

Turtle Cove Environmental Research Station

SOUTHEASTERN LOUISIANA UNIVERSITY

SAFETY, BOATING, & FACILITY MANUAL



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Manager Revised 2020

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I. Overview & History of Turtle Cove Facilities

MISSION STATEMENT

Turtle Cove Environmental Research Station is a field research and educational/outreach facility of Southeastern Louisiana University located in the Lake Pontchartrain estuarine ecosystem. Because of its location at the upper end of this major estuary, Turtle Cove is within one hour by boat of various wetland environments, along with their aquatic counterparts, ranging from fresh to saline, including bottomland hardwood forests, cypress swamps, and marshes. Moreover, each of these habitat types exists in pristine, degraded, and restored states. The facility complements other field stations in the state (and nation) that are more concerned with higher salinity marine waters or fresh waters.

PRIORITIZED GOALS

1. **Scholarly research** - To enhance research activities of Southeastern faculty and students and to attract regional, national, and international researchers.
2. **University teaching** - To provide access to aquatic and wetland environments for field trips, summer courses, workshops and restoration activities.
3. **Teacher training** - To provide opportunities for continuing education through summer programs and weekend workshops when grant funding is available.
4. **Public service (outreach)** - To provide hands-on field experiences for K-12 students and other community groups interested in wetland and aquatic environments.
5. **Restoration** – to conduct restoration activities in the surrounding Manchac/Maurepas swamps and marshes under externally-funded programs.

In keeping with Southeastern's image as a dynamic institution of higher learning, Turtle Cove is also developing as an active research and educational facility for interdisciplinary studies. The overall goal is to make Turtle Cove a nationally recognized center for environmental education and research in low-salinity environments.

STATION DESCRIPTION

The Turtle Cove station is comprised of two sites: a main facility/lodge along the south shore of Pass Manchac (only accessible by boat) and a boat shed/classroom at Galva Canal in Akers (Manchac), LA accessible by car. The main facility, known as the lodge, occupies a three-story wood-frame building crafted of virgin cypress in 1908 as a private hunting and fishing lodge for Mr. Edward Schlieder, a logger out of New Orleans until his death in 1947, when it then began to be used by the Turtle Cove Hunting Club (Mr. Schlieder's local hunting companions). In the 1960s the building and the three acres of land it sits on was donated to the State of Louisiana, where it served until 1981 as the

headquarters for the Louisiana Department of Wildlife and Fisheries (LDWF) - Manchac Wildlife Management Area (WMA).

The station's main facility is located on the 8,325 acre Manchac WMA in St. John the Baptist Parish, Louisiana, along the south shore of Pass Manchac, two miles west of Lake Pontchartrain. It has been administered since 1981 by Southeastern Louisiana University (College of Science and Technology), under a 99-year lease agreement (with a 25 year extension option) with the Louisiana Wildlife and Fisheries Commission. University activities began in earnest at the station in 1985.

The Turtle Cove Lodge contains a first floor research and teaching area and second floor living quarters with kitchen, bathrooms, and bedrooms, and a dining hall that can double as a conference room. At the west end of the 2nd floor is a "researcher suite" that has a small adjacent "computer lab" with internet service. Until further notice, the third floor space is not allowed for use (a means of fire escape will first have to be designed, approved and constructed). The entire building underwent a \$50,000 renovation in 2000 that substantially upgraded the interior. However Hurricanes' Katrina and Rita in 2005 caused substantial damage, completely destroying the bulkheads and boardwalks, flooding the first floor, and destabilizing the entire structure. In 2008, Hurricane Gustav and Tropical Storm Ike brought similar flooding, though the facilities had yet to begin reconstruction. The reconstruction, funded by FEMA for approx. \$6 million, was completed in December 2011 with a new Caretaker's residence as well.

Since the main facility is accessible only by boat, several vessels, including canoes, are available for station visitors to use with properly trained operators. Currently, 6-8 skiffs (17-21 ft in length), one pontoon boat (40'), and several mud-boats are available at the Turtle Cove Boat Shed and Classroom at Galva Canal, located five miles west of the lodge, in an area shared with the Louisiana Department of Wildlife and Fisheries. Transportation for large groups is provided by the pontoon boat, which was purchased with FEMA funds (from Katrina/Rita damage) in December 2006. In addition, Turtle Cove has access to a boat launch and possibly two boat slips on the west side of Lake Maurepas near the Black Lake Bait and Tackle store on an as-needed basis (i.e., only when researchers need them—contact Turtle Cove Manager to arrange). This auxiliary site was chosen as much for safety reasons as for gas savings because researchers who work on the west side of Lake Maurepas would no longer have to cross the 12 mile lake from the Galva site. Several flat boats, pirogues, and canoes are in the Turtle Cove barn next to the main facility (10) and on a trailer at Galva Canal (10) for mobile canoe transport. Other boats are stored at the Horticulture Center on campus and used as replacements during times of boat repairs.

Various nets and other field equipment, as well as holding tanks (with capability of aeration and filtration) for aquatic organisms, are available at the main facility. Both potable (from a well) and non-potable (from Pass Manchac) water is available outside

and on the ground floor of Turtle Cove for use in research. Compound and stereo microscopes, a drying oven, water quality meters, and other wet lab equipment are also available, as are computers. Internet service is provided by Hughes Net as of 2012.

In addition, the Galva Canal facility contains a bathroom with a field shower, room for 6 boats, and an upstairs classroom and office complex. The classroom has a small computer lab with a printer and other amenities tied into satellite internet service.

WEBSITE, GPS COORDINATES, DRIVING DIRECTIONS, & CONTACT INFORMATION

Website

The easiest and quickest way to view information about Turtle Cove is to visit the website: <http://www.selu.edu/turtlecove>. The website has information on the history of the station, driving directions, current events, staff information, boat reservation procedures, maps, affiliated research projects, and other relevant information.

GPS Coordinates for Main Sites

Galva Canal Classroom & Boat Shed	30° 16' 35.4" N and 90° 23' 53.4" W
Turtle Cove Lodge (Main Facility)	30° 17' 39.7" N and 90° 20' 6.5" W
Dock at West Lake Maurepas	30° 15' 34" N and 90° 39' 6" W

Driving Directions to the Galva Canal Classroom & Boat Shed

The boat shed for transportation to the main facility is located in Galva (not on state road maps), just south of Pass Manchac in St. John the Baptist Parish, off of U.S. Highway 51 (also called "Frontage Road" near Manchac). The community is also known by locals and the post office as either "Manchac" or "Akers." You should take I-55 (south from Hammond or north from LaPlace) to the Manchac exit (Exit 15), travel south on Hwy 51, also called "Frontage Road" (past Middendorf's Restaurant), cross the bridge over Pass Manchac, and then take the second left turn (only about 200 yards from the end of the bridge). A small road will take you across the railroad tracks (watch out for the trains). On the east side of the tracks, turn right and follow the road to its end—go thru the yellow iron gate, and continue across the parking lot to the Southeastern Turtle Cove boat shed. For 911 emergencies, the address of the boat shed at Galva is 87 Alligator Lane, Akers, LA, 70421 (St. John the Baptist Parish). This address shows up on some smart phones. GPS Coordinates are: 30° 16' 35.4" N and 90° 23' 53.4" W.

