

August 7, 2024

Marshall Berg
Sempra Infrastructure
1500 Post Oak Blvd Suite
1000 Houston, TX 77056
mberg@sempraglobal.com

RE: 2024-0125764
Protected Species Survey
Hackberry Carbon Sequestration, LLC
Hackberry Carbon Sequestration Project
Cameron Parish, LA

Dear Mr. Berg,

T. Baker Smith, LLC (TBS) Environmental Professionals conducted a threatened and endangered (T&E) species review on behalf of our client, Hackberry Carbon Sequestration LLC., of the proposed injection well for the Hackberry Carbon Sequestration Project. The project is located in Black Lake in Cameron Parish, Louisiana.

Threatened and Endangered Species

A list of T&E species for Cameron Parish was gathered from the United States Fish and Wildlife Service (www.fws.gov) and the Louisiana Department of Wildlife and Fisheries (www.wlf.louisiana.gov). Below is a list of potential T&E species that may occur in the proposed project area:

Scientific Name	Common Name	State Status	Federal Status
Birds			
<i>Charadrius melodus</i>	Piping Plover	Threatened	Threatened
<i>Calidris canutus</i>	Red Knot	Threatened	Threatened
<i>Grus americana</i>	Whooping Crane	Not Listed	Experimental Population, Non-Essential
<i>Laterallus jamaicensis ssp. jamaicensis</i>	Eastern Black Rail	Not Listed	Threatened
Mammals			



Scientific Name	Common Name	State Status	Federal Status
<i>Perimyotis subflavus</i>	Tricolored Bat	Not Listed	Proposed Endangered
<i>Trichechus manatus</i>	West Indian Manatee	Threatened	Threatened
Insects			
<i>Danaus plexippus</i>	Monarch Butterfly	Not Listed	Candidate

The proposed injection well will be located entirely in open water in Black Lake near Hackberry, LA and includes water bottom disturbance. Black Lake averages 3 to 4 feet deep and is located in the Louisiana coastal zone.

Birds

The piping plover and the rufa red knot prefer coastal marine and estuarine habitats with large areas of exposed intertidal sediments. Algal flats, sand flats, and occasionally beaches, provide habitat for foraging safe from predation. The project area does not contain suitable habitat for the piping plover or the rufa red knot. Therefore, the project will have no effect on the piping plover and the rufa red knot.

The whooping crane is a tall, white bird with black primary feathers and a vivid crimson colored crown with sparse black bristly feathers. This species' diet includes insects, frogs, rodents, small birds, minnows, and berries. Whooping cranes winter on 22,500 acres of salt flats and marshes in the Aransas National Wildlife Refuge. Whooping cranes summer and nest in poorly drained wetlands in Canada's Northwest Territories at Wood Buffalo National Park. Louisiana began reintroducing an experimental, non-migratory population of whooping cranes in the White Lake Wetlands Conservation Area in Vermillion Parish, Louisiana which reached 76 individuals by 2019. The Project Area is within the whooping crane's historic range. However, any whooping cranes found in the project area would be considered part of the experimental population and non-essential. Additionally, the project does not impact habitat suitable for the whooping crane. TBS ecologists did not observe any cranes during field visits. The project will have no effect on the whooping cranes.

The Eastern black rail is a sparrow-sized marsh bird that is gray-black in coloration with white speckled upperparts and a grayish crown. They require dense vegetative cover that allows for movement underneath the canopy. They can be found in salt, brackish, and freshwater marsh habitats. The project will occur in open water and will have no impact on the Eastern black rail. The USFWS Information for Planning and Consultation (IPaC) tool determination key provided a consistency letter for the Eastern black rail with a may affect – not likely to adversely affect determination.



Mammals

The tricolored bat historically prefers lowland pine and hardwood forests but has adapted to utilize abandoned man-made structures as habitat also. The project area is in open water with no suitable habitat for bats. Therefore, the project will have no effect on the tricolored bat.

The federal and state-listed endangered West Indian manatee has historically inhabited coastal waterways throughout Louisiana. Manatees prefer slow moving rivers, river mouths and shallow coastal areas with submerged vegetation such as seagrass and eelgrass. The USFWS IPaC tool determination key provided a consistency letter for the West Indian manatee with a may affect – not likely to adversely affect determination.

