



January 22, 2015

Ms. Bonnie R. Renfro  
Randolph County EDC  
PO Box 2001  
Asheboro, North Carolina 27204

Reference: Report of Preliminary Federally Protected Threatened and Endangered Species Determination  
Liberty Mega Site  
Liberty, Randolph County, North Carolina  
ECS Project No. 09-24982

Dear Ms. Renfro:

ECS Carolinas, LLP (ECS) is pleased to submit this report documenting the preliminary federally protected threatened and endangered species determination of the approximate 1410 acre tract located between Julian Airport Road and Troy Smith Road in Liberty, Randolph County, North Carolina. This report summarizes our findings for the site.

### **Background Information**

The site is an approximate 1410 acre tract located between Julian Airport Road and Troy Smith Road in Liberty, North Carolina (Figure 1). ECS was contracted to conduct a preliminary determination of federally protected threatened and endangered species.

The majority of the site consists of wooded land and agricultural fields. Several areas of cleared land are located on the northwestern portion of the site. A utility easement runs through the center portion of the site. Residential and agricultural buildings are found throughout the site. Power lines run along the utility easement. There are a number of unimproved roads and farming trails that run through the site. Streams are located throughout the site.

### **Field Reconnaissance**

Mr. Ken Vilagos and Mr. David Valentine of ECS conducted the field reconnaissance on January 15, 2015 through January 20, 2015. The reconnaissance was performed to observe the site for federally threatened or endangered species/suitable habitat present within the boundaries of the subject site. The study was conducted by walking throughout the site, observing the site for evidence of the presence of the endangered species and their habitats as mentioned below.

The site can be divided into three (3) separate zones of potential habitat (Figure 2). The zones are listed below:

1. Roadway
2. Wooded Land
3. Cleared Land

The zone designated as "Roadway" is located along the roads trails that run along the boundary and throughout the site. The areas immediately adjoining the roads consist of grasses that lead into wooded land. This zone appears to be mowed regularly.

The zone designated as "Wooded Land" is located on a majority of the site. This area consists of a mixture of species. Portions of this zone contain heavily wooded areas. Streams are located in the wooded portion of the site.

The zone designated as "Cleared Land" is located on the northern portion of the site in breaks of wooded areas and along the rail road tracks. Several piles of debris are located in this area. This zone consists primarily of grasses and small shrubs.

**Preliminary Threatened and Endangered Species Determination**

We have reviewed the North Carolina Department of Natural Resources, Rare, Threatened & Endangered Species Inventory prepared by the Heritage Trust Program. The inventory identifies the species have been reported to the Heritage Trust Program as occurring in the state and each county. The inventory is not a complete listing of what actually exists, as no complete survey of the state has ever been done. The inventory does not include common or game species. The following federal listed species were identified in Randolph County.

Common Name	Scientific name	Federal Status
Cape Fear Shiner	<i>Notropis mekistocholas</i>	Endangered
Schweinitz's Sunflower	<i>Helianthus schweinitzii</i>	Endangered

Endangered - A taxon "in danger of extinction throughout all or a significant portion of its range."  
 Threatened - A taxon "likely to become endangered within the foreseeable future throughout all or a significant portion of its range."

**Species/Habitat Description**

**Cape Fear Shiner**

**Description:** Cape Fear Shiner is a small fish that is endemic to Cape Fear River drainage. It is a small (approximately 2 inches long), yellowish minnow with a black band along the sides of its body. The shiner's fins are yellow and somewhat pointed. It has a black upper lip, and the lower lip bears a thin black bar along its margin. .

**Habitat:** The Cape Fear Shiner is found in small rivers to medium-sized creeks near the Fall Line; areas of moderate gradient and riffles alternating with long deep pools, and substrate a mixture of sand-gravel, rubble, and boulders. It also occurs in slow pools, riffles, slow runs. Juveniles occupy slack-water, areas near rock outcrops, and flooded areas.

