Bochicchio, Juliet - RD, Washington, DC

From: Bechdol, Michael <bechdol.michael@epa.gov>

Sent: Tuesday, May 20, 2014 3:00 PM

To: Bochicchio, Juliet - RD, Washington, DC

Subject: FW: Port of Alexandria, Rapides Parish, LA > Chicot Aquifer SSA > USDA Request **Attachments:** USEPA SSA Site Summary.pdf; USACENPRLtr.pdf; Revision14-05-05_epa exhibit-usepa

exb 1.pdf

Here it is.

Michael Bechdol US EPA Region 6 (6WQ-SG) 1445 Ross Avenue Dallas, TX 75202 214-665-7133

----Original Message----

From: Trimble, Paul [mailto:Paul.Trimble@MMLH.com]

Sent: Thursday, May 15, 2014 3:02 PM

To: Bechdol, Michael

Subject: Port of Alexandria, Rapides Parish, LA > Chicot Aquifer SSA > USDA Request

Good afternoon Mr. Bechdol;

The Port of Alexandria has leased property to Cool Planet Energy Systems for construction of a bio-fuels, green energy refinery, situated on the river side of the Red River Levee. Cool Planet is seeking a USDA Business & Industry Loan for construction of the refinery and has been advised by USDA of the requirement to gain evaluation of the potential impact to the Chicot SSA. The site naturally drains directly to the Red River and due to the proximity to the flood control levee system, all aspects of the project are subject to review by the USACE under Section 408.

Attached is a summary of the site use, acreages, basic tank primary and secondary containment design requirements and storm water retention and waste water treatment and disposal areas. The exhibit graphically locates the various areas and provides the latitude and longitude for the site. The USACE letter indicating No Permit Required due to the absence of wetland and jurisdictional areas is the third attachment.

Should you require any additional information, please advise our office.

Port of Alexandria - Cool Planet Lease %Paul Trimble, PE, Engineer of Record 100 Engineer Place Alexandria, LA 71303 (318) 448-0888



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS TX 75202-2733

June 11, 2014

Port of Alexandria – Cool Planet Lease c/o Mr. Paul Trimble, PE 100 Engineer Place Alexandria, LA 71303

Dear Mr. Trimble:

We have received your May 15, 2014, email requesting our evaluation of the potential environmental impacts that might result from the following project:

Construct Bio-Fuels Refinery & Process Facility 28 Acre Tract, Section 5, T4N-R1W Rapides Parish Port of Alexandria, Louisiana

The project, proposed for financial assistance with a United States Department of Agriculture Business and Industry Loan, is located on the Chicot aquifer system, which has been, designated a sole source aquifer by the EPA. Based on the information provided for the project, we have determined that the project, as proposed, should not have an adverse effect on the quality of the ground water underlying the project site.

This approval of the proposed projects does not relieve the applicant from adhering to other State and Federal requirements, which may apply. This approval is based solely upon the potential impact to the quality of ground water as it relates to the EPA's authority pursuant to Section 1424(e) of the Safe Drinking Water Act.

If you did not include the parish, project description, project location or the federal funding agency, please do so in future Sole Source Aquifer correspondence.

If you have any questions on this letter or the sole source aquifer program please contact me at (214) 665-7133.

Sincerely yours,

Michael Bechdol, Coordinator Sole Source Aquifer Program Ground Water/UIC Section

ce: Juliet Bochicchio, USDA Jesse Means, LDEQ

Port of Alexandria, Rapides Parish, Louisiana

Alexandria Regional Port Authority Cool Planet Genesis Bio-fuels Refinery USDA – B&I Program, Financing

The Port of Alexandria has leased approximately 28 acres of batture within the port on the Red River to Cool Planet Energy Systems for its Cool Planet Genesis facility. The USACE has issued a letter of No Permit Required (attached) for the site which lies riverside of the Red River Levee. Exhibit 1 (attached) delineates the four primary areas and uses of the leased property, as further described hereafter.

Area 1: Access, access control and gated entry, operations facility and warehouse, truck scales and fire protection facility including a ground storage water tank and fire pump house.

Storm water runoff from Area 1 will be collected in a storm water retention pond (Area 1-1) for sampling prior to controlled discharge.

Area 2: Bio-fuels refinery and process facility.

Process liquids and product will be contained in double bottom tanks, with leak detection, in two areas (Areas 2-1 and 2-2) within Area 2. Each tank location will be protected and provided secondary containment by concrete lined and sealed dikes with discharge control valves and piping. Discharge piping to the industrial wastewater treatment facility and/or industrial storm water retention system (Area 2-3). Normal discharge will be directed to the industrial storm water retention system for sampling prior to controlled discharge or by-passed to the treatment facility.

Industrial wastewater will be treated in accordance with the City of Alexandria's pre-treatment requirements prior to transmission to the City's waste water collection system and treatment facility.

Area 3: Bio-mass, wood chip delivery, storage and handling area.

Storm water runoff from Area 3 will be screened and piped to the storm water retention pond located in Area 4.

Area 4: Facility flare area.

Area 4 contains the storm water retention pond (Area 4-1) for Areas 3 and 4. There is limited allowable use of the flare area for other purposes.

The perimeter roadway will effectively control off-site or upland storm water runoff, directing the runoff along the perimeter of the facility to natural discharge locations to the river. The roadway will also direct on-site run-off to the storm water drainage systems and retention ponds.

March 21, 2014

Jeff Weller, Field Supervisor USFWS 646 Cajundome Boulevard, Suite 400 Lafayette, LA 70506

Re: Cool Planet Louisiana, LLC – Port Authority of Alexandria – 27 acre conversion facility

Dear Mr. Weller,

The U.S. Department of Agriculture Rural Business-Cooperative Service (RBS) requests a letter of concurrence from the USFWS with respect to our determination of "may affect/not likely to affect" for the Endangered Interior Least Tern and the Red-cockaded Woodpecker and a "no effect" determination for the Endangered Pallid Sturgeon, for the proposed Cool Planet woody biomass to renewable fuels conversion facility proposed in Rapides Parish, LA. This request is made under the requirements of Section7 of the Endangered Species Act.

RBS is in the process of preparing an Environmental Assessment (EA) on the proposal in accordance with the National Environmental Policy Act. The EA includes an analysis of potential impacts to threatened and endangered species on the site and affected area.

Project Description

RBS proposes to issue a guaranteed loan to Silicon Valley Bank for Cool Planet Louisiana, LLC to construct and operate a woody biomass conversion facility in Alexandria, LA. Cool Planet plans to produce 10 million gallons per year of non-ethanol, drop-in renewable fuel blendstocks for gasoline, jet and diesel, as well as biochar and ash, from the conversion of pine wood chips sourced within Louisiana. This proposal would impart overall environmental benefits related to its reduction in greenhouse gas emissions from a reduction in the burning of fossil fuels.

The proposal is to be located within a leased portion of the existing Alexandria Regional Port Authority, an existing industrial park, located at 600 Port Road, Alexandria, LA 71303, and would include the construction and operation of the facility and related infrastructure on 27 acres within the Port (**Attachments 1 and 2 – Vicinity Maps**). Construction and operation, including

United States Department of Agriculture, Rural Development

1400 Independence Avenue, SW Stop 0761, Room 6900 Washington DC, 20250 Voice (202) 720-9619 Fax (202) 690-4335

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Environmental Assessment

Alexandria Port Authority

L.E.D. Cerification

37.2 Acre Site

Alexandria, Louisiana

Prepared for:

Alexandria Port Authority

PREPARED BY:



September 27, 2013

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TABLES

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FIGURES

Figure 1. Project Location Map

Figure 2. United States Department of Agriculture Aerial Photograph, 2010

Figure 3. Aerial Photograph, Army Corps of Engineers jurisdiction map

Figure 4. LiDAR Elevation Map

Figure 5. DEM Map

Attachment 1: LDWF Data Base Search Letter

Attachment 2: CE Routine Wetland Data Sheets

Attachment 3: Site Photos

1. INTRODUCTION

This report presents the findings of an Environmental Assessment (EA) conducted on behalf of the Alexandria Port Authority. Bosso-Imhof Environmental Sciences, Inc. (Bosso-Imhof) has prepared this EA in conformance with US Army Corps of Engineers (CE), Federal Fish and Wildlife (FWS) and Louisiana Department of Wildlife and Fisheries (LDWF) standards, practices and procedures as outlined in the most current guidelines. Alexandria Port Authority is seeking certification in the Louisiana Economic Development (LED) program for a 37.2 acre tract of land adjacent to and contiguous to surrounding property which they currently own. Overall, the Port Authority holds title to approximately 150 acres of which the subject 37.2 acres is a subset.

It is anticipated that development expansion of the 37.2 acres will be used for industrial, interstate and intrastate commerce. The findings in this report satisfy the requisite LED certification guidelines as listed under section L of the LED application.

1.1 Objectives

The specific objectives are to of this EA are:

- Conduct jurisdictional determinations in accordance with CE Section 404 guidelines
- Field delineate jurisdictional waters and wetlands
- GPS locate jurisdictional areas and prepare representative graphics
- Conduct field review of The Site for the presence of listed species
- List federal and state threatened and endangered (TE) plant and animal species with known records of occurrence in the project vicinity
- Identify their habitat requirements and describe the distributions and habitat use of TE species presently occurring in the project vicinity

1.2 Study Area

The study area, herein known as "the Site", consists of 37.2 acres of Alexandria Port Authority land as displayed in the figures of this report. The Site lies in north central Rapides Parish and within the city limits of Alexandria. It is positioned in Sections 11 and 12, Township 4-North, Range 1-West with a central location near 92°28'13.484"W longitude and 31°20'6.958"N latitude (NAD 1983 UTM Zone 15N). The Site is bound to the north by the Red River, to the east by Diamond B Construction Company, to the west by the port and to the south by the flood control levee. It is irregularly shaped, but the Site boundaries are clearly discernible in the field. Boundary fencing secures the landward extents of the entire Port Authority's property with the exception of the riverfront. Access is gained via River Port Road and an existing gated drive into the Port facility.

The Site is characterized by two distinct settings: maintained pasture and natural woodlands. Both of these land types are clearly evident in the recent aerial photographs as displayed in Figures 2 & 3. Between 1982 and 1994, the CE completed a major channelization and flood prevention project on the Red River. This project not only shortened the flow distance between the Mississippi River and Shreveport, LA, but established a minimum channel width and depth throughout this reach. During the project, dredged river material was spoiled on adjacent properties including the Site. The fill material consisted of fine river sand that raised the elevation of a large portion of the Site by as much as 10 feet. Although the sandy substrate is very permeable, the finished surface layer was equipped with shallow swales for directing storm water runoff toward the wooded portion of the Site. A final grade which ranges between 94 and 96 feet extends across the entire southern section of the Site. The sandy surface layer is protected with a dense cover of upland turf grasses such as Bahia grass and Bermuda grass. Drought tolerant herbs such as Poor Joe weed, Ragweed and Broomsedge cover inclusions of nutrient poor sands within the turf. These are identified on the aerial photography by patches of white sand. Routine mowing of this area has provided a competitive advantage for the turf and in turn has maintained erosional stability of the sandy soil.

The remainder of the Site, consisting of the wooded area located between the maintained pasture and the river is also anthropogenically disturbed. It is comprised of early successional upland and wetland hardwoods underlain by a dense cover of vines, briars and canes. Large breaks in the tree canopy which can be identified on the aerial photograph in Figures 2 & 3 as a fuzzy green texture, consists of solid, 5 foot deep layers of Poison ivy and Woodbine in the field. Many of the hardwoods are naturally recruited from a ground banked seed source or natural seed dispersal. Vegetative transitions are abrupt at the wetland and upland interface and generally correspond to the topographic gradients produced by the side cast spoil material. A deeply cut ditch that discharges storm water to the river bisects the wooded portion of the site and provides drainage to the entire Site. The ditch is indicative of the long narrow linear connection between the river and wetland. All of the shallow upland swales in the pasture are channeled to this ditch as well as overflow water in the adjacent wetland.

