

A. COVER PAGE

Project Title: A Comprehensive Safety, Wellness, and Change Program for New Entrants and Existing Persons in the Commercial Fishing Industry in Downeast Maine	
Grant Number: 1T03OH011928-01	Project/Grant Period: 09/01/2019 - 08/31/2021
Reporting Period: 09/01/2019 - 08/31/2021	Requested Budget Period: 09/01/2019 - 08/31/2021
Report Term Frequency: Final	Date Submitted: 11/30/2023
Program Director/Principal Investigator Information: THOMAS DUYM , BS Phone Number: 2073672708 Email: tduym@coastalfisheries.org	Recipient Organization: MAINE CENTER FOR COASTAL FISHERIES 13 ATLANTIC AVE STONINGTON, ME 04681 DUNS: 784775665 UEI: NXAME4T9QMP9 EIN: 1270069386A1 RECIPIENT ID:
Change of Contact PD/PI: NA	
Administrative Official: BOBBI BILLINGS 13 Atlantic Ave P0 Box 27 Stonington, ME 04681 Phone number: 2073672708 Email: babillings@coastalfisheries.org	Signing Official: BOBBI BILLINGS 13 Atlantic Ave P0 Box 27 Stonington, ME 04681 Phone number: 2073672708 Email: babillings@coastalfisheries.org
Human Subjects: NA	Vertebrate Animals: NA
hESC: No	Inventions/Patents: Not Applicable

B. ACCOMPLISHMENTS**B.1 WHAT ARE THE MAJOR GOALS OF THE PROJECT?**

See report attached.

B.1.a Have the major goals changed since the initial competing award or previous report?

No

B.2 WHAT WAS ACCOMPLISHED UNDER THESE GOALS?

File Uploaded : FINAL Report CDC NIOSH Grant #12798519.pdf

B.3 COMPETITIVE REVISIONS/ADMINISTRATIVE SUPPLEMENTS

For this reporting period, is there one or more Revision/Supplement associated with this award for which reporting is required?

No

B.4 WHAT OPPORTUNITIES FOR TRAINING AND PROFESSIONAL DEVELOPMENT HAS THE PROJECT PROVIDED?

NOTHING TO REPORT

B.5 HOW HAVE THE RESULTS BEEN DISSEMINATED TO COMMUNITIES OF INTEREST?

Through the participating school systems through the Eastern Maine Skippers Program.

B.6 WHAT DO YOU PLAN TO DO DURING THE NEXT REPORTING PERIOD TO ACCOMPLISH THE GOALS?

Not Applicable



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Final report Narrative for Grant ID # 12798519

Title: “A Comprehensive Safety, Wellness and Change Program for New Entrants and Existing Persons in the Commercial Fishing Industry in Downeast Maine”

This final narrative report for conditions and activities describing the accomplishments and challenges to the Grant Award # To3OH011928, Titled “**A Comprehensive Safety, Wellness and Change Program for New Entrants and Existing Persons in the Commercial Fishing Industry in Downeast Maine**” is submitted by Principal Investigator Thomas Duym on behalf of Maine Center for Coastal Fisheries, institutional and financial recipient for this award.

This report will describe progress and outcomes of the major objectives of this project. The original statements of purpose and implementation will be outlined as to outcomes, challenges, redirects and lack of success.

Preface to statements of objective success and or change:

The notice of this grant award was relayed to Maine Center for Coastal Fisheries on March 3rd of 2020. At that particular point in time, the news of the potential spread of the identified Covid-19 Virus into the United States was gaining attention in the press and affecting many urban areas. Within a ten day period the effect of this world wide pandemic had reached Maine with unsettling speed and severity. Much of what we had proposed and were experienced with, using face to face training was now in jeopardy. Due to the public health decisions to curtail or eliminate public gatherings which directly affected schools and communities around any form of multi person convenings, our initial plan for delivery was on hold. This included traditional school settings of

