



STATE OF MAINE
DEPARTMENT OF
MARINE RESOURCES
MARINE RESOURCES LABORATORY
P.O. BOX 8, 194 MCKOWN POINT RD
W. BOOTHBAY HARBOR, MAINE 04575-0008

PATRICK C. KELIHER
COMMISSIONER

August 5, 2021

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland St. Ste. 200 A-N
Arlington, VA 22201

Dear ACCSP:

We are pleased to submit the proposal titled “FY22: Managing 100% Lobster Harvester Reporting in Maine” for your consideration. This is a maintenance proposal which has not changed in the scope of work. The continuation of this project will allow the Maine Department of Marine Resources (MEDMR) come into compliance with ASMFC’s Addendum 26 requirement that the MEDMR move from 10% lobster reporting (in 2019 the MEDMR moved to an ASMFC required “optimized draw” selection method to choose the lobster harvesters required to report for the following year. The “optimized draw” selects different percentages of license types and active/non-active harvesters based on the makeup of the overall fishery based on a mix of dealer data and harvester reported data) to 100% electronic lobster reporting. The deadline for this Addendum to be fully implemented is currently January 1, 2024; however, new regulations to reduce the risk of entanglement to right whales through the Atlantic Large Whale Take Reduction Plan continue to accelerate the timeline for documenting effort and vertical line use in the lobster fishery. To comply with and track the pending vertical line reductions resulting from these initiatives, MEDMR is aiming for implementation of the 100% reporting requirement as early as 2023. The MEDMR’s initial goal was to implement 100% reporting in 2021; however, funding shortfalls prevented this from occurring. Continued funding of this proposal would allow MEDMR to start this implementation.

The MEDMR does not currently have the funds or staff needed to support the program at the 100% reporting level. Overall, MEDMR are proposing to create nine new positions that have been identified as necessary to successfully roll out 100% electronic lobster harvester reporting. Not all these positions are included in our funding request as other one-time funding sources have been identified. Please view all graphs in color. This proposal addresses the following 2022 ranking criteria: catch and effort, data delivery plan, regional impact, funding transition plan, in kind contribution, improvement in data quality and timeliness, impact on stock assessment and properly prepared.

During the initial pre-proposal review process, we were asked four questions. We will address them here and within the proposal where appropriate.

1. Budgeting for 500 logbooks seems low. We just send watermen reporting on paper 1 page and instruct them to make their own copies. RI charges watermen for logbook costs.
 - a. *Addendum XXVI requires 100% electronic harvester reporting. While this is probably not possible for any partner, the MEDMR would like to only allow those individuals who are able to demonstrate that electronic reporting is not possible. We currently*

have two fisheries (menhaden and herring) that require 100% electronic harvester reporting and out of the 600 plus harvesters licensed in these fisheries, less than 5 have been offered other means of reporting that are not electronic. Our forms are currently only supplied for other fisheries if a harvester requests them. We have discussed charging for paper logbooks in the past, but currently are not looking at that as an option at this time.

2. In kind contribution is 38% not 62%

a. We calculate our in-kind by dividing the total MEDMR contribution (\$208,508) by the total requested amount (\$335,662.37) to determine our in-kind contribution of 62%. All the positions listed as partner contributions are fully funded by the State of Maine and should be included as in-kind and not a match.

3. Budgeted for in-person training. We use videos and remote outreach.

a. We will also utilize videos and remote outreach; however, there are times when it is most productive to hold a few large in-person meetings to assist those that are not as tech savvy as others and are more comfortable having an in-person meeting. Having to on-board almost 6000 new harvesters will require every tool we have in our toolbox. There are also areas in Maine where internet speeds and or connectivity are lacking so remote meetings are difficult (this is why we developed a reporting application that will work "offline"). We intend to rely heavily on remote meetings and creating video and reporting how-to's (many are already created) to assist those individuals that are comfortable with that format.

4. Confirm if other partners using VESL will also be able to take advantage of the GARFO compliance.

a. The MEDMR has a contract with Bluefin Data LLC that will allow any harvester with a MEDMR license or permit to use the VESL application free of charge. Once approved by GARFO, if those harvesters with a MEDMR license or permit also have reporting obligations to GARFO, they will be able to use VESL to fulfill their GARFO reporting requirements regardless of where they are landing.

For a summary of the proposal for ranking purposes, please see page 28. Please contact Robert Watts at the MEDMR with any questions. Thank you for your consideration of this proposal.

Sincerely,

Robert B. Watts II
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Atlantic Coastal Cooperative Statistics Program
1050 N. Highland Street. Suite. 200A-N
Arlington, VA 22201

FY22: Managing 100% Lobster Harvester Reporting in Maine

Total Cost: \$335,662.37

Submitted by:

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Applicant Name: Maine Department of Marine Resources (MEDMR)

Principal Investigator: Robert Watts, Marine Resource Scientist

Project Title: FY22: Managing 100% Lobster Harvester Reporting in Maine

Project Type: Maintenance Project

Requested Award Amount (without the NOAA administration fee): \$335,662.37

Requested Award Period: One year after receipt of funds

Objectives:

The objective of this proposal is to comply with Addendum XXVI (http://www.asmfc.org/uploads/file/5a9438ccAmLobsterAddXXVI_JonahCrabAddIII_Feb2018.pdf) of ASMFC's (Atlantic States Marine Fisheries Commission) American lobster Fisheries Management Plan (FMP) which requires MEDMR increase the percentage of trip level landings information MEDMR collects from commercial lobster harvesters from the current "optimized draw method" (approximately 380 harvesters) to 100% (approximately 6,000 harvesters). Starting in 2019, ASMFC Addendum XXVI required MEDMR move to an "optimized draw" selection method to choose the lobster harvesters required to report for the following year. The "optimized draw" selects different percentages of license types and active/non-active harvesters based a statistical analysis of the variability of each license class using a combination of dealer data and harvester reported data. In the past MEDMR would select approximately 700 to 800 harvesters per year, now around 350 to 400 harvesters are selected with the idea that the selected harvesters would provide the same number of trip records (See Figure 3). Addendum XXVI requires 100% reporting (electronic reporting is recommended but not mandatory) by January 2024 in addition to other new required fields that became mandatory in January 2021. MEDMR started collecting total endlines and 10 min square data at the trip level in 2020 even though ASMFC moved these requirements back to 2021. Requiring the MEDMR to implement 100% reporting will cause MEDMR to increase landings and licensing staff by a total of 9 currently non-existent positions to effectively manage, monitor and audit what will be a 500% increase in the number of trip level reports the MEDMR receives on an annual basis.

National Marine Fisheries Service (NMFS) is in the process of finalizing new rules to protect North Atlantic right whales as part of the Atlantic Large Whale Take Reduction Plan (ALWTRP) for the Northeast lobster fishery. The Department of Marine Resources submitted a proposal to NMFS in December 2019. The proposal laid out a plan for regulations to reduce the risk of entanglement to right whales due to the Maine portion of the lobster fishery. Portions of that plan were incorporated into the Draft ALWTRP Rules published in 2020. Additionally, the DMR proposal included a commitment to move lobster harvesters to 100% reporting, the timing of which depends on securing adequate funding. ASMFC is requiring 100% reporting in the lobster fishery by 2024. The AWTRT has recommended on more than one occasion that fisheries move to 100% reporting as soon as possible. MEDMR strongly agrees with this recommendation because our ability to achieve and monitor the consensus goals of the AWTRT is tied to the availability of these data in the short term. MEDMR believes that the January 2023 date is necessary to meet the data guidelines outlined in Addendum 26, the needs of the AWTRT, and work out any data collection and data management issues well before the 2024 deadline. Additionally, MEDMR is interested in moving the timeframe for 100% electronic lobster harvester reporting up to as early as 2023 to track effort and vertical line use in support of pending new regulations. The FY20 proposal intended MEDMR to require 100% reporting starting in January 2021; however, lack of funding has required this timeframe be pushed back to 2023. Similarly, in the 2023 timeframe the MEDMR does not

have the funding to continuously fund all the positions necessary to effectively administer, collect, audit and distribute the data required in Addendum XXVI. If the MEDMR is not able to secure adequate funding, the January 2023 start date might need to be pushed back to January 2024. **The MEDMR has self-funded the creation of a new offline mobile application for both iOS® and Android® platforms through dedicated technology funds. This program is being built to accept reports from all fisheries and meet NMFS electronic reporting requirements. This new program has dynamic entry pages and be completely table driven allowing the entry pages to display more concise field descriptions based on species and gears fished. There will be built in data validations, favorites and basic end user analytics.** The MEDMR anticipates putting this new offline reporting application out a group of test harvesters around the time this proposal is submitted and be in full production by the end of the fall. **The primary tasks will be electronic reporting software training, regulation compliance, data audits, data entry and general outreach. Staff will also focus on harvester outreach to help industry understand the importance of the accurate and timely reporting. Electronic reporting will be required for commercial lobster harvesters and heavily pushed for those that still report other fisheries on paper. The focus on expansion of electronic reporting will require the MEDMR to spend a significant amount of time on outreach, explaining the reporting system to harvesters and troubleshooting any issues that might arise.** Currently, MEDMR only required electronic reporting in our Atlantic herring and Atlantic menhaden fisheries. There are currently no plans to mandate electronic reporting for other fisheries, as this is not an ACCSP requirement.

Need:

Maine currently requires harvesters from 12 fisheries to report trip level landings on a monthly basis. Two other quota monitored fisheries (Atlantic herring and Atlantic menhaden) have daily reporting requirements during their “open quota monitored seasons (i.e. directed and episodic fishing season for menhaden). The 2020 seasons are the first year the MEDMR has required electronic reporting for these two fisheries. **When the MEDMR implements 100% lobster reporting, the number of new harvesters (see Table 1) will require significant resources tracking compliance, entering and auditing a ~500% increase in the number of reports received from approximately 60K to ~300K. In 2020, approximately 5,750 lobster harvesters were licensed to fish in Maine. Of those 5,750 harvesters, MEDMR dealer reports indicate 4,052 harvesters sold at least once to a licensed dealer. All 5,750 license holders regardless of activity will be required to report for each month they hold a current license. During the 2019 season the MEDMR move to an “optimized draw” selection method to choose the lobster harvesters required to report for the following year. The “optimized draw” selects different percentages of license types and active/non-active harvesters based a statistical analysis of the variability of each license class using a of combination of dealer data and harvester reported data. In the past MEDMR would select approximately 700 to 800 harvesters per year, now around 350 to 400 (280 active in 2020) are selected with the idea that the selected harvesters would provide the same number of trip records (See Figure 3). Overall in 2020, MEDMR required 382 lobster harvesters to report trip level information. The number of individual lobster harvesters required to report will increase to just under 5,800 when 100% lobster harvester reporting becomes mandatory.**

Of those 5,750 licensed harvesters, ~1,300 (23%) of them will eventually be required to report to National Marine Fisheries Service (NMFS) since they possess a federal lobster permit. **Regardless of their federal permit status, MEDMR will work with all harvesters to ensure all landings are reported either to MEDMR or NMFS since the collected data will benefit all partners. MEDMR staff will also audit all records with a state landed of Maine but defer any federal data changes to NMFS.**

Table 1: Increase in Individual Harvester Reporting Expected in Maine

Moving from 10% to 100% Lobster Reporting							
Year	Total Trips Entered	Lobster Only Entered	10% Active Lobster Harvesters	100% Active Lobster Harvesters	100% Lobster Harvesters	Lobster Trips From Dealer Reoprts	Lobster Harvester Reports Expected if 100% Required
2015	54,368	29,551	532	4,406	5,898	270,324	295,510
2016	57,864	30,927	566	4,504	6,012	293,919	309,270
2017	58,702	29,877	535	4,485	6,021	276,754	298,770
2018	58,974	26,870	541	4,389	5,950	264,046	268,700
2019	45,672	17,400	275	4,330	5,850	256,338	232,319
2020*	41,704	17,176	280	4,052	5,766	218,962	232,241

*2020 data are preliminary and subject to change without notice.

100% active license based on dealer reported data from 2015 - 2020

Harvester counts are individual harvesters. Many harvesters have multiple licenses that are tracked seperately.