**Conclusion:** We did observe moderate riffles in the larger streams in close proximity to deep and slow moving pools. Therefore, based on our observations and knowledge of Cape Fear Shiner, it does appear that suitable habitat for this species is present on the site.

### **Schweinitz's Sunflower**

**Description:** Schweinitz's sunflower is a perennial plant that can grow to heights ranging between 6 and 16 feet. The stem is purple, and the upper third is branched at a 45 degree angle. The leaves are arranged in pairs on the lower portion of the stem and typically occur singly on the upper portion. The leaves grow out from the stem at a right angle, and the tips of the leaves tend to droop. The leaves are thick and stiff, with a rough upper surface. The leaves have broad spiny hairs that are directed toward the tip, and soft white hairs cover the underside. The plant produces small yellow flowers. Schweinitz's sunflower blooms from late August until frost.

**Habitat:** Schweinitz's Sunflower is typically found along roadsides, power line clearings, old pastures, woodland openings as well as other sunny to semi-sunny areas. The sunflower is generally associated with poor clayey and/or rocky soils. The sunflower is believed to have formerly occurred in prairie-like habitats or post-oak savannas maintained by fires.

**Conclusion:** Portions of the site border roadways. In addition, there are power line clearings, pastures and woodland openings. It appears that suitable habitat for this species may be present on the site. However, we did not observe this species in accessible areas of the site. The site reconnaissance was conducted outside of the flowering season.

No other federal listed threatened and endangered species were identified in Randolph County by the North Carolina Department of Natural Resources Heritage Trust Program.

### **Conclusions**

Based on our observations, it appears that suitable habitat for the Cape Fear Shiner and Schweinitz's Sunflower may be present on the site. However, we did not observe this species during our reconnaissance of accessible areas of the site. Our observations and conclusions are based on the conditions observed and the materials reviewed at the time this study was undertaken.

Therefore, it is our opinion that federally protected threatened and endangered species will not be impacted by the proposed industrial development.

*Preliminary Threatened and Endangered Species Determination  
Liberty Mega Site  
Liberty, Randolph County, North Carolina  
ECS Project No. 09-24982  
January 22 2015*

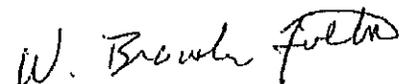
**Closing**

We appreciate the opportunity to provide our services to you. Please contact us at (704) 525-5152 if you have questions or require additional information.