Driving Directions to the Dock at West Lake Maurepas

The dock at West Lake Maurepas enables researchers to access Lake Maurepas faster and easier than boating from the Galva Canal area. Usually, the Gray Boat and a Go-Devil are docked in this boat slip. You need to bring your own boat gas, though, because gas is not sold at the Black Lake Bait & Tackle shop. To drive to the dock, take I-55 (south from Hammond or north from LaPlace) to the exit for Hwy 22 (Exit 26) toward Springfield. Follow the signs for Hwy 22 all the way to the intersection of Hwy 1039 and

the sign for the Steve Broviar Park. Turn left onto Hwy 1039, traveling south toward the park. Travel 3.7 miles on Hwy 1039 (Bear Island Rd). At the 4-way intersection with Black Lake Grill on your left, turn right staying on Hwy 1039. Continue another ¼ of a mile over the bridge and gravel road as Hwy 1039 changes into Black Lake Club Rd. End at the Black Lake Bait & Tackle shop. (GPS Coordinates: 30° 15' 34" N and 90° 39' 6" W)

Turtle Cove Staff & Relevant Contacts

You must bring your own cell phone every time you are using the Turtle Cove facilities or vessels. Always keep the marine radio on channel 16 for USCG monitoring in case you have problems (channels 2 or 22 are for weather updates). See the table below for the contact information of Turtle Cove staff and relevant people/sites.

In an emergency, first dial 911. Then contact the Turtle Cove Manager or Caretaker at one of the contact numbers below.

Staff Name	Duties	Contact Information
Robert Moreau <i>Manager</i>	Administrative, on-campus, and emergency issues, as well as Turtle Cove boat issues when Hayden is unreachable	Off: 985.549.5008 (rm 124 Wilson Hall) Cell: 506.231.1067 Fax: 985.549.5068 rmoreau@selu.edu
Hayden Reno <i>Caretaker</i>	All boat and station issues	Cell: 985.507.7710 Hm: 985.386.9928 hrenno@selu.edu

NOTE: Check Turtle Cove Website for current Grad Student Contact Information at any given time.

Southeastern Campus Police (in Hammond)	Emergency Only	985.549-2222 or call 911
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Additional Southeastern Contacts

Gary Shaffer	Professor and researcher	O: 985.549.2865 Cell: 985.507.6673
Southeastern	Directory of phone numbers for all	985.549.2000

Campus Info	Southeastern offices and personnel	
Southeastern Emergencies	Southeastern police	985.549.2222
Manchac Fuel Dock & Boat Mechanics		
Manchac Fuel Dock	Always fill-up when <1/3 of a tank on the return trip; respect the next boat user	225.362.8515 (cell) 985.386.0870 (dock) [call for hours of operation; they change often]
Big Wheel Boats and RV Service	Yamaha engines (Gray, Brown, and Pontoon). Can also do minor repairs on Honda engines—good since they are local in Hammond/Ponchatoula	985.345.3252 42227 W. I-55 Service Rd., Hammond, LA 70403
Slidell Marine	Honda 4-stroke engines on Blue, Black, and Green boats	504.649.4412 [closed Sun and Mon]
West Lake Maurepas Boat Shed and Dock		
Black Lake Bait and Tackle	For boat supplies (no fuel) “Doc” is the owner	W/H: 225.695.6447 C: 225.715.3415
Technical Phone Service/Support		
Southeastern Telephone Services		985.549.5050

SIGNIFICANT EVENTS IN TURTLE COVE HISTORY

Schlieder Era

- 1901 5,506 acres bought by Salmen Brick and Lumber Company Ltd (from Chicago, St. Louis, and New Orleans Railroad Co.).
- 1908 Land bought and Turtle Cove building built as hunting and fishing lodge by Mr. Edward G. Schlieder.
- 1947 Schlieder died (95 years old), left \$2.6 million estate to establish the Edward G. Schlieder Educational Foundation.

Turtle Cove Club Era

- 1951 Turtle Cove Club incorporated (a private hunting and fishing club) and used the “Schlieder camp” as their headquarters.
- 1980 Turtle Cove Club reorganized and purchased property on Galva Canal.

Department of Wildlife and Fisheries Era

- 1975 Manchac Wildlife Management Area created (5,261 acres), and Turtle Cove camp became Manchac Management Area headquarters.
- 1977 Acreage of Manchac WMA increased to 8,325 acres.

Southeastern Louisiana University Era

- 1981 Turtle Cove Biological Research Station is established (under 99-year lease agreement with Louisiana Department of Wildlife and Fisheries).
- 1983 Grant of \$285,000 received from Coastal Zone Management Program, Louisiana Department of Natural Resources, and U. S. Department of Commerce to conduct a baseline study of the water quality and selected faunal communities in Lake Maurepas, its major tributaries, and Pass Manchac.
- 1985 Dr. Robert Hastings hired as Director of Turtle Cove.
- 1986 Hayden Reno hired as Caretaker of Turtle Cove.
- 1992 Station is renamed Turtle Cove Environmental Research Station.
- 1995 External review of Turtle Cove programs is conducted.
- 1996 622 acres of land on west end of Jones Island donated to Turtle Cove for preservation and wetlands research.
- 1997 Donation received from Schlieder Foundation to create the Endowed Chair of Environmental Studies.
- 1998 NSF-sponsored planning workshop is conducted, and Dr. Robert Moreau is hired as Assistant Director of Turtle Cove.
- 2000 Southeastern administration provides \$50,000 for major structural renovations to the building and to replace the building's furnishings.
- 2001 Dr. Paul Keddy replaces Dr. Robert Hastings as (Interim) Director of Turtle Cove. Turtle Cove enters into partnership with Tulane University and LUMCON for long-term monitoring of water quality and weather data in Lake Pontchartrain Basin. Two new 21' research skiffs (Blue and Black Boats) are ordered to replace vessels in the aging fleet. 20' Creole is retired for safety reasons.
- 2002 Dr. Robert Moreau replaces Dr. Keddy assuming new title of Manager of Turtle Cove. Michael Greene is hired at 60% time as Education/Outreach Coordinator and Biologist on Staff (with 40% as Instructor in Biology). Fred Mars Stouder is named Marsh Restoration Coordinator for all of his soft-money restoration work. Funding from the EPA-sponsored Pontchartrain Basin Research Program begins to positively impact on research, education, and outreach use numbers on the station over the next 5 years. Michael Greene and Debbie Dardis restart the teacher workshops at Turtle Cove that had been dormant since Dr. Hastings' absence in 2000. A satellite boat shed housing two boats is established on the west side of Lake Maurepas for expanding research efforts there. Tropical Storm

- Isidore and Hurricane Lili inflict major damage on infrastructure at Turtle Cove, primarily in the form of bulkhead damage.
- 2003 \$80,000 in repairs to bulkheads are made from FEMA and ORM monies stemming from the storms of 2002. Turtle Cove receives grants from the EPA and LPRA programs. Turtle Cove obtains satellite internet service at the station. The station obtains one new boat and motor (14' flat Bird Boat) and two used boats: 17' White Boat from LUMCON and 21' Red Boat (Lake Skiff) from WLF to add to the growing fleet.
- 2004 Major improvements are made to the pontoon boat to handle the large increases in education and outreach numbers from the EPA and LPRA programs. Turtle Cove experiences record numbers of use (3,000 user days) for FY 04/05 in terms of research, education, and outreach use at the station and at its West Lake Maurepas boat shed. Station receives grants from EPA and LPRA programs. Turtle Cove Administrative Offices move out of Wilson Hall into new Biology Building suite on 3rd floor.
- 2005 A new septic system (\$35,000) is installed at Turtle Cove by Southeastern's Physical Plant. The long awaited Galva Canal Boat Shed and Classroom are constructed in spring to handle the growing fleet. In May, Southeastern Administrators (President, Provost, Deans, etc.) attend large "open house" at Turtle Cove to view refurbished (cleaned/painted) facilities, including new Boat Shed/Classroom at Galva. Hurricanes Katrina and Rita in August/September inflict severe damage on Turtle Cove facilities estimated at \$2.5 million (\$900,000 on main building; \$1 million on bulkheads; \$458,000 on boardwalks; \$50,000 on wharfs; \$52,000 for a new pontoon boat; all EPA experiment infrastructure destroyed). Turtle Cove is deemed "unusable" by Facility Planning, and goes into a 7-year period of dormancy. Repair cost estimates rise and eventually exceed \$5 million by the time they are completed in mid-2012. Research continues (by using the fleet) throughout FY 05/06 but at a low rate as infrastructure is not usable. Education and outreach programs are suspended for the year. Moreau obtains \$73,000 grant for Mitigation Study from EPA program. Station also receives \$90,000 grant from LPRA program for Internet Workshop/Field Trip development.
- 2006 The facilities on Pass Manchac are approved by FEMA for major repairs stemming from storms of 2005. ORM and Facilities Planning now determine timeframe for repairs. New Galva Canal facilities (Boatshed and Classroom) replace the lodge as center of activities until repairs are made. Turtle Cove is set to become center for Technology Transfer for EPA and other related grant programs. Turtle Cove Administrative Offices return to Wilson Hall due to space issues/needs in New Biology Building.
- 2007 New 40' Pontoon Boat reinstates the Outreach Program for the first time since the 2005 storms. Blueprints are created for restoring the main lodge, Caretaker Residence, bulkheads, boardwalks and wharfs.