**Alexa M. Dayton, PhD • Executive Director
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classrooms and other public group dynamics. Most of our proposal for training was built upon public and small to medium group gatherings within central fishing and participating school communities. At first analysis, this seemed to be a temporary delay caused by prudent precautions to curtail the spread of the virus into the typically small communities of Maine. But as we all know now, despite the abundance of caution, the virus spread into small and large communities with considerable economic and social upheaval not to mention the rapid and growing death rate from Covid amongst the elderly and medically challenged individuals. Though Maine is a small state in terms of population, our demographic contains a high percentage of middle and elderly age groups who were being affected by Covid at an unprecedented rate. This reality led to the decision that schools would be shut down for a minimum of 30 days and be evaluated as to the eventuality of reopening with future analysis of risk to students, staff and families. This precipitated alternative options to attempt to keep schools and students safe but making distance education available through technology. These options continued throughout the school year of 2020/21 and through much of 2022.

Due to numerous outbreaks and resurgences of the virus, most of our participating schools at the time of the grant award were in an operational mode that was week to week and focused on essential graduation requirements for their students. Most of our plans for community based events and offerings had to be scrapped as both public venues and individuals were mandated or selectively refusing public gatherings over ten persons in confined spaces. This ultimately led to Maine Center for Coastal Fisheries (MCCF) requesting no cost extensions to try and salvage as much of the impact we had hoped to accomplish over a longer time period and with more restrictive methods.

The pandemic had additional program challenges which will be evidenced in the following description of accomplishments. Our intended work in the area of Wellness and Health was severely curtailed by restrictions on public gathering but mostly due to the added workload that the stress of the pandemic was evidenced in the professional counselors and medical professionals. The stress of workload and demanding cases combined with the separation of professionals with the potential audience and client, caused a priority of attending to backlogs of appointments and treatment options. The grant objectives were superseded by the professional obligations of our intended partners.

A final note of unforeseen consequences of this pandemic timing was that much of the continuity of our partner school and community relationships became problematic. Many of the schools during this time period experienced unusual staff and administration turnover. This meant that much of our “institutional memory” of the Eastern Maine Skippers Program (EMSP) and the methodology, effect, and vision for grounding commercial fishing in local communities, became diluted and overlooked in some cases. This project in many ways became a vehicle for attempting a slow rebuild

Maine Center for Coastal Fisheries

and support for community members and students who had connected with and supported EMSP in their communities. Additionally, there was a reduction in dedicated staff budgeted for this project. Due to family need and conditions related to the pandemic, one key staff person left MCCF employ and was not replaced, which in turn reduced time dedicated to this project and subsequently expenses to be reimbursed.

First Objective: USCG Drill Conductor Training and Certification for Next Gen Fishermen

To provide localized training in meeting requirements for United States Coast Guard (USCG) approved Emergency Drill Conductor training for Commercial Fishing Vessels and USCG accepted training in First Aid, CPR and AED training.

Our unique approach to this was to utilize the long standing Eastern Maine Skippers Program (EMSP) which serves high school age participants interested in, or choosing commercial fishing as a primary occupation. Uniquely in the State of Maine, all commercial lobster and crab license applicants must complete the Drill Conductor program prior to receiving a full commercial harvesting license from the Department of Marine Resources for State waters. Additionally, both Drill Conductor and accepted First Aid certification are required on all vessels conducting federally permitted commercial fisheries beyond state waters.

Due to the nearly immediate curtailment of our intended plan to organize community events which provided not only the requirements of the Drill Conductor and First Aid certifications but also workshops in repetitive injury risk and emergency opioid overdose treatment and education, we refocused our approach toward technology. Assuming that the scope of time needed to move back to our original delivery plan was in reach, we quickly produced some short video clips for students to view and prepare with. Though simple from a production standpoint these were used by several schools to provide some continuity for the training we were to offer. List of links to pre instructional videos will follow in the addendum.

