

CAPE FEAR



RIVER WATCH

## *Fishery Restoration in the Cape Fear River*



*Be a part of, and support, the greatest fishery restoration project in the history of our region.*

Cape Fear River Watch is a non-profit organization that protects and improves the water quality of the Lower Cape Fear River Basin through education, advocacy, and action. In 2007, Cape Fear River Watch became a leading advocate for fishery restoration through construction of fish passages that allow fish to reach their spawning grounds above the locks and dams on the Cape Fear River.

*The benefits of fishery restoration are numerous:*

- *bringing the Cape Fear River ecosystem back into balance*
- *boosting our regional economy*
- *providing a source of family recreation*

The tide is turning for the Cape Fear River fishery, as Lock and Dam #1 is no longer a barrier for fish to reach spawning areas upriver. We are excited and hopeful about the fishery's future but we still have a long way to go. We now have our sights set on Locks and Dams #2 and #3.

**Take this journey with us and be part of the most comprehensive fishery restoration effort the Cape Fear Region has ever seen.**

# FISHERY RESTORATION IN THE CAPE FEAR RIVER

## *The Problem:*

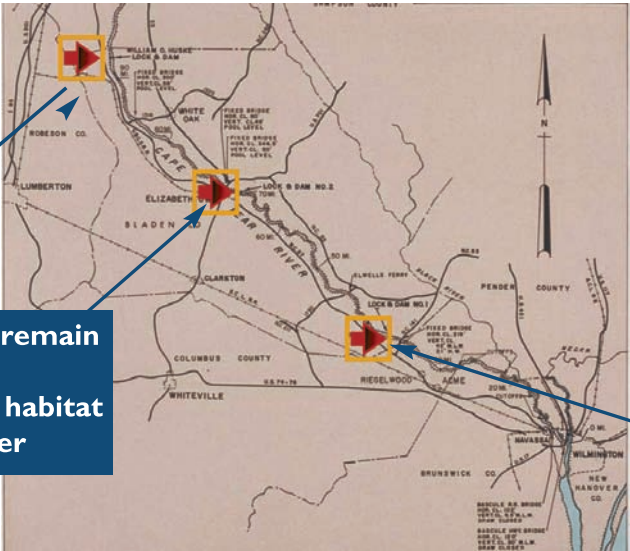
Dams prevent fish from reaching their spawning grounds

The Cape Fear River provides spawning habitat for anadromous fish, which live most of their lives in the ocean but spawn in freshwater. Striped bass, shad, river herring, and the endangered short nosed and Atlantic sturgeon must travel upriver from the Atlantic to find suitable freshwater habitat to spawn.

Since 1915, when construction of the first lock and dam was completed, populations of these native fish have decreased significantly because they cannot reach their natural, freshwater spawning grounds upriver. As the fishery has declined, so have the associated economic and recreational opportunities that the fishery made possible. But, the dams impound much of our region's drinking water so they cannot simply be removed.



**Before the Rock Arch Rapids were built at Lock & Dam #1**



**Two locks and dams remain that block access to freshwater spawning habitat in the Cape Fear River**

*There is a solution  
to this problem,  
and we know it works!*

**Construction of the first Rock Arch Rapids is complete!**



# FISHERY RESTORATION IN THE CAPE FEAR RIVER

## *The Solution:*

Rock Arch Rapids allow fish to traverse dams and reach their spawning grounds upriver



**AFTER**

Rock Arch Rapids, one type of fish passage, are structures built over and around artificial barriers like dams. Also called “rock ramps”, these structures facilitate the natural migration of anadromous fish to their freshwater spawning areas upstream. The completed Rock Arch Rapids at Lock and Dam #1 created pools and small waterfalls that allow fish to swim over the dam.

### **After the Rock Arch Rapids were completed at Lock & Dam #1**

sonic tagging program, allowing us to tag dozens of striped bass and shad in partnership with the NC Division of Marine Fisheries. Because we can locate them in the river, we know that anadromous fish are using the rock ramp to reach freshwater spawning grounds! Cape Fear River Watch also received funding from NOAA-SARP to construct spawning habitat above Lock and Dam #1, furthering our efforts to restore the Cape Fear River fishery.

