

3.5 WATERS OF THE U.S.

3.5.1 Introduction

The term “waters of the U.S.” includes streams, creeks, rivers, ponds, lakes, and vegetated wetlands. The waters of the U.S. study area shares the same boundaries as the Vegetation and Wildlife study area depicted in Figure 3.4-1. This section provides a baseline characterization of water resources within the waters of the U.S. study area for the Proposed Project, and describes their extent, location, community type, and function. The affected environment includes portions of Noisette Creek, Shipyard Creek, and associated tidelands.

In accordance with 33 C.F.R. 328.3⁵⁴, waters of the U.S. are defined as:

1. *“All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
2. *All interstate waters including interstate wetlands;*
3. *All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:*
 - (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
 - (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or*
 - (iii) Which are used or could be used for industrial purpose by industries in interstate commerce;*
4. *All impoundments of waters otherwise defined as waters of the United States under the definition;*
5. *Tributaries of waters identified in paragraphs (a) (1) through (4) of this section;*
6. *The territorial seas;*
7. *Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section; and*
8. *Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.”*

⁵⁴ 33 U.S.C. 1344; 51 FR 41250, Nov. 13, 1986

Wetlands are further defined as:

“Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas (33 C.F.R. 328.3[b]⁵⁵).”⁵⁶

Hereafter, waters of the U.S., including wetlands, will be referred to collectively as waters of the U.S.

3.5.2 Existing Conditions

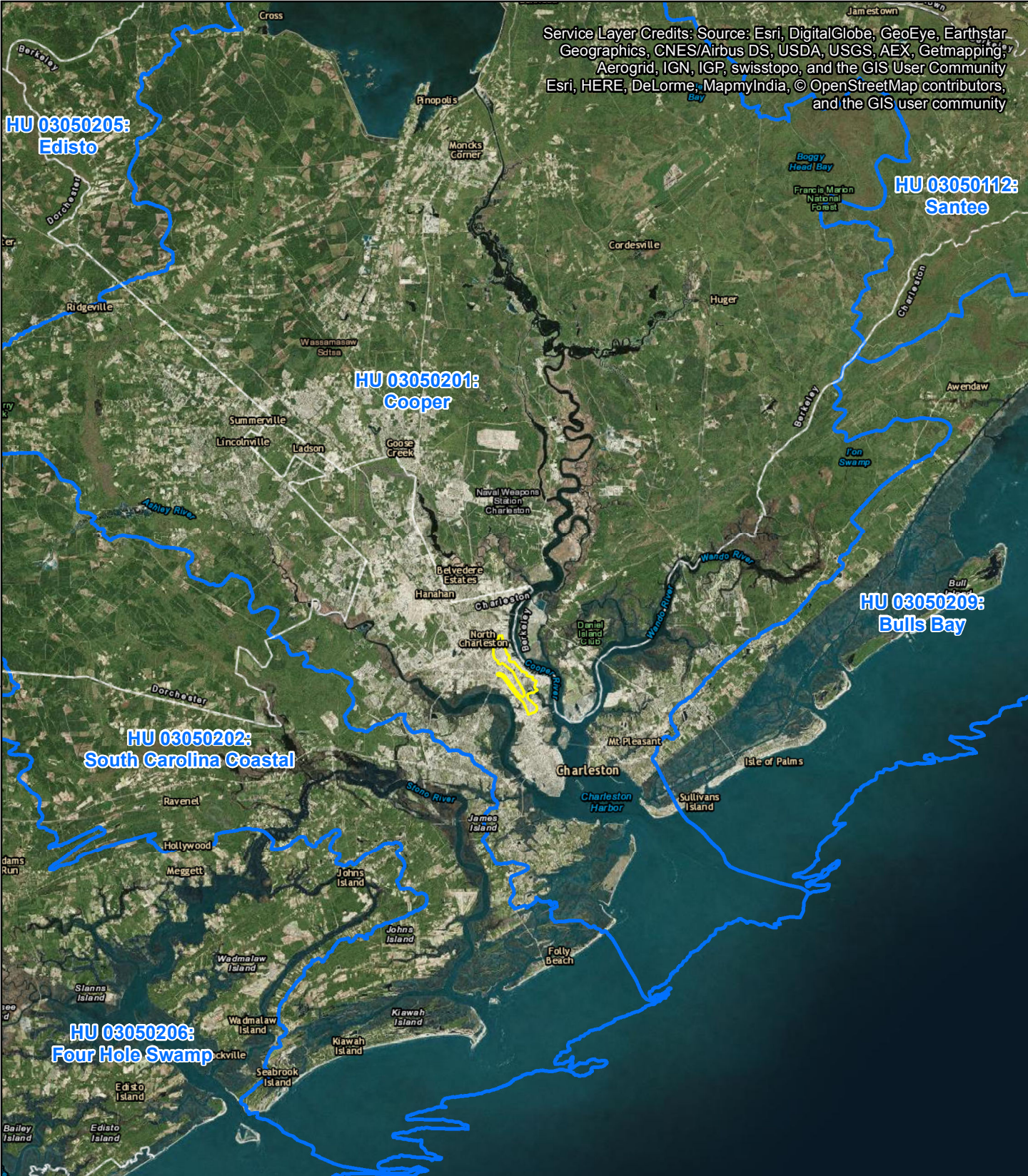
The Corps requires that jurisdictional determinations be developed in accordance with criteria specified in the *1987 Corps of Engineers Wetland Delineation Manual* (Corps 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0) (Regional Supplement)* (Corps 2007 and 2010), and the *Regulatory Guidance Letter (RGL) 05-05 Ordinary High Water Mark (OHWM) Identification* (Corps 2005). These criteria include the presence of appropriate hydrology, the presence of hydric soils, and vegetation communities dominated by hydrophytic (water loving) vegetation. Palmetto Railways submitted their 404/401 permit application (SAC 2012-00960) on October 11, 2016.