Insects

The Monarch butterfly is a candidate species for listing. Monarch butterfly habitat is mainly in prairies and grasslands containing milkweed. Because the project occurs in open water, it will not impact any monarch butterfly habitat and therefore will not contribute to the listing of the species.

Summary of Determination

Neither T&E species nor any preferred habitat was found for any listed species within the survey area boundary. The attached IPaC consistency letter that uses the Louisiana Endangered Species Act project review and guidance for other federal trust resources determination key (Louisiana DKey) provides a may affect – not likely to adversely affect determination for the Eastern black rail and the West Indian manatee. Due to the lack of preferred habitat at the project site and the temporary nature of the project, we do not expect the project to impact any of the potentially occurring protected species.

Scientific Name	Common Name	Determination
Birds		
<i>Charadrius melodus</i>	Piping Plover	NE
<i>Calidris canutus</i>	Red Knot	NE
<i>Grus americana</i>	Whooping Crane	NE
<i>Laterallus jamaicensis</i> <i>ssp. jamaicensis</i>	Eastern Black Rail	NLAA
Mammals		
<i>Perimyotis subflavus</i>	Tricolored Bat	NE
<i>Trichechus manatus</i>	West Indian Manatee	NLAA
Insects		



Scientific Name	Common Name	Determination
<i>Danaus plexippus</i>	Monarch Butterfly	NE

* NE = No effect, NLAA = Not Likely to Adversely Affect

Please accept this letter of findings as a review of the proposed project site. If you have any questions regarding this letter, or if any additional information is required, please do not hesitate to contact me at 337.735.2815 or by e-mail at brady.trahan@tbsmith.com.

Sincerely,

T. BAKER SMITH, LLC

Brady S. Trahan, PWS
Lead Professional

Attachments: Vicinity Map
 Boundary Map
 IPaC Consistency Letter

TBS Project Number 2021.0228



NOTES:
 1. THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.
 2. THIS DRAWING MAY NOT REPRESENT ALL HAZARDS IN THE PROJECT AREA

DRAWN BY: GJL	APPROVED BY: BST
DATE: 8/7/2024	JOB NO: 2021.0228
DRAWING NAME: 21_0228_TaE	
SHEET NO: 1 of 1	
COORDINATE SYSTEM: GCS WGS 1984 Datum: WGS 1984	

