

To ensure you survive unexpected slips or falls overboard wear your life jacket, because it provides you time to be rescued. It only takes an adult an average of 60 seconds to drown and on average it takes 10 minutes for a strong swimmer to put on a life jacket after entering the water. If you will not wear it for yourself then wear it for those who love you. Great information on life jackets can be found at www.pfdma.org/.

C. Never Exceed Your Swimming Abilities or Swim Alone

Regardless of how well you swim, you could have to fight for your life due to unexpected conditions such as waves, current, or exhaustion. Using proper rescue techniques a fellow swimmer can help you out when you encounter the unexpected. Remember your swimming abilities are likely to decrease with age, so don't overdo it.

D. Alcohol and Water are a Deadly Combination

When underwater and under the influence of alcohol or drugs you can suffer from an inner ear condition (caloric labyrinthitis) that causes you to become disoriented and not know which way is up. Also, boaters can develop "boater's hypnosis" a condition in response to sun, wind, noise, vibration and motion, which causes fatigue and slows your reaction time. Combining that condition with alcohol or drugs greatly reduces your coordination, judgment and reaction time, which could lead to deadly consequences.

www.boatus.com/seaworthy/magazine/2011/july/alcohol.asp

E. Involuntary Gasp Reflex Can Kill You

A sudden unexpected fall into cold water causes an involuntary gasp (or torso) reflex. It takes less than ½ cup of water in your lungs to drown. Your gasp reflex is delayed when you are under the influence of alcohol or drugs, which can lead to a last breath of water, instead of air. Falls contribute to 18.4% of all water-related fatalities on Corps-managed waters. www.oregon.gov/OSMB/safety/coldwaterimmersion.shtml

F. Drowning is a Silent Killer

An estimated 60% of all drownings are witnessed, because people are unable to identify the four signs of a drowning victim. Signs are head back (bobs up and down above/below the surface), mouth open, no sound and arms outstretched moving simultaneously in an above-the-water, up and down stroke that appears as if they are slapping or playing in the water.

<http://mariovittone.com/2010/05/154/>

G. Proper Rescue of a Person Drowning

Many drowning victims are within 10 feet of safety, having unintentionally entered the water. You should never go near anybody struggling to stay afloat, because you could drown too! To help rescue someone extend a pole, stick, line or clothing to reach them or throw something floatable to them. The "Reach, Throw, Row, Go for Help" rescue method is used to avoid multiple drownings. www.army.mil/article/51402/reach-throw-row-dont-go

H. Be Aware of Carbon Monoxide (CO) Poisoning

CO is a colorless, odorless gas that can harm and even kill you while you are inside or swimming outside of a boat. CO is lighter than water, so it invisibly hovers on the water's surface. Prevent the unexpected by learning more about where CO may accumulate and CO poisoning symptoms. A good source of information on symptoms and care can be found at: www.cdc.gov/co/. More fatalities have probably occurred than are known concerning CO poisoning, because it is not recorded in an autopsy report unless a carboxyhemoglobin test is asked for. Ask for it.

I. Take a Boating Course

Learn valuable tips that can help save your life in unexpected situations by taking a NASBLA-approved (National Association of Boating Law Administrators) boating safety course. Many insurance companies offer discounts to boating safety course graduates. In addition, many states require a boating education course for operators, sometimes only for those under a certain age. These are offered by the U.S. Coast Guard Auxiliary, U.S. Power Squadron, state agencies, and on-line at <http://www.boat-ed.com>, <http://www.boatus.org/onlinecourse/>, <http://www.americasboatingcourse.com> and <http://www.boatcourse.com>.

J. Learn to Swim Well and Practice Floating

Besides wearing a life jacket, learning to swim well is one of your best defenses against drowning. Also, teach those you love and practice simple survival floating skills; remembering how to relax and float when exhausted can save your life. Swimming in natural or open waters is not the same as swimming in a pool. The USA Swimming Foundation works with local partners to offer free swimming lessons. Find a location near you at <http://swimfoundation.org/Page.aspx?pid=347>.

K. Watch Your Children

You may not expect your child to reach overboard or turn the boat key to see what might happen, so always be alert. On shore, children can quickly wander from the campground, picnic area or playground and end up in the water. It takes an average of 20 seconds for a child to drown, so always stay aware of their location; make them wear a life jacket and never take your eyes off of them around water.

L. Never Dive in Lakes & Rivers (Open Water)

Open water situations where water depth is unknown and conditions are constantly changing with floating or underwater debris can be very dangerous. You never know what might lie unseen below the surface of the water in a lake or river, diving should only be done in the deep end of a swimming pool.

M. Don't Depend on Floating or Air-filled Toys

There is no substitute for a properly fitted, USCG approved life jacket. Inflatable toys, including water wings, cannot be relied upon to keep children afloat and can deflate in seconds. Inflatable rafts or inner tubes can easily float into deeper waters and might slip away from you or your child unexpectedly. The consequences could be fatal.

N. Cold-Water Immersion-HELP Response Can Save You

Cold-water immersion is the cause of many boating-related fatalities. The danger increases as water temperature decreases below normal body temperature (98.6 degrees F). Cold-

water immersion follows four stages, starting with cold shock, followed by swimming failure, then hypothermia and finally post-rescue collapse. Most cold-water drowning fatalities are attributed to the first two stages, not hypothermia. All boaters should wear a life jacket and dress for the water temperature, not the air temperature. If self-rescue is not possible, actions to minimize heat loss should be initiated by remaining as still as possible in the Heat Escape Lessening Position (HELP), where your knees are drawn to your chest with your arms grasping them together, or simply huddling with your arms around other survivors in a circle. Additional layers of clothing can help you stay afloat by trapping air. Wet clothes will not weigh you down in the water as many people perceive, because water does not weigh more than water. “Cold Water Boot Camp” and “Beyond Boot Camp” are great videos produced by the National Water Safety Congress teaching how to survive a fall into cold water; they can be downloaded or viewed online at:

<http://coldwaterbootcampusa.org/videos.shtml>. A report on cold-water immersion can be found at www.bordeninstitute.army.mil/published_volumes/harshEnv1/Ch17-ColdWaterImmersion.pdf.

O. Boat with Consideration for Others

You are responsible for any damage caused by your vessel or your wake. Be cautious and aware of your surroundings at all times. Obey all signs and posted restrictions. Typically, irresponsible actions of boat operators lead to accidents, so boat responsibly.

www.uscgboating.org

P. Inspect Your Equipment

Before every trip you should perform a safety check of your vessel. It is your responsibility to make sure you have all the required equipment on board such as life jackets, throwable device, certificate of number (state registration), fire extinguisher, visual distress signals, sound producing devices and whatever additional items Federal and your state’s laws require. Check your engine, ventilation, backfire flame arrestor, electrical systems and trailer before you go. Take advantage of free vessel safety checks offered in your area by boating-related agencies. See Federal Boating Requirements at <http://nyss.com/federal>.

Q. Steer Clear of Commercial Vessels

Commercial vessels have to stay within the navigation channel on rivers. An average tow boat pushing barges can take $\frac{3}{4}$ to $1\frac{1}{2}$ miles to come to a stop. If you can’t see the pilot, he or she can’t see you, because a commercial pilot’s blind spot can extend for several hundred feet to the front and sides of the vessel. To learn more about how to properly lock through visit www.youtube.com/user/TeamSaintLouis?feature=mhum#p/a/u/0/YdbuzJiehm8.

R. Watch for Dangerous Waves or Signs of Rip Currents

Rip currents are powerful flows of water that pull you away from the shore, even if you are a strong swimmer. These can occur in any body of water with breaking waves, including the Great Lakes. Swimming or even wading can turn into a tragedy if you don’t know how to identify and respond to rip currents. These are identified by water that is discolored, unusually choppy, foamy, or filled with debris. If you are caught in a rip current it is important to stay calm and not panic. These are usually narrow currents and swimming parallel to the shore should get you out of them. Once out of the current, swim toward the shore. www.ripcurrents.noaa.gov/overview.shtml

S. **Know Before You Go-Prepare for Sudden Weather Changes**

Always check the weather conditions and file a float plan (See sample at www.boatsafe.com/nauticalknowhow/boating/float1.htm) with a responsible person before you go boating. Take maps or charts of the waterways you're traveling and a weather radio, so you can check weather conditions while boating. If you are caught in an unexpected storm make sure everyone still has on their life jackets and have them sit on the bottom of the boat close to the centerline. Reduce speed and head the bow of your boat into the waves at a 45-degree angle. Personal watercraft should head directly into the waves.