Throughout the two year grant period and subsequent two, one year no cost extensions to August of 2023, we trained a total of 156 individuals for the Drill Conductor certification and 10 in First Aid/ CPR. On average, 90% of participants were 14 to 18 year old students entering or associated with fishing communities while the remainder were either adult participants or 10 to 14 year olds seeking apprenticeship or student lobster license from the State of Maine.

While conducting these training sessions we became aware of a need to focus on one of the emergencies included in the training. “Man” or “Crew Overboard” was often discussed with participants in terms of what to do once the individual is in the recovery phase. Vessels in the lobster fleet are getting larger and fishing is happening more and more in offshore federal waters. These vessels and their operators are not experienced

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in retrieving someone from the water when the rail of the vessel may be 4-6 feet above the waterline. This presented a need for options in equipment and provisions for retrieval, as well as methods and procedures. To this end, we brought in MCCF's videographer and began a series that is formatted to the Eastern Maine lobster fishery and includes standards for Crew Overboard (COB) and examines retrieval equipment and maneuvers. Students in EMSP were involved in prototyping some ideas for retrieval equipment made from commonly available materials. This effort was a shift in resource allocation from print and video materials to video production from the original proposal. While intended to be a three part series - Introduction, Procedures, and Retrieval and After Care. The third video is still in editing due to refilming of retrieval equipment that was not illustrative with adequate detail for training. (See Youtube files in addendum for videos produced.)

Second Objective: Wellness Objective I; Autonomous Addiction Counseling and Narcan Training

This objective was a casualty of the conditions created by the pandemic. The premise of providing professional counseling to industry members through an autonomous voucher system did not materialize. The primary reason was the overburdened professional staff available at the time of the grant period. All partners who expressed interest in participating were overwhelmed by demands on their professional time due to an increase in opioid abuse caused by the isolation and the social change of the pandemic period. Appointment availability was also consumed by an increase of depression that many individuals experienced during this period. We therefore shifted some of the resources available to more tech support for COB videos. This course of action was to prevent the possibility of not having the full commitment for counseling follow through and therefore causing more harm.

Third Objective: Wellness II; Repetitive Injury Assessment and Prevention

This effort was not achieved in full due to demands on health care professionals during the pandemic period. A reduction in time available for a project such as this was due to limited patient time and our partner therapist's exposure to non-patients. Similarly, our participating physical therapist found an increased demand, in spite of more social isolation, treating physical issues aggravated by the pandemic. However, she was able to consult with us over e-mail and through later meetings to discuss the importance of re-thinking this objective in terms of instructional videos for future use in training and for general industry distribution. This past summer of 2023, we did provide her with some video to examine for specific analysis as a gauge for producing informative video based training opportunities. We plan on trialing this in future safety training efforts.

Final data supporting effort:

Due to the age and mobile nature of the bulk of our participants, high school students, we are going back through our database of names and addresses of the performance period to establish some of the following criteria for ongoing data acquisition. Most of the participants, if continuing in the fishery, will only be in a position of owner/operator or stable employment as a deckhand, after two to five years. As with most high school graduates, tracking current contact information is a time consuming endeavor not to mention the frequent transitions many in the commercial fishing industry encounter. Our data is set up to look at trends for long term industry involvement over a ten year period as this will support a more longitudinal and stabilized data set on which to draw conclusions from.

One interesting opportunity was established locally by a former colleague assisting in this project and speaks to impact, as well as opportunity. The feedback from the more established fishing community that took advantage of the training was that keeping up with the requirements and maintenance of safety equipment was not getting the attention it needed and they wished there was a more streamlined way to manage this aspect of their business. The former MCCF employee, who had grown up in a fishing family and still fished part time, saw the potential for a subscription based service business focused on the commercial small boat un-licensed fleet. Their company, which started in May of 2023, has seen steady growth for this service with primarily the commercial fishing fleet in Eastern Maine. Since their startup the company has had a noticeable impact on safety awareness and preparedness. A much needed and impactful outcome from this type of work.

