



SURFACE TRANSPORTATION BOARD
Washington, DC 20423
Office of Environmental Analysis

HEO-2993

April 4, 2018

Tarek Ravenel
Palmetto Railways
540 East Bay St
Charleston, SC 29403

Re: Docket No. FD 36095, Palmetto Railways – Petition for Exemption – In Berkeley County, South Carolina; Information Request #4

Dear Mr. Ravenel:

Consistent with 40 C.F.R. § 1506.5(a), we request the information listed below to assist the Surface Transportation Board's Office of Environmental Analysis (OEA) in fulfilling its obligations under Section 7 of the Endangered Species Act, specifically pertaining to potential impacts to the Atlantic sturgeon (*Acipenser oxyrinchus*) and the shortnose sturgeon (*Acipenser brevirostrum*) resulting from the proposed Diversion Canal bridge crossing. OEA will use this information in its consultations with the National Marine Fisheries Service (NMFS). We have attached NMFS's Section 7 Checklist that OEA will use to initiate consultation with NMFS. While OEA is able to obtain some of the information from Palmetto Railways' Environmental Report and Section 404/401 Individual Permit Application, OEA needs the information requested below to complete the assessment. Please note that we have included the alpha numeric references from the Checklist for your convenience.

1. C.1. Existing Structures – Based on March 2017 aerial imaging, there does not appear to be any rip-rap or bank armoring along the Diversion Canal (above or below the ordinary high water mark) or any other existing in-water structures (e.g., docks) at the location of the proposed bridge crossing. Please confirm the absence of existing structures at the location of the proposed bridge crossing.
2. D.3. Overwater Structures - Please describe the rail bridge decking for the bridge spans.
 - a. What are the components of the bridge from side to side (i.e., walkways, concrete ballast trough, rail, ties) and what are they made from (e.g., steel, concrete)?
 - b. Are there any openings in the decking or are components impermeable (e.g., if there are walkways are they steel grated)?
 - c. If there are openings in any component of the decking, what are the approximate distances between openings or opening dimensions?
3. D.5. General Construction Methods (not including pile installation – see next question) - Please provide detailed plans for step-by-step bridge construction methodology, and locations of work (barge, upland or both).
4. D.6. Pile Installation – It is understood that Palmetto Railways anticipates drilled shaft foundations for all bridge supports, but based on Palmetto Railways' Response to Information Request #3 (dated March 7, 2018), pile driving cannot be ruled out. Therefore, to adequately assess potential impacts should pile installation occur, please provide information on the construction methodology (similar to general construction methods

above) used to install any piles that may be driven in-water to support the bridge. For the following questions, provide reasonable estimates, as appropriate:

- a. What is the composition of the piles (e.g., wood, vinyl, concrete, metal)?
 - b. What is the estimated maximum number of piles that would be driven in a day?
 - c. What is the estimated average number of pile strikes per pile?
 - d. Will piles be driven in a confined space (150 feet to nearest reflecting object)?
 - e. Based on Palmetto Railways' Section 404/401 Individual Permit Application, drilled shaft foundations will be used instead of piles, where feasible. Please describe drilled shaft foundations, how they differ from piles, and why Palmetto considers use of drilled shafts a mitigation/minimization measure that would benefit sturgeon (i.e., what impacts would be avoided/reduced by use of drilled shaft foundations).
 - f. Based on Palmetto Railways' Section 404/401 Individual Permit Application, piles will be installed with a vibratory driver to the maximum extent practicable, and impact hammer will be used if needed. Is there an estimate on how much one method may be used over the other, and are any other methods potentially necessary (i.e., jetting or auguring)?
 - g. Based on Palmetto Railways' Section 404/401 Individual Permit Application cushion blocks or other noise attenuation devices will be used if impact hammers are used. Please provide additional details on the cushion blocks and provide examples of the other attenuation devices that would be used. What would be the extent of underwater noise with and without attenuation devices for each method of pile driving used and what are the estimated underwater sound pressure levels?
5. D.9. Construction Schedule – Please provide an estimated construction schedule with the duration of the bridge construction's major phases of in-water work (e.g., number of days, weeks, or months, season restrictions, etc.). Please confirm that construction would only occur during daylight hours and no longer than 12 hours per day.
6. D.10. Conservation/Protective Measures – Please indicate how mitigation or other protective measures for sturgeon are being incorporated into the bridge design and construction, and if any measures in addition to those provided in Palmetto Railways' Section 404/401 Individual Permit Application are planned to avoid or reduce potential impacts to sturgeon.

Thank you for your assistance in this matter. Please feel free to contact Diana Wood of my staff at 202-245-0302 or by email at Diana.Wood@stb.gov, if you have any questions. I would appreciate two copies of your response, one sent to Diana Wood at 395 E Street SW, Washington DC 20423 or by email at the above address, and one sent to David Bauer of ICF, our independent

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third-party consultant, at 9300 Lee Highway Fairfax, VA 22031 or by email at David.Bauer@icf.com. We look forward to receiving this information at your earliest convenience, but no later than April 18, 2018.