T. **Wade with Caution**

Watch for unexpected drop-offs and currents while wading in open water situations. The safest places to wade at U.S. Army Corps of Engineers' lakes are in designated swimming areas because they are inspected for dangers such as drop-offs.

U. **Obey All Signs and Buoys**

Many times accidents, injuries and fatalities could have been prevented if the person just followed the posted signs or buoys. Staying within the buoys marking designated swim areas is the safest place to swim, especially where rescue equipment is located. You swim at your own risk on U.S. Army Corps of Engineers managed waters because life guards are not provided; however, eighty percent of those who drown while swimming are outside of a designated swim area.

V. **Don't Rock Your Boat**

Standing up in your boat can increase the risk of an unexpected fall overboard while your boat is underway, adrift or at anchor. Many falls overboard result in death, so to increase your chance of survival wear your life jacket!

W. **"Don't Cross Your Stupid Line"**

This campaign is a way to encourage individuals to make smart decisions when it comes to risky behavior. The Stupid Line is that line of choice we all have when faced with risk. It separates smart risk from stupid risk. It's up to you to decide where to draw the line. (*This media campaign was started in 1994 by an organization from Canada called SMARTRISK as a way to appeal to the senses of younger audiences.* <http://www.smartrisk.ca>)

CAMPAIGN GOALS, STRATEGIES AND ACTION DESCRIPTIONS. The following goals, strategies and actions can lead the way in accomplishing a successful campaign to reduce public fatalities on Corps managed lands and waters. It is strongly suggested that all those who support public safety promotion (e.g. district and division water safety teams) not only use the methods in this plan, but continue to discover innovative ways to accomplish our campaign goal.

- A. **Interpretive Services and Outreach Program Goal:** Elevate the importance of interpretation as a viable tool to achieve management objectives across all business lines and encourage support for the promotion of public safety throughout the Corps.

Strategy: All employees and volunteers should be aware of key safety messages and be trained in utilizing effective interpretive techniques to strengthen deliverability to target groups.

HQ Actions:

1. NOC will look into working with promotional businesses to identify if dollars can be stretched by developing catalogs for give-away products so all Corps projects nationwide can purchase from the same sources.
2. NOC will revisit the products provided by the National Water Safety Program to determine if they need to be replaced to more effectively reach our target audience.
3. NOC will work with Interpretation NRM Gateway POCs to create a roving interpretation section. This section needs to define what roving interpretation is and provide examples.

MSC, District and Field-level Actions:

1. Establish “Are You Next” as the Corps nationwide campaign to promote recreation safety to all ages with an emphasis toward the target audience.
2. Programs targeting children, such as Bobber the Water Safety Dog, have been effective in promoting water safety to kids, but current indications are that we have not adequately reached the target age group of 18-35 year old adult males. It is important at this time to focus on initiatives that promote water safety to adults.
3. Staffed Events. Expand Corps presence at adult recreation venues and events on a national and regional level. It is a good idea for projects to work across district and division boundaries to be able to afford staffing booths at events in major metropolitan areas (e.g. boat, sport, travel shows, state fairs). The National Safe Boating Council’s Inflatable Life Jacket kit is a great tool to use as part of an exhibit to help answer questions about inflatable life jackets.
4. Understand that shocker messages can be effective in influencing our target audience; utilize stronger messaging when appropriate.
5. At least one-third of all interpretive presentations should focus on water safety. Weekend campground and beach presentations are recommended during peak visitation periods. Safety messages, if not the main topic, should be incorporated into **all** interpretive programs.
6. Water safety programs have been developed to assist your interpretive outreach presentations to schools, civic groups, libraries and clubs at various off-project locations. The award winning “Safe Passage” program was developed by the NOC with lesson plans for teachers supportive of educational curriculum requirements for kindergartners through sixth-graders. If used as designed, the lessons are taught by teachers, reducing the requirement for ranger presence. A similar program targeting teenagers, “The Young and the Reckless”, also has a teacher’s lesson plan available. Field projects should make these productions available to all schools in their area and campaign to make sure teachers are aware of them. The “Water Safety Through the Ages” DVD contains those two educational programs, as well as one called Wear-It-Right, on life jacket safety for all ages and is from the NOC water safety catalog.
7. Water Safety Robots and Costumes. Educational tools in the form of mascot costumes and interactive character robots can be effective draws to your program or exhibit. “Bobber the Water Safety Dog” is currently the official water safety mascot for the Corps and costumes for Bobber can be purchased through GSA pricing from Robotronics, Inc., at www.Robotronics.com. The company also sells other Corps-used products, such as Seamoor Safety, Towboat, Tackle and Buddy Beaver.
8. Special Outreach Campaigns. Since many people head to the water for spring break, it is a great idea to promote water safety at area colleges and high schools just prior to spring break. At a minimum this can be accomplished by simply providing them with

- posters and other promotional materials. Also, a news release has been developed that includes a top ten list of things students needed to know before going on spring break.
9. Projects hold a variety of weekend special events. Some of these events deal with water safety themes, i.e. water safety carnivals, fishing fairs or family safety days. Projects should take advantage of any gatherings of large audiences to promote boating and water safety. In addition to events that we directly organize, it is encouraged to become involved with events that other agencies organize to promote safety (e.g. fishing tournaments, mall displays and parades).
 10. National Safe Boating Week in late May is a great time to kick off the annual recreation season promoting safety. The National Safe Boating Council (NSBC) provides radio and television PSAs and a variety of tools to assist in planning a great event. More information can be found at their website. <http://www.safeboatingcampaign.com/>. NSBC also has a Ready, Set, Wear It! event (previously “Ready, Set, Inflate”) to promote the use of life jackets.
 11. Unstaffed Attractive Displays. These can be an excellent educational tool when placed at local restaurants, businesses and libraries.
 12. Water Safety Coloring or Poster Contests are used as a means to go into schools and inform children about being safe around water. Some have placed contest winners on billboards displayed around the lake.
 13. Visitor Center Displays. It’s a good idea to have displays that specifically address water safety and to share the specifications and vendors on the NRM Gateway for others to use. Making displays interactive can make them more effective. The National Operations Center for Water Safety has developed a locking through game featuring Bobber the Water Safety Dog that makes a great exhibit. The Army has developed water safety games at <https://safety.army.mil/SafetyCity/Pages/Water/WaterSafety.aspx>. Some of these games have been converted to a CD so they can be used without an internet connection in an interactive exhibit. CDs are available from the NOC.
 14. Inflatable Props. Unique inflatable props are often used to grab people’s attention while promoting water safety. For example, a 25 foot tall wind dancing ranger wearing a life jacket has been used at several projects to promote water safety. Also, a portable six-foot tall life jacket can be purchased that is easy to inflate and can be used indoors or outdoors.
 15. Water Safety Trailer. Water safety trailers have been entirely wrapped utilizing the Bobber the Water Safety Dog and other safety-themed graphics. Artwork for your project is available from the NOC.
 16. The National Association of State Boating Law Administrators (NASBLA) holds an annual Operation Dry Water event the last weekend in June prior to the 4th of July holiday weekend to promote boating sober. Projects are encouraged to work with their state counterparts in conducting these events.
 17. Prize Wheel and Safety Quiz. A prize wheel in conjunction with a safety quiz can be an effective way to interact with visitors during an event. Participants take a short quiz for a chance to spin the prize wheel. There is an adult and child version of the quiz. The quiz can be used alone if a prize wheel is not available.

B. Public Education Goal: Promote the importance of taking a boating safety course if they boat and learning to swim well if they intend to go around the water.

Strategy: Improve communications and share resources with partners, public safety entities and educational organizations that provide boating safety and swimming instruction courses.