Synopsis of financial resources committed and reimbursed for the project

Total Federal Funds Expended and Reimbursed:	\$113,583.45
Total federal funds allocated:	\$185,923.00
Percent funds reimbursed:	61%
Total match approved:	\$185,923.00
Total Match committed:	\$179,707.87
Percent match committed:	97%

We shifted \$10,571.65 from Contractual (Atlantic Counseling) to Salaries/Fringe, and \$3,400 from Contractual (Coastal Physical Therapy) to Contractual - Videography. That total of \$13,971.65 is below the 25% of the total grant we were allowed to reallocate.

At 160 persons trained through 22 training events, the cost per student of training and related outputs was \$710 of reimbursed funds per person per 8 hour training inclusive of approximately 3 hours of video produced for training.

Addendum: Videos Produced

TRAILER | Crew Overboard Emergency Drill Sequence Video Series
<https://youtu.be/urOsdeWM1b8>

Part 1 - Preparation and Prevention | Crew Overboard Emergency Drill Sequence Video Series <https://youtu.be/SkRzP3QN7Yc>

Part 2 - Critical Reaction | Crew Overboard Emergency Drill Sequence Video Series
<https://youtu.be/FumlaJpezrM>

Pre-Instructional Videos from 2020-2021

- 1.) Overview https://youtu.be/8NQDwvGIa_o
- 2.) Introduction - Part 1 <https://youtu.be/JctIsINvrkw>
- 3.) Introduction - Part 2 <https://youtu.be/or7OCK5AExo>
- 4.) PFD & Immersion Suit - Part 1 <https://youtu.be/pv-wRGVYsvE>
- 5.) PFD & Immersion Suit - Part 2 <https://youtu.be/VzKsud732xE>
- 6.) Inflatable Marine Life Raft & Emergency Equipment <https://youtu.be/JuXIoGlLTGU>
- 7.) Emergency Distress & Communications - Part 1 <https://youtu.be/pO2Y6qIVztg>
- 8.) Emergency Distress & Communications - Part 2 <https://youtu.be/KwvfEVfoe3g>
- 9.) Fire Fighting - Part 1 <https://youtu.be/NejlETnxWvY>
- 10.) Fire Fighting - Part 2 <https://youtu.be/t12Q9CN5DJw>
- 11.) Man Overboard <https://youtu.be/NuPvD2udpbU>
- 12.) Flooding <https://youtu.be/Sdp2oJr5n7s>
- 13.) Station Bill <https://youtu.be/oh-OcronflA>

C. PRODUCTS

C.1 PUBLICATIONS

Are there publications or manuscripts accepted for publication in a journal or other publication (e.g., book, one-time publication, monograph) during the reporting period resulting directly from this award?

No

C.2 WEBSITE(S) OR OTHER INTERNET SITE(S)

Not Applicable

C.3 TECHNOLOGIES OR TECHNIQUES

Not Applicable

C.4 INVENTIONS, PATENT APPLICATIONS, AND/OR LICENSES

Not Applicable

C.5 OTHER PRODUCTS AND RESOURCE SHARING

NOTHING TO REPORT

D. PARTICIPANTS

D.1 WHAT INDIVIDUALS HAVE WORKED ON THE PROJECT?

Commons ID	S/K	Name	Degree(s)	Role	Cal	Aca	Sum	Foreign Org	Country	SS
THOMASDUYM	Y	Duym, Thomas		PD/PI	4.0	0.0	0.0			NA

Glossary of acronyms:

S/K - Senior/Key
 Cal - Person Months (Calendar)
 Aca - Person Months (Academic)
 Sum - Person Months (Summer)

Foreign Org - Foreign Organization Affiliation

SS - Supplement Support

RS - Reentry Supplement

DS - Diversity Supplement

OT - Other

NA - Not Applicable

D.2 PERSONNEL UPDATES

D.2.a Level of Effort

Not Applicable

D.2.b New Senior/Key Personnel

Not Applicable

D.2.c Changes in Other Support

Not Applicable

D.2.d New Other Significant Contributors

Not Applicable

D.2.e Multi-PI (MPI) Leadership Plan

Not Applicable

E. IMPACT**E.1 WHAT IS THE IMPACT ON THE DEVELOPMENT OF HUMAN RESOURCES?**

Not Applicable

E.2 WHAT IS THE IMPACT ON PHYSICAL, INSTITUTIONAL, OR INFORMATION RESOURCES THAT FORM INFRASTRUCTURE?

