



*Help Preserve the Heritage of America
Save the Morris Island Lighthouse*



“I can think of no other edifice constructed by man as altruistic as a lighthouse. They were built only to serve. They weren’t built for any other purpose.

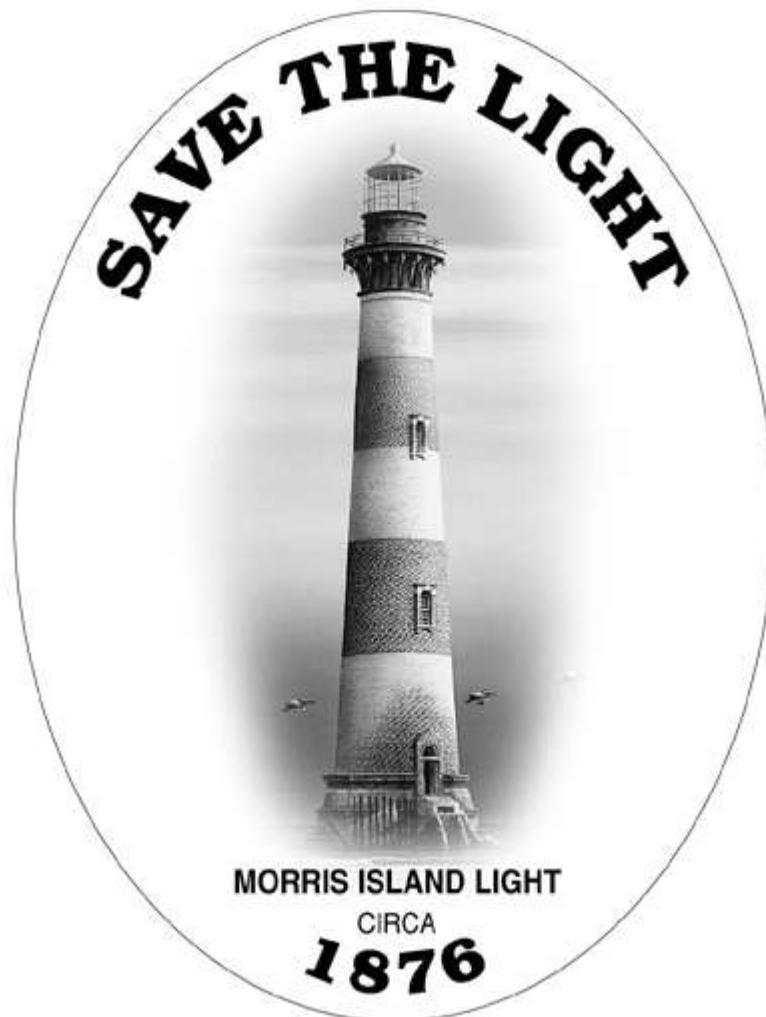
- George Bernard Shaw

Whether South Carolina is your home; whether you simply love lighthouses; or whether you are an American who seeks to save our remaining historical treasures, your help is earnestly needed.

As you may know, the Morris Island Lighthouse has a damaged foundation and may fall if stabilization steps are not taken soon. Thanks to years of beach erosion, made worse by the construction of the Charleston jetties which were completed in 1897, the site of the lighthouse has been steadily eroded by the Atlantic Ocean. The exposure has allowed an infiltration of shipworms to infest the timber pile & grillage base of the lighthouse tower.

The following pages will acquaint you with, the history of Morris Island and its lighthouses. You will also learn in more detail about the current condition of the structure and the state approved engineering plan to save the lighthouse from collapse. Finally, you will have the opportunity to evaluate the phased plan for its preservation and budget to accomplish each phase.

Our recent completion of Phase 1 on March 28, 2008 puts us squarely on track to ensure our enjoyment of this historical treasure for many years to come.



The Lighthouse

When you look at the Morris Island Lighthouse today you are seeing a landmark so rich in history that it has become an integral part of America's heritage. Artists' paintings and photographs of the Light adorn countless walls, appear on greeting cards and illustrate history books and travel guides.



