



Re: The Bluffs

North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

01 November 2006

**MEMORANDUM**

TO: Keith Megginson, Planning Director  
Chatham County Planning Department

FROM: Sarah McRae, Freshwater Ecologist *SEM*  
NC Natural Heritage Program

SUBJECT: Comments on the potential effects of development of The Bluffs, Shively and Banner Tracts on the natural resources of the Haw River in Chatham County

The NC Natural Heritage Program (NHP) has been asked to provide the Chatham County Planning Board with information regarding the potential impacts of development on the natural resources near or in the Haw River in the vicinity of the Bluffs, Shively and Banner Tracts in Chatham County, North Carolina. NHP does not know the particulars of the development projects except for the location of the tracts. Development on the aforementioned tracts may impact several streams in Chatham County, including the Haw River and Dry Creek, and several tributaries to both Dry Creek and the Haw River. The proposed project(s) have the potential to impact Significant Natural Heritage Areas as well as rare and endangered species.

A Significant Natural Heritage Area (SNHA) is an area of land or water identified by the NC Natural Heritage Program (NHP) as being important for protection of the State's biodiversity. SNHAs contain one or more Natural Heritage elements – high-quality or rare natural communities, rare species, and special animal habitats. Two SNHAs may be affected by impacts associated with these projects: the nationally significant Haw River Aquatic Habitat and the locally significant Rock Rest Mafic Islands and Shore. The Haw River Aquatic Habitat supports one of the few known populations of the federal and state Endangered Cape Fear Shiner (*Notropis mekistocholas*) and the uncommon Septima's clubtail [dragonfly] (*Gomphus septima*). Rare freshwater mussels also occur here, including the Brook floater (*Alasmidonta varicosa*) and Yellow lampmussel (*Lampsilis cariosa*). Rock Rest Mafic Island and Shore is a scenic, popular recreation area with extensive mafic rock formations. These formations support a basophilic plant community, one of the less common types occurring within the county. The presence of area-sensitive wildlife species, such as pileated woodpecker and wild turkey, indicate this area's importance as a wildlife corridor.

Development of the Bluffs, Shively and Banner tracts may impact sensitive and rare species, particularly the federal and state endangered Cape Fear shiner (*Notropis mekistocholas*). Please

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see the attached map for the location of habitat for the Cape Fear shiner as well as the location of surrounding natural areas. Cape Fear shiner has been documented from the Haw River just downstream of the proposed developments as recently as May 2000. The NC Wildlife Resources Commission (NCWRC) surveyed the Haw River in the vicinity of the proposed developments as recently as September 2005. Ryan Heise, Central Nongame Aquatics Coordinator describes the survey results as follows:

