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Atlantic Coastal Cooperative Statistics Program

Operations and Advisory Committee

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Arlington, VA 22201

June 12, 2020

I am pleased to submit the proposal titled "Electronic Reporting and Biological Characterization of New Jersey Commercial Fisheries". Please feel free to contact me with any questions or comments.

Sincerely,

Heather Corbett, Supervising Biologist

NJ Marine Fisheries Administration

Heather Corbett

Proposal for Funding made to: Atlantic Coastal Cooperative Statistics Program Operations and Advisory Committees 1050 North Highland Street, Suite 200 A-N Arlington, VA 22201

Electronic Reporting and Biological Characterization of New Jersey Commercial Fisheries

Submitted by; Heather Corbett New Jersey Division of Fish and Wildlife P.O. Box 418 Port Republic, NJ 08241

Proposal for FY2021 ACCSP Funding

Applicant Name: New Jersey Division of Fish and Wildlife

Bureau of Marine Fisheries

P.O. Box 418

Port Republic, NJ 08241

Project Title: Electronic Reporting and Biological Characterization of

New Jersey Commercial Fisheries

Project Type: Maintenance

ACCSP Program Priorities: 1) Catch/Effort (55%), 2) Biological (45%)

Project Supervisor: Heather Corbett, Supervising Biologist (NJDFW)

Principal Investigator: Chad Power, Assistant Biologist (NJDFW)

State Staff: Matthew Heyl, Assistant Biologist (NJDFW)

Project Staff: Laura Versaggi, NJ ACCSP Fisheries Specialist

Requested Amount: \$63,146

Requested Award Period: September 1, 2021 to August 31, 2022

1. Objective

To continue New Jersey's trip level catch and effort data collection, dependent at-sea observer coverage, and biological characterization of commercial fisheries, a project that started in 2001.

2. Need

Since 2001, several projects have been implemented by the New Jersey Division of Fish and Wildlife (NJDFW) through funds provided by the Atlantic Coastal Cooperative Statistics Program (ACCSP). These funds have been vital in proactive management of the marine resources in New Jersey (NJ). Loss of funding for these critical projects would result in a significant loss of commercial fisheries data collection for the State of NJ, the ACCSP, and the Atlantic States Marine Fisheries Commission (ASMFC).

NJ projects currently funded under the ACCSP grant include commercial trip level data collection via eTRIPS for all commercially important species including American eel, Atlantic menhaden, blue crab, and tautog; port sampling of the American eel, Atlantic menhaden, Atlantic croaker, weakfish, tautog and American shad fisheries; at-sea observer coverage for American lobster off the NJ coast, and trip level dealer reporting and quota management through the Standard Atlantic Fisheries Information System (SAFIS) and electronic Dealer Reporting (eDR). Six of the species that NJ collects biological data for occur in the upper quartile of ACCSP's Biological Priority Matrix. These species include American lobster, American eel, American shad, black sea bass, river herring, and weakfish. The major scope of work for the current FY2021 proposal has not changed from the accepted FY2020 proposal. As part of the ACCSP's funding process, NJ has submitted all progress reports to date covering the FY2019 project to the ACCSP. The final FY2019 report will be due on November 30, 2020. The NJ FY2020 project will begin on September 1, 2020.

2.A. Fisheries Dependent At-Sea Observer Program

Project staff has used at-sea observer coverage to describe fishing activities and to aid in biological characterization of American lobster and tautog. In addition, port sampling for tautog is also performed as a source of characterizing the commercial landings. The information collected is critical for accurate stock assessments and ultimately sustainable harvest practices for these species. Characterization of the NJ commercial tautog fishery began in 2007 and will continue through FY2021 to document sex ratios, length/weight relationships, and age information. Project staff have been sampling federally and state permitted American lobster pot vessels since 2008 and will continue to do so based on Addenda VIII and X of the American Lobster Fishery Management Plan, which mandates at-sea observer coverage as a means of describing the fishing activities in southern New England. The ASMFC's

American Lobster Technical Committee encourages sampling at-sea as a way of monitoring commercial bycatch and discards in the fishery.

2.B. Biological Characterization of Commercial Fisheries

The NJ Biological Characterization Sampling Project provides accurate length, weight, age, and temporal data for stock assessment and management of commercial harvest for NJDFW, ASMFC, and NMFS. Target sample sizes identified through the ASMFC's Fishery Management Plans (FMP) achieved from 2020 are found in Table 3 of the Appendix. Sampling is conducted through port of landings intercepts and will be continued in FY2021 for American eel, American shad, Atlantic croaker, Atlantic menhaden, tautog and weakfish. NJ will continue sampling for Atlantic croaker, black sea bass, river herring, summer flounder, tautog and weakfish through independent sampling on the NJ Ocean Trawl Survey. Data collected will provide information on sex ratios and mean length/weight as identified by the Stock Assessment Review Committee (SARC) on June 20, 2008.

2.C. ACCSP Data Feeds

NJ is currently conducting several projects under the auspices of the ACCSP, most of which are mandates from the ASMFC and require compliance by the State of New Jersey to fulfill various ASMFC FMPs. Equally important to the collection of fisheries dependent data, is the guarantee of accurate data entry and quality assurance before these data are used as fisheries management tools. The ACCSP has increasingly taken on more duties as the data depot starting with SAFIS and moved to Fisheries of the US for NMFS. As such, it is advantageous to the success of not only the ACCSP, but to all 23 ACCSP partners that partner data be supplied to the ACCSP in a timely and accurate fashion facilitating the movement of data into fisheries management.

2.D. Commercial Trip and Dealer Reporting (eTRIPS, eDR, Commercial Harvester & Dealer Reports)

The importance of a standardized trip and dealer reporting system is clear. The effort put forth to use an all-inclusive standardized data entry project is critical for NJDFW to provide a single location to find harvest data for multiple fisheries/species/years. Further, the importance of single source harvest data is like that for dealer data entry and warehousing, allowing managers and scientists to pull accurate landings data through a query database using common ACCSP data formats. Project staff provide support to federal/state permitted dealers facilitating weekly eDR reporting. Additionally, it is the responsibility of project staff to monitor landings through eDR, correct erroneous data when trip landings and dealer reports are inconsistent, and recommend closures when seasonal quotas are reached within the state. NJ has shifted to entering trip reporting data directly to SAFIS to increase efficiency in supplying ACCSP and its partners with fishery dependent data. This was initiated in FY2016 and will continue for FY2021.

3. Results and Benefits

The ACCSP Coordinating Council approved NJ's proposal "Continued Dealer Reporting, Trip Level Reporting, and Biological Sampling for Commercial Fisheries in NJ" for FY2020. Included again in the FY2021 proposal is the request for salary for staff on the project. New Jersey will fund the ageing of summer flounder and black sea bass otoliths by the NMFS Woods Hole Laboratory. The FY2021 proposal will ensure that ongoing projects in NJ will continue to maintain NJ's participation in the ACCSP/ASMFC's mandated compliance programs. In kind state match, has averaged over 50% for the past eight fiscal years (2010-2020) for the Project and for FY2021 state match is 78% due to the addition of new state staff and additional project responsibilities absorbed by NJDFW. (See page 14).

3.A. Fisheries Dependent Sampling Program

Lobster At-Sea Observer Coverage

In January 2008, at-sea sampling commenced aboard lobster vessels fishing in Lobster Conservation Management Areas (LCMA) 4 and 5 off the coast of NJ. Staff will continue at-sea observer coverage in FY2020 to characterize the NJ lobster fishery except during each LCMA closed seasons occurring April 30 - May 31 in LCMA 4, and February 1 – March 31 in LCMA 5. All data collected will be delivered to the ACCSP for inclusion into the lobster database.

3.B. Biological Characterization of Commercial Fisheries

Biological sampling for American eel, American shad, Atlantic croaker, Atlantic menhaden, black sea bass, river herring, summer flounder, tautog, and weakfish was a maintenance project for FY2019. **Sampling targets were near 100% of set goals during the first 13 years** (2006-2019, Table 1) and will be similar for FY2021.