2. STUDY METHODS

Listed species and their habitats which are known to occur in Rapides Parish (Table 1.) and which are protected under Louisiana Title 56 and the United States Endangered Species Act (ESA) of 1973 (7 U.S.C. §1531 et seq.) were carefully investigated. Although species with a recorded occurrence in Rapides Parish were given special attention, all listed species were considered during the site reconnaissance. Threatened species represent plants and animals that are likely to become endangered within the foreseeable future throughout all

of or a significant portion of their range. Endangered species are considered those plants and animals that have become so rare that they are in danger of becoming extinct.

Jurisdictional wetlands and other waters determinations were conducted in accordance with the Regional Supplement to the *Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (Version 2.0). Jurisdictional areas were field delineated with survey flagging tape. Each flagged point was alpha-numerically labeled and subsequently located using a handheld, Trimble GEO XT GPS unit. Data collected during the field survey were imported into a GIS for the generation of report graphics. Routine CE wetland data sheets that establish an analytical basis for the upland and wetland determination were completed in the field and finalized in *Wetforms*® digital format are provided in attachment 2. Representative site photographs which depict the visual conditions at the time of the site survey are displayed in Attachment 3.

2.1 Review of Existing Information

Species were investigated according to the study approaches recommended by state and federal agencies and the latest, most up to date literature. Tabular listings of TE species with known records of occurrence in the study area were reviewed in the following government databases:

- Louisiana Natural Heritage Program
- Louisiana Department of Wildlife and Fisheries
- Louisiana Department of Natural Resources SONRIS
- Nature Serve Explorer
- US Fish and Wildlife (FWS)
- Untied States Department of Agriculture (USDA) Natural Conservation Resources Conservation Service: Plants Database
- USGS National Wetland Inventory

Other key sources of information and data used in performing this study included but were not limited to the following:

- LSU Atlas: The Louisiana Statewide GIS database
- USDA historic aerials
- USDA Natural Resource Conservation Service Soil data
- US Geographical Survey (USGS) topographic quadrangles
- USDA National Elevation Data, 2 meter or better
- Digital Elevation Models
- Historic Aerials
- Noni Map View

2.2 <u>Listed Species Field Reconnaissance Survey</u>

This report provides specific information within the project area, its natural communities, and its capacity to support listed species known to occur in Rapides Parish. Field reconnaissance review was conducted during the month of August 2013. Pedestrian transects at varying intervals according to species type and habitat makeup were utilized to adequately cover the project area. Data collected during the field reconnaissance phase of the study was documented using a handheld Trimble XT, 2008 series, sub-meter accurate GPS unit. These data were compiled and expressed in the report graphics.

Field notes were recorded and digital photographs of the general nature of the Site along with any observed species were captured. A series of color, black & white and infrared aerial photographs and raster data ranging from 1985 to 2012 were carefully studied prior to field survey. USGS topographic quadrangles were also utilized to identify representative elevation conditions and land use improvements in the general vicinity. Remote sensing techniques were employed to evaluate potential habitats or vegetative community types that would be indicative of adequate or sustaining habitat for listed species. Identifying occurrences of TE aquatic species considered data base queries of previously recorded terrestrial and aquatic surveys by the FWS and other sources.

3. PROTECTED SPECIES

Coordination with LDWF staff regarding a query of the state data base relative to known occurrences of listed species or species of special concern in Rapides Parish resulted in nine species being identified. These include three birds, two fish, two reptiles, one amphibian and one clam.

3.1 Plant Species

The issue of listed plants is treated slightly differently than animals with prime interest being afforded to federally listed species. Under this heading, however, no plants are listed by either the state or federal governments for protection at this time.

3.2 Aquatic Species

Louisiana Pearshell (*Margaritifera hembeli***)** – Listed as Endangered by the State and Threatened by FWS, this freshwater mussel is oblong with moderately full beaks without obvious sculpture. The adults are approximately 4.0" long, 2" high and 1.2" wide. The species is typically associated with small sandy streams within mixed pine hardwood forests. Habitat which supports this species is not present on site or proximal to the site. Development activities on the site will "Not Affect" the Louisiana Pearlshell.

Southeastern Blue Sucker (*Cycleptus meridionalis*) – Not listed by the State or FWS, the Southeastern blue sucker is a large elongate benthic fish that reaches a maximum length of approximately 24 inches. This species is gray on the top and sides and has a white underside. The Southeastern blue sucker has heavy lips and feeds on insect larva and nematodes. This species prefers moderate currents in medium to large rivers. The Southeastern blue sucker typically returns to the same area for breeding. The major threats to this species include damming, dredging and discharges that reduce water quality. This species is typically found east of the Mississippi River, and is not known to occur in Rapides Parish. Development activities on the site will "Not Affect" the Southeastern Blue Sucker.

Bluehead Shiner (*Pteronotropis hubbsi*) – Not listed by the State or FWS, the Bluehead shiner is a small fish that reaches a maximum length of about 2.5 inches and has a large dorsal fin. A dark lateral stripe crosses the chin and extends to the caudal base. The stripe at the caudal base is wider and extends a short distance onto the caudal rays. This species is typically found in quiet, slow moving, tea colored waters that are heavily vegetated so they can hide for protection. The typical substrate ranges from mud and detritus to mixed mud and sand. The major threats to this species include water quality degradation and dams preventing migration patterns. Aquatic habitat requirements are not provided by the Site for this species. Terrestrial activities on the Site will "Not Affect" the Bluehead Shiner.

3.3 Wildlife Species

3.3.1 Federally Protected Species

Interior least tern (*Sterna antillarum*) – Listed as endangered by both the LDWF and FWS, this species of bird is approximately 9" long with a yellow bill, a black cap through the eyes, a pale gray back and wings and a white breast and underside. The least tern nests from late April to August along marine and estuarine shores or on sandbar islands in large rivers. Ideally this species nests in sand or gravel areas with little to no vegetation. The major threats to this species are dams and reservoirs, which have caused the flooding of the sandbars where this species nests, and nest disturbances from recreational activities causing Interior least terns to abandon their nests. The closest sandbar which may provide nesting habitat for this species occurs over 3.5 miles upriver. Suitable nesting habitat is not provided by the site. Development activities on the site will "Not Affect" the Interior Least Tern.

Red-cockaded woodpecker (*Picoides borealis*) – Listed as endangered by both State and USFWS, this species is a relatively small woodpecker with prominent white bars. The crown, nape and back of the neck are black and there is a black line from the bill down to the side of the neck. The cheeks, side of the neck and throat are white and there is a white eyebrow line. The tail is black with white on the outer features and the underside is white

with black streaks on the flanks. The males have an inconspicuous red mark on each side of the crown. This species is found in longleaf pine forests and in mixed pine-upland hardwood forest with little or no hardwood mid-story. Good habitat consists of pine stands with trees 22.9 cm and larger in diameter at breast height. Pine stands with or without out adequate management do not occur near the site. Therefore habitat is not present on the Site and development activities will "Not Affect" the Red-Cockaded woodpecker.

3.3.2 State Protected Species

Bald Eagle (Haliaeetus leucocephalus)

The Bald eagle (Haliaeetus leucocephalus) is protected only by the state since the FWS delisted this species from the Endangered Species Act in 2007. The Bald eagle is, however, afforded protection under the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act and the Lacey Act. Due to a lack of habitat and exceedingly low potential for habitat development, development actions will "Not Affect" the Bald eagle. Tree species old, and tall enough to support an eagle's nest do not occur on or nearby the Site. Additionally, review of the project area did not reveal any signs of active or inactive nesting sites.

Alligator Snapping Turtle (*Macroclemys temminkii*) – Listed only by the State as Restricted Harvest, this turtle has webbed toes, an upper jaw with a strongly hooked beak and eyes on the side of the head. There are three dark brown peaked heels on the carapace and five pairs of plastral scutes. The plastron is small, narrow and cross-shaped with a long narrow bridge. This species is typically found in freshwater lakes and bayous, but can also be found in coastal marshes. The Site does not provide habitat to support this species. Development activities on the Site will "Not Affect" the Alligator snapping turtle.

Louisiana Pine Snake (*Pituophis ruthveni*) – A candidate for listing by the FWS and not listed by the State, this snake is pale tan with a row of large black or brown blotches down the back and a smaller series on either side. The underside is whitish with obscure brown spotting. The tip of the snout is pointed and the snake's scales are keeled and in 27 to 33 rows. This species is typical of sandy, well drained soils, often associated with open pine forests and xeric sandhills with a well developed grassy understory. Although not protected by either state or federal law at this time, suitable habitat does not exist on Site to support this species. Development activities on the site will "Not Affect" the Louisiana pine snake.

Southern Redback Salamander (*Plethodon serratus***)** – Listed only by the State as prohibited from possession or harvest, the Southern redback salamander is thin and dark with a reddish, orange, saw-toothed stripe along its top. The underside and the lower sides consist of light and gray mottling. This species is typically found in wet forests near rocks,

limbs, logs and leaves which it uses to hide from predators. Necessary habitat for this species is not present on the Site. No evidence of nesting, foraging or individual species was documented during the site review. Development activities on the site will "Not Affect" the Southern redback salamander.

4. JURISDICTIONAL WETLANDS AND OTHER WATERS

4.1 US Army Corps of Engineers

Technical guidelines outlined in the US Army Corps of Engineers Wetlands Delineation Manual (1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0) were applied in the field for determining the presence and location of jurisdictional wetlands and waters on and near the Site.

Section 404 of the Clean Water Act (33 USC 1344) requires authorization from the Secretary of the Army, acting through the Corps of Engineers, for the discharge of dredged or fill material into all waters of the United States, including wetlands. Discharges of fill material generally include, without limitation: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; dams and dikes; artificial islands; property protection or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments; beach nourishment; levees; fill for intake and outfall pipes and subaqueous utility lines; fill associated with the creation of ponds; and any other work involving the discharge of fill or dredged material. A CE is required whether the work is permanent or temporary.

The basic premise of the dredge and fill program is to ensure that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment or (2) the nation's waters would be significantly degraded. What this implies is a Section 404 permit application must reflect that to the extent practicable, the following below sequential review has been met:

- 1. Reasonably avoided all wetland impacts
- 2. Minimized potential impacts on wetlands and
- 3. Provide compensation for any remaining unavoidable impacts

4.2 Jurisdictional Summary

Jurisdictional evaluation of the entire Site revealed a regulated forested wetland with a significant nexus to a Relatively Permanent Water (Red River). The jurisdictional area consists of approximately 3.2 acres of disturbed, low quality wetlands that are densely

overgrown by invasive exotic species. Soils underlying this system, albeit disturbed, maintain hydric soil conditions through a long hydro period that extends into the dry season. A dark matrix with a Munsell chroma of less than 2 and numerous concentrations of redox formations on living pore linings was clearly evident. Relic redox concentrations were present throughout the matrix and dismissed, however, significant contemporary diffuse redox boundaries were present near the surface with and without living root channels.

Jurisdictional analysis of the maintained pasture specifically targeted several "wet" signatures on available historic aerials. Due to the nature and thickness of the fine sandy fill material above the pre-existing natural grade, hydric soil genesis cannot occur nor could it be maintained. Upon further examination of the "wet" signatures, a clear dominance of upland plant species occurs. The contrasting mottling that signifies a change in the pasture is not due to moisture but from nutrient poor soils that have stressed the Bermuda turf and have, in response to those xeric conditions, turned a shade of brown. This is further supported by Bermuda and Bahia exhibiting vigorous growth in the upland swales. The swales are underlain by the same sandy material; however, they have a slightly longer hydro-period and concentrate fine materials and nutrients from overland flow. As the jurisdictional map illustrates in Figure 3, uplands extend beyond the maintained pasture and into the forested portion of the Site. Jurisdictional criteria coincide with a fairly consistent elevation near the toe of the slope. This steep slope of the spoiled dredge sand can be identified on the topographic map in Figure 4. A digital elevation model (DEM) in Figure 5 uses shading to represent similar elevation levels for visual comparison. Due to the disturbed nature of the entire site, review of NRCS soils data did not provide an in situ representation of the current soil conditions. Therefore, this data was only used to understand the pre-existing soil conditions prior to the placement of the dredged material.