Expected reports are calculated from reports received by harvesters and extraoplated based on reports received by dealers.

*Increase in the number of harvesters and reports expected when MEDMR implements 100% lobster harvester reporting.

In 2016 MEDMR converted to a new online licensing and landings system, called Maine LEEDS (Licensing Enforcement and Environmental Data System). Using this system, harvesters and dealers are able to:

- Renew a license you previously held
- Apply for a new license you’ve never held before
- Order tags (for certain licenses)
- Reprint your license
- Upgrade a license (if applicable)
- Pay administrative fees
- Report landings
- Check reporting compliance status
- Upload documents to the department
- Change your password to the system

This web application has been an extremely useful tool that will allow for more “self-service” for harvesters and dealers, will improve customer satisfaction and increase MEDMR staff efficiency. **In late spring 2018, MEDMR started allowing harvesters to enter their data through the LEEDS system. Since the first record entered directly by a harvester occurred on 5/28/2018, 308 harvesters have entered 15,946 (9.8%) records that in the past MEDMR data entry staff would have had to enter. The breakdown by year is 1,004 (from 83 harvesters) in 2018, 2,782 records (from 232 harvesters) in 2019, 10,798 records (from 569 harvesters) in 2020 and to date have 1,311 records from 146 harvesters in 2021.** Having industry enter their own information also saves staff time because paper reports do not need to be opened or processed through the mail, scanned into our LEEDS system or entered by hand. Staff have spent significant time training and creating outreach material (videos, electronic user guides, etc.) and communicating directly with industry.

MEDMR intends on requiring (with some potential exemptions based on to be determined criteria) 100% electronic harvester reporting for lobster, herring and menhaden. Reliable high-speed internet access is not available in certain parts of the state which prohibits full 100% electronic reporting. The goal is to get as close to that as possible. The addendum allows until January 1, 2024. Many other states are also not yet 100% electronic in the lobster fishery at this point. **Halibut, herring and menhaden are quota monitored species that MEDMR has identified as benefiting from requiring state only harvesters to report electronically. Starting in 2020 all herring and menhaden harvesters were required to report electronically through either Maine LEEDS or some federally accepted reporting application during the active harvest season. This**

new requirement replaced the email system MEDMR relied upon the past few seasons to monitor quota. Requiring daily electronic reporting will save the harvesters from emailing and then filling out complete harvester reports at the end of the week/month. The offline mobile application MEDMR is building through its own funds will allow harvesters with multiple reporting fisheries the ability to use one program to fulfill all their requirements whether they are state only or federal. **Of the 1.13 million trips entered for 2020 in the data warehouse, 31% of them were landed in Maine which exceeds any other state (Figure 1 – view in color).** This figure includes both dealer and harvester records. **If MEDMR had required 100% harvester reporting in 2020, the number of warehouse records for 2020 would have been 1.35 million (when extrapolating current lobster reporting levels to 100% lobster) and MEDMR would have accounted for 42% of all records (dealer and harvester) landed in ACCSP’s Warehouse.** These records were submitted by both “state-only” harvesters (those that only report to MEDMR) as well as federal harvesters (those that report to fulfill both NMFS and MEDMR reporting requirements). **Because all state licensed harvesters are required to report to the MEDMR regardless if they have federal reporting requirements or not, MEDMR works with NMFS to collect data from federally permitted harvesters so they do not need to double report. MEDMR staff devotes time and resources to help all harvesters that submit data to NMFS and MEDMR.**

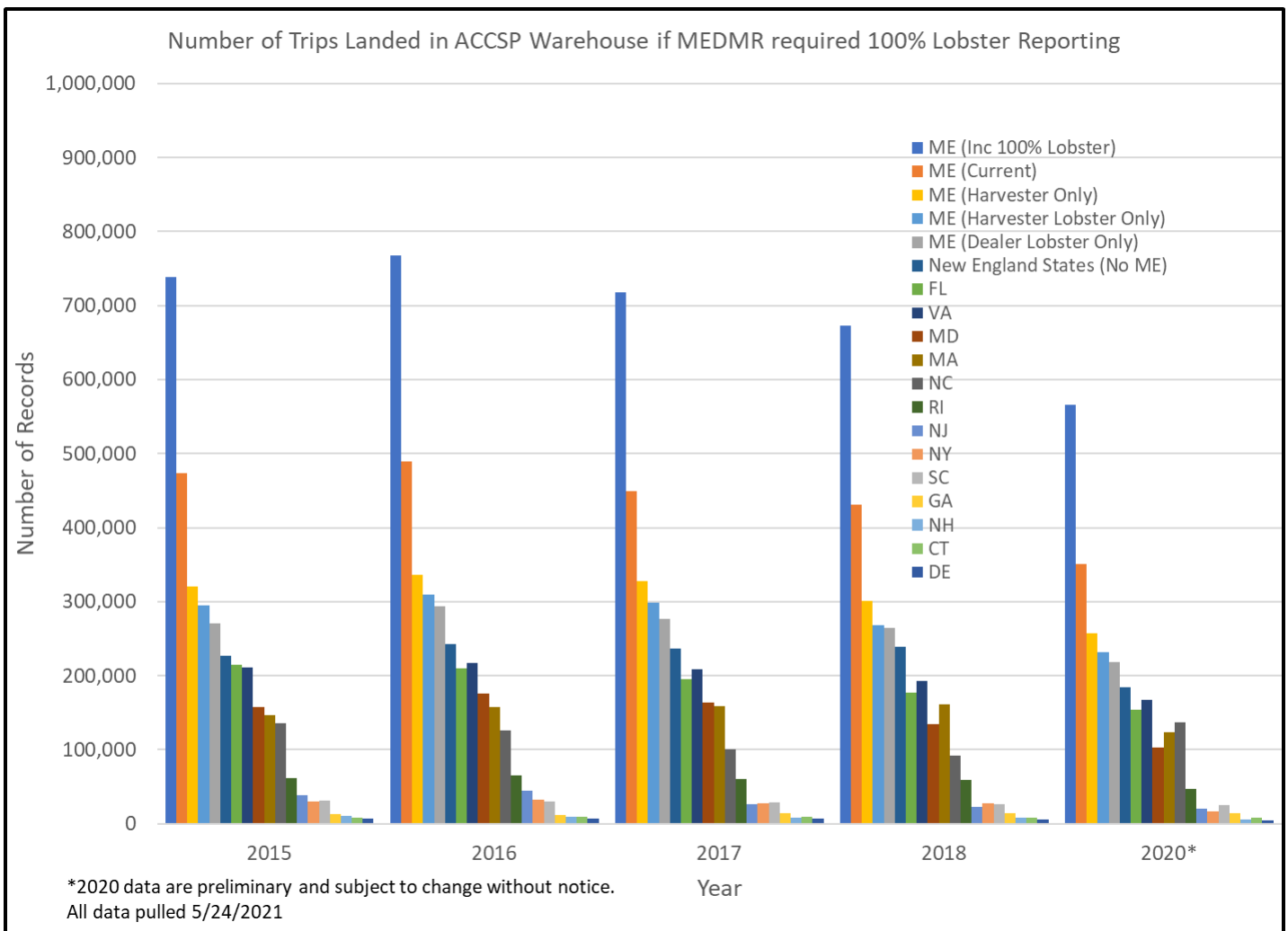


Figure 1: Number of Reported Trip Records by State Landed in ACCSP Data Warehouse

Once MEDMR requires 100% lobster harvester reporting the volume of phone calls and data requests will increase. Throughout the year, approximately 40% to 60% of all harvesters are out of compliance for at least one

month of reporting. In 2020 there were 3,570 harvesters with 5,199 individual licenses from all 12 fisheries that required harvester reporting and MEDMR sent out approximately 2,800 compliance letters (and emails) and fielded thousands of calls a month relating to reporting questions and compliance/license renewal status. Doubling the total number of harvesters required to report (many lobster harvesters are required to report other fisheries) will increase these figures and require more staff and staff time to provide industry with an acceptable level of customer service.

More staff will be needed to assist with audits and the increase in data that will require auditing. The increase in data will increase the time it takes to complete audits. The implementation of 100% lobster harvester reporting will allow the MEDMR to audit and compare 100% of our lobster dealer and harvester data. These two datasets alone account for over 500,000 records annually and will take significant staff resources to complete. MEDMR currently matches up what the 10% harvester reports indicate against what dealers reported for the same individuals. Any discrepancies over 2,000 pounds for the year are flagged and further research is conducted. While the data submitted through an electronic means will certainly help reduce the amount of data that MEDMR staff will need to audit through built in data validations, there are audits that will still need run (such as dealer vs harvester) that will take up significant staff time the first few years of 100% reporting.

The first few years will require significant outreach with industry. **Communicating with industry and fielding electronic reporting questions will be the biggest time burden the landings program will face. Almost 75% of all harvester records submitted to MEDMR are key entered by MEDMR staff. Electronic reporting will be a cultural shift for the lobster fishery, which will require diligent customer service and an intuitive reporting application.** MEDMR is funding the development of a new harvester reporting application that will be user friendly and meet the reporting needs of all MEDMR reporting fisheries, as well as meet NMFS eVTR reporting requirements. MEDMR spent significant time testing ACCSP's eTRIPs V2, which was greatly improved over the previous versions. However, there are still significant concerns about the number of reporting pages it took to complete, the agility of a program that is not fully table driven, and the ease of use for different fisheries. The program MEDMR contracted with Bluefin Data LLC to build will work on both Android® and iOS® and meet all federal requirements (including NERO, SERO and HMS) so federal harvesters will be able to utilize this system. **The MEDMR has a contract with Bluefin Data LLC that will allow any harvester with a MEDMR license or permit to use the VESL application free of charge. Once approved by GARFO, if those harvesters with a MEDMR license or permit also have reporting obligations to GARFO, they will be able to use VESL to fulfill their GARFO reporting requirements regardless of where they are landing. All data collected through the new MEDMR funded harvester applications will be submitted directly to ACCSP through the newly developed API (requirements are listed here <https://accsp-software.github.io/spec-unified-api-prod/>).** The funding source for the new mobile applications are through dedicated technology funding within MEDMR's budget. These funds must be used for advancing technologies and cannot be used for personnel.

The number of trip records that MEDMR staff entered into MARVIN (MEDMR's database that contains all sampling, biological and landings data that MEDMR collects) has increased 490% since 2007 (Figure 2 – view in color), which was the last year the MEDMR did not require 10% lobster harvester reporting. When harvesters submit paper reports, they are entered into the MARVIN database. MARVIN is used for reports submitted on paper because it is a faster method of data entry and MEDMR uses this tool to audit the data before sending a copy of it to ACCSP. Routines are configured to convert the MARVIN data to ACCSP codes before they are uploaded to the ACCSP warehouse.

