



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
<https://www.fisheries.noaa.gov/region/southeast>

10/24/2024

F/SER25:JB
Tab A, No. 9

Dr. Carrie Simmons, Executive Director
Gulf of Mexico Fishery Management Council
4107 West Spruce Street, Suite 200
Tampa, Florida 33607

Dear Dr. Simmons:

Enclosed is a request from Texas Sea Grant to obtain an exempted fishing permit (EFP). The EFP would be valid through December 31, 2028, commencing on the date the EFP is issued. The application submitted to NOAA Fisheries involves the testing of new bycatch reduction device (BRD) designs in the commercial shrimp fishery in federal waters of the Gulf of Mexico (Gulf). The Better BRDs for the Gulf Shrimp Fleet Project is a collaborative effort amongst Louisiana Sea Grant, Texas Sea Grant, NOAA Restoration Center, and NOAA Fisheries to restore finfish populations injured by the Deepwater Horizon oil spill through development and certification of new BRDs for the commercial shrimp industry throughout the Gulf. The EFP would exempt these research activities from federal regulations specific to the shrimp fishery in federal waters of the Gulf at 50 CFR § 622.53 - BRD requirements. The project is currently working under an authorized EFP that expires on December 31, 2024. The project is summarized below.

This project would identify and develop new bycatch-reducing technology to minimize commercial shrimp trawl fishing pressure on finfish populations and advance cost-effective solutions and incentives that would maximize the adoption of improved BRDs. New BRD designs were vetted by NOAA Fisheries Gear Research Branch partners during proof-of-concept dive testing aboard the R/V *Caretta* off Panama City, Florida. The applicant would further evaluate the vetted BRDs through an incentivized commercial stakeholder testing period prior to certification trials. This would allow for data collection on the strengths and weaknesses of new gear across the mosaic of species and environmental conditions within the Gulf. This testing would also aid in the acceptance of new BRDs by the commercial shrimping industry when the most promising designs are later submitted for certification.

Up to 50 federally-permitted commercial Gulf shrimp vessels would be selected to test gear that passed the proof-of-concept dive testing. The incentivized gear testing effort would continue up to submission for BRD certification. During testing, vessels listed on this EFP would be surveyed for qualitative information about the new BRDs, and any other use recommendations that are needed. Additional information including time and difficulty to install, longevity, ease of use (tangling during deployment/retrieval, shark damage), bycatch and shrimp retention characteristics, and overall cost would be collected to assist with recruitment for industry wide roll out. Protocols for the collection of these data on the test BRDs aboard commercial shrimp trawl vessels would mirror those of the NOAA Fisheries Observer Program and the processes outlined in the NOAA Fisheries Bycatch Reduction Device Testing Manual. Information from



the gear tests would be collected and managed by Sea Grant University researchers with summaries provided to NOAA partners on a regular basis.

For your review, please find enclosed a draft EFP for this proposed activity. Please contact us should you have questions or concerns about issuance of this EFP. If you need additional information, please contact Frank Helies at (727) 824-5305.

Sincerely,

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REW.JAMES.13658
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Andrew J. Strelcheck
Regional Administrator

cc: John McGovern, Ph.D.
Frank Helies
Mara Levy

Enclosure

Application:

Date Submitted: October 04, 2024

Research end date: December 31, 2028

Project coordinator:

Laura Picariello, Interim Director Texas Sea Grant, lpicariello@tamu.edu, 361.371.4207

Point of contact:

Laura Picariello, Interim Director, lpicariello@tamu.edu, 361.371.4207

Matt Kammann, Fisheries Bycatch Reduction Manager, mkammann@tamu.edu, (361) 480-8587

Purposes and goals of activity:

The Better Bycatch Reduction Devices (BRD) for the Gulf Shrimp Fleet Project is a collaborative effort amongst Louisiana Sea Grant, Texas Sea Grant, NOAA Restoration Center, and NOAA Fisheries to restore finfish populations injured by the Deepwater Horizon oil spill through development and certification of new BRDs for the commercial shrimp industry throughout the Gulf of Mexico. This project will identify and develop new bycatch-reducing technology to minimize commercial shrimp trawl fishing pressure on finfish populations and advance cost-effective solutions and incentives that will maximize the adoption of improved BRDs. An Exempted Fishing Permit (EFP) is requested to allow for testing of new BRD designs under commercial fishing conditions within the Gulf of Mexico (Gulf).