Sincerely,

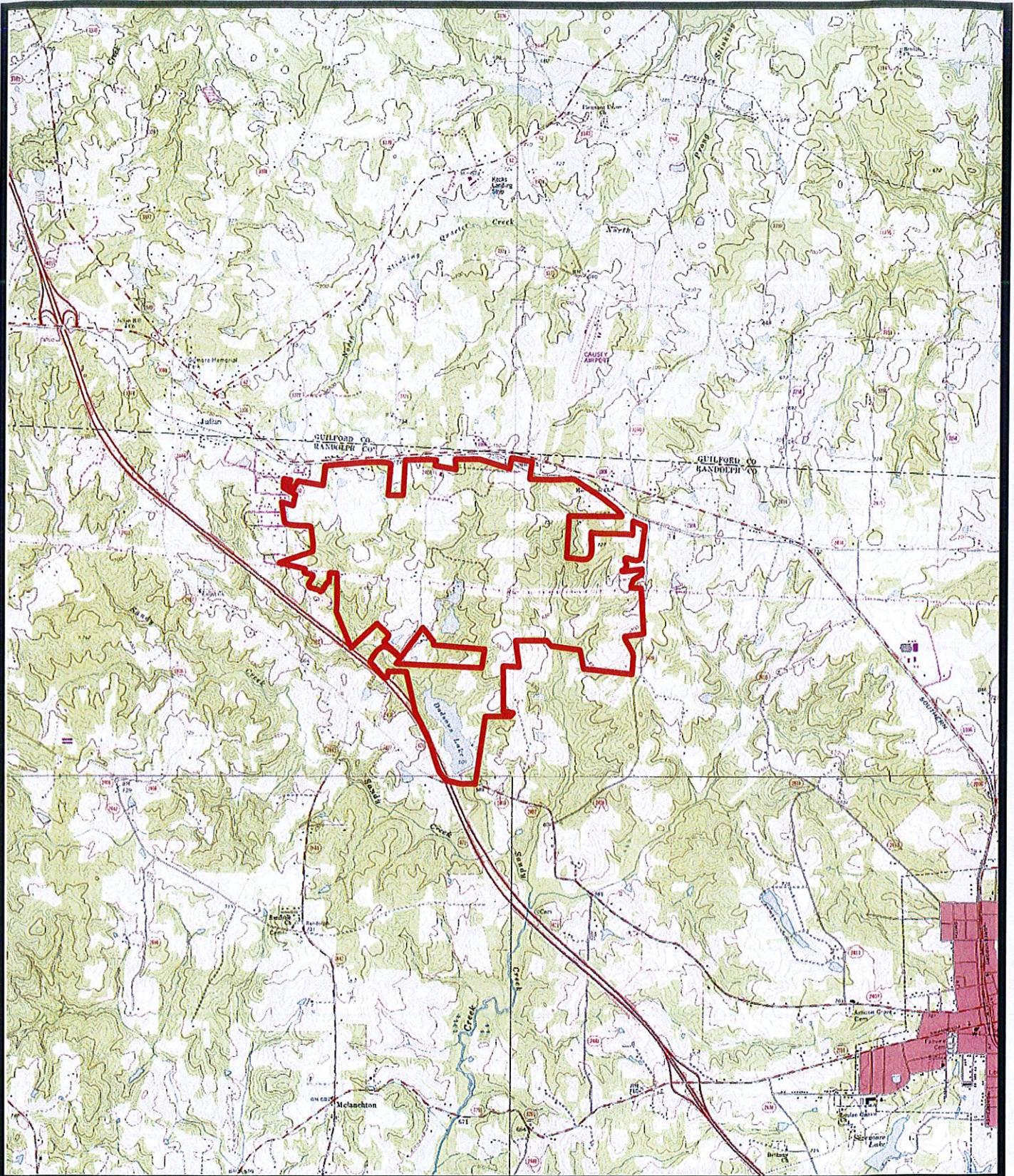
**ECS CAROLINAS, LLP**

  
Ken Vilagos  
Wetland Scientist

  
W. Brandon Fulton, PWS, LSS  
Environmental Department Manager

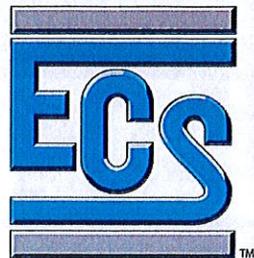
  
Brian E. Maas, REM  
Senior Environmental Principal

Attachments: Figure 1 - Site Location Map  
Figure 2 - Site Map



**SOURCE:**  
 USGS TOPOGRAPHIC MAP  
 CLIMAX, NC QUADRANGLE,  
 DATED 1970 REVISED 1982; KIMESVILLE, NC  
 QUADRANGLE DATED 1970 REVISED 1982; GREY  
 CHAPEL, NC QUADRANGLE, DATED 1974; LIBERTY,  
 NC QUADRANGLE, DATED 1974

