US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: August 5, 2016
Comment Deadline: September 6, 2016
Corps Action ID Number: SAW-2016-01258

The Wilmington District, Corps of Engineers (Corps) has received a prospectus describing the establishment of an umbrella compensatory mitigation bank, known as the RES Cape Fear Umbrella Mitigation Bank (Bank), to offset impacts authorized as part of future Federal and State permits.

Bank Sponsor:
Environmental Banc & Exchange, LLC
Mr. Daniel Ingram
302 Jefferson Street, Suite 110
Raleigh, North Carolina 27605

This public notice does not imply, on the part of the Corps of Engineers or other agencies, either favorable or unfavorable opinion of the work to be performed, but is issued to solicit comments regarding the factors on which final decisions will be based.

LOCATION OF THE PROPOSED WORK: The initial phase of the proposed umbrella bank includes 2 sites as described in the table below:

Site Name	Easement Size (acres)	Township	County	Stream/ Receiving Water	Latitude (°N)	Longitude (°W)
Dairyland	30.96	Hillsborough	Orange	Hudson Branch / Watery Fork	35.9792	-79.1875
Cloud and Banner	56.45	Mebane	Alamance	Back Creek	36.1408	-79.2686

*All sites as proposed are within the Cape Fear River Basin, Hydrologic Unit Code (HUC) 03030002.

PROPOSED WORK AND PURPOSE: The Bank proposes 2 sites including approximately 15,157 linear feet of existing intermittent and perennial warm water streams, and involves a combination of stream restoration, enhancement, and preservation activities as itemized in the table below:

Site Name	Existing Length (linear feet)	Mitigation Type*	Ratio	Stream Mitigation Units (SMUs)
Dairyland	3,876	R	1:1	3,876
	729	E1	1.5:1	485
	717	E2	2.5:1	287
	925	E3	5:1	185
	1,478	P	10:1	148
Cloud and Banner	1,558	R	1:1	1,558
	558	E1	1.5:1	372
	5,039	E2	2.5:1	2,017
	277	E3	5:1	55
	0	P	10:1	0
Total	15,157	---	---	8,982
			Adjusted total	**10,131****

*R = Restoration; E1 = Enhancement I; E2 = Enhancement II; E3 = Enhancement III; P = Preservation

**Adjusted SMU total based on non-standard buffer width guidance for 75 foot buffers for Dairyland (7% adjustment) and 150+ foot buffers for Cloud and Banner (20% adjustment)

The Cloud and Banner site also includes approximately11.95 acres of riparian wetlands, and involves a combination of enhancement activities as itemized in the table below:

Site Name	Size (acres)	Mitigation Type**	Ratio	Wetland Mitigation Units (WMUs)
Cloud and Banner	3.83	H	2:1	1.92
	8.12	L	5:1	1.62
Total	11.95	---	---	3.54

**H = High Enhancement; L = Low Enhancement

Currently there are no detailed designs on proposed stream restoration and enhancement reaches. Areas designed as Priority Level I Restoration would modify cross-section geometry, planform, and profile to restore appropriate capacity and sinuosity to the channelized streams. Stream restoration would incorporate the design of a single-thread meandering channel, with parameters based on data taken from appropriate regional curve tables for the Piedmont of North Carolina and from reference sites and hydrologic analyses.

Primary activities designed to restore channels would include: draining existing impoundments, belt-width preparation and grading, channel excavation, installing woody debris along the stream bed, backfilling of abandoned channels, installation of piped channel crossings, and vegetative planting.

Enhancement activities, categorized as level I, II, or III are proposed where the use of restoration may not be necessary to improve a system's ecological function. Stream Enhancement I is geared towards bank stabilization, bedform diversity, and riparian buffer restoration, involving activities such as installing grade control structures and woody debris structures to improve hydraulic efficiency and aquatic habitat, as well as planting disturbed areas within the proposed buffer with native riparian vegetation. Stream Enhancement Level II would focus on improving the riparian buffer and incorporating minimal grading to address minor bank erosion areas. Enhancement Level III activities would include invasive species treatment and planting of native vegetation to develop a minimum buffer width of 50 feet. Stream Preservation is proposed in areas where the channel is stable throughout the easement and provides a variety of aquatic habitats, has a riparian buffer comprised of an intact hardwood forest, and incorporates easements extending a minimum of 100 feet outward from the stream channel. Wetland Enhancement activities would include reconnecting low lying areas of hydric soil with the floodplain along stream restoration reaches, creating a rough soil surface to aid infiltration, and planting native tree species.