The project is separated into several phases. The first phase, conducted in 2022, included proof-of-concept testing of new BRD designs by NOAA Fisheries Gear Research Branch partners. This testing involved both dive and vessel testing aboard the R/V Caretta. New BRD designs that showed the greatest potential to be effective during proof-of-concept testing were accepted for further evaluation during the project's next phase. The subsequent phase, initiated in 2023 and covered by the previous EFP issued to this project (effective October 6, 2022, through December 31, 2024), involves ongoing commercial stakeholder testing of the vetted BRDs. This phase focuses on testing the BRDs consistent with the requirements in 50 CFR 622.53(a)(2) and the NOAA Bycatch Reduction Device Testing Manual. The purpose of the commercial stakeholder testing authorized under the EFP is to directly measure performance of new BRD designs across a variety of bycatch species and environmental conditions within the Gulf. The project goal is to determine if these BRD designs produce a restoration benefit, showing improved performance over the existing industry standard BRD- the fisheye. New BRDs will only be recommended by the project team for certification if they produce a restoration benefit above and beyond the minimum certification threshold of 30% bycatch reduction. This stakeholder testing, and stakeholder involvement with a final "roll out" phase after testing is complete, will aid in the acceptance of new BRDs by the commercial shrimping industry after the most promising designs have received NOAA Fisheries bycatch reduction certification.

Up to 50 federally-permitted commercial Gulf shrimp vessels will be selected by Texas Sea Grant to test gear that passed the proof-of-concept testing. The location of the testing vessels

will be distributed across the federal Gulf shrimp fishery and fishing grounds throughout the Gulf in water depths of 10-50 fathoms. During testing, some vessels included in the EFP will have Sea Grant researchers aboard to gather quantitative information about the new BRDs. Sea Grant researchers will compare measurements of the catch from both experimental and control nets. Additional information on each BRD including time and difficulty to install, longevity, ease of use (*e.g.*, tangling during deployment/retrieval and shark damage), bycatch and shrimp retention characteristics, and overall cost will also be collected from surveys and interviews with vessels participating in this project. These vessels, covered by this permit to use these BRDs after NOAA Fisheries certification, will assist with promotion of new BRD designs for industry wide usage during a final “roll out” period. .

List of specific regulation from which exemption is being requested:

An exemption is requested to 50 CFR § 622.53 - Bycatch reduction device requirements. BRD designs, which have been vetted by proof-of-concept testing and are anticipated to meet or exceed current BRD bycatch reduction characteristics, will be installed on all federally permitted commercial shrimping trial vessel nets that are participating in the incentivized testing. The comparisons being made with the gear trials are between new BRD designs, and designs which have already been certified for legal use in the Gulf commercial shrimp fishery, not between nets without BRD devices installed and the new BRD designs. There will always be a BRD installed in all nets used by vessels participating in this testing.

Catch information:

This project anticipates catch profiles appropriate for the federal shrimp fishing grounds of the experimental vessel. We foresee the new BRD designs having a potential for a reduction in bycatch over the federally certified Fisheye BRD, which may also lead to a cleaner catch. To ensure that effort reflects genuine commercial fishing, and because incentives will not cover all operating costs, shrimp that are caught on participant vessels are free to be sold or otherwise utilized in whatever legal fashion that the owners determine. The location of testing trial vessels will be distributed across the federal penaeid shrimp fishery and fishing grounds throughout the Gulf. Aboard vessels with Sea Grant researchers, total catch weight and total shrimp weight will be recorded for each experimental and control net after each tow.