- 2008 Final FEMA sign-off on all major renovation plans. Record numbers of education and outreach groups in the spring and summer. New office furnishings for Wilson Hall and Galva Classroom provided by Southeastern Administration (\$30,000).
- 2009 Major repairs/renovations begin to take place for the eventual \$5+ million FEMA funded restoration from Katrina/Rita hurricane damage. By fall, new bulkhead is replaced (\$3.1 mill). Although Turtle Cove itself is still unusable education/outreach activities continue under direction of Dr. Moreau and Marsh Restoration Coordinator Fred Stouder (soft money grants from LDNR for Christmas Tree Projects for past 15 years) who helps assume duties of Education Coordinator Michael Greene (out on sick leave for that year).
- 2010 In 2010 new 2,500 ft long, 6' wide boardwalk is replaced. Dr. Moreau receives \$60,000 grant from LPRA program to create a "Young Scientists Training Program" at Turtle Cove, which includes among other items the development of a self-guided boardwalk tour (50 signs) and maps and field guides for vegetation identification and other water quality documentation. Budget cuts eliminate Education Coordinator (hard money) position, but LPRA grant provides funding for Fred Stouder to continue as Marsh Restoration/Education-Outreach Coordinator thru end of 2011.
- 2011 In 2011 Turtle Cove is raised up 4.5 ft and a new bottom floor constructed, and new cypress siding skin put on the entire building. The building is cleared for temporary use by the Fire Marshall in early December 2011 while several minor issues are addressed (stairs, door closures, fire alarm system, and the condition of the two boat sheds behind Turtle Cove). Dr. Debbie Dardis and Dr. Moreau receive a \$20,000 education/outreach grant from the Gulf of Mexico Alliance (GOMA), which provides funding to continue education/outreach program thru the end of 2011 after the LPRA grant comes to its conclusion in mid-2011. Fred Stouder begins a tree survey for the old Jones Island Mitigation Project (JIMP) in an effort to determine how many trees are still surviving 6+ years after the storms of Katrina/Rita in 2005.
- 2012 Fred Stouder completes a Tree Survey for the old Jones Island Mitigation Project (JIMP), then with no other funding available terminates (retires) after 16 years of service to Turtle Cove. At this point it is decided to continue the Education/Outreach program by using the two Turtle Cove grad students to lead groups with Caretaker Hayden Reno driving the Pontoon Boat. In addition, two undergraduate students are also hired to assist (Daniel Powell and Eric Strickland). Along with the Manager (Moreau) leading some trips when needed, this system works well and will be the new model going forward given continuing uncertainties with the state budget. The new Caretaker Cabin breaks ground in April and is completed by the end of the year. Also the new episode of Backyard Wonders, which is all about Turtle Cove, airs in April. A companion 18 min "PR" video is also provided by the Southeastern Channel. In August of

2012 Hurricane Isaac hits and becomes the “new high water mark” for Turtle Cove and the Manchac area, flooding the newly raised Turtle Cove structure with 18” on the bottom floor and the Galva Boatshed bathroom with about 4’ of water.

2013-2016 After Hurricane Isaac, Turtle Cove makes repairs and begins a growth in use of the station that in 2015 approaches the high-mark of 2004 with approx. 2500 different individuals per year using the station, and nearly 2700 user days of activity in research, education and outreach activities. In 2014 the first formal Turtle Cove “Fundraiser” was held on November 2, 2014, with approximately 75 people participating (plus another 25 staff and volunteers), raising a net of \$21,000 for the station. These funds went to repairs and restorations of boats/motors/facilities, portable generators for both Turtle Cove and the Caretaker Residence, and gas for the increased use in boats. Funds were raised by providing “sponsorship plates” on the 55 boardwalk signs---tied in with ticket sales, this produced the majority of the revenue. Entergy was the “tidal sponsor” for the fundraiser, gifting \$3,500. The Gray and Green Boats were retired (surplused) in 2016 due to extreme age and rotting of the shells of the boats that were deemed to expensive to repair.

2017 Efforts began in 2017 to re-establish the Weather Monitoring Station on the Boardwalk behind Turtle Cove as well as the implementation of a Water Quality Monitoring Station on the front wharf. A follow-up fundraiser was planned for October 28th, 2017.

II. Health & Safety Regulations

Turtle Cove is a multi-use facility that serves many individuals for different purposes. Such communal use requires basic rules and procedures to ensure the facilities remain in good working order for everyone. We have kept the rules to a minimum, but common sense and respect for the needs and rights of others is the best policy. Of utmost importance is following the applicable rules and regulations of the University as well.

Keys & Combinations – Starting in 2005, we have moved towards a combination lock system for both doors and padlocks at the Galva Canal Boatshed/Classroom Facility and at Turtle Cove itself (replacing the old #3210 padlock keys). Check with the Turtle Cove Manager or Caretaker for specific numbers as they should not be publicly posted here:

- Galva Canal Boat Shed Bathroom [code ____]
- Galva Canal Boat Shed Classroom (upstairs) [code ____]
- Galva Canal Researcher Storage Shed [combo ____ on door hang lock; key is inside lock. Other keys to canoe trailer, etc. are in that storage shed on right when walking inside]
- Turtle Cove Downstairs (ground level screen porch entrance) and Upstairs (2nd Floor entrance from front stairs) [code____]

Plumbing – Don't clog the commodes. Inform Turtle Cove staff immediately if there is a potential problem, and try to correct the problem before the commode overflows. We have plungers in all of the bathrooms at both the Galva Facility and at Turtle Cove.

Water – The tap water at the Galva Facility and at Turtle Cove is safe to drink (tested periodically), but commonly tastes bad, so you may want to bring your own water for drinking. The water supply is usually turned off during the winter to avoid frozen pipes, so if you need to use the facility during the winter, check with the Manager or Caretaker to ensure the water is on.

Ice – Our ice machine is at the Galva Canal facility, upstairs in front of the classroom on the deck.

Third Floor of Turtle Cove is NOT FOR USE UNTIL OTHERWISE NOTED.

First Aid Kit – A first aid kit is on the wall in the kitchen of the lodge. If you use the last of any supplies, or if you find something missing, notify Turtle Cove staff so that those supplies may be replaced. Most boats have first aid kits as well.