Not Applicable

E.3 WHAT IS THE IMPACT ON TECHNOLOGY TRANSFER?

Not Applicable

E.4 WHAT DOLLAR AMOUNT OF THE AWARD'S BUDGET IS BEING SPENT IN FOREIGN COUNTRY(IES)?

NOTHING TO REPORT

G. SPECIAL REPORTING REQUIREMENTS SPECIAL REPORTING REQUIREMENTS

G.1 SPECIAL NOTICE OF AWARD TERMS AND FUNDING OPPORTUNITIES ANNOUNCEMENT REPORTING REQUIREMENTS

File(s) uploaded:

Final Federal Financial Report for CDC1 SF-425 (1).pdf

G.2 RESPONSIBLE CONDUCT OF RESEARCH

NOTHING TO REPORT

G.3 MENTOR'S REPORT OR SPONSOR COMMENTS

Not Applicable

G.4 HUMAN SUBJECTS

G.4.a Does the project involve human subjects?

NA

G.4.b Inclusion Enrollment Data

NOTHING TO REPORT

G.4.c ClinicalTrials.gov

Does this project include one or more applicable clinical trials that must be registered in ClinicalTrials.gov under FDAAA?

G.5 HUMAN SUBJECTS EDUCATION REQUIREMENT

Are there personnel on this project who are newly involved in the design or conduct of human subjects research?

G.6 HUMAN EMBRYONIC STEM CELLS (HESCS)

Does this project involve human embryonic stem cells (only hESC lines listed as approved in the NIH Registry may be used in NIH funded research)?

No

G.7 VERTEBRATE ANIMALS

Does this project involve vertebrate animals?

G.8 PROJECT/PERFORMANCE SITES

Not Applicable

G.9 FOREIGN COMPONENT

No foreign component

G.10 ESTIMATED UNOBLIGATED BALANCE

G.10.a Is it anticipated that an estimated unobligated balance (including prior year carryover) will be greater than 25% of the current year's total approved budget?

G.11 PROGRAM INCOME

Not Applicable

G.12 F&A COSTS

Is there a change in performance sites that will affect F&A costs?

G.1 (Final Federal Financial Report for CDC1 SF-425 (1).pdf)

FEDERAL FINANCIAL REPORT

(Follow form instructions)