5. SUMMARY AND CONCLUSIONS

Extensive review and survey reconnaissance of the Site revealed that it is unsuitable for any State or Federal listed animal species. The disturbed nature and habitat makeup of the Site and the project area are not conducive for listed species nesting habitat. Development activities occurring on the 37.2 acres will "Not Affect" any species currently listed as threatened or endangered. The overall developed nature of the project area and the Site's disturbed nature are not conducive to supporting listed plant and animal species. Of the state and federally listed animal species, no occurrences are documented for the project Site. Although their future absence from the site cannot be guaranteed, the likelihood is exceedingly low.

A jurisdictional feature meeting Section 404 wetland criteria was identified and delineated in the north end of the Site. It occupies approximately 3.2 acres and is located adjacent to the river. Dredge or fill activities waterward of the jurisdictional limits will require CE permitting review prior to conducting such activities.

Based on the information gathered during the performance of the this Environmental Assessment, it is my best professional opinion that the Alexandria Port Authority's expansion plans for this 37.2 acre Site will neither affect state or federally listed species nor provide negative consequences to the environment.

Prepared by:

Patrick Imhof

Environmental Scientist

Patrick J. Imlig

September 27, 2013

Date

6. REFERENCES

Field Guide to the Rare Plants of Florida by Linda G. Chafin, Botanist with Jean C. Putnam Hancock, Botanical Illustrator and Gil Nelson, Ph.D., Graphic Designer and Chief Photographer

FWS Integrated Wildlife Habitat Ranking System 2009

FWS Critical Habitat Mapper, Louisiana Data layer

Godfrey Robert K. Aquatic and wetland plants of southeastern United States: Dicotyledons University of Georgia Press, Athens, GA 30602 1981

Godfrey Robert K. Aquatic and wetland plants of southeastern United States: Monocotyledons University of Georgia Press, Athens, GA 30602 1979

Louisiana Department of Wildlife and Fisheries, Natural Heritage Program

Nature Serve Website

U.S. Department of Agriculture aerial photographs

U.S. Department of Agriculture, Natural Resource Conservation Services: Soil Survey of Rapides Parish, 1981

U.S. Geological Survey, Alexandria Topographical Quadrangle. Revised 1983.

FIGURES

This page contains proprietary information that Cool Planet Energy Systems requests not to be released to persons outside the Government, except for purposes for review and evaluation, under obligation of confidentiality. (E) The Edgewood _Ball LOCATION MAP FIGURE 1 BOSSO
IMHOF
Sovenment Steets no
1300 West Government Silveet
Pensacola, Fl. 32503 (850) 434-1755 (ૹ) ALEXANDRIA PORT AUTHORITY L.E.D. CERTIFICATION 37.2 ACRE TRACT ALEXANDRIA, LOUISIANA

ATTACHMENT 1:

LDWF Data Base Search Report

BOBBY JINDAL GOVERNOR

State of Houisiana DEPARTMENT OF WILDLIFE AND FISHERIES OFFICE OF WILDLIFE

ROBERT J. BARHAM SECRETARY JIMMY L. ANTHONY ASSISTANT SECRETARY

Date

September 6, 2013

Name

Michael Rogers

Company

Bosso-Imhof Environmental Sciences

Street Address

1300 West Government St.

City, State, Zip

Pensacola, FL 32502

Project

Threatened and Endangered Species Review for a Port Expansion on the Red River

Project ID

0

Invoice Number

13090601

Personnel of the Habitat Section of the Coastal & Nongame Resources Division have reviewed the preliminary data for the captioned project.

Our records indicate blue sucker (Cycleptus meridionalis) occurs within waterbodies of the proposed project area. This species has an S3 state rank and is considered rare in Louisiana. Blue sucker is usually found in channels and flowing pools with moderate currents of 1.0-2.6 m/sec. This species may also be found in some impoundments. Cited causes of decline include depletion of surface water, poor water quality stemming from sewage effluent and agricultural runoff, interruption of migrations by dams, and stranding in irrigation canals. If you have any questions, please contact Beau Gregory at 337-491-2576.

Our records indicate bluehead shiner (Pteronotropis hubbsi) also occurs within waterbodies of the proposed project area. This species has an S2 state rank and is considered imperiled in Louisiana. Bluehead shiner is usually found in small to medium-sized pools, slow moving streams and oxbow lakes with mud bottoms. Threats to this species include draining, filling, farming or flooding of backwater swamp habitat. If you have any questions, please contact Beau Gregory at 337-491-2576.

The LNHP database indicates the presence of Interior Least Tern in the project vicinity. The Interior Least Tern is listed as federally endangered under the Endangered Species Act and is listed as critically imperiled in the state of Louisiana with an S1B rank. Interior Least Tern breed along the northern Mississippi River and along the Red River with nesting beginning in late April and ending in August. Critical habitat includes dry, exposed sandbars and favorable river flow that support forage fish supply. The Interior Least Tern decline has been primarily due to extensive water management projects and increased use of beaches and sandbars. Work activities should occur outside of the breeding season and should minimize the impacts on Interior Least Tern habitat. Contact Brigette Firmin with the US Fish and Wildlife Service at 337-291-3108 to coordinate activities.

After careful review of our database, no other impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-

This page contains proprietary information that Cool Planet Energy Systems requests not to be released to persons outside the Government site surveys required for carminoptal assessments of MHD information of the highlighten that the project area, please source of all data provided here. If at any time Heritage tracked species are encountered within the project area, please contact the LNHP Data Manager at 225-765-2643. If you have any questions, or need additional information, please call 225-765-2357.

Sincerely,

Amity Bass, Coordinator Natural Heritage Program

ATTACHMENT 2:

CE Routine Wetland Data Sheets

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Alexandria Port	City/County: Rapides Sampling Date: 13-Auq-13
Applicant/Owner: Alexandria Port Authority	State: LA Sampling Point: 1
	(2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)222224 (2)2224 (2)2224 (2
Investigator(s): Pat Ilmhof	Section, Township, Range: S 12 T 4N R 1W
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, convex, none): flat Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR O Lat.:	31 20' 04.11" Long.: 92 28' 18.74" Datum: WGS 84
oil Map Unit Name: Roxana very fine sandy loam, occasionally floode	
Are climatic/hydrologic conditions on the site typical for this time of ye	
Are Vegetation , Soil , or Hydrology significan	ntly disturbed? Are "Normal Circumstances" present? Yes No No
	problematic? (If needed, explain any answers in Remarks.)
	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No •	Is the Sampled Area
Hydric Soil Present? Yes ○ No •	within a Wetland? Yes ○ No ●
Wetland Hydrology Present? Yes O No •	within a wettand:
Remarks:	
	erlain by river dredged spoil from past ACOE dredging projects. Soils and hydrology
support drought tolorant species.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1	Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide	e Odor (C1) Moss Trim Lines (B16)
☐ Water Marks (B1) ☐ Oxidized Rhizosp	oheres along Living Roots (C3) Dry Season Water Table (C2)
Sediment Deposits (B2)	uced Iron (C4) Crayfish Burrows (C8)
☐ Drift Deposits (B3) ☐ Recent Iron Redu	luction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	ce (C7) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No O Depth (inches):	- November and Advantage and A
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes ○ No •
Describe Recorded Data (stream gauge, monitoring well, aerial photographics)	
Describe Recorded Data (stream gauge, monitoring well, denai prior	ros, previous inspections, in available.
Remarks:	
Elevated spil cell from ACOE river dredging in the 80's and 90's.	

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VEGETATION (Five/Four Strata) - Use scientific names of plants.

Dominant

Samp

- (Olah disa)	Absolute % Cover	Rel.Strat.	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size:)	K		Status	Number of Dominant Species
1	0	0.0%	E0007X-011-011-011-01	That are OBL, FACW, or FAC: 0 (A)
12.		0.0%	et consistent to the state of t	Total Number of Dominant
3.	0	0.0%	WARRING TO STREET STREET	Species Across All Strata: 2 (B)
4.	0	0.0%	SALES CONTRACTOR CONTRACTOR	
5.	O personal p	0.0%	WARREST CONTRACTOR	Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
6.	0	0.0%	parameter support	That Are Obl., FACW, or FAC.
7.	0	0.0%	hannes annihelitäre distine findasia.	Prevalence Index worksheet:
8.	0	0.0%		Total % Cover of: Multiply by:
50% of Total Cover: 0 20% of Total Cover: 0	0 =	= Total Cover		OBL species 0 x 1 = 0
Sapling or Sapling/Shrub Stratum (Plot size:	2044			FACW species $0 \times 2 = 0$
100000000000000000000000000000000000000		0.0%		FAC species $0 \times 3 = 0$
	No. of Street, or other Persons.	0.0%	MONTH OF THE PARTY	1 (7)(0
2.		рашализанически	polycycylelocycliciticaliticity	FACU Species Province A T - Province Control of the
3. ACTION CONTINUES AND ACTION		0.0%		UPL species (ALEXTENDEDICTION X 5 = ROTTONGEROPPULASANATION)
4.	0	0.0%		Column Totals: 67 (A) 268 (B)
5. Explanation of the control of the	0	0.0%	F042277074747474444	Prevalence Index = $B/A = 4.000$
6.		0.0%		
7.	0	0.0%	**************************************	Hydrophytic Vegetation Indicators:
8.	0	0.0%		1 - Rapid Test for Hydrophytic Vegetation
50% of Total Cover: 0 20% of Total Cover: 0	0 =	= Total Cove		2 - Dominance Test is > 50%
Note the second	***************************************			3 - Prevalence Index is ≤3.0 ¹
Shrub Stratum (Plot size:	0	0.00		1
1.	0	0.0%	ранизания	☐ Problematic Hydrophytic Vegetation ¹ (Explain)
2	0	0.0%	Processing and the second	¹ Indicators of hydric soil and wetland hydrology must
3.	0	0.0%	-	be present, unless disturbed or problematic.
4.	0	0.0%		
5.	0	0.0%	MONTH CACACIDITATION	Definition of Vegetation Strata:
O	0	0.0%	.commonmonument	Tree - Woody plants, excluding woody vines,
50% of Total Cover: 0 20% of Total Cover: 0	0 =	= Total Cove		approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 50' radius)				(1.5 only of larger in diameter at predet height (221))
processor and the second secon	20	44.00/	EACH	Sapling - Woody plants, excluding woody vines,
1 Cynodon dactylon	NAME AND PERSONS ASSESSED.	44.8%	FACU	approximately 20 ft (6 m) or more in height and less
2 Diodia teres	ACCOUNTS OF THE	44.8%	FACU	than 3 in. (7.6 cm) DBH.
3 Paspalum notatum	5	7.5%	FACU	Couling (Obs.) At a shoulest a such dispersion of loca
4. Poa compressa	1	1.5%	FACU	Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.
5. Helenium amarum	1	1.5%	FACU	than o in. Borrana greater than 0.20 it (111) tail.
6.	0	0.0%		Shrub - Woody plants, excluding woody vines,
7,	0	0.0%_		approximately 3 to 20 ft (1 to 6 m) in height.
8	0	0.0%	· processor construction of the second	
9	0	0.0%		Herb - All herbaceous (non-woody) plants, including
10.	N. P. C.	0.0%		herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately
11.	0	0.0%	median/simulation/simulations	3 ft (1 m) in height.
12.	0	0.0%	. periodical contraction of the c	
50% of Total Cover: 33.5 20% of Total Cover: 13.4	oracoinnient	= Total Cove	· possession in the second	Woody vine - All woody vines, regardless of height.
personal contraction of the cont		- 10461 60461		
Woody Vine Stratum (Plot size:)				
1.	0	0.0%		
2.	0	0.0%		
3.	0	0.0%	a Secondarian grand, source .	
4.	0	0.0%		
5.		0.0%	· commoncementorio	Hydrophytic
		Monte on a designation of the Party	s sommeronmousecom	Vegetation Yes ○ No ●
50% of Total Cover: 0 20% of Total Cover: 0	, contraction contraction	= Total Cove		
Remarks: (If observed, list morphological adaptations below).				
Maintained by mowing pasture. Poor Joe weed shows signs	of mortality	y within seve	ral colonie	s. No wetland vegetation present.
, 5,				- ·
*Indicator suffix = National status or professional decision assigned because F	Regional status	not defined by F	ws.	