NOC, MCS, District and Field-level Actions:

1. Promote on-line, virtual training courses that complement traditional NASBLA-approved classroom courses.
2. Communicate with state agencies (e.g. Boating Law Administrators), U.S. Coast Guard Auxiliary and U.S. Power Squadron to provide boating safety courses at our projects.
3. Boating safety education courses are typically provided by state agencies and many of our rangers are instructors for the state-authorized curriculum. Encourage Corps employees to become state boating course instructors when feasible.
4. Partner with YMCA, USA Swimming Foundation and swim instruction organizations to promote water safety and learning to swim well.

C. Public Affairs/Media/Technology Goal: Ensure broad, consistent and proactive public communication about recreation safety across the Corps.

Strategy: Appropriate personnel tasked to support the public fatality reduction campaign plan will provide timely and effective communication techniques including the use of the latest technology to promote safety.

HQ Actions:

1. NOC will continue to utilize HQ PAO as an advisor for the National Water Safety Program and continue to have a PAO representative as a member of the national team.
2. NOC and their public affairs advisor will develop a strategic communication plan for the national water safety program for distribution and use throughout the Corps.
3. NOC will update the dated water safety media guide and make it available on the NRM Gateway.
4. NOC will explore the possibility of working with an outside entity, such as a professional marketing group, to develop a better strategy to address the target group.
5. NOC will provide field public affairs offices and ranger/safety staff with nationally consistent messaging and safety statistics and will ensure a clear understanding of the national water safety program and its activities.
6. NOC will develop key messaging scripts, news releases and produce audio/visual PSAs for use in educational outreach when appropriate.
7. NOC will provide effective interpretive products designed to promote recreation safety through the newest, cutting edge technology i.e. QR codes, mobile or smart phones.
8. NOC will develop electronic media products (alerts, apps etc) for projects to use on web sites and will link this to various national web sites i.e. recreation.gov, Oh Ranger etc.

MSC and District PAO/OD Actions:

1. Facilitate proactive media engagement to communicate safety risks and tips, including disadvantaged/non-English-speaking groups.
2. Target public safety communication efforts to highest risk visitors identified by statistical trends.
3. Leverage social media to directly engage recreation users with safety information and tools.
4. Maintain division and/or district water safety teams to develop locally-specific communication strategies for public recreation safety.

Field-level Actions:

1. Use available opportunities to share best management practices for public recreation safety. Sharing them on the NRM Gateway in “Good Enough to Share” sections or simply providing ideas to your division representative on the National Water Safety Team is strongly encouraged.
2. Encourage the use of social media (FaceBook, Twitter, YouTube etc.) at the local-level to promote safety. Use effective interpretive techniques to develop messages for mobile, hand-held devices to inform and educate the public on water safety messages.
3. Phone Information Hotlines. Consider use of tools such as 24-hour project information recordings for people to call for current fishing conditions, weather forecasts, upcoming special events, water levels, and other pertinent information. Each recording should include a seasonally-related safety message.
4. Travelers Information (AM Radio) Station. Travelers’ information stations allow access to information both through their vehicle’s AM radio station when within broadcast range and by telephone from any location. These types of low wattage, short- range, AM-frequency, radio stations provide programming similar to that used for years on the phone hotline services. Signs along the roadway can remind visitors to tune in or call for project information while en-route.
5. Radio Programs. Local radio stations often invite community personalities to provide on-the-air interviews and informational programs for their listeners. Rangers should use these programs as an opportunity to educate the media and the public about recreational opportunities in their communities, including the important messages on boating and water safety. Even if the program topic is something other than water safety, find clever ways to bring a safety message into any radio interview. Don’t wait to be invited; visit with your local radio station manager and encourage the stations support of public safety initiatives.
6. Public Service Announcements (PSA's). Audio and visual PSAs when developed by the NOC are intended to be distributed by field staff to local television and radio stations. Districts and local field offices are encouraged to produce their own recordings in cooperation with local radio and TV stations. Understand that there is high demand for air time for PSAs of all types of social causes these days and expect that display of such for free on local stations will be limited, if not challenging. In some cases, purchasing air time or space for water safety PSAs on television or radio, and even print media is often the only way to guarantee their use. Major holiday weekends should be targeted for these expenditures due to higher visitation rates. It is recommended that projects in close proximity of each other combine their PSA efforts to reduce costs. The Corps is prohibited from “Advertising” according to Federal procurement regulations; however, CECW-ON has issued permissions in various memorandums for us to procure air time or space to promote public safety.
7. News Releases/Newsletters. Use news releases to the media to share important safety messages to the public. If the news release discusses another topic, find clever ways to include water safety as a secondary topic when appropriate. Use special events or emphasis weeks, such as National Safe Boating Week or the kickoff of Memorial Day weekend as a newsworthy opportunity to deliver key safety tips. Local newsletters can also be distributed to visitors during the recreation season.
8. Telephone Hold Messages. Incorporate safety points or use short water safety jingles for callers to listen to while they are on hold. These seasonal safety messages can cover a variety of messages, including boating, swimming, angler and hunter safety.
9. Television. Work with local television stations to develop newsworthy feature stories

around Memorial Day and Fourth of July weekends. Start planning discussions early and look for event opportunities as a hook to community interest. Propose your ideas early. Look for stories that can be captured during the week, as reporter crews are limited on the weekends. Offer to take a reporter out on the water and talk about water safety tips while you conduct the tour.

10. Project Brochures. Although the call for printed publications may be dwindling, some pamphlets and brochures produced by projects and districts can be effective. Strive to include a water safety tip or message in each brochure produced.
11. Web Sites. Web sites offer great places to display water safety messages, safety games and informational links to other safety-related web sites. You may want to identify on project web sites any known dangerous areas and possibly convert that information to apps.
12. Make visitors aware of cell phone (911) coverage limitations on the lakes and rivers.

D. Employee Professional Development & Training Goal. All appropriate Corps employees will have a basic understanding of boating and water safety and take responsibility to assist Corps efforts to reduce public recreation fatalities.

Strategy: Improve employee knowledge and skills for promoting and interpreting boating and water safety.

NOC Actions:

1. NOC will develop internal “water safety shorts” to assist those who distribute this information to employees.

MCS, District and Field-level Actions:

1. Employee Safety Awareness Training is encouraged. District Safety Offices generally require safety training sessions during either weekly or monthly intervals and use other means of communication, (e.g. Safety Gram) to keep employee aware of risks.
2. The Corps has two interpretive PROSPECT courses designed to improve employee’s skills in interpretation and that improves the effectiveness of our safety promotional efforts. One is the basic Interpretative Services course and the other is a more advanced course called Interpretative Services for Managers, Supervisors and Team Leaders.
3. On-site basic interpretive and water safety training tools were developed by the NOC to assist the field in training Student Conservation Association (SCA) Public Safety Interns. However, these training materials can be used to train Corps employees as well. Materials include two PowerPoint presentations; one titled “Building Effective Interpretive Presentations” and another for “Boating & Water Safety Key Messages”, along with an SCA Intern Handbook. An instructor handbook is included that is designed for any Corps employee to utilize to conduct a two-day training. Materials can be found on the NRM Gateway at this link.
<http://corpslakes.usace.army.mil/partners/sca/interntraining.cfm>
4. Various water safety requirements should be incorporated into each employee’s performance objectives. For example, posting a new safety idea on the NRM Gateway or conduct so many hours of roving interpretation each week from Memorial Day through Labor Day.
5. Comply with Corps-specific motorboat operators training and operations requirements: all employees who operate Corps vessels less than 26 feet in length must be trained, tested, and licensed in accordance with ER 385-1-91, Safety - Training, Testing, and

Licensing of Boat Operators, and other applicable regulations. Each project equipped with a boat should have an instructor for this course.