Additionally, a random subsample of approximately 32 kg/70 lbs of mixed bycatch will be removed from the catch, weighed and processed for a modified bycatch characterization. This will include shrimp weight, finfish counts, and weights for pre-determined finfish taxa, counts and weights for other predetermined taxa (*i.e.* rays and sharks, jellyfish, etc.) for all other finfish grouped, and for other taxa groups. Shrimp catch will be retained by the vessel crew under their federal commercial Gulf shrimp permits and bycatch will be returned to the water as is typical of normal commercial operations.

Any anticipated impacts:

There are no deleterious environmental, marine mammal, essential fish habitat, or endangered species impacts anticipated as a result of this work. We anticipate several new BRD designs would yield lower finfish bycatch rates and greater shrimp retention when compared with

currently approved BRDs. All vessels performing BRD testing under this permit will be operating during normal legal fishing seasons under valid Gulf shrimp permits and within Gulf waters that are open to legal U.S. commercial shrimp trawl fishing.

The anticipated effort information for each vessel:

Up to 50 federally permitted commercial shrimp fishing vessels are expected to participate in BRD trials under this permit. Vessels will be using experimental BRD designs on trips of up to 30 days at sea. Trip time, and the total number of tows with experimental BRD gear may vary as conditions and business factors necessitate at the discretion of the vessel. During a 30-day trip, approximately 90 tows are expected to occur. Tow times will be variable between vessels, but will be consistent during each trip. Typical tow time averages three hours but may vary from one to five hours. On vessels with a Sea Grant researcher, approximately $\frac{2}{3}$ of total tows per trip (~60) are expected to be observed and recorded. If all 50 vessels participate, and complete each test tow, there is the potential for a maximum of 3,000 tows over the course of the project. A minimum of 40 tows for each BRD system being tested will be recorded by Sea Grant Researchers.

Type and size of gear to be used:

Commercial shrimp vessels using otter trawl gear, standard 2 or 4 trawl nets and 1 try net. Turtle excluder devices (TEDs), required by law, will be installed at all times during testing.

Experimental BRDs:

Large Mesh Sections:

Areas of the net that are composed of 2" or larger mesh that are well above minimum codend dimensions, installed anywhere from 4 to 8 ft from tie off rings. The large mesh provides openings that allow fish to escape. This design is often used with chafing gear that floats away from the tail bag and allows fish to escape while discouraging predator interactions.

Flapless TED:

Testing bycatch reduction of two different flapless TED designs known as the Chauvin TED, and the Drury TED. These are both top-shooting TEDs with PVC pieces ahead of the bars. The bar design "knocks shrimp down" as they pass through the TED extension and the large openings allow fish to escape. The Chauvin TED is already certified as a TED design but has shown excellent bycatch reduction potential. The Drury TED design modifies the Chauvin with a different diameter bar that is not included in a sack and shares the potential for bycatch reduction. The Drury TED design is in line for TED certification.

Composite Panel Variations:

Already certified design includes two soft panels with two sets of windows that allow fish to escape the net. Additionally, a secondary component of either a spooker cone or a large mesh section is installed further down the net. There is a potential for differences in bycatch reduction characteristics when used with a top vs bottom shooting TEDs. There is also potential for differences when installed in combination with Large Mesh Section BRD designs or with the

composite panel escape openings in a top as opposed to the current certified design which orients the escape openings to the bottom.

Large TED Openings:

Large TED escape openings are already certified for industry use. The triangular cut design shows potential for bycatch reduction. This design has an opening with a base no less than 40 in wide across the TED frame. The sides of the triangle taper along the bar and must each measure no less than 53 in. Similar to the flapless TEDs, the well placed opening allows fish to escape.

Number of days during which the experiment will be conducted:

Day of receipt through December 31, 2028

Sampling locations (including depth):

Federal waters of the Gulf of Mexico off Texas, Louisiana, Mississippi, Alabama, and Florida at depths of 10-50 fathoms.

Information for vessels to be used for the EFP as soon as the information is available and before operations begin under the EFP:

See Appendix 1.

Principal Investigator's (including the applicant's and/or project coordinator's) CVs:

See Appendix 2.

Signature:

A handwritten signature in black ink, appearing to be 'L. L. L.', written in a cursive style.

Appendix 1: List of vessels participating in BRD research trials.

