



Bayou Land Conservancy  
10330 Lake Road, Bldg J  
Houston, Texas 77070

February 20, 2019

Evaluation Branch, North  
Regulatory Division, CESWG-RD-E  
U.S. Army Corps of Engineers  
P.O. Box 1229  
Galveston, Texas 77553

Texas Commission on Environmental Quality  
401 Coordinator  
MSC-150  
P.O. Box 13087  
Austin, Texas 78711-3087

RE: Public Notice SWG-2016-00384

To Whom It May Concern:

Bayou Land Conservancy (BLC) is a non-profit, accredited land trust, working to preserve land along streams for flood control, clean water, and wildlife. Our work is focused in the watersheds that feed into Lake Houston, and within that area we work closely with the communities.

Project application SWG-2016-00384, for Romerica Investments LLC, has been submitted to the U.S Army Corp of Engineers (USACE, Corps) under Clean Water Act, Section 404, 33 U.S.C. § 1344 to authorize the discharge of dredge and fill material to wetlands subject to federal jurisdiction, an area adjacent to the West Fork of the San Jacinto River, Kingwood, Harris County, Texas. After reviewing the Public Notice and speaking with community leaders, we are writing to express our concerns about the project's significant environmental impact and the potential risks this project poses to the life, health, and safety of area residents.

BLC respectfully submits the following comments for your consideration during project evaluation, provided in a format similar to the Public Notice:

**PROJECT DESCRIPTION:**

The applicant proposes to discharge 68,323 cubic yards of fill material into 42.35 acres of wetlands and an estimated 285 cubic yards of fill material into 771 linear feet of streams adjacent to the West Fork San

Jacinto River during the development of a marina/resort district, a commercial district, a residential district, and roadway expansion.

It has been documented in the Public Notice that the current aquatic features onsite include: open water, forested wetlands, emergent wetlands, and streams, which flow into the West Fork of the San Jacinto River and Lake Houston. This project will ultimately result in the discharge of thousands of tons of fill material into these productive aquatic features, which have a significant nexus to Houston's drinking water supply. BLC understands that a waters of the U.S. delineation was verified by the Corps on May 10, 2018.

BLC made a Freedom of Information Act (FOIA) request to the USACE, which was fulfilled, to learn additional information about the wetlands delineation and verification. BLC learned that the waters of the U.S. delineation was verified by the USACE with a Preliminary Jurisdictional Determination after two site visits in May 2017. The project site includes 73 wetlands totaling 86.74 acres, 35 tributaries totaling 15,965.59 linear feet, and five areas totaling 32.631 acres that include ponds and other standing water that are not characterized as a wetland or tributary. The proposed project results in direct fill of 48% of site wetlands and 5% of linear stream feet. It is unknown by BLC how many of the verified wetlands and streams are within the noted "conservation area" of the project, and therefore unable to be filled.

BLC believes that site wetlands may meet requirements as Aquatic Resources of National Importance (ARNIs) that will be affected by the proposed project. This is based on the rarity of remaining undisturbed bottomland hardwood wetlands in the West Fork of the San Jacinto watershed, and the importance of the aquatic resources in the project area to the quality of the Nation's waters. In 2006, San Jacinto River (both the East and West Fork) was determined to be one of America's Most Endangered Rivers based on unregulated sand mining operations that permanently damages the river and its adjacent forest and wetlands. Wetlands on this project site have a significant nexus to the West Fork San Jacinto River and function to improve water quality prior to entering Lake Houston, one of the primary sources of drinking water for the City of Houston. BLC requests that the USACE and Environmental Protection Agency (EPA) evaluate if the proposed project will result in substantial and unacceptable impacts to ARNIs.

BLC believes this project has secondary impacts to waters of the U.S. that are not accounted for in the permit application. Without a table detailing the waters of the U.S. with the proposed impact dimensions, it is difficult to ascertain how the impacts were calculated. As proposed, the project plans show several aquatic resources being bisected or truncated and show the limits of disturbance. The limits of disturbance are a primary impact of the proposed plans, and there is no indication that the project has been evaluated for secondary or cumulative impacts to aquatic resources. Disruption of water flow into or within aquatic resources and sedimentation due to construction are secondary impacts that should be evaluated.