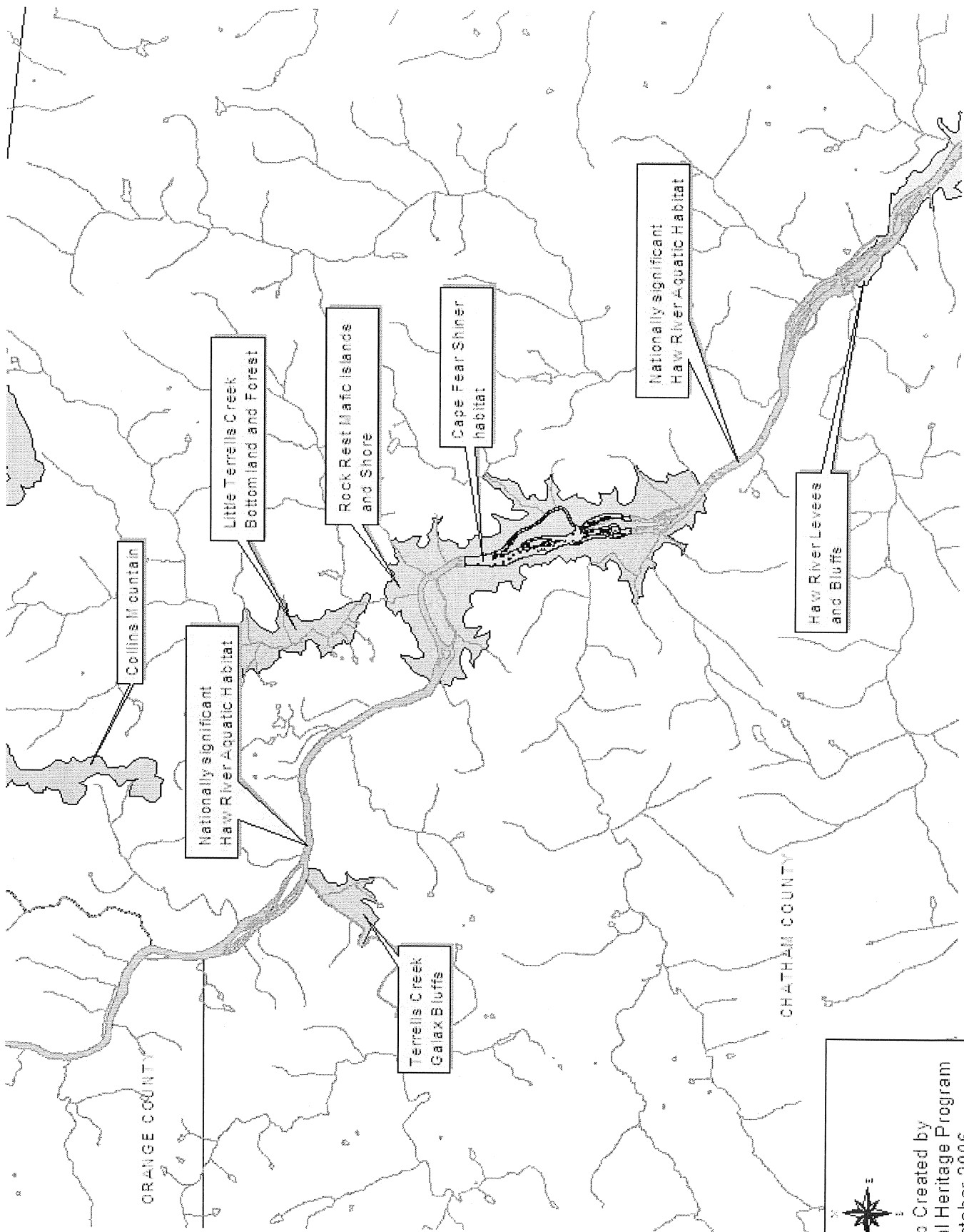
"We sampled the Haw River, including major tributaries, from Hwy 64 bridge crossing upstream to Saxapahaw. No Cape Fear Shiners were captured. Five of the 12 tributaries that were sampled contained good habitat and diverse fish assemblages. Water willow was sparsely distributed in the Haw River; mostly located in the reach from Hwy 15/501 downstream to Hwy 64. Cape Fear shiners may still exist in this system, but if so, would appear to be at very low densities and patchily distributed" (email communication, 09 October 2006).

In general, NHP is concerned about the direct manipulation of stream channels, and the secondary and cumulative impacts that such projects may have on the aquatic and terrestrial ecosystem. To minimize impacts, please review the guidance document entitled: "Guidance memorandum to address and mitigate secondary and cumulative impacts to aquatic and terrestrial wildlife resources and water quality" published by the NCWRC in August 2002 ([http://www.ncwildlife.org/pg07\\_WildlifeSpeciesCon/pg7c3\\_impacts.pdf](http://www.ncwildlife.org/pg07_WildlifeSpeciesCon/pg7c3_impacts.pdf)). Another document that is very useful for proactively planning development away from sensitive natural resources is "Swimming With the Current: A Guide to Help Local Governments Protect Aquatic Ecosystems while Streamlining Environmental Review," published by the NC Department of Natural Resources, NC Department of Transportation, NCWRC, and US Fish and Wildlife Service in 2006 ([http://www.ncwildlife.org/planningworkshop/swimming\\_with\\_the\\_current.pdf](http://www.ncwildlife.org/planningworkshop/swimming_with_the_current.pdf)). NHP strongly recommends that direct, cumulative and secondary impacts to streams and rare community types be avoided or minimized. Prior to construction of the proposed projects, NHP recommends that detailed surveys be performed to determine if there will be impacts to rare species.

Please let me know if I can provide more information. The North Carolina Natural Heritage Program looks forward to a collaborative effort to help protect the State's natural diversity. If I can be of assistance, please do not hesitate to call me at 919-715-1751.

Attachment: "Haw River\_NHP" map

cc: Ryan Heise, NCWRC  
David Rabon, USFWS  
Allison Weakley, Biologist  
Dickson Phillips, Attorney



Collins Mountain

Nationally significant  
Haw River Aquatic Habitat

Little Terrells Creek  
Bottomland and Forest

Rock Rest Mafic Island  
and Shore

Cape Fear Shiner  
habitat

Terrells Creek  
Galax Bluffs

Nationally significant  
Haw River Aquatic Habitat

Haw River Levees  
and Bluffs

ORANGE COUNTY

CHATHAM COUNTY

Map Created by  
 NC Natural Heritage Program  
 October 2006