Sampling Point: 1

SOIL Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)												
Depth		Matrix		Red	dox Feat			<u>-</u>				
(inches)	Color (%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks Brown			
0-6	7.5YR	5/4	100%		• 6222000000000000	nna culturarioraniamento		Sand				
6-12	7.5YR	6/4	100%					Fine Sand	tight brown			
									AND THE PROPERTY OF THE PROPER			
PORTER CONCERNS NO CONTRACTOR OF THE PROPERTY	CHARLEST CONTRACTOR AND ALEA	9 NaCommented surrous	d Accommonweal		of procontinuous	man persistantelesistantelesis.	ERONAL CONTRACTOR AND	NOTIFICATION OF THE PROPERTY O	anna ann an Aireann agus an an an Aireann an Aireann an Aireann Aire			
***************************************			4 #	ре-мунитерительного вынамической	d varoubilities		ATTO CONTROL TO PERSON	ENGAGERICATIVES OF SHEET AND LIGHT CASH STATE OF THE	A Company of the Comp			
Detrimonation of the contract of the contra	p	а рито-житокамича	N Bergeleten autoritäten senatarioritat	Bearing property and the second secon			***************************************	·	455334435-00000-0-000000-0-000000-0-000000-0-0000			
	Philippolite Communication Com	. (0.00-4000-4000-400-400	particular de la constitución de									
	OCCUPATION OF THE PARTY OF THE	* * December of the Continue o	-	pro		****	*****************	-				
1 Type: C=Con	centration. D	=Depletio	n. RM=Redu	ced Matrix, CS=Covere	d or Coate	ed Sand Grai	ns ² l oca	tion: PI =Pore I ining.	M=Matrix			
Hydric Soil 1												
Histosol (Polyvalue Belo	w Surface	/S8) (LDD 9	T 10		Problematic Hydric Soils ³ :			
l — ·	pedon (A2)			Thin Dark Surf				1 cm Muck (
☐ Black Hist				Loamy Mucky			,	2 cm Muck (
_	Sulfide (A4)			Loamy Gleyed	•			_	tic (F18) (outside MLRA 150A,B)			
_	Layers (A5)			Depleted Matr	•	<i>-,</i>			odplain Soils (F19) (LRR P, S, T)			
	odies (A6) (L	RR P. T. I	J)	Redox Dark Su		`			Bright Loamy Soils (F20) (MLRA 153B)			
	ky Mineral (A		•	Depleted Dark	•	•		,	Material (TF2)			
l .	sence (A8) (L		, , , ,	Redox Depres				-	Dark Surface (TF12)			
l ,	k (A9) (LRR			Mari (F10) (LR				☐ Other (Explai	in in Remarks)			
1 —	Below Dark S		11)	Depleted Ochr		MI DA 151)						
	k Surface (A		/	☐ Iron-Mangane	. , .	•	O D T)					
	irie Redox (A	•	\ 150A)	Umbric Surface			0, 1, 1)					
I —	ck Mineral (S		-	Delta Ochric (I								
l — ·	yed Matrix (, -,	Reduced Verti		-	150B)	³ Indica	tors of hydrophytic vegetation and			
☐ Sandy Re		,		Piedmont Floo				wetland hydrology must be present, unless disturbed or problematic.				
	Matrix (S6)							unless disturbed or problematic. 49A, 153C, 153D)				
	ace (S7) (LRI	R P. S. T. I	(ا	Asiottidious bit	igne Loam	y 30113 (1 20)	(11604 11.	ж, 1330, 1330)				
	(, (, -, -,	-,									
Restrictive L	ayer (if obs	erved):										
Type:			CVATORIA NA CARACTERIA NA C	POTENTIAL DE LE PROPERTIE DE L	with the second			Hydric Soil Prese	nt? Yes ○ No •			
Depth (inc	hes):							riyunc 3011 Prese	ites © NO ©			
Remarks:												
Sandy spoil n	naterial.											

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Alexandria Port	City/County: Ra	apides	Sampling Date:	13-Aug-13		
Applicant/Owner: Alexandria Port Authority	St	ate: LA	Sampling Point: 2	CONTROL OF THE PROPERTY OF THE		
nvestigator(s): Pat Iimhof	Section, Towns	hip, Range: S	12 T 4N R 1W	TOTAL CONTRACTOR OF THE PROPERTY OF THE PROPER		
.andform (hillslope, terrace, etc.): Terrace	Local relief (conc	•	ONTERPORTED ONTERPORT	0.0°		
BROWNERS AND THE PROPERTY OF T	•	, ,	***************************************	n: WGS 84		
coil Map Unit Name: Coushatta silty clay loam, 0 to 1 percent slopes	31 20 01.13	Longi	Annial or recommendation of the company of the comp			
	a Vec (● No ○ (NWI classification:	- Indiana in the second in the		
Are climatic/hydrologic conditions on the site typical for this time of your state of the state	Lui .	`	If no, explain in Remarks.) Sircumstances" present? Yes	No O		
	ntly disturbed?		modification process.	110 🔾		
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, ex	(plain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map showing sa	ampling point l	ocations, tra	nnsects, important features,	etc.		
Hydrophytic Vegetation Present? Yes O No 💿	Is the Sa	ampled Area				
Hydric Soil Present? Yes ○ No •		`	∕es ○ No ●			
Wetland Hydrology Present? Yes ○ No ●	Within a	Wetland?				
Remarks: Upland Spoil cell created from river dredging operations. Well main HYDROLOGY	ntained upland turf	on well drained	sandy soil.			
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	.		Secondary Indicators (minimum of 2 required)			
Surface Water (A1) Aquatic Fauna (E	EEN STEELEN ST		Surface Soil Cracks (B6)			
Surface water (A1) Aquatic Faulia (E			☐ Sparsely Vegetated Concave Surface (B8) ☐ Drainage Patterns (B10)			
Saturation (A3) Hydrogen Sulfide			Moss Trim Lines (B16)			
	pheres along Living Ro	oots (C3)	Dry Season Water Table (C2)			
Sediment Deposits (B2) Presence of Red		. ,	Crayfish Burrows (C8)			
☐ Drift Deposits (B3) ☐ Recent Iron Red	uction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Thin Muck Surfa	ce (C7)		Geomorphic Position (D2)			
Iron Deposits (B5) Other (Explain in	n Remarks)		Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)			Sphagnum moss (D8) (LRR T, U)			
Field Observations:						
Surface Water Present? Yes No Depth (inches)	CAMPADONIA MANAGEMENTO DE LA CAMPADONIA DEL CAMPADONIA DE LA CAMPADONIA DE					
Water Table Present? Yes O No O Depth (inches)	1	Makland Usedna	ology Present? Yes O No 💿			
Saturation Present? (includes capillary fringe) Yes No Depth (inches)	i Escansisconaisco	wetiand riyard	ology Present? Yes \cup No $ullet$			
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspe	ections), if availa	able:			
Remarks:						
Well drained, permeable sandy soils.						
·						
,						

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VEGETATION (Five/Four Strata) - Use scientific names of plants.

Dominant Samp

,		Dominant Species?	Sampling Point: 2
		Rel.Strat. Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Cover Status	Number of Dominant Species
* handle date to the second of	0	0.0%	That are OBL, FACW, or FAC: 0 (A)
	0	0.0%	Total Number of Dominant
	0	0.0%	Species Across All Strata: 1 (B)
· Library Constitution Constitu	The second second	0,0%	Percent of dominant Species
	0	0.0%	That Are OBL, FACW, or FAC: 0.0% (A/B)
•	0	0.0%	Prevalence Index worksheet:
	0	0.0%	Total % Cover of: Multiply by:
50% of Total Cover: 0 20% of Total Cover: 0	0 =	= Total Cover	OBL species $0 \times 1 = 0$
Sapling or Sapling/Shrub Stratum (Plot size:	Proposition of the Party of the		FACW species $1 \times 2 = 2$
	0	0.0%	FAC species $\frac{3}{3} \times 3 = \frac{9}{9}$
Management of the control of the con	0	0.0%	FACU species 102 x 4 = 408
		0.0%_	UPL species $0 \times 5 = 0$
ENDABLESSESSESSESSESSESSESSESSESSESSESSESSESS	Λ	0.0%	Column Totals: 106 (A) 419 (B)
		0.0%	Marie Committee of the
	0	0.0%	Prevalence Index = B/A = 3.953
	0	0.0%	Hydrophytic Vegetation Indicators:
guicour; production de de de la constant de la cons	0	0.0%	1 - Rapid Test for Hydrophytic Vegetation
50% of Total Cover: 0 20% of Total Cover: 0	0 =	= Total Cover	2 - Dominance Test is > 50%
Shrub Stratum (Plot size:)			3 - Prevalence Index is ≤3.0 ¹
Name of the state	0	0.0%	Problematic Hydrophytic Vegetation ¹ (Explain)
	_	0.0%	
PARAMETER STATE OF THE STATE OF	0	0.0%	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
MANUFACATION CONTRACTOR CONTRACTO		0.0%	
		0.0%	Definition of Vegetation Strata:
The state of the s	0	0.0%	Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
50% of Total Cover: 0 20% of Total Cover: 0	0 =	= Total Cover	(7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 50' radius			
1 Paspalum notatum	100	✓ 94.3% FACU	Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
2. Mimosa strigillosa	3	2,8% FAC	than 3 in. (7.6 cm) DBH.
3. Cyperus retrorsus	1	0.9% FACU	
4. Axonopus fissifolius	1	0.9% FACW	Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.
5. Helenium amarum	1	0.9% FACU	than o in BBN and greater than electric tropics
6.	0	0.0%	Shrub - Woody plants, excluding woody vines,
7.		0.0%	approximately 3 to 20 ft (1 to 6 m) in height.
8,	0	0.0%	Herb - All herbaceous (non-woody) plants, including
9.		0.0%	herbaceous vines, regardless of size, and woody
0,	00	0.0%	plants, except woody vines, less than approximately 3 ft (1 m) in height.
1 <u>.</u> 2.	0	0.0%	
50% of Total Cover: 53 20% of Total Cover: 21.2	-	= Total Cover	Woody vine - All woody vines, regardless of height.
The second secon	100 -		
Woody Vine Stratum (Plot size:)	0		
* ************************************	0	0.0%	
•		0.0%	
	0	0.0%	
		0.0%	Hydrophytic
550% of Total Cover: 0 20% of Total Cover: 0		EXPERIMENTAL PROPERTY AND ADDRESS AND ADDR	Vegetation Present? Yes O No •
50% of Lotal Cover: 0 20% of Total Cover: 0	0 =	= Total Cover	a amounted