The aquatic resource labeled at SA001 (page 10 of 28, Plan View D2) is an example of an aquatic resource where the public cannot discern if secondary impacts were evaluated. The Public Notice includes plans that show the limits of disturbance, proposed pavement, but based on current aerial photographs, the

water extends further than the property line. Paving a portion of a stream will have impacts to the remainder of the stream, whether on the project property or not. Secondary impact analysis should not stop at the project boundary.

The Public Notice plans include a note that refers to an Attachment D Wetland and Waterbody Impact Tables, but this attachment is not included in the Public Notice. BLC requests that a table with full impact dimension be available for public review and that the impacts include both primary impacts, due to fill placement, and secondary impacts, aquatic resources whose function will diminish as a result of the project.

BLC requests an analysis of both primary and secondary impacts to aquatic resources that includes a discussion of temporal loss for aquatic resources on and off the property. BLC also requests that analysis be made available for public review.

**AVOIDANCE AND MINIMIZATION:**

In accordance with 33 CFR § 325.1(d)(7), for activities involving discharges of dredged or fill material into waters of the U.S., the application must include a statement describing how impacts to waters of the U.S. are to be avoided and minimized. The applicant stated they have avoided and minimized the environmental impacts, but the Public Notice includes no data to substantiate that claim.

BLC requests the applicant be required to provide an alternatives analysis that clearly depicts and describes avoidance and minimization measures that the applicant has taken. This analysis should be in accordance with 40 CFR § 230.10(a) which states that except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

The alternatives analysis should not rely solely upon economic cost as the deciding factor for a preferred alternative. According to 40 CFR § 230.10(a), an alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.

The alternatives analysis should be reviewed by permitting and resources agencies and available for review by the public.

**MITIGATION:**

According to 33 CFR § 332.3 (a), the fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the U.S. authorized by Department of Army (DA) permits. Without an alternatives analysis, the applicant has not shown that there are unavoidable impacts requiring mitigation.

If the District Engineer authorizes impacts with a DA permit, the applicant is required to complete compensatory mitigation commensurate with the amount and type of impact associated with the permit. The Public Notice lacks any kind of detailed information about mitigation that would be required to adequately review the applicant's mitigation plan. BLC requests the applicant be required to submit a detailed mitigation plan outlining either use of permittee responsible mitigation and/or purchasing credit from an approved mitigation bank.

Based on 33 CFR § 332.3(b), purchase of credits from an approved mitigation bank shall be considered prior to consideration of a permittee responsible mitigation plan. Following 33 CFR § 332.3(b) paragraphs 4 and paragraph 6, BLC requests that the applicant use a watershed approach to determine the most appropriate compensatory mitigation, be it permittee responsible mitigation and/or purchasing credit from an approved mitigation bank.

This project is located within the frontal Lake Houston watershed (Eight-digit Hydrologic Unit Code (HUC) 1204010105) within the larger West Fork San Jacinto Subbasin (Ten-digit HUC 12040101). The impacted aquatic resources are within bottomland riparian habitat along the West Fork San Jacinto River that is increasingly rare within the watershed as a result of rapid urbanization. Mitigation within the ten-digit HUC watershed will better replace lost aquatic resources in this unique landscape position. BLC requests that any mitigation occur within the frontal Lake Houston watershed, the ten-digit HUC.

**CURRENT SITE CONDITIONS:**

The Public Notice references a conservation easement (CE) within the project area for a previous permit (SWG-99-26-012). There is no CE, though there is a restrictive covenant (Harris County File #U210918 and U215790). Restrictive covenants differ from CEs in that CEs include more legally defensible restrictions and CEs include a third-party holder. BLC is an accredited land trust that is the third-party holder of over 60 CEs. The role of the CE holder is to protect, and legally defend, the property in perpetuity, long after the landowner changes. BLC requests that the USACE require the permittee to 1) replace/amend the existing restrictive covenant with a conservation easement that is held by an accredited land trust and 2) if PRM is authorized, the applicant be required to place a CE on the PRM land with a third-party accredited land trust named as the holder.