List of fishing vessels and vessel owners included under the EFP (as of June 12, 2024).

Vessel Name	Vessel ID	Vessel Owner	Home Port
Blood and Guts	504945	Charles Burnell	Brownsville, TX
Last of the Mohicans	595424	Ronnie Anderson	New Orleans, LA
Helen Kay	556852	Gary Graham	Freeport, TX
Old Frenchman	592390	Gary Graham	Freeport, TX
Miss Madeline	1088867	Ernest Aparicio	Palacios, TX
Fortuna	613355	Justin Versaggi	Tampa, FL
Waymaker	1040733	James Blanchard	Houma, LA
Miss Cathy	575655	Juan Gaona, Jr	Port Isabel, TX
Little Ernie	1093432	Ernest Aparicio	Palacios, TX
Southern Clipper	589356	Ernest Ruttley, Jr	Barataria, LA
Mr Williams	608678	Ronnie Williams	New Orleans, LA
St Joseph	1039485	Tom Thanh Vu	Palacios, TX
Drury Legacy	1053626	Kevin Drury, Sr	Covington, LA
My Angel	617863	Nguyen Hoi Van	Biloxi, MS
Miss Christina	923316	Chad Rogers, Jr	Lafitte, LA
Josey Wales	683250	Jesse Lecompte, Jr	Chauvin, LA
Candy Man	515556	Seth Sanders	Brownsville, TX
Queen Mary	928647	Merinaldo Nieto	Brownsville, TX
Oceanica Cruz	1095887	Rolando Zepeda	Brownsville, TX
Lady Tiffany	1027078	Lindsey Burroughs	Bayou La Batre, AL
Nathan James	1079273	Nathan Rogers	Lafitte, LA
Michael S	646716	Sammy Snodgrass	Brownsville, TX
Chackbay Lady	913789	Parish Williams	Houma, LA
Luke & Easton	1288923	Terry Luke	Dulac, LA
Mariah Jade	1039109	David Chauvin	Chauvin, LA
Daytin & Destin	1079814	Kim Chauvin	Chauvin, LA

Additional vessels may be added throughout the course of this project and this Appendix will be updated as additional vessels are approved.

Appendix 2: Principal Investigator(s) CVs.

Laura Picariello

1614 40th Street
Galveston, TX 77550
lpicariello@tamu.edu

EDUCATION

Master of Marine Conservation and Policy, Stony Brook University, *Stony Brook, NY* 12/2012
Bachelor's Degree, University of Southern California, *Los Angeles, CA* 12/2000

PROFESSIONAL EXPERIENCE

Interim Director June 2018 – present
Texas Sea Grant College Program, Texas A&M University
College Station, TX

Director, Gulf United for Lasting Fisheries (G.U.L.F.) November 2017 – May
2018 Audubon Nature Institute
New Orleans, LA

Technical Programs Manager, G.U.L.F. September 2015 - October 2017
Audubon Nature Institute
New Orleans, LA

Research Assistant, G.U.L.F. November 2013 - September 2015
Audubon Nature Institute
New Orleans, LA

Sea Going Technician I August 2013
Integrated Statistics
Woods Hole, MA

Teaching Assistant, Marine Biology Field Program July 2010, 2011, 2012, 2013,
2014 Glendale Community College, Estación del Mar Cortés
Bahia de Los Angeles, Mexico

GRANTS AND PROJECTS

Principal Investigator. Better Bycatch Reduction Devices for the Gulf of Mexico Commercial Shrimp Trawl Fishery: Sea Grant's Role. January 2021-December 2023. NOAA-National Sea Grant Office.

Principal Investigator. Sea Turtle Small Bar Spacing TED Project: Planning for Industry Engagement and Communications. July 2021-June 2024. NOAA-National Sea Grant Office.

Principal Investigator. COVID-19 Prevention among Seafood Workers: Outreach and engagement activities. June 2021-June 2022. Centers for Disease Control and Prevention (CDC) National Institute for Occupational Health and Safety (NIOSH)

Principal Investigator. Texas Oyster Mariculture Workshop Training: Sea Grant COVID-19 Response. September 2021-August 2022. NOAA-National Sea Grant Office.

