

ENVIRONMENTAL SERVICES, INC.  
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05 November 2009

Mr. Ernest Kaufmann  
GreenFirst, LLC  
132 Riverstone Terrace, Suite 103  
Canton, Georgia 30114

**RE: GreenFirst / Elbert County Tract  
Preliminary Wetland and Threatened & Endangered Species Assessment  
Elberton, Elbert County, Georgia** **ESI#: ES09064.00**

Dear Mr. Kaufmann:

On September 2-3, 2009, Environmental Services, Inc., (ESI) completed a preliminary wetland/stream and threatened/endangered species assessment of the above referenced ±250-acre property located south of Athens Highway (Hwy. 72) in Elberton, Elbert County, Georgia. This assessment was performed in accordance with the *Corps of Engineers Wetlands Delineation Manual; January 1987*, 33 CFR Part 328; *Definition of Waters of the United States*. The above referenced document defines the methodologies used to identify the jurisdictional limits of Waters of the United States, including wetlands, which are regulated by the U.S. Army Corps of Engineers (CE). In general, areas that meet specified hydrology standards, contain hydrophytic vegetation and hydric soils are considered jurisdictional wetlands by the CE.

The U.S. Supreme Court issued a decision on January 9, 2001 in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers et al.* (Slip Opinion No. 99-1178) that held that the jurisdiction of the CE regulatory permitting program does not extend to isolated waters of the United States under the provision of Section 404(a) of the Clean Water Act (CWA). The subsequent judicial decisions *Rapanos et ux., et al. v. United States* (decided June 19, 2006) and *McWane, Inc. v. United States* on petition for writ of certiorari (505 F.3d 1208, 11th Cir. 2007) further defined the jurisdictional Waters of the U.S. definition and the subject parcel was also reviewed in accordance with this decision.

The CE Savannah District has adopted the North Carolina Division of Water Quality definition of a perennial stream as a “well defined channel that contains water year round during a year of normal rainfall with the aquatic bed located below the water table for most of the year” (15A NCAC 2B.0100). This definition also notes that perennial streams exhibit the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water. An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water and runoff from rainfall is a supplemental source of water for intermittent stream flow. The CE at a national level defines ephemeral streams as those that have flowing

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water only during, and for a short duration after precipitation events in a typical year. In general, ephemeral streambeds are located above the water table year round, and ground water is not a source of water for the stream. Runoff from rainfall is the primary source of water for ephemeral stream flow.

**WETLAND/STREAMS:** As depicted on the attached Figure 1, multiple stream systems, all of which are unnamed tributaries and headwater in nature, exist on the project site. The project site is considered a hill and valley system and given the location of the property boundary only the uppermost reaches of each stream system is onsite. Correspondingly, most of the identified systems are ephemeral in nature, with intermittent stream channels beginning where certain times of the year groundwater is intercepted. Only one perennial stream segment was identified on the property. No other jurisdictional Waters of the U.S., including freshwater wetlands, were identified during the course of our assessment.

ESI traversed the entire property and walked the entire reach of every ephemeral channel and stream identified on Figure 1. To ensure an accurate mapping effort of the identified stream features, ESI GPS located every point where a change in stream type or a confluence was encountered and GPS located the uppermost limit of jurisdiction, including the ephemeral channels. According to the assessment, approximately 9,650 linear feet of ephemeral channel, 2,850 linear feet of intermittent stream, and 350 linear feet of perennial stream were identified on the subject property. As previously mentioned, no areas of non-stream jurisdictional freshwater wetland were identified.

Please note, ephemeral channels are required to be shown on a wetland delineation survey, under current Savannah District CE guidelines. These channels are however not treated as stream channels during Section 404 of the Clean Water Act impact permitting that may be necessary for a given project. Ephemeral channels are mitigated for as an acreage and under the Savannah District CE Standard Operating Procedure (March 2004) methodology outlined for freshwater wetlands. Intermittent and perennial stream channel impacts, if any, will be mitigated under the guidance provided in the same aforementioned CE document, however under the stream methodology section.

**THREATENED & ENDANGERED SPECIES:** ESI reviewed the project area to ascertain whether habitats commonly utilized by federally protected species, as identified by the U.S. Fish & Wildlife Service (USFWS) and listed for Elbert County, Georgia, is present on the project area tract. The USFWS only identifies one species that is protected on a federal level that has ranges known to extend into Elbert County, which is a plant species known as Michaux's sumac. This plant prefers sandy or rocky open woods, usually on ridges with a disturbance history (periodic fire, prior agricultural use, maintained right-of-ways). While this habitat is present on the project site primarily along the existing haul road and other trail roads within the property, records show only 4 plants surviving in Elbert County which is the only known surviving population in Georgia. This species is more commonly associated with its historic ranges in North Carolina and Virginia. Considering the closed canopy nature of the vast majority of the project site (this species is shade intolerant), the limited habitat afforded by the property along the roadway margins, and the severely depressed population numbers in Georgia for this species, ESI believes that there is a low chance that any populations occur within the project area.

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If a systematic survey for this species is desired or becomes necessary as part of any federal permitting process, this plant can be surveyed for anytime during primary survey window of May-October, as defined by the USFWS.

Should you have any questions concerning this report or wish to discuss further investigation into the subject property, please do not hesitate to contact ESI at (912) 236-4711.