**NOTES:**

As previously stated, the applicant is required to complete compensatory mitigation commensurate with the amount and type of impact associated with the permit. BLC understands that the Corps has received the interim Hydrogeomorphic assessment and Level 1 Stream assessment but has not verified this information. BLC is concerned that the Public Notice was issued without this information available for review. Mitigation for project impacts are highly dependent upon the results of the assessments and can't be reviewed for appropriateness without the data.

In addition, BLC questions if the Level 1 Stream Condition Assessment is appropriate. The Level 1 assessment may be used to assess the functional condition of intermittent streams with perennial pools, perennial streams, and wadeable rivers when the proposed impact less than 500 linear feet. BLC believes that Level 1 is appropriate only when direct and cumulative impacts are less than 500 linear feet, and feels that the applicant's project impacts extend beyond this limit. As an example, SA001 is noted in the verification as 480.27 feet long within the property. However, this aquatic resource is visible extending beyond the property line. It seems inappropriate to only calculate the direct impact of the pavement placement within SA001, and disregard secondary impacts which will surely extend beyond the property line. BLC requests use of the Level 2 Stream Condition Assessment.

BLC requests that any wetland and waters assessments (including, but not limited to, the iHGM and stream assessment) be made available for public review.

**OTHER AGENCY AUTHORIZATIONS:**

In addition to the USACE, this letter is being sent to the TCEQ, EPA, U.S. Fish and Wildlife Service (USFWS), and Texas Parks and Wildlife Department (TPWD).

**THREATENED AND ENDANGERED SPECIES:**

BLC believes that the project, as proposed, may not adhere to 40 CFR § 230.10(b)(3) and § 230.30. The project would cause impairment and destruction of habitat that is crucial to the continued survival of Bald eagles, a Texas state threatened species (ranked as vulnerable within the state for both breeding and nonbreeding populations (S3B, S3N)). In the Public Notice, Bald eagles were observed to inhabit the proposed project area, thus it follows that destruction of habitat in the project area will negatively impact Bald eagles utilizing the land. Although nests weren't observed, it is unknown when the study was completed to know if it was during the nesting period.

Not only is this area habitat for Bald eagles, but according to the USFWS Information for Planning and Consultation (IPaC, attached) report pulled for this project area, there are at least seven migratory bird species that utilize this area as breeding and nesting grounds. The destruction of wetlands which prove to be vital habitat for these species would have a significant impact to migratory bird species.

The Public Notice includes no information about what threatened and endangered species were considered for this permit. Bottomland hardwoods are prime habitat for the state-threatened Timber Rattlesnake (*Crotalus horridus*), but there is no information if the applicant completed a survey for this species. According to TPWD, the fastest way to kill timber rattlesnake populations is by destroying or altering the places they need to hunt, hibernate and live.

The Public Notice doesn't indicate if mussel studies were completed within the project area. Any take (incidental or otherwise) of state-listed species is prohibited. The West Fork San Jacinto River provides potential habitat for two (2) state-listed freshwater mussel species: the Texas Pigtoe (*Fusconaia askewi*) and the Sandbank Pocketbook (*Lampsilis satura*). TPWD should be formally consulted to determine if a presence/absence survey is required for the listed freshwater mussels so as to prove the project will not have a "take" on listed mussel species. If a survey determines that either the Texas Pigtoe or Sandbank Pocketbook are present, the applicant should follow TPWD's Guidelines for Aquatic Resource Relocation Plans for Fish and Shellfish, Including Freshwater Mussels.

BLC requests that a Biological Assessment is completed that evaluates the project's impact on all potential threatened and endangered species and migratory species that may utilize the area. This assessment should be formally coordinated and reviewed by TPWD and USFWS.

**PUBLIC INTEREST REVIEW FACTORS:**

In accordance with 33 CFR § 320-332, BLC requests the following factors be reviewed prior to permit issuance. Many of these factors influence each other and none have been addressed in the Public Notice.

**Flood Hazards:**

BLC is extremely concerned about the proposed project's location in the floodplains of the West Fork of the San Jacinto River. The proposed project is located within the currently mapped 100-year floodplain (1% chance of being flooded in any given year) and floodway (5% chance of being flooded any given year).