Snakes and Snake Bites – Snakes, including poisonous cottonmouths, are common at Turtle Cove. Watch your step, and wear shoes when you are outside. All snakes, as well as other wildlife, are protected, so do not kill them (except for valid research or educational purposes). In general, a victim bitten by a poisonous snake (most likely to be a Cottonmouth Water Moccasin) should sit or lay still and calm. Immediately transport the victim on a boat back to Galva, and if the victim remains coherent, continue transport to the nearest hospital (North Oaks Hospital on Bus. Hwy 51, noted by signs as "Frontage Road," between Ponchatoula and Hammond). **If the victim begins to fall in and out of consciousness, contact 911 for case-by-case instruction.**

Swimming – Swimming at Turtle Cove is prohibited. There is no lifeguard, the water is deep, the current is usually strong, and alligators may be present. Water quality is often poor and below standards recommended for swimming. Thus, diving or swimming off of the dock is prohibited.

Nutria Itch – Bare skin in marsh ditches may expose you to "swimmer's itch," a parasitic infection that causes severe itching. So wear boots, even when it's hot.

Dogs – Dogs and other pets, except service animals, are prohibited at Turtle Cove as the facility sits on the Manchac WMA (and dogs are prohibited by LDWF).

Bonfires, Campfires, & Fireplace Use – Bonfires and campfires on Turtle Cove grounds are prohibited. The old fireplace inside Turtle Cove on the 2nd floor is just a façade with

no chimney existing after the post-Katrina renovations. A BBQ pit is available and should be used with caution.

EQUIPMENT USE REGULATIONS

All Turtle Cove equipment is intended for on-site use at the station unless special permission is received from the Manager for its use elsewhere.

Canoes – Each person in a canoe must wear a life jacket, regardless of water depth, ability to swim, or experience. At the lodge, several canoes (and pirogues) are available in the barn. Canoes should be taken down Schleider’s Ditch only (and never used in Manchac Pass). At Galva Canal, 10 canoes on a trailer can be used to travel towards the “Prairie” area or tailored anywhere around the basin in an appropriate vehicle like the Turtle Cove truck. Please clean your canoe after use, and replace it on the storage rack, making sure that all are properly tied down by rubber bungee-type cords.

Library Books – Turtle Cove maintains a small, but quality library of reference books especially pertinent to the Turtle Cove environment. These books are not to be “checked out” but must remain in the lodge. Please replace books in their proper location (by library call number) immediately after use.

Computers and Projectors – A small computer lab exists in the classroom at the Galva Facility, and consist of 3 computers/monitors, a color printer/copier/scanner/fax, and satellite internet service. The classroom also has a power point projector, pull down screen, and white board w/markers/erasers. A small computer lab currently consisting of one computer and monitor and is on the 2nd floor at Turtle Cove adjacent to the researcher suite, and is also connected to satellite internet service and a router and all-in-one copier/scanner/fax/printer. There is a power point projector in the closet of the researcher suite at Turtle Cove, and the code for the padlock is ____.

Microscopes – Microscopes for general use are stored in the closet at Galva Canal and in the locking double door closet on the bottom floor of Turtle Cove.

Hot Water/Washing Machine & Dryer – You should check with Caretaker to make sure the main water heaters (1st and 2nd floors are turned ON prior to an overnight stay as we normally keep them OFF. Yare welcome to use the washer and dryer in the lodge, but please rinse well any muddy clothes before placing them in either machine. Turn off the dryer when no one is present in the building.

Equipment Storage – If you need to store equipment or supplies at Turtle Cove for long-term use, do so in an out-of-the-way location and mark any materials with your name. If you want a locked storage area for such equipment, check with the Manager or Caretaker.

III. Facility Use Procedures & Policies

GENERAL RULES

Turtle Cove Use – All individuals using Turtle Cove facilities and boats must register with the Manager: boat reservations are done via the Turtle Cove Google Calendar once you are an approved boat user (after taking the Turtle Cove Boating Safety Class), and facility reservations are done via email with the Manager (who will then place the reservation on the Turtle Cove Google Calendar). Any reservation must be for activities for research, education, or outreach.

Wildlife/Vegetation – All wildlife and vegetation at Turtle Cove is protected for the benefit of all visitors. **Do not kill or remove any plant or animal life** except for valid research or educational purposes.

A. Regular Day-Time Use

Approved groups may use Turtle Cove facilities for special meetings, retreats, or other events provided that such activities do not interfere with research or educational activities being conducted at the station. Request for use of facilities (Turtle Cove or the Galva Classroom) should be addressed to Dr. Robert Moreau, Manager, Turtle Cove Environmental Research Station, PO Box 10585, Hammond, LA 70402. Office Ph: (985)549-5008. Cell Ph: (504)231-1067. Email: rmoreau@selu.edu

An Authorized Group Representative must submit the request for use and should inform all participants of regulations and policies for Turtle Cove use. The Representative will be responsible for the safety and behavior of the group and will be expected to remain with the group during the entire period of Turtle Cove use.

Group Regulations (with permission from the Manager)

The regulations described in Section 2 (Health & Safety) along with the general rules described in Section 3 (Facility Use) must be followed by groups using Turtle Cove. In addition, the following regulations and procedures apply to group use:

1. Turtle Cove does not “charge for hire” for groups to use the Pontoon Boat. However, we gladly accept any donations to help cover the cost of gas and equipment repairs. Any donation should be made to: “Southeastern Foundation – c/o Turtle Cove Programs” and sent to Box 10585, Hammond, LA, 70402.
2. Hold Harmless Waiver forms must be completed for any outside groups (i.e., not related to Southeastern or State users). For example, each individual from a K-12 school group needs to download a waiver from the Turtle Cove website, fill it out and have it signed, and bring with them in order to ride the Pontoon Boat. In addition, the “Rules and Regulations for Field Trips” form needs to be signed

(one form per group) by the group leader and brought to Turtle Cove. Both of these forms (Hold Harmless Waiver and Rules and Regulations for Field Trips) can be found on the Turtle Cove website at www.selu.edu/turtlecove (go to Field Trips section).

3. All people aged 16 and younger must wear life jackets while being transported in any Southeastern boat, including the Pontoon Boat (the primary group field trip vessel)..
4. No boat trips are allowed after dark unless by special permission of the Manager for unique and special events. All pickups and returns must be scheduled at least 30 minutes before sunset.
5. The only person(s) approved to drive the Pontoon Boat for group field trips at this time are the Manager and Caretaker, and certain faculty approved by the Manager on a case by case basis for their own classes.
6. Groups must have an adequate and reasonable amount of teachers, chaperones and adults to help educate and maintain order and safety for the group. Communication with the Turtle Cove Manager on this issue on a case by case issue is expected well in advance of the group field trip.
7. The facility must be left clean (sweep floors, wipe tables and counter tops, wash dishes, remove all trash, food, and personal belongings), and return all furniture to its original location. Any group not cleaning the facility will be assessed a \$50 cleanup fee.
8. All damages or problems with the facility or equipment should be reported to the Caretaker immediately.

For emergency calls from Turtle Cove, contact **911** and the following:

Robert Moreau

Manager

Office: 985.549.5008

Cell: 504.231.1067

Cell: 985.507.2855

Hayden Reno

Caretaker

Cell: 985.507.7710

The GPS Coordinates for the Turtle Cove lodge are 30° 17' 39.7" N and 90° 20' 6.5" W. The 911 Address of the Galva Boat Shed/Classroom Facility/Parking Lot is: 87 Alligator Lane, Akers (more commonly known as "Manchac"), LA 70421.

B. Overnight Use

All individuals or groups who wish to stay overnight at Turtle Cove must obtain approval from the Manager for overnight use of the lodge, which will then be seen as a “reservation” in the Turtle Cove Google Calendar. To reserve a date, contact the Manager well in advance to avoid any potential scheduling conflicts.