Commercial American eel, American shad, Atlantic croaker, tautog, and weakfish samples collected are processed and aged at the NJDFW Nacote Creek ageing facility in Port Republic, New Jersey. Atlantic menhaden samples collected from the NJ commercial purse seine, pound net, gillnet, and cast net fisheries are processed at the NJDFW Nacote Creek facility and forwarded to NMFS Beaufort Laboratory, Beaufort, North Carolina for ageing. Black sea bass and summer flounder samples collected on the NJDFW Ocean Trawl Survey are processed for length, weight, and sex at the NJDFW Nacote Creek facility. Hard parts are collected and sent to the NMFS Woods Hole Laboratory for processing and age determination. Future samples collected will be processed and aged using the same protocol as in previous years. A current summary of species processed and aged by NJDFW staff in support of this proposal is found in Table 1 of the Appendix.

A NJDFW biological characterization data entry system was developed in 2006 to warehouse all data collected under the biological characterization project. The NJ

biological database consists of trip level effort information from which the samples were collected, and biological data taken from each individual sample. To date, all biological data collected for American eel, American shad, Atlantic croaker, Atlantic menhaden, black sea bass, river herring, summer flounder, tautog, and weakfish have been entered, processed for QA/QC, and are available for assessment purposes.

The ACCSP and the ASMFC have established species-specific biological sample size goals for each partner state based on the total annual landings for each species. Sampling targets for species not based on commercial landings were developed by NJDFW staff at the initiation of this project and may exceed what is mandated by the ASMFC through species specific FMPs. All data entry is standardized in the ACCSP format and queried when needed by NJDFW staff members for inclusion in technical reports, stock assessments, etc.

4. Data Delivery Plan

4.A. ACCSP Data Feeds

Project staff provides the ACCSP with support tables to facilitate timely and accurate landings for all species in which trip level data are collected. FY2016 initiated the direct entry of trip level data into SAFIS. This will ensure a more efficient process for quality assurance and quality control performed by NJDFW and NJ ACCSP staff. It will also allow for a smooth transfer of data for the "End of the Year" Fisheries of the U.S. report submission.

4.B. Commercial Trip and Dealer Reporting (eTRIPS, eDR, Commercial Harvester & Dealer Reports)

The ACCSP and the State of NJ have accumulated a significant number of commercial landings data while improving accuracy and efficiency through the use of eTRIPS and eDR. The eTRIPS program encourages fishermen to enter their own catch and effort data providing each fisherman the ability to review data without staff involvement. Commercial trip level reporting is mandatory for American eel, Atlantic menhaden, blue crab, and tautog in NJ. Additionally, commercial trip level data are available to authorized NJDFW staff for query purposes used in harvest compliance and stock management. NJ has gained a significantly larger number of commercial landings data through eDR for American eel, Atlantic menhaden, blue crab, and tautog. Project staff remove duplicate reports from multiple sources (paper, e-TRIPS) prior to the ACCSP data uploads, ensuring accurate landings. Continuation and maintenance of eDR is imperative for the improvement of NJ's commercial fishery landings data collection. SAFIS eDR is the exclusive method of quota monitoring in NJ and has proven itself as a central management tool for monitoring fisheries status in NJ.

A major goal from the onset of the project was to develop and implement an allencompassing commercial trip and dealer reporting system for the NJDFW. This goal was accomplished by project staff on January 1, 2016, through the New Jersey Commercial Harvester Trip Reporting Program. The New Jersey Harvester Trip Reporting Form was created to help standardize all trip level data collected and to provide fishermen with a single comprehensive reporting form for all issued commercial licenses. The New Jersey Harvester Trip and Dealer Reporting Forms collect catch, effort, bycatch and discard data. A copy of the harvester trip form is found in Figure 4. A summary of NJDFW commercial trip reporting since the project's initiation is described in Table 2.

The New Jersey Commercial Harvester Trip Report database was developed and is the primary database for New Jersey Trip Harvester Trip Reports submitted by fishermen. In combination with SAFIS eTRIPS, the New Jersey Commercial Harvester Reporting Form will comprehensively characterize the commercial fisheries within New Jersey state waters. All paper reporting forms are entered into SAFIS, reviewed for quality assurance, and are available to the ACCSP immediately.

5. Approach

5.A. Fisheries Dependent Sampling Program 30% Allocated Funds

Lobster At-Sea Observer Coverage. The primary location of commercial lobster landings during the past 5 years off NJ takes place in LCMA 4 with some landings occurring in LCMAs 3 and 5. Therefore, at-sea observer sampling will consist of 10 trips per year in LCMA 4. During each sampling effort, every lobster brought aboard the vessel is measured for carapace length in addition to biological observations including sex, egg development on females, cull status (number of claws), shell condition (diseased or not), and shell hardness.

Tautog At-Sea Observer Coverage. NJDFW will continue to collect filleted fish (racks) from the recreational hook and line fishery, as well as whole samples from the commercial hook and line fishery. Data collected from both sectors include sex, length, weight, area fished, and effort data. This data is taken for harvested fish as well as those that are discarded. Total targeted lengths and ages of tautog are found in Table 3 of the Appendix. Data from the recreational and commercial observer coverage will be entered into the NJDFW Biological Characterization database. Data will be formatted to ACCSP standards and submitted annually.

5.B. Biological Characterization 15% Allocated Funds

Sampling of American eel, American shad, Atlantic croaker, Atlantic menhaden, black sea bass, river herring, summer flounder, tautog, and weakfish will continue in FY2021 based on 2019 annual landings of each species. Six of the species sampled

by NJ are ranked in the top quartile of the biological sampling priority matrix. Effort, either at-sea or dockside, is assigned in accordance with guidelines defined in the ASMFC's FMPs for each species. NJDFW and the ACCSP staff will continue to collect biological samples. Staff will process (cut and/or mount) all hard structures to be aged. The project staff at the NJDFW Nacote Creek facility in Port Republic, NJ will age all hard parts collected, except Atlantic menhaden, black sea bass and summer flounder. Atlantic menhaden are sent to the NMFS aging lab in Beaufort, NC throughout the sampling year and are aged pro-bono. NJDFW has been providing samples for over 15 years which has been beneficial to the coastwide stock assessment for Atlantic menhaden (Ray Mroch, Ray.Mroch@noaa.gov; Amanda Rezek, Amanda.rezek@noaa.gov); black sea bass and summer flounder were sent to the NMFS aging lab in Woods Hole, MA in early 2020 (Eric Robillard, Eric.Robillard@noaa.gov). For all other species, NJDFW and ACCSP staff have received the necessary training to process and read all the collected otolith samples (Table 1 of the Appendix). NJ will coordinate with NOAA Fisheries-Greater Atlantic Regional Fisheries Office (GARFO) to avoid duplicate ageing.

Data collected from each sample is transferred to electronic format by NJDFW and the NJ ACCSP staff. After data are successfully entered and quality control measures have been performed, project staff will send data feeds to the ACCSP for integration into the ACCSP Data Warehouse. This method will allow stock assessment committees, technical committees, and operations committees to view the status of the NJ biological sampling project. Species-specific sampling and data collection methodology will follow previous sampling protocol. Species-specific target samples sizes for 2020 are found in Table 3 of the Appendix.

5.C. ACCSP Data Feeds 15% Allocated Funds

The project supplies the ACCSP with data from multiple sources including paper/electronic landings data and biological characterization programs. Some NJ landings data are not collected via eTRIPS or eDR and must be converted from paper to electronic records. Paper reports include trip level landings of all commercially harvested fish by state permitted fishermen. Biological characterization data are collected for American eel, American lobster, American shad, Atlantic croaker, black sea bass, river herring, summer flounder, tautog, and weakfish. Following collection, the data is inputted into SAFIS for future use and analyses by NJ and all other partners.