1. Federal Agency and Organizational Element to Which Report is Submitted HHS-CENTERS FOR DISEASE CONTROL & PREVENTION				2. Federal Grant or Other Identifying Number Assigned by Federal Agency (To report multiple grants, use FFR Attachment) 19T03OH011928			
3. Recipient Organization (Name and complete address including Zip code)							
<p>Maine Center For Coastal Fisheries 13 Atlantic Ave, Stonington, ME 04681</p>							
4a. UEI NXAME4T9QMP9	4b. EIN 1270069386A1	5. Recipient Account Number or Identifying Number (To report multiple grants, use FFR Attachment) E6391P1			6. Report Type <input type="checkbox"/> Quarterly <input type="checkbox"/> Semi-Annual <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Final	7. Basis of Accounting <input checked="" type="checkbox"/> Cash <input type="checkbox"/> Accural	
8. Project/Grant Period (Month, Day, Year) From: September 1, 2019				9. Reporting Period End Date (Month, Day, Year) To: August 31, 2023 August 31, 2023			
10. Transactions (Use lines a-c for single or combined multiple grant reporting)							
Federal Cash (To report multiple grants separately, also use FFR Attachment):							
a. Cash Receipts				\$113,583.45			
b. Cash Disbursements				\$113,583.45			
c. Cash on Hand (line a minus b)				\$0.00			
(Use lines d-o for single grant reporting)							
Federal Expenditures and Unobligated Balance:							
d. Total Federal funds authorized				\$185,923.00			
e. Federal share of expenditures				\$113,583.45			
f. Federal share of unliquidated obligations				\$0.00			
g. Total Federal share (sum of lines e and f)				\$113,583.45			
h. Unobligated balance of Federal funds (line d minus g)				\$72,339.55			
Recipient Share:							
i. Total recipient share required				\$113,583.45			
j. Recipient share of expenditures				\$179,707.87			
k. Remaining recipient share to be provided (line i minus j)				\$0.00			
Program Income:							
l. Total Federal share of program income earned				\$0.00			
m. Program income expended in accordance with the deduction alternative				\$0.00			
n. Program income expended in accordance with the addition alternative				\$0.00			
o. Unexpended program income (line l minus line m and line n)				\$0.00			
11. Indirect Expense	a. Type Fixed	b. Rate 8	c. Period From September 1, 2019	Period To August 31, 2023	d. Base \$277,466.13	e. Amount Charged \$22,197.29	f. Federal Share \$8,268.35
g. Totals:				\$277,466.13	\$22,197.29	\$8,268.35	
12. Remarks: Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation:							
13. Certification: By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and intent set forth in the award documents. I am aware that any false, fictitious, or fraudulent information may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)							
a. Typed or Printed Name and Title of Authorized Certifying Official Moore, Catherine Finance Manager				c. Telephone (Area code, number, and extension) +1 (207) 367-2708			
				d. Email Address cmoore@coastalfisheries.org			
b. Signature of Authorized Certifying Official Moore, Catherine				e. Date Report Submitted (Month, Day, Year) November 29, 2023			

Standard Form 425

OMB Approval Number: 4040-0014

Expiration Date: 02/28/2025

Paperwork Burden Statement

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is 4040-0014. Public reporting burden for this collection of information is estimated to average 1 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: US Department of Health & Human Services, OS/OCIO/PRA, 200 Independence Ave, SW, Suite 336-E, Washington DC 20201. Attention: PRA Reports Clearance Officer

FEDERAL FINANCIAL REPORT

(Additional Page)

Federal Agency & Organization	:	HHS-CENTERS FOR DISEASE CONTROL & PREVENTION
Federal Grant ID	:	19T03OH011928
Recipient Organization	:	Maine Center For Coastal Fisheries 13 Atlantic Ave, Stonington, ME 04681
UEI	:	NXAME4T9QMP9
UEI Status when Certified	:	ACTIVE (as of 11/29/2023)
EIN	:	1270069386A1
Reporting Period End Date	:	August 31, 2023
Status	:	Report Certified/Pending Agency Approval
Remarks	:	

Federal Agency Review

Reviewer Name	:	
Phone #	:	
Email	:	
Review Date	:	
Review Comments	:	

I. OUTCOMES

I.1 What were the outcomes of the award?

156 persons were trained in USCG drill Conductor certification and 10 on First Aid and CPR. These trainees were 95% 14 -18 year old students who participate or live in Downeast coastal fishing communities. Many of the individuals are in the Maine student license or apprenticeship program for a Maine Lobster and Crab harvesters licenses. The training was made available within fishing communities from The Haven Islands in Penobscot Bay to Cutler in Eastern Maine. Six high schools supported this training throughout the region.

Additionally, this effort prompted private entrepreneurs into establishing a marine safety equipment and training support company to meet the industry stated need of managing equipment, training and drill maintenance.

This initiative has led to the continuation of training for safety awareness and experience, with the potential of reducing accidents and or tragedy from marine related emergencies. As one parent of a trainee said "This program should be available like driver training is for your drivers license, many of these students are on the water as much as they are in their cars". The program continues to push to achieve that level of availability.