

ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

Federal Agency Name(s): National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce

Funding Opportunity Title: Marine Fisheries Initiative (MARFIN)

Announcement Type: Initial

Funding Opportunity Number: NOAA-NMFS-SE-2016-2004533

Catalog of Federal Domestic Assistance (CFDA) Number: 11.433, Marine Fisheries Initiative

Dates: Applications must be received by <http://www.grants.gov>, postmarked, or provided to a delivery service by 5:00 pm, Eastern Standard Time, Friday, October 2, 2015. Use of Grants.gov is preferred. If Grants.gov cannot be used, use of U.S. mail or another delivery service must be documented with a receipt; private metered postmarks are not acceptable. Applications received more than 5 business days following the closing date will not be accepted. No facsimile or electronic mail applications will be accepted. Please note: Validation or rejection of your application by Grants.gov may take up to 2 business days after submission. Please consider this process in developing your submission timeline. Applications not adhering to postmark or submission deadlines will be rejected and returned to the sender without further consideration.

Funding Opportunity Description: The National Marine Fisheries Service (NMFS), Southeast Region, is seeking proposals under the Marine Fisheries Initiative Program (MARFIN), for research and development projects that optimize the use of fisheries in the Gulf of Mexico, Puerto Rico, the U.S. Virgin Islands, and off the South Atlantic states of North Carolina, South Carolina, Georgia, and Florida involving the U.S. fishing industry (recreational and commercial), including fishery biology, resource assessment, socio-economic assessment, management and conservation, selected harvesting methods, and fish handling and processing. This program addresses NOAA's mission goal "Healthy Oceans."

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

The Marine Fisheries Initiative (MARFIN) is a competitive Federal assistance program that funds projects seeking to optimize research and development benefits from U.S. marine fishery resources through cooperative efforts involving the best research and management talents to accomplish priority activities. Projects funded under MARFIN provide answers for fishery needs covered by the NMFS Strategic Plan, available from National Marine Fisheries Service (NMFS), particularly those goals relating to: rebuilding over-fished marine fisheries, maintaining currently productive fisheries, and integrating conservation of protected species and fisheries management. Funding priorities for MARFIN are formulated from recommendations received from non-scientific and technical experts and from NMFS research and operations officials.

With the long-term planning capabilities available through the Southeast Data, Assessment, and Review (SEDAR) process, the priorities are selected to coordinate assessment needs with this solicitation. There is no preference between short-term and long-term projects.

B. Program Priorities

Proposals must address one of the priority areas listed below as they pertain to federally managed species. If you select more than one priority, you should list first on your application the priority that most closely reflects the objectives of your proposal. Projects should focus on the greatest probability of recovering, maintaining, improving, or developing fisheries; collecting data directly applicable for improving stock assessments, and/or generating increased social and economic values and opportunities for commercial and recreational fisheries. The priorities are not listed in any particular order of importance.

1. Bycatch

The bycatch of biological organisms (including interactions with sea turtles and marine mammals) by various fishing gear types can have wide-reaching impacts from a fisheries management and an ecological standpoint. Numerous factors contribute to bycatch and bycatch mortality, including fishing gear, depth, species morphology, environmental variables, and regulations. Determining methods and gear for reducing bycatch and bycatch

mortality can reduce fishing mortality and operational costs, increase efficiency, and result in less waste.

a. Collect and analyze shrimp trawl fisheries data in the U.S. to expand and update current bycatch estimates, temporally and spatially emphasizing areas of greatest impact by shrimping. Sampling effort should include estimates of numbers, weight, and random samples of size (age) structure of associated bycatch complex. The statistical design and extent of the shrimp-trawl observation program should ensure bycatch data collected are appropriate and sufficient for stock assessment of the bycatch species, specifically species of commercial and recreational importance such as red snapper.

b. Identify, develop, and evaluate gear, non-gear, and tactical fishing options to reduce bycatch in the U.S. shrimp trawl fisheries.

c. Obtain estimates of sea turtle interaction and capture rates in U.S. shrimp trawls or other data that addresses problems in estimating sea turtle interaction and capture rates in U.S. shrimp fisheries as identified in the 2011 biological opinion on shrimp fisheries.

d. Identify gear and tactics that can be used to reduce sawfish interactions with shrimp trawl gear in the Gulf of Mexico (Gulf).

e. Characterize and assess the impact of bycatch in the commercial and recreational reef fish fisheries including depth-related release mortality for species caught with hook and line, bottom longline, and bandit gear. Studies are needed to evaluate the impacts of the Gulf individual fishing quota programs on bycatch, including whether discards are due to harvest of undersized fish or lack of sufficient allocation. Studies are also needed to estimate the magnitude of discarded snapper-grouper species associated with quota and seasonal closures in the Gulf and South Atlantic.

f. Characterize the species composition, age, sex, size, and disposition of all fishes caught during recreational and commercial fishing and assess the impact of bycatch of undersized reef fish, shark, and mackerels, including release mortality. Research is needed on catch-and-release mortality of reef fish species, by gear (e.g., capture by commercial bandit rigs that are electrically or hydraulically powered), sector (e.g., headboat, private boat, charter boat, commercial), and depth. Studies are needed to evaluate acute (short-term observations typically at surface by observers) and chronic, long-term release survival rates.

g. Identify gear and tactics that can be used to return regulatory discards to depth in the recreational and commercial reef fish fisheries to minimize or reverse pressure-related fishing trauma.

h. Test and validate the use of on-board recording systems (e.g., electronic logbooks) for capturing information on discarded fishes in the commercial and recreational reef fish

fisheries including species, length, depth, location, and disposition (float, swim, etc.).

- i. Identify gear and tactics that can be used to reduce sea turtle interactions with commercial fisheries in the Gulf.
- j. Research to document predation rates by marine mammals on discarded reef fish and mackerel species.
- k. . Characterize effort, fishing tactics and catch rates of sea turtles at recreational fishing sites that have significant catch of turtles and recommend changes to reduce bycatch.