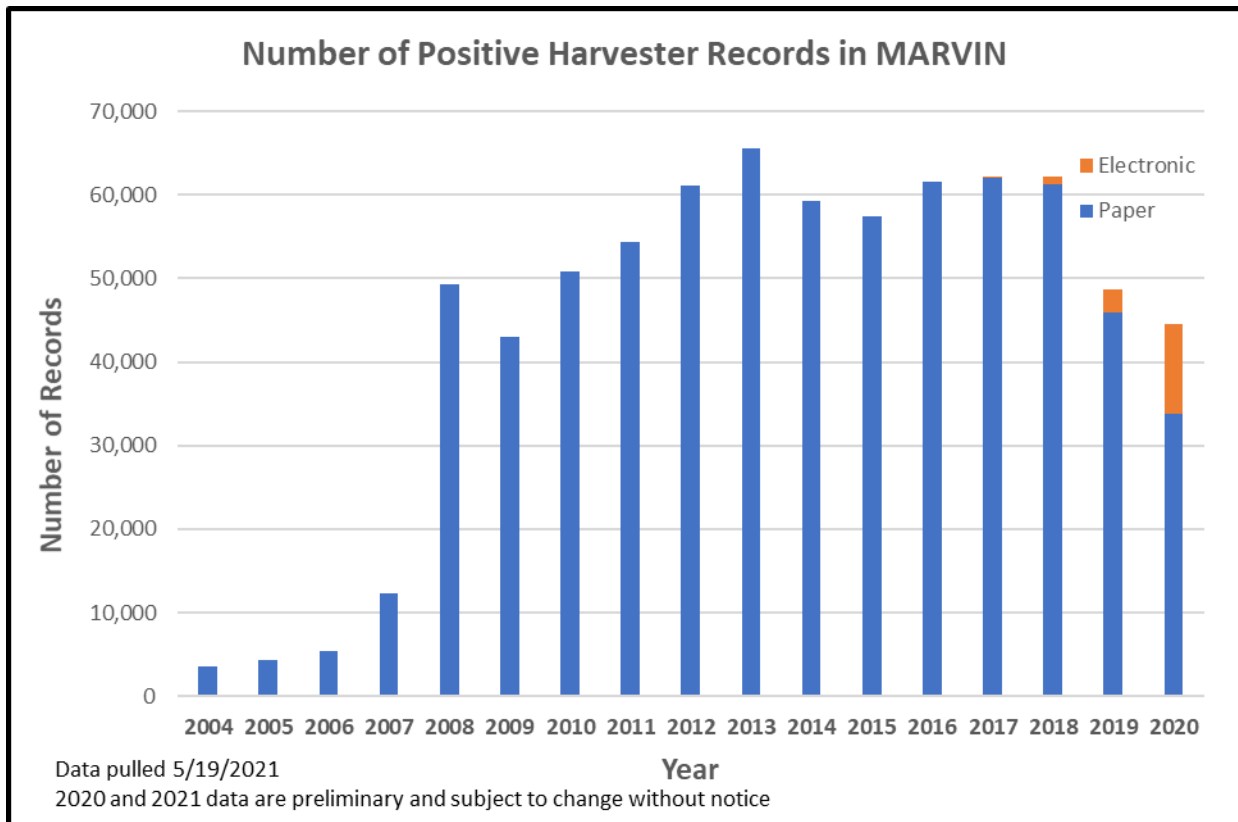


Figure 2: Number of Positive Trip Records Entered by MEDMR Staff and Industry into MARVIN

Landings data entered in MARVIN are uploaded to the ACCSP data warehouse. The significant increase in the amount of data entry, outreach/education and auditing are the single greatest challenge facing the landings harvester (including lobster) program staff. MEDMR currently funds seven positions that work at least part-time on harvester reporting. Currently no positions working on the harvester program are funded by ACCSP grants. In addition to the FY20 ACCSP grant, MEDMR was able to secure additional one-time funding of \$600K from NOAA through congressional appropriations as part of a large \$1.6 million dollar bill to offset costs that might result from new regulations in the lobster fishery to protect right whales (split with MA, NH, ME and RI). While this funding is vital, it does not provide MEDMR with enough funds to fully fund multiple years of lobster reporting. MEDMR continues to look for other sources of funding (both internal and external) to fund 100% lobster reporting. MEDMR has modified the current budget from last year’s funded proposal to account for the FY20 and other NOAA funds. The positions listed in this grant currently have no other funding source available. MEDMR is now requesting funding for 4 new positions.

This proposal is designed to help fund the transition from 10% harvester reporting to 100% harvester reporting where most harvesters will be required to report electronically **as required by Addendum XXVI**. MEDMR understands that not everyone will be able to report electronically so a paper option must still be available. The positions being funded will be doing very little data entry and will mostly be assisting harvesters with reporting questions along with other data entry duties.

Summary of staffing:

MEDMR Landings Program staff involved in harvester reporting who are fully funded by MEDMR:

- **Scientist IV:** makes decisions on the general Landings Program direction.

- **Scientist III:** oversees the Landings Program, participates in ACCSP committees, transfers data to ACCSP; reporting technology development and responds to data requests.
- **Scientist II:** manages the day-to-day operations of the Landings Program, is responsible for database development, responds to data requests and updates the Landings Program web page. This position also audits data, and monitors licenses and compliance.
- **Specialist II:** provides one-on-one outreach with the harvesters; trains harvesters how to report electronically or on paper; follows up on compliance issues. This position audits data from “state-only” and “NMFS” harvesters. See the *Approach* section below for further details on auditing. This position is also assigned tasks in the dealer-reporting project.
- **Office Associate II:** corresponds with industry regarding new suspension authority for failure to report on time; identifies and notifies delinquent reporters; follows protocols for suspending licenses; works with the licensing division to ensure licenses are re-issued when reports have been submitted.
- **Office Associate I:** opens and processes mail and enters data into MARVIN.

Proposed new MEDMR Landings Program staff to be funded by additional NOAA grant:

- **Marine Resource Scientist II (1 position):** Oversee the daily operations of harvester reporting program, including but not limited to scheduling of duties, directly supervising four employees, managing harvester data audits, database maintenance and assisting with reporting writing.
- **Marine Resource Scientist I (2 positions):** Oversee the rollout of the new offline harvester reporting application, outreach with industry and overseeing data audits. These two positions will be one of the primary contacts for industry members that have reporting program questions.
- **Office Specialist I Supervisor (1 position):** Supervise three Office Associate I positions and two Office Associate II positions located in the West Boothbay Harbor, ME Laboratory. This position will assist with incomplete reports, handle in-person report drop-off, report rejections, compliance mailings and calls and data audits.
- **Office Associate II (1 position):** Will have similar duties to the Office Associate II listed below (currently filled by Alice Mayberry). Will be based out of our Augusta office and will be cross-trained to assist our Licensing Department when help is needed.
- **Office Associate II (currently filled by Alice Mayberry):** Primary contact for incomplete reports, rejects reports, primary contact for compliance and reporting questions, notifies new harvesters of reporting requirements, assists with audit research.

Proposed new MEDMR Landings Program staff to be funded by ACCSP grant:

- **Marine Resource Specialist II (2 positions):** Help run data audits and correct erroneous data, primary data audit researcher for dealer vs harvester audits and will assist the Marine Resource Scientist I’s with any industry technical outreach questions.
- **Office Associate II (2 positions):** Will have similar duties to the Office Associate II listed above that is currently staffed by Alice Mayberry). This position will be based out of our West Boothbay Harbor office.

The MEDMR has discussed and decided against the idea to ramp up from the current number of harvesters selected to report to 100% reporting. It has determined the best way forward is to go directly to 100% harvester reporting. For MEDMR to provide excellent customer service from the beginning, the number of positions proposed are what we feel are necessary to provide the best level of customer service while being as fiscally responsible as possible. Each position created will be a limited period position and each year MEDMR will evaluate these new positions to determine if they are still needed. We anticipate that by year 3 to 5 we might be able to reduce the number of positions as harvesters become more versed with the reporting programs.

Finding funding to help defray the costs for this federally mandated requirement is something that the MEDMR has been looking for and will continue to look for. MEDMR will also look for ways to bring the overall costs down through either staff reductions as the program evolves or any and all in-house or outside sources. MEDMR will continue to look at ways to streamline the Landings Program's operation and will continue to try and automate as many processes (compliance and audits for instance) that will cut down on staffing needs. The extra staff included in this proposal will assist with the initial roll out and anticipated help that industry will need and the ability to assist industry within a reasonable amount of time to answer their questions.

It is essential that this harvester reporting program meet its funding needs, which are born as a result of ASMFC's requirement that MEDMR collect trip level harvester reports from 100% of all licensed commercial lobster harvesters. The implementation of new lobster fishery regulations in the Atlantic Large Whale Take Reduction Plan to reduce the threat of entanglement to endangered right whales is expediting the timeframe to increase reporting to 100% faster than Addendum XXVI required. **Requiring 100% lobster reporting will add another tool for monitoring Maine's commercial fisheries, which are large and economically important to the U.S. seafood industry.** According to the NMFS commercial fisheries database (as of 5/24/2021), Maine was ranked as the highest state on the Atlantic Coast in commercial value (\$559.8 million of which \$406 million were lobster) and fourth highest in whole pounds landed (185.8 million of which 96.6 million were lobster) in 2020. **This comprehensive harvester reporting program also addresses ASMFC compliance issues for several fisheries, including American lobster, Atlantic herring, American eel and Atlantic menhaden.**

This grant does not include any funding for the offline mobile harvester reporting application. The MEDMR will fully fund the original programming, programmatic updates and maintenance costs associated with this project. The MEDMR will continue to fund the monthly maintenance fees. MEDMR will continue to try to identify alternative sources of funding for the harvester reporting project, but the State of Maine is continuing to face budget challenges and there are few options for state funding to cover the total cost.

Results and Benefits:

The data collected so far through MEDMR's harvester reporting program have shown how valuable this information is for Maine's fisheries. **Currently MEDMR requires 12 fisheries to submit trip level harvester reports and lobster is the only fishery not collecting 100% of harvester trips (Figure 3 shows all non-confidential fisheries trips reported over past 5 years). Maine's commercial lobster fishery is by far the largest lobster fishery on the East Coast in both volume and number of individuals.** There are just under 5,800 licensed harvesters of which MEDMR currently only selects ~380 harvesters each year to report. Even with selecting only a percentage of harvesters in the lobster industry, MEDMR scientists have learned more about the fleet characteristics, gear configurations and fishing patterns for full time and part time fishermen involved in this fishery than they have been able to with the current sampling programs. Other fishery managers are now analyzing landings data to learn more about the fishing fleet and the makeup of other fisheries. **Requiring 100% reporting will only increase the MEDMR's knowledge base and increase the amount of data collected. Since most data will be submitted to SAFIS and all data stored in the ACCSP Warehouse, this large dataset will be available to all partners.**