SOIL Sampling Point: 2

Profile Descri	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Depth Matrix Redox Features								
(inches)	Color (ı	****************	<u>%</u>	Color (moist)	%_	Type ¹	Loc ²	Texture	Remarks Light brown
0-2	7.5YR	6/4	100%	Service Control of the Control of th		0.00 Carrier 100 C		Sand	Brown
2-10	7.5YR	5/3	100%		pri	was company to the contract of	p	Sand	DI OMI
pademanemecrominismmecrominists.	MERCENNIC AND PROPERTY OF THE PERCENTY OF T	bears and a second a second and	kountradulistasilis/Sünd	Anadanted Transconcer	ACTUAL CONTRACTOR OF THE PARTY	eas funcionamentication		Name of the State	THE STATE OF THE S
ACCIPATION DESCRIPTION OF THE PROPERTY OF THE				MANUAL 2012/2014 (1972)		7.7 G77N0000000000000000000000000000000000		gryptings and the state of the	and the state of t
	P		рашинизиненн	Particularity Province Constitution of the Con		-	BOX	\$\tag{\text{\tint{\text{\tint{\text{\tin\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\texi}\text{\texit{\ti}\tinttitt{\texittt{\text{\texi}\text{\texit{\text{\text{\	
	\$1000000000000000000000000000000000000	(2015)	province and the second	particular and particular properties and a second	E0000000000000000000000000000000000000	,,,,	COLUMN TO THE OWNER OF THE OWNER OW	And and the factoring of the second s	OMESSIGNATURES WOTTON DOCUMENT DOCUMENT HAVE AND AN ADMINISTRATION OF THE PROPERTY OF THE PROP
4	***************************************	E-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1			£447400000		Automatical Company of the Company o	position and the second	
¹ Type: C=Cond	entration. D	=Depletior	n. RM=Redu	ced Matrix, CS=Covere	d or Coate	ed Sand Grai	ns ²Loca	tion: PL=Pore Lining.	M=Matrix
Hydric Soil I	ndicators:							Indicators for I	Problematic Hydric Soils ³ :
Histosol (A	\1)			Polyvalue Belo	w Surface	e (S8) (LRR 9	s, T, U)	1 cm Muck (A9) (LRR O)
Histic Epip	edon (A2)			Thin Dark Surf	ace (S9)	(LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histi	c (A3)			Loamy Mucky	Mineral (F	1) (LRR O)			rtic (F18) (outside MLRA 150A,B)
_ ` -	Sulfide (A4)			Loamy Gleyed	Matrix (F	2)			oodplain Soils (F19) (LRR P, S, T)
_	_ayers (A5)			Depleted Matr				Anomalous E	Bright Loamy Soils (F20) (MLRA 153B)
mercons.	odies (A6) (L			Redox Dark Su				Red Parent I	Material (TF2)
F	ky Mineral (A		, T, U)	Depleted Dark				Very Shallow	Dark Surface (TF12)
	ence (A8) (L			Redox Depres				Other (Expla	in in Remarks)
	k (A9) (LRR I			Mari (F10) (LR	-				
	Below Dark S		l1)	Depleted Ochr					
_	Surface (A1	•	4504)	☐ Iron-Mangane			O, P, T)		
	rie Redox (A		-	Umbric Surface					
_ `	ck Mineral (S		, 5)	Delta Ochric (I			(FOD)	³ Indica	ators of hydrophytic vegetation and
Sandy Gle	yed Matrix (S	04)		Reduced Verti				wet	land hydrology must be present, nless disturbed or problematic.
Stripped M				Piedmont Floo	•			u 9A, 153C, 153D)	mess disturbed of problematic.
	ice (S7) (LRF	PETI	I)	Anomalous bit	gnt Loan	y 30115 (1 20)	(ויונגא ויו)	5K, 133C, 133D)	
Dark Sarro	100 (07) (114	(1,0,1,	<i>.</i> ,						
	32-3111111111								
Restrictive La	ayer (if obs	erved):							
Type:	***************************************				****			Hydric Soil Prese	ent? Yes ○ No •
Depth (inch	nes):							,	
Remarks:									
Very permeab	ole, well dra	ined soil							

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Alexandria Port	City/County: R	apides	Sampling Date:	13-Aug-13			
pplicant/Owner: Alexandria Port Authority	St	ate: LA Sam	pling Point: 3				
Investigator(s): Pat Iimhof	Section, Towns	hip, Range: S 12	T 4N R 1	W			
Landform (hillslope, terrace, etc.):	Local relief (con	cave, convex, none):	Slope: 1	0.0 % / 0.0 °			
# Management Comment of the Particular Comme	31 20' 01.08"	Long.: 92 28	School Control	tum: WGS 84			
Soil Map Unit Name: Coushatta silty clay loam, 0 to 1 percent slopes	3120 01.00	, , , , , , , , , , , , , , , , , , ,	I classification:	,			
Are climatic/hydrologic conditions on the site typical for this time of ye	Yes Yes	A O	plain in Remarks.)	***************************************			
		Are "Normal Circumst		● No ○			
	problematic?		ny answers in Remarks.)				
	•	. , ,	•				
SUMMARY OF FINDINGS - Attach site map showing sa	ampling point	locations, transects	s, important features	i, etc.			
Hydrophytic Vegetation Present? Yes O No	Te the S	ampled Area					
Hydric Soil Present? Yes O No •		Vac (No 💿				
Wetland Hydrology Present? Yes O No •	within a	Wetland?					
Remarks:				2000			
Remarks							
HYDROLOGY							
Wetland Hydrology Indicators:	- · · · · · · · · · · · · · · · · · · ·	Secondar	y Indicators (minimum of 2 re	quired)			
Primary Indicators (minimum of one required; check all that apply)	:	Surfa	Surface Soil Cracks (B6)				
Surface Water (A1) Aquatic Fauna (E	:13)	☐ Spars	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2) Marl Deposits (B.		Drain	☐ Drainage Patterns (B10)				
Saturation (A3) Hydrogen Sulfide		_	Moss Trim Lines (B16)				
	heres along Living R		Dry Season Water Table (C2)				
Sediment Deposits (B2) Presence of Redu			Crayfish Burrows (C8)				
	uction in Tilled Soils		ration Visible on Aerial Imager	y (C9)			
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface	• •		norphic Position (D2)				
☐ Iron Deposits (B5) ☐ Other (Explain in Inundation Visible on Aerial Imagery (B7)	Remarks)		ow Aquitard (D3) Neutral Test (D5)				
Water-Stained Leaves (B9)			gnum moss (D8) (LRR T, U)				
		Зрпа	ghuil moss (Do) (ERR 1, 0)				
Field Observations: Surface Water Present? Yes No Depth (inches)	1						
			_	_			
p sper (manas)		Wetland Hydrology Pre	esent? Yes \bigcirc No $^{\circ}$	•			
Saturation Present? (Includes capillary fringe) Yes No Depth (inches)		11 > 15 - 15 - 15 - 15 - 15 - 15 - 15 -					
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous insp	ections), if available:					
Remarks:							

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VEGETATION (Five/Four Strata) - Use scientific names of plants.

VEGETATION (Five/Four Strata) - Use scientific names of plants.

,		Dominant Species?		Sampling Point: 3		
		Rel.Strat.	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size:	% Cover	Cover	Status	Number of Dominant Species		
1.	0	0.0%	energy contraction of	That are OBL, FACW, or FAC: 0 (A)		
2.	0	0.0%	физической	Takal Niyashay of Daminanh		
3.	^	0.0%	*************************	Total Number of Dominant Species Across All Strata: 2 (B)		
4.	0	0.0%	NOONOTOHANNOMAND	MITTAGE AND		
5.	0	0.0%	CHARTES CONTROL AND ADDRESS OF THE PARTY OF	Percent of dominant Species That Are OBL_FACW_or_FAC: 0.0% (A/B)		
6.	0	0.0%	Non-investment of the second	That Are OBL, FACW, or FAC: U.0% (A/B)		
7.		0.0%	posessionalitantino	Prevalence Index worksheet:		
8.	0	0.0%		Total % Cover of: Multiply by:		
50% of Total Cover: 0 20% of Total Cover: 0	0 =	Total Cover		OBL species $0 \times 1 = 0$		
Sapling or Sapling/Shrub Stratum (Plot size:	LLDC-VII-CO-			FACW species $0 \times 2 = 0$		
1	Λ	0.0%		FAC species 0 x 3 = 0		
A STATE OF THE PROPERTY OF THE	Λ	0.0%		FACU species $96 \times 4 = 384$		
^		0.0%	# relative med der prijer welde gill	UPL species		
A	^	0.0%	P477			
	^	0.0%		Column Totals: 96 (A) 384 (B)		
	C C	0.0%	permanananan mananan	Prevalence Index = B/A = 4.000		
	COLUMN TO THE REAL PROPERTY AND ADDRESS OF THE PERTY ADD	0.0%	ENVAN-	Hydrophytic Vegetation Indicators:		
7. R	0	0.0%	Konomographymographym			
		to an all models with the later.	Background participations	1 - Rapid Test for Hydrophytic Vegetation		
50% of Total Cover: 0 20% of Total Cover: 0	0 =	= Total Cover		2 - Dominance Test is > 50%		
Shrub Stratum (Plot size:)				☐ 3 - Prevalence Index is ≤3.0 ¹		
1. parameter and the second se	0			Problematic Hydrophytic Vegetation ¹ (Explain)		
2.			Martin and State of the State o			
3.	0		\$0000000000000000000000000000000000000	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
4.		0.0%	килексичение			
5.	0	0.0%	Enthusiate nature transit	Definition of Vegetation Strata:		
ô.	0	0.0%	размения	Tree - Woody plants, excluding woody vines,		
50% of Total Cover: 0 20% of Total Cover: 0	0 =	= Total Cover		approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).		
Herb Stratum (Plot size:				(170 only of larger in diameter at 2702011103111(==17).		
1 Diodia teres	60	✓ 62.5%	FACU	Sapling - Woody plants, excluding woody vines,		
2. Paspalum notatum	MARKAGE STREET	✓ 26.0%	FACU	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.		
3. Cynodon dactylon	10	10.4%	FACU	than 3 in. (7.0 din) DDT.		
4 Poa compressa	1	1.0%	FACU	Sapling/Shrub - Woody plants, excluding vines, less		
5.	0	0.0%		than 3 in. DBH and greater than 3.28 ft (1m) tall.		
6.	0	0.0%	balance for contrast constraint.			
	0	0.0%	***************************************	Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.		
7	0	0.0%		approximatory of to 20 it (1 to 0 in) in noight.		
8. 9.	0	0.0%	Management	Herb - All herbaceous (non-woody) plants, including		
Contraction of the Contraction o	0	0.0%		herbaceous vines, regardless of size, and woody		
10 <u>.</u> 11.	0	0.0%	Moreonous acceptation of the Control	plants, except woody vines, less than approximately 3 ft (1 m) in height.		
12.	Delivery Delivery	0.0%	productive contracts			
	0	C		Woody vine - All woody vines, regardless of height.		
50% of Total Cover: 48 20% of Total Cover: 19.2	96 =	= Total Cove				
Woody Vine Stratum (Plot size:)						
1.	0	0.0%	we'le declarate Manifest Make the Markette			
2.	^	0.0%				
3.	0		promotor working working			
4.	0	0.0%	\$20,000,000,000,000,000,000	1		
	0	0.0%	**************************************	Hydrophytic Vegetation		
50% of Total Cover: 0 20% of Total Cover: 0		= Total Covei		Present? Yes No No		
NaLANO-MOD-MAN-NOW (MINING ALL AND ALL	Activitation and activities and					
Remarks: (If observed, list morphological adaptations below).						