5.D. Commercial Trip and Dealer Reporting (eTRIPS, eDR, Commercial Harvester & Dealer Reports)

40% Allocated Funds

The continuation of SAFIS implementation includes components for web-based dealer reporting (eDR), web-based fishermen reporting (eTRIPS), paper-based data entry by project staff, report compliance monitoring, and site administration (user

access, look-up tables, data correction, etc.). NJDFW and the NJ ACCSP Fisheries Specialist supervise the implementation of the NJ eTRIPS application. Project staff provides state permitted fishermen with user accounts, establishes favorites lists and facilitates the usage of the eTRIPS application, which is a web-based trip level reporting form. Staff develop and present training seminars for groups and conduct individual meetings when necessary to support fishermen in the use and customization of the eTRIPS application. These training tools include presentations at local libraries, firehouses, and other public meeting venues. The project attempts to train multiple individuals at each meeting; however, there are frequently cases when individual attention and support is required outside of these announced seminars. In addition, staff conducts compliance monitoring of reporting and performs QA/QC analyses of collected data. NJDFW and the ACCSP Fisheries Specialist identifies and completes data gaps/user support for state-permitted dealers, fishermen, and managers. Cross validation for all species entered into eTRIPS with SAFIS eDR is completed during each reporting period to ensure that duplicate reporting is not taking place by comparing electronic reports to those received in paper logbook format by NJDFW for all commercial species. Compliance of fishermen monthly reports is facilitated using the eTRIPS program and the New Jersey Harvester Trip Reporting forms.

Project staff lends support to the majority of state permitted dealers, typically providing logistical information regarding quota status, vessel recognition, gear selection, and general state regulations. Staff will travel to commercial fishing facilities to assist permitted dealers with issues pertaining to data entry for the eDR application as needed. NJ ACCSP staff travel for dealer and fishermen support pertaining to SAFIS and eTRIPS data entry, meetings for the further development of NJ commercial fisheries landing statistics program, and training expenses incurred will be covered by NJ ACCSP.

In addition to all trip and dealer reports entered electronically through SAFIS, NJDFW and ACCSP staff collects all paper trip reports submitted on NJ Commercial Harvester and Dealer Reporting Forms. Harvester and Dealer Reports are due at the same frequency as electronic reports. Trip and dealer reports are entered into SAFIS and are processed for QA/QC. Project staff enter all harvest data received by paper trip report forms directly into SAFIS to increase efficiency.

6. Geographic Location

The ACCSP Fisheries Specialist will serve as project staff. The project will be administered from the New Jersey Department of Environmental Protection (NJDEP), Division of Fish & Wildlife's Nacote Creek Research Station in Port Republic, New Jersey.

7. Milestone Schedule: Month 1 following receipt of grant approval.

							N	Mon	th						
Description of Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Electronic Vessel Trip Reporting (monitor existing fishermen	X	X	X	X	X	X	X	X	X	X	X	X			
reports, train new fishers, rollout system for additional species,															
data entry of data collected via paper based reports)															
Biological Characterization of Commercial Fisheries (Collect	X	X	X	X	X	X	X	X	X	X	X	X			
lengths, weights and age structures from NJ's commercial fisheries.															
Process and age scales, opercula or otoliths collected)															
Lobster Landing Statistics (Lobster harvest data collection with	X			X		X	X	X	X	X	X	X			
components of eVTR, dealer data, at-sea sampling, port sampling)															
Tautog Landing Statistics (collection of commercial at-sea coverage	X	X	X	X	X	X	X	X	X	X	X	X			
data)															
ACCSP Data Feeds (data entry of all biological samples collected by			X			X			X			X			
the NJDFW, transmission of all data to the ACCSP through															
monthly data feeds, SAFIS support tables)															
Electronic Dealer Reporting (continue to perform quota monitoring	X	X	X	X	X	X	X	X	X	X	X	X			
and the online reporting of commercial fisheries landings data for															
summer flounder, black sea bass and scup)															
Semi-annual report 1							X								
Semi-annual report 2													X		
Final report															X

8. Project Accomplishment Measurements update

Project Component	Goal	Measurement
SAFIS Electronic Trip Reporting (eTRIPS) Phase I	Successfully collect data from fishermen reports, check for compliance, and perform quality assurance.	All data checked, and compliance performed prior to the 10 th of the following month.
SAFIS Electronic Trip Reporting (eTRIPS) Phase II	Enter all received data submitted by fishermen, perform quality assurance measures.	All data entered and checked prior to the 10 th of the following month.
Biological Characterization of Commercial Fisheries	Meet all target sample sizes for length, sex, age for each species.	Number of samples collected.
Dependent Fisheries At- Sea Observer Program	Conduct the prescribed number of trips and collect target number of samples by species and management area.	Number of trips made, and number of samples collected.
ACCSP Data Feeds	Supply the ACCSP with data feeds as described including participant, and landings data on the schedule described.	Were the data feeds performed by the deadlines identified?
SAFIS Electronic Dealer Reporting (eDR)	Supply support to participating eDR dealers with NJ state dealer permits when requested. Perform report compliance monthly. Manage summer flounder, black sea bass, and bluefish quota as allocated to the State of NJ.	Was support provided and quotas managed?
New Jersey Commercial Harvester Trip Report	Create an all-encompassing reporting form for all state issued commercial marine fishing licenses.	All trip reports are entered and checked for quality assurance and accuracy.

9. FY2021 Budget (Letters in parenthesis pertain to Federal Grant Object Codes)

Item	Total NJ DFW in-kind support
Salaries (NJDFW)	
Supervising Biologist 5% in-kind (current FTE)	\$5,218
Assistant Biologist-Lab Supervisor- 15% in-kind (current FTE)	\$8,688
2-Assistant Biologist- 50% in-kind (current FTE)	\$57,992
Clerical 10% (current FTE)	\$2,600
Fringe benefits (46.35% on FTEs)	\$34,530
2-Hourly Technicians (current PTE)	\$23,400
Fringe benefits (7.65% on PTE)	\$1,790
Supplies & Materials	
Scientific Equipment (Measuring boards, scales, calipers)	\$250
Materials for collection and preparation of scales, otoliths, opercula, etc.	\$350
purchase of samples (American eels)	\$600
Other	
NJDFW Trawl Survey (\$5,900 per day x 10 days)	\$59,000
Department Network account (OIRM)	\$4,000
NJDFW indirect costs (20.29% of salaries)	\$15,116
Travel (mileage and tolls)	\$4,000
NMFS Contract; process and age summer flounder/black sea bass otoliths, (\$12.94/sample, 1,000 samples)	\$12,940
Subtotal NJ funds	\$230,474
Append to ACCSP Administrative Grant	
Salaries (NJ ACCSP Staff)	
1 ACCSP Fisheries Specialists (ASMFC employee)	\$43,500
Benefits 25%	\$10,875
ASMFC Overhead (16.13%)	\$8,771
ACCSP Admin Grant Project Costs	\$63,146
Total Project Costs (includes in-kind)	\$293,620

Budget Narrative

- (a). Salaries; ACCSP Fisheries Specialist:
 - (1) NJ ACCSP Fisheries Specialist annual salary.
- (b). Benefits of above employees

25% of the annual salary for the one NJ ACCSP Fisheries Specialist.

- (c). ASMFC Overhead:
 - 16.13% of the sum of budget items a and b.
- (d). ACCSP Administrative Grant Project Costs:

Total of (a) through (c) does not include in-kind support. No funds are being directly received by the State of NJ.

The FY2021 budget is in two parts, the first part details the amount that is being provided as in-kind match by NJDFW, while the second part is the amount to be amended to the ACCSP Administrative Grant.

The in-kind funding provided by NJDFW includes salaries for NJDFW full time employees under the titles of supervising biologist, three assistant biologists, two hourly technicians, and clerical staff. The NJDFW is devoted to the project by transitioning staff and taking on additional costs. In previous years, the NJDFW hired an assistant biologist devoted to the project. For FY2021, the NJDFW will take over travel cost for the ACCSP Fisheries Specialist and NMFS contract for the processing and ageing of summer flounder and black sea bass otoliths. These costs represent a cost savings of \$16,940 to ACCSP. These additions exemplify the commitment of the NJDFW, while maintaining the objectives and goals of the project. Additional in-kind funds include: supplies for port sampling, ageing laboratory materials, and purchasing American eel samples; staff time for independent samples taken aboard the NJ Ocean Trawl Survey and processed at the NJDFW's Nacote Creek Field Station in Port Republic, as well as Department network support for online reporting systems, and computer support for staff working under the ACCSP project. Sources of in-kind funding come from the annual state appropriation for the NJ Marine Fisheries Administration (MFA) and from the Atlantic Coastal Grant.