2. Reef Fish and other Fishery Resources Associated with Reef Environments

Some species within the reef fish complex are overfished and/or experiencing overfishing because of directed efforts and bycatch in other fisheries. Reef fish are vulnerable to overfishing because they tend to concentrate over specific types of habitat, are often long-lived, may aggregate to spawn, and sometimes change sex.

a. Collect basic biological data for species in commercially and recreationally important fisheries using statistically defined and defensible sample sizes and sample allocations. For all reef fish species, representative age, length, and sex composition data are needed for all sectors (commercial, private, for-hire), gear, seasons, and areas. Life history studies are needed that cover the complete geographic range of species scheduled for upcoming stock assessments. Species-specific estimates of recruitment, fecundity, steepness, natural mortality, release mortality, and gear selectivity are also needed for stock assessments, as well as estimates of how catchability has changed overtime due to technological and other advances. Proposed projects may include the following:

(1) Conduct research on age, growth, and reproduction of reef fish. Collect basic fishery information (landings, discards, and biological characteristics) for all managed stocks necessary to develop age-based quantitative stock assessments for those stocks that comprise the bulk of the fishery, or serve as important ecological indicators.

(a) Describe the age, growth, and fecundity, especially for South Atlantic, Gulf, and Caribbean species in anticipation of upcoming stock assessments. Provide an evaluation of the survey and biological sampling information available for all managed stocks that are currently unassessed.

(b) Collect otoliths from groupers, snappers, and other reef fish species according to the Gulf States Marine Fisheries Commission (GSMFC) otolith manual. Analyze age information (by gear and sector) considering temporal and geographic effects, where applicable. Develop standardized techniques for ageing reef fishes. Resolve any discrepancies in fish age estimates by different institutions.

(c) Age sampling from commercial and recreational fishery sectors (e.g., private, charter, headboat) that is representative of the catches for South Atlantic, Gulf, and Caribbean species. Conduct representative sampling of age- and length-composition consistently across area, time, and gear. Examine the age structure of reef fishes taken from longlines (survey and fishery) and other gear, to evaluate availability to gear types and the geographic distribution of fish as they age.

(d) Identify spawning locations for reef fishes in the Gulf, South Atlantic, and Caribbean.

(2) Develop fishery-independent methods and three-dimensional larval dispersal/connectivity models for monitoring and predicting recruitment of reef fishes in the Gulf, South Atlantic, and Caribbean.

(3) Conduct comprehensive fishery independent monitoring and sampling in the South Atlantic, Gulf of Mexico, and Caribbean to support quantitative assessments, track changes in fish size and reef fish abundance over time assess status and trends of reef fish species, and reconcile differences between catch per unit effort indices and fishery-dependent age composition used for stock assessments. Indices should cover a broad seasonal/spatial scale, and age structure.

(4) In relation to the oil spill in the Gulf of Mexico, particular emphasis should be placed on determining the impacts on deepwater species of commercial and recreational importance (e.g. yellowedge grouper, warsaw grouper).

(5) Conduct research to estimate changes in catchability by gear over time due to the introduction of GPS and marine chart-plotting equipment.

(6) Assess the contribution of live-bottom habitat, marine protected areas, and habitat areas of particular concern (HAPC) in the South Atlantic, Gulf, and Caribbean to reef fish recruitment and survival.

(7) Conduct research examining the efficacy of marine reserves, marine protected areas, and HAPCs in the Gulf, South Atlantic, and Caribbean reef fishes. Specific research is needed for comparing compositions, densities, locations, habitat associations, and size and age distributions of species inside and outside of existing or potential marine protected areas, particularly for South Atlantic warsaw grouper and speckled hind. Conduct fishery independent surveys to determine the effectiveness of Marine Protected Areas. Information is needed on locations where reef fish spawning occurs, including locations of spawning aggregations. Work is also needed to classify habitat using high resolution imagery.

(8) Research the stock structure of reef fish and other fishery resources associated with reef fish environments as listed below:

(a) Examine retention and residency of reef fish species. Examine temporal and spatial differences in the size at age, size at maturity, and other life history characteristics.

(b) Conduct genetic research on stock structure of commercially and recreationally important reef fishes in the Gulf and South Atlantic. Evaluation of stock structure and identification of stock units is needed before conducting a first time benchmark assessment for any stock. Genetic research is needed for scamp and gray snapper by 2017 for use in upcoming stock assessments. Continue oceanographic and genetic studies to identify the origin of spiny lobster recruitment to the United States and Caribbean.

(c) Use genetics techniques to estimate the effective population size of reef fish populations in the Gulf and South Atlantic.

(d) Conduct traditional tagging studies or use genetic tag methods to estimate natural mortality and release mortality rates of managed fishes.

(e) Tagging data are needed to help elucidate movement of black sea bass between Mid-Atlantic and South Atlantic regions and movement of Gulf red snapper between the eastern and western Gulf. A tag and recapture program for red drum in the Gulf is needed to help determine the status of the offshore portion of the stock. Tagging programs specifically designed to examine the mixing of king mackerel between Gulf and South Atlantic regions should be developed. Tagging data are needed for Caribbean spiny lobster to provide estimates of growth and natural mortality. In the Gulf of Mexico, greater amberjack, the jack complex, and lionfish management also can benefit from tag and recapture studies.

b. Management of reef fish

(1) Identify ways to design, manage, and implement a U.S. Caribbean fishing permit specific to gear or fishery.

(2) Develop a pilot program for fisheries-dependent and fisheries-independent sampling of reef fish species, such as groupers, tilefishes, and snappers, including quantifying bycatch, catch composition, and size frequency.

(3) Evaluate the utility of electronic logbooks and other data collection systems for commercial and for-hire fisheries in the Gulf, South Atlantic, and Caribbean. Projects should focus on validation of data and timeliness of data delivery.

(4) Develop statistical models integrated with stock assessment projections for use by fishery managers in evaluating the effects of management actions (e.g., bag limits, size limits, seasonal closures, etc.) on future harvest rates and catch limits.