From 1673 until 1962 a light at Morris Island served as the front door to Charleston. Much like the Statue of Liberty has marked the entrance to New York City, the sea-going entrance to Charleston Harbor has been marked by the "Old Charleston Light", and its two previous sisters.

Like Fort Sumter and Fort Moultrie, the Morris Island Lighthouse stands as a memorial to the battles fought and reminder of the importance of our maritime heritage.

Many people are still unaware that this monument is in peril. The current lighthouse was originally constructed over 1/2 mile from the ocean's edge atop 264 timber piles, but due to erosion it is now positioned 2000 feet off-shore! We all have a responsibility to see that the lighthouse does not collapse. With your help, its preservation is well within our grasp.

The Master Plan

The Master Plan concept involves five components:

- Phase 1. Erosion protection installation of a cofferdam and stones outside. (complete)
- Phase 2. Stabilization of the foundation.
- Phase 3. Preservation of the Lantern Room.
- Phase 4. Preservation of the tower.
- Phase 5. Construction of a viewing platform, history kiosk on the east end of Folly Island

\$7-8 million is the estimated construction cost to stabilize and preserve the lighthouse (Phases 1 thru 4). Of this sum \$1.5 million has already been contributed by the State of South Carolina. Capital contributions from individuals and organizations are being received continuously. The Federal Government, thru the US Army Corps of Engineers, has contributed \$3 million for the Phase 1 work. Phase 1 was completed on March 28, 2008.



300 Years of History

The Morris Island Lighthouse and its predecessor lights and lighthouses have played a part in American History since before 1673-when English colonists established a beacon light of pitch and oakum to guide ships into Charleston Harbor.

For generations lightkeepers and their families have served the people of South Carolina as well as visitors, immigrants and merchants from far away lands in their search for safe harbor and commerce. The lightkeepers' home and much of their home-island have now been lost to the sea, but the memory of their times still remains in the lighthouse they so faithfully served.

From the lighthouse site these lightkeepers oversaw the birth of a nation and the war that almost divided it in two. The maritime history of South Carolina is an important part of American history and Morris Island is where much of it occurred. In fact, of the ten Colonial Lights constructed (1716-1771), only the Charleston Light and one other survived the Revolutionary War.

During the Civil War, the bloodiest battles in South Carolina were on Morris Island. The north end of the island was critical to Union General Gillmore's strategy. If he could take Fort Wagner and Battery Gregg, his forces could fire directly into the city of Charleston and, he thought, force the city into surrender. During the ill-fated frontal assault on Fort Wagner by the 54th Massachusetts Infantry, Sergeant William Carney accepted the flag when the color-bearer could not advance. Although he was wounded four times, he never relinquished the national flag. Carney was later honored with the Congressional Medal of Honor, the first African American to receive the nation's highest honor.

The Chronology which follows highlights the construction dates of the three Morris Island Lighthouses, and the dates of significant accomplishments toward saving the Light.

Chronology

1600S 1673 - After Charles Towne was founded, records show a navigation aid on Morris Island consisting of a raised metal pan filled with pitch and set afire at night.

1800S 1801 - a second, taller tower replaced the first lighthouse. The lighthouse was 102 feet tall with a revolving light.

1861 - The Civil War began and the light was extinguished. The lighthouse was destroyed by the Confederacy in 1862 to prevent its use by the Union as a lookout tower.



1900S 1938 - The Morris Island Lighthouse originally constructed 2,700 feet on-shore, was then at water's edge.



1962 - The U.S. Coast Guard activated a new lighthouse on Sullivans Island and extinguished the light of the Morris Island Lighthouse.

2000S 2000 -The South Carolina Department of Natural Resources agreed to accept title of the Morris island Lighthouse. The Lighthouse was leased to Save the Light, Inc. for 99 years to coordinate the fundraising effort and preservation of the lighthouse.



1700S 1767 - The first lighthouse, 42 feet tall, was built on Morris Island to guide ships approaching the Charleston Harbor.

1872 - Work on the current lighthouse began. Its height was 174 feet; diameter was 33 feet wide at the base.