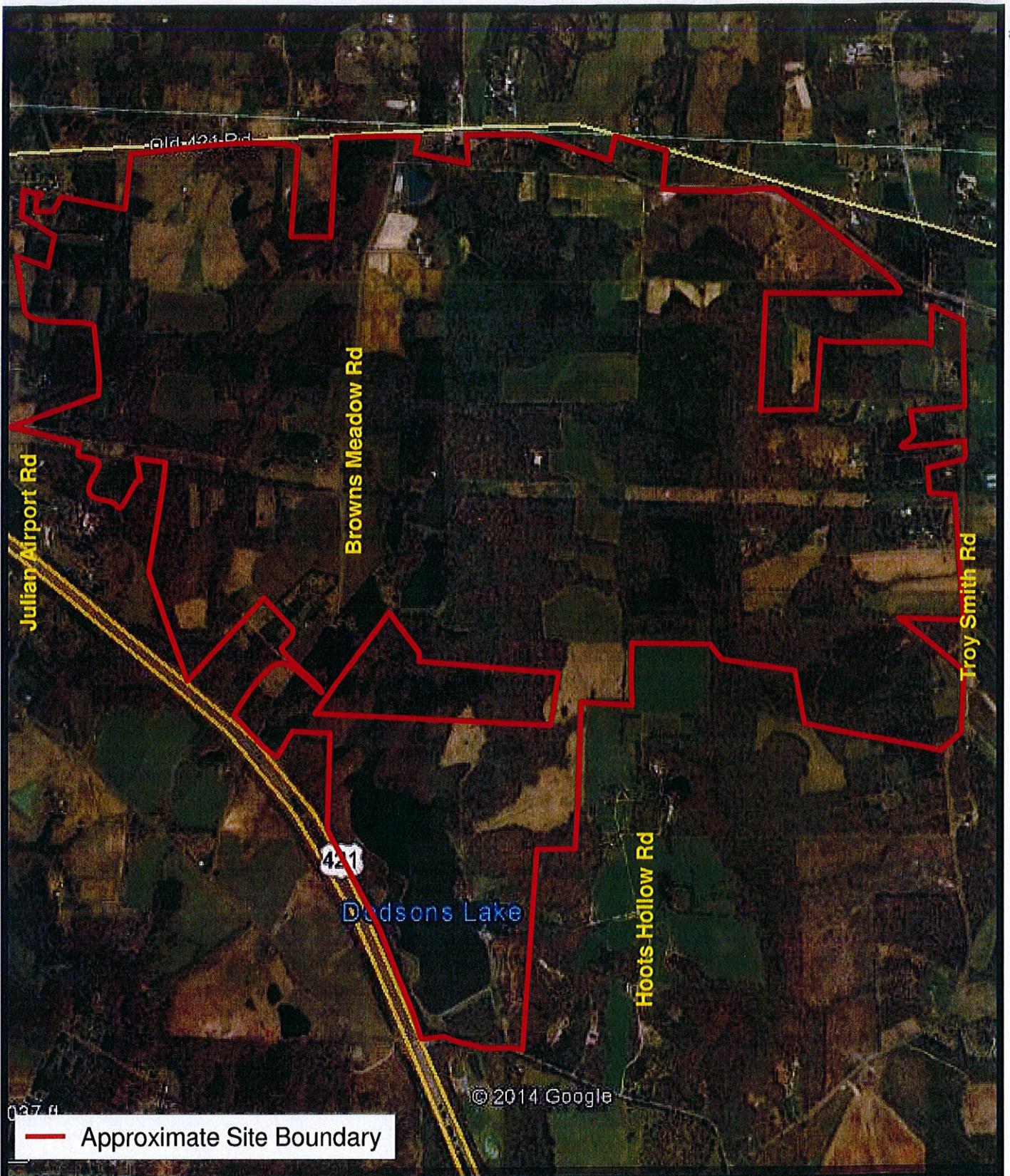
SCALE 1" = 4,000'



**FIGURE 1  
 SITE LOCATION MAP**

LIBERTY MEGA SITE  
 HIGHWAY 421  
 LIBERTY, NORTH CAROLINA

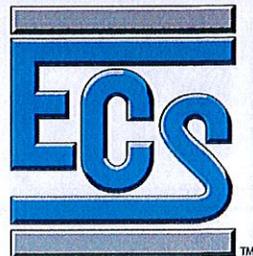
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**SOURCE:**

GOOGLE EARTH SATELLITE IMAGERY  
AERIAL PHOTOGRAPH, DATED 2014

SCALE: 1" ~ 1540'



**FIGURE 2  
AERIAL SITE MAP**

LIBERTY MEGA SITE  
HIGHWAY 421  
LIBERTY, NORTH CAROLINA  
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