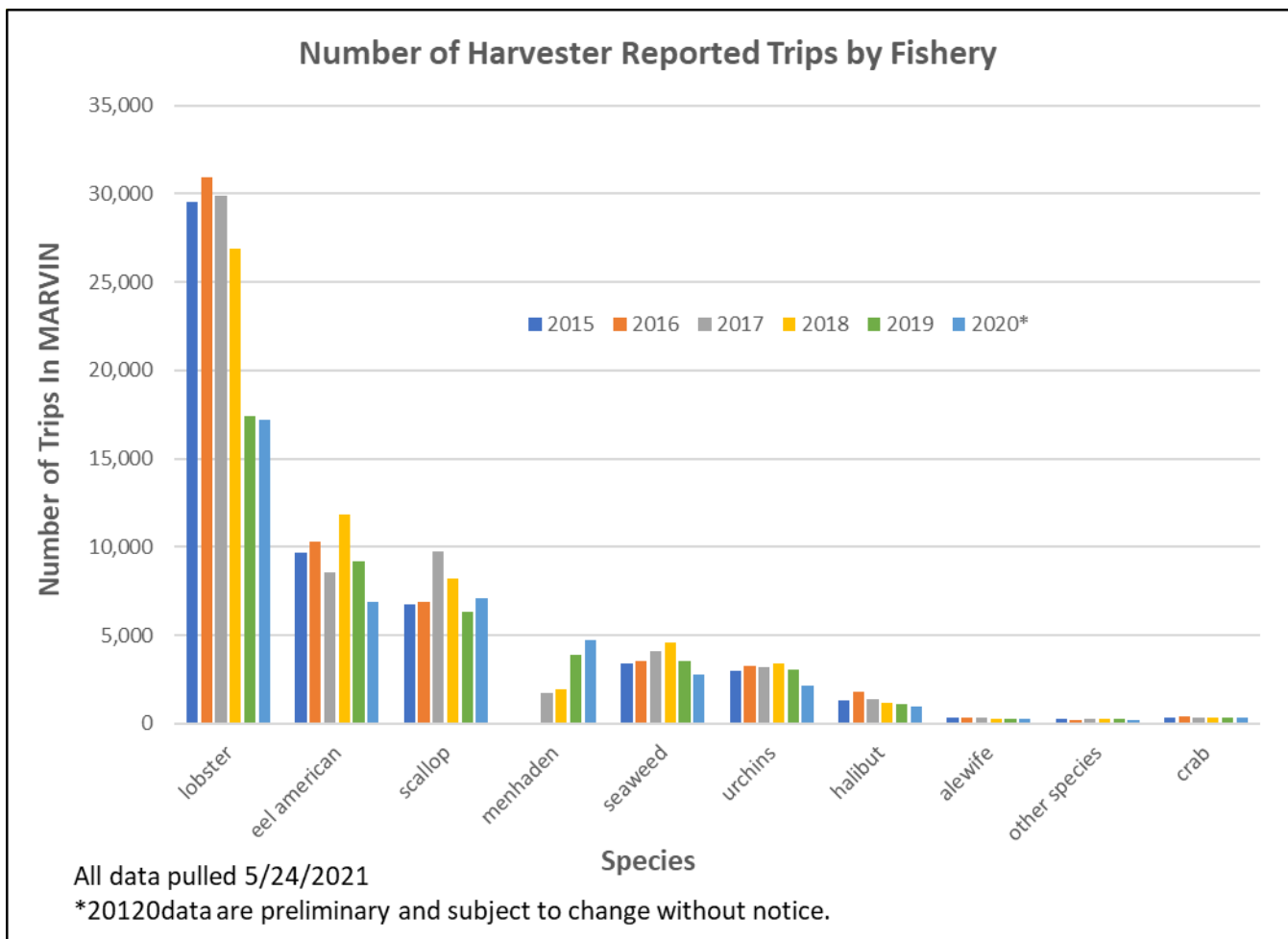


Figure 3: Number of Harvester Reported Trips by Fishery from Harvester Data

This grant will allow MEDMR to meet ASMFC’s Addendum XXVI target of 100% harvester reporting in the lobster fishery by January 2024. This timeline is potentially being sped up by protected species issues and could require 100% trip level reporting in the lobster fishery by January 2023. This grant will allow MEDMR the ability to fund positions needed to ensure the data collected are as accurate as possible through more data auditing, especially linking dealer and harvester reports together through our “dealer vs harvester reporting” audits where we match up each harvester report to the dealer report and their total landings are scrutinized. Addendum XXVI does not necessarily require 100% electronic reporting; however, MEDMR will require nearly 100% lobster harvester electronic reporting and know that harvesters in other fisheries are looking to move from paper reporting to electronic reporting when this option is available in an intuitive offline application. MEDMR anticipates that any new harvesters that report on paper will be offset by those the currently report on paper but will be required to switch to an electronic reporting option and the data entry staff currently employed will be sufficient. Staff are fielding more calls each day asking about electronic reporting and are promoting our Maine LEEDS online reporting, but most want a mobile friendly reporting option. **MEDMR is already uploading data reported to MARVIN to ACCSP every six months and intends to start uploading every month; which benefits all partners.**

Metadata for the harvester program will be updated as needed according to the Federal Geographic Data Committee (FGDC) and the Content Standard for Digital Geospatial Metadata (CSDGM) standards where appropriate. The resulting metadata will be reported to ACCSP as text and XML.

This project will help MEDMR meet the data collection standards of ACCSP. All partners will benefit, as all data will be uploaded to ACCSP and many of the species landed in Maine have a broad geographic range which includes many other agencies in their management. Partners will benefit from the technologies built and lessons learned from the offline harvester reporting application MEDMR intends to have in production by early summer as this will be available to any partner.

Approach:

1. Enforce compliance

MEDMR staff will enforce compliance of the trip level reporting regulation through these methods:

- **Provide initial outreach and technical support needed for harvesters to report trip level landings to MEDMR. Meet with harvesters in a group setting and one on one as needed to explain reporting procedures, install application, troubleshoot issues with reporting, and explain consequences for failing to report.**
- **Review paper reports submitted for completeness and verify the submissions in Maine LEEDS. If reports are incomplete, MEDMR will contact industry to correct reporting mistakes. If a harvester cannot be contacted by phone, the report will be returned for correction. Reports submitted electronically are deemed complete upon submission.**
- **Send delinquent harvesters not included in the suspension process emails indicating what they are missing and send automated notifications within the Maine LEEDS program when a report is received or not.**
- **Complete suspension notices monthly to those harvesters involved in the halibut, herring, menhaden and elver fisheries that are delinquent enough to meet the minimum notification criteria as outlined in the suspension law (Attachment 4).**
- **Complete follow-up suspension notices monthly to those harvesters that are delinquent enough to meet the minimum notification criteria as outlined in the suspension law (Attachment 4).**
- **MEDMR will suspend harvester licenses for those who fail to report in a timely manner. See Attachment 4 for the law, which dictates suspension procedures MEDMR will follow.**

2. Data entry

Paper reports and electronic reports entered through the Maine LEEDS system will go directly into MARVIN and then uploaded to the ACCSP Warehouse at least every 6 months once it has been thoroughly audited.

The harvester reporting application MEDMR contracted to have built by Bluefin Data LLC will include point of entry validations for harvester, vessel, gear, gear to various other variables (i.e. fisheries, gear quantities), gear quantities, locations, pounds, dispositions for example. The data entered through these new applications will utilize ACCSP's API and all data will be submitted directly into SAFIS.

3. Encourage electronic reporting

MEDMR staff will encourage harvesters who report on paper to report using one of the two electronic reporting methods MEDMR will offer (Maine LEEDS or our own Offline Electronic Reporting Application). MEDMR staff will train all harvesters who are required to report electronically regardless if they have reporting obligations to NOAA or not.

MEDMR believes that electronic reporting will benefit industry as much as it benefits MEDMR. If harvesters enter their own data through the MEDMR proposed application, they will have the ability to run basic analytics within the application to view their own trends and harvest information. MEDMR will benefit by

reducing the amount of staff time spent entering data. If MEDMR was not able to offer an electronic reporting option, the number of data entry staff required to handle approximately 300,000 records per year would be at least 7 or 8 individuals in addition to what is currently proposed. Electronic reporting will not only save MEDMR staff data entry time, we will be able to automate many of our daily reporting processes, include data validation at the point of harvester entry and automate compliance and spend more time on data audits and outreach with industry.

4. Continue outreach with industry to promote buy-in.

MEDMR staff will continue to work with harvesters to explain the purpose and benefits of harvester reporting. Staff (along with staff from GARFO and Bluefin Data LLC) attended the annual Maine Fishermen's Forum in March 2020 to facilitate an electronic reporting discussion. This discussion allowed MEDMR, GARFO and Bluefin Data LLC an opportunity to show harvesters the current and future electronic reporting options that are/will be available. The session was lightly attended but helped formulate ideas of how to improve this important part of outreach. We also anticipate holding a workshop to demonstrate the two MEDMR electronic reporting options available to industry to help promote buy in. **We will also utilize videos and remote outreach; however, there are times when it is most productive to hold a few large in-person meetings to assist those that are not as tech savvy as others and are more comfortable having an in-person meeting. Having to on-board almost 6000 new harvesters will require every tool we have in our toolbox. There are also areas in Maine where internet speeds and or connectivity are lacking so remote meetings are difficult (this is why we developed a reporting application that will work "offline"). We intend to rely heavily on remote meetings and creating video and reporting how-to's (many are already created) to assist those individuals that are comfortable with that format.**

Staff will work with established industry organizations, such as the MEDMR advisory councils, lobster zone councils, and dealer and harvester associations to reiterate the program goals and show results of mandatory reporting. Staff will also focus on explaining the statutory authority for suspending licenses for those who fail to report on time, and how this will help gather more accurate data.

5. Audit of harvester data submitted.

Staff will audit data submitted monthly. Paper data will be audited twice per month; electronic audits sent via email from SAFIS will be corrected weekly. SAFIS audits for "state-only" harvesters will be corrected via an ODBC connection to a view of the Maine data. **Audits concerning federal harvesters will be vetted through the NMFS Northeast Region. MEDMR staff will audit electronic data submitted by federal harvesters because these harvesters submit data in order to also fulfill MEDMR reporting requirements. MEDMR performs basic audits of records to catch potential oversights from NMFS audits.** MEDMR also compares dealer-reported landings with harvester-reported landings and identifies both parties if there are any discrepancies. In these audits, MEDMR contacts dealers and harvesters when discrepancies are discovered and works to correct records or recover missing data.

MEDMR does intend to audit 100% of all individual records that are submitted. **Many of these audits will be simple gross audits (over the trip, gear quantity, spatial audits, etc.); however, the data submitted through the new mobile application will have validations built-in for pre-submission checks. Harvesters will not be able to enter certain gear/species combinations, certain dispositions for certain species and gear quantity checks for instance. Many of these audits will be canned within the audit database and will be added to a routine check. The dealer/harvester audits are performed annually**

and start by looking at yearly totals with a 2,000 pound discrepancy. Dealer/harvester audits are not performed on a trip by trip basis.

6. Transmission of harvester data to ACCSP.

MEDMR will continue to upload harvester data from MARVIN to the ACCSP data warehouse once every two months. In each data feed, the following fields are uploaded to the warehouse according to ACCSP protocols: cf_license_nbr, iss_agency, trip_type, supplier_trip_id, port, state, coast_guard_nbr, state_reg_nbr, trip_start_date, trip_start_time, trip_end_date, trip_end_time, num_crew, num_anglers, vtr_number, vessel_permit, sub_trip_type, reporting_source, fuel_used, fuel_price, charter_fee, distance, in_state, area_code, sub_area_code, local_area_code, latitude, longitude, gear, lma, gear_quantity, gear_sets, fishing_hours, hours_days, total_gear, gear_size, mesh_ring_length, mesh_ring_width, stretch_size, target_species, avg_depth, species_itis, disposition, market_code, grade_code, unit_of_measure, sale_disposition_flag, dealer_license_nbr, date_sold, reported_quantity, price, dea_iss_agency, catch_source, catch_latitude, catch_longitude, supplier_catch_id. MEDMR enters data daily and audits data weekly, so the data uploaded to the warehouse are a mix of pre- and post-audited records. MEDMR does not keep track of what percentage of the uploaded records are “reloads” due to errors, but simply reloads all the data in MARVIN to the warehouse once every three months. **In addition, the data supplied by the MEDMR offline mobile application will be sent directly to SAFIS daily.**

The MEDMR does not upload data from MARVIN to SAFIS because MEDMR staff continually audit data each week, so the data that are uploaded to the warehouse are a mix of pre- and post-audited records. The reloading of data from MARVIN to the Warehouse is an automated process that the MEDMR loads into a temporary table provided by the Warehouse. If we were to perform the same upload method to SAFIS we would need the ability to mass delete records from SAFIS (which we do not have the ability to do at this time) before records are reloaded to avoid creating duplicate records.

7. Report metadata to ACCSP.

Metadata will be created with ESRI ArcCatalog 10 in order to conform to the FGDC (Federal Geographic Data Committee) standards and specifications. As specified by the federal standard, MEDMR metadata will include the following main sections with detailed information on: identification information, data quality information, spatial data organization information, spatial reference information, entity and attribute information, distribution information, metadata reference information, citation information, time period information and contact information. Created metadata will be available in text and XML formats.

Geographic Location: Operations will be based out of Boothbay Harbor, Maine and the project will take place throughout Maine.

Milestone Schedule:

	<u>Months</u>											
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
1. Enforce harvester compliance	X	X	X	X	X	X	X	X	X	X	X	X
2. Data enter harvester reports	X	X	X	X	X	X	X	X	X	X	X	X
3. Encourage electronic harvester reporting	X	X	X	X	X	X	X	X	X	X	X	X
4. Industry outreach to promote industry buy-in	X	X	X	X	X	X	X	X	X	X	X	X
5. Audit harvester data	X	X	X	X	X	X	X	X	X	X	X	X
6. Upload harvester data to ACCSP			X		X		X			X		X
7. Report metadata to ACCSP												X
8. Semi-annual reports						X						X
9. Annual reports												X

Table 2. Project Accomplishments Measurement:

Goal	Measurement	2019	2020*	2021*
Enforce Harvester Compliance	Number of compliance letters to harvesters	3,226	2,555	671
Enforce Harvester Compliance	Number of harvesters suspended for failing to report timely	447	421	-
Harvester Data Entry	Number of trip records by year landed in data warehouse	46,235	34,148	437
Harvester Data Entry	Number of positive trip records by year landed in MARVIN	48,655	44,595	6,949
Harvester Data Entry	Number of paper trip records entered in MARVIN	45,873	33,797	5,572
Harvester Data Entry	Number of electronic trip reports entered into Maine LEEDS	2,782	10,798	1,377
Harvester Data Entry	Number harvesters entering directly into Maine LEEDS	232	569	154
Harvester Data Entry	Number of positive trip records by year landed in SAFIS	-	-	-
Encourage Electronic Reporting	Number of harvesters submitting positive reports in SAFIS	-	-	-
Transmit Harvester Data to Data Warehouse	Frequency of data submitted by year landed	1 time every 6 months	1 time every 6 months	1 time every 6 months
Outreach	Number of custom data requests	479	1051	376

Text in bold indicate where proposal hit on ranking criteria.