6. Use employee-assistance programs designed to minimize emotional distress following any crisis or major event. Critical Incident Stress Management Program (CISM) is a peer-driven stress management program that combines pre-crisis preparation, stress education and post-event response to help people recover more quickly from stressful job-related incidents and trauma, collectively known as "critical incidents." CISM can be very helpful to those dealing with public fatalities. More information on this program is available on the NRM Gateway, <http://corpslakes.usace.army.mil/employees/cism/cism.cfm>.
7. Membership in organizations, such as the National Water Safety Congress (NWSC) and National Safe Boating Council (NSBC), is encouraged and can be especially beneficial for our non-profit partners who may be eligible for grants. It is recommended that employees responsible for water safety programs attend available professional training and networking meetings to stay abreast of current information and contacts. International Boating & Water Safety Summit (IBWSS), held annually, is an ideal opportunity to learn from and interchange ideas with many boating and water safety experts. Since 2009, the Corps has presented and showcased some of its top initiatives during a Best Management Practices Session held in conjunction with the IBWSS.

E. Safety Campaign Management Goal: Increase safety campaign efficiency and effectiveness for reducing public fatalities.

Strategy: Appropriate personnel tasked with reducing public fatalities will develop and implement safety initiatives, products and materials that support this goal.

HQ Actions:

1. HQUSACE will establish a directive prioritizing water safety. The NOC will work to develop policies, procedures and guidelines supportive of public fatality reduction.
2. HQ Safety and Security along with the NOC will establish a simplified and consistent public fatality reporting system guidance.
3. NOC will provide educational products or tools (e.g. posters, rack cards, fun books, stickers, coloring sheets and various media products) supportive of field programs. These products will be offered on a first-come, first-served basis, at no cost to the field. Products can be requested by submitting an order form coordinated through national water safety program division representatives. NOC products are limited in quantities and only intended to supplement what is provided locally.
4. NOC division representatives are intended to communicate program-related information between the field and the NOC.
5. NOC will strive to develop products that include both English and Spanish. NOC maintains a bilingual team to assist in those translations.
6. CECW-CO-N and NOC will work with the Student Conservation Association (SCA) to manage the Public Safety Intern program.

MSC, District and Field-level Actions:

1. Management will establish performance measures for their employees that support the public fatality reduction initiative.
2. MSC and districts will maintain water safety teams that consist of representatives from each field project and district OD, SO, PA, OC, and possibly RM who work together to

accomplish this goal. Water safety teams should consolidate purchases of safety incentive products intended for the public to reduce costs.

3. Comply with the Public Safety Promotional Material Policy, dated 27 Nov 2002 to assure that products purchased are nominal in value. Examples of products that are authorized include pencils, wrist bands, magnets, fishing bobbers, can koozies, tape measures, sunglass lanyards, cups, refrigerator eraser boards, magnets, mini multi-tools, ink pens, floating key chains, etc. A copy of this policy can be found on the NRM Gateway, <http://corpslakes.usace.army.mil/employees/policy.cfm?Id=watersafety&Code=All>.
4. Keep your NOC division representative apprised of key activities and initiatives that could benefit other districts and/or be adopted at the national level.
5. Representatives from district water safety teams should collaborate at the division level to cross-share information and establish regional goals.
6. Field offices should be encouraged to work with local cooperating associations or water safety councils as a way to minimize the costs on safety promotional items.
7. Utilize resources such as Quality Management Systems (QMS) and the NRM Gateway to share best management practices for promoting public safety.
8. Take advantage of various hiring programs that leverage dollars and minimize our costs e.g. Student Conservation Association Public Safety Interns, Warriors in transition/Wounded Warrior and volunteer program.
9. To ensure accurate data, ENGLink must be updated when information changes (e.g. if alcohol or drug use, heart attack or homicide is determined). Field office personnel and safety office staff must proactively communicate to obtain accurate information and update the data. Those entering incident report data into ENGLink should code alcohol use as “Unknown” or “Suspected” unless clear evidence shows otherwise.
10. Billboards. Use water safety billboards along entrance roads to recreation areas as a static way of delivery important messages to visitors entering your sites. Most states have an Association of Outdoor Advertisers that are willing to assist non-profit and government organizations in developing billboards at minimal or no costs for the promotion of public safety along state highways and interstates.
11. Shocker Banners. Use messaging with a more serious tone when appropriate. Shocker banners, which carry stark facts outlining consequences of risk, can be especially effective when placed in conjunction with life jacket loaner stations. Use of stark facts about risk is an effective way to engage personal emotions that may lead to behavioral changes.
12. Door Mats. Water safety messages can be incorporated into carpet mats are effective attention-getters when placed in various locations such as visitor centers, project offices, events and/or loaned to local businesses.
13. NRRS Receipt Messages. National Recreation Reservation Service (NRRS) receipts have space for messages. Use that space to include key safety tips for your visitors. For example, “Buckle Up - Life Jackets and Seat Belts Save Lives.”

F. Visitor Assistance & Regulations Goal. Initiate visitor assistance measures and local regulations under Title 36, 327.12a posted restrictions authority that supports public fatalities reduction.

Strategy: Analyze statistical trends to identify local issues and use visitor assistance measures to accomplish this goal.

MSC, District and Field-level Actions:

1. Conduct Vessel Safety Checks (VSC) in cooperation with the U.S. Coast Guard Auxiliary (USCG-Aux); these can be performed through local agreements with USCG-Aux or by trained park rangers. Under MOU agreement with the USCG/USCG-Aux, Corps personnel can complete USCG-Aux training and be authorized to use the official VSC inspection forms and decals. USCG-Aux will conduct training on request. In some regions, local or state inspection programs have been utilized by Corps staffs for basic boating safety checks for vessel equipment. These types of inspections generally are conducted at project ramps before boats are launched. National Safe Boating Week, which is typically held the week prior to Memorial Day, is a great time to conduct these inspections since it is early in the season.
2. Personal Watercraft Industry Association sponsors an equipment loan program through local participating businesses. If interested, contact local PWC vendors in your region and inquire about the program. The PWC loaner program was designed to introduce PWCs as a law enforcement or patrol tool, and includes primarily state or federal agencies, such as the U.S. Army Corps of Engineers. If approved, sites are provided a one-year loan of a personal watercraft at no cost other than routine maintenance and repairs to the equipment at the end of the loan period if damages occurred. PWCs are ideal for single-person boat patrols, especially at sites that have minimal staff. For Corps purposes, the agreement of loan should be documented under a contributions or challenge partnership agreement with the loaning company or business.
3. Title 36 posted restrictions have been successful in controlling risk behaviors or problematic activities. District commanders have the authority to establish their own regulations under Title 36, CFR 327.12(a), posted restrictions. Some examples of effective use of posted restrictions include, but are not limited to, kite tubing policy, life jacket wear policies, boat rafting policy, alcohol bans and beach restrictions.
4. On the water presence of Corps park rangers conducting routine boat patrols is an effective visitor assistance tool for public safety. In addition to being available for public assistance, Corps rangers can issue safety equipment inspections, as well as provide personal delivery of safety tips and materials to the boating public.
5. Incorporate requirements that promote safety measures into Special Use and Event permits that are issued at the project level. For example, require life jackets be worn during fishing tournaments; while some tournaments already have that requirement, others don't think to include it. Alcohol bans have been introduced at several Corps facilities, especially for specific areas, such as beaches or day use areas. Work with your marina concessionaires to seek assistance in promoting water safety messages regarding alcohol.
6. Explore the possibilities of working with local law enforcement agencies (city, county, and state) to adopt all or portions of Title 36 rules and regulations as part of their own regulations. These agencies have the same public safety responsibilities and generally see value in working regulations that are the same or support federal regulations.

G. Recreation Facility and Equipment Management Goal. Maintain Corps facilities and equipment in a manner that maximizes our efforts to reduce public fatalities.

Strategy: Seek improvements to facilities and equipment we manage to assist in accomplishing this goal.

NOC Actions:

1. The NOC will work with the National Sign MCX and Sign Advisory Work Group to develop water safety signs associated with the national campaigns that projects can purchase.