Sincerely,



Victoria Rutson
Director, Office of Environmental Analysis

cc: Elizabeth Williams, U.S. Army Corps of Engineers
Encl: NMFS Section 7 Checklist

NMFS Endangered Species Act Section 7 Checklist

For common, minor coastal construction projects

Updated 09/15/2015

A) Project Identification

Lead Action Agency:

Agency Contact: (Phone, Email)

Applicant Name/ Contact: (Phone, Email)

Project Name & ID #:

Are any aspects of the proposed project being authorized under a separate consultation? (SAJ general permits, GRBO, SARBO, NWP, Programmatic consultation, etc.)

B) Project Location and Site Description

1. Address, including county and state, and description of property (public, residential, commercial, industrial, etc.):

2. a) Latitude & Longitude:

i. Required to be submitted in Decimal Degrees and Datum (e.g., 27.71622 , -80.25174 [NAD83])

ii. Online conversion: <http://transition.fcc.gov/mb/audio/bickel/DDDMSS-decimal.html>

3. Waterbody:

i. Name of the body of water on which the project is located (St. Johns River, Tampa Bay, Suwannee River, etc.)

ii. If riverine or estuarine, approximate navigable distance from marine environment (e.g., Atlantic, Gulf of Mexico)

C) Project Site Resource Description

1. Existing Structures: (Describe current structures in project area)

i. Marina, riprap, dock, etc.

ii. Number of slips, size (area of overwater structure), linear or square footage, location, orientation, etc.

2. Existing Conditions: (Describe the project area)

i. Substrate type, water quality, depth, etc.

ii. List any alterations to substrate type, water quality, depth, etc, resulting from the proposed action (qualitative and quantitative)

3. Seagrasses & Other Marine Vegetation

i. If a benthic survey was conducted provide date of survey and a copy of the report

ii. Species area of coverage estimates and density of species coverage (percentage) estimates

iii. Location relative to proposed structures. Provide detailed sketch of action area and location of marine vegetation

iv. List any impacts to seagrasses or other marine vegetation resulting from proposed action (square feet)

4. Mangroves

i. Species (red, black, or white)

ii. Area (square and linear feet). Provide detailed sketch of the action area and location of mangroves.

iii. List any impacts to mangroves resulting from the proposed action (square and linear feet)

5. Corals

- If a benthic survey was conducted provide date of survey and a copy of the report
- Species Present
- Area of coverage and density estimates (percentage, include estimates for each species)
- Location relative to proposed structures. Provide detailed sketch of action area and location of corals.
- List any impacts to corals resulting from proposed action (number and size of colonies and/or fragments)

D) Project Description and Construction Methods

- ☐ Yes, the applicant has agreed to follow the Mangroves and Seagrass Dock Construction Guidelines (Found [here](#))
- ☐ Yes, the applicant has agreed to follow NMFS Johnson's Seagrass Dock Construction Guidelines (Found [here](#))
- ☐ Yes, the applicant has agreed to follow the NMFS Sea Turtle and Smalltooth Sawfish Construction Conditions (Found [here](#))

1. Project: (Please describe)

2. In Water Structures:

- Type of structure(s) (e.g. boat basin, riprap, seawall)
- Square and/or linear feet of structure(s)
- Number of new vessels/slips, if any
- Is this structure new, removal, or replacement?

3. Overwater Structures:

- Will the structure have grated decking?
- Proposed spacing between boards (0.5-inch, 0.75-inch, none, etc.)
- Height above mean high water (MHW) elevation
- Directional orientation of main axis of dock
- Overwater area (calculate square footage)
- Is this structure new, removal or replacement?

4. If the proposed structure is a fishing pier please answer the following:

- Is the fishing pier public or private?
- How many people are expected to fish from the pier each day?
- What is the applicant's plan to address hook-and-line captures at the fishing pier?
- Will there be any educational signs posted?

5. Methods: (For pile installation, please see Pile Installation section below)

- Step-by-step construction methodology
- Demolition/ removal of existing structures and debris
- Location of work (barge, upland or both)

6. Pile Installation (Use additional rows for each combination of pile size and material)

Pile Material	Installation Method	Number of Piles	Pile Size (inches)	Max. number of piles to be driven per day	Average number of strikes per pile

Will piles be driven in a confined space (150' to nearest sound reflecting object)?

Yes ☐

No ☐

Will noise abatement be used?

Yes ☐

No ☐

Noise abatement details:

Pile Installation details/notes:

7. Dredging

Dredge Type: (Hopper, clamshell, etc.)

Area (sq. ft.) to be dredged:

Depth of cut:

Volume of material to be dredged: (cubic yards)

Sediment testing: (Has the material to be dredged been tested? Is there any contamination?)

Spoil disposal plans: (location of disposal area, sediment type at disposal area, etc.)

8. Artificial Reefs

Please refer to the artificial reef program websites for the particular state in which the project will occur:

[Alabama](#); [Florida](#); [additional Florida guidance](#); [Mississippi](#); [Louisiana](#); [South Carolina](#); [North Carolina](#); [Texas](#)

- i. Reef site selection (process details)
- ii. Materials to be used
- iii. Deployment Method
- iv. Deployment schedule

9. Construction Schedule

- i. Number of days/weeks/months of in-water work
- ii. Daylight construction only?
- iii. Seasonal restrictions?

10. Conservation/ Protective Measures

How is conservation, or other protective measures, being incorporated into this project, if at all?