From 2015 to 2017, three disasters were declared in Harris County by the federal government as a result of severe flooding. These flooding events established that currently mapped Federal Emergency Management Agency (FEMA) Floodplains for the area are inadequate. As such, the floodplain maps are being updated by Harris County Flood Control District (HCFCD) and FEMA. As recently as January 29, 2019, HCFCD approved \$2.5 million for engineering, project management and control, and quality control services in support of this project. The floodplain assessment has an expected delivery to FEMA in 2021.

The area surrounding this proposed project was severely impacted during Hurricane Harvey. In fact, houses in the neighborhood directly adjacent to the proposed project, Barrington, were 100%

impacted by flooding during Hurricane Harvey in August 2017. Every single house flooded. Please see the attached figure which illustrates the proposed project location and occurrence of flooding during Hurricane Harvey.

The Public Notice states that the project will raise the elevation from 45 to 57 feet. Based on data from USGS Stream Gage #8069500, located near the project site, water levels exceeded 57 feet at least nine different times since 2010, with less than half of those days occurring during Hurricane Harvey. During Hurricane Harvey, water levels were 63 feet upstream of this project and 61 feet downstream. The currently proposed fill elevations may meet current county and city permit standards, but they fail to meet a common-sense approach to development.

To permit a project within the floodway and floodplain of West Fork San Jacinto River, at a time of agreed-upon outdated knowledge, would be irresponsible of the USACE as it poses a risk to life, health, and safety. BLC requests an analysis of this project's direct and cumulative impacts on flood hazards in the region be conducted and made publicly available.

**Floodplain Values:**

Floodplains possess significant natural values and perform numerous functions important to the public interest. The proposed project has not been evaluated based on impact to these values, in particular on the role that the proposed project land has on flood moderation, water quality, and living resources. In an area heavily impacted by flooding, the cumulative impacts of a floodplain modification project, such as this, must be considered.

BLC requests an analysis of this project's direct and cumulative impacts on floodplain values be made publicly available.

**Shore Erosion and Accretion:**

The proposed project is located on soils primarily mapped as fine sands, and highly susceptible to erosion, particularly when vegetation is removed. The West Fork San Jacinto River currently suffers from excessive introduction and dispersal of sediments, and this project fails to address this significant local water quality problem. The environmental impacts of increased erosion and accretion, include the following: loss of important or sensitive aquatic habitat, decrease in fishery resources, loss of recreation attributes, human health concerns, loss of wetlands, nutrient balance changes, circulation changes, increases in turbidity, and loss of submerged vegetation.

The West Fork San Jacinto River is a dynamic river system undergoing significant erosion and accretion, as evidenced by review of historical aerial photography. Sand deposition and higher water levels in this portion of the West Fork San Jacinto River is believed by many local flood experts to have exacerbated the flooding that occurred during Hurricane Harvey. BLC believes that the cumulative

impacts of this project to the shore erosion and accretion of West Fork San Jacinto River are significant and must be considered.

BLC requests an analysis of this project's direct and cumulative impacts on shore erosion and accretion in the region be completed and made publicly available.

**Water Quality:**

No information related to the proposed project's impacts on water quality was included with the Public Notice. In accordance with 40 CFR § 230.11(b), the permit should be evaluated to determine the nature and degree of effect that the proposed discharge will have individually and cumulatively on water quality. Consideration should be given to water chemistry, salinity, clarity, color, odor, taste, dissolved gas levels, temperature, nutrients, and eutrophication. This portion of West Fork San Jacinto River is listed as impaired by the Texas Commission on Environmental Quality for not meeting pH standards. This segment is also listed for state concerns for nitrate and phosphorus based on screening levels.

In addition to environmental concerns about the impact of the project on water quality for aquatic life, BLC has concerns about the project's potential impact on drinking water quality.

This project is located at the confluence of the West Fork San Jacinto River with Lake Houston. Lake Houston is a primary source of drinking water for the City of Houston and includes the Northeast Water Purification Plant that treats 80 million gallons of water per day (which is in the process of being expanded to handle 400 million gallons of water per day by 2024).

BLC requests an analysis of this project's direct and cumulative impacts on water quality for both aquatic resources and drinking water be made publicly available.