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL Sampling Point: 3

Profile Descr	iption: (De	scribe to	the depth r	needed to document	the indi	ator or cor	firm the a	bsence of indicator	rs.)
Depth							,		
(inches)	Color (1	************		Color (moist)	<u>%</u>	Type ¹	Loc2	Texture	Remarks Brown
0-2	7.5YR	5/4	100%		A	***	NONE TO SERVICE AND ADDRESS OF THE PARTY OF	Sand	-tight brown
2-12	7.5YR	6/4	100%	parkage ANGARAS STREET, STREET	possibility to the second seco		omidules de l'estate de l'esta	Sand	THE RESIDENCE AND ADDRESS OF THE PROPERTY OF T
			ELECTRODORNAMINAM AND			pro grandinimination (A.C.)			
BOSSICALISTO COSTA POR POR PORMA MARIOLAS COMPANDA CONTRA PORMA MARIOLAS CONTRA PORMA	\$	pull-Laverzezzezzezzezez	NAME OF THE PROPERTY OF THE PR		EMO-STATE OF THE PARTY OF THE P		#Upp-contractors and an analysis and an analys		
¹ Type: C=Cond	centration. D	=Depletio	n. RM=Redu	ced Matrix, CS=Covered	d or Coate	ed Sand Grai	ns ² Loca	tion: PL=Pore Lining.	M=Matrix
Stratified I Organic B Organic B 5 cm Mucl Muck Pres 1 cm Mucl Depleted I Thick Darl	pedon (A2) ic (A3) Sulfide (A4) Layers (A5) odies (A6) (L ky Mineral (A pence (A8) (L k (A9) (LRR I Below Dark S k Surface (A1)	.RR P, T, U A7) (LRR F .RR U) P, T) Surface (A	·, Τ, U)	Polyvalue Belo Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress Marl (F10) (LR Depleted Ochr Iron-Manganes	ace (S9) Mineral (I Matrix (F x (F3) Irface (F6 Surface (Sions (F8) R U) Ic (F11) (Ic Masses	(LRR S, T, U F1) (LRR O) 2)) (F7) MLRA 151) 5 (F12) (LRR)	Reduced Ver Pledmont Flo Anomalous E Red Parent N Very Shallow	A9) (LRR O) A10) (LRR S) A10) (LRR S) A1ctic (F18) (outside MLRA 150A,B) codplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) (MLRA 153B) Material (TF2) V Dark Surface (TF12) In in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M		51) (LRR C 54)), S)	☐ Umbric Surface ☐ Delta Ochric (I ☐ Reduced Vertion ☐ Piedmont Floon ☐ Anomalous Bri	=17) (MLF = (F18) (N dplain So	RA 151) /ILRA 150A, ils (F19) (ML	RA 149A)	wet	ators of hydrophytic vegetation and land hydrology must be present, nless disturbed or problematic.
Restrictive La	ayer (if obs	erved):							
Type: Depth (incl	hae).	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ALASTA MARKET CRUCKES TO THE STATE OF THE ST				Hydric Soil Prese	ent? Yes O No 💿
	iles).								
Remarks: Well drained :	sandy soil.								

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WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Alexandria Port	City/County: Rap	pides	Sampling Date: 13-Aug-13			
pplicant/Owner: Alexandria Port Authority	Sta	te: LA	Sampling Point: 4			
(nvestigator(s): Pat Iimhof	Section, Townsh	nip, Range: S	12 T 4N R 1W			
.andform (hillslope, terrace, etc.): Upland swale	Local relief (conca					
parallelian de la librar de la		,	processor proces			
	31 20' 09.05"	Long	procupation and difference and district or year grown as a second and a second district of the Control			
oil Map Unit Name: Roxana very fine sandy loam, occasionally floode			NWI classification:			
Are climatic/hydrologic conditions on the site typical for this time of ye	ear? Yes 🥌		(If no, explain in Remarks.)			
Are Vegetation , Soil , or Hydrology significan	ntly disturbed?	Are "Normal	Circumstances" present? Yes No			
Are Vegetation , Soil , or Hydrology naturally	problematic?	(If needed, e	explain any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map showing sa	ampling point lo	ocations, tr	ansects, important features, etc.			
Hydrophytic Vegetation Present? Yes O No •	Is the Sai	mpled Area				
Hydric Soil Present? Yes ○ No •		•	Yes ○ No •			
Wetland Hydrology Present? Yes ○ No ●	within a v	Wetland?				
Remarks:						
Upland drainage swale with 6:1 slope. Very sandy soil carpeted wit	th turf grasses.					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (minimum of 2 required)			
Primary Indicators (minimum of one required; check all that apply)			Surface Soil Cracks (B6)			
Surface Water (A1) Aquatic Fauna (B		☐ Sparsely Vegetated Concave Surface (B8) ☐ Drainage Patterns (B10)				
High Water Table (A2) Marl Deposits (B:						
Saturation (A3) Hydrogen Sulfide	, ,		Moss Trim Lines (B16)			
Water Marks (B1) Oxidized Rhizosp	ots (C3)	Dry Season Water Table (C2)				
Sediment Deposits (B2)			Crayfish Burrows (C8)			
Drift Deposits (B3)	(6)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4) Thin Muck Surface			Geomorphic Position (D2) Shallow Aquitard (D3)			
☐ Iron Deposits (B5) ☐ Other (Explain in	ı Remarks)					
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)			Sphagnum moss (D8) (LRR T, U)			
Field Observations: Surface Water Present? Yes No Depth (inches):	,					
	/	Wetland Hyd	drology Present? Yes 🔾 No 💿			
(includes capillary fringe) Yes V No Deput (inches):						
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspec	ctions), if avai	lable:			
Remarks:						
Soil pit to 24" and no saturation present.						

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VEGETATION (Five/Four Strata) - use scientific names of plants.

		Species?		Samping Polit:
	Absolute	Rel.Strat.	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Cover	Status	
broad and a second	printing and a printing (Miles			Number of Dominant Species
`1.	0	0.0%		That are OBL, FACW, or FAC: 0 (A)
	0	0.0%		·
[2.		pourthermanians	CONTRACTOR	Total Number of Dominant
3	0			Species Across All Strata: 2 (B)
4.	0	0.0%		
E	0	0.0%	AND THE PROPERTY OF THE PARTY O	Percent of dominant Species
5.	DESCRIPTION OF THE PARTY OF THE	Programma and a second	C-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	That Are OBL, FACW, or FAC: 0.0% (A/B)
6.	0	0.0%		
7.	0	0.0%		Prevalence Index worksheet:
8.	0	0.0%	Constitution	Total % Cover of: Multiply by:
		(Mary 1997)	Management of the Control of the Con	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		OBL species $0 \times 1 = 0$
Sapling or Sapling/Shrub Stratum (Plot size:	١			FACW species $0 \times 2 = 0$
Property and the second				6 x 3 = 18
1, procedurate and an analysis of the second and th	0	0.0%		FAC Species (Instrumental A 3 — processors
2.	Δ.	0.0%		FACU species $100 \times 4 = 400$
	Deliverior many	0.0%	Paris Contract Contra	
3.			-	UPL species UPL species
4.	0	0.0%	KORDONA PARAMETERS	Column Totals: 106 (A) 418 (B)
5.	0	0.0%		NAME OF THE PROPERTY OF THE PR
Company of the contract of the	0	0.0%		Prevalence Index = B/A = 3.943
6.		***************************************	heliania da caca de la	Hydrophytic Vogetation Indicators:
7. www.new.new.new.new.new.new.new.new.new.	0			Hydrophytic Vegetation Indicators:
8.	0	0.0%		1 - Rapid Test for Hydrophytic Vegetation
				1 - Kapid Test for Hydrophytic vegetation
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		2 - Dominance Test is > 50%
Shrub Stratum (Plot size:)				☐ 3 - Prevalence Index is ≤3.0 1
	_	□ a aa4		
11.	0	0.0%	Parket and the second s	Problematic Hydrophytic Vegetation ¹ (Explain)
2.	0	0.0%		
S to the second	0	0.0%		¹ Indicators of hydric soil and wetland hydrology must
3.		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CECTOTOR	be present, unless disturbed or problematic.
4.	0	0.0%	упили втогольное к мо	
5.		0.0%		Definition of Vegetation Strata:
6.	0	0.0%		Tree - Woody plants, excluding woody vines,
A STATE OF THE PROPERTY OF THE		римсосасиминением	entrousus armaras	approximately 20 ft (6 m) or more in height and 3 in.
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		(7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: 50' radius)				
Personal Control Contr				Sapling - Woody plants, excluding woody vines,
1. Diodia teres	50	✓ 47.2%	FACU	approximately 20 ft (6 m) or more in height and less
2 Paspalum notatum	25	✓ 23.6%	FACU	than 3 in. (7.6 cm) DBH.
3. Cynodon dactylon	20	18.9%	FACU	
PROCESSES AND ADDRESS OF THE PROCESS	20	Antwest design for the first control of	**************************************	Carling (Charle Monda plants evaluding vines loss
4. Mimosa strigillosa	5		FAC	Sapling/Shrub - Woody plants, excluding vines, less
5 Ambrosia artemislifolia	2	1.9%	FACU	than 3 in. DBH and greater than 3.28 ft (1m) tall.
6, Cyperus retrorsus	1	0.9%	FACU	
	Marian Marian Marian		e	Shrub - Woody plants, excluding woody vines,
7 Sporobolus indicus	1	0.9%	FACU	approximately 3 to 20 ft (1 to 6 m) in height.
8 Paspalum urvillei	1	0.9%	FAC	
9 Rubus trivialis	1	0.9%	FACU	Herb - All herbaceous (non-woody) plants, including
Participant of the Control of the Co	The bottom was a series			herbaceous vines, regardless of size, and woody
10.	0	0.0%	ECTIVATIVE PROPERTY.	plants, except woody vines, less than approximately
11	0	0.0%		3 ft (1 m) in height.
12.	0	0.0%	J	
		***************************************	parameter and the same states	Woody vine - All woody vines, regardless of height.
50% of Total Cover: 53 20% of Total Cover: 21.2	106	= Total Cover		VVOCay vine 7 iii vvocay vinos, regardiose or noighi.
Woody Vine Stratum (Plot size:)				
The state of the s				
1	0	0.0%		
2.	0	0.0%		
		0.0%	1000000	
3.	U	ASSACHORONOMINIMATINIS	Entransportation	
4.	0	0.0%	manufacture entress	(Industrial)
5.	0	0.0%	*	Hydrophytic Vegetation
	^	- Total Carre		Present? Yes O No •
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover		
Demayles (If sheeped list mountained adaptation below)				
Remarks: (If observed, list morphological adaptations below).				
Upland plant species inside and adjacent to drainage swale.				
*Indicator suffix = National status or professional decision assigned because if	oolonal ctatus	e not defined by Fl	VS.	

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SOIL Sampling Point: 4

Profile Descr	iption: (Des	cribe to	the depth	needed to document			nfirm the a	bsence of indicato	rs.)
Depth			Redox Features			1 3	Tt	Remarks	
(inches)	Color (r		%	Color (moist)		Type ¹	Loc ²	Texture Sand	Brown
0-2	7.5YR	5/4	100%	pomoutoum destablishments		0000 G00000000000000000000000000000000		PONTO DE CONTRACTO	Light brown
2-12	7.5YR	6/3	100%	Processing Statement Control of the		A48 6440000000000000000000000000000000000	***************************************	Sand	WE COMPANY AND
yearson Acaettemachelastochtelien A	province and the second second	MATERIAL PROPERTY AND ADDRESS OF THE PARTY AND	us journmenterscontlements	Sold transportation of the second second second	222000000000000000000000000000000000000	and an annual section of the section			
	***************************************		4 Marine Marine Statement Committee	PORTON CONTRACTOR OF THE PROPERTY OF THE PROPE	-	<i></i>	-	\$=000000000000000000000000000000000000	entrousers with the second sec
and delicated to the second second	prompopulation and except a		n passocianistes estate		# STATE OF THE PARTY OF THE PAR	waterstate and the same of the	***************************************	patro-various voluments accommendation	**************************************
programmy geometric de la little de la litte de la lit	•	10200 000000000000000000000000000000000		PARTICULAR PROPERTY.	parameters.	these Anthropositions	possession	g	
							No.	-A-1144444444444444444444444444	
Recommendation of the Control of the			-						
¹ Type: C=Cond	centration. D	=Depletio	n. RM=Redu	iced Matrix, CS=Covere	d or Coat	ed Sand Gra	ins ² Locat	ion: PL=Pore Lining	. M=Matrix
Hydric Soil I	ndicators:		<u> </u>					Indicators for	Problematic Hydric Soils ³ :
Histosol (A	A1)			Polyvalue Belo	w Surface	e (S8) (LRR :	S, T, U)		(A9) (LRR O)
Histic Epip	edon (A2)	,		Thin Dark Surf				-	(A10) (LRR S)
Black Histi	ic (A3)			Loamy Mucky			•	_	rtic (F18) (outside MLRA 150A,B)
_	Sulfide (A4)			Loamy Gleyed	•			C	oodplain Soils (F19) (LRR P, S, T)
=	Layers (A5)			Depleted Matr	•	,			Bright Loamy Soils (F20) (MLRA 153B)
	odies (A6) (L	RR P. T. U	J)	Redox Dark Su		5)			Material (TF2)
_	ky Mineral (A			Depleted Dark	•	•			v Dark Surface (TF12)
	sence (A8) (L			Redox Depres		• •			
	k (A9) (LRR F	-		☐ Marl (F10) (LR	` '	,		U Other (Expir	ain in Remarks)
	Below Dark S		11)	Depleted Ochr	•	MIRA 151)			
· ·	k Surface (A1	•	,	☐ Iron-Mangane			O P T)		
	rie Redox (A	•	A 150A)	Umbric Surfac			.0/1/1/		
	ck Mineral (S			Delta Ochric (I					
	yed Matrix (S		,, 0,	Reduced Verti			150B)		ators of hydrophytic vegetation and
Sandy Rec	•	· · · ·		☐ Piedmont Floo					land hydrology must be present, Inless disturbed or problematic.
Stripped N					•			9A, 153C, 153D)	ances distributed of problematic.
	ace (S7) (LRF	P. S. T.	UY	Allomatous bi	grit Loari	iy 30113 (1 20) (111107 1-1.	m, 1550, 1550)	
Duik Suite	acc (07) (E14	(1,0,1,	٠,						
Restrictive La	ayer (if obse	erved):							
Type:		****	ALCOHOLOGO (NO. 1907)					Hydric Soil Pres	ent? Yes O No 💿
Depth (incl	nes):							•	
Remarks:									
Very permeat	ole sand ins	ide of dr	ainage swa	ale that is dominated	l by upla	and pasture	grasses.	Water runoff into	swale does not appear to attenuate
or a period lo current hydro			the vegeta	ition makeup from u	pland to	wetiana. i	iyarıc soli	cnaracteristics and	l indicators are not maintained by
urrent nyaro	logic regim	c.							