*2020 and 2021 data are incomplete at time of report creation.

Cost Summary: FY22 Managing 100% Lobster Harvester Reporting in Maine				
5/1/2022 - 4/30/2023				
Personnel^A	Description			Cost
2 Marine Resource Specialist II (to be created)	full time position for 12 months	2 @	\$40,816	\$81,632.00
2 Office Associate II (to be created)	full time position for 12 months	2 @	\$34,361.60	\$68,723.20
			Subtotal	\$150,355.20
Fringe Benefits^A				
2 Marine Resource Specialist II (to be created)	Includes health, dental, workers comp, FICA, life insurance and retirement	2 @	\$24,490	\$48,980.00
2 Office Associate II (to be created)		2 @	\$20,617	\$41,234.00
			Subtotal	\$90,214.00
			Total Personnel	\$240,569.20
Travel				
1 vehicle ^B	1 car * \$377.34/mo * 12 mo			\$4,528.08
Mileage fee	1 car * 1,150 mi per mo * \$.1533/mi * 12 mo			\$2,115.54
Toll allowance	Estimated			\$200.00
5 Overnight stays ^C	4* \$150/night			\$600.00
Per diem (includes extended days)	(2 overnights @ \$65/day & 5 extended days @ \$24/day)			\$250.00
			Total Travel	\$7,693.62
Supplies				
Year labels	1,000 labels (500/box * 2 boxes * \$15.00/box)			\$30.00
Folder labels	1,000 labels (500/box * 12 boxes * \$24.50/box)			\$49.00
AAK Color Coded Folders ^D	1,000 folders (50/box * 120 boxes * \$23/box)			\$460.00
Other				
Printing and binding of harvester report forms	500 logbooks * \$2.50 per logbook			\$1,250.00
Postage for logbooks	Mail 500 logbooks * \$5.00 per logbook			\$2,500.00
Postage for info packets and letters	(\$0.55*1000 compliance letters)			\$550.00
Maine LEEDS enhancement programming				\$2,100.00
Telecommunication charges ^E	5 phones * \$50/mo * 12 mo			\$3,000.00
			Total Supplies	\$9,939.00
			Subtotal	\$17,632.62
			Total Direct Costs	\$258,201.82
			Indirect Costs (30%)	\$77,460.55
			Total Award to DMR	\$335,662.37

A: Cost includes salary and benefits, which are dictated by contract with State of Maine and are non-negotiable.

B: All state agencies must rent vehicles through state's Central Fleet Agency which is non-negotiable. Vehicle costs include the following services and costs: maintenance, repairs, insurance, and gasoline.

C: DMR staff meet with and train harvesters how to electronically report to DMR and/or NMFS.

D: AAK Color Coded Folders are folders MEDMR uses for all harvester reporting, they are reusable but will need 2 years supply eventually.

E: One cell phone for each of the Scientist II, Scientist I (2) and Specialist II (2) working on the project.

Partner Contribution For ACCSP Purposes

Scientist IV (7% time)	\$9,116
Scientist III (25% time)	\$25,919
Scientist II (25% time)	\$28,742
Specialist II (25% time)	\$19,788
Office Associate I (85% time)	\$66,322
Office Associate I (50% time)	\$39,013
Office Associate II (25%)	\$19,604
	\$208,504

Text in bold indicate where proposal hit on ranking criteria.

Budget Narrative for FY2022 proposal:

Personnel and Fringe Benefits: The new positions proposed in this proposal (2 Marine Resource Specialist II and 2 Office Associate II). These positions are funded full time (100%) by this award and are a Department of Marine Resources' employees. Salary and benefits for this employee are dictated by contract with the State of Maine and are non-negotiable. Benefits include retirement benefits, FICA, health insurance, dental insurance, workers compensation and life insurance. The benefits are determined by a formula the state uses which is variable dependent upon the position classification, the pay grade of the employee (e.g. the number of years the person has been employed by the State of Maine) and type of coverage the employee selects.

Travel: The Scientists and Specialists are the employees who will be travelling. The travel is for holding electronic harvester reporting workshops, visiting harvesters to install reporting software, training harvester staff how to electronically report or troubleshooting reporting problems. Staff provide harvesters with one-on-one training first via phone but then in person if individuals need further assistance with the reporting system and help troubleshoot electronic reporting problems. Travel occurs throughout the coast of Maine, although trips to the interior are unusual unless the harvester can only meet inland. These harvesters must be trained in the use of electronic reporting and in some cases a group informational setting will not be enough for some to learn how to report their landings information.

The monthly fee for the vehicle is dictated by contract with the State of Maine Central Fleet Agency; the fee is based on the type of vehicle leased, and the mileage fee is based on how many miles the car was used the previous year. Because of this, the vehicle fees between projects may differ. This project has one Nissan Rogue SUV which is a state-owned vehicle that MEDMR leases from the State of Maine Central Fleet Agency.

Occasional extended day travel or overnight stays are necessary. If multiple harvester appointments to these remote areas are made for the same day, or appointments are made for consecutive days, overnight travel may be necessary. The rates were calculated through the GSA website for posted rates.

Supplies: Filing supplies are needed each year but as more harvesters eventually shift to electronic reporting the need for filing supplies will decrease. The filing supplies include AAK folders used to store individuals log sheets, labels (year and name) and protective coatings for these labels. These are the same folders used for all of MEDMR's harvester reports and are purchased from Allied Systems Products AAK Filing system.

Other: The MEDMR will try and push electronic reporting as much as possible and will require waivers to report on paper for lobster reporting. To help cut down on costs, MEDMR will try and have harvesters print their own paper forms when necessary from the MEDMR website. We do accept forms via email, fax or U.S. mail. The bound logbook includes a carbon copy that harvesters use for their records, or to resend should the original gets lost in the mail. Many harvesters like this carbon copy feature, which is one of the main reasons why we choose to continue to purchase these bound logbooks. Cell phones for the Specialists and the Scientists are necessary for communication and safety when on travel to harvester meeting locations. Staff often needs to call NMFS or the programmer when installing software or troubleshooting reporting issues in the field. The line for Maine LEEDS enhancement programming is to cover any programmatic cost associated with enhancements identified by MEDMR's once the new 100% reporting requirement is put in place. MEDMR anticipates that after the compliance enhancement is in place, other features that will be a large time saver for MEDMR will be identified.

Indirect costs: The Department of Marine Resources has an indirect cost rate of 34.3%; however, our Commissioner has authorized this proposal use the lower rate of 30%. See Attachment 3 for the Negotiated Indirect Cost Agreement. These indirect funds are a necessity to help defray and offset the administrative costs associated with the ASMFC's directive to increase MEDMR's lobster reporting from its current rate to 100%. These indirect monies are utilized to help cover the administrative costs not covered directly by this grant proposal and help offset any burden MEDMR assumes with fulfilling their ASMFC reporting requirements.

Cost Summary: FY21 Managing 100% Lobster Harvester Reporting in Maine (Proposal Withdrawn at Operations Fall Meeting)				
5/1/2021 - 4/30/2022				
Personnel^A		Description		Cost
	2 Marine Resource Specialist II (to be created)	full time position for 12 months	2 @ \$37,766	\$75,532.00
	1 Office Associate II (Alice Mayberry)	full time position for 12 months	1 @ \$45,553.89	\$45,553.89
	1 Office Associate II (to be created)	full time position for 12 months	1 @ \$33,289	\$33,289.00
			Subtotal	\$154,374.89
Fringe Benefits^A				
	2 Marine Resource Specialist II (to be created)	Includes health, dental, workers comp, FICA, life insurance and retirement	2 @ \$21,652	\$43,304.00
	1 Office Associate II (Alice Mayberry)		1 @ \$26,116.81	\$26,116.81
	1 Office Associate II (to be created)		1 @ \$19,085	\$19,085.00
			Subtotal	\$88,505.81
			Total Personnel	\$242,880.70
Travel				
	1 vehicle ^B	1 car * \$377.34/mo * 12 mo		\$4,528.08
	Mileage fee	1 car * 1,150 mi per mo * \$.1533/mi * 12 mo		\$2,115.54
	Toll allowance	Estimated		\$200.00
	5 Overnight stays ^C	6* \$150/night		\$900.00
	Per diem (includes extended days)	(6 overnights @ \$65/day & 36 extended days @ \$24/day)		\$1,254.00
			Total Travel	\$8,997.62
Supplies				
	Year labels	1,000 labels (500/box * 2 boxes * \$13.95/box)		\$27.90
	Folder labels	1,000 labels (500/box * 2 boxes * \$24.50/box)		\$49.00
	AAK Color Coded Folders ^D	1,000 folders (50/box * 20 boxes * \$23/box)		\$460.00
Other				
	Printing and binding of harvester report forms	1000 logbooks * \$2.50 per logbook		\$2,500.00
	Postage for logbooks	Mail 1000 logbooks * \$5.00 per logbook		\$5,000.00
	Postage for info packets and letters	(\$0.55*3250 compliance letters)		\$1,787.50
	Maine LEEDS enhancement programming			\$28,000.00
	Telecommunication charges ^E	5 phones * \$40/mo * 12 mo		\$2,400.00
			Total Supplies	\$40,224.40
			Subtotal	\$49,222.02
	Total Direct Costs			\$292,102.72
	Indirect Costs (15%)			\$43,815.41
	Total Award to DMR			\$335,918.13

A: Cost includes salary and benefits, which are dictated by contract with State of Maine and are non-negotiable.

B: All state agencies must rent vehicles through state's Central Fleet Agency which is non-negotiable. Vehicle costs include the following services and costs: maintenance, repairs, insurance, and gasoline.

C: DMR staff meet with and train harvesters how to electronically report to DMR and/or NMFS.

D: AAK Color Coded Folders are folders MEDMR uses for all harvester reporting, they are reusable but will need 2 years supply eventually.

E: One cell phone for each of the Scientist II, Scientist I (2) and Specialist II (2) working on the project.

Partner Contribution For ACCSP Purposes

Scientist IV (7% time)	\$9,116
Scientist III (25% time)	\$25,919
Scientist II (25% time)	\$28,742
Specialist II (25% time)	\$19,788
Office Associate I (85% time)	\$66,322
Office Associate I (50% time)	\$39,013
Office Associate II (25%)	\$19,604
Mobile Harvester Reporting App Development	\$32,050
	\$240,554

Budget Narrative for FY2021 proposal (Proposal withdrawn at Operations Committee Meeting 9/2020):

Personnel and Fringe Benefits: The new positions proposed in this proposal (2 Marine Resource Specialist II and 1 Office Associate II) and current Office Associate II (currently filled by Alice Mayberry). These positions are funded full time (100%) by this award and are a Department of Marine Resources' employees. Salary and benefits for this employee are dictated by contract with the State of Maine and are non-negotiable. Benefits include retirement benefits, FICA, health insurance, dental insurance, workers compensation and life insurance. The benefits are determined by a formula the state uses which is variable dependent upon the position classification, the pay grade of the employee (e.g. the number of years the person has been employed by the State of Maine) and type of coverage the employee selects.

Travel: The Scientists and Specialists are the employees who will be travelling. The travel is for holding electronic harvester reporting workshops, visiting harvesters to install reporting software, training harvester staff how to electronically report or troubleshooting reporting problems. Staff provide harvesters with one-on-one training first via phone but then in person if individuals need further assistance with the reporting system and help troubleshoot electronic reporting problems. Travel occurs throughout the coast of Maine, although trips to the interior are unusual unless the harvester can only meet inland. These harvesters must be trained in the use of electronic reporting and in some cases a group informational setting will not be enough for some to learn how to report their landings information.