**Aesthetics:**

In speaking with community residents and leaders, BLC is concerned that the proposed project doesn't meet the needs of the community aesthetically. The proposed project area of Kingwood is well known as a forested respite from the larger City of Houston, being nicknamed the "Livable Forest", populated with suburban style houses and businesses. BLC believes that the currently proposed high rise and marina development is inconsistent with local aesthetics and is concerned that this is not addressed in the Public Notice.

**Traffic:**

The Kingwood area has experienced significant residential growth that has contributed to increases in traffic volume and congestion along major thoroughfares in this area (2015, Kingwood Area

Mobility Study, City of Houston Lake Houston Redevelopment Authority (TIRZ #10)). This project proposes to add to the residential and commercial growth, without regard for traffic congestion.

In addition, BLC questions the development of high-rise buildings within a major flight path of the George Bush Intercontinental Airport. It is unknown if the project will require flight path changes, due to high-rise construction, which in turn would create disruptive noise issues.

BLC requests a traffic study of the direct and cumulative impacts that this proposed project would cause to the area. This study should include an evaluation of air traffic and an evaluation of noise disturbance. The resulting information should be made publicly available.

**CONCLUSION:**

BLC believes that the Public Notice lacks the information necessary to adequately consider the totality of impacts that will result from the proposed development. The environmental information provided in the Public Notice is substantially deficient, failing to meet regulations for permitting dredge and fill activities. In consideration of the significance of the proposed project's impacts and lack of information provided in the Public Notice, BLC requests an Environmental Impact Statement to evaluate impacts, following 33 CFR § 230(b).

BLC requests additional information and studies related to the issuance of a permit for this project be made publicly available and a public hearing be conducted, following 33 CFR § 325.2 (a)(5) and 327.4(b). If additional studies are not provided to the USACE, TCEQ, and the public, or if additional studies do not result in a Finding of No Significant Impact, BLC request that this permit is denied.

The potential risks this project poses to the life, health, and safety of area residents, has not been evaluated. BLC believes the project is contrary to the public interests of protecting wetlands, floodplain functionality, water quality, and wildlife and fisheries habitat.

BLC appreciates the opportunity to comment on the Public Notice and respectfully requests a response to this letter. Please contact me at [bmartinez@bayouland.org](mailto:bmartinez@bayouland.org) or 281-576-1634 if you have any questions.

Sincerely,

Becky Martinez  
Conservation Director  
Bayou Land Conservancy

Enclosures:

Aerial photograph of the proposed project with Hurricane Harvey Damage Assessment Data  
USFWS Information for Planning and Consultation for the Project Area

CC:

U.S. Environmental Protection Agency  
Region 6, Water Division  
Charles Maguire  
1445 Ross Avenue, Suite 1200  
Dallas, TX. 75202-2733

U.S. Fish and Wildlife Service  
TX Coastal Ecological Services Field Office -  
Houston  
17629 El Camino Real, Suite 211  
Houston, TX. 77058-3051

Texas Parks and Wildlife Department  
1502 FM 517 East  
Dickinson, TX. 77539

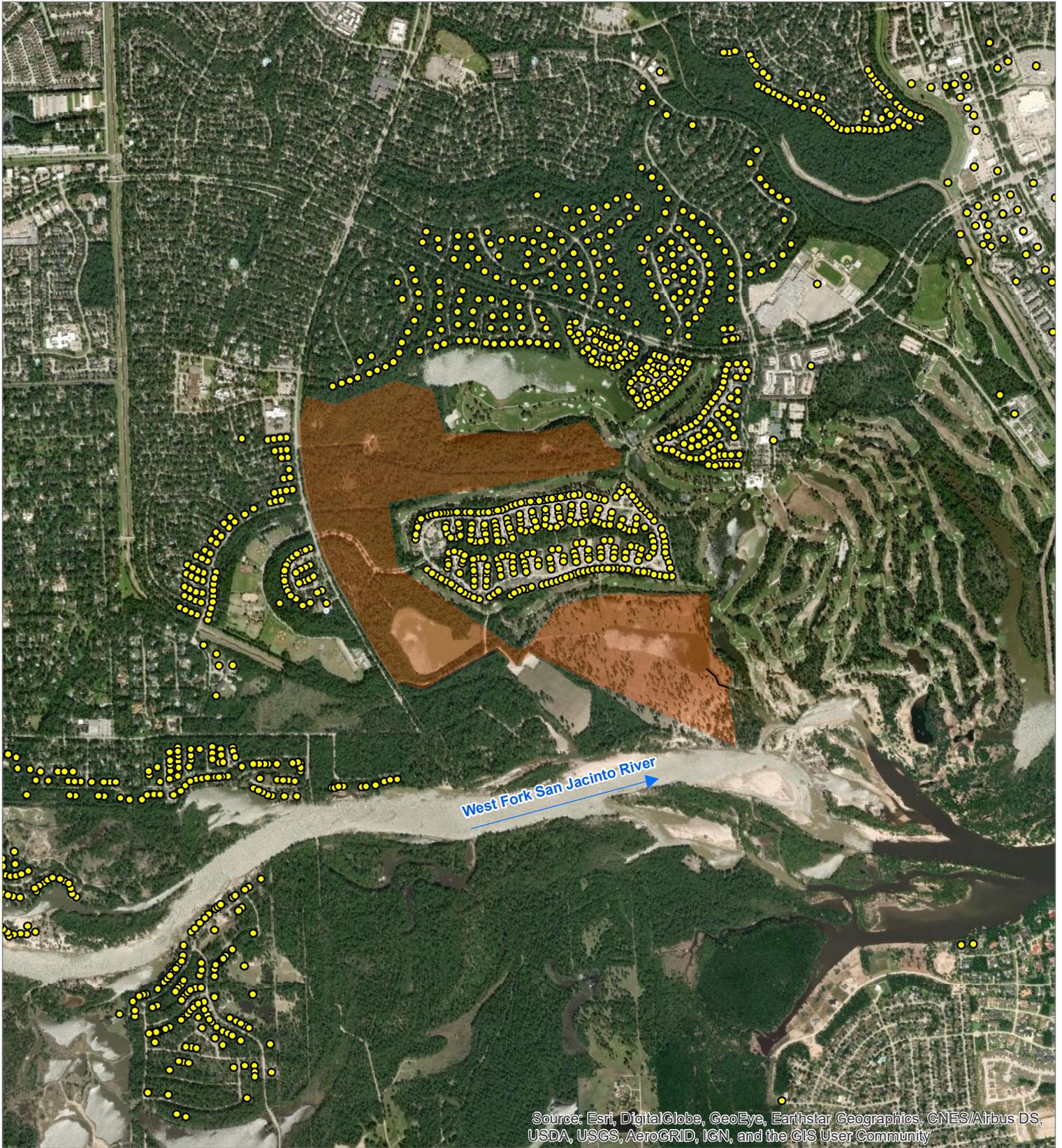
U.S. Senator Ted Cruz  
1919 Smith St., Suite 9047  
Houston, TX. 77002

U.S. Congressman Dan Crenshaw  
1801 Kingwood Drive, Suite 240  
Kingwood, TX. 77339

U.S. Senator John Cornyn  
5300 Memorial Drive, Suite 980  
Houston, TX. 77007

# SWG - 2016 - 00384

## Proposed Project with Hurricane Harvey Damage Assessment Data



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



- FEMA Damage Assesment Data
- Proposed Project

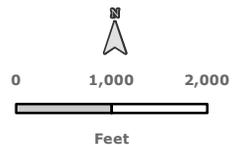


**We preserve land along streams for flood control, clean water, and wildlife**

Map Drawn By Becky Martinez

Organization Bayou Land Conservancy

Date 02/07/2019



Coordinate System

NAD 1983

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Harris County, Texas



## Local office

Texas Coastal Ecological Services Field Office

☎ (281) 286-8282

📅 (281) 488-5882

17629 El Camino Real #211

Houston, TX 77058

<http://www.fws.gov/southwest/es/TexasCoastal/>

[http://www.fws.gov/southwest/es/ES\\_Lists\\_Main2.html](http://www.fws.gov/southwest/es/ES_Lists_Main2.html)