The \$63,146 covers the salaries for one Fisheries Specialist position that was hired by the ACCSP and works out of the NJDFW's field office in Port Republic, NJ. This covers fringe, indirect, and ASMFC's overhead. All other funding for the project will be covered by NJDFW.

The requested ACCSP Administrative Grant amount does not achieve the 33% mandatory reduction for FY2021. NJDFW is covering all funding for this project except for the salary and benefits of one ACCSP Fisheries Specialist. NJDFW is requesting a one-time amount of \$63,146. While NJDFW understands that this request is above the maximum grant amount we would appreciate the additional money if available to guarantee full funding of the Fisheries Specialist position for the entirety of the project year. The amount requested is only an additional \$8,545 or 13% over the reduction amount of \$54,601. NJDFW has returned \$30,952 to ACCSP in unused funds from FY11 through FY19 including \$23,807 when NJDFW transitioned an ACCSP Fisheries Specialist to a full-time state funded Biologist Trainee. Although this has no bearing on available funds for the FY21 proposal funding, NJDFW felt it important to note since it exemplifies the commitment to this project and the transition to full state funding. The additional \$8,545 requested is only 36% of the unused funds from previous fiscal years. After this fiscal year the goal is to hire this position on as a full-time state

Bold Comments indicate sections that help with the ranking process

employee. This shows the commitment of the NJDFW to electronic reporting and biological characterization of New Jersey commercial fisheries even when funding has ended. Again, the amount requested only covers salary, benefits, and ASMFC's overhead costs. All other funding aspects of the project will be covered by NJDFW.

9.1 FY2020 Budget (Letters in parenthesis pertain to Federal Grant Object Codes)

Item	Total NJ DFW in-kind support
Salaries (NJDFW)	
Supervising Biologist 5% in-kind (current FTE)	\$4,821
Principal Biologist-Lab Supervisor- 15% in-kind (current FTE)	\$12,739
2- Assistant Biologists- 50% in-kind (current FTE)	\$49,263
Biologist Trainee - 90% in-kind (current FTE)	\$44,100
Clerical 10% (current FTE)	\$2,600
Fringe benefits (46.35% on FTEs)	\$50,972
Hourly Technician (current PTE)	\$11,700
Fringe benefits (7.65% on PTE)	\$895
Supplies & Materials	
Scientific Equipment (Measuring boards, scales, calipers)	\$250
Materials for collection and preparation of scales, otoliths, opercula, etc.	\$350
purchase of samples (American eels)	\$600
Other	
NJDFW Trawl Survey (\$5,900 per day x 10 days)	\$59,000
Department Network account (OIRM)	\$4,000
NJDFW indirect costs (20.29% of salaries)	\$36,859
Subtotal NJ funds	\$278,149
Append to ACCSP Administrative Grant	
Salaries (NJ ACCSP Staff)	
1 ACCSP Fisheries Specialist (ASMFC employee)	\$43,500
Benefits 25%	\$10,875
Other	
Travel (mileage and tolls)	\$2,000
otoliths, (\$12.94/sample, 1,000 samples)	\$12,940
Biological Collection	\$15,000
ASMFC Overhead (16.13%)	\$9,093
ACCSP Admin Grant Project Costs	\$93,408
Total Project Costs (includes in-kind)	\$371,557

Bold Comments indicate sections that help with the ranking process Highlighted text indicates changes from the first submission

10. Maintenance Projects

Amount of funds received directly by NJDFW, the amount appended to the ACCSP Admin. Grant for NJ ACCSP Staff salaries, and the amount and percentage of in-kind funds supplied by NJDFW

for the ACCSP project.

		History Details for NJDFW AC	CCSP Funded	Projects		
Fiscal Year	Period	Project	NJ ACCSP Funds Requested	Appended to ACCSP Admin Grant	NJDFW In-Kind	In-Kind Percentage of Total Project Cost
2001	9/01/2001 through 8/31/2002	Integration of Commercial Blue Crab Harvest Data into the ACCSP	\$133,988	\$0	\$0	0%
2005	5/01/2005 through 4/30/2006	Implementation of Phase 2 of the ACCSP for the State of New Jersey	\$89,180	\$84,375	\$41,831	19%
2006	9/01/2006 through 8/31/2007	Biological Characterization of Four New Jersey Commercial Fisheries	\$79,722	\$0	\$59,986	43%
2006	9/01/2006 through 8/31/2007	Continuance of Phase 2 of the ACCSP for the State of New Jersey	\$81,264	\$78,975	\$63,556	28%
2007	9/01/2007 through 8/31/2008	Implementation of eVTR, Biological Characterization and Continuance of SAFIS Coordination for the State of New Jersey	\$167,544	\$87,413	\$111,617	30%
2008	9/1/2008 through 8/31/2009	NJ Implementation of ACCSP Commercial Fisheries Data Collection; Electronic Vessel Trip Reporting, Electronic Dealer Reporting, and Biological Characterization.	\$128,536	\$150,525	\$86,609	24%
2009	9/1/2009 through 8/31/2010	Introduction & Continuation of SAFIS and Biological Characterization of Commercial Fisheries in NJ	\$52,814	\$174,096	\$132,008	37%
2010	9/1/2010 through 8/31/2011	Further Development of SAFIS and Biological Characterization of Commercial Fisheries in NJ	\$24,301	\$174,096	\$191,008	49%

Fiscal Year	Period	Project	NJ ACCSP Funds Requested	Appended to ACCSP Admin Grant	NJDFW In-Kind	In-Kind Percentage of Total Project Cost
2011	9/1/2011 through 8/31/2012	Continued Expansion of SAFIS and Biological Sampling for the Commercial Fisheries of NJ	\$0	\$188,779	\$191,008	50%
2012	9/1/2012 through 8/31/2013	Continued Dealer Reporting, Trip Level Reporting, and Biological Sampling for Commercial Fisheries in NJ	\$0	\$192,100	\$240,897	56%
2013	9/1/2013 through 8/31/2014	Continued Dealer Reporting, Trip Level Reporting, and Biological Sampling for Commercial Fisheries in NJ	\$0	\$192,100	\$240,897	56%
2014	9/1/2014 through 8/31/2015	Continued Dealer Reporting, Trip Level Reporting, and Biological Sampling for Commercial Fisheries in NJ	\$75,988	\$152,602	\$159,227	41%
2015	9/1/2015 through 8/31/2016	Continued Dealer Reporting, Trip Level Reporting, and Biological Sampling for Commercial Fisheries in NJ	\$0	\$158,740	\$205,725	56%
2016	9/1/2016 through 8/31/2017	Continued Dealer Reporting, Trip Level Reporting, and Biological Sampling for Commercial Fisheries in NJ	\$0	\$167,956	\$205,725	55%
2017	9/1/2017 through 8/31/2018	Continued Dealer Reporting, Trip Level Reporting, and Biological Sampling for Commercial Fisheries in NJ	\$0	\$158,547	\$205,725	56%
2018	9/1/2018 through 8/31/2019	Continued Dealer Reporting, Trip Level Reporting, and Biological Sampling for Commercial Fisheries in NJ	\$0	\$164,356	\$198,916	55%
2019	9/1/2019 through 8/31/2020	Continued Dealer Reporting, Trip Level Reporting, and Biological Sampling for Commercial Fisheries in NJ	\$0	\$164,356	\$198,916	55%
2020	9/1/2020 through 8/31/2021	Continued Dealer Reporting, Trip Level Reporting, and Biological Sampling for Commercial Fisheries in NJ	\$0	\$93,408	\$278,149	75%
	Total Amount	for all ACCSP Projects	\$833,337	\$2,382,424	\$2,811,800	47%

Proposal Summary for Ranking Criteria

PROPOSAL TYPE: Maintenance

PRIMARY PROGRAM PRIORITY:

Catch and Effort (55%): 100% of permitted dealers in NJ will be submitting dealer reports through SAFIS eDR, for 100% of the species they purchase. 100% of the 21 commercial harvester license types will be submitting trip level catch and effort data, the remaining harvester licenses are collected through the federal NMFS VTR program.