MSC, District and Field-level Actions:

1. Establish on-site life jacket loaner program or implement effective changes that will improve on existing programs. Follow life jacket loaner program guidelines published by NOC in 2011; they establish minimally acceptable standards for design, construction, maintenance, public information and program implementation for effective life jacket loaner stations. To obtain life jackets work with local water safety partners, community organizations, safety councils or apply for life jacket donation programs (e.g. BoatUS, SeaTow). CECW-CO memorandum, dated 23 July 2010, subject: Life Jacket Loaner Program Policy and the 2011 Life Jacket Loaner Program Guidelines are on the NRM Gateway.
2. Inspect beaches annually, and/or as deemed necessary, to eliminate underwater obstructions and hazards. Beaches should be established in accordance with the criteria in EM 1110-1-400, Recreation Facility and Customer Service Standards, dated 1 Nov 2004.
3. Posted beach rules should be placed at all entrances to designated swimming areas. Safety messaging (e.g. shocker signs) should be posted separated from beach rules to avoid customer confusion over actual regulations. Signs such as “Swim at Your Own Risk”, “No Lifeguards”, “No Diving” and “Watch Your Children” should be displayed as necessary.
4. Buoys that display water safety messaging can be effective tools, as long as they don’t undermine the safety intent. For instance, marking an area that has experienced a high number of fatalities may inadvertently create an attractive nuisance that encourages others to swim to it, risking exceeding their abilities.
5. Place water safety messages on sidewalks at beaches boat ramps or even on grass and concrete portions of our dams. A stencil with a life jacket and a water safety message can be purchased from the New England Sign Shop, the National Safe Boating Council or be custom designed locally.
6. Provide emergency rescue equipment, such as ring buoys with lengths of rope, reach poles or throw bags at designated beaches, when appropriate and at reasonable intervals in beach areas. EM 1110-1-400 provides further guidance on this type of equipment, and states that provision of such is optional.
7. Side Scan Sonar is a valuable search and recovery underwater tool during any suspected or known drowning. Its use can expedite recovery, adding to the peace of mind for family members who have had to endure longer recovery methods in the past.
8. Vehicle/Vessel Markings. A variety of water safety messages can be incorporated into decals, magnets or wraps for use on project vehicles and vessels. Be sure to follow current GSA and visitor assistance standards for use. Contact the NOC for more information on authorized use.
9. Bulletin Boards. Water safety posters should be placed on bulletin boards located throughout your recreation areas, especially those near water, i.e. boat ramps, beaches, marinas, etc.

H. Partnering/Coordination with Area Businesses Goal: Maximize the use of partnerships that require minimal effort and expenditure that can result in a tremendous impact in reducing public fatalities.

Strategy: Increase the use of existing partnerships and explore the development of new partnerships with local businesses and agencies with similar missions to accomplish this goal.

HQ Actions:

1. NOC and Partnership Advisory Committee should revisit all existing national agreements to re-engage viable partners, improve on working relationships and determine methods to facilitate working relationships on regional and local levels.
2. NOC and Partnership Advisory Committee will work to clarify the authority to co-logo with businesses and other organizations, so Corps logo can be placed with partner logo concerning water safety initiatives.
3. NOC and Partnership Advisory Committee will work with boat and life jacket manufacturers at the national level to encourage joint promotion of water safety initiatives and public education on equipment changes that improve on personal safety.
4. NOC will continue working with agencies (i.e. BoatUS Foundation) and finding other means to provide life jackets for the life jacket loaner program.
5. NOC and HQ Safety will engage military leadership to open communication with the U.S. Army, particularly the Army Safety Center, to utilize their authorities to promote recreation safety.
6. NOC and HQ Safety will work with federal partners through the Federal Interagency Working Group to share processes, resources and studies that enhance public recreation safety on a national level.
7. NOC/Bilingual Team will seek out non-traditional partners, particularly in the Hispanic communities, to assist in public recreation safety promotion with non-English-speaking visitors.
8. NOC will partner with organizations that conduct fishing tournaments on a national level to promote public recreation safety.

MSC, District and Field-level Actions:

1. Assure that all those working partnerships that enhance public safety are thoroughly familiar with the Contributions, Fundraising and Recognitions Reference Guide on the NRM Gateway.
2. Company Safety Meetings. Contact businesses and work sites in your community to schedule a water safety program as a special session or during one of their routine staff safety meetings. A good time to get this scheduled is just before the recreation season begins in your region.
3. Display water safety messaging in innovative ways; i.e., provide advertising slicks available from the NOC or created locally, to a variety of businesses for use on bank envelopes, restaurant placemats, ice bags, milk cartons and grocery bags.
4. Provide water safety slides to community movie theaters for use in projected pre-show previews and displays.
5. Place safety banners at major approaches to projects and at access points, as well as on project dams during holiday weekends. Partner with local businesses, such as insurance or soft drink companies for these types of special displays.
6. Display “avenue banners”, approximately 60” x 30” in size, on light poles along busy roadways. Use colorful banners that are effective in attracting attention. Double-sided

banners can display both a welcome message as well as a simple and short safety-related message. Such banners are easily changed to reflect seasonal messages. Other great locations for such displays are along the dam roadway, boat ramps, and day use/picnic areas.

7. Work with local businesses for permission to post seasonal safety display boards, such as large department stores. Provide the business with double-sided safety boards, about 3' X 4' in size, and request to have them suspended from the ceilings near popular holiday product displays, or in store sections, such as sporting goods. The NOC developed "Size it Right" life jacket poster and brochure or similar products can be provided to vendors where life jackets are sold.
8. Contact area businesses with marquees on an annual basis and request that key safety messages be displayed throughout the recreation season, or especially during busy holiday weekends or National Safe Boating Week. Changeable marquee signs can be purchased and used by project staffs for posting important project information, as well as recreation safety messages.
9. Similar to static marquee signs discussed in item 7, electronic message boards are also great for displaying timely safety messages; these are devices commonly used by financial institutions, restaurants, and other businesses. Portable highway electronic message boards are also being utilized to place water safety messages on.
10. Work with schools and local businesses to conduct a grocery store paper bag project in which students "decorate" paper grocery bags from local grocery stores with water safety pictures and messages. The bags are returned to the stores and used for bagging customers' groceries. Each customer leaves the store with great water safety messages produced by kids from their own community.
11. "I Got Caught with my Life Jacket" campaigns target visitors who were 'caught being safe' by park rangers and rewarded for their actions with nominal value prizes, such as donated ice cream treats, shopping discounts or t-shirts, provided by local businesses. These types of campaigns offer positive opportunities to reward good behavior. They are especially popular during busy weekends, Memorial Day through Labor Day. As part of the campaign, pictures of those caught with their life jackets can be published in weekly newspapers, further promoting the campaign.
12. Work with marina concessionaires to share safety information on a variety of topics such as carbon monoxide poisoning and rental boat safety. Provide safety promotional materials to post and distribute at those locations.
13. Partner up with local pizza restaurants and convenience stores, providing water safety messages on stickers that can be applied to pizza boxes. Stickers can provide clever messaging, such as "Any way you slice it: Make SAFETY a 'Pizza' your life, Buckle-Up Seatbelts and Life Jackets Save Lives".
14. Work with local electric and utility companies and other business that send out monthly bills. Ask to include water safety messages on company billing inserts, especially during peak recreation season. They may also print large ads in magazines and be willing to place different safety messages according to the season.
15. Scrolling electronic safety messages can be placed on gas pumps usually for no cost. A sample message that is usually accepted is "Buckle Up. Life Jackets and Seat Belts Save Lives". Companies may also print the message on their credit card receipts.
16. Purchase a few self-inking stamps with water safety messages to use on outgoing publications and envelopes. Distribute these stamps to campground hosts and local businesses (i.e. banks), so that all materials they distribute can be stamped with a safety message.