Sincerely,

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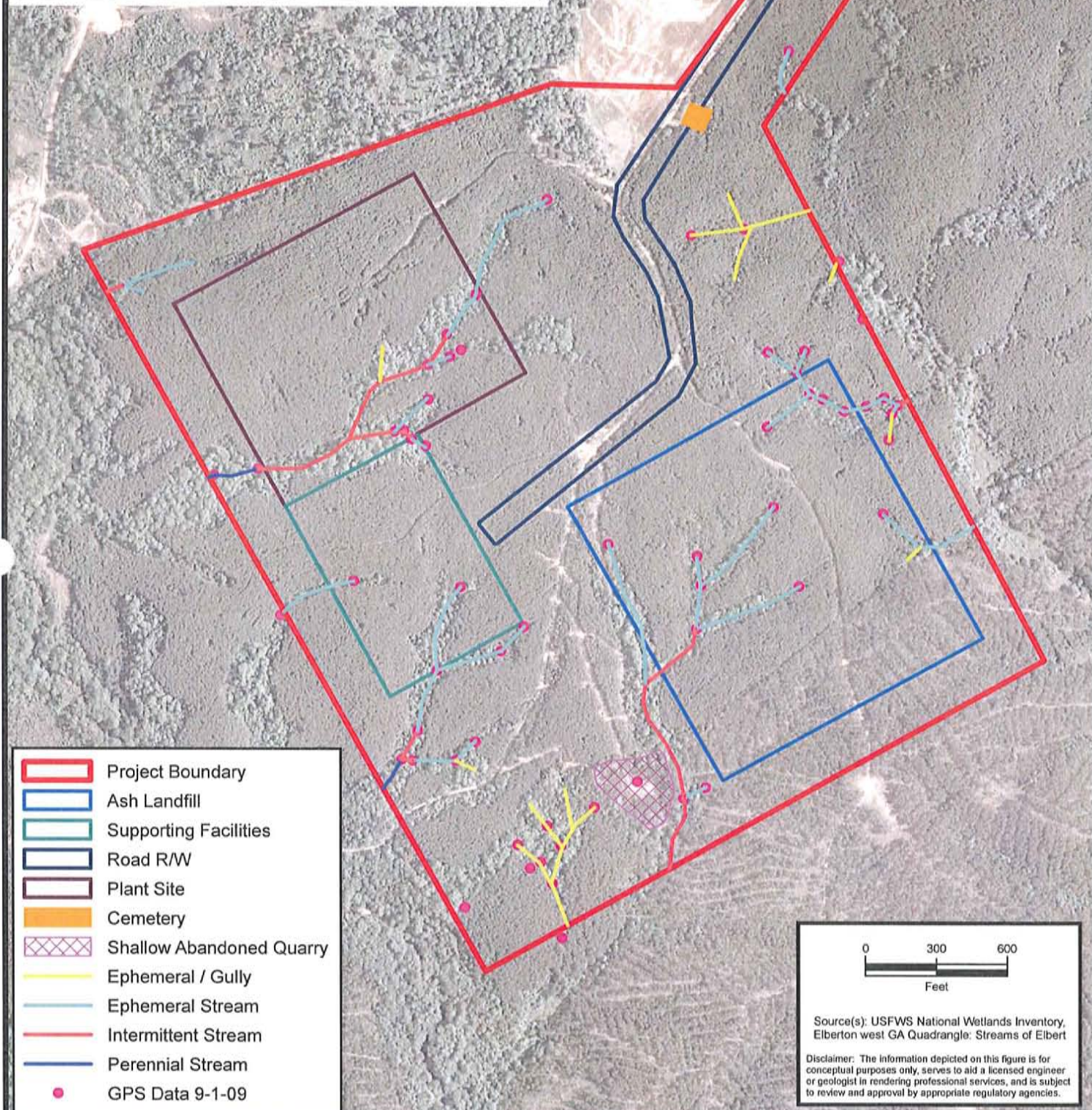


Brandon F. Smith  
Senior Project Manager

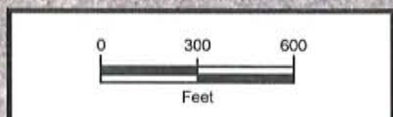
BS  
ES09064.00/ElbertPrelimLtr\_110209.doc  
(Nov. 2009)

xc: Mr. Bill Hodges, HHNT  
Mr. Gary Howalt, ESI Corporate

Stream Type	Length (ft)	
	Total	Impacted
Ephemeral / Gully	2608.6	218.2
Ephemeral Stream	7046.2	3587.3
Intermittent Stream	2839.5	1574.2
Perennial Stream	358.8	0.0
<b>Total</b>	<b>12853.1</b>	<b>5379.7</b>



- Project Boundary
- Ash Landfill
- Supporting Facilities
- Road R/W
- Plant Site
- Cemetery
- Shallow Abandoned Quarry
- Ephemeral / Gully
- Ephemeral Stream
- Intermittent Stream
- Perennial Stream
- GPS Data 9-1-09



Source(s): USFWS National Wetlands Inventory, Elberton west GA Quadrangle: Streams of Elbert

Disclaimer: The information depicted on this figure is for conceptual purposes only, serves to aid a licensed engineer or geologist in rendering professional services, and is subject to review and approval by appropriate regulatory agencies.

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Approximate Preliminary Stream & Wetland Sketch  
**Elbert Co. Tract, Preliminary Wetland and T&E Assessment**  
 Elbert County, Georgia

Project:	ES09064.00
Date:	Sept. 2009
Drwn/Chkd:	TS/BS
Figure:	1