PROJECT QUALITY FACTORS (Partners, Funding, and Data):

Partners-

Multi-Partner/Regional impact including broad application:

Although this project focuses on the activities of NJ permitted fishermen and dealers, it includes the data collection of species harvested regionally such as lobster, bluefish, summer flounder, black sea bass, scup, tautog, river herring, and weakfish. Thus, ASMFC will benefit from the dealer and harvester data collected from this project.

Funding-

FY2021 Funding Request

NJDFW is requesting a one-time amount of \$63,146. While NJDFW understands that this request is above the maximum grant amount we would appreciate the additional money if available to guarantee full funding of the Fisheries Specialist position for the entirety of the project year. The amount requested is only an additional \$8,545 or 13% over the reduction amount of \$54,601. NJDFW has returned \$30,952 to ACCSP in unused funds from FY11 through FY19 including \$23,807 when NJDFW transitioned an ACCSP Fisheries Specialist to a full-time state funded Biologist Trainee. Although this has no bearing on available funds for the FY21 proposal funding, NJDFW felt it important to note since it exemplifies the commitment to this project and the transition to full state funding. The additional \$8,545 requested is only 36% of the unused funds from previous fiscal years. After this fiscal year the goal is to hire this position on as a full-time state employee. This shows the commitment of the NJDFW to electronic reporting and biological characterization of New Jersey commercial fisheries even when funding has ended.

Transition Plan:

The project in FY2013 included funds that went directly to NJDFW for salaries and supplies. NJDFW has proposed a landing license for all state fisheries several times over the years. The efforts have been thwarted by industry lobbyists who are opposed to any license. NJDFW has been able to create an Atlantic menhaden landing license, the funds of which will be directed towards commercial fisheries research and management for that specific fishery. This specific license is limited entry with very specific qualifying factors to remain in the fishery. Because of this recent development, there are several commercial bases realizing the importance of mandatory reporting. These license funds will provide NJ with a source of revenue further

relieving funding away from ACCSP. These costs were removed in FY2014 and will continue to be covered as NJDFW in-kind match for FY2021.

Additionally, a Biologist Trainee was hired in November of 2018, as the first phase of transitioning staff under NJDFW authority. The addition of the Biologist Trainee, whose main task is devoted to the objectives and goals of this project allowed NJDFW to meet the mandatory 33% reduction during FY 18. **NJDFW anticipates the addition of another new staff member devoted to the project after funding for the FY 21 maintenance project is complete.**

In-kind Contribution:

NJDFW is providing 78% of the project cost (see section 9).

Data:

Improvement in data quality/quantity:

NJDFW has been able to provide commercial harvest landings data to ACCSP for American lobster, Atlantic menhaden, blue crab, and American eel through annual data feeds. Additionally, NJDFW will be able to provide all commercial state harvester landings through the Commercial Harvester Trip Report Program. The NJ eDR program continues to be monitored by the project staff. This type of project and data management has ensured improvements in data quality, quantity and timeliness.

SECONDARY PROGRAM MODULE:

Biological Sampling (45%):

NJDFW is collecting biological characterization data through port sampling and at-sea observer coverage for 10 species, 6 of which are listed in the upper 25% on ACCSP's Biological Priority Matrix.

PROJECT QUALITY FACTORS (Partners, Funding, and Data):

Partners:

NJDFW is collecting biological characterization data for 10 species, all of which are regionally managed through ASMFC's FMPs including weakfish, Atlantic croaker, American shad/river herring, tautog, Atlantic menhaden, American eel, American lobster, black sea bass, and summer flounder.

- -American lobster at-sea observer data coverage includes trips in LCMA 4.
- -American eel sampling covers water bodies bordered by NY, NJ, PA, and DE.

Data:

All biological data collected by NJDFW and NJ ACCSP staff are available for coast-wide stock assessment. NJDFW blue crab harvest trip level catch and effort data are used by the state of Delaware to conduct their stock assessment within the Delaware Bay. NJDFW tautog biological sampling and ageing data are used by coast-wide and regional stock assessment committees. NJDFW at-sea lobster observer data are utilized regionally for stock assessment and recruit

abundance. NJDFW American eel and weakfish biological characterization data are used for stock assessment.

Ranking Guide and Factors

Achieved Goals:

Biological sampling for American eel, American shad, Atlantic croaker, Atlantic menhaden, black sea bass, river herring, summer flounder, tautog, and weakfish was a maintenance project for FY2019. Sampling targets were near 100% of set goals during the first 13 years and will be similar for FY2021.

The continuation of SAFIS implementation includes components for web-based dealer reporting (eDR), web-based fishermen reporting (eTRIPS), paper-based data entry by project staff, report compliance monitoring, and site administration (user access, look-up tables, data correction, etc.) Catch and effort of 100% of permitted dealers in NJ will be submitting dealer reports through SAFIS eDR, for 100% of the summer flounder, black sea bass, scup, menhaden, and all other species mandated by federal and state regulations that dealers have purchased. 100% of the 21 commercial harvester license types will be submitting trip level catch and effort data, the remaining harvester licenses are collected through the federal NMFS VTR program.

Data Delivery Plan:

Project staff provides ACCSP with support tables to facilitate timely and accurate landings for all species in which trip level data are collected. FY2016 initiated the direct entry of trip level data into SAFIS which will continue through FY2021.

Commercial trip level reporting is mandatory for American eel, Atlantic menhaden, blue crab, and tautog in NJ. Additionally, commercial trip level data are available to authorized NJDFW staff for query purposes used in harvest compliance and stock management. NJ has gained a significantly larger number of commercial landings data through eDR for American eel, Atlantic menhaden, blue crab and tautog. Project staff remove duplicate reports from multiple sources (paper, e-TRIPS) prior to ACCSP data uploads, ensuring accurate landings.

The New Jersey Harvester Trip Reporting Form was created to help standardize all trip level data collected and to provide fishermen with a single comprehensive reporting form for all issued commercial licenses. The New Jersey Harvester Trip and Dealer Reporting Forms collect catch, effort, bycatch and discard data. All paper reporting forms are entered into SAFIS, reviewed for quality assurance, and are available to the ACCSP immediately. NJDFW staff completes two semi annual reports, final reports and multiple uploads for commercial fisherman and dealers which are sent to ACCSP.

Level of Funding:

The requested ACCSP Administrative Grant amount does not achieve the 33% mandatory reduction for FY2021. NJDFW is covering all funding for this project except for the salary and benefits of one ACCSP Fisheries Specialist. NJDFW is requesting a one-time amount of \$63,146. While NJDFW understands that this request is above the maximum grant amount we would appreciate the additional money if available to guarantee full funding of the Fisheries Specialist position for the entirety of the project year. The amount requested is only an additional \$8,545 or 13% over the reduction amount of \$54,601. NJDFW has returned \$30,952 to ACCSP in unused funds from FY11 through FY19 including \$23,807

when NJDFW transitioned ACCSP Fisheries Specialist to a full-time state funded Biologist Trainee. Although this has no bearing on available funds for the FY21 proposal funding, NJDFW felt it important to note since it exemplifies the commitment to this project and the transition to full state funding. The additional \$8,545 requested is only 36% of the unused funds from previous fiscal years. After this fiscal year the goal is to hire this position on as a full-time state employee. This shows the commitment of the NJDFW to electronic reporting and biological characterization of New Jersey commercial fisheries even when funding has ended.