Staffing - An approved staff person must be present for any overnight use, and can include one of the following:

-Any Turtle Cove staff person (including Manager, Caretaker, or Turtle Cove Graduate Assistant);

-Any approved University Faculty or Staff person (as approved by the Turtle Cove Manager). For instance, the instructor of a Southeastern class may be designated as the approved staff person.

-Furthermore, the approved staff person must have access to and be able to operate a boat at night in case there is any emergency situation requiring the transport of someone from Turtle Cove back to the Boat Shed after day-light hours. For example, a Turtle Cove Grad Student staying with the group at Turtle Cove, or the Caretaker being available at the Caretaker Residence, both satisfies the requirement. If unsure, communicate with Manager.

Smoking is prohibited inside Turtle Cove facilities and on Turtle Cove boats. **Do not litter** the property with cigarette butts or any other trash.

Illegal drugs and **firearms** are prohibited at Turtle Cove. **No alcoholic beverages** are to be taken to Turtle Cove, nor consumed at Turtle Cove, except for officially registered, Southeastern-approved social events where an alcohol permit is obtained. Approved events must abide by Southeastern’s University Alcohol Policy. Public intoxication is not allowed on Southeastern property, including Turtle Cove. No one is to operate a Southeastern boat, or other vehicle or power equipment, while drinking alcohol or under the influence of alcohol or drugs, including any medications that may cause interference in proper boat operation.

All private boats visiting the station must abide by all Turtle Cove and Southeastern regulations, including the prohibition against drinking alcohol on Turtle Cove grounds.

Turtle Cove boats must be used for university business only (research, education, or outreach activities, or other administrative activities related to Turtle Cove).

Unofficial use – Turtle Cove must only be used for activities related to the educational and research mission of Southeastern. Turtle Cove cannot be used for personal parties, skiing, boarding, racing, or other social activities unless those are approved by the

Manager and approved via the submittal of an activities form thru the Office of the Vice President for Student Affairs.

Equipment – Do not remove any equipment from Turtle Cove without prior authorization from the Manager. **Report any problems or defective equipment** to the Caretaker and to the Manager as soon as possible.

Occupancy – Turtle Cove is rated by the Fire Marshall to sleep a maximum of 15 persons in the second floor living area. Again, the 3rd floor is currently off limits.

Kitchen/Bathrooms – there is a full kitchen at Turtle Cove, complete with working refrigerator, stove/oven, microwave, sink, etc. And there are ceramic plates and mugs, glassware and utensils, pots and pans, etc. Individuals need to bring their own food and drinks (as well as any good tasting, potable water). There are 3 full bathrooms at Turtle Cove (one on 2nd floor, two on ground floor, and a half-bath on 2nd floor). Bring your own soap, towels, shampoo, etc. (we do have toilet paper and plungers!).

Bedding – new and comfortable vinyl coated mattresses are available in the two main dormitory rooms (2 sets of bunk beds in each of those east-rooms, for total of 8 beds) and in the “researcher suite” (3 bed in that east room). In addition, there are several futons in the main living room that may be used. Pillows and bedding are provided—bedding is assumed “clean” if in stuff sacks on beds. **ALL BEDDING USED MUST BE WASHED/DRYED/PUT BACK IN STUFF SACKS ON APPROPRIATE BEDS BEFORE LEAVING.**

Clean up - Wash all dishes after use and put them away, and haul out any trash with you in a trash bag (maybe best to bring some trash bags with you just in case). Leave the facility at least as clean as you found it because Turtle Cove does not have custodial staff. **Do not leave perishable foods** at Turtle Cove. See Turtle Cove “Checklist for Groups” in various areas of the 2nd floor.

IV. Boat Use & Boating Safety Regulations

BOATING REGULATIONS—THE 10 COMMANDMENTS

On August 15, 2002, the following regulations were implemented (known as the “10 Commandments for Boat Use”)---any user of a Turtle Cove boat must abide by these rules:

1. **Approved Boat Operator Status** – Only “approved boat operators” (someone who has successfully completed the Turtle Cove boating safety class and completed the Boat Mentoring Program) will be able to check out and take out a boat that they will drive. These individuals must be either faculty, staff or students at Southeastern or other Louisiana state institutions. In addition to these rules, all other rules related to the use of the Turtle Cove Environmental Research Station and Turtle Cove boats must be followed as described in this manual (i.e., no alcohol/illegal drugs/smoking; boats only used for research, education, or outreach purposes; no unauthorized use of boats; etc.).
2. **Boat Mentoring Program for Approved Status** – After completing the Turtle Cove boating safety class (which must be completed every three years), new boat users will have to go out with “approved boat operators” until those operators (“mentors”) sign off on the new user as being capable of operating a boat by him/herself. Included in this program will be the passing of knowledge of exactly where boats can reasonably go regarding underwater hazards, knowledge of stumps, areas of low water, and the intricacies of operating each boat. The mentor (and, when applicable, the student’s advisor) will “sign off” via an email to the Manager when this training is complete. The new user will then be considered approved.
3. **Two People in the Boat** – Any trips other than back and forth to Turtle Cove require two people at all times in the boat (One must be an Approved Boat Operator; the second person must be over the age of 21). In special circumstances, this rule can be waived, in advance, by the written approval of the student’s advisor. A waiver will also be given to Turtle Cove staff and its affiliated staff for work related to the administration of the research station itself and its programs (e.g., Manager, Coordinator of Education/Outreach Programs, Caretaker, Turtle Cove graduate students, or LUMCON technicians responsible for maintenance of the online water quality and weather monitoring station).
4. **Details of Float Plan & Contact Person** – The Boat Registration Form at the end of this manual serves as the guide for the information that must be included in the DESCRIPTION BOX of the Turtle Cove Google Calendar, where reservations are made, and includes sections for stating the precise details of the trip (i.e., route taken there and back, exact destinations) and the contact information

- (name, phone number) for someone who knows about the planned trip. The individual making the reservation in the Turtle Cove Google Calendar can enter this information either into the DESCRIPTION BOX itself, or can fill out an electronic version of the BOAT RESERVATION FORM and “attach” it as a Google Document to the calendar when making the reservation. The main point here is that Turtle Cove staff be able to have ready access to the contact and other information in case of any emergency.
5. **Life Jackets** – All people riding in any Turtle Cove boat (except those in the pontoon boat who are over the age of 16) must wear a United States Coast Guard Approved Personal Flotation Device (life preserver).
 6. **Usable Cell Phone** – There must be at least one usable cell phone in a Turtle Cove boat at all times that is within range of activity throughout the trip. The cell phone number must be listed on the Boat Registration Form. The cell phone must be properly charged. Turtle Cove is not responsible for having a cell phone for the operator. Cell phones are the responsibility of the student (personally) or his/her lab (i.e., the faculty advisor).
 7. **Checklist & Weather-Monitoring** – Before taking the boat out, operators must conduct a brief checklist (one is laminated on each boat) for important things to check, such as gas, life jackets, paddles, and a cell phone. In addition, each boat operator is responsible for checking weather conditions, **in advance**, of going out. This monitoring may include watching the local TV weather forecast or The Weather Channel, logging onto www.weather.com, listening to the Marine Forecast on a marine weather station (channel 2 or 22), listening to the forecast on the radio, or other common methods. Users are not authorized to operate Turtle Cove boats during times and in locations of severe thunderstorms, lightning, high winds, or times of fog that severely limit visibility.
 8. **Normal Boat Operating Hours** – Normal boat operating hours are from sunrise to sunset, seven days a week, with the rule being daylight availability (i.e., where no boat lights are needed or required by law). Boat operators should realize that Turtle Cove staff is not available after hours or on weekends. Night-time operation is prohibited, except under special circumstances. Night-time use must be approved by both the Faculty Advisor and the Manager via email for one-time use, or on a more formal written form for multiple use.
 9. **Reporting of Any Accident, Incident, or Damage** – Boat users must report any accident or “unusually hard hit” (e.g., unusually hard hitting of stumps, logs, bottom,) that may have caused damage to the boat or motor, seen or unseen. Such reporting, which can be through email, phone call, or in person to the Manager or Caretaker should help to warn others of obstacles in designated areas, and, after discussing the incident with the Manager, should help the boat

user to understand how this may be avoided in the future. Failure to report such incidents may result in loss of privilege to use boats.