The Cape Fear River Striper Foundation has funded water quality studies and a multi-year



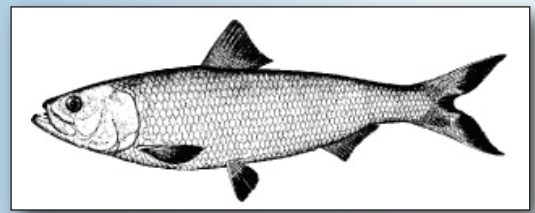
**Since spring of 2012, we have tracked  
tagged fish swimming over the Rock  
Arch Rapids at Lock and Dam #1.**

**IT WORKS!**

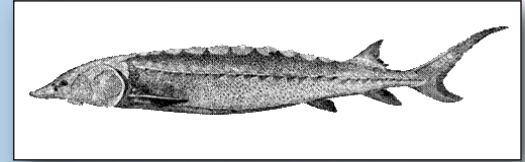
# FISHERY RESTORATION IN THE CAPE FEAR RIVER

## *Environmental and Recreational Benefits*

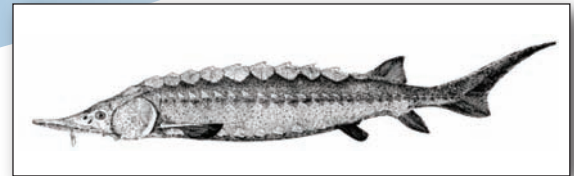
- Restores balance to the Cape Fear River ecosystem
- Fish populations will now be able to make their natural spawning runs which will bring back a healthy fishery
- Preserves endangered sturgeon species and populations in decline
- Protects impounded drinking water for current and future generations
- Rock ramps allow continued recreational boating along the entire length of the Cape Fear River



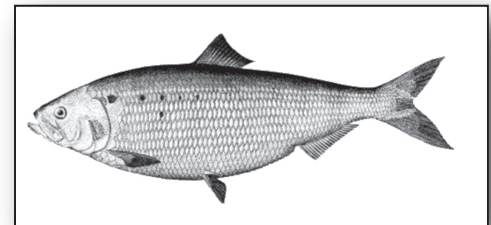
RIVER HERRING ~  
threatened



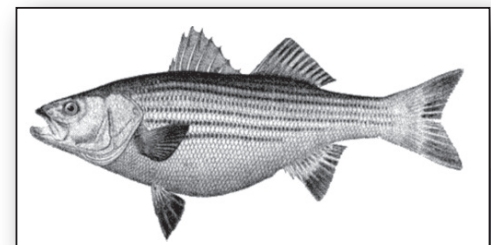
SHORTNOSE STURGEON ~  
endangered



ATLANTIC STURGEON ~  
endangered

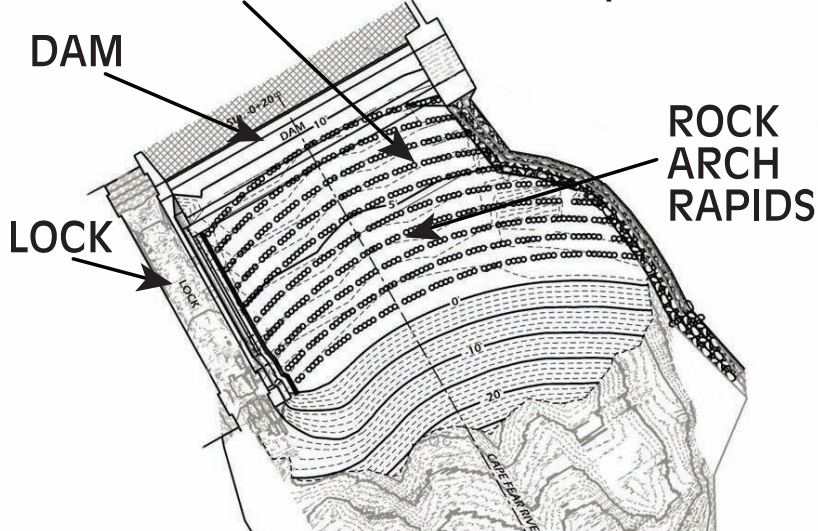


AMERICAN SHAD ~  
population in decline



STRIPED BASS ~  
population in decline

Rocks and boulders create  
terraces and shallow pools





# FISHERY RESTORATION IN THE CAPE FEAR RIVER

## *Financial Benefit: The Ripple Effect*



A healthy Cape Fear River fishery will have far-reaching, positive economic impacts across our region. Income from sport-fishing, food-fishing, and tourism will energize the regional economy.

