



2014/2015 Action Items

Over the past year, a sub-group of the Cape Fear River Partnership has been actively working to identify high priority barriers in the basin to remove or bypass to benefit anadromous fishes. This group is specifically working towards the completion of Action items: 2.1, 2.2, 2.3, 2.4 and 3.2. This group, made up of representatives from the USFWS, NOAA, American Rivers, Dial Cordy and Associates Inc., Piedmont Conservation Council, Wildlands Engineering, and SARP, has developed a methodology to identify and perform reconnaissance on potential fish passage projects using the North Carolina Barrier Prioritization tool. Below are the steps developed to analyze potential fish passage projects:

- 1) **Generate priority results using the SEACAP tool and state specific data.** The SEACAP tool, developed by TNC and SARP, to prioritize dams for removal or bypass in the Southeast is currently being used by the group to identify new dams to target for removal.
- 2) **Explore dams using ArcGIS online to view aerial photographs**
The top priority dams are then explored in ArcGIS using the new ArcGIS online based USFWS Region 4 Fish Barrier Inventory, overlaying local data such as the herring habitat GIS analysis performed by Matt Hayes, anadromous fish spawning areas, and more.
- 3) **Explore several non-map factors**
If projects are deemed good possibilities given that the appropriate ecological metrics are met (few downstream dams, flow capable of supporting anadromous fishes, NCDOT crossings, etc.), then information about the dam's owner, current use, and owner information is noted within the webmap using external data from the web and the webmap.
- 4) **Perform field visits**
Field visits are then performed by experienced staff (i.e. Fritz Rohde, NOAA-NMFS) to assess the passability of the dam and identify if any natural barriers are present.
- 5) **Land owner contact**
Finally, the landowner is contacted by first attempting to find a shared contact. If none exists, other methods include sending a letter or cold calling.

2016 Goals and Targets

The process of connecting a top priority project with a willing landowner takes time. However, to this date the subgroup has conducted six site visits on potential dams and culverts for bypass. While not all of these sites were given the green light due to low flow or absence of a dam, all information collected informed the barrier database. The top priorities are:



Hall Lake (Black River Watershed): The subgroup used SEACAP to identify Hall Lake as a top priority, a dam in the upper black river watershed. The owner was called to inquire about removing his dam, and given its condition, he is willing to remove it with assistance. This dam has no downstream dams and will open 10 miles of small tributary to American eel. The group has since conducted sampling of fishes below the dam, and hopes to secure funding and begin design and permitting during 2016.



Photo by Fritz Rohde, NOAA-NMFS

Alligator Creek (Eagles Island): Eagles Island is currently a confined disposal facility (CDF) for dredged material. Prior to this designation, there were several tidal creeks that traversed the site. Many of these creeks are now covered by the CDF, but the portion of Alligator Creek that runs northwest to southeast is outside the dike alignment that surrounds the CDF. This creek has closed up over the decades since the access road to Eagles Island blocked tidal flow in the creek. This project would restore approximately 10,000 linear feet of tidal creek and place a bridge or large box culverts at the access road.



Dodd's Millpond Dam (Cape Fear River): The subgroup has identified Dodd's Millpond Dam, located below LD1 as a high priority to bypass for American shad and herring. The landowner at this time is unwilling to remove the dam, as the impoundment is a Natural Heritage Area; however fish passage utilizing an Alaskan steeppass and eel passage is an option. This option will be explored further with the subgroup in 2016.



Photo by Fritz Rohde, NOAA-NMFS



Fort Bragg Unnamed Dams (Little River): Two abandoned dams sit on the Little River and continues to surface to the top of the list for removal. Reaching an agreement with the environmental planning division of Fort Bragg is the next step action for the subgroup.



Photo by Dawn York, Dial Cordy and Associates

Next Steps

- Continue to identify top priority dams in the Cape Fear River basin (Upper and Lower)
- Collaborate with the Piedmont Conservation Council to identify shared priority projects
- Identify culverts that may be a barrier to herring in the lower Cape Fear River Basin using the new USFWS fish barrier inventory
- Continue to refine the process of identifying high priority barriers
- Follow up on projects still “up in the air” to generate active restoration projects
- Develop funding proposals for high priority projects for upcoming funding opportunities (i.e. USFWS Fish Passage Program)