VICINITY

HACKBERRY CARBON SEQUESTRATION LLC

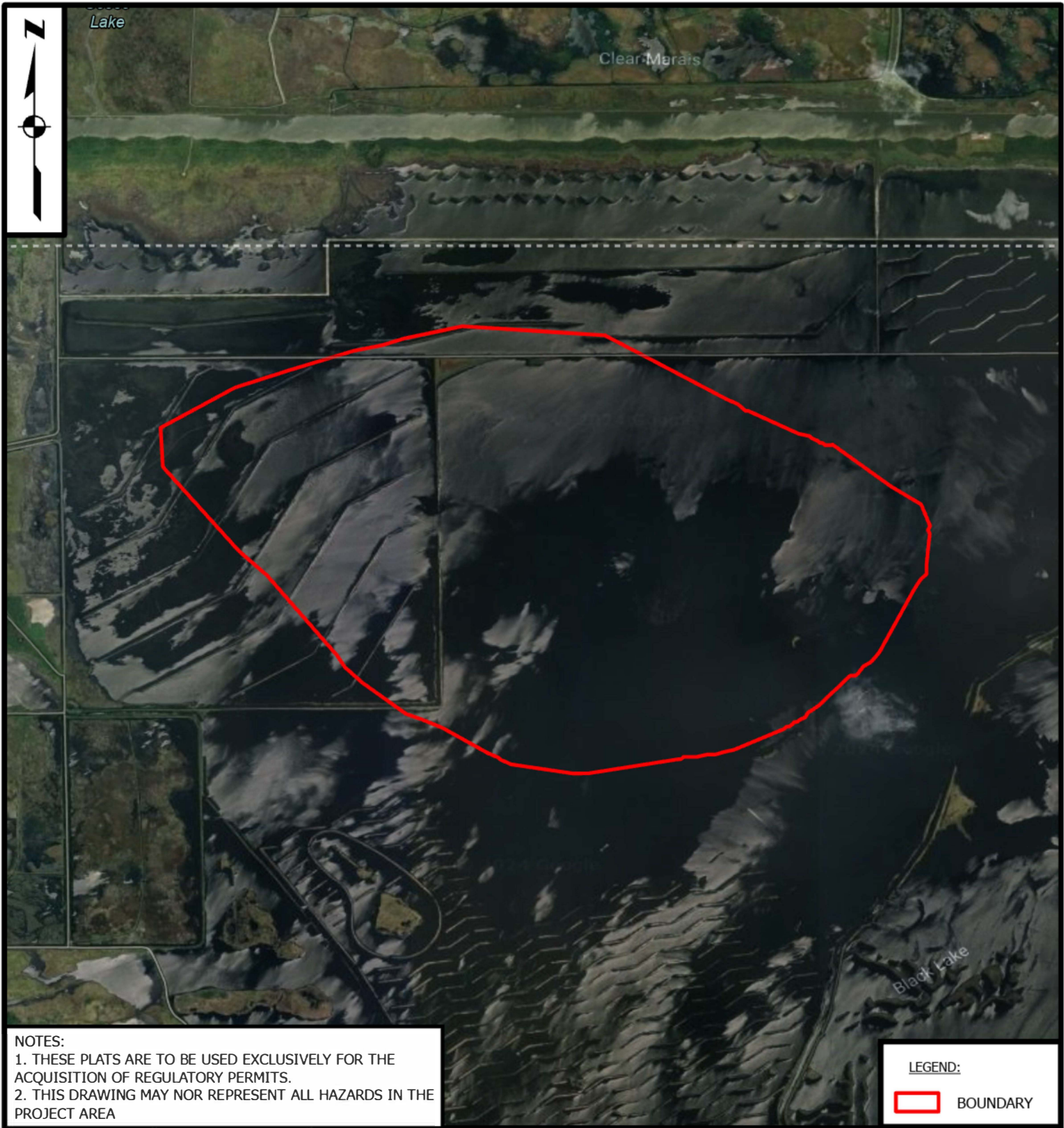
THREATENED AND ENDANGERED SPECIES REPORT

HACKBERRY CARBON SEQUESTRATION PROJECT

T12S-R11W


CAMERON PARISH, LOUISIANA

REV. NO:	REV. DATE:	REV. BY:
REVISION DESCRIPTION:		



NOTES:
1. THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.
2. THIS DRAWING MAY NOT REPRESENT ALL HAZARDS IN THE PROJECT AREA

LEGEND:
 BOUNDARY

DRAWN BY: GJL		APPROVED BY: BST		<div>PLAN VIEW</div> <div>HACKBERRY CARBON SEQUESTRATION LLC</div> <div>THREATENED AND ENDANGERED SPECIES REPORT</div> <div>HACKBERRY CARBON SEQUESTRATION PROJECT</div> <div>T12S-R11W</div> <div>CAMERON PARISH, LOUISIANA</div>	
DATE: 8/7/2024		JOB NO: 2021.0228			
DRAWING NAME: 21_0228_TaE					
SHEET NO: 1 of 1					
COORDINATE SYSTEM: GCS WGS 1984 Datum: WGS 1984					
<div><div>Yards</div><div><div></div><div></div><div></div></div><div>1,000 500 0 1,000</div></div>				<div><div> T. BAKER SMITH <small>SOLUTIONS START HERE</small> <small>187 Gladiolus Circle, Lafayette, LA 70503</small></div><div>REV. NO: REV. DATE: REV. BY:</div><div>REVISION DESCRIPTION:</div></div>	



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Louisiana Ecological Services Field Office
200 Dulles Drive
Lafayette, LA 70506
Phone: (337) 291-3100 Fax: (337) 291-3139



In Reply Refer To:

08/06/2024 20:20:43 UTC

Project code: 2024-0125764

Project Name: LAS-Carbon Sequestration Project

Subject: Consistency letter for the project named 'LAS-Carbon Sequestration Project' for specified threatened and endangered species that may occur in your proposed project location pursuant to the Louisiana Endangered Species Act project review and guidance for other federal trust resources determination key (Louisiana DKey).