Principal Investigator. DOC-NOAA-National Sea Grant Office. Network Visioning Implementation Grant. September 2019-August 2022. Recreational For-Hire Fishing Guide Best Practices Training Program and collection of local/traditional ecological knowledge from fishermen through a Coastal Monitor Network.

Co-PI. Reducing Barotrauma Using Fish Descender Devices. July 2021- August 2023. NOAA National Sea Grant Office via University of Florida.

Co-PI. Extending Our Reach: A multi-state collaborative approach to reef fisheries Extension. September 2021- August 2025. NOAA National Sea Grant Office via Mississippi-Alabama Sea Grant.

Co-PI. Food from the Sea: Regional Gulf of Mexico Approach. September 2021- February 2022. NOAA

National Sea Grant Office via Louisiana State University.

Co-PI. 2020-2023 Gulf of Mexico and South Atlantic Greater Amberjack Research Program. September 2020- August 2021. NOAA National Sea Grant Office via University of Florida.

Co-PI. Resolving Barriers to Sustainable Fishery Certification for the Gulf of Mexico Federal Otter Trawl Shrimp Fishery. September 2020- August 2022. NOAA Saltonstall Kennedy Grant via LGL Ecological Associates.

Co-PI, Outreach Coordinator. A Decision-Support Tool for Evaluating the Impacts of Short- And Long Term Management Decisions On The Gulf Of Mexico Red Snapper Resource. July 2017- June 2021. NOAA RESTORE Science Program. PI: Yuying Zhang, Florida International University.

Project Lead and Scheme Manager. Development and Implementation of the Gulf United for Lasting Fisheries (G.U.L.F.) Responsible Fisheries Management (RFM) Certification Program (internationally accredited, third-party certification for wild capture fisheries in the Gulf of Mexico). Audubon Nature Institute. August 2015 through May 2018. State of Louisiana, Department of Wildlife and Fisheries (LDWF). CFMS#729613, PO#2000079332 and # 2000258640.

Project Lead. Benchmarking of the G.U.L.F. RFM Certification Program to the Global Sustainable Seafood Initiative (GSSI) Benchmarking Tool. Formal GSSI recognition received October 2018. State of Louisiana. LDWF. Contract# 2000258640.

Project Lead. Gulf of Mexico Shrimp Fishery Improvement Projects (FIPs)- Louisiana, Texas, Mississippi and Alabama. Audubon Nature Institute. American Shrimp Processors Association (ASPA). Supporting a Stable and Thriving Gulf of Mexico Shrimp Fishing Industry to protect and preserve the Gulf Shrimp Fishery and Fishermen. Funding Award. October 1, 2017-Sept. 30, 2018.

Research Coordinator. Fishing Industry Outreach and Facilitation Support for the Deepwater Horizon Oceanic Fish Restoration Project. National Fish and Wildlife Foundation (NFWF) #0315.16.054379. June 2017-January 2018.

Key Personnel. Gulf Coast Conservation Grant (GCCF). NFWF # 6001.16.052546. Reduction of Sea Turtle Capture through Shrimp Industry Engagement. July 2016-June 2017

Project Co-Lead. Fishery Improvement Plan, Design, Implementation and Communications. Gulf States Marine Fisheries Commission. NA10NMF4770481. September 2013-August 2015.

COMMITTEES AND WORKING GROUPS

Gulf States Marine Fisheries Commission

Sea Grant Fisheries Extension Advisory Committee, chair	Sept. 2019 –
present Gulf of Mexico Fishery Management Council	
Outreach and Education Technical Committee member	June 2019 –
present Shrimp Advisory Panel member	June 2021 –
present	

Audubon G.U.L.F. Responsible Fisheries Management Certification Program

Fisheries and Chain of Custody Technical Advisory Committees August 2015 –
present Gulf of Mexico Commercial Fisherman’s Training Program
Planning Team and Steering Committee member September 2018 –
present Texas Department of Agriculture
Shrimp Marketing Advisory Committee October 2020 –
present Houston Food Systems Collaborative
Executive Committee September 2021 – present