(5) Develop pilot studies and methods for enhancing data collection to test alternative

management strategies for the recreational sector, such as tagging programs, days-at-sea, regional state-by-state management, and catch share programs.

(6) Characterize the impacts of invasive species (lionfish, etc.) on ecosystems and their influence on stocks managed by fishery management councils, including information on geographic ranges, rates of expansion, food web dynamics, and habitat (niche?) competition with native species.

(7) Investigate the value of Gulf oil rigs as fish habitat for reef fishes as well as their potential as habitats to enhance stock building efforts. Quantify the size and species composition of fish killed by explosive removal of oil and gas platforms.

3. Red Snapper Research

Red snapper are overfished and undergoing overfishing in the South Atlantic and are overfished in the Gulf. Additional information is needed to improve stock assessments of red snapper.

a. Conduct research (e.g., otolith analysis, tagging, etc.) to better describe stock structure and mixing rates of red snapper and other reef fishes between the eastern and western.

b. Develop and/or evaluate gear, fishing tactics, and management measures to minimize the bycatch of or increase the survival of discarded red snapper and other reef fish species in the directed and shrimp trawl fisheries. Identify fishing tactics and gear that can be used to reduce red snapper interactions and discard mortality in the South Atlantic and Gulf with hook-and-line gear.

c. Characterize and assess the impact of bycatch of undersized red snapper, including release mortality, during recreational and commercial fishing. Conduct research on the catch-and-release mortality of red snapper and other reef fish species by gear, sector, and depth. Studies are needed to evaluate acute (short-term observations typically at surface by observers) with chronic, long-term release survival rates. More information is needed on release mortality and discard rate by depth, fish size, season, and fishery. Studies are also needed to evaluate the impacts of the Gulf individual fishing quota program on bycatch including whether discards are due to harvest of undersized fish or lack of sufficient allocation.

d. Conduct age and length sampling across area, time, and gear from commercial and recreational fishery sectors that is representative of the catches for South Atlantic and Gulf red snapper. Examine the age structure of red snapper taken from longlines (survey and fishery) and other gear, to evaluate availability to gear types and the geographic distribution of fish as they age.

- e. Obtain better estimates of red snapper natural mortality and release mortality in commercial and recreational fisheries.
- f. Investigate life history (i.e., growth, survival, feeding, habitat preferences, movement) of larval/juvenile (ages 0 and 1) red snapper in the South Atlantic.
- g. Monitor the expansion or repopulation of reefs by red snapper along the west coast of Florida and South Atlantic and assess the potential impact on reef fish populations in terms of potential competitive interactions and catch based estimates of abundance.
- h. Conduct gut content analysis of groundfishes and predator-prey interactions, to assess possible impacts of reductions in shrimp trawl bycatch on post-settlement survival of juvenile red snapper and other reef fishes.

4. Economic and Sociocultural Studies

Social and economic assessments are required components of all fishery management plans and actions. These assessments assist in the determination of whether management objectives have been met.

- a. Use historical data to develop models that explain and predict the production of fishing effort, including participation across fisheries and entry-exit decisions, in response to past and proposed regulatory actions (e.g., annual catch limits, catch shares, allocation, time/area closures, trip and bag limits, and size limits) and other external forces (e.g., imports, trade restrictions, hurricanes, and other environmental factors) for the commercial, for-hire and recreational sectors. Research should also consider, when possible, how targeting behavior changes spatially and/or temporally (e.g., when to fish, where to fish, how much to fish, what species to target, what gear to use, etc.) due to the above-mentioned forces.
- b. Evaluate the economic effects of past and present allocations of harvests (ACLs/quotas) among competing user groups. Estimate the economic value of allocation decisions to the commercial, private angler, and for-hire sectors, as well as seafood consumers. Analyses should quantify the economic surplus to each sector and identify the allocation that maximizes the net economic benefit to the nation, subject to the applicable biological constraints, where appropriate. Key species include, but are not limited to, red snapper, vermilion snapper, king mackerel, red grouper, gag, snowy grouper, tilefish, greater amberjack, and gray triggerfish). Evaluation of the commercial sector should include analysis by gear type and fishing location (eastern, northern, or western Gulf; northern or southern Atlantic; Florida Keys), including any fishery management plan-designated location/season/zone, while the evaluation of the recreational sector should distinguish between charter, party boat, and private angler by fishing location.

c. Evaluate the socio-economic performance of past regulatory actions (e.g., allocation, catch shares, area or seasonal closures, trip limits, bag limits, size limits, etc.) in the commercial, for-hire, and recreational fishing sectors. The research should also consider existing and novel regulatory tools that may help minimize the socio-economic impact of accountability measures.

d. Evaluate the potential use and effects of catch shares for the for-hire (charter and headboat), recreational (private angler), and commercial (including small-scale fisheries) sectors.

e. Estimate demand and supply relationships in the market for for-hire fishing services. Fishing quality (stock size, catch per unit effort, average fish size) as a determinant of demand and supply should be emphasized. Key species are red drum, king mackerel, Spanish mackerel, red grouper, gag, black grouper, dolphin, wahoo, vermilion snapper, yellowtail snapper, red snapper, greater amberjack, and Atlantic black sea bass. The models should be applicable to the evaluation of the economic effects of common management tools including, but not limited to, minimum and maximum size limits, bag limits, seasonal closures, and catch shares. Important supply and demand factors such as cost, trip duration, time of departure, capacity, services offered, target species, fishing location, seasonality, etc., should be investigated. Specific attention should also be given to species target behavior, time and space decisions. The project should clearly address the differences between the charter and headboat industries, such as clientele, target species, location of services, and affiliated tourism.

f. Identify and examine economic incentives and other innovative alternatives to minimize by-catch and by-catch injury and mortality, including by-catch quotas (aggregate and/or vessel quotas), and alternative fishing practices. The project should contrast the relative economic and social costs, potential gains, and level of by-catch and by-catch injury and mortality reduction associated with traditional methods and any innovative alternatives addressed by the project.