### Projected Financial Benefits

- \$2,895,450 per year benefit from striped bass
- \$749,000 per year benefit from American shad
- \$1,559,870 per year benefit from river herring

***Over \$5 million per year total fishery incomes!\****

\* SOURCE: US Fish and Wildlife Service (2007 Study). These values are conservative, and will be much higher if we also consider fish which benefit from feeding on young herring and shad, such as flounder, speckled trout, red drum, and bluefish.



## ***Our Goals:***

- Ensure that North Carolina receives federal and state funding to support fish passage at Locks and Dams #2 and #3
- Fund the Cape Fear River Striper Foundation to support the ongoing effort to restore anadromous fish in the Cape Fear River
- Educate our community about the importance of a healthy fishery and how it benefits our region. The new Environmental Education Center at Lock and Dam #1, a partnership between the US Army Corps of Engineers and CFRW, will offer educational programs in 2013-2014!
- Advocate for a comprehensive migratory fish restoration effort in the Cape Fear River basin



Tickets are \$50/each or \$350/table of 8

Purchase tickets online at  
[www. CapeFearRiverWatch.org](http://www.CapeFearRiverWatch.org)

## BANQUET & AUCTION

January 16, 2015

Join us for the 7th annual Banquet & Auction to benefit fishery restoration!

Bid on adventure tours, unique art pieces fishing gear and tackle, beach vacations, and more, while enjoying a delicious catered dinner.

*Sponsors receive  
 complimentary tickets to the  
 Banquet & Auction*

## TAG & RELEASE STRIPED BASS FISHING TOURNAMENT

January 17, 2015

The 7th Annual Striper Tournament is the Cape Fear River's premier catch, tag, and release fishing tournament. Our region's top guides and anglers partner with fisheries biologists to catch and tag striped bass which allows scientists to better understand the movement, spawning activity, and life history of these amazing fish.



**Sponsoring StriperFest  
 means sponsoring the return  
 of migratory fish to our  
 region, restoring our fishery  
 and creating significant  
 positive economic, environ-  
 mental, and recreational  
 impacts to our area.**

To fish in the tournament,  
 email Jot Owens: [captainjot@yahoo.com](mailto:captainjot@yahoo.com)



# STRIPERFEST COMMUNITY EDUCATION DAY

January 17, 2015

Education is a critical component to successful fishery restoration. Our fun activities focus on the Cape Fear River's incredible migratory fish and the importance of restoring our fishery.

For adults, the Fisheries Science forum starts at **10am**.

**Noon-** Jot Owens free fishing seminar: Cape Fear River Striped Bass

From **11am-2pm**, family activities include:

- Migratory fish presentation
- Interactive rock ramp model
- Fish prints
- Anatomy of a fish
- Face painting
- Learn-to-cast station
- Kayak fishing demonstrations
- Microscopes - observe and identify organisms
- River cruises aboard "The Wilmington" (\$5/person, \$20/family)
- Guided tours of the RV Cape Hatteras
- And much more!



Family  
Activities  
from 11am-  
2pm!

Free  
event!

Last year, over 400 children and young adults participated in StriperFest Education Day! Come join the fun on January 17th!

## *Fishery Restoration in the Cape Fear River You Can Help!*

**Sponsor** the 7th annual StriperFest to raise awareness of the economic and recreational benefits — and environmental necessity — of restoring our fishery.

### *Take Action:*

1. *Show support* for fish passage at all three locks and dams on the Cape Fear River
2. *Spread the word* by writing letters to the editor and talking to your friends about this issue
3. *Become a member* and contribute to Cape Fear River Watch so we can continue working to protect and improve the water quality of the Lower Cape Fear River basin
4. *Fish* in the tag & release tournament on January 17th

*Come and enjoy StriperFest 2015! Join us January 16th for the Banquet & Auction, and enjoy a day full of fun educational activities on January 17th*



Contact Kemp Burdette (kemp@cfrw.us) to join CFRW, make a donation, or purchase banquet tickets.

Acknowledgements: Thanks to Alan Cradick Photography for providing photos.  
Cover photo courtesy of Peter Doran. Brochure design by Cindy Mueller.

### **CAPE FEAR RIVER WATCH, INC.**

Headquarters and Environmental Education Center

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**[www.CapeFearRiverWatch.org](http://www.CapeFearRiverWatch.org)**