For serious accidents, incidents, and/or damage, the **Operator Boating Incident Report Form** must be completed and submitted to the Louisiana Department of Wildlife & Fisheries (see Appendix A for a copy of the form). The form must be completed when an incident results in: loss of life or disappearance from a vessel; an injury which requires medical treatment beyond first aid; or property damage in excess of \$500 or complete loss of the vessel. Reports in death and injury cases must be submitted within 48 hours. Reports in other cases must be submitted within 5 days. For more information, visit the LDWF website (<http://www.wlf.louisiana.gov/boating/boatingaccident/>).

10. **Conference for Major Incidents & Possible Loss of Boat Use Privileges** – Any accidents or incidents deemed “serious” by the Manager and/or the Faculty Advisor will result in a meeting with the boat operator to discuss the incident, to determine any loss of boat privileges that may result from the incident, and to discuss how such incidents can be avoided in the future. This conference is required in addition to the completion of the Operator Boating Incident Report Form (see Appendix A). At any time if the Manager and/or Faculty Advisor believe the boat operator is unfit to drive boats, those privileges will be temporarily or permanently suspended.

BOAT OPERATOR RESPONSIBILITY

- Remember, the operator of the boat is considered the Captain who is responsible for the crew and everything that happens on the boat. The Captain is also responsible for any damage the wake may cause to other people’s boats or private property.
- Always leave the boat as clean as or cleaner than you found it, and with no less than half a tank of gas in it for the next person.
- All private boats visiting the station must abide by all Turtle Cove and Southeastern regulations.

REQUIRED TURTLE COVE BOATING SAFETY CLASS

To be approved for using Turtle Cove boats, boat operators must take (every three years) an approved boating safety class conducted by Turtle Cove staff (or those offered by the Coast Guard Auxiliary or Power Squadron). The class is based on the most current version of the Water Vessel Safety Program developed by the State of Louisiana-Office of Risk Management (see Appendix B). In addition, the operators must complete

the Boat Mentoring Program to gain Approved Status. Boating safety classes are conducted at the beginning of each semester (or as needed).

BOAT CHECK-OUT PROCEDURES

- Keys remain in boats (in the ignition) at all times.
- Use the Turtle Cove Google Calendar (discussed in Boating Safety Class) to see what is available on the day you need a boat and to make the reservation.
- After placing your boat reservation on the calendar, complete the Boat Registration Form (see Appendix C), and email it to the Manager. Keep a copy for your records.

SUMMARY OF BOAT OPERATING PROCEDURES

Anyone violating these procedures may be prohibited from further use of Turtle Cove boats.

Check that your boat has all required equipment before using it:

- Life Jackets (one per person)
- Throw Cushion (or ring)
- Lights (if you will be out after dark or near dusk)
- Fire Extinguisher
- Flare Signal Kit
- Paddles
- Whistle or Horn
- Gas Cans (with plenty of gas)
- Anchor
- Tool Box

Immediately report any missing or defective equipment to the Manager and Caretaker, as well as to any others who may be planning to use that boat.

Do not move “attached” equipment from one boat to another except in emergencies (includes batteries, lights, fire extinguishers, etc.).

Check the motor repeatedly when it is running to ensure it is pumping cooling water. Be especially careful in shallow water and at night. All motors are now “4-Stroke” versions, so they **do not mix oil with gas**.

Check the motor for weeds after leaving canals or bayous. A few small weeds can prevent a boat from getting up on plane.

Always tie the boat in at least two places, and be certain that it will not be caught under or above dock if water level changes.

Raise the motor out of the water when leaving the boat in a boat slip.

Clean the boats (including canoes and pirogues) thoroughly after each use.

BOAT GAS PURCHASE PROCEDURES

As of 2016, the Turtle Cove Caretaker maintains gas levels in boats under the boatshed on Galva Canal. So check in with Caretaker or Manager prior to trip. If you determine gas is needed for a boat once you arrive, and the Caretaker is not around, gas may be purchased at the Fuel Dock Marina (at the north end of the railroad bridge) in Manchac when using boats at Galva Canal (or you could drive a car over there). In this case it is probably easiest to use your own personal credit card at the pump (as the Fuel Dock is only manned with a worker on weekends) and to then give the receipt to the Manager for reimbursement. Contact Manager or Caretaker if any questions.

All Turtle Cove boats are powered by 4-stroke engines so that oil does not have to be mixed with gas. Fill the gas tanks after each use if possible. The marina usually closes at 5:00 pm. Notify any subsequent boat user if there is no gas available or if there is a mechanical problem. Phone numbers of the gas stations are located in Section 1 (Overview & History) of this manual. Contact the gas stations prior to your trips so as to make sure of their current operating hours.

DAILY PREVENTATIVE MAINTENANCE

Check the following daily before operating the vessel:

1. Fuel level: Should have enough to get where you are going and back, with enough left over for unforeseen circumstances. (1/3 out, 1/3 back, 1/3 in reserve)
2. Fuel system: Check for noticeable leaks.
3. Vessel electrical systems: Make sure all systems function.
4. Lights: Check all lights, especially if you will be out after dark (or late in the day).
5. Propeller: Check for damage.
6. Lower unit: Check for noticeable leaks.
7. Water circulation system: Check rear telltale (especially when operating in shallow or muddy water). If there is no water stream coming out of the telltale, cut the motor and clear the water intakes.

MARINE VHF RADIO OPERATION

The marine radio call sign for all Turtle Cove boats is **WSE 5590**. The channels are numbered 1-28 and 60-88. The Coast Guard monitors channels **16** and **22** (which they call 2-2-Alpha). Additionally, there are two weather channels, WX01 and WX02.

The Controls

On-Off-Volume – This is generally one dial or button and should be comprehensible to the average Turtle Cove user.

Squelch – This control filters out unnecessary static noise. In most cases, it is a knob which, upon turning the radio ON, is turned fully clockwise, then counterclockwise until you hear background noise (static), then clockwise just until the static disappears. This should be the optimal setting. The only time you may want to change it is if you are trying to receive a weak transmission.

Channel – Channels are changed by turning a dial or, in some cases, by entering the channel number on a keypad. When you turn the radio ON, channel 16 will automatically be selected.

High/Low – This control selects for transmission power. It is courteous, and legally required, to transmit on LOW power to limit the transmission range and avoid cluttering the airwaves with unnecessary traffic. If you cannot elicit an answer to your transmission (you may be 40 miles out in the Gulf of Mexico), then it is appropriate to switch to HIGH power.

Microphone – The microphone has a push-to-talk switch which is fairly straightforward to operate.

Channel 16 – Channel 16 is the universal Distress, Safety, and Hailing channel. Boat operators are expected to monitor Channel 16 at all times so as to be aware of distress calls, safety messages from the Coast Guard, and any stations trying to reach you. But you are required to do your talking on some other channel (24-28, 62, 68-72, or 84-87).