The monthly fee for the vehicle is dictated by contract with the State of Maine Central Fleet Agency; the fee is based on the type of vehicle leased, and the mileage fee is based on how many miles the car was used the previous year. Because of this, the vehicle fees between projects may differ. This project has one Nissan Rogue SUV which is a state-owned vehicle that MEDMR leases from the State of Maine Central Fleet Agency.

Occasional extended day travel or overnight stays are necessary. If multiple harvester appointments to these remote areas are made for the same day, or appointments are made for consecutive days, overnight travel may be necessary. The rates were calculated through the GSA website for posted rates.

Supplies: Filing supplies are needed each year but as more harvesters eventually shift to electronic reporting the need for filing supplies will decrease. The filing supplies include AAK folders used to store individuals log sheets, labels (year and name) and protective coatings for these labels. These are the same folders used for all of MEDMR's harvester reports and are purchased from Allied Systems Products AAK Filing system.

Other: The MEDMR will try and push electronic reporting as much as possible and will require waivers to report on paper for lobster reporting. To help cut down on costs, MEDMR will try and have harvesters print their own paper forms when necessary from the MEDMR website. We do accept forms via email, fax or U.S. mail. The bound logbook includes a carbon copy that harvesters use for their records, or to resend should the original gets lost in the mail. Many harvesters like this carbon copy feature, which is one of the main reasons why we choose to continue to purchase these bound logbooks. Cell phones for the Specialists and the Scientists are necessary for communication and safety when on travel to harvester meeting locations. Staff often needs to call NMFS or the programmer when installing software or troubleshooting reporting issues in the field. The line for Maine LEEDS enhancement programming is to cover any programmatic cost associated with enhancements identified by MEDMR's once the new 100% reporting requirement is put in place. MEDMR anticipates that after the compliance enhancement is in place, other features that will be a large time saver for MEDMR will be identified.

Indirect costs: The Department of Marine Resources has an indirect cost rate of 34.3%; however, our Commissioner has authorized this proposal use the lower rate of 15%. See Attachment 3 for the Negotiated Indirect Cost Agreement. These indirect funds are a necessity to help defray and offset the administrative costs associated with the ASMFC's directive to increase MEDMR's lobster reporting from its current rate to 100%. These indirect monies are utilized to help cover the administrative costs not covered directly by this grant proposal and help offset any burden MEDMR assumes with fulfilling their ASMFC reporting requirements.

Cost Summary: FY20 Managing 100% Lobster Harvester Reporting in Maine
3/1/2020 - 2/28/2021

Personnel^A		Description	Cost
1 Marine Resource Scientist II (to be created)		full time position for 12 months	1 @ \$50,079 \$50,079
2 Marine Resource Scientist I (to be created)		full time position for 12 months	2 @ \$45,340 \$90,680
2 Marine Resource Specialist II (to be created)		full time position for 12 months	2 @ \$37,849 \$75,698
2 Office Specialist I Supervisory (to be created)		full time position for 12 months	2 @ \$36,234 \$72,468
1 Office Specialist I (to be created)		full time position for 12 months	1 @ \$34,424 \$34,424
1 Office Associate II (to be created)		full time position for 12 months	1 @ \$31,741 \$31,741
		Subtotal	\$355,090
Fringe Benefits^A			
1 Marine Resource Scientist II (to be created)			\$32,551
2 Marine Resource Scientist I (to be created)			\$58,942
2 Marine Resource Specialist II (to be created)	Includes health, dental, workers comp, FICA, life insurance and retirement		\$49,204
2 Office Specialist I Supervisory (to be created)			\$47,104
1 Office Specialist I (to be created)			\$22,376
1 Office Associate II (to be created)			\$20,632
			Subtotal
		Total Personnel	\$585,899
Travel			
1 vehicle ^B		1 car * \$188.67/mo * 12 mo	\$2,264
Mileage fee		1 car * 1,000 mi per mo * \$.1533/mi * 12 mo	\$1,840
Toll allowance		Estimated	\$100
5 Overnight stays ^C		5* \$150/night	\$750
Per diem (includes extended days)		(5 overnights + 5 extended days) * \$65/day	\$650
		Total Travel	\$5,604
Supplies			
Filing Supplies		folders, folder labels, year labels	\$500
Other			
Printing and binding of harvester report forms		1000 logbooks * \$2.50 per logbook	\$2,500
Postage for logbooks		Mail 1000 logbooks * \$4.75 per logbook	\$2,375
Postage for info packets and letters		(\$0.50*3250 compliance letters)	\$1,625
Software (Adobe DC Professional)		8 copies at \$329.65/copy	\$2,637
Technology (equipment, licenses)			\$500
Enhancements to Maine LEEDS system		Automate compliance for electronic reporting	\$40,000
Telecommunication charges ^D		5 phones * \$40/mo * 12 mo	\$2,400
		Total Supplies	\$52,537
		Subtotal	\$58,141
		Total Direct Costs	\$644,039
		Indirect Costs (30%)	\$193,212
		Total Award to DMR	\$837,251

A: Cost includes salary and benefits, which are dictated by contract with State of Maine and are non-negotiable.

B: All state agencies must rent vehicles through state's Central Fleet Agency which is non-negotiable. Vehicle costs include the following services and costs: maintenance, repairs, insurance, and gasoline.

C: DMR staff meet with and train harvesters how to electronically report to DMR and/or NMFS.

D: One cell phone for each of the two specialists, one each for the two scientists and one scientist II working on the project.

Partner Contribution For ACCSP Purposes

Scientist IV (7% time)	\$9,115
Scientist III (25% time)	\$24,542
Scientist II (25% time)	\$26,854
Specialist II (25% time)	\$18,710
Office Associate I (85% time)	\$47,568
Office Associate I (50% time)	\$37,191
Office Associate II (50%)	\$32,813
Office Associate II (15%)	\$10,531
Office Associate II (15%)	\$9,750
Office Associate II (15%)	\$8,513
Office Associate II (100%)	\$65,626
<u>Mobile Harvester Reporting App Development</u>	<u>\$150,000</u>

\$441,211

Budget Narrative for FY2020 proposal:

Personnel and Fringe Benefits: The new positions proposed in this proposal (1 Marine Resource Scientist II, 2 Marine Resource Scientist I, 2 Marine Resource Specialist II, 2 Office Specialist I Supervisory, 1 Office Specialist I and 1 Office Associate II). These positions are funded full time (100%) by this award and are a Department of Marine Resources' employees. Salary and benefits for this employee are dictated by contract with the State of Maine and are non-negotiable. Benefits include retirement benefits, FICA, health insurance, dental insurance, workers compensation and life insurance. The benefits are determined by a formula the state uses which is variable dependent upon the position classification, the pay grade of the employee (e.g. the number of years the person has been employed by the State of Maine) and type of coverage the employee selects.

Travel: The Scientists and Specialists are the employees who will be travelling. The travel is for holding electronic harvester reporting workshops, visiting harvesters to install reporting software, training harvester staff how to electronically report or troubleshooting reporting problems. Staff provide harvesters with one-on-one training first via phone but then in person if individuals need further assistance with the reporting system and help troubleshoot electronic reporting problems. Travel occurs throughout the coast of Maine, although trips to the interior are unusual unless the harvester can only meet inland. These harvesters must be trained in the use of electronic reporting and in some cases a group informational setting will not be enough for some to learn how to report their landings information.

The monthly fee for the vehicle is dictated by contract with the State of Maine Central Fleet Agency; the fee is based on the type of vehicle leased, and the mileage fee is based on how many miles the car was used the previous year. Because of this, the vehicle fees between projects may differ. This project has one Nissan Rogue SUV which is a state-owned vehicle that MEDMR leases from the State of Maine Central Fleet Agency.

Occasional extended day travel or overnight stays are necessary. If multiple harvester appointments to these remote areas are made for the same day, or appointments are made for consecutive days, overnight travel may be necessary. The rates were calculated through the GSA website for posted rates.

Supplies: Filing supplies are needed each year but as more harvesters eventually shift to electronic reporting the need for filing supplies will decrease. The filing supplies include folders used to store individuals log sheets, labels (year and name) and protective coatings for these labels.

Other: The MEDMR will try and push electronic reporting as much as possible and will require waivers to report on

paper for lobster reporting. To help cut down on costs, MEDMR will try and have harvesters print their own paper forms when necessary from the MEDMR website. We do accept forms via email, fax or U.S. mail. The bound logbook includes a carbon copy that harvesters use for their records, or to resend should the original gets lost in the mail. Many harvesters like this carbon copy feature, which is one of the main reasons why we choose to continue to purchase these bound logbooks. Cell phones for the Specialists and the Scientists are necessary for communication and safety when on travel to harvester meeting locations. Staff often needs to call NMFS or the programmer when installing software or troubleshooting reporting issues in the field. All Landings Program staff use Adobe DC Pro to enter or audit paper reports or .PDF's that have been received electronically. The cost for this program has been set by our OIT Department. The line for Maine LEEDS enhancement is the programmatic cost to streamline MEDMR's compliance with harvester data submitted to SAFIS. MEDMR will need to create a SQL Server table to pull any data submitted by a harvester from the ACCSP Warehouse with Maine permits and flip their Maine LEEDS compliance record to submitted. This feature will be a large time saver for MEDMR and will save at least one full-time staff position.

Indirect costs: The Department of Marine Resources has an indirect cost rate of 30%. See Attachment 3 for the Negotiated Indirect Cost Agreement. These indirect funds are a necessity to help defray and offset the administrative costs associated with the ASMFC's directive to increase MEDMR's lobster reporting from its current rate to 100%. The anticipated increase to ~300,000 new harvester records and overall ~700,000 records (dealer and harvester) supplied to ACCSP's Data Warehouse will account for roughly 42% of all reports stored in the Data Warehouse. The increase in harvester reports received by MEDMR will be roughly 538%. These indirect monies are utilized to help cover the administrative costs not covered directly by this grant proposal and help offset any burden MEDMR assumes with fulfilling their ASMFC reporting requirements.

Attachment 1. Project History

Fund Year	Title	Cost	Extension through	Actual dates funding covered	Results
2020	FY20- Managing 100% Lobster Harvester Reporting in Maine	\$336,120	Apr-22	May 2020 – Apr 2021	Start preparing for MEDMR to move from mandatory 10% lobster harvester reporting to 100% lobster. Work on enhancement to Maine LEEDS program and continue work on app development.
2021	FY21- Managing 100% Lobster Harvester Reporting in Maine	\$335,918.13 (withdrawn)		May 2021 – Apr 2022	Continue preparations for MEDMR to move from mandatory 10% lobster harvester reporting to 100% lobster. Finalize enhancement to Maine LEEDS program, outreach with industry and rolling out MEDMR's offline harvester application built by Bluefin Data LLC.
2022	FY22- Managing 100% Lobster Harvester Reporting in Maine	\$335,662		May 2022 – Apr 2023	Final preparations before 100% reporting requirement is implemented in January 2023. Continue with outreach, audits and implementing reporting requirements.