Dear Lindsey Harris:

The U.S. Fish and Wildlife Service (Service) received on August 06, 2024 your effects determination(s) for the 'LAS-Carbon Sequestration Project' (the Action) using the Louisiana DKey within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers, and the assistance in the Service's Louisiana DKey, you made the following effect determination(s) for the proposed Action:

Species	Listing Status	Determination
Eastern Black Rail (<i>Laterallus jamaicensis ssp. jamaicensis</i>)	Threatened	NLAA
West Indian Manatee (<i>Trichechus manatus</i>)	Threatened	NLAA

Consultation with the Service is not complete. The "may affect - not likely to adversely affect" determination(s) becomes effective when the lead Federal action agency or designated non-federal representative uses it to ask the Service to rely on the Louisiana Endangered Species Act project review and guidance for other federal trust resources key to satisfy the agency's consultation requirements for this project.

Please provide this consistency letter to the lead Federal action agency or its designated non-federal representative with a request for its review, and as the agency deems appropriate, to submit for concurrence verification through the IPaC system. The lead Federal action agency or

designated non-federal representative should log into IPaC using their agency email account and click "Search by record locator". They will need to enter the record locator **446-147549644**.

This IPaC-generated letter only applies to the species in the above table and **does not** apply to the following ESA-protected species that also may occur in the Action Area:

- Alligator Snapping Turtle *Macrochelys temminckii* Proposed Threatened
- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

Please Note: If the Federal Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) may be required. Please contact Ulgonda Kirkpatrick (phone: 321/972-9089, e-mail: ulgonda_kirkpatrick@fws.gov) with any questions regarding potential impacts to bald or golden eagles.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

LAS-Carbon Sequestration Project

2. Description

The following description was provided for the project 'LAS-Carbon Sequestration Project':

Sempra Global proposes to create and maintain a CCUS well project near Black Lake in Cameron Parish, LA.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@30.0334467,-93.46072096730363,14z>



QUALIFICATION INTERVIEW

1. Is the action authorized, funded, or being carried out by a Federal agency?
Yes
2. Is the action authorized, funded, or being carried out by the:
a. U.S Army Corps of Engineers
3. Please identify your agency or organization type:
b. Designated non-federal representative
4. Have you determined that the project will have "no effect" on federally listed species? (If unsure select "No")
No
5. Are you with the U.S. Army Corps of Engineers Regulatory Division?
No
6. Are you with the U.S. Army Corps of Engineers Planning Division?
No
7. [Hidden Semantic] Does the project intersect the eastern black rail AOI?
Automatically answered
Yes
8. Will the proposed project involve human disturbance or ground disturbance (such as foot traffic, vehicles, tracked equipment, excavating, grading, placing fill material, etc.)?
Yes
9. Will the project directly impact suitable eastern black rail nesting habitat (shallow inundated wetlands containing mesic to hydric soils with dense herbaceous plant cover) and/or foraging habitat (wetland-upland transition zones with dense cover and 1-3 cm deep pools) and/or roosting habitat (elevated wetlands that allow for refugia from high water events and nest to be elevated above water level)?
No
10. [Hidden Semantic] Does the project intersect the west indian manatee AOI?
Automatically answered
Yes
11. (Semantic) Is the project located within the manatee consultation zone, excluding the Mississippi River?
Automatically answered
Yes
12. Is the project footprint entirely on land?
No
13. Is the water depth within the project greater than 2 feet (at mean high tide)?
Yes

14. Will the project occur during the months of June through November?

Yes

15. Will the following Standard Manatee [Conditions](#) for in-Water Activities be included within the project design?

Yes

16. [Hidden Semantic] Does the project intersect the pink mucket mussel AOI ?

Automatically answered

No

17. (Semantic) Does the project intersect the Louisiana black bear Range?

Automatically answered

No

IPAC USER CONTACT INFORMATION

Agency: T. Baker Smith
Name: Lindsey Harris
Address: 107 Global Cir
City: Lafayette
State: LA
Zip: 70503
Email: lindsey.harris@tbsmith.com
Phone: 3377352803

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers