

USGS NEPA CE Record

Project ID: 661 **Final Approval Status:** Approve

Project Name: Development of indicators and identification of thresholds to support reef restoration

Project Location Street Address: Not Provided. See description or attachments

Project Description:

Task 1 is just data analyses.

Task 2 will involve sampling the reef itself. Techniques will involve determining depth and extent of the reef (non-destructive); but also quantifying the reef "material" which does involve removing reef material to estimate volume of live and dead oyster material on the reef.

Task 3 involves sampling oyster reefs using diver quadrant surveys, which involves surveys where we remove/count (depends on clarity of water) reef material from the water; we also will take dredge samples at these reefs. This is proposed at our focus reefs only (Galveston, Aransas, St. Charles, Sabine).

Tasks 4 and 5 are for Coastal Bend. Activities will include collection of water samples, placement of 2 bags with 50 oysters each for two locations. Also, 24 trays with substrate will be affixed using rebar and will require some excavation at the reefs.

See attached proposal for more details.

Project Evaluator/Principal Investigator	e-Signature	Date	Organization Name	Business Entity
Beussink, Amy M	<i>Beussink, Amy M</i>	9/16/2025	OFFC OF REG EXEC, SOUTHEAST AREA	
Center Director or Responsible Official	e-Signature	Date		
Knight, Rodney R	<i>Knight, Rodney R</i>	9/17/2025		
Environmental Protection Specialist	e-Signature	Date		
Lapine, Michael E	<i>Lapine, Michael E</i>	9/17/2025		

USGS CE

B. Collection of data & samples for geologic, palaeontologic, hydrologic, mineralogic, geochemical & surface or subsurface geophysical investigations, & resource evaluation, including contracts thereof

DOI CE

N/A

Was an on-site review conducted? No

No On-Site Review Details

N/A

1. Will the project result in significant impacts on public health or safety? [40 CFR 46.215(a)] No

2. Does the project have the potential to significantly impact environmental resources (i.e., human, natural, & unique geographical resources or characteristics)? [43 CFR 46.215(b)] No

3. Will project have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources? [43 CFR 46.215(c). Sec 102(2)(E)] No

4. Will project have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks? [43 CFR 46.215(d)] No

5. Will project establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects? [43 CFR 46.215(e)] No

6. Will project have a direct relation to other actions with individually insignificant but cumulatively significant environmental effects? [43 CFR 43.215(f)] No

7. Will the project have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau? [43 CFR 46.215(f)] No

8. Will project have significant impacts on species listed, proposed to be listed, on list of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species? [43 CFR 46.215(h)] No

9. Will project violate a federal, state, local, or tribal law or requirement imposed for the protection of the environment? [43 CFR 46.215(i)] No

10. Will the project limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites? [43 CFR 46.215(k)] & E.O. 13007 No

11. Will project continue introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species? [43 CFR 46.215(l)] & Federal Noxious Weed Control Act and E.O. 13112 No

Executive Order 14154, Unleashing American Energy (Jan. 20, 2025), and a Presidential Memorandum, Ending Illegal Discrimination and Restoring Merit-Based Opportunity (Jan. 21, 2025), require the Department to strictly adhere to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. The USGS verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President's January 2025 Order and Memorandum.

Attachments

[NOAA NMFS Magnuson-Stevens FFH Approval USGS ID 166.pdf](#)
[RESTORE Research for Oyster Reef Restoration-Essential Fish Habitat Review - June 2025.docx](#)
[Texas Historical Commission Approval SHPO USGS ID=661.pdf](#)
[USGS Oyster Reef Restoration RESTORE informal consultation final FWS Hardgree USGS ID=661.pdf](#)
[USGS_FPL4_Oyster Reef Restoration Proposal_Revised_01162025_clean copy.docx](#)



In Reply Refer To:
FWS/R2/GRPO/
02ETCP00-2022-
0073927

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Gulf Restoration Program Office
4444 Corona Dr #215
Corpus Christi, Texas 78411
361-994-9005



June 2, 2025

Amy Beussink
Science Coordinator
U.S. Geological Survey, Southeast Region

Subject: Informal consultation request for the USGS Oyster Reef Restoration Proposal to RESTORE.

This letter is in response to the U.S. Geological Survey (USGS) request for informal Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service (Service) on the Oyster Reef Restoration Proposal submitted to the RESTORE Council as part of the FPL 4 Council lead projects. Your initiation request and project information were received on May 15, 2025.

The Service has reviewed the USGS study proposal. The effort aims to advance oyster restoration planning, design and assessment in Texas by evaluating sustainability of restored and natural oyster reefs, in closed and open harvest areas; to identify reef design elements that will enhance habitat use by both fish and wildlife; and to quantify reef biological response to chemical and physical variables. Oyster reefs will be sampled in the winter using divers and small oyster dredges pulled by small boats. Macrofauna inhibiting the reefs will be assessed using 24 sampling trays (45 X 30 X 11 cm) filled with reef material. Trays will be anchored to the reef and later collected. Water will also be collected from sites for chlorophyll *a* analyses. A total of eight reefs will be sampled for the study. Site will be located in Sabine Lake, Galveston Bay, Aransas Bay and St. Charles Bay.

This response is provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act), and in accordance with the implementing regulations pertaining to interagency cooperation (50 CFR 402). The Service reviewed the proposal activities for impacts to listed species under its jurisdiction. Only West Indian manatee and whooping crane were identified. Impacts to these two species were evaluated.

The West Indian manatee was reclassified from endangered to threatened on May 5, 2017, because the endangered designation no longer reflected the status of the species (82 FR 16668). Critical habitat for the Florida manatee subspecies was designated in 1976 (41 FR 41914) but no critical habitat designation is located in Texas. This species is also protected under the Marine Mammal Protection Act (MMPA). The major threats faced by this marine mammal include collisions with watercrafts, water control structures and navigational locks. Although rarely observed on the Texas coast, manatees have been observed foraging on seagrass habitat in several Texas bays and can tolerate a wide range of salinities but usually seeks warm water temperatures. Because most field activities associated with this proposal will be carried out in the winter, it is unlikely manatees will be present thus the impact is considered discountable. Inclusion of conservations measures listed below will further reduce potential impacts to the species to insignificant by allowing the manatee to leave the area on its' own volition. Therefore, the Service has determined that this project may affect but not adversely affect this species.

The endangered whooping crane, with less than 600 birds in the wild, winters along the marshes of the central Texas coast. The species currently winters primarily on the Aransas National Wildlife Refuge which is designated critical habitat for the species. Whooping cranes also occur in adjacent counties including Aransas, Calhoun, and Refugio. In recent years, whooping cranes from the Louisiana experimental population have been documented in more coastal counties as the flock has expanded in size. Typically, whooping crane wintering season is from November 1 to April 30 along the mid Texas coast. Whooping cranes are known to use uplands and wetlands surrounding St Charles and Aransas bays. Effects of the proposed work on the whooping crane is discountable because all work associated with this proposal will take place on submerged oyster reefs which is a habitat not typically used by whooping cranes and they are unlikely to be encountered. However, if reef locations are close to shore, then whooping cranes could be disturbed by study activities. Following the conservation measures listed below will reduce adverse effects to insignificant by allowing the birds to leave on their own volition. Therefore, the Service has determined that this project may affect but not adversely affect whooping cranes. This project will have no effect on critical habitat for this species.

Conservation Measures

West Indian Manatee

- All personnel associated with the project would be informed of the potential presence of manatees and the need to avoid collisions with manatees, which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973.
- All personnel are responsible for observing water-related activities for the presence of manatee(s).
- If a manatee is sighted within 100 yards of the active work zone, special operating conditions would be implemented, including: no operation of moving equipment within 50 feet of a manatee; all vessels shall operate at no wake/idle speeds within 100 yards of the work area. Once the manatee has left the 100-yard buffer zone around the work area on its own accord, special operating conditions are no longer necessary, but careful observations would be resumed.
- Any collision with and/or injury to a manatee shall be reported immediately to the Texas Marine Mammal Stranding Network in Galveston, TX at (800-9MAMMAL) 1-800-962-6625. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Houston at (281-286-8282).

Whooping Crane

- Provide all individuals working on the project with information in support of general awareness of whooping crane presence and means to minimize disturbance to the species if present.
- Between October and April all equipment reaching heights of 15' or greater will be lowered as much as possible during nighttime hours and periods of low visibility to reduce collision risk.
- If whooping cranes are observed within 1000 feet of project activities all work will stop until the cranes have left or move greater than 1,000 feet from the work site.

This concludes the Service's review for the USGS Oyster Reef Restoration Proposal. No further action pursuant to the Act is necessary unless new information reveals effects of the proposed project that may affect listed species or critical habitat in a manner or to an extent not previously considered; the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this determination; or a new species is listed or critical habitat designated that may be affected by the identified action.

Should the USGS have any questions regarding this consultation, please feel free to contact Wildlife Biologist, Adriana Leiva at (281) 898-5686.

Sincerely,

Beau Hardegree
Field Supervisor
Gulf Restoration Program Office

cc: Adriana Leiva, U.S. Fish and Wildlife Service, Corpus Christi, Texas



[EXTERNAL] Re: RESTORE Oyster Reef Research Project for EFH Review

From charrish stevens - NOAA Federal <charrish.stevens@noaa.gov>

Date Mon 6/30/2025 2:24 PM

To Beussink, Amy M <ambeussi@usgs.gov>

Cc _NMFS ser HCDconsultations <nmfs.ser.hcdconsultations@noaa.gov>

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hello Amy,

The National Marine Fisheries Service Southeast Regional Office's Habitat Conservation Division has reviewed the Essential Fish Habitat Assessment provided on June 26, 2025, for a RESTORE Council Funded FPL 4 Project entitled "Development of indicators and identification of thresholds to support reef restoration." The research project is proposed to take place in Aransas, St. Charles, Galveston, and Sabine Bays and Estuaries along the Texas Coast. We believe compliance with the proposed conservation measures and guidelines would enable avoidance and minimization of any potential adverse impacts to essential fish habitats. Therefore, we have no essential fish habitat conservation recommendations to provide for the proposed project.

Assuming the project is not further revised, this satisfies the consultation procedures outlined in 50 CFR Section 600.920, the regulation to implement the essential fish habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act. If you have any questions or concerns, please do not hesitate to contact me. This concludes the required essential fish habitat consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act.

Thank you for your coordination,

**Charrish Stevens
Fishery Biologist
Habitat Conservation Division
NOAA National Marine Fisheries Service
4700 Ave U, Galveston, TX 77551**

**Office Ph: (409) 766-3697
Fax: (409) 766-3575
Email: charrish.stevens@noaa.gov**

On Thu, Jun 26, 2025 at 5:25 PM charrish stevens - NOAA Federal <charrish.stevens@noaa.gov> wrote:

Thanks, I'll take a look.
Charrish Stevens
Fishery Biologist
Habitat Conservation Division
NOAA National Marine Fisheries Service
4700 Ave U, Galveston, TX 77551

Office Ph: (409) 766-3697
Fax: (409) 766-3575
Email: charrish.stevens@noaa.gov

On Thu, Jun 26, 2025 at 4:58 PM Beussink, Amy M <ambeussi@usgs.gov> wrote:

Hi Charrish,

The attached document describes the proposed RESTORE research project in need of EFH review. The RESTORE Council is selecting this research project as part of FPL4 to be funded in 2026.

The document includes a description of the project, a map with subject water bodies labeled, list of the species and habitat in those areas, and our determination of that there may be minor short term impacts and no adverse or long term impacts.

Please let me know if you have questions.

Thank you,

amy

~ ~

Amy Beussink
Science Coordinator
US Geological Survey, Southeast Region

ambeussi@usgs.gov
Mobile 713-560-9899



[EXTERNAL] Development of indicators and identification of thresholds to support reef restoration

From noreply@thc.state.tx.us <noreply@thc.state.tx.us>

Date Wed 4/16/2025 6:21 PM

To Beussink, Amy M <ambeussi@usgs.gov>; reviews@thc.state.tx.us <reviews@thc.state.tx.us>

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TEXAS HISTORICAL COMMISSION
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Re: Project Review under Section 106 of the National Historic Preservation Act

THC Tracking #202508558

Date: 04/16/2025

Development of indicators and identification of thresholds to support reef restoration

19241 David Memorial Drive

Conroe, TX 77385

Description: USGS and HART Institute are investigating Texas coastal bay and estuary conditions to help inform resource managers on decisions related to potential oyster reef restoration and fisheries management.

Dear Amy Beussink:

Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act.

The review staff, led by Amy Borgens, has completed its review and has made the following determinations based on the information submitted for review:

Archeology Comments

- No identified underwater archeological sites, historic shipwrecks, and/or significant remote-sensing targets present or affected. However, if buried cultural materials are encountered during project activities, work should cease in the immediate area; work can continue where no cultural materials are present. Please contact the THC's Archeology Division at 512-463-6096 to consult on further actions that may be necessary to protect the cultural remains.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: amy.borgens@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit <http://thc.texas.gov/etrac-system>.

Sincerely,



for Joseph Bell, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.