1875 - The Morris Island Lighthouse was first illuminated on October 1, 1876.



1982 - The lighthouse was registered as a National Historic Landmark.

1999 - Save the Light, Inc. bought the lighthouse for \$75,000 and began discussions with state and federal agencies about preservation.

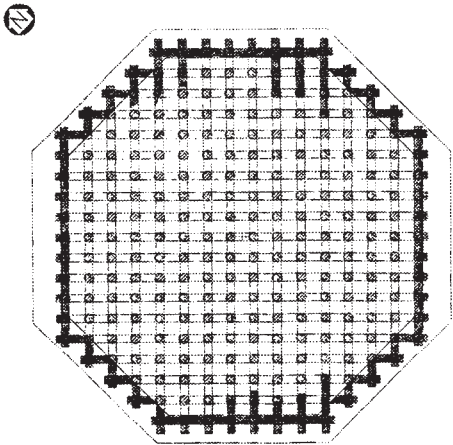
2007 -A contract was awarded to Taylor Brothers Marine Construction of Beaufort, NC, in the amount of \$2.9 million to install the Phase 1 Cofferdam. The work was completed on March 28, 2008.

The Physical Condition of the Lighthouse

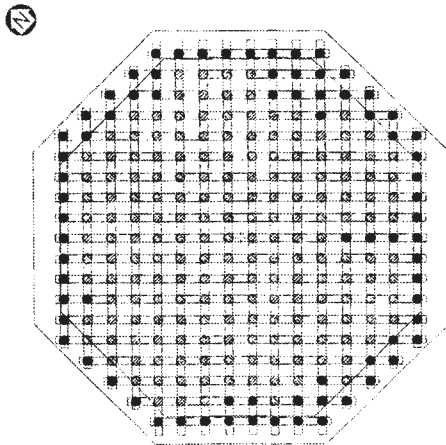
Due to years of erosion, exposure to the elements, infestation by shipworms, action of waves/tides, the entire foundation and physical structure of the Morris Island Lighthouse needs remedial repair.

Many visual inspections have been made of the lighthouse. In order to determine the condition of the foundation two important technical evaluations were performed. Through the assistance of the United States Army Corps of Engineers, Charleston District, Eason Diving and Marine Contractors, Inc. was commissioned in August, 1999 to provide an underwater inspection. The Sheridan Corporation was retained by Eason Diving to provide consulting structural engineering services.

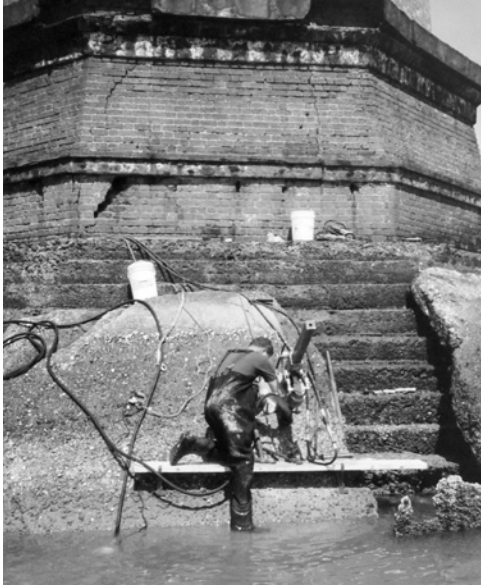
The results of the Eason Diving/Sheridan Corporation's report confirmed that the waffle-shaped timber grillage that was installed above the timber piles is significantly damaged due to sea water and "wood-boring marine organisms". Even though several parts of the foundation were not possible to inspect because of the large concrete slabs which prevented access, it was also determined that the exterior piles were missing, too-likely caused by the same circumstances. This information is illustrated in the accompanying drawings which were prepared by International Chimney Corporation who performed a subsequent follow-up study in June, 2001. The study involved taking core samples of the foundation piers. Fortunately, this study concluded that some piles were in good condition and could be expected to be carrying the load of the structure.



Timber grillage known to be compromised are shown shaded.



Timber piles known to be compromised are shown in black.