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME

STATUS

**West Indian Manatee** *Trichechus manatus*

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/4469>

Threatened  
Marine mammal

## Birds

NAME	STATUS
<b>Least Tern</b> <i>Sterna antillarum</i> This species only needs to be considered if the following condition applies: <ul style="list-style-type: none"> <li>• Wind related projects within migratory route.</li> </ul> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8505">https://ecos.fws.gov/ecp/species/8505</a>	Endangered
<b>Piping Plover</b> <i>Charadrius melodus</i> This species only needs to be considered if the following condition applies: <ul style="list-style-type: none"> <li>• Wind related projects within migratory route.</li> </ul> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened
<b>Red Knot</b> <i>Calidris canutus rufa</i> This species only needs to be considered if the following condition applies: <ul style="list-style-type: none"> <li>• Wind related projects within migratory route.</li> </ul> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened

## Flowering Plants

NAME	STATUS
<b>Texas Prairie Dawn-flower</b> <i>Hymenoxys texana</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6471">https://ecos.fws.gov/ecp/species/6471</a>	Endangered

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE.

"BREEDS ELSEWHERE" INDICATES  
 THAT THE BIRD DOES NOT LIKELY  
 BREED IN YOUR PROJECT AREA.)

#### American Kestrel *Falco sparverius paulus*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Apr 1 to Aug 31

#### Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Sep 1 to Jul 31

#### Kentucky Warbler *Oporornis formosus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 20 to Aug 20

#### Lesser Yellowlegs *Tringa flavipes*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9679>

Breeds elsewhere

#### Prothonotary Warbler *Protonotaria citrea*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 1 to Jul 31

#### Red-headed Woodpecker *Melanerpes erythrocephalus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 10 to Sep 10

#### Swallow-tailed Kite *Elanoides forficatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8938>

Breeds Mar 10 to Jun 30

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

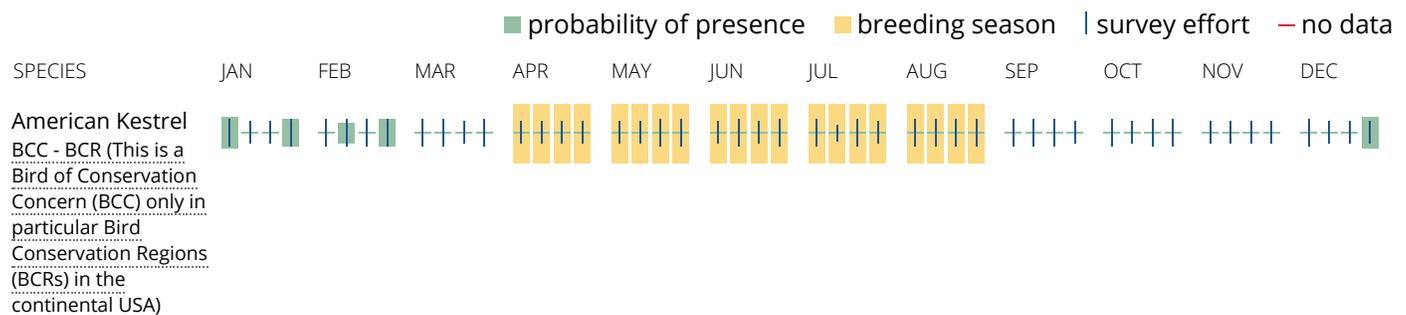
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