17. Work with internal partners (PAO, SO) and continue to conduct events and initiatives such as NASBLA's Operation Dry Water to promote water safety on all levels.
18. Work with National volunteer program to recruit and provide incentives to maintain volunteers.
19. Utilize Student Conservation Association Public Safety Intern training to ensure that interns, volunteers, and employees have the skills to effectively interpret boating and water safety.
20. Partner with organizations that conduct fishing tournaments on a regional and local level to promote public recreation safety.
21. Form local water safety councils or task forces to expand on relationships with local rescue and law enforcement agencies. Formalize existing relationships into councils or search and rescue organizations supportive of public safety, including preventive approaches to water safety and collaboration during recreation emergencies. Seek out non-profit organizations who are eligible for grants and can provide tax deductions to donors for their contributions.
22. Cooperating Associations are non-profit, 501(c)3 organization partners who can benefit the public and the Corps in a variety of ways. These associations work with the Corps to support all of our educational and natural resource management initiatives, including boating and water safety promotion.
23. Collaborate with community and regional agencies/organizations. Projects should maintain current listings of all applicable state, regional and local agencies that are involved in promoting safety issues to include names of contact persons, addresses, and phone numbers. Sharing resources such as printed materials and joint participation in events or education programs can assure wider distribution of information. At a minimum, a meeting should be held at the beginning of each recreation season to discuss shared goals, jurisdictional issues and other plans with these agencies. Suggested agencies include state departments of natural resources/conservation, water patrol, sheriff and police departments, highway patrol, search and rescue groups (civil defense, dive clubs), fire departments, emergency management agencies, U.S. Coast Guard, USCG-Aux, local water safety councils, Power Squadrons, hospitals, other medical facilities, ambulance services, county health departments, coroners, Federal Magistrate, U.S. Marshal, District Attorney's, public health departments, American Red Cross, resort owners, marinas and tourism offices.

Appendix A

USACE Public Recreation Fatality One-Page Summary FY98 - FY11

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	1074	46.90%
Designated Area	210	9.17%
Undesignated Area	864	37.73%
Boating Total	975	42.58%
Swimming	212	9.26%
Collision	132	5.76%
PWC	55	2.40%
Capsized	187	8.17%
Falls from Boat	276	12.05%
****Other Boating	113	4.93%
Other Falls	146	6.38%
Other Recr Total	95	4.15%

Total Undesignated Swimming Area	47.0%
Total Falls Boat, Dock, Shore, etc.	18.4%

TOTAL 2290 100.0%

Category Summary			
Gender		%	
246	Female	10.7%	
2024	Male	88.4%	
20	Unknown	0.9%	
2290	Total		
			2290
Common Age Groupings			
13 and under	9%	214	
Age14-17	10%	233	
Age18-35	39%	889	
Age36-53	24%	544	
Age 54 & Over	15%	350	
			2290
10 Yr Age Groupings			
Age 0-9	6%	135	
Age 10-20	23%	520	
Age 21-30	22%	493	
Age 31-40	15%	350	
Age 41-50	13%	295	
Age 51-60	9%	216	
Age 61-70	6%	126	
71 & Over	4%	95	
Age Unknown	3%	60	
			2290
*Wearing PFD		%	
YES	108	4.7%	
NO	2046	89.3%	
Unknown	95	4.1%	
*N/A	41	1.8%	
			2290
**Alcohol/Drug		%	
YES	461	20%	
NO	1231	54%	
SUSP	34	1% #	
Unk	564	25%	
			2290
***Swimming Fatalities (incl boat&swim)		%	
Designated Area	221	17%	
Undesignated Area	1065	83%	
Total Swimming Only	1286		
***Cause			
D = Drowning	1959	86%	
T = Trauma	198	9%	
DH = Hypothermia	46	2%	
M = Medical	24	1%	
****CO = Carbon Monoxide	11	0%	
U = Unknown	52	2%	
			2290 100%

Note:

* New not applicable category in PFD section in FY06

**FY06-combined alcohol/drugs together so we could summarize with FY98-05 data, assumed that if no alcohol reported then no drugs were involved

***Started tracking in FY06 - carbon monoxide as new cause

**** All swimming-related drownings including boating & swimming when location is known

*****BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

Started tracking "Suspected" Alcohol in 2010

Started including all public recreation-related fatalities in FY11 (7 additions)

Appendix B

Corps of Engineers Public Water Related Fatalities FY97 - FY11																			
Division	District		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total	Average
Great Lakes and Ohio River	Buffalo	LRB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	Chicago	LRC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	Detroit	LRE	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.1
	Huntington	LRH	1	7	4	3	7	10	2	0	6	7	3	1	5	4	3	63	4.2
	Louisville	LRL	7	6	6	3	2	3	4	5	10	14	7	8	9	6	4	94	6.3
	Nashville	LRN	13	21	17	17	10	11	5	11	13	16	16	11	14	15	19	209	13.9
	Pittsburgh	LRP	2	6	2	2	3	0	0	0	0	0	1	3	4	6	1	30	2.0
	TOTAL	LRD	23	40	29	25	22	24	11	16	30	37	27	23	32	31	27	397	26.5
Mississippi Valley	Vicksburg	MVK	5	12	10	8	9	2	7	8	4	1	4	5	2	9	2	88	5.9
	Memphis	MVM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	New Orleans	MVN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0.1
	St. Paul	MVP	0	0	0	0	0	1	1	2	0	0	5	0	0	0	0	9	0.6
	Rock Island	MVR	0	1	5	0	0	1	2	1	2	8	3	2	0	1	0	26	1.7
	St. Louis	MVS	6	11	3	2	3	2	5	1	5	3	8	1	2	5	4	61	4.1
TOTAL	MVD	11	24	18	10	12	6	15	12	11	12	20	8	4	15	8	186	12.4	
North Atlantic	Baltimore	NAB	2	1	1	0	0	0	0	2	3	1	2	1	0	1	2	16	1.1
	New England	NAE	1	0	1	0	0	1	1	0	1	2	0	0	0	1	2	10	0.7
	New York	NAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	Norfolk	NAO	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.1
	Philadelphia	NAP	0	0	3	1	2	0	0	0	1	0	1	0	1	0	2	11	0.7
TOTAL	NAD	3	1	5	1	2	1	1	2	5	4	3	1	1	2	6	38	2.5	
Northwestern	Kansas City	NWK	6	6	14	4	2	9	9	8	11	12	5	5	7	9	7	114	7.6
	Omaha	NWO	2	3	8	8	3	5	1	3	2	3	3	4	2	1	4	52	3.5
	Portland	NWP	3	8	2	4	0	1	5	2	4	3	5	4	5	2	1	49	3.3
	Seattle	NWS	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0.1
	Walla Walla	NWW	7	0	2	2	2	1	1	2	5	7	1	2	3	4	2	41	2.7
TOTAL	NWD	19	17	27	18	7	16	16	15	22	25	14	15	17	16	14	228	17.2	
Pacific Ocean	Alaska	POA	0	4	0	1	0	0	0	0	0	0	1	0	0	0	0	6	0.4
	TOTAL	POD	0	4	0	1	0	0	0	0	0	0	1	0	0	0	0	6	0.4
South Atlantic	Charleston	SAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	Jacksonville	SAJ	0	0	2	3	0	0	0	2	2	0	0	2	5	1	2	19	1.3
	Mobile	SAM	25	19	33	15	13	20	16	22	18	18	24	23	16	17	31	310	20.7
	Savannah	SAS	4	13	12	7	10	9	6	10	3	4	8	8	3	10	9	116	7.7
	Wilmington	SAW	8	11	4	10	6	8	5	8	1	5	4	9	10	2	5	96	6.4
TOTAL	SAD	37	43	51	35	29	37	27	42	24	27	36	42	34	30	47	541	36.1	
South Pacific	Albuquerque	SPA	4	2	2	3	4	1	0	4	2	1	0	2	0	0	2	27	1.8
	Sacramento	SPK	0	5	1	2	8	7	5	6	5	2	4	0	4	3	8	60	4.0
	Los Angeles	SPL	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0.1	
	San Francisco	SPN	1	5	0	3	1	1	1	1	1	2	1	0	6	0	0	23	1.5
TOTAL	SPD	6	12	3	8	13	9	6	11	8	6	5	2	10	3	10	112	7.5	
Southwestern	Fort Worth	SWF	25	35	30	43	30	26	22	23	23	16	33	30	27	40	426	28.4	
	Galveston	SWG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	Little Rock	SWL	10	17	15	9	10	20	14	18	17	10	13	3	15	7	11	189	12.6
	Tulsa	SWT	20	21	16	28	21	15	19	12	18	14	20	24	13	16	34	291	19.4
TOTAL	SWD	55	73	61	80	61	61	55	53	58	47	49	60	58	50	85	906	60.4	
Nationwide	TOTAL	COE	154	214	194	178	146	154	131	151	158	158	155	151	156	147	197	2444	162.9
			1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		Average
Change				39%	-9%	-8%	-18%	5%	-15%	15%	5%	0%	-2%	-3%	3%	-6%	34%		