g. Survey crew members/mates who are not owners or operators in the commercial and for-hire fisheries in the southeast. Collect social and economic information, including, but not limited to, basic personal and household demographic information, personal and household income and debt, employment patterns (seasonal, across fisheries, non-fishing), economic and other social measures of well-being, and attitudinal information concerning fishing, fisheries management, and expectations of future well-being and continued participation in the fishing industry. Appropriate sampling to support analysis by fishery and gear-type will be required.

h. Identify and evaluate the social and economic relationships between fishermen, communities, and specific habitats where they fish. Descriptions of the species and their

habitats should include an indicator of the sensitivity of the habitat to fishing practices and environmental factors and the fishing community's social and economic reliance on those habitats. Social and economic impacts for various habitat-related issues and actions, such as essential fish habitat (EFH), habitat of particular concern, restoration, climate change, and inland water-related issues should be discussed. The researchers should work with habitat and social science (including economic) staff to identify regionally focused topics and develop a methodology for evaluating the social and economic impacts of the implementation of fisheries management measures to address habitat-related issues.

i. Evaluate the existence and magnitude of subsistence fishing, including consideration of regional, demographic, or other factors that influence the rate of subsistence fishing. The research approach should be either an in-depth study of a particular fishing community or a broader regional approach that uses survey methodology or mixed methods. The research should examine all aspects of subsistence fishing, whether from the shore, pier, or vessels at sea, and encompass a multi-faceted view of subsistence or food-oriented fishing in the context of the modern household economy; fishing to eat for one's personal consumption and/or in one's nuclear and extended family settings; use of fish for celebrations; fishing to engage customary trade and to maintain reciprocity and various traditions, such as the gift economy; use of fish for barter; use of commercial fishing and/or other sources of income to maintain subsistence activities. For subsistence within the "recreational" sector, the incidence of subsistence fishing by mode, i.e., charter, headboat, or private angler (shore or boat), should be examined. Research should include an examination of the significance that subsistence fishing has for individuals, families, and communities in terms of food security and how the importance of subsistence fishing for food security may vary by race, ethnicity, gender, age, and class.

j. Collect social and economic information on Southeast fish processors and dealers. The data collection should include information on both year-round and seasonal employers and employees. The information collected should include, but not be limited to, gender, race and ethnicity, country of origin, and employee wages. Various data collection methodologies may be utilized, such as conducting in-person interviews, surveys, or mixed methods.

k. Examine and describe seafood processing, distribution, and marketing channels in the southeast region for key commercial species. Key species include, but are not limited to, red snapper, vermilion snapper, king mackerel, red grouper, gag, snowy grouper, tilefish, greater amberjack, and gray triggerfish). Estimate retail demand relationships, product mark-up, and the impact of regulations on consumer welfare. Examine the impact of the international seafood flows on regional and national markets for the species, and recent development of local food movements that include seafood by examining the associations between local commercial fleets and restaurants/tourism.

l. Examine and describe how coastal development and coastal land management in the U.S. Caribbean has economically and socially affected fishermen, their families, and communities, including, but not limited to, impacts on participation and production in the commercial, recreational and subsistence fishing sectors.

m. Develop a socioeconomic description of recreational fishermen and their motivations for fishing.

n. Evaluate the social impacts of past and present allocations of harvests (ACLs/quotas) among competing user groups including the commercial, private angler, and for-hire sectors. Analyses should examine both the negative and positive effects upon fishermen, as well as impacts to fishing communities. Particular attention should be focused upon changes in fishing dependence within communities and vessel level effects. Evaluation of the commercial sector should include analysis by gear type and fishing location, including any fishery management plan-designated location/season/zone, while the evaluation of the recreational sector should distinguish between charter, party boat, and private angler components by fishing location.

o. Develop a general equilibrium model for assessing the economic implications of an ecosystem management program.

5. Integrated Ecosystem Assessment

The goal of Integrated Ecosystem Assessment (IEA) is to provide an ecosystem-based fisheries management approach to managing various ecosystem services. By integrating information from all other MARFIN projects such as fisheries stock assessments, bycatch, and community social economics, the IEA uses Management Strategy Evaluation to make clearer the management tradeoffs between multiple users of the available resources. It is recommended that proposals in this area pertaining to the Gulf demonstrate direct support of the existing GOM IEA program through collaboration with the GOM IEA team. Proposed projects may include the following:

a. Conduct diet composition and gut content of Gulf and South Atlantic fishes currently under represented in the existing trophic database or literature.

c. Conduct studies that lead to the quantification of uncertainty (especially climatic variability and process error) of results of various ecosystem modeling platforms.

d. Conduct studies that describe socioeconomic/ecological trade-offs between the various ecosystem services provided by the Gulf of Mexico Large Marine Ecosystem.

e. Identify and quantify ecosystem drivers and pressures and comparative risk analysis of candidate management strategies analysis.

f. Obtain data resurrection, compilation, or community-based knowledge that leads to pertinent data histories that can readily be used in various ecosystem models.

6. Coastal Migratory Pelagics

The goal to update and improve information used in the assessment process for King Mackerel, Spanish Mackerel, and Cobia in the Gulf of Mexico.

a. Tagging studies to identify mixing of stocks. Particularly in the Gulf in respect to Mexican and Texas waters.

b. Collect life history information to characterize the age and size structure as it relates to fecundity, feeding and migration patterns.

c. Collect fishery dependent catch composition information from US and Mexican ports.

7. Ageing of Gulf and South Atlantic spiny lobster and shrimp.

Evaluate the feasibility of directly ageing Gulf and South Atlantic spiny lobster and shrimp utilizing the recent techniques developed for detection of growth bands in calcified regions of the eyestalk or gastric mill in shrimps, crabs, and lobsters (R. Kilada, B. Sainte-Marie, R. Rochette, N. Davis, C. Vanier, and S. Campana. 2012. Direct determination of age in shrimps, crabs, and lobsters. Can. J. Fish. Aquat. Sci. Vol. 69: 1728-1733) and provide updated growth and ageing data for stock assessments. Direct age determinations derived from counting endocuticle growth bands would make age-based stock assessments possible.