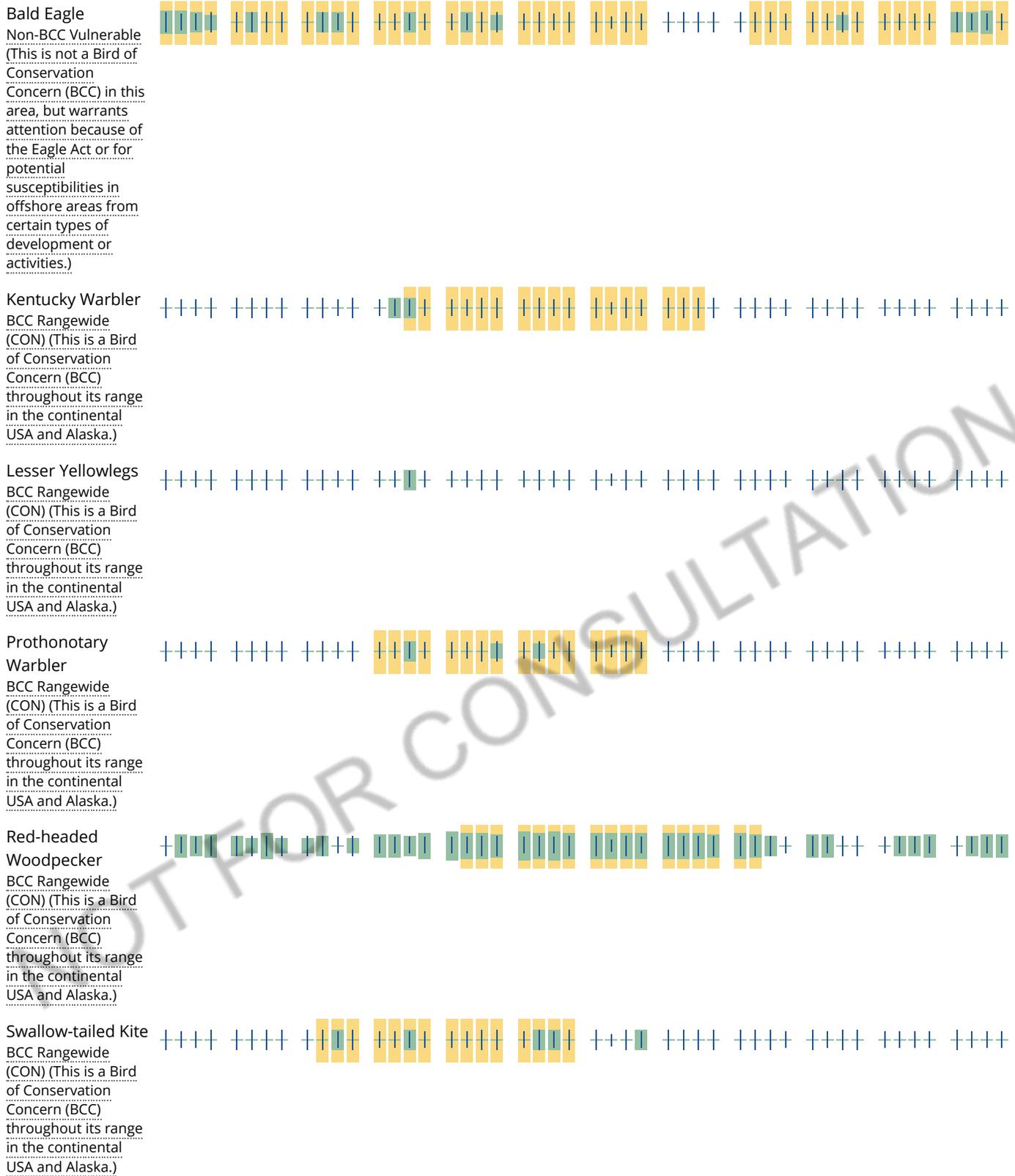
### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to

occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

### What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

## Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

## What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

## Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Marine mammals

Marine mammals are protected under the [Marine Mammal Protection Act](#). Some are also protected under the Endangered Species Act<sup>1</sup> and the Convention on International Trade in Endangered Species of Wild Fauna and Flora<sup>2</sup>.

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries<sup>3</sup> [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the [Marine Mammals](#) page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The [Endangered Species Act](#) (ESA) of 1973.
2. The [Convention on International Trade in Endangered Species of Wild Fauna and Flora](#) (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME

West Indian Manatee *Trichechus manatus*  
<https://ecos.fws.gov/ecp/species/4469>

## Facilities

## National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

# Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

### FRESHWATER EMERGENT WETLAND

[PEM1Cx](#)

[PEM1C](#)

### FRESHWATER FORESTED/SHRUB WETLAND

[PFO1/4A](#)

[PFO4A](#)

[PFO1C](#)

[PFO1Ch](#)

[PFO1A](#)

[PSS1C](#)

### FRESHWATER POND

[PUBFx](#)

### LAKE

[L1UBHh](#)

### RIVERINE

[R2UBHx](#)

[R4SBC](#)

[R5UBH](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error

is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.