LRD Public Recreation Fatality One-Page Summary FY98 - FY11

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	146	52.49%
Designated Area	29	9.15%
Undesignated Area	117	43.34%
Boating Total	182	37.97%
Swimming	35	7.95%
Collision	31	4.17%
PWC	8	2.58%
Capsized	24	6.16%
Falls from Boat	58	12.13%
*****Other Boating	26	4.97%
Other Falls Total	32	6.96%
Recr-not water	15	2.58%

TOTAL 375

Total Undesignated Swimming Area	51.29%
Total Falls Boat, Shore, etc.	19.09%

LRD Recreation Fatality Data Summary FY98 - FY11

Gender		%
Female	38	8.5%
Male	336	90.5%
Unknown	1	1.0%
Total	375	

Wearing PFD		%
YES	18	4.8%
NO	337	89.9%
Unknown	12	3.2%
*N/A	8	2.1%
	375	

10 yr Age Groupings		
Age 0-9	4%	21
Age 10-20	25%	87
Age 21-30	25%	60
Age 31-40	15%	64
Age 41-50	11%	62
Age 51-60	9%	35
Age 61-70	6%	19
71 & Over	3%	14
Age Unknown	2%	13
Total		375

**Alcohol/Drug		%
YES	96	25.6%
NO	174	46.4%
Unk/Suspect	105	28.0%
	375	

**** Swimming Fatalities (includes boat/swim)		%
Y=Designated Area	29	16.0%
N=Undesignated Area	152	84.0%
Total	181	

Other Common Age Groupings		
13 & under	8%	32
Age14-17	11%	28
Ages 18-35	44%	137
Ages 36-53	21%	106
Age 54 & Over	21%	59
Age Unknown	14%	13
		375

Cause		
D = Drowning		323
T = Trauma		31
DH = Hypothermia		4
M = Medical		4
***CO = Carbon Monoxide		1
U = Unknown		12
		375

Note:

* New not applicable category in PFD section in FY06

**FY06-combined alcohol/drugs together so we could summarize with FY98-05 data, assumed that if no alcohol reported then no drugs were involved

***Started tracking in FY06 - carbon monoxide as new cause

**** All swimming-related drownings including swimming around boats when location is known

*****BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

Started tracking "Suspected" Alcohol in 2010

Started including all public recreation-related fatalities in FY11 (none LRD, 7 total)

MVD Public Recreation Fatality One-Page Summary FY98 - FY11

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	68	38.42%
Designated Area	32	18.08%
Undesignated Area	37	20.90%
Boating Total	88	49.72%
Swimming	25	14.12%
Collision	14	7.91%
PWC	3	1.69%
Capsized	11	6.21%
Falls from Boat	27	15.25%
****Other Boating	8	4.52%
Other Falls Total	14	7.91%
Recr-not water	6	3.39%

TOTAL 177

Total Undesignated Swimming Area	35.03%
Total Falls Boat, Shore, etc.	23.16%

MVD Recreation Fatality Data Summary FY98 - FY11			
Gender		%	
Female	20	11.3%	
Male	157	88.7%	
Unknown	0	0.0%	
Total	177		
10 yr Age Groupings			
Age 0-9	7%	12	
Age 10-20	24%	43	
Age 21-30	17%	30	
Age 31-40	14%	25	
Age 41-50	11%	19	
Age 51-60	12%	21	
Age 61-70	7%	12	
71 & Over	6%	10	
Age Unkno	3%	5	
Total		177	
Other Common Age Groupings			
13 & under	11%	20	
Age14-17	11%	19	
Ages 18-35	33%	59	
Ages 36-53	21%	37	
Age 54 & C	21%	37	
		177	
*Wearing PFD		%	
YES	10	5.6%	
NO	161	91.0%	
Unknown	6	3.4%	
*N/A	0	0.0%	
			177
**Alcohol/Drug		%	
YES	30	17%	
NO	99	56%	
Unk	45	25%	
**** Suspected	3	2%	177
****Swimming Fatalities (includes boat/swim)		%	
D=Designated Area		33	39%
U=Undesignated Area		60	71%
NA=Not applicable		84	
Total		93	
Cause			
D = Drowning		155	88%
T = Trauma		14	8%
DH = Hypothermia		5	3%
M = Medical		2	1%
***CO = Carbon Monoxide		1	0%
U = Unknown		0	0%
			177

Note:

- * New not applicable category in PFD section in FY06
- **FY06-combined alcohol/drugs together so we could summarize with FY98-05 data, assumed that if no alcohol reported then no drugs were involved
- ***Started tracking in FY06 - carbon monoxide as new cause
- **** All swimming-related drownings including swimming around boats when location is known
- *****BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)
- # Started tracking "Suspected" Alcohol in 2010
- ## Started including all public recreation-related fatalities in FY11 (None MVD, 7 total)

NAD Public Recreation Fatality One-Page Summary FY98 - FY11

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	17	48.57%
Designated Area	3	8.57%
Undesignated Area	14	40.00%
Boating Total	14	40.00%
Swimming	2	5.71%
Collision	4	11.43%
PWC	0	0.00%
Capsized	3	8.57%
Falls from Boat	1	2.86%
*****Other Boating	4	11.43%
Other Falls Total	1	2.86%
Recr-not water	3	8.57%

Total Undesignated Swimming Area	45.71%
Total Falls Boat, Shore, etc.	5.71%

TOTAL 35

NAD Recreation Fatality Data Summary FY98 - FY11			
Gender		%	
Female	5	14.3%	
Male	30	85.7%	
Unknown	0	0.0%	
Total	35		
Wearing PFD		%	
YES	0	0.0%	
NO	28	80.0%	
Unknown	4	11.4%	
*N/A	3	8.6%	
35			
10 yr Age Groupings			
Age 0-9	6%	2	
Age 10-20	20%	7	
Age 21-30	20%	7	
Age 31-40	9%	3	
Age 41-50	14%	5	
Age 51-60	17%	6	
Age 61-70	6%	2	
71 & Over	0%	0	
Age Unknd	9%	3	
Total	100%	35	
**Alcohol/Drug		%	
YES	3	9%	
NO	15	43%	
Unknown	16	46%	
SUSPECTED	1	3%	35
****Swimming Fatalities(incl boat, swim)			%
Y=Designated Area		3	16%
N=Undesignated Area		16	84%
Total		19	

Other Common Age		
13 & under	6%	2
Age14-17	17%	6
Ages 18-35	29%	10
Ages 36-53	23%	8
Age 54 +	17%	6

35

Cause			
D = Drowning		23	66%
T = Trauma		5	14%
DH = Hypothermia		2	6%
M = Medical		3	9%
***CO = Carbon Monoxide		1	3%
U = Unknown		1	3%
		35	100%

Note:

* New not applicable category in PFD section in FY06

**FY06-combined alcohol/drugs together so we could summarize with FY98-05 data, assumed that if no alcohol reported then no drugs were involved

***Started tracking in FY06 - carbon monoxide as new cause

**** Includes all swimming-related drownings even around boats when location is known

*****BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

Started tracking "Suspected" Alcohol in 2010

Started including all public recreation-related fatalities in FY11 (2 NAE, 7 total)

NWD Public Recreation Fatality One-Page Summary FY98 - FY11

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	91	38%
Designated Area	16	7%
Undesignated Area	75	31%
Boating Total	109	46%
Swimming	29	12%
Collision	17	7%
PWC	6	3%
Capsized	24	10%
Falls from Boat	22	9%
*****Other Boating	11	5%
Other Falls	18	8%
Other Recr Total	21	9%