Waters of the U.S. features associated with the Proposed Project were provided by Palmetto Railways' 404/401 permit application. Since this EIS needed to evaluate areas outside the limits of the Proposed Project, the waters of the U.S. features associated with the 404/401 permit application were combined with estimated features outside of the Proposed Project area to create the base layer for the entire waters of the U.S. study area. Estimated features were created using a desktop-based methodology (Appendix D) that integrated field data from the study area to calibrate the estimations. The waters of the U.S. study area is located in the Cooper River watershed associated with the USGS designated hydrologic unit code (HUC) 03050201 (as shown in Figure 3.5-1). The ecological characteristics of waters of the U.S. vary due to their landscape, regional geology, and water budget. Therefore, it is important to consider these aspects in an ecoregion context (see Section 3.4.2.1). The following section provides a summary of the waters of the U.S., as well as their ecological context and regulatory considerations.

⁵⁵Code of Federal Register, <http://www.gpo.gov/fdsys/pkg/CFR-2012-title33-vol3/xml/CFR-2012-title33-vol3-sec328-3.xml>

⁵⁶The existing definition of waters of the U.S. as described in the Federal Register (51 FR 41250, November 13, 1986, as amended at 58 FR 45036, Aug. 25, 1993) is used due to the Order of Stay that is in effect nationwide as described in the Sixth Circuit United States Court of Appeals (15a0246p-06). The final rule published on June 29, 2015, as described in 80 FR 37054 is not used until the Order of Stay is resolved.

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Legend

- Waters of the U.S. Study Area
- 8-Digit HUCs



Source: USGS NHD 8-Digit Hydrologic Unit Codes (HUCs)



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USGS HUCs

Figure 3.5-1



3.5.3 Summary of Waters of the U.S. in the Study Area

As summarized in Table 3.5-1, a total of 157.80 acres of waters of the U.S., consisting of wetlands and open waters, and approximately 3,400 linear feet of freshwater creeks were identified within the waters of the U.S. study area. Of the two categories of wetlands that occur, the most prominent wetland feature is tidal salt marsh. In addition to tidal salt marsh, freshwater wetlands occur in small areas associated with natural drainages not affected by lunar or wind tides (see Figure 3.5-2).