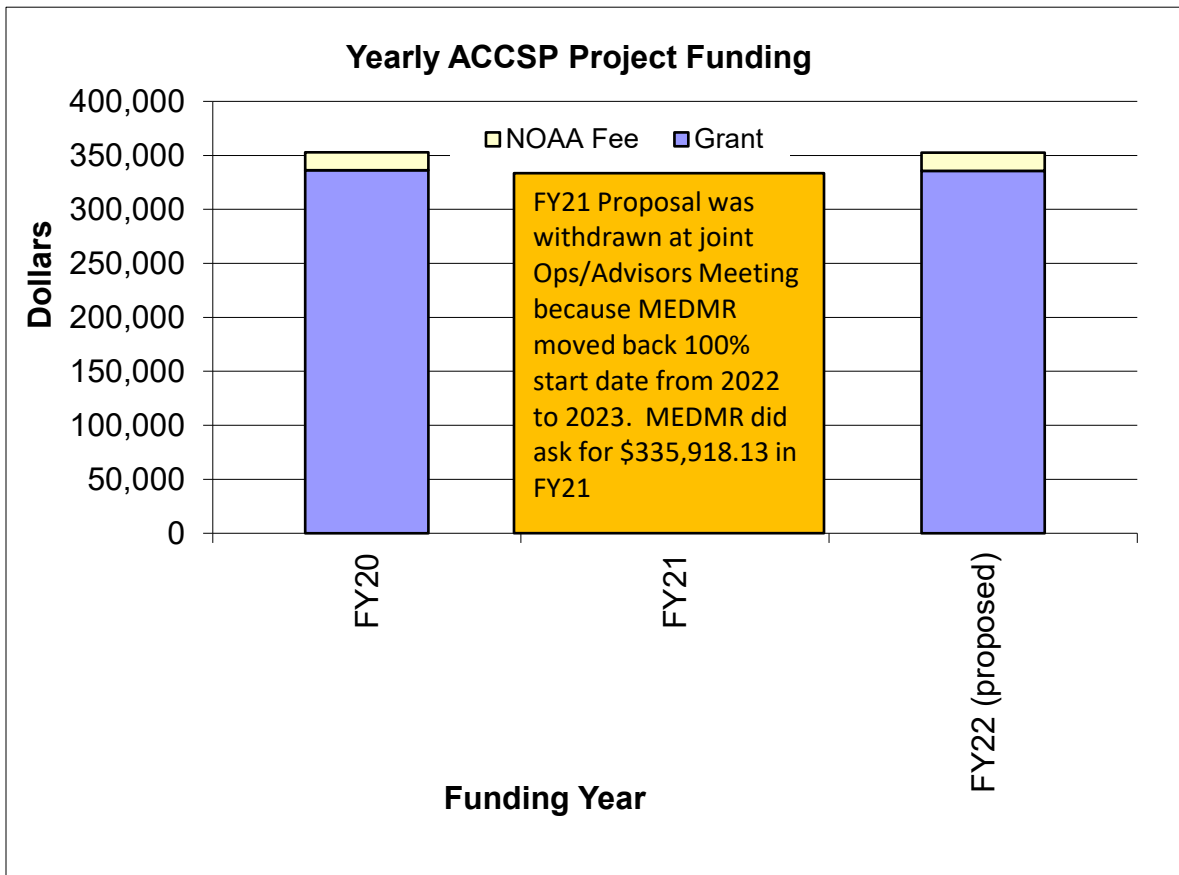


Figure 4. Project Funding History

Attachment 2: Negotiated Indirect Cost Agreement and Letter of Acknowledgement

U.S. Department of Commerce
Office of Acquisition Management – Grants Management Division
1401 Constitution Ave., NW, HCHB Rm 6412
Washington, DC 20230, Attn: Indirect Cost Program

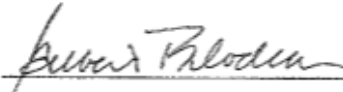
CERTIFICATE OF INDIRECT COSTS

This is to certify that I have reviewed the indirect cost rate proposal prepared and maintained herewith and to the best of my knowledge and belief:

- (1) All costs included in this proposal dated 3/18/20 to establish indirect cost billing rates for July 1, 2019 through June 30, 2020 are allowable in accordance with the requirements of the federal awards to which they apply and 2 CFR Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards". This proposal does not include any costs which are unallowable as identified in the applicable federal cost principles. For example, advertising contributions and donations, bad debts, entertainment costs or fines and penalties.
- (2) All costs included in this proposal are properly allocable to federal awards on the basis of a beneficial or causal relationship between the expenses incurred and the agreements to which they are allocated in accordance with applicable requirements. Further, the same costs that have been treated as indirect costs have not been claimed as direct costs. Similar types of costs have been accounted for consistently and the Federal Government will be notified of any accounting changes that could affect the rate.
- (3) The indirect cost rate calculated within the proposal is 34.30%, which was calculated using an indirect cost rate base type of Modified Total Direct Costs. The calculations were based on actual costs from fiscal year July 1, 2018 thru June 30, 2019 to obtain a federal indirect cost billing rate for fiscal year beginning July 1, 2019.

Subject to the provisions of the Program Fraud Civil Remedies Act of 1986, (31 USC 3801 et seq.), the False Claims Act (18 USC 287 and 31 USC 3729); and the False Statement Act (18 USC 1001), I declare to the best of my knowledge that the foregoing is true and correct.

Organization Name: State of Maine, Department of Marine Resources

CFO Signature:  Date: 3/18/2020

Name/Title Authorized Official: Gilbert M. Bilodeau, Director, Natural Res Ser Ctr

Dept Head Signature:  Date: 03/18/2020

Name/Title Authorized Official: Patrick Keliher, Commissioner



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
ACQUISITION AND GRANTS OFFICE

August 10, 2020

Mr. Brandon Flint
Managing Staff Accountant
Natural Resources Service Center
155 State House Station
Augusta, ME 04333

Dear Mr. Flint:

This letter supersedes the previous letter dated May 1, 2020 concerning this subject, and confirms that no further action is required under Department of Commerce Financial Assistance Standard Term & Condition A.05, Indirect Costs. Pursuant to OMB regulation 2 CFR Part 200, your organization is not required to submit an indirect cost allocation proposal or plan narrative to its cognizant agency. These plans are to be prepared and retained at the local government level. OMB regulation 2 CFR Part 200, Appendix V Il, par. D states, in part:

All department or agencies of the governmental unit desiring to claim indirect costs under Federal awards must prepare an indirect cost rate proposal and related documentation to support the costs. The proposal and related documentation must be retained for audit in accordance with the records retention requirements contained in the Common Rule.

When actual costs are known at the end of your fiscal year, you are required to account for differences between estimated and actual indirect costs by means of either: a) making an adjustment to the next year's indirect cost rate calculation to account for carry-forward (the difference between the estimated costs used to establish the rate and the actual costs of the fiscal year covered by the rate); or b) making adjustments to the costs charged to the various programs based on the actual charges calculated. Since OMB regulation 2 CFR Part 200 requires the independent auditor to determine the allowability of both direct and indirect costs, the organization's indirect cost charges will be subject to audit.

It is important to note that your organization is still required to submit to the Grants Management Division of the National Oceanic and Atmospheric Administration (NOAA) an annual Certificate of Indirect Costs. NOAA acknowledges receipt of your most recent certificate, submitted March 18, 2020 pertaining to your rate of 34.30% for Fiscal Year 2020. Additionally, your request to move to a two-year fixed rate with carry-forward schedule, is approved. Given this, the aforementioned indirect cost rate of 34.30% is also applicable for Fiscal Year 2021.

The submission of the Certificate of Indirect Costs is due to our office within six (6) months after the close of your fiscal year.

A copy of this letter will be retained in your official award file. If you have any questions, please contact Lamar Revis at 301.628.1308 or at lamar.revis@noaa.gov. Thank you.

Sincerely,

Lamar Dwayne Revis

Arlene Simpson Porter
Director, Grants Management Division




Department of Marine Resources

INTEROFFICE MEMORANDUM

TO: FILE
FROM: PATRICK KELIHER, COMMISSIONER
SUBJECT: RATE USED FOR COST ALLOCATION
DATE: 5/25/21

In accordance with OMB Circular A-87, the Department of Marine Resources has submitted to the U.S. Department of Commerce a departmental cost allocation plan for use during state fiscal year 2019 ending June 30, 2019. The indirect cost rate proposal is 34.30%. I am authorizing the use of the lesser rate of **30%** to be used during this period.

ACCSP
"FY22: Managing 100% Lobster Harvester Reporting in Maine"
(May 1, 2022 – April 30, 2023)


Patrick Keliher, Commissioner 5/26/21

Attachment 4: Authority to Suspension Licenses for Delinquent Reporters

An Act to Improve the Quality of the Data Used in the Management of Maine's Fisheries

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 12 MRSA §6301, sub-§6 is enacted to read:

6. Ownership identified. If a license issued under chapter 625 is issued to a firm, corporation or partnership, the individual who owns the highest percentage of that firm, corporation or partnership must be identified on the license application. When 2 or more individuals own in equal proportion the highest percentages of a firm, corporation or partnership, each of those owners must be identified.

Sec. 2. 12 MRSA §6412 is enacted to read:

§ 6412. Suspension of license or certificate for failure to comply with reporting requirements

1. Authority to suspend. The commissioner, in accordance with this section, may suspend a license or certificate issued under this Part if the holder of the license or certificate fails to comply with reporting requirements established by rule pursuant to section 6173. A license or certificate suspended under this section remains suspended until the suspension is rescinded by the commissioner. The commissioner shall rescind a suspension when:

A. The commissioner determines and provides notice to the holder of the suspended license or certificate that the holder has come into compliance with the reporting requirements established by rule pursuant to section 6173; and

B. The holder pays to the department a \$25 administrative fee.

When a suspension is rescinded, the license or certificate is reinstated. Until the suspension is rescinded, the holder of the suspended license or certificate is not eligible to hold, apply for or obtain that license or certificate.

2. Process for suspension for failing to comply with weekly reporting. If the commissioner determines that a person who holds a license or certificate under this Part has failed to comply with a weekly reporting requirement established by rule pursuant to section 6173, the commissioner shall notify the person at the telephone number provided on the application for the license or certificate and by e-mail if an e-mail address is provided on the application. If the license or certificate holder has not complied with the reporting requirements within 2 days after the commissioner has provided the notice, the commissioner shall mail a notice of suspension to the license or certificate holder by certified mail or the notice must be served in hand. The notice must:

A. Describe the information that the license or certificate holder is required to provide pursuant to this Part that the department has not received; and

B. State that, unless all the information described in paragraph A is provided to the department or the license or certificate holder requests a hearing, the license or certificate will be suspended in 3 business days after the license or certificate holder's receipt of the notice.

If the license or certificate holder has not complied with the reporting requirements or requested a hearing within 3 business days after receipt of the notice, the commissioner shall suspend the license or certificate.

3. Process for suspension for failing to comply with monthly reporting. If the commissioner determines that a person who holds a license or certificate under this Part has failed to comply with a monthly reporting requirement established by rule pursuant to section 6173, the commissioner shall notify the person at the telephone number provided on the application for the license or certificate and by e-mail if an e-mail address is provided on the application. If the license or certificate holder has not complied with the reporting requirements within 45 days after the commissioner has provided the notice, the commissioner shall mail a notice of suspension to the license or certificate holder by certified mail or the notice must be served in hand. The notice must:

A. Describe the information that the license or certificate holder is required to provide pursuant to this Part that the department has not received; and

B. State that, unless all the information described in paragraph A is provided to the department or the license or certificate holder requests a hearing, the license or certificate will be suspended in 3 business days after the license or certificate holder's receipt of the notice.

If the license or certificate holder has not complied with the reporting requirements or requested a hearing within 3 business days after receipt of the notice, the commissioner shall suspend the license or certificate.

4. Hearing. A license or certificate holder receiving a written notice of suspension pursuant to this section may request a hearing on the suspension by contacting the department within 3 business days of receipt of the notice. If a hearing is requested, the suspension is stayed until a decision is issued following the hearing. The hearing must be held within 3 business days of the request, unless another time is agreed to by both the department and the license or certificate holder. The hearing must be conducted in the Augusta area. The hearing must be held in accordance with:

A. Title 5, section 9057, regarding evidence, except the issues are limited to whether the license or certificate holder has complied with reporting requirements established by rule pursuant to section 6173;

B. Title 5, section 9058, regarding notice;

C. Title 5, section 9059, regarding records;

D. Title 5, section 9061, regarding decisions, except the deadline for making a decision is one business day after completion of the hearing; and

E. Title 5, section 9062, subsections 3 and 4, regarding a presiding officer's duties and reporting requirements, except that notwithstanding Title 5, section 9062, subsection 1, the presiding officer must be the commissioner or the commissioner's designee.

Summary of Proposal for ACCSP Ranking

Proposal Type: Maintenance Proposal

Primary Program Priority and Percentage of Effort to ACCSP modules:

Catch and Effort (10 points): 100% of licensed lobster (and 11 other fisheries) must report trip level information. Most of these reports will be electronic.

Data Delivery Plan (2 Points): All electronic data through the MEDMR offline application will be submitted into SAFIS daily. All data entered into MEDMR's MARVIN database and will be sent to the ACCSP Data Warehouse on at least a bi-annual basis after all data have been thoroughly audited.