Crew pulling foundation core samples

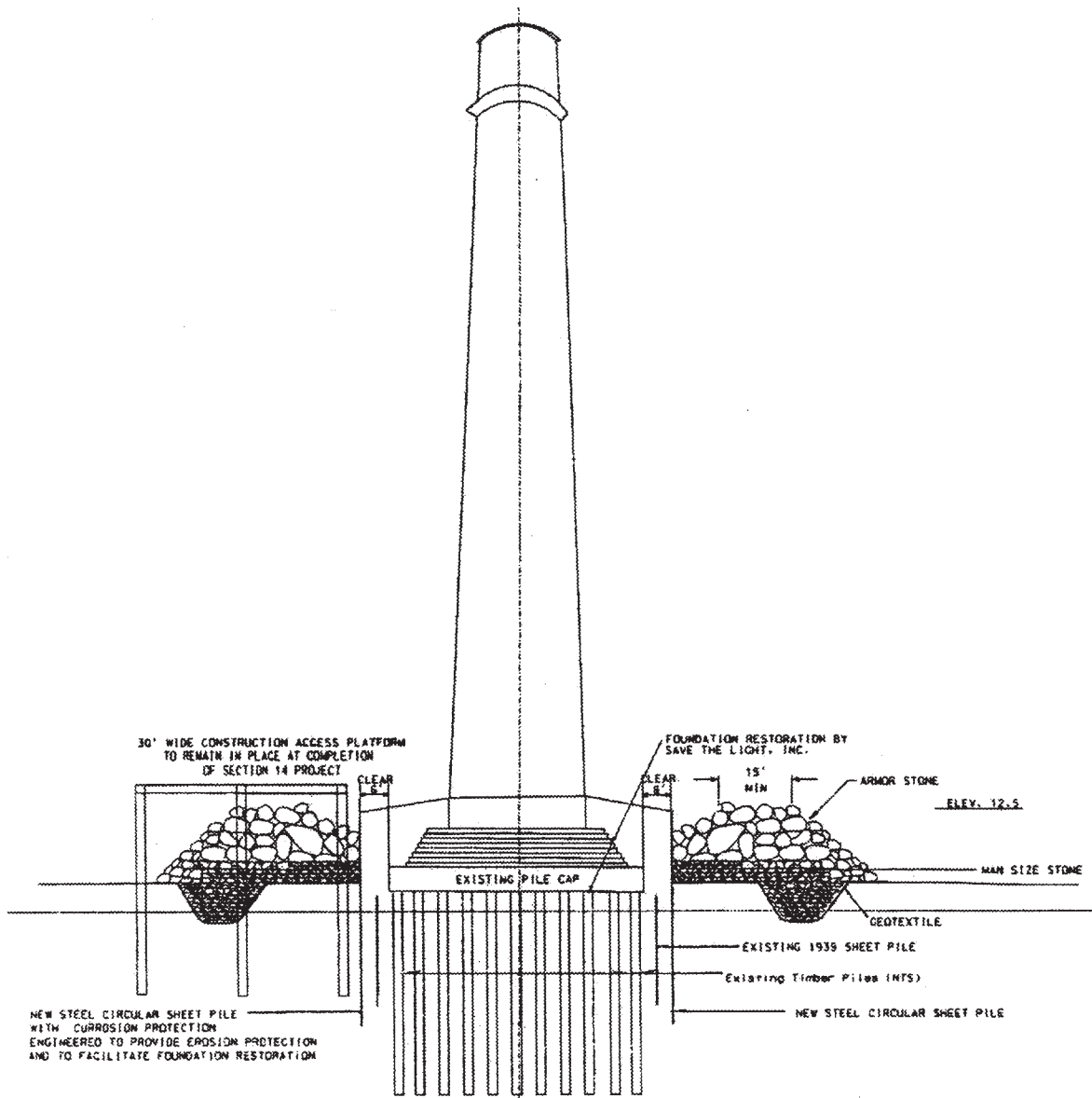


Core samples, such as this one, show that many of the pilings are in good shape, but some have been damaged.