Appendix:

Table 1. History of ALL biological samples collected by the project. American eel, American lobster, black sea bass, river herring and weakfish, all appear on the upper quartile of the ACCSP Biological Priority Matrix. (NJDFW recognizes biological samples by calendar year, not project year) American shad and river herring have been aged by scales in the past, otoliths were collected and will be processed for aging

				N	J ACCSF	Biologica	ıl Samplin	g Summa	ry (Calend	lar Year)					
		Weakfish		Aı	merican E	el	Atla	antic Croa	ker	An	nerican Sl	nad	Atlar	ntic Menh	aden
Year	Lengths	Otoliths	Otoliths Aged	Lengths	Otoliths	Otoliths Aged	Lengths	Otoliths	Otoliths Aged	Lengths	Otoliths	Otoliths Aged	Lengths	Scales	Scales Aged
2004	71	57	57	0	0	0	0	0	0	0	0	0	0	0	0
2005	148	148	148	0	0	0	0	0	0	0	0	0	0	0	0
2006	379	311	300	457	141	104	364	364	364	0	0	0	310	310	230
2007	566	546	543	237	0	0	340	340	338	7	0	0	630	630	486
2008	457	451	448	547	508	259	608	500	498	36	34	0	760	760	667
2009	254	254	254	478	418	274	960	560	558	28	28	0	430	430	386
2010	650	571	571	399	384	346	750	750	749	42	42	0	560	560	421
2011	313	313	310	289	289	265	274	274	240	0	0	0	530	530	448
2012	202	202	154	140	60	60	660	635	635	0	0	0	890	890	826
2013	216	216	212	175	173	175	0	0	0	162	162	0	570	570	474
2014	108	108	108	197	197	188	27	27	27	81	77	0	890	890	814
2015	88	88	86	256	256	136	170	169	166	130	128	0	1300	1300	1078
2016	80	80	76	279	279	170	166	166	163	149	148	0	1120	1120	778
2017	116	116	114	167	167	113	50	50	50	83	82	0	1461	1461	1345
2018	144	144	144	341	341	227	52	52	52	23	23	0	946	946	*
2019	121	121	*	399	397	*	17	17	*	42	40	0	1150	1150	*
TOTAL	3913	3726	3525	4361	3610	2090	4438	3904	3840	783	764	0	11547	11547	7953
* All samp	les denote	d by an ast	erisk have n	ot been ag	ed at the t	ime of sub	mission.	Please no	te that 202	0 samples	are in the I	process of	being colle	ected	

		Tautog		Americar	Lobster	Bla	ck Sea B	ass River Herring			Sum	Summer Flounder		
Year	Lengths	Opercles	Opercles Aged	Lengths	Trips Made	Lengths	Otoliths	Otoliths Aged	Lengths	Otoliths	Otoliths Aged	Lengths	Otoliths	Otoliths Aged
2004	176	176	176	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005	208	208	208	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2006	339	339	339	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2007	467	313	313	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2008	983	505	505	6330	11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2009	902	569	200	6785	14	N/A	N/A	N/A	2009	1850	0	N/A	N/A	N/A
2010	563	486	486	5569	10	91	91	90	378	306	0	247	247	231
2011	363	346	346	8661	14	106	106	106	655	509	0	340	340	335
2012	265	259	259	23690	20	109	109	108	891	889	0	393	393	377
2013	460	431	300	9954	9	142	142	141	226	226	0	360	360	350
2014	783	783	294	13482	13	113	113	113	319	319	0	347	343	323
2015	569	536	200	6352	10	126	120	120	156	156	0	360	359	336
2016	637	637	253	3710	5	113	113	109	49	48	0	327	327	324
2017	504	504	256	9543	10	119	119	119	247	243	0	315	315	295
2018	359	359	*	1615	5	150	150	150	152	149	0	286	286	285
2019	415	415	*	1270	3	155	154	154	106	105	0	283	277	271
TOTAL	7993	6866	4135	96961	124	1224	1217	1210	5188	4800	N/A	3258	3247	3127
* All samples denoted by an asterisk have not been aged at the time of submission. Please note that 2020 samples are in the proc									process of	being colle	ected			

Table 2. History of reported commercial fisheries in New Jersey state waters.

T'alama					Year	•			
Fishery	2008	2009	2010	2011	2012	2013	2014	2015	2016- 2020
AMERICAN SHAD	X	X	X	X	X	X	X	X	X
CRAB DREDGE	X	X	X	X	X	X	X	X	X
BAIT NET									X
CRAB POT	X	X	X	X	X	X	X	X	X
LOBSTER, FISH, CONCH POTS									X
DRIFTING GILL NET									X
FYKE NET									X
GILL NET MESH EXEMPTION PERMIT (GNMEP)	X	X	X	X	X	X	X	X	X
HAUL SEINE									X
MENHADEN							X	X	X
MINIATURE FYKES OR POTS	X	X	X	X	X	X	X	X	X
POUND NET									X
SHIRRED NET, PURSE SEINES, OTTER/BEAM TRAWLS									X
SHRIMP TRAWL									X
STAKED AND ANCHORED GILL NET									X
TAUTOG	X	X	X	X	X	X	X	X	X
WIRE POUND NET									X

Table 3. 2020 sampling targets for each of the nine species currently funded through the ACCSP.

2020 NJ ACCSP Sampling Targets		
Species	Target Lengths	Target Ages
American eel	350	350
American shad	250	250
Atlantic croaker	540	540
Atlantic menhaden	7,620	7,620
Black sea bass	500	500
River herring	500	500
Summer flounder	500	500
Tautog	200	200
Weakfish	9	58



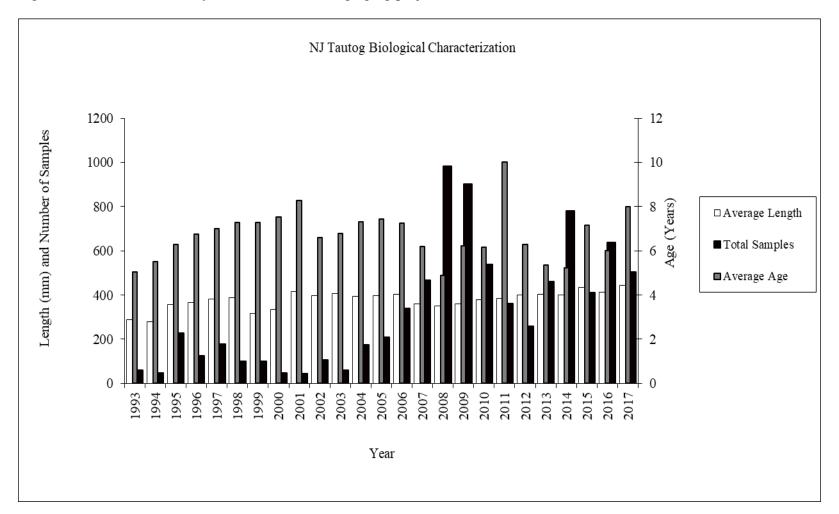
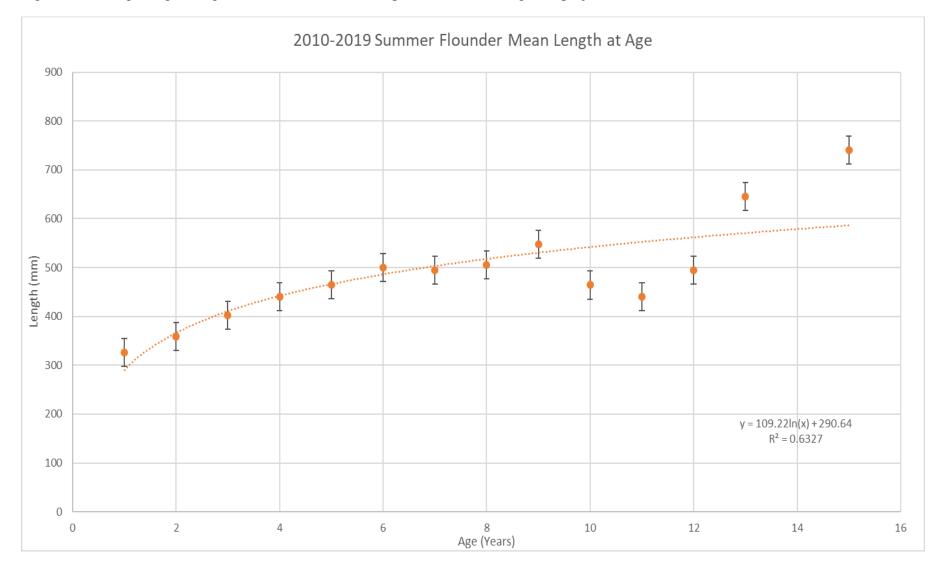
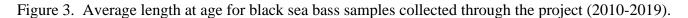


Figure 2. Average length at age for summer flounder samples collected through the project (2010-2019).