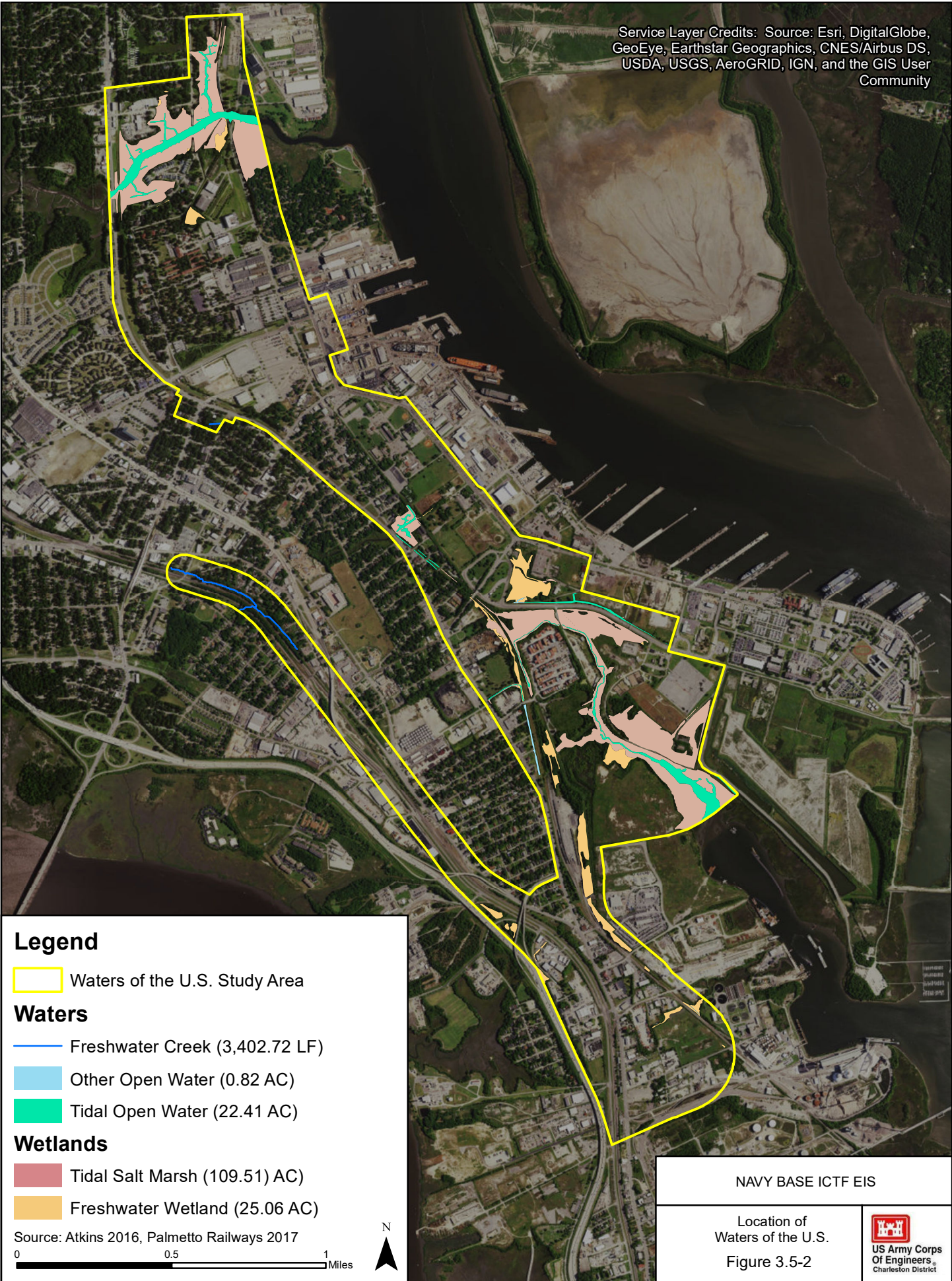
Noisette Creek and Shipyard Creek are both considered Section 10 waters by the Corps and U.S. Coast Guard (USCG). For the purposes of CWA/ Rivers and Harbors Act (RHA) regulations, both Noisette Creek and Shipyard Creek are also considered Traditionally Navigable Waters (TNWs). These tidal open waters connect all of the waters of the U.S. features present within the waters of the U.S. study area to the Cooper River. Along with these two named creeks, there are several ditches that are considered tidal open waters due to their lunar tide flooding.