C. Program Authority

Authority for the Marine Fisheries Initiative Program is provided by the following: 16 U.S.C 753a, and 16 U.S.C. 742d.

II. Award Information

A. Funding Availability

Approximately \$2.0 million may be available in fiscal year (FY) 2016 for projects. This amount includes possible in-house projects. Actual funding availability for this program is contingent upon Fiscal Year 2015 Congressional appropriations. The NMFS Southeast Regional Office anticipates awarding approximately three to six projects that will range from \$100,000 to \$175,000 per year for each project (not to exceed \$175,000 per year). The total amount that may be requested shall not exceed \$175,000 for a one-year project, \$350,000 for a two-year project, and \$525,000 for a three-year project. Applications exceeding these amounts will be rejected/returned without further consideration. Publication of this notice

does not obligate NMFS to award any specific grant or cooperative agreement or any of the available funds. Project proposals accepted for funding with a project period over one year do not have to compete for the additional years of funding. However, funding for the additional years is contingent upon the availability of funds and satisfactory performance and is at the sole discretion of the agency.

B. Project/Award Period

Project/Award Period The period of awards may be from one to three years. It is suggested that a September 1, 2016, start date (1st of a month) be requested on the application. It is also suggested that the requested award period start on the first day of the month.

C. Type of Funding Instrument

Proposals selected for funding will be funded through a grant or cooperative agreement depending upon the amount of collaboration, participation, or involvement of NOAA in the management of the project. Substantial involvement includes planning, scheduling, conducting, and analyzing proposed project activities and frequent contact with the grantee to help solve technical problems/situations as they arise during performance of the award.

III. Eligibility Information

A. Eligible Applicants

Eligible applicants may be institutions of higher education, nonprofits, individuals, state, and local and Indian tribal governments. Federal agencies or institutions are not eligible. Foreign governments, organizations under the jurisdiction of foreign governments, and international organizations are excluded for purposes of this solicitation since the objective of the MARFIN program is to optimize research and development benefits from U.S. marine fishery resources.

B. Cost Sharing or Matching Requirement

Cost-sharing is not required for this program.

C. Other Criteria that Affect Eligibility

Not applicable.

IV. Application and Submission Information

A. Address to Request Application Package

The standard application package is available at <http://www.grants.gov>. If you do not have internet access, an application package may be received by contacting Robert Sadler, MARFIN Competition Manager, NMFS, SERO 263 13th Avenue S., St. Petersburg, FL 33701, Phone: (727) 551-5760, e-mail: robert.sadler@noaa.gov.

B. Content and Form of Application

Applicants must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number (www.dnb.com) and be registered in the System for Award Management (SAM) (www.sam.gov). Allow a minimum of thirty days to receive a DUNS number and to be registered in SAM. Applicants are strongly encouraged not to wait until the application deadline date to begin the application process through <http://www.grants.gov>.

1. Format Requirements:

All pages should be single-spaced and must be composed in at least a 12-point font with one-inch margins on 8 1/2 x 11 paper. The project description may not exceed 25 pages, exclusive of title page, project synopsis, literature cited, budget information, resumes of investigator, and letters of support (if any). Applications that do not follow the format requirement will be rejected and returned.

Any PDF or other attachments that are included in an electronic application must meet the above format requirements when printed out.

2. Content Requirements:

The following information must be included. Failure to submit will result in the rejection of the application and subsequent return.

a. Signed Title Page: The Application for Federal Assistance (SF-424) must be signed by the authorized representative. Electronic signatures submitted through www.grants.gov satisfy this requirement.

b. Project Synopsis (1-page limit): It is critical that the project synopsis accurately describes the project being proposed and conveys all essential elements of the activities. It is imperative that potential applicants tie their proposals to one of the program priorities described in Section I.B., Funding Opportunity Description. The Project Synopsis must identify the principal investigator(s) and a brief statement of their qualifications.

c. Project Description (25-page limit): The applicant should describe and justify the project being proposed and address each of the evaluation criteria as described below in Section V., Application Review Information. Project descriptions should include clear objectives and specific approaches to achieving those objectives, including methods, timelines, and expected outcomes.

Environmental data and information collected and/or created under NOAA grants/cooperative agreements must be made visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner (typically no later than two (2) years after the data are collected or created), except where limited by law, regulation, policy or security requirements.

(1) Unless otherwise noted in the federal funding announcement, a Data/Information Sharing Plan of no more than two pages shall be required as part of the Project Narrative. A typical plan should include descriptions of the types of environmental data and information created during the course of the project; the tentative date by which data will be shared; the standards to be used for data/metadata format and content; policies addressing data stewardship and preservation; procedures for providing access, sharing, and security; and prior experience in publishing such data. The Data/Information Sharing Plan will be reviewed as part of the NOAA Standard Evaluation Criteria, Item 1 -- Importance and/or Relevance and Applicability of Proposed Project to the Mission Goals.

(2) The Data/Information Sharing Plan (and any subsequent revisions or updates) must be made publicly available at time of award and, thereafter, will be posted with the published data.

(3) Failing to share environmental data and information in accordance with the submitted Data/Information Sharing Plan may lead to disallowed costs and be considered by NOAA when making future award decisions.

d. Literature Cited: If applicable.

e. Budget and Budget Justification: There must be a detailed budget justification accompanying the SF424A Budget Information form. Provide justifications for all budget items in sufficient detail to enable the reviewers to evaluate the appropriateness of the funding requested. For multi-year award applications, indicate and describe separate funding amounts for each funding year in the detailed justification and in the SF424A Budget Information form. You must submit a copy of a current negotiated indirect cost rate agreement with a federal agency, if such agreement exists.

f. Resumes (2 pages maximum for each major participant).

g. Standard Application Forms: Please refer to the appropriate application package.

h. NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA). Consequently, as part of an applicant's package, applicants are required to answer the following questions:

(1) Has any National Environmental Policy Act (NEPA) or other environmental

compliance documentation (e.g., Endangered Species Act Biological Opinion; Letter of Concurrence or Biological Assessment/Evaluation; Clean Water Act permit; State Historic Preservation Officer consultation; state environmental compliance documentation (mini-NEPA); etc.) been completed? If yes, list the environmental compliance documentation that has been completed and provide copies of the documentation as appropriate.