The Plan for Stabilization and Preservation

A solid, efficient plan to save the structure from collapse has been developed. But time is of the essence! To ensure that future generations see the tower, the Save the Light, Inc. engineers have planned a unique two phase solution to save the lighthouse. Phase 1 plan involved the installation of a ring of sheet piles which form a cylinder around the base of the lighthouse. The cofferdam is 72' in diameter and will keep the sea out during the Phase 2 work. Phase 2 will consist of jet grouting under the existing pile cap to encapsulate the worm damaged piles and seal the entire area with a concrete mixture.

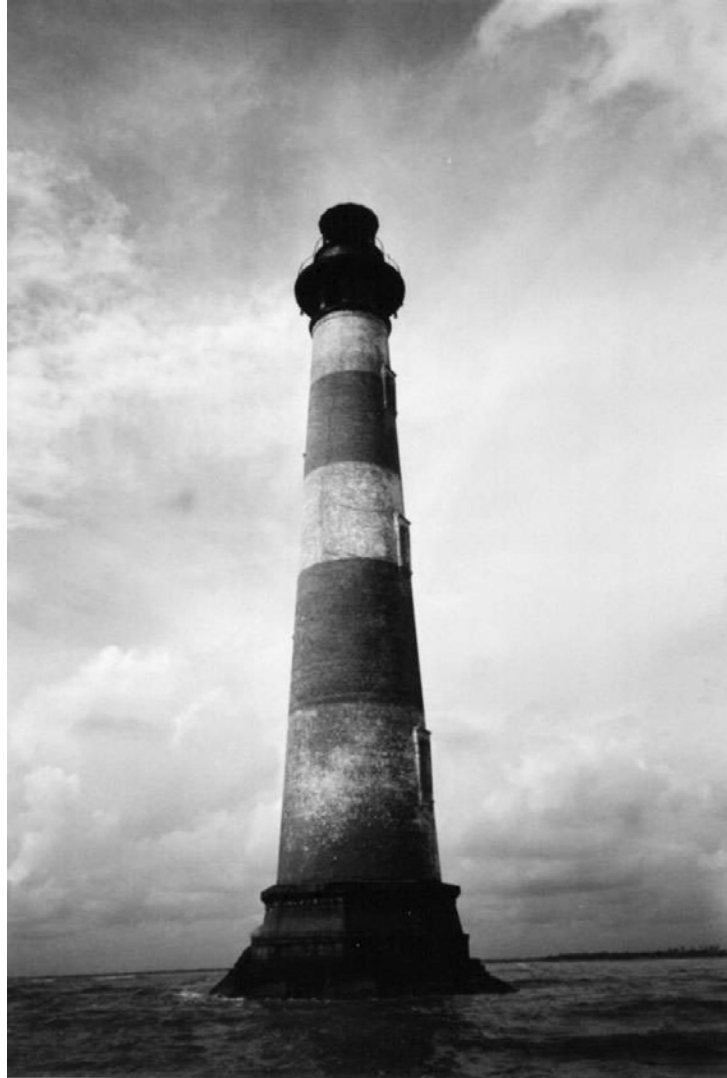
The area inside the cofferdam and adjacent to the lighthouse foundation will eventually be filled with sand and capped with concrete. This will provide a weather hardened structure at the base of the lighthouse.



Stabilization Plan

The cofferdam plan consists of a ring of P2-40 sheet piles driven 30' into the sand and rising 15' above the sand to protect the foundation from the sea. This design concept was developed by the Save the Light Technical Committee, their consultant, Carroll Crowther, PE, Whitaker Laboratories and the U.S. Army Corps of Engineers, Charleston District.

The jet grouting plans and specifications will be developed by the Technical Committee and Mr. Carroll Crowther.



The Tower

The Tower has also been inspected, but not yet to the same detail as the foundation. All the brickwork suffers from moisture damage. This is the result of lack of a protective coating (paint) for many years. The entire tower, inside and out, needs to be pressure cleaned to remove pollutants and salt build-up. Some repointing will also be required to the masonry joints in the brick. The corroded metals will require replacement in some cases and cleaning and sealing only in other locations. The windows require replacement and natural ventilation needs to be provided. The circular steel steps on the inside will need some repairs. One step is missing. The landings and handrails will need repair.

