## Cape Fear River Partnership 3<sup>rd</sup> Annual Meeting Tuesday, May 24, 2016

University of NC at Wilmington, CREST Research Park MARBIONC Building, 5600 Marvin Miss Lane, Room 1001 Wilmington, NC 28409

Fish Passage Breakout Session

Dam removal projects, Kat speaking on the phone.

Fws.aps.arcgis.com Web map is available to people with login

Free web use of database training is available. We are currently seeking funds for field assessments. Training—American Rivers can provide training for groundtruthing: photos, measurements, training aimed at culvert assessments for 6 mo-1yr, step process how to recon—utilize web map/interactive—find landowner contact info, webinar is on the 31st if more are interested it will be recorded, Kat will send info to Dawn

## Michael Fisk:

Electrofishing at all 3 lock and dams started in mid-March. Buckhorn Dam (long term monitoring site), caught many American Shad, higher catch rates at lock and dam 1 with more abundance upstream past the rapid, buckhorn and lock and dam 3—Raven Rock and Lillington, Irwin thru smiley falls, numbers of shad are much lower but more persistent Buckhorn Falls, natural barrier effecting the Shad when river is low they can't get past it

Was the fish species considered a criteria when first fish passage was created?

Fisk: No. Now, there is better information out and making modification to this first fish passage project is needed. A document will be put out by NOAA with more information... the original slope wasn't met with lack of funds.

Rohde: Can we do genetics on the striper to see if the fish are all hatchery?

Fisk: We are assuming each is hatchery by genetic analysis; we can assess their genetics with the project used on the Neuse

Are the fish fully motivated to run upstream?

Why are they spawning more at the base then other areas?

Jeremy: There is an increase in larger females—who produce more eggs, and stock growth there in the structure and size, stronger effort in sampling this year, sampling i.e. is # of eggs per cubic liter of water

\*Much abbreviated sample program in 2015, with length of time and sample counts

Fisk: Look into larval surveys, see if there's survival rates in the fall of youth, physical makeup of fish changes historically, some eggs are stronger for higher flow, depending on where the stocks are from—some eggs are more buoyant prefer mid-flow, etc. if we receive them from other fish stocking programs

Would different stock be more efficient?

Are you seeing a growth in fish efficiency over the ramp?

-Fish are spending more time in one area, then moving further upstream.

Is there an average increase of DO upstream to downstream?

-Not enough years of variable flows

Bladen County, moving forward with engineering design for Lock and Dam 2—Mark  $1^{st}$  step another stakeholders meeting, is it slope/geometry for the engineering design? Initial plan will be designed and all partners will convene again. Learning process, hope to complete fish passage as a group for dams 2 and 3.

Wicker: What are the sacrifices of the slope?

Sara Ward—Bladen County funds go to both LD 2 and 3

Joe's update:

- 120 active striper tags, original ones have died (from 3 years ago)
- The tagged stripers will drop about 1/3 a year from here on out, acoustic array funding is done at the end of May 2016.

Loss with a 30 station array, 5-6 a year loss for normal receivers, didn't assess passage, just provided data, sampled stripers are ripe and running, fin clips collected will be able to determine If hatchery fish or not

Are there trends growing the population as range and where they are headed? Group headed to Lock and Dam 1 Eagle Island/Sutton Lake for the winter and then disperse after (those stripers were tagged from NC State)

Sturgeon, not many tags have active batteries left. 2017 the batteries will be done. No evidence of them over the rock arch, there is one large adult above in the Northeast Cape Fear Shortnose caught by mistake, and survived above Navassa bridge, same area tagged shortnose stays DMF has no more funding to continue the tagging, looking into options to keep the array up

Fred Sharp: We are in the preliminary stages of partnering up to maintain the search, if money is needed to continue with his proposal, what questions do we want this array to answer?

Receivers are \$2,500 apiece. 5 per year cost, \$30 apiece for batteries last a year, field techs to check them, tags \$300 a piece, which are built into that project, per Jeremy (says we can request)

Previous director wasn't enthusiastic about the ongoing cost and responsibility of the proposals to expand statewide

Dawn: Is there new technology available?

-Satellites are better (\$\$\$\$) and more expensive.

Communicating tag returns and data, there needs to be a central place for these topics to talk about on maintenance and long term array, need to pull resources for

Sara Ward: If there is a comprehensive cost for it, option for the Kerr McGee Trust Joe: Need to run proposals up thru their higher ups, if FWS or CFR Partnership could fund

Bob Lorenz: LACK OF FUNDING

NC pattern occurred, mgmt. take it back to higher ups, advocacy, working together, a new director with loss of funding, fishing funds through the licensure required by the commercial fisheries, big issue with what the division calls: Sport Fishing tackle, stop misusing funds—stripers are being harvested, funds used improperly, if the fish restoration work is honest, long haul fishery

What does this group want to accomplish moving forward?

## Mike Wicker:

Dam removal identification have an article or commonly read publication that is well read, most dams privately owned, keep track of property ownership and wait for change of hands in order to have them removed. Do these people know who to contact in order to have them removed properly, action item? Culverts: Interactive with DOT guidelines at the district level of how the state is divided, address their ability to help us there is a large disconnect here. DMF coordinators working on this semi-currently could adjust their plans for implementing fish friendly passage, changing the protocol

Fritz Rohde: Update the sheets on the call, conference call can resolve new/changes. How do we show progress outside of this group for fisheries-visualize progress, GIS system, could be linked to WIX site for the public, public's interaction on the website is needed?

## Present

Elizabeth Zanders: Piedmont Conservatory Council

Dana Matics – US Army Corps of Engineers

Mark Pirrello - Moffatt and Nichols

John Hutton – Wildlands Engineering

Bob Lorenz – Cape Fear River Watch

Fritz Rohde - NMFS

Mike Wicker – US Fish and Wildlife Service

Joe Facendola – NC Division of Marine Fisheries

Sara Ward – US Fish and Wildlife Service

Jeremy McCargo – NC Wildlife Resources Commission

Michael Fisk – NC Wildlife Resources Commission

Clint Morgeson – NC Wildlife Resources Commission

Cindy Bohn – US Fish and Wildlife Service

Dawn York – Dial Cordy and Associates, Coordinator of Partnership

Kat Hoenke – Southeast Aquatic Resources Partnership – via phone/webinar

Fred Scharf – UNC – Wilmington

Katie Bradley – Cape Fear River Watch