(2) Would the proposed activity or environmental impacts of the activity be subject to public controversy? If yes, describe the potential controversy.

(3) Would the proposed activity have potential environmental impacts that are highly uncertain or involve unique or unknown risks? If yes, describe the impacts that are uncertain or involve unique or unknown risks.

(4) Is the proposed activity related to other activities (both NOAA and non-NOAA that together may cumulatively adversely impact the environment? For example, the proposed activity is one of a series of projects that together may cause a change in the pattern of pollutant discharge, traffic generation, economic change, flood plain change, or land use. If yes, briefly describe the other activities and discuss how the related projects would have cumulative impacts on the environment.

(5) Would the proposed activity involve a non-native species? If yes, describe how the non-native species is involved.

(6) Would the proposed activity occur within a unique geographic area of notable recreational, ecological, scientific, cultural, historical, scenic or aesthetic importance? If yes, describe the area, including the name or designation if known.

(7) Would the proposed activity affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or cause loss or destruction of significant scientific, cultural, or historical resources? If yes, describe the impact.

(8) Would the proposed activity affect public health or safety? The effects may be adverse or beneficial and temporary, long-term, or permanent. If yes, describe the effects and the circumstances that would cause these impacts.

(9) Would the proposed activity affect directly or indirectly, in an adverse or beneficial manner, any listed endangered, threatened, or otherwise protected species or their critical

habitat under federal and state laws including the Endangered Species Act and the Marine Mammal Protection Act? If yes, name the species and/or habitat that will be impacted and describe the circumstances that would impact the species and/or habitat.

i. Applications must identify the principal participants, and include copies of any agreements describing the specific tasks to be performed by participants. Project applications should give a clear presentation of the proposed work, the methods for carrying out the project, its relevance to managing and enhancing the use of Gulf and/or South Atlantic fishery resources, and cost estimates as they relate to specific aspects of the project. Budgets must include a detailed breakdown, by category of expenditures, with appropriate justification for both the federal and non-federal shares.

j. Due to budget constraints, NMFS does not expect to hold an annual MARFIN conference for projects completed under this Funding Opportunity. The principal investigator(s) will be asked to provide an abstract and PowerPoint presentation to the NMFS program office at the completion of the project.

k. Applications should exhibit familiarity with related work that is completed or ongoing. Proposals should state whether the research applies to the Gulf, South Atlantic or North Atlantic for highly migratory species or multiple areas. Successful applicants are required to collect and manage data in accordance with standardized procedures and format approved or specified by NMFS and to participate with NMFS in specific cooperative activities that are determined by consultations between NMFS and successful applicants before project grants are awarded. All data collected as part of an awarded grant must be provided to NMFS.

l. In the event that an application contains information or data that you do not want disclosed prior to award for purposes other than the evaluation of the application, you should mark each page containing such information or data with the words "Privileged, Confidential, Commercial, or Financial Information - Limited Use" at the top of the page to assist NOAA in making disclosure determinations. DOC regulations implementing the Freedom of Information Act (FOIA) are found at 5 U.S.C 552, which sets forth rules for DOC to make requested materials, information, and records publicly available under FOIA. The contents of funded applications may be subject to requests for release under the FOIA. Based on the information provided by you, the confidentiality of the content of funded applications will be maintained to the maximum extent permitted by law.

C. Submission Dates and Times

Applications must be received by <http://www.grants.gov>, postmarked, or provided to a delivery service by 5:00 pm, Eastern Standard Time October 2, 2015. Use of Grants.gov is preferred. If Grants.gov cannot be used, use of U.S. mail or another delivery service must be documented with a receipt; private metered postmarks are not acceptable. Applications received more than 5 business days following the closing date will not be accepted. No facsimile or electronic mail applications will be accepted. Please note: Validation or rejection of your application by Grants.gov may take up to 2 business days after submission.

Please consider this process in developing your submission timeline. Applications not adhering to postmark or submission deadlines will be rejected and returned to the sender without further consideration.

D. Intergovernmental Review

Applications submitted by state and local governments are subject to the provisions of Executive Order (E.O.) 12372, Intergovernmental Review of Federal Programs. Any applicant submitting an application for funding is required to complete item 16 on SF-424 regarding clearance by the State Single Point of Contact (SPOC) established as a result of E.O. 12372. To find out about and comply with a State's process under E.O. 12372, the names, addresses and phone numbers of participating SPOCs are listed in the Office of Management and Budget's home page at: <http://www.whitehouse.gov/omb/grants/spoc.html>.

E. Funding Restrictions

Indirect costs - If an applicant has not previously established an indirect cost rate with a Federal agency they may choose to negotiate a rate with the Department of Commerce or use the de minimis indirect cost rate of 10% of MTDC (as allowable under 2 C.F.R. §200.414). The negotiation and approval of a rate is subject to the procedures required by NOAA and the Department of Commerce Standard Terms and Conditions Section B.06. The NOAA contact for indirect or facilities and administrative costs is:

Lamar Revis, Grants Officer

NOAA Grants Management Division

1325 East West Highway

9th Floor

Silver Spring, Maryland 20910

lamar.revis@noaa.gov

Construction is not an allowable activity under this program. Therefore, applications will not be accepted for construction projects.

Funding beyond the first year will be dependent upon satisfactory performance and the continued availability of funds.

The total amount that may be requested shall not exceed \$175,000 for a one-year project, \$350,000 for a two-year project, and \$525,000 for a three-year project. Each funding year cannot exceed \$175,000. Applications exceeding these amounts will be rejected/returned without further consideration.

F. Other Submission Requirements

Please refer to important information in "Submission Dates and Times" above to help ensure your application is received on time.?