Distress and Safety Messages – The Coast Guard recognizes three levels of safety or distress messages:

- **Security** (pronounced in French se-cur-ee-tay), used to precede storm warnings and other messages concerning navigation safety.
- **Pan Pan** (pronounced in French pon-pon), used in any situation where the safety of a person or vessel is in jeopardy but is in no immediate danger (e.g., out of gas or engine failure).
- **M'Aidez** (pronounced in French may-day), used only when there is immediate danger of loss of life or property (e.g., vessel is sinking or person on board is injured).

Always give priority to Distress and Safety messages.

Making Radio Contact

Suppose you are in the Blue Boat and your buddy is in the Green Boat. If all is well, both you and your buddy will have your radios ON and tuned to channel 16. Further suppose that you want to contact your buddy with some vital information. You should use the following protocols:

1. Check that the High/Low switch is set to LOW.
2. Listen to ascertain that no other transmission is in progress.
3. Press the push-to-talk button and say, "R/V Blue Boat, this is R/V Green Boat."
4. Wait for a reply. If none, then try again in about thirty seconds. If still no reply, try again later. Your buddy may not have his/her radio ON, or perhaps motor noise has drowned out the transmission.
5. When responding from the Blue Boat say, "Green Boat, this is Blue Boat."
6. Then, the Green Boat should respond, "Blue Boat, this is Green Boat. Switch to 84" (or some other channel). (You could have selected another channel [24-28, 62, 68-72, or 84-87], but 84 is the channel used by many Manchac locals.)
7. Both you and your buddy change channels ("switch") to channel 84.
8. After contact is made on the new channel, you may carry on your conversation in a normal fashion. Remember, these are public airwaves. Anything you say can and will be heard by anyone. Federal law dictates no swearing and no whistling.
9. When you are finished with the conversation say, "R/V Green Boat out," and switch back to channel 16.

ORM WATER VESSEL SAFETY AUDIT & PROGRAM REQUIREMENTS

Each summer Turtle Cove undergoes a Water Vessel Safety Audit by the Office of Risk Management (ORM). The self-audit is completed by the Manager and turned into the Director of the Safety and Hazardous Materials Management Office at Southeastern. The latest version of the audit and the forms used to document the audit can be found on the ORM—Loss Prevention website (see <http://doa.louisiana.gov/orm/lp.htm>). Some of the key terms, concepts, and identifications outlined in the audit, as related to Turtle Cove, include the following:

High Risk Operator – High Risk Operators are those individuals having three or more convictions, guilty pleas, and/or *nolo contendere* pleas for moving vessel violations or individuals having a single conviction, guilty, plea, or *nolo contendere* plea for operating a vessel while intoxicated, careless operation, reckless operation, negligent homicide, or similar violation including any civil case for which negligence has been proven within the previous 12- month period.

Determination of High-Risk Operators – Determination is made through an annual check by LDWF on the current approved list of users (as provided by Manager via a “Letter of Audit” request).

State Water Vessels – Any water vessel owned, leased, and/or rented by the State of Louisiana.

Other Vessel Safety Requirements

- Manager is assigned to monitor the program.
- Monthly inspections made by Caretaker of all legally required issues (e.g., life jackets, lights, registration, flares, sounding devises, fire extinguishers, damage assessments, communication devises, trailers). Corrective actions taken and all relevant items are documented on the Checklist Form (see Appendix D).
- Preventive maintenance performed annually on all boats and motors.
- Master list of approved users maintained.
- All accidents reported to Turtle Cove staff. Accidents requiring the completion of the Operator Boating Incident Report Form must be reported to LDWF (see Appendix A for the reporting guidelines and form).

V. Hurricane Evacuation Procedures

Following the storms of 2005, Southeastern Louisiana University had all departments develop a hurricane evacuation plan. Turtle Cove's plan of activities is as follows:

PHASE I: THE SIX-MONTH PERIOD FROM DECEMBER 1 – MAY 30

During the period, the Manager and/or his/her designated representative(s) will:

1. Review the Southeastern Hurricane/Severe Weather Operations Plan and ensure all employees are familiar with the plan.
2. Conduct training addressing emergency operations expected during a hurricane/tropical storm.
3. Update staffing changes and emergency contact information for Turtle Cove personnel. Identify all emergency personnel who will assist with hurricane operations. (These individuals comprise the Emergency Team: Robert Moreau, Hayden Reno, Michael Greene, and Fred Stouder).
4. Inventory emergency supplies and equipment especially duct tape, flashlights and batteries, ropes, gas cans, etc. Requisition needed supplies and equipment. Ensure that needed items are stocked by May 15th. Ensure Emergency Team is aware of these supplies.
5. Coordinate with Horticulture Center and Physical Plant on assistance in hauling boats from Galva Canal and West Lake Maurepas back to Campus (to Horticulture Center). Coordinate with outside, local contractors for recovery operations, i.e., debris removal.
6. Attend any planning meetings called by the President.

PHASE II: HURRICANE ADVISORY

During the period June 1st through November 30th, upon notification by the National Weather Service that a tropical storm or formed hurricane's projected track will be into the Gulf of Mexico, the Manager and/or his/her designated representative(s) will:

1. Review the Southeastern Louisiana University Hurricane and Severe Weather Operations Plan and brief other Turtle Cove personnel as to their responsibilities.
2. Manager will alert all emergency personnel for possible support operation during extreme/severe inclement weather.
3. Direct the inspection and/or determine the operation status of equipment, fuel, etc., as follows:
 - a. Generators.
 - b. Fuel supplies (gasoline and diesel).

- c. Emergency supplies.
 - d. Water Vessels and Vehicles.
 - e. Radios and batteries.
 - f. Grounds at Turtle Cove and Galva Canal
4. Attend all planning meetings called by the President, Provost (in the absence of the President), and Vice-President, Administration and Finance, and be prepared to brief Turtle Cove's operational status.

PHASE III: HURRICANE/SEVERE WEATHER WATCH

When the National Weather Center declares that a hurricane watch is in effect for the Gulf of Mexico, the Manager and/or his designated representative(s) will:

1. Initiate corrective action as necessary for any problems noted during Phase II.
2. Verify assignment and availability of emergency team personnel.
3. Ensure that all boats are in ready status for transport to campus or that materials, supplies, and equipment at Turtle Cove and Galva Canal areas are ready for storage on higher elevation storage areas.
4. Ensure that directives are in place for recovery supplies that may be needed following the storm.
5. Attend all planning meetings called by the President. Be prepared to brief the Department's personnel and logistical status.

PHASE IV: HURRICANE/SEVERE WEATHER WARNING

When the National Weather Center declares a hurricane warning for the Gulf of Mexico, the Manager and/or his/her designated representative(s) will:

1. Ensure that all operational boats and vehicles are fueled.
2. Direct personnel to load boats onto trailers and begin hauling to campus (behind Horticulture Center). Coordinate with Physical Plant drivers who will assist with appropriate Physical Plant vehicles on the hauling of boats back to campus (especially those larger boats like the Pontoon Boat that may require a 1-ton truck to pull them). Depending on estimated severity and track of storm, Pontoon Boat will be moved to either area under Interstate 55 (near Manchac Volunteer Fire Department) or, in case of most severe storm expectation, will need to be brought to campus and placed in a secure spot in a parking lot somewhere (discuss with Physical Plant Director for proper location). Leave one boat securely and appropriately tied (or on a trailer) at Galva Canal; this boat will be reserved for emergency and immediate recovery purposes that may arise.