The Lantern Room at the very top of the lighthouse will require extensive restoration due to damage to its metal components by 45 years of exposure. Replacement of large glass panels is key to waterproofing the structure.

Teamwork

To succeed at this ambitious challenge of stabilizing and preserving the Morris Island Lighthouse and creating a Viewing Site at Folly Beach to describe the American History of Morris Island which the Lighthouse marks, there must be a coordinated effort from all caring individuals and groups.

Under the direction of Save The Light, Inc., a non-profit 501 (c) (3) corporation, a capital campaign has been developed. The Lighthouse, property of the State of South Carolina under the care of the South Carolina Budget and Control Board, will be an active participant with Save The Light in this program.



Mr. Davis (l) and Captain Hecker (r), the last two lightkeepers to serve on Morris Island.

The Capital Campaign is organized with an eye toward the collective efforts of the following groups:

State of South Carolina

The State has already generously committed \$1,500,000 toward stabilization and preservation of the Lighthouse. In addition, through the enthusiastic support of the state of South Carolina, requests for grants to governmental entities and foundations have been made.

United States Army Corps of Engineers, Charleston District

The Charleston District of the Corps of Engineers has provided and will continue to provide valuable technical expertise and leadership. The major part of the foundation stabilization cost was derived from emergency erosion control funding.

Families and Individuals

Because of the personal care, interest and attention of individuals from literally all parts of the world, it is expected that the greatest help will come from individual people and their families. Working individually and yet together, people from everywhere can make the lighthouse their own.

Business

Businesses in South Carolina and in many other places want to be involved. Already, significant contributions of materials, labor and services have been committed by caring corporations who want to give back to the community and to America some of what they have received. Business wants to do its part.

Foundation Grants

Many foundations, especially those with a keen interest in children and history, want to help. If the Lighthouse is lost, part of American History will be lost. Only a surviving monument can remind us of history and its importance to maintaining American values and traditions. The City of Folly Beach has generously contributed over 100,000.00 so far in A-Tax Grants.

Communities, Organizations, and Schools

There are so many groups of all kinds that want to join together to make a gift and be a part. Raising funds for the Lighthouse will not only benefit the Lighthouse stabilization/preservation program, but the act of helping will bring the helping organizations closer together.

The financial information which follows illustrates the estimated costs and target funding goals.

Everyone can help. Everyone can be involved. Everyone.

Summary of Estimated Costs

Phase I - Erosion Control & Cofferdam Installation	\$3,500,000
Phase 2 - Jet Grouting of the foundation and filling of the Cofferdam	\$1,750,000
Phase 3 - Preservation of the Lantern Room	\$1,000,000
Phase 4 - Preservation of the Tower	\$1,000,000
Contingency	\$ 500,000
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TOTAL	\$7,750,000
Phase 5 - Viewing Site	scope not yet determined

Project Sources of Funds

Families and Individuals	\$2,000,000
Federal	\$2,500,000
State of South Carolina	\$1,500,000
Business	\$1,000,000
Foundation Grants	\$500,000
Statewide Communities, Organizations and Schools	<u>\$250,000</u>
Total	\$7,750,000

Joint collaboration effort: The Citadel Civil Engineering Department and Save The Light

A joint collaboration agreement between the Engineering Department at The Citadel and Save The Light has been formed to monitor the long term conditions at the lighthouse. The Citadel, thru an engineering team, will provide engineering assistance and monitoring of the structure with the use of instruments placed on the tower during Phase 1 construction. Courses will be taught at The Citadel utilizing the light house as a model. Educational opportunities will be made available at all levels of public school thru this innovative agreement. Students involved in this long term study will provide the input of raw data into monitoring for a successful program to insure the lighthouse is there for future generations.



*Photo credit for front cover and above photo:
Larry Workman
February 8, 2008*



*Photo Credit
Dr. Richard L. Beck*



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