23?

Applicants should submit applications electronically through <http://www.Grants.gov>. Applicants should note that it can take between 3-5 business days or as long as 3 weeks to register with Grants.Gov if all steps are not completed in a timely manner, and registration is required only once. Users of Grants.gov will be able to download a copy of the application package, complete it off line, and then upload and submit the application via the Grants.gov site. If an applicant has problems downloading the application forms from Grants.gov, contact Grants.gov Customer Support at 1-800-518-4726 or support@Grants.gov.?

To use Grants.gov, applicants must have a DUNS number and current registration in the System for Award Management (SAM) system. Applicants should allow a minimum of five days to complete the SAM registration; registration is required only once, but must be renewed periodically. In all, there are approximately five steps needed to set up your organization's Grants.gov account (see http://www.grants.gov/applicants/get_registered.jsp).?

If an applicant cannot use Grant.gov, paper applications will be accepted. Paper applications must be submitted with completed, signed, original forms in hard copy and an electronic copy of the entire application on CD, including scanned signed forms. If the applicant has completed the entire application in Grants.gov but is unable to submit it via Grants.gov, then this application package should be provided via CD along with printed and signed versions of forms SF-424, SF-424B, and CD-511. The authorized representative **MUST** sign and date these forms over the printed signature that will appear in the signature box. Paper applications should be printed on one side only, on 8.5" x 11" paper, and should not be bound in any manner.?

Paper applications must be postmarked or provided to a delivery service and

documented with a receipt and sent to Robert Sadler, MARFIN Competition Manager, NMFS SERO, 263 13th Avenue S., St. Petersburg, FL 33701, Phone: (727) 551-5760, e-mail: robert.sadler@noaa.gov.?

24?

Applications postmarked or provided to a delivery service after 5:00 pm October 2, 2015, Eastern Standard Time, will not be considered for funding. Applications submitted via the U.S. Postal Service must have an official postmark; private metered postmarks are not acceptable. In any event, applications received later than 5 calendar days following the closing date will not be accepted. No facsimile or electronic mail applications will be accepted.

V. Application Review Information

A. Evaluation Criteria

Applications responsive to this solicitation will be evaluated by three or more appropriate private and/or public sector experts to determine their technical merit. These reviewers will provide individual evaluations of the proposals. No consensus advice will be given. These reviewers provide comments and assign scores to the applications based on the following criteria, with the points shown in parentheses. Applications that best address these criteria will be most competitive:

1. Importance/relevance and applicability of proposed projects to the program goals (35 points):

This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, or local activities. Does the proposal describe its relevance to a MARFIN Program Priority, and how information gathered will contribute to NOAA's mission to enhance the understanding of the fishery resource and contribute to the body of information on which management decisions are made (20 points)? Does this study address an important problem, providing a clear definition of the problem, issue or research need (10 points)? Is the participation of U.S. fishermen or industry meaningfully incorporated into the project design (3 points)? Is this the best method to obtain the needed data (2 points)?

2. Technical/scientific merit (40 points):

This criterion assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether there are clear project goals and objectives. Proposals should provide a clear definition of the approach to be used, including descriptions of field work, theoretical studies, and laboratory analysis to support the proposed research.

Are the conceptual framework, design, methods, and analyses adequately developed, well-integrated, and appropriate to the aims of the project (15 points)? Are the objectives in the proposal clearly defined and focused, realistic and attainable within the proposed project period (8 points)? Is there sufficient description of the project's environmental impact, such as detailed information on the activities to be conducted, locations, sites, species and habitat to be affected, and any environmental concerns that may exist (4 points)? Does the applicant acknowledge potential problem areas and consider ways to resolve the issues or implement alternative tactics (4 points)? Does the project develop new methodologies or technologies (4 points)? Is sufficient detail provided in the proposal about the methods proposed for monitoring and evaluating the success of the project, and are they appropriate (5 points)?

3. Overall qualifications of applicants (15 points):

This criterion ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project.

Does the applicant have the expertise to conduct the scope and scale of the proposed work, as indicated by the qualifications and past experience of the project leaders and/or partners that show adequate experience in successfully completing similar projects (6 points)? Does the applicant describe the facilities, equipment and/or administrative resources available to support and successfully manage the work and award responsibilities (3 points)? If applicable, are partners (e.g., consultants/contractors) necessary to complete the project (5 points)? If consultants and contractors are conducting the critical activities under the award, is the primary applicant's involvement necessary (1 point)?

4. Project costs (10 points):

This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time frame. Is the proposed budget sufficiently detailed, with appropriate breakdown and justification of costs by object class and funding year (6 points)?

Is the proposed budget cost-effective and realistic based on the applicant's stated objectives, and time frame (4 points)?

B. Review and Selection Process

Applications must address one of the priority areas listed in Section I.B (Program Priorities). When we receive applications we will screen them to ensure that they were

received by the deadline date (see Submission Dates and Times); were submitted by an eligible applicant, and meet the requirements of Section IV.B (Content and Form of Application). We do not have to screen applications before the submission deadline to identify deficiencies that would cause your application to be rejected so that you would have an opportunity to correct them. However, should we do so and provide you information about deficiencies, or should you independently decide it is desirable to do so, you may correct any deficiencies in your application before the deadline. After the deadline, the application must remain as submitted; no changes can be made to it. If your application does not conform to these requirements and the deadline for submission has passed, the application will be returned without further consideration.

Following the technical review, we will determine the score for each individual review and average the individual review scores to determine the final score for each application. Then, we will rank applications in descending order by their average scores. The applications that rank in the top twenty (including those tied for twentieth) will be forwarded to a panel for further review. Those applications that are not in the top twenty ranking category will be eliminated from further consideration.