3. Ensure all loose items in boats and on grounds (at Galva Canal and Turtle Cove) are secured (i.e., direct the removal and relocation of outside potential low-weight, airborne objects to storage sheds, barn or indoor facilities).
4. Ensure that all landscaping services equipment is secured (e.g., lawnmowers are stored on ramps at highest ground).
5. Ensure all emergency personnel have been issued all necessary emergency equipment.
6. Close down all building systems as necessary at Turtle Cove and Galva Canal locations.
7. Attend all planning meetings called by the President. Be prepared to brief the Department's personnel and logistical status.

PHASE V: CLOSURE & EVACUATION OF THE UNIVERSITY; IMPLEMENTATION OF EMERGENCY SUPPORT OPERATIONS

When the President makes the decision to close and evacuate the University, the Manager and/or his/her designated representative(s) will:

1. Complete any remaining tasks to prepare the Turtle Cove and Galva Canal sites (buildings, grounds, vessels, equipment and supplies).
2. Ensure that all emergency personnel are prepared to conduct recovery operations.
3. Attend all planning meetings called by the President. Be prepared to brief the Department's personnel, operations, and logistical status.

PHASE VI: HURRICANE EMERGENCY SUPPORT OPERATIONS

After the Turtle Cove and Galva Canal sites have been evacuated and closed, the Manager and/or his/her designated representative will:

1. Ensure that all emergency personnel do not unnecessarily expose themselves to hazardous situations.
2. Prepare to implement recovery operations.
3. Attend all meetings called by the President. Be prepared to brief the Department's personnel, operations, and logistical status.

PHASE VII: RECOVERY & RECONSTITUTION OF TURTLE COVE & GALVA CANAL SITES

As soon as possible after the storm, the Director and/or his/her designated representative(s) will:

1. Notify all Emergency Team personnel to report to the Galva Canal site for recovery and clean-up operations and for preparations to depart for Turtle Cove to do the same.
2. Conduct an in-depth damage assessment of buildings and facilities listed below and complete an EMO Form (See ANNEX).
 - a. Waterways used to travel to Turtle Cove.
 - b. General condition of buildings inside and out (checking for roof penetrations) at Galva Canal and Turtle Cove sites.
 - c. Other outdoor facilities (e.g., barns, pump house, Caretaker's house, Turtle Cove Boat Shed).
 - d. Trees and shrubbery.
3. Initiate any repair work that can be handled by Turtle Cove personnel as soon as possible. Request repair work from Physical Plant and other outside contractors as deemed necessary for all other repair work needed.
4. Request restoration of all utilities and equipment that were shutdown (including returning all boats back from campus Galva Canal area in Manchac).
5. Initiate debris removal by Turtle Cove personnel where applicable. Consult with Physical Plant and Hurricane Coordinator for all other debris removal that is beyond the scope and capability of Turtle Cove personnel.
6. Initiate bid process for contract work.
7. Remove tape and plywood window panels.
8. Return items placed in temporary storage locations to their original location. Once any flood waters have receded, and any other environmental hazards have dissipated (e.g., high winds, rain, tide), begin return of boats and trailers and other vehicles to their normal places.
9. Coordinate with the Director of Safety and Hazardous Waste Management to initiate and complete all applicable FEMA Forms (See ANNEX) and all State Office of Risk Management Forms (See ANNEX).
10. Attend all planning meetings called by the President. Be prepared to brief the Department's personnel, operations, and logistical status.
11. Record issues and notes for the After-Action-Review.

For more information on the Turtle Cove Environmental Research Station, visit our website at <http://www.selu.edu/turtlecove>.

VI. APPENDICIES

APPENDIX A – OPERATOR INCIDENT REPORT FORM

The Operator Boating Incident Report Form must be completed when any of the following occurs:

- loss of life or disappearance from a vessel
- an injury which requires medical treatment beyond first aid
- or property damage in excess of \$500 or complete loss of the vessel

Reports in death and injury cases must be submitted within 48 hours. Reports in other cases must be submitted within 5 days. Reports must be submitted to the Louisiana Department of Wildlife & Fisheries. For more information, visit the LDWF website (<http://www.wlf.louisiana.gov/boating/boatingaccident/>).

APPENDIX B – LOUISIANA WATER VESSEL PROGRAM

This water vessel program is the foundation of Turtle Cove’s boating safety class. The program is part of the Louisiana Loss Prevention program, and it “provides a systematic method of screening, training, and accountability for employees and supervisors required to assign or operate state-owned/leased/hired water vessels in the scope of their employment. The Louisiana Office of Risk Management maintains an electronic copy of this document. For latest version, see <http://doa.louisiana.gov/orm/pdf/WaterVessel.pdf> .

APPENDIX C – TURTLE COVE BOAT REGISTRATION FORM TEMPLATE

Use this template as a “guide” to enter in all of this information into the DESCRIPTION BOX of the Turtle Cove Google Calendar when making a reservation to use a boat. Or fill out this form (there is an electronic version that is available on the Turtle Cove website) and save it as a “Google Doc” in the calendar reservation. A separate reservation on the Calendar must be made for each day of use and for each boat in use—unless continuous multiple days of same boat.

User Names (Two-Person Rule): _____ Total # in Group: _____

(1) Turtle Cove Approved Boat Driver: _____

(2) Second Adult Companion: _____

Cell phone # you will have with you during trip (mandatory):(_____-)_____

Contact Person (who knows about your trip and when you should be expected back, mandatory):

Name:_____ Ph. #: (_____-)_____

Date of Use:____/____/____ Hours of Operation: _____AM/PM - _____AM/PM

Total Boat Running Time (to nearest hour): _____ hour(s)

Boat out by: _____AM/PM Boat in by: _____AM/PM (keys stay in ignition)

Weather Conditions: You are responsible for checking weather conditions by cable TV, internet, radio, etc. Per our safety rules, any listings of small craft advisories (high winds, thunderstorms, lightning, heavy fog, etc.) prohibit you from taking a boat out during those times. **Have you checked weather conditions within 24 hours of going out? Circle: YES or NO**

Boat to be Used (these boats are available to all Approved Boat Users)

(circle one)	(capacity)
14' Bird Boat w/20 hp Honda (Not in water—Horticulture Center)	4
16' Flat Back Canoe with 2 hp Honda 4-Stroke (Wilson Hall-Cooler Rm)	3
16' Honda Go-Devil—W Lake Maurepas Slip (for use w/Shafe)	3
16' Turtle Cove Go-Devil—Turtle Cove Boat Shed	3
17' White Boat (“Egret”)—Galva Canal Boat Shed (stay under 4,000 rpms!)	5
18' Gray Boat (“Rangia”)—W Lake Maurepas Slip	4
18' Brown Boat (“Pelican”)—Galva Canal Boat Shed	4
21' Black Boat (“Vulture”)—LPBMM (check w/ Jay Martin to use there)	6 (or1,200 lbs)
21' Blue Boat (“Osprey”)— Galva Canal Boat Shed	6 (or1,200 lbs)
21' Red Boat (“Red Wing”)— Not in water (Galva parking lot)	6 (or1,200 lbs)
23' Green Boat (“Maurepas”)—Galva Canal Boat Shed	8

Restricted Boats (used by Turtle Cove staff; all other authorization goes through the Manager)

40' Pontoon Boat (“Pelican”)—Galva Canal Boat Shed 35

Destination (circle):

Turtle Cove

Galva Canal

Lake Pontchartrain (north, south, east or west)

Lake Maurepas (north, south, east or west)

Other:_____

Purpose of Trip (circle one):

Research

Education-SLU Class:_____

Outreach-Group Tour: _____

Administrative:_____

Other:_____

Planned Route & Exact (as exact as you can, include GPS if available) **Destination:** _____

*****You must follow the “10 Commandments for Boat Use” for using Turtle Cove Boats.*****

*****Fill the gas tank and clean the boat after use*****