There is one freshwater creek, characterized as a perennial Relatively Permanent Water (RPW), located near the intersection of Cosgrove Avenue and Cochise Street. This creek flows for a few hundred feet within the waters of the U.S. study area before entering a pipe that most likely discharges directly to the Cooper River. This perennial RPW contains a sandy loam substrate and has low flow.


The predictive mapping methods indicated the presence of several other freshwater creeks located within the vicinity of the CSX related activity. Field access to this site was not possible due to its proximity to active rail lines. The entire predicted length of these features are included in Table 3.5-1.

There are also freshwater, open water impoundments located at slightly higher elevations than the tidal open waters in the waters of the U.S. study area. These features have nearly permanent water, but flow is inconsistent due to tidal fluctuations of the receiving TNWs.

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Legend

 Waters of the U.S. Study Area

Waters

 Freshwater Creek (3,402.72 LF)

 Other Open Water (0.82 AC)

 Tidal Open Water (22.41 AC)

Wetlands

 Tidal Salt Marsh (109.51 AC)

 Freshwater Wetland (25.06 AC)

Source: Atkins 2016, Palmetto Railways 2017

0 0.5 1 Miles



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Location of Waters of the U.S.
Figure 3.5-2



Table 3.5-1
Waters of the U.S. within the Waters of the U.S. Study Area

Summary of Waters of the U.S.	
Wetlands	Area¹
Freshwater Wetland	25.06 AC
Tidal Salt Marsh	109.51 AC
Total Wetlands	134.57 AC
Waters	Length/Area¹
Freshwater Creek	3,402.72 LF
Tidal Open Water	22.41 AC
Total Creeks and Tidal Waters	3,402.72 LF/22.41 AC
Other	Area¹
Open Water	0.82 AC
Total Waters of the U.S.	3,402.72 LF/157.80 AC²

Source: Atkins 2018.

¹AC – acres; LF – Linear feet.

² Palmetto Railways 401/404 Permit Application was used to quantify Waters of the U.S. for Alternative 1: Applicant's Proposed Project and similar areas of other alternatives. Acreages for Waters of the U.S. outside of Alternative 1 were identified through GIS desktop analysis of National Hydrography Dataset (NHD) streams and a predicted wetlands layer that was created using a combination of elevation data, Charleston Harbor buoy data, and aerial photo interpretation. The predicted features were verified during field visits to the waters of the U.S. in the waters of the U.S. study area for the Proposed Project which took place in June 2014 and January 2016.

3.6 PROTECTED SPECIES

3.6.1 Introduction

The affected environment analysis for Protected Species considers all federal⁵⁷ and state-protected threatened, endangered, at-risk, and candidate species with the potential to occur in the Protected Species study area for the Proposed Project. The Protected Species study area includes the physical footprints of Alternative 1 (Proposed Project) and its alternatives, including the River Center project site, as well as the Cooper River to the east, Shipyard Creek to the south, and adjacent areas of North Charleston to the north of Noisette Creek (Figure 3.6-1). The evaluation area for terrestrial resources encompasses the entire Protected Species study area above an elevation of 5 feet above Mean Sea Level (MSL), while the evaluation area for aquatic and marine resources encompasses all areas at an elevation below 5 feet MSL, including tidal wetlands, tributaries, and rivers.

⁵⁷Species listed as threatened, endangered, or candidate by the USFWS pursuant to the ESA of 1973, as amended (16 U.S.C. 1536).