

Cape Fear River Partnership  
2<sup>nd</sup> Quarterly Meeting  
Fish Passage  
UNCW Center for Marine Science  
May 22, 2018

### **Introductions and Announcements**

MFC nominated region 4 strategic habitat areas in all 4 coastal regions of the state. Ground truthing is beginning now.

Audobon Society and Dial Cordy are working to create shellfish habitat in the Lower Cape Fear River. Designs are in place and site selection and modeling are done, now in the process of moving with documentation to apply for permits.

Progress on hydrological modeling of Northeast and Black River basins has been made by Kerry Mapes. There is a drone and geospatial service group now to offer contract work with drone imagery or GIS based studies.

Cape Fear River Partnership now has a website. [www.CapeFearPartnership.com](http://www.CapeFearPartnership.com). This is a way to share information, notes, presentations, on a platform that anyone can access. Eventually there will be a way for anyone to add their information.

DMF is wrapping the last season of tagging Striped Bass, little over 3,000 fish. Joe just finished his telemetry about movement of American Shad and Striped Bass. Just recovered a female sturgeon (95kg) in Snows Cut, victim of a boat strike.

Will distribute sturgeon signs throughout all the boat access points on the river.

DWR should be ready to monitor for microcystin toxin this summer.

### **Kyle Rachels and Clint Morgeson: Anadromous Species Spawning Stocks (2018)**

Every year since 2008 we do spring anadromous sampling on Locks and Dams 1,2, and 3.

Lock and Dam 2 is closed in 2018 for Army Corps to fill the scour hole. Suspended there for 2018, will be back in 2019.

Started around the first of April.

Over 90% striped bass are stocked

16 fish not stocked by WRC or SC. Two fish likely indicate wild origin, either migrants from another river or born in the river.

At least 25% of 2017 striped bass at LD1 were stocked in upstream reservoirs.

Questions:

What does 25% stocked in reservoir tell us?

A: they are flushing downstream from those reservoirs.

Do they migrate back up?

Buckhorn is the end of the road, but theoretically they could make it back. Usually Smiley's Falls is the end of the line. Most stripers hit LDs and don't go any further.

Goal: Self sustaining naturally producing striped bass population. Fish are not sterile. Striped Bass eggs are in the river in various stages, but we have not seen larvae.

Is there any natural mortality on the larger fish? That work is being done. Mature at 3-4 years old. 16-24% annual being normal. Fish aren't getting as old as other places and we don't know why.

### **Scott Belcher, NC State University**

Determine levels of "new" & legacy poly and perfluorinated alkyl substances in alligator and fish in the CFR.

"Are PFAS present and accumulating in wildlife? For how long? Are the levels associated with indicators of adverse health in wildlife/ecosystems? Can this tell us anything about effects on humans? Can consuming fish caught from the CFR increase PFAS levels in humans?"

63 stripers, blood and serum samples. Detect 20 known perfluorinated compounds.

The main source of PFAS on the NASA site is fire fighting foams.

Any thought to terrestrial food chain because it's being disposed of in the air? Yes, Detlef Knappe.

Where are the alligators located?

How do you sample alligators? Snaring and hooks, duct tape, about 20 minutes of work.

### **George Howard, Restoration Systems, Dam Removal**

What did you do with the debris? What's the approximate cost?

We recycled 60-70% in the construction of a toe wall and some armoring. Saved 30-40% for potential wetland protection.

Is there any looking at people's well supply when there's a dam removal?

0.1% are eligible for removal right now. Most of these are less than 15 feet deep.

### **Jeff Fisher, Unique Places, Ecological Uplift in the Cape Fear River Basin**

Could you expand on the requirements that are holding up your permit?

Whether or not you have to mitigate wetlands that dissolve or go away as a result of a dam going away. Nationwide approval of permit 53.

### **Danielle Darkangelo, Assessing Aquatic Connectivity in the Black River Watershed**

#### **Director of Division of Marine Fisheries**

Full summary of DMF Activities.

Get politics out of management of fish stocks

Fishery Reform Act

**Frank Yelverton**

Funding is there, refining needs to be done, when the 408 process is open we'll move forward.

**Mark Pirrello**

Will there be a public comment period on the EA for LD2 and LD3? Potentially, the model is being calibrated but it all depends on the disposition study.

**Tonya Bonitatibus, Savannah Riverkeeper**

**Amin Davis, DWR Funding for Aquatic Barrier Removals**

**Final Conversation:**

What is the outcome of the deauthorization process, how does that affect the Locks and Dams, what's the timeline, etc.?

Can we fast track potential owners? Corps at LD1? Etown at LD2? LD3? State parks?

What we're missing is the big picture for how all of these projects connect together and what we want it to look like

There are \$6 million in funding in the deauthorization process. This is a whole culture shift for the Corps and we don't know what will follow.

Pete has received funding to look at the economics of passage improvement. That's the information that needs to be brought together. Political pressure might be needed.

The state has the ability to take the locks.

The community engagement is going to be what carries it.

30 million dollars really isn't that much money for a project like this.

We have to say what we want, have an estimate of how much it's gonna cost, and then go do it.

Next meeting: Collective GIS effort for Habitat Committee. Several hours of working group meeting to pull together tools that all the various groups to figure out what we need for habitat improvements. Aiming for September or October.

There's a lot of funding for paddle trail/recreation projects e.g. Recreational Trail Grant Program

Elizabethtown might be interested in joining the conversations from the historical angle of the area.