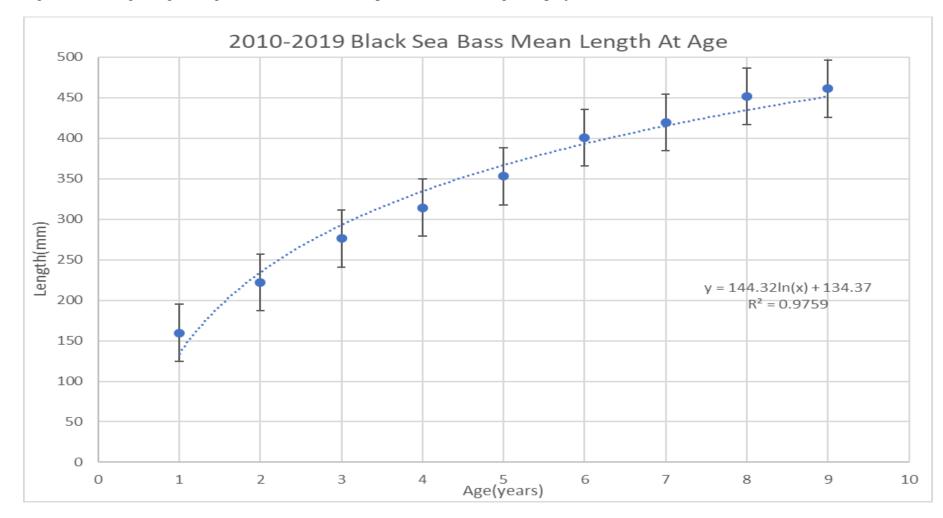


Figure 4. New Jersey Harvester Trip Reporting Form(front)

			1	New Je	rsey Harv	ester Tr	ip Repo	rt	
Fisherman nam	e				Fishing year				art area
	o					Fish (select all t	that apply)	G	ear type
			☐ I fished	from chara		•		un Gear	quantity
Vessel nam			□ Tilsiled	nom snore			Apr May Ju Oct Nov D	ec G	Gear size
	***************************************				□Iam	done fishing for	the year		lesh size
Trip date	# Crew	# Hauls	Soak time	Species	Kept	Discards	Disposition	Buyer	County
	-								
		-							-
	-								
	-								
	1						 		-
	<u> </u>								
	-						 		
	-	-					 		
	have fadar		fishing on -	fodosally posmi	tted vessel 🔲 I am	sanding a Vassal T	isia Danast (VCD) to	the National Masine	Fishering Comise
			_			_			t if any of the information
reported here is					. coect to the best o	, KIIOWICUSC, GI	III good Iai	anderstand the	d, or the information
Signature							Date		
					of reporting. Submit fo own records. Question				eries Administration, PO 064. Form NJTRIP 2019-01

New Jersey Harvester Trip Reporting Form(back)

Trip date	# crew	# hauls	Soak time	Species	Kept	Discards	Disposition	Buyer	County
	-								

This is a continuation for any additional catch during the same month. Remember to fill out all chart and gear information on the front of this report. If gear size, gear type or chart area changes please fill out a new harvester trip report.

Chad A. Power

67 Arapaho Place Galloway, NJ 08094 (609) 334-6479 Chad0826@gmail.com

Education

Bachelors of Science, Marine Science, 2012 GPA-3.68 Stockton University, Pomona, N.J

Associates of Chemistry, 2010 Gloucester County College, Sewell, N.J.

Employment

April 2017- Present Marine Fisheries Biologist New Jersey Division of Fish and Wildlife **Bureau of Marine Fisheries**

GPA-3.30

- Manage and Monitor allocations and seasonal quotas for New Jersey's commercial fisheries
- Oversee the duties and responsibilities of New Jersey's Atlantic Coastal Cooperative Statistics Program's (ACCSP) contracted fisheries specialists
- Lead and assist numerous field and lab oriented projects administered by the New Jersey Division of Fish and Wildlife
 - o Lead on NJ's vellow eel survey
 - o Support crew on NJ's Ocean Trawl Stock Assessment Survey
 - o Lead on NJ's Gut Content Analysis Project
- Active member of the Atlantic States Marine Fisheries Commission's (ASMFC) American lobster Technical Committee and the former chair of ACCSP's Biological Review Panel
- Oversee operations and maintenance of New Jersey's Commercial Harvester Trip Reporting **Program**

October 2013- April 2017

Atlantic Coastal Cooperative Statistics Program

NJ ACCSP Fisheries Specialist

- Interact and assist New Jersey fishermen and dealers on submitting commercial harvest and landings reporting forms on both paper and electronic formats through the Standard Atlantic Fisheries Information System (SAFIS)
- Draft and design formal documents, including request for funding (RFP) documents and regulatory correspondence letters
- Created and implemented New Jersey's first Commercial Harvester Trip Reporting Program
- Coordinate with upper management on commercial fishery closures based on monitoring quotas

Bold Comments indicate sections that help with the ranking process Highlighted text indicates changes from the first submission

- Supervision of seasonal and part time New Jersey Division of Fish and Wildlife employees
- Supervise and take part in at sea observing and dock side sampling programs to assess New Jersey fisheries species populations

June 2013- October 2013

New Jersey Division of Fish and Wildlife Bureau of Freshwater Fisheries

Freshwater Fisheries Technician

- Identification and classification of New Jersey native and invasive freshwater species
- Usage of field sampling equipment to collect fishes and other field sampling data
 o Electrofishing boats, backpack electrofishers, seine nets, YSI instrumentation,
 hand held GPS,
- Mounting and preparation of Largemouth Bass and Northern Snakehead scales, and assist in the determining of their age
- Experience in Microsoft Office to develop Largemouth and Smallmouth Bass regulation and Lake inventory databases

June 2012- June 2013

New Jersey Division of Fish and Wildlife

Marine Fisheries Technician

- Exportation and evaluation of collection data, using both software and online applications
 - o Microsoft Office
 - o SAFIS
 - o Infoview, a database application of SAP BusinessObjects
- Outreach to commercial fishermen about monthly reporting issues and violations
- Extraction of fish otoliths and other hard parts for use in aging
- Operation and maintenance of sampling equipment
 - o haul seines, dredges, fyke nets, benthic grabs, trawls, gill nets

June 2012- October 2013

Stockton University

Field Station Technician

Marine Science and Environmental Field Station

- Provide support to research and educational activities; participate in vessel trips including assisting with field-oriented classes
- Vessel and equipment preparation, deployment, and operation
- Oversight of equipment, facility, and vessel maintenance
 - o Remote operated vehicle, side scan sonar towfish, depth finders, YSI water quality sondes, Boat Motors
 - o Maintenance shop, storage units, office buildings
 - o Upkeep and Husbandry on lab's multiple aquaculture systems

Matthew Heyl

New Jersey Fish and Wildlife Bureau of Marine Fisheries Nacote Creek Research Center 360 N. New York Rd. (Rt. 9) P.O. Box 418 Port Republic, NJ 08241 (609)748-2020 Matthew.Heyl@dep.nj.gov

Education

BACHELOR OF SCIENCE | 2008 | RICHARD STOCKTON COLLEGE OF NEW JERSEY

Major: Marine Biology

BROOKDALE COMMUNITY COLLEGE

• Major: Environmental Science

Experience

FISHERIES MARINE BIOLOGIST | NEW JERSEY DIVISION OF FISH AND WILDIFE | 11/18 TO CURRENT

- Oversee New Jersey's commercial fisherman and dealer reporting
 - Supervising the entry in the state's compliance file, entry of report in SAFIS eTRIPS, QA/QC of entry, and uploading of data to ACCSP
 - Reviewing commercial dealer reports in SAFIS eDR for accuracy
 - Reaching out to commercial fisherman via by phone, email, letter or in person to discuss reporting requirements
- Oversee New Jersey's commercial biological sampling
 - At sea observer trips for American lobster and tautog
 - Communicating with commercial fisherman for dockside sampling
 - Supervise and participate in the processing of commercially important species
- Active member on the ACCSP Commercial Technical, Information Systems, and Standard Codes committees
- New Jersey's contact for confidential data access for ACCSP's data warehouse
- Processing of data request from ACCSP and state biologist
- Participating in NJDFW field sampling
- Supervising hourly and summer employees
- Writing technical reports for ASMFC managed species
- · Grant writing for proposals of funding