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ATTACHMENT 3:

Site Photographs

Site Photographs

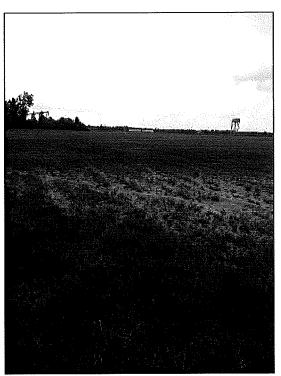


Photo 1 – Excessively drained sandy soil with upland vegetation.

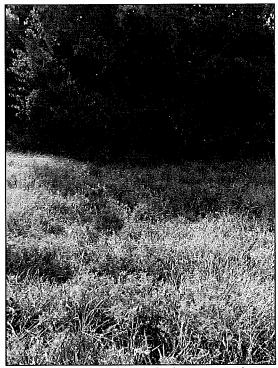


Photo 2 – Upland drainage swale.

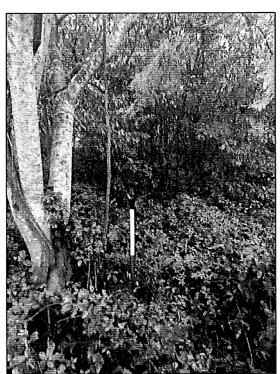


Photo 3 – View from within the disturbed wetland facing the uplands.



Photo 4 – Typical upland soil profile.

staging areas, of the facility would include disturbance within a 27-acre area as well as associated infrastructure within existing rights of way as shown on **Attachment 3.** Please note the Vicinity Maps in Attachments 1 and 2 identify the project site's general vicinity; the project itself excludes the 10 acre portion located directly adjacent to the Red River (which is shown as encompassed in the red project area outline in these maps). The map shown in Attachment 3 indicates the proposals leased area and limits of disturbance, which excludes this 10 acre area adjacent to the river.

The proposed site is located within the central portion of Louisiana at Mile 90 on the Red River. It is positioned in Sections 11 and 12, Township 4-North, Range 1-West with a central location near 92°28'13.484"W longitude and 31°20'6.958"N latitude (NAD 1983 UTM Zone 15N) (Attachment 1 and 2). The Site is bound to the north by a 10 acre plot of land (owned by the port) adjacent to the Red River, to the east by Diamond B Construction Company, to the west by the port and to the south by the flood control levee. The site and surrounding area of the Port are zoned General Industrial by the city of Alexandria.

The existing land use on the 27 acre parcel is vacant mowed pastureland. There is a 3.2 acre forested wetland located within the adjacent 10 acre forested parcel, north and adjacent to the projects 27 acre parcel. Dredged fill material was placed on the site by the US Army Corps of Engineers (USACE) as part of the Philip Bayou Realignment Project in the 1990's, thus altering the surface soils at that time. The site has not been developed for use other than mowed pasture since the placement of dredged material. The project will not convert any existing wetlands, critical habitat or sensitive areas. There are no highly erodible soils within the project boundary. The NRCS soil survey indicates that most of the site is covered by a very fine sandy loam, with pockets of silty clay loams or clay soils at the eastern edge of the site.

All process waters would be leaving the site via conveyance to existing City of Alexandria sewer facilities (at the tie in sewer manholes along the River Port Road). The project does not propose discharge to the adjacent Red River.

This facility would be receiving pine wood chips, mainly from commercial pine plantation feedstock suppliers within an approximate 150 mile radius in Louisiana. It is anticipated that Cool Planet's commercial plant will require approximately 350,000 tons per year of green wood chips. This would equate to approximately 259 trucks per week for biomass delivery. Fuel Product would be transported offsite via barges and/or trucks and utilize the existing barge and truck infrastructure at the port. See Attachment 3 for proposed product line to existing barge facility. In addition, the facility will be producing a Biochar byproduct in quantities of greater than 25,000 tons per year and Ash in the amount of approximately 2,200 tons per year which would be shipped via rail or truck.

Construction Timeline

The expected project lifespan is a minimum of 20 years. Construction of the facility is planned to begin as early as Fall/Winter of 2014/2015 with expected startup of the facility in late 2015.

Mitigation Measures

The proposal will enforce state required erosion control measures to capture stormwater and sediments before they enter the Red River or its tributaries. Use of the best practices outlined in the SWPPP will mitigate potential erosion and water quality impacts. The existing forested wetlands located on the adjacent 10 acre parcel are not proposed for impact for this proposal.

RBS Conclusions and Determination

Based on a review of the existing conditions at the site, and the proposed construction and operation activities, RBS has determined that the proposal **may affect but is not likely to affect** the Endangered Interior Least Tern and the Endangered Red-cockaded Woodpecker. The areas for disturbance for the site are limited to pastureland which was developed from dredged River materials and minor disturbance within existing road rights of way for tie in to existing infrastructure. There are no existing trees within the limits of disturbance for the proposal.

The Interior Least Tern is listed as federally endangered and critically imperiled in Louisiana (S1B rank). These species breed along the North Mississippi River and Red River with nesting beginning in late April through August. Their critical habitat includes dry, exposed sand bars, and favorable river flow that support forage fish supply. Since the proposal and site does not contain or propose impact to dry, exposed sand bars adjacent to the Red River, RBS determined that the proposal is not likely to adversely affect this listed species.

The Endangered Red-cockaded Woodpecker, having no listed habitat, could occur anywhere in LA. Since the site is in pastureland, however, any impacts from the proposed construction should not adversely effect this species.

Since the proposal does not propose discharge or outflow to the adjacent Red River or its tributaries or wetlands, RBS has determined that the proposal would have "no effect" on the Endangered Pallid Sturgeon since the proposal has no water dependent construction, outflow, or discharge. Other than minor stormwater management during construction, which will be mitigated by adherence to the Stormwater Pollution Prevention Plan, no impacts should occur to the Red River or its tributaries or adjacent wetlands. The State Department of Wildlife and Fisheries also recognizes the state listed Blue Sucker (Ranked S3) and the Bluehead Shinner) (Ranked S2 imperiled) (Attachment 4). RBS has determined that the proposal would similarly have no effect to these water dependent species.

Please feel free to contact me with any comments or questions at <u>juliet.bochicchio@wdc.usda.gov</u> or at 202.205.8242. Thank you for forwarding all correspondence to me via email or to my attention at the address above.

Sincerely,

Juliet Bochicchio

Julit Bochulio

Federal Preservation Officer Program Support Staff, RBS cc: Bret Turner, Silicon Valley Bank

Wes Bolsen, Cool Planet Louisiana, LLC

Attachments: 1) General vicinity map

- 2) Aerial Photograph with Project Location
- 3) Limits of Disturbance
- 4) Letter from the Department of Wildlife and Fisheries dated September
- 6, 2013

Bochicchio, Juliet - RD, Washington, DC

From:

Bochicchio, Juliet - RD, Washington, DC

Sent:

Saturday, March 22, 2014 11:14 AM

USFWS LA (Lafayette@fws.gov)

Cc: Wesley Bolsen (Wesley.Bolsen@Coolplanet.com); Juliette MacKay; Hubbell, Todd - RD,

Washington, DC; Bret Turner; Hicks, Jared - RD, Alexandria, LA

Subject: Cool Planet Determination of May Affect/Not Likely to Affect USFWS

Attachments: USFWS Determination CoolPlanent 032114.pdf; Attach 1 and 2.pdf; Attach 3 Cool

Planet Limits of Distrubance.pdf; Attach 4 090613 wildlife.pdf

Dear Mr. Weller,

Through submission of this email, and a hard copy to follow, the USDA Rural Business-Cooperative Service (RBS) requests a letter of concurrence from the USFWS with respect to our determination of "may affect/not likely to affect" for the Endangered Interior Least Tern and the Red-cockaded Woodpecker and a "no effect" determination for the Endangered Pallid Sturgeon, for the proposed Cool Planet woody biomass to renewable fuels conversion facility proposed in Rapides Parish, LA. This request is made under the requirements of Section7 of the Endangered Species Act.

Please find attached determination materials and please do not hesitate to contact me if I can provide additional information.