A monitoring program would be implemented for at least seven years following the initial biological improvements to evaluate whether the Bank's goals and objectives are met. Stream stability and vegetation survival would be monitored across both the restoration and enhancement areas of the sites to determine the success of the stream and buffer mitigation. Stream stability would be monitored with cross section surveys and visual assessment stream walks. Vegetation survival rates would be monitored using vegetation plots over approximately two percent of the planted area. Wetland hydrology would be monitored to document hydric conditions in the wetland restoration areas via automatic recording pressure transducer gauges as well as visual observations of primary and secondary wetland hydrology indicators.

The Sponsor states that the project goals address stressors identified in the watershed, including nutrient removal, sediment removal, invasive species removal, filtration of runoff, and improved aquatic and terrestrial habitat. These goals would be addressed through the following project objectives:

- Elimination and control of exotic invasive species
- Restoration of riparian forested stream buffers
- Stabilization of eroding stream banks due to lack of vegetation
- Addition of large woody debris such as log vanes, log weirs, and root wads
- Restoration of appropriate pattern, dimension, and profile in stream channels
- Restoration of bottomland hardwood habitats, and
- Enhancement of hydrology in existing wetlands.

GEOGRAPHIC SERVICE AREA: The proposed Geographic Service Area for this bank includes the Cape Fear 02 River basin (Haw River basin), hydrological unit code (HUC) 03030002.

PROSPECTUS: The full prospectus is available for review at: http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram/PublicNotices.aspx

This umbrella mitigation bank may be considered one of a number of practicable alternatives available to applicants to compensate for unavoidable stream impacts associated with permits issued under the authority of Sections 404 and 401 of the Clean Water Act for projects located within the prescribed geographic service area.

Oversight of this stream mitigation bank will be by a group of federal and state agency representatives collectively referred to as the Interagency Review Team (IRT). The IRT shall be chaired by the Wilmington District, U.S. Army Corps of Engineers and is comprised of representatives from the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, N.C. Division of Water Quality, and the N.C. Wildlife Resources Commission.

The actual approval of the use of this mitigation bank for a specific project is the decision of the Corps pursuant to Section 404 of the Clean Water Act. The Corps provides no guarantee that any particular individual or general permit will be granted authorization to use this stream compensatory mitigation bank to compensate for unavoidable stream impacts associated with a proposed permit, even though mitigation from this bank may be available.

AUTHORITY: This public notice is required pursuant to 33 CFR Part 332, *Compensatory Mitigation for Losses of Aquatic Resources*.

FEDERAL EVALUATION OF PROPOSAL: The Corps is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate this proposed mitigation bank. Any comments received will be considered by the Corps in evaluating this proposal. Comments are used to assess impacts on endangered species, historic properties, conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards and flood plain values (in accordance with Executive Order 11988), land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people.

Preliminary review indicates that:

1. An environmental impact statement (EIS) will not be required.

2. There are species of fish, wildlife, or plant (or their critical habitat) listed as endangered or threatened under the Endangered Species Act of 1973 (PL 93-205) that may be affected. We will coordinate with the US Fish and Wildlife Service to determine the impacts upon the listed species within the area, specifically the smooth coneflower (*Echinacea laevigata*), Michaux's sumac (*Rhus michauxii*), and dwarf wedgemussel (*Alasmidonta heterodon*) in Orange County.

3. No cultural or historic resources considered eligible or potentially eligible for listing on the National Register of Historic Places will be affected.

Additional information may change any of these preliminary findings.

Written comments pertinent to the proposed work, as outlined above, will be received in this office, Wilmington District, Corps of Engineers, attention: Mr. John Thomas, Raleigh Regulatory Field Office, 3331 Heritage Trade Drive, Suite 105, Wake Forest, North Carolina 27587, until 5:00 p.m., September 6, 2016.