FISHERIES SPECIALIST | ATLANTIC COASTAL COOPERATIVE STATISTICS PROGRAM |01/18 TO 11/18

- Monitor multiple databases to keep track of all state and federal seafood dealers and fishermen as
 regulated by the Atlantic States Marine Fisheries Commission (ASMFC) and the New Jersey Division of Fish
 and Wildlife
- Conducing dockside sampling of marine fish from commercial and recreational fisherman
- Field sampling that includes fisheries dependent and independent surveys

- Biological sampling of marine fish while in a lab and in the field, which includes extracting otolith, operculum, and scales for aging
- Work with New Jersey seafood dealers and fishermen, and with state, federal, and ACCSP staff to implement the ACCSP Standard Atlantic Fisheries Information System (SAFIS) for electronic Dealer Reporting, and electronic Vessel Trip Reporting
- Perform entry of commercial fisheries data collected from individual fishermen for the use of stock assessment
- Provide New Jersey biologist commercial fisheries data upon request
- Supervise hourly and summer workers and proof reading and editing work before submission

HOURLY MARINE BIOLOGIST | NEW JERSEY FISH AND WILDLIFE | 05/2008 TO 01/2018

- Successfully helped create and lead New Jersey's River Herring Project which resulted in much needed data and a timeline that will be used in management and regulation of the fishery
- Knowledge and experience conducting fisheries surveys of adult and juvenile saltwater, freshwater and estuarine fishes with a focus on anadromous fish
- Provide supervision and training to hourly and summer workers
- Documented and collected fisheries data while working in the field and at the office
- Created and monitored river herring field survey database keeping track of fisheries data using Microsoft office
- Certified and experienced using electro-fishing equipment
- Monitored water quality, atmospheric conditions, and flow rates of various water bodies
- Processing and aging of otoliths and scales
- Prepares time restricted reports for supervisors
- Knowledge and experience of various sampling methods including Seine Nets, Gill Nets, Otter Trawl, and Fyke Nets
- Maintenance and purchasing of nets, vehicles, boats, trailers and field equipment

LAB PROFESSOR | BROOKDALE COMMUNITY COLLEGE | 09/2013 TO 01/2016

- Teach college age student Oceanography and Environmental Science concepts
- Plan and lead labs and field trips
- Grade students work including lab practical, class work, and research papers

Skills & Abilities

WORK RELATED CERTIFICATES

- ASMFC Introduction to Stock Assessment
- Rutgers Introduction Fisheries Science for Stakeholders
- US Fish and Wildlife Electro- Fishing
- PADI Advanced Scuba Diver
- New Jersey Safety Boating Certificate (with driver license endorsement)

PUBLICATIONS AND PRESENTATIONS

Books:

- Heyl, M. River Herring Status: Research Hold the Key, NJ Fish and Wildlife Marine Fish Digest, 2018.
- Heyl, M. <u>It's a Short! Safely Releasing Summer Flounder Unharmed</u>, NJ Fish and Wildlife Marine Fish Digest 2017

Presentations:

 Heyl, M. "An Assessment and Restoration Program of River Herring (Alewife and Blueback Herring) in the Rancocas Creek and Maurice River" Mid- Atlantic Chapter of the American Fisheries Society, Jacques Cousteau National Estuarine Research Reserve, Tuckerton, NJ.

LAURA E. VERSAGGI

29 Briar Creek Road Sicklerville, NJ 08081 www.linkedin.com/in/laura-versaggi

lversaggi@gmail.com (856)-562-7903

Graduated: May 2017

Galloway, NJ

Sewell, NJ

EDUCATION

Stockton University

B.S. in Marine Science: Marine Biology Concentration

GPA: 3.10

Rowan College at Gloucester County (RCGC)

A.S. in Marine Science Graduated: December 2014

GPA: 3.59

PROFESSIONAL EXPERIENCE

Fisheries Specialist

February 2019 – present

Atlantic States Marine Fisheries Commission

Port Republic, NJ

- Contracted with *Atlantic Coastal Cooperative Statistics Program (ACCSP)* to work with *New Jersey Division of Fish & Wildlife (NJDFW)*
- Manage New Jersey commercial fisheries data and ensure accuracy of fishery dependent data being submitted in *Standard Atlantic Fisheries Information System (SAFIS)*
- Work within the SAFIS Management System to manage data such as participants, permits, and SAFIS accounts
- Work with fishermen to provide accurate reporting on their NJ Harvester Trip Reports
- Dockside sampling and data collection for New Jersey commercial fisheries
- Extract hard parts (otoliths, scales, and opercula) from commercially important NJ marine species
- Prepare and submit proposals, semi-annual reports, and final reports for each grant period.
- Prepare and submit New Jersey participant and dealer information for data uploads to Data Warehouse
- Complete data requests for NJDFW staff involving confidential and non-confidential fisheries data

Hourly Fisheries Technician

May 2018 – February 2019

New Jersey Division of Fish & Wildlife

Port Republic, NJ

- Assist in field activities, including inshore and at-sea sampling surveys of important NJ species
- Dockside sampling and data collection of commercial and recreational fisheries
- Work with Atlantic Coastal Cooperative Statistics Program (ACCSP) staff to enter and ensure accuracy of fishery dependent data using Standard Atlantic Fisheries Information System (SAFIS)
- Work with fishermen to provide accurate data on their NJ Harvester Trip Reports
- Extract hard parts (otoliths, scales, and opercula) from commercially important NJ marine species

Bold Comments indicate sections that help with the ranking process

Highlighted text indicates changes from the first submission

NJ Bureau of Marine Fisheries

LAURA E. VERSAGGI

29 Briar Creek Road Sicklerville, NJ 08081 www.linkedin.com/in/laura-versaggi

lversaggi@gmail.com (856)-562-7903

- Follow laboratory procedures to mount scales and clean opercula to prepare them for aging
- Review proposals and reports for errors and suggest edits
- Transcribe audio from lobster vessel observer trips into database
- Conduct public outreach events
- Maintenance of field and laboratory equipment

Assessment Coordinator

November 2015 – February 2019

Conserve Wildlife Foundation of New Jersey

Manahawkin, NJ

- Sub-contracted by Marine Academy of Technology and Environmental Science.
- Assist in removal of derelict fishing gear from Barnegat Bay
- Assess the condition, by-catch, and organism growth of derelict fishing gear
- Database management and analysis

Program Coordinator

May 2015 – February 2019

Marine Academy of Technology and Environmental Science

Manahawkin, NJ

- Assist in activities, programs and projects for Project Terrapin
- Assist in raising diamondback terrapin hatchlings
- Assist in creating nesting habitats
- Create educational materials and conduct outreach events
- Database management and analysis

PRESENTATIONS

NJ Diamondback Terrapin Meeting, The Wetlands Institute

October 13, 2017

• Poster: Removal and Assessments of Derelict Fishing Gear from Barnegat Bay

Stockton University NAMS Research Symposium

April 28, 2017

- Poster: Removal and Assessments of Derelict Fishing Gear from Barnegat Bay
- Poster: Determination of Important Chemical and Nutrient Trends Along an Estuarine Salinity Gradient

Ocean Planet: Where the River Meets the Sea, Stockton University

October 29, 2015

Guest Lecture on diamondback terrapins with hatchling measurement activity

CERTIFICATIONS AND SKILLS

- Microsoft Office Suite
- Standard Atlantic Fisheries Information System (SAFIS)
- NJ Boating Safety Certificate

Bold Comments indicate sections that help with the ranking process Highlighted text indicates changes from the first submission

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COURSEWORK

Barnegat Crab Pot Project

Spring 2017

• Independent study student research project

- Stockton University
- Collected and analyzed data for poster presentation at student research symposium

Analysis of Sediments and Seawater

Spring 2017

- Independent laboratory analysis of dissolved micronutrients. Stockton University
- Analyzed results for poster presentation at student research symposium

Biostatistics I & II

Fall 2016-Spring 2017

Stockton University

- Statistical analysis of biological data
- Statistical analysis in Excel and WinSTAT