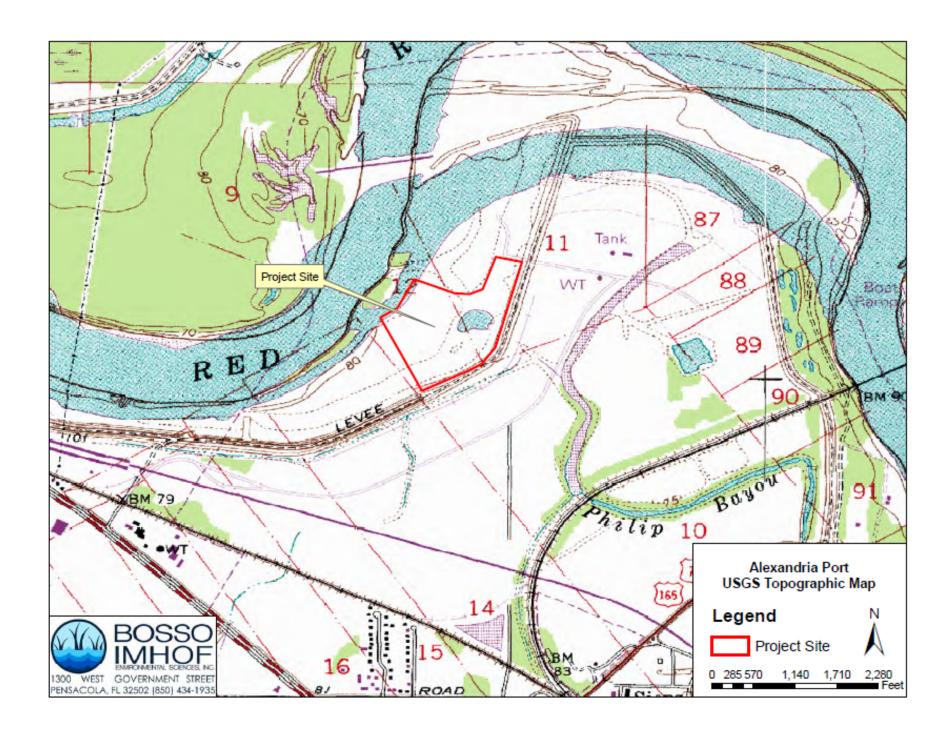
Sincerely, Juliet Bochicchio

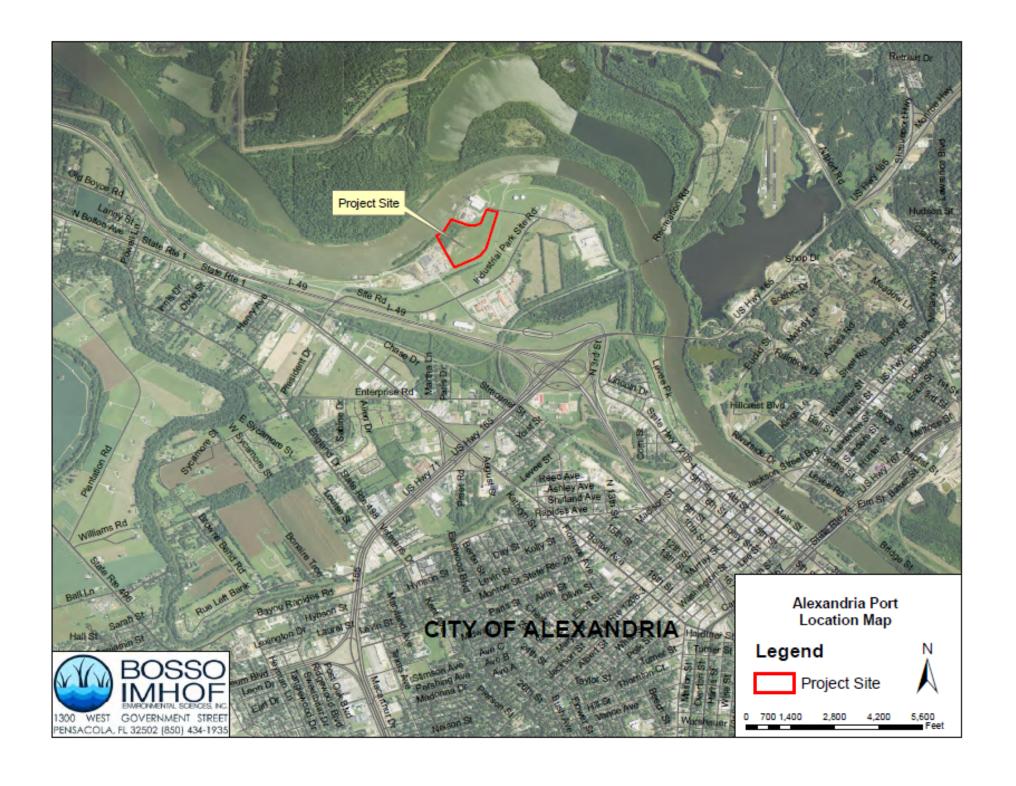
Juliet Cartron Bochicchio | Environmental Protection Specialist Rural Development U.S. Department of Agriculture 1400 Independence Ave., S.W. | Washington, D.C. 20250 Phone: 202.205.8242 | Fax 202.690.4335

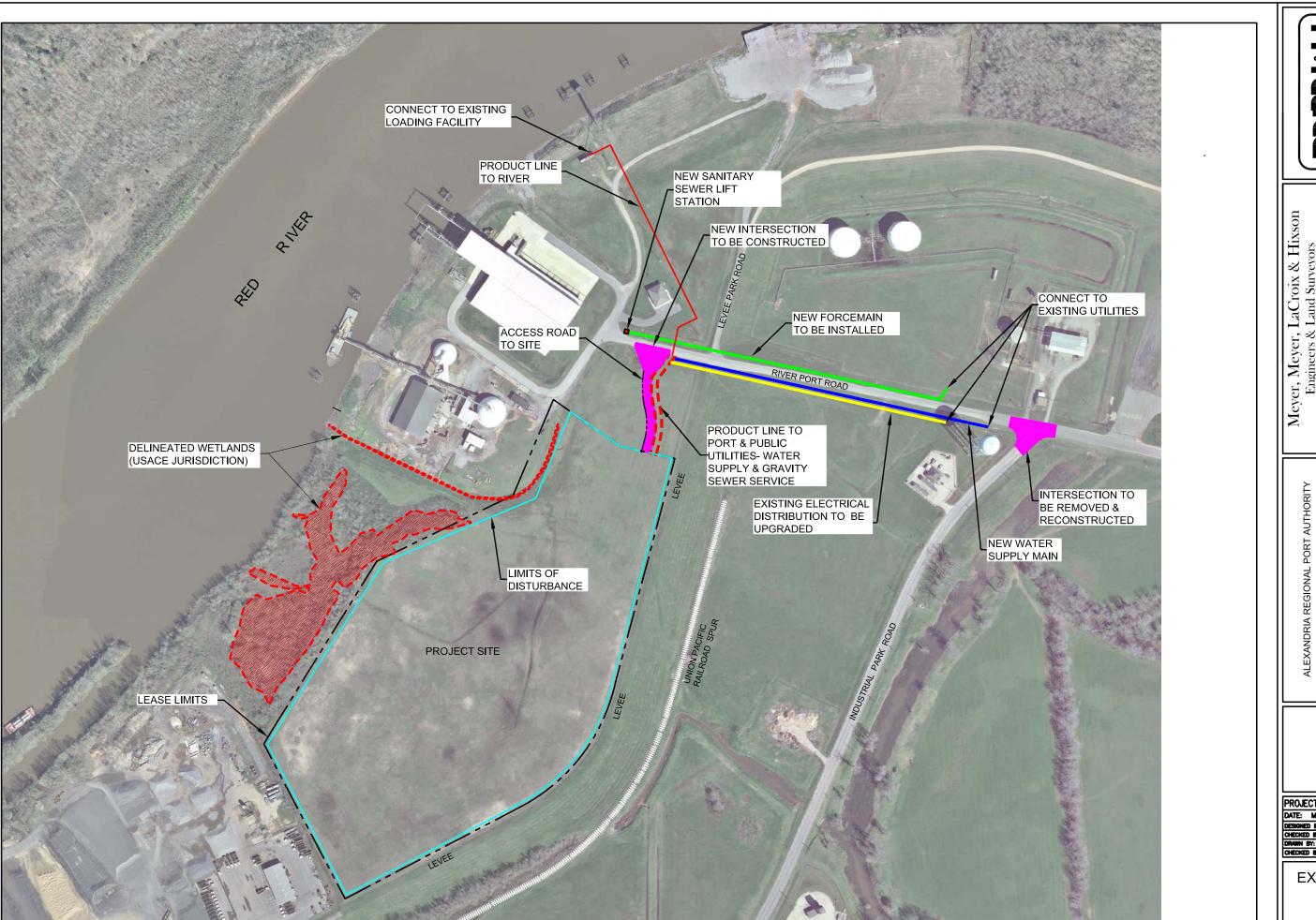
www.rurdev.usda.gov

[&]quot;Committed to the future of rural communities"

[&]quot;Estamos dedicados al futuro de las comunidades rurales"







Meyer, Meyer, LaCroix & Hi Engineers & Land Surveyors 100 Engineer Place, Alexandria, LA 71300 Phone: (318) 448-0888 - Fax: (318) 448-08

PROJECT NO. 6750
DATE: MAR. 2014
DESIGNED BY: MMLH
CHECKED BY: MMLH
CHECKED BY: MMLH
CHECKED BY: MMLH

EXHIBIT

1

BOBBY JINDAL GOVERNOR

State of Louisiana DEPARTMENT OF WILDLIFE AND FISHERIES OFFICE OF WILDLIFE

ROBERT J. BARHAM SECRETARY JIMMY L. ANTHONY ASSISTANT SECRETARY

Date

September 6, 2013

Name

Michael Rogers

Company

Bosso-Imhof Environmental Sciences

Street Address

1300 West Government St.

City, State, Zip

Pensacola, FL 32502

Project

Threatened and Endangered Species Review for a Port Expansion on the Red River

Project ID

0

Invoice Number

13090601

Personnel of the Habitat Section of the Coastal & Nongame Resources Division have reviewed the preliminary data for the captioned project.

Our records indicate blue sucker (Cycleptus meridionalis) occurs within waterbodies of the proposed project area. This species has an S3 state rank and is considered rare in Louisiana. Blue sucker is usually found in channels and flowing pools with moderate currents of 1.0-2.6 m/sec. This species may also be found in some impoundments. Cited causes of decline include depletion of surface water, poor water quality stemming from sewage effluent and agricultural runoff, interruption of migrations by dams, and stranding in irrigation canals. If you have any questions, please contact Beau Gregory at 337-491-2576.

Our records indicate bluehead shiner (Pteronotropis hubbsi) also occurs within waterbodies of the proposed project area. This species has an S2 state rank and is considered imperiled in Louisiana. Bluehead shiner is usually found in small to medium-sized pools, slow moving streams and oxbow lakes with mud bottoms. Threats to this species include draining, filling, farming or flooding of backwater swamp habitat. If you have any questions, please contact Beau Gregory at 337-491-2576.

The LNHP database indicates the presence of Interior Least Tern in the project vicinity. The Interior Least Tern is listed as federally endangered under the Endangered Species Act and is listed as critically imperiled in the state of Louisiana with an S1B rank. Interior Least Tern breed along the northern Mississippi River and along the Red River with nesting beginning in late April and ending in August. Critical habitat includes dry, exposed sandbars and favorable river flow that support forage fish supply. The Interior Least Tern decline has been primarily due to extensive water management projects and increased use of beaches and sandbars. Work activities should occur outside of the breeding season and should minimize the impacts on Interior Least Tern habitat. Contact Brigette Firmin with the US Fish and Wildlife Service at 337-291-3108 to coordinate activities.

After careful review of our database, no other impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-

This page contains proprietary information that Cool Planet Energy Systems requests not to be released to persons outside the Government, site surveys required for environmental assessments. ENHP requires that this office be activitied and provided in all reports as the source of all data provided here. If at any time Heritage tracked species are encountered within the project area, please contact the LNHP Data Manager at 225-765-2643. If you have any questions, or need additional information, please call 225-765-2357.

Sincerely,

Amity Bass, Coordinator Natural Heritage Program

Rural Development Environmental Justice (EJ) and Civil Rights Impact Analysis (CRIA) Certification

1 . Applicant's name and proposed project description: Cool Planet Biorefinery - new facility					
on 27 acres within existing industrial park in city of Alexandria's port.					
2. Rural Development's loan/grant program/guarantee or other Agency action:					
9003 Biorefinery Assistance Program					
3. Attach a map of the proposal's area of effect identifying location or EJ populations, location of the proposal, area of impact or					
Attach results of EJ analysis from the Environmental Protection Agency's (EPAs) EnviroMapper with proposed project location and impact footprint delineated.					
4. Does the applicant's proposal or Agency action directly, indirectly or cumulatively affect the quality and/or level of services provided to the community? Yes No N/A					
5. Is the applicant's proposal or Agency action likely to result in a change in the current land use patterns (types of land use, development densities, etc)? Yes No N/A					
6. Does a demographic analysis indicate the applicant's proposal or Agency's action may disproportionately affect a significant minority and/or low-income populations? Yes No N/A					
If answer is no, skip to item 12. If answer is yes, continue with items 7 through 12.					
7. Identify, describe, and provide location of EJ population					
8. If a disproportionate adverse affect is expected to impact an EJ population, identify type/level of public outreach implemented					
9. Identify disproportionately high and adverse impacts on EJ populations					
10. Are adverse impacts appreciably more severe or greater in magnitude than the adverse impacts expected on non-minority/low-income populations? Yes No N/A					
11. Are alternatives and/or mitigation required to avoid impacts to EJ populations? Yes No N/A					
If yes, describe					
12. I certify that I have reviewed the appropriate documentation and have determined that: No major EJ or civil rights impact is likely to result if the proposal is implemented. A major EJ or civil rights impact is likely to result if the proposal is implemented.					
Juliet Bochicchio EPS 06-17-2014					
Name and Title of Certifying Official Date					