Project Quality Factors:

Regional Impact (5 Points): all partners will benefit, as all the data collected will be uploaded to ACCSP. Regional management organizations, such as ASMFC, will benefit from the trip level information from Maine. Partners may also benefit from the technologies/procedures tested in the new offline MEDMR mobile application. MEDMR is currently contracted with Bluefin Data LLC to build a mobile app for harvesters to use to meet the 100% lobster reporting requirement mandated in ASMFC Addendum XXVI. MEDMR is currently paying for all start-up costs associated with this project and shared findings with ACCSP. Partners will be able to utilize (the developer might charge a support fee) this application once built if they so choose.

Funding transition plan (4 Points): MEDMR will continue to look for other funding sources; however, with the timeline of 100% lobster reporting being pushed forward from the date set in Addendum XXVI, MEDMR will need help to achieve the requirements coming in the next few years. MEDMR is funding the development of an offline mobile harvester reporting application that will meet MEDMR, NMFS NERO and SERO along with HMS reporting requirements. MEDMR will pay for the ongoing monthly maintenance fee associated with this program. MEDMR has already secured an additional one-time \$600K in additional federal funding for this project. Currently, the MEDMR does not have any plans to require electronic reporting for all fisheries but intends on pushing electronic reporting. Geographical restrictions prevent all harvesters from having reliable high-speed internet access at this time.

In-kind Contribution (3 Points): the partner contribution is listed on page 14. MEDMR's in-kind contribution is approximately 62% of the requested amount. **We calculate our in-kind by dividing the total MEDMR contribution (\$208,508) by the total requested amount (\$335,662.37) to determine our in-kind contribution of 62%. All the positions listed as partner contributions are fully funded by the State of Maine and should be included as in-kind and not a match.**

Improvement in Data Quality/Timeliness (4 Points): MEDMR can audit data at a more detailed level, including checking harvester reported data against dealer reported data. MEDMR encourages reporting timeliness through outreach with harvesters and is working with Marine Patrol to ensure industry understands the importance of submitting accurate and timely information. The Maine State Legislature also passed law that authorizes license suspensions for those who fail to report on time which has improved the timeliness and quality of the data submitted for the fisheries that utilize this law.

Potential secondary module as a by-product (in program priority order) (3 points): The offline application that MEDMR envisions will be able to eventually link up with certain dealer reports and accept tracker data which will revolutionize the way spatial data could be used to determine many effort fields and dealer and harvester reports are matched up.

Impact on Stock Assessment (3 Points): Regional management organizations which carry out stock assessments will benefit from the detailed landings data reported from Maine. This information is used in stock assessments for many species that are managed by regional agencies.

Properly Prepared (1 Points): MEDMR followed ACCSP guidelines and pertinent documents when preparing this proposal.

Merit (3 points): This proposal allows MEDMR to comply with mandatory ASMFC requirements. The MEDMR currently provides more data to the data warehouse than any other state and accounts for over 30% of all records landed in the Data Warehouse. MEDMR are always looking for ways to collect data in a timely and efficient manner.

Summary of Proposal for ACCSP Ranking (Abridged Ranking Process)

Achieved Goals: MEDMR did not receive FY20 funding for this grant from NOAA until June 8, 2020. MEDMR also pulled back our FY21 proposal with the understanding that the FY22 would be treated as a maintenance proposal since our new data to require 100% lobster reporting shifted from January 1, 2022 to January 1, 2023. MEDMR has already completed the Maine LEEDS enhancement to automate electronic reporting compliance. The offline harvester application is set for a soft roll out to select industry members on June 14, 2021.

Data Delivery Plan (2 Points): All electronic data through the MEDMR offline application will be submitted into SAFIS daily. All data entered into MEDMR's MARVIN database and will be sent to the ACCSP Data Warehouse on at least a bi-annual basis after all data have been thoroughly audited.

Level of Funding (1 Point): Last year MEDMR asked for \$837,251 and was awarded \$336,162. This FY22 proposal is asking for \$335,620.77.

Properly Prepared (1 Points): MEDMR followed ACCSP guidelines and pertinent documents when preparing this proposal.

Merit (3 points): This proposal allows MEDMR to comply with mandatory ASMFC requirements. The MEDMR currently provides more data to the data warehouse than any other state and accounts for over 30% of all records landed in the Data Warehouse. MEDMR are always looking for ways to collect data in a timely and efficient manner.

Robert B. Watts II
Maine Department of Marine Resources
(207) 633-9412
rob.watts@maine.gov

June 2021

PROFILE:

- Knowledge of Maine and federal regulations pertaining to commercial fishing and associated reporting requirements through working with the Department of Marine Resources and the National Marine Fisheries Service.
- Knowledgeable of Maine's fishing industries and how they operate.

EDUCATION:

B.S. Marine Science, Maine Maritime Academy, Castine, ME 2002

EMPLOYMENT EXPERIENCE:

May 2016 – Present **Marine Resource Scientist III**
Maine Department of Marine Resources
West Boothbay Harbor, ME

- Manages daily operations of Maine's Commercial Landings Program, which collects, compiles and distributes commercial fishery statistics for Maine's commercial fisheries.
- Supervises Landings Program personnel.
- Maintain Microsoft Access databases for licensing information, compliance and data entry.
- Communicates with industry regarding reporting requirements, monitors reporting compliance and works with the licensing division in order to ensure all mandatory reporting requirements are met and licenses are issued accordingly.
- Oversees DMR's landings suspension authority and process.
- Oversees DMR's swipe card reporting program.
- Oversees MEDMR's MARVIN database.
- Maintains dealer and harvester auditing databases.
- Oversaw Maine's Interactive Voice Response (IVR) reporting program (IVR reporting ended in 2019)
- Serves as key contact for Maine commercial landings information.
- Promotes Maine's partnership with Atlantic Coastal Cooperative Statistical Program (ACCSP), serving on the Operations Committee, Commercial Technical Committee, Information Systems Technical Committee, Standard Codes Committee and Outreach Committee; working to bring the Landings Program into compliance with ACCSP standards.

Jan 2014 – Jan 2016 **Marine Resource Scientist III (Acting Capacity)**

June 2015 – Apr 2016 **Marine Resource Scientist II**
Maine Department of Marine Resources
West Boothbay Harbor, ME

- Manages daily operations of Maine's Commercial Landings Program, which collects, compiles and distributes commercial fishery statistics for Maine's commercial fisheries.
- Supervises Landings Program personnel.
- Maintain Microsoft Access databases for licensing information, compliance and data entry.
- Communicates with industry regarding reporting requirements, monitors reporting compliance and works with the licensing division in order to ensure all mandatory reporting requirements are met and licenses are issued accordingly.

- Oversees DMR's landings suspension authority and process.
- Oversees DMR's swipe card reporting program.
- Maintains dealer and harvester auditing databases.
- Oversees Maine's Interactive Voice Response (IVR) reporting program.
- Serves as key contact for Maine commercial landings information.
- Promotes Maine's partnership with Atlantic Coastal Cooperative Statistical Program (ACCSP) through serving on the Commercial Technical Committee, Information Systems Technical Committee and Outreach Committee; working to bring the Landings Program into compliance with ACCSP standards.

**Feb 2012 – Apr 2015 Marine Resource Scientist I
Maine Department of Marine Resources**

- Manages daily operations of Maine's Commercial Landings Program, which collects, compiles and distributes commercial fishery statistics for Maine's commercial fisheries.
- Supervises five Landings Program personnel.
- Maintain Microsoft Access databases for licensing information, compliance and data entry.
- Communicates with industry regarding reporting requirements, monitors reporting compliance and works with the licensing division in order to ensure all mandatory reporting requirements are met and licenses are issued accordingly.
- Oversees outreach to industry.
- Maintains dealer and harvester auditing databases.
- Oversees Maine's Interactive Voice Response (IVR) reporting program.
- Serves as key contact for Maine commercial landings.

**Oct 2007 – Jan 2012 Marine Resource Specialist II
Maine Department of Marine Resources**

- Oversee daily operations of the harvester landings program.
- Notify new harvesters about reporting requirements.
- Maintain databases used for data audits and data entry.
- Monitor reporting compliance database and notifies harvesters if they are delinquent.
- Supervise two Landings Program personnel.
- Oversees IVR reporting.
- Prepare data requests from various sources

**Jul 2005 – Oct 2007 Marine Resource Specialist I
Maine Department of Marine Resources**

- Interviewed marine recreational anglers all over the Maine coast to help determine fish stocks. Identified, weighed, measured and recorded fish caught by anglers.
- Created publications, updated regulation handouts and updated the recreational fishing website as needed.

**May 2001 – Jun 2005 Conservation Aid
Maine Department of Marine Resources**

- Interviewed marine recreational anglers all over the Maine coast to help determine fish stocks. Identified, weighed, measured and recorded fish caught by anglers.
- Acted as a liaison between the State of Maine and the recreational anglers, answered anglers questions about fishing regulations.

Erin L. Summers
Maine Department of Marine Resources
(207) 633-9556
erin.l.summers@maine.gov

June 2020

Profile:

- Work collaboratively with state, federal, academic, conservation, and industry partners to reduce whale entanglements and mortality in marine mammals and sea turtles through bodies such as the Atlantic Large Whale Take Reduction team and Atlantic Large Whale Disentanglement Network.
- Build research programs to provide baseline data on large whale life history, ecology, and habitat use in Maine's coastal rocky bottom habitats. Design new and emerging methodologies to inform management decisions.
- Oversee research and monitoring programs within the Division of Biological Monitoring at DMR, including the lobster programs, surveys for scallops, sea urchin, shrimp, and herring, recreational fisheries program, inshore trawl survey, and the landings and reporting group.
- Represent the Department of Marine Resources in stakeholder meetings, including those for wind energy permitting, Natural Resource Damage Assessments, department wide research and priority setting, etc.
- Member of the Atlantic Scientific Review Group advising NOAA Fisheries on marine mammal stock assessments

Education:

MA Biology: Boston University Marine Program Woods Hole, Ma. 5/02
BA Biology, Spanish minor: Truman State University Kirksville, Mo. 5/00

Employment:

Jan 2017 – present: **Marine Resource Scientist IV**
 Maine Department of Marine Resources
 West Boothbay Harbor, Me

- Oversee Division of Biological Monitoring, including Commercial Landings Program, Benthic group (lobster, scallops, urchins), and Pelagics group (herring, groundfish, shrimp, and recreational fishing)
- Lead Scientist for DMR's Large Whale Conservation Program
- Member of the Atlantic Large Whale Take Reduction Team

Feb 2006 – Jan 2017: **Marine Resource Scientist II**
 Maine Department of Marine Resources

- Lead scientist for DMR's Large Whale Conservation Program
- Secured grant funding, wrote reports, tracked budgets to support research projects
- Completed projects to support management decisions for the Atlantic Large Whale Take Reduction Plan, including tagging humpback whales, right whale habitat surveys, passive acoustic surveys, gear density surveys, testing alternative fishing gear, characterizing fishing practices, etc.
- Oil Spill Response Coordinator
- Assist with GIS coordination

Jan 2010 – May 2010: **Adjunct Faculty**

**Unity College
Unity, Me**

- Taught upper level course in the biology of Marine Mammals

**Feb 2004 – Feb 2006: Marine Mammal Research Specialist
University of New England
Biddeford, Me**

- Lead Research technician on project to track and predict right whale habitat use and distribution
- Analysis of remotely sensed data and right whale sightings in the Bay of Fundy Critical Habitat
- Assisted with report writing and budget tracking
- Completed project and published paper analyzing right baleen using stable isotope analysis
- Completed project and published papers satellite tagging and tracking basking sharks off the coast of New England

**Sept 2002 – Feb 2004: Research Technician
Cetacean and Sea Turtle Team, NOAA Fisheries Service
Beaufort, NC**

- Lead technician tracking and analyzing movements of satellite tagged dolphins
- Perform field work including fishing gear and dolphin aerial surveys, boat based dolphin biopsy and photo-identification surveys, satellite tagging dolphins, responding to strandings, etc.
- Participate in necropsies as needed

**Oct 2000 – June 2002: Laboratory Technician
Marine Biological Laboratories
Woods Hole, Ma**

- Manage daily operations of the laboratory of marine veterinarian, Roxanna Smolowitz
- Run experiments and document methodologies and results
- Prepare media, samples, histology slides, and other lab bench work