Total Undesignated Swimming Area	44%
Total Falls Boat, Shore, etc.	17%

239

NWD Water-Related Fatality Data Summary FY98 - FY11			
Gender		Wearing PFD	
	%		%
Female	27	11%	11%
Male	209	87%	85%
Unknown	3	1%	9%
Total	239		1%
239			
10 yr Age Groupings		**Alcohol/Drug	
	%		%
Age 0-9	6%	15	21%
Age 10-20	20%	47	56%
Age 21-30	19%	46	1%
Age 31-40	15%	36	23%
Age 41-50	13%	32	
Age 51-60	8%	19	
Age 61-70	5%	13	
71 & Over	10%	23	
Age Unknown	3%	8	
Total		239	
239			
Other Common Age		Swimming Fatalities (include boat/swim) %	
	%		%
13 & under	9%	21	13%
Age 14-17	11%	26	87%
Ages 18-35	33%	78	
Ages 36-53	24%	58	
Age 54 & Over	20%	48	
Total		239	
239			
Cause			
D = Drowning		185	77%
T = Trauma		25	10%
DH = Hypothermia		11	5%
M = Medical		2	1%
***CO = Carbon Monoxide		4	2%
U = Unknown		12	5%
Total		239	100%

Note:

* New not applicable category in PFD section in FY06

**FY06-combined alcohol/drugs together so we could summarize with FY98-05 data, assumed that if no alcohol reported then no drugs were involved

***Started tracking in FY06 - carbon monoxide as new cause

**** All swimming-related drownings including boating & swimming when location is known

*****BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

Started tracking "Suspected" Alcohol in 2010

Started including all public recreation-related fatalities in FY11 (None NWD, 7 total)

SAD Public Recreation Fatality One-Page Summary FY98 - FY11

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	264	52.49%
Designated Area	51	10.14%
Undesignated Area	213	42.35%
Boating Total	191	37.97%
Swimming	40	7.95%
Collision	21	4.17%
PWC	13	2.58%
Capsized	31	6.16%
Falls from Boat	61	12.13%
*****Other Boating	25	4.97%
Other Falls Total	35	6.96%
Recr-not water	13	2.58%

Total Undesignated Swimming Area	50.30%
Total Falls Boat, Shore, etc.	19.09%

TOTAL 503

SAD Recreation Fatality Data Summary FY98 - FY11			
Gender		%	
Female	43	8.5%	
Male	455	90.5%	
Unknown	5	1.0%	
Total	503		
Wearing PFD		%	
YES	19	3.8%	
NO	469	93.2%	
Unknown	12	2.4%	
*N/A	3	0.6%	
	503		
**Alcohol/Drug		%	
YES	75	14.9%	
NO	295	58.6%	
Unk/Suspect	133	26.4%	#
	503		
****Swimming Fatalities (incl boat & swim)			%
Y=Designated Area		51	16.8%
N=Undesignated Area		253	83.2%
Total		304	
Cause			
D = Drowning		438	87%
T = Trauma		47	9%
DH = Hypothermia		1	0%
M = Medical		5	1%
***CO = Carbon Monoxide		2	0%
U = Unknown		10	2%
		503	

Note:

* New not applicable category in PFD section in FY06

**FY06-combined alcohol/drugs together so we could summarize with FY98-05 data, assumed that if no alcohol reported then no drugs were involved

***Started tracking in FY06 - carbon monoxide as new cause

**** Includes swimming-related drownings even boat/swim when location is known

*****BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

Started tracking "Suspected" Alcohol in 2010

Started including all public recreation-related fatalities in FY11 (1 SAM, 7 total)

SPD Public Recreation Fatality One-Page Summary FY98 - FY11

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	55	51.89%
Designated Area	1	0.94%
Undesignated Area	54	50.94%
Boating Total	38	35.85%
Swimming	8	7.55%
Collision	3	2.83%
PWC	5	4.72%
Capsized	10	9.43%
Falls from Boat	10	9.43%
*****Other Boating	2	1.89%
Other Falls Total	8	7.55%
Recr-not water	5	4.72%

TOTAL 106

Total Undesignated Swimming Area	58.49%
Total Falls Boat, Shore, etc.	16.98%

SPD Recreation Fatality Data Summary FY98 - FY11			
Gender		%	
Female	15	14.2%	
Male	89	84.0%	
Unknown	2	1.9%	
Total	106		
10 yr Age Groupings			
Age 0-9	9%	10	
Age 10-20	25%	27	
Age 21-30	17%	18	
Age 31-40	16%	17	
Age 41-50	13%	14	
Age 51-60	5%	5	
Age 61-70	4%	4	
71 & Over	4%	4	
Age Unknd	7%	7	
Total		106	
Other Common Age Groupings			
13 & under	12%	13	
Age 14-17	11%	12	
Ages 18-35	37%	39	
Ages 36-53	24%	25	
Age 54 & C	9%	10	
		106	
*Wearing PFD		%	
YES	7	6.6%	
NO	92	86.8%	
Unknown	6	5.7%	
*N/A	1	0.9%	
		106	
**Alcohol/Drug		%	
YES	17	16%	
NO	65	61%	
Unk	22	21%	
**** Suspected	2	2%	106
**** Swimming Fatalities (incl boat swim)			%
D=Designated Area		1	2%
U=Undesignated Area		62	98%
Total		63	
Cause			
D = Drowning		91	86%
T = Trauma		10	9%
DH = Hypothermia		1	1%
M = Medical		1	1%
***CO = Carbon Monoxide		0	3%
U = Unknown		3	0%
		106	

Note:

- * New not applicable category in PFD section in FY06
- **FY06-combined alcohol/drugs together so we could summarize with FY98-05 data, assumed that if no alcohol reported then no drugs were involved
- ***Started tracking in FY06 - carbon monoxide as new cause
- **** All swimming-related drownings including boat & swim when location is known
- *****BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)
- # Started tracking "Suspected" Alcohol in 2010
- ## Started including all public recreation-related fatalities in FY11 (7 total)

SWD Public Recreation Fatality One-Page Summary FY98 - FY11

Activity Summary (Based on Codes)	Number	% of Total
Swimming Total	423	49.94%
Designated Area	84	9.92%
Undesignated Area	339	40.02%
Boating Total	348	41.09%
Swimming	78	9.21%
Collision	43	5.08%
PWC	19	2.24%
Capsized	83	9.80%
Falls from Boat	93	10.98%
*****Other Boating	32	3.78%
Other Falls Total	38	4.49%
Recr-not water	38	4.49%

Total Undesignated Swimming Area	49.23%
Total Falls Boat, Shore, etc.	15.47%

TOTAL 847

SWD Recreation Fatality Data Summary FY98 - FY11			
Gender		%	
Female	96	11.3%	
Male	743	87.7%	
Unknown	8	0.9%	
Total	847		
Wearing PFD		%	
YES	44	5.2%	
NO	752	88.8%	
Unknown	33	3.9%	
*N/A	18	2.1%	
847			
10 yr Age Groupings			
Age 0-9	6%	51	
Age 10-20	23%	199	
Age 21-30	23%	192	
Age 31-40	16%	133	
Age 41-50	13%	106	
Age 51-60	10%	84	
Age 61-70	5%	41	
71 & Over	3%	28	
Age Unknd	2%	13	
Total		847	
Other Common Age Groupings			
13 & under	10%	82	
Age 14-17	10%	86	
Ages 18-35	40%	342	
Ages 36-53	24%	206	
Age 54 & C	14%	118	
847			
**Alcohol/Drug		%	
YES	190	22%	
NO	447	53%	
Unk	196	23%	
Suspected	14	2%	847
**** Swimming Fatalities (incl boat, swim)			%
D=Designated Area		84	17%
U=Undesignated Area		417	83%
Total		501	
Cause			
D = Drowning		739	87%
T = Trauma		64	8%
DH = Hypothermia		22	3%
M = Medical		6	1%
***CO = Carbon Monoxide		2	0%
U = Unknown		14	2%
847			

Note:

* New not applicable category in PFD section in FY06

**FY06-combined alcohol/drugs together so we could summarize with FY98-05 data, assumed that if no alcohol reported then no drugs were involved

***Started tracking in FY06 - carbon monoxide as new cause

**** All swimming-related drownings including boating & swimming when location is known

*****BAC, BAE, BAM,BAS (Control/Speed, Electrical, Carbon Monoxide, Skiing/Towing)

Started tracking "Suspected" Alcohol in 2010

Started including all public recreation-related fatalities in FY11 (3 SWD, 7 total)