Those applications ranking in the the top twenty will be presented to a panel of non-NOAA fishery experts known as the MARFIN Panel. Each member of the MARFIN Panel individually considers: if needs of the Agency, as described under Priorities, are addressed in each proposal; if the project assists industry; and if the project addresses issues that are important to regional fisheries management. Needs of the Agency follow the information identified in the Magnuson-Stevens Act, Title III, Sections 301 and 404. The individuals on the panel provide comments and rate each of these proposals on Grants Online as either “Recommended for Funding” or “Not Recommended for Funding.” The panel will give no consensus advice. The Program Manager ranks the proposals in the order of preferred funding based on the number of participating panel members recommending the proposal for funding. In the event that there are two or more projects tied in the panel’s percent selected category that are competing for the final available funds, all tied projects will be given equal consideration by the selecting official based on the Selection Factors, regardless of the tied projects’ peer review score.

C. Selection Factors

The MARFIN Panel ratings will be provided in rank order to the Selecting Official for final funding recommendations. The Selecting Official shall award in the rank order unless the proposal is justified to be selected out of rank order based on the following factors:

1. Availability of funding
2. Balance/distribution of funds:

- a. geographically
- b. by type of institutions
- c. by type of partners
- d. by research priority
- e. by project types

3. Duplication of other projects funded or considered for funding by NOAA/federal agencies

4. Program priorities and policy factors

5. Applicant's prior award performance

6. Partnerships with/Participation of targeted groups

7. Adequacy of information necessary for NOAA staff to make a NEPA determination and draft necessary documentation before recommendations for funding are made to the Grants Officer. In the case of ties among applications which received a panel review, the Selecting Official will justify the selection based on the selection factors. The Selecting Official may negotiate the funding level of the proposal. The Selecting Official makes final recommendations for award to the Grants Officer who is authorized to obligate funds.

D. Anticipated Announcement and Award Dates

Subject to the availability of funds, successful applications are usually recommended for funding within 275 days from the application due date specified in this notice. The earliest start date of awards (1st of a month) is approximately 335 days from the application due date specified in this notice. Applicants should consider this selection and processing time in developing requested start dates for their applications. Based on that timetable, it is suggested that a September 1, 2016, start date (1st of a month) be requested on the application.

The exact amount of funds awarded, the final scope of activities, the project duration, and any specific NMFS cooperative involvement with the activities of each project are determined in pre-award negotiations between the applicant, the NOAA Grants Office and the NMFS Program Office. Recipients must not initiate projects until an approved award is received from the NOAA Grants Office.

VI. Award Administration Information

A. Award Notices

Successful applicants will receive notification that the application has been approved for funding by the NOAA Grants Management Division with the issuance of an award signed by a NOAA grants officer. This is the authorizing document that allows the project to begin. The award will be issued electronically to the authorizing official of the project.

Unsuccessful applicants will be notified by the NMFS program office that their proposals were not selected for recommendation. Panel review comments and individual recommendations will not be provided to unsuccessful applicants.

To enable the use of a universal identifier and to enhance the quality of information available to the public as required by the Federal Funding Accountability and Transparency Act of 2006, to the extent applicable, any proposal awarded in response to this announcement will be required to use the Central Contractor Registration and Dun and Bradstreet Universal Numbering System and be subject to reporting requirements, as identified in OMB guidance published at 2 CFR Parts 25, 170 (2013), http://www.ecfr.gov/cgi-bin/text-idx?SID=1ccffb4c1d4de03addd6a041113460f9&mc=true&node=se2.1.200_1300&rgn=div8

B. Administrative and National Policy Requirements

The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the Federal Register notice of December 30, 2014 (79 FR 78390) are applicable to this solicitation and may be accessed online at <http://www.gpo.gov/fdsys/pkg/FR-2014-12-30/pdf/2014-30297.pdf>.

Limitation of Liability - Funding for potential projects in this notice is contingent upon the availability of funds. In no event will NOAA or the Department of Commerce be responsible for proposal preparation costs. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

National Environmental Policy Act (NEPA) - NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), for applicant projects or proposals which are seeking NOAA federal funding opportunities. Detailed information on NOAA compliance with NEPA can be found at the following NOAA NEPA Web site at www.nepa.noaa.gov/, including our NOAA Administrative Order 216-6 for NEPA website at http://www.corporateservices.noaa.gov/ames/administrative_orders/chapter_216/216-6.html

and the Council on Environmental Quality implementation regulations website at http://ceq.hss.doe.gov/nepa/regs/ceq/toc_ceq.htm

Consequently, as part of an applicant's package, and under their description of their program activities, applicants are required to provide detailed information on the activities to be conducted, locations, sites, number and species expected to be caught, species and habitat to be affected, possible construction activities, and any environmental concerns that may exist (e.g., the use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems). In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting of an environmental assessment, if NOAA determines an assessment is required.

Applicants will also be required to cooperate with NOAA in identifying feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. The failure to do so shall be grounds for not selecting an application. In some cases if additional information is required after an application is selected, funds can be withheld by the grants officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment of any impacts that a project may have on the environment.

Delinquent Tax Liability- In accordance with current Federal appropriations law, NOAA will provide a successful corporate applicant a form to be completed by its authorized representatives certifying that the corporation has no Federally-assessed unpaid or delinquent tax liability or recent felony criminal convictions under any Federal law.

The Federal Funding Accountability and Transparency Act of 2006- This Act includes a requirement for awardees of applicable Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards issued in FY 2011 or later. All awardees of applicable grants and cooperative agreements are required to report to the Federal Subaward Reporting System (FSRS) available at www.FSRS.gov on all subawards over \$25,000.

C. Reporting

Unless otherwise specified by terms of the award, performance and financial reports are to be submitted semi-annually. Performance reports should include progress on identified milestones. Electronic submission of reports is required and conducted through the use of NOAA's Grants Online system. All reports, other than a comprehensive final performance report, will be submitted on a semi-annual schedule and must be submitted no later than 30 days following the end of each 6-month period from the start date of the award. In addition

to the financial and performance reports, grant recipients will be required to submit the comprehensive final performance report 90 days after the project end date.

VII. Agency Contacts

For questions regarding the application process, you may contact: Robert Sadler, (727) 551-5760, or Robert.Sadler@noaa.gov.

VIII. Other Information