Element 1: Standard Form-424

All applicants requesting direct funding must submit the Standard Form, SF-424, "Application for Federal Assistance," to indicate the total amount of funding proposed for their institution for the whole project period.

The form is on the next three pages. A fillable version of this form and the form instructions may be downloaded from:

http://www.grants.gov/web/grants/forms/sf-424-family.html.

OMB Number: 4040-0004 Expiration Date: 12/31/2022

Application for Federal Assistance SF-424											
* 1. Type of Submission: Preapplication Application Changed/Corrected Application	* 1 f Revision, select appropriate letter(s): New Continuation * Other (Specify): Revision										
* 3. Date Received:	4. Applicant Identifier:										
5a. Federal Entity Identifier:	5b. Federal Award Identifier:										
State Use Only:											
6. Date Received by State:	7. State Application Identifier:										
8. APPLICANT INFORMATION:											
* a. Legal Name:											
* b. Employer/Taxpayer Identification Nur	mber (EIN/TIN): * c. Organizational DUNS:										
d. Address:											
* Street1: Street2: * City:											
County/Parish:											
* State:											
Province:											
* Country: USA: UNITED S	TATES										
* Zip / Postal Code:											
e. Organizational Unit:											
Department Name:	Division Name:										
	erson to be contacted on matters involving this application:										
Prefix: Middle Name:	* First Name:										
* Last Name:											
Suffix:											
Title:	=										
Organizational Affiliation:											
* Telephone Number:	Fax Number:										
* Email:											

Application for Federal Assistance SF-424
* 9. Type of Applicant 1: Select Applicant Type:
Type of Applicant 2: Select Applicant Type:
Type of Applicant 3: Select Applicant Type:
* Other (specify):
* 10. Name of Federal Agency:
11. Catalog of Federal Domestic Assistance Number:
CFDA Title:
* 12. Funding Opportunity Number: * Title:
13. Competition Identification Number: Title:
14. Areas Affected by Project (Cities, Counties, States, etc.): Add Attachment Delete Attachment View Attachment
* 15. Descriptive Title of Applicant's Project:
Attach supporting documents as specified in agency instructions. Add Attachments Delete Attachments View Attachments

Application for Federal Assistance SF-424
16. Congressional Districts Of:
* a. Applicant * b. Program/Project
Attach an additional list of Program/Project Congressional Districts if needed.
Add Attachment Delete Attachment View Attachment
17. Proposed Project:
* a. Start Date: * b. End Date:
18. Estimated Funding (\$):
* a. Federal
* b. Applicant
* c. State
* d. Local
* e. Other
* f. Program Income
* g. TOTAL
* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?
a. This application was made available to the State under the Executive Order 12372 Process for review on
b. Program is subject to E.O. 12372 but has not been selected by the State for review.
c. Program is not covered by E.O. 12372.
* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)
Yes No
If "Yes", provide explanation and attach
Add Attachment Delete Attachment View Attachment
21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)
** I AGREE
** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency
specific instructions.
Authorized Representative:
Prefix: * First Name:
Middle Name:
* Last Name:
Suffix:
* Title:
* Telephone Number: Fax Number:
* Email:
* Signature of Authorized Representative:

Element 2: Summary Title Page

• One-page maximum, single spaced, 12-point font, one-inch margins

The summary title page includes, in order:

- a) Project title.
- b) Letter of intent number (provided by the Science Program after LOI review).
- c) Lead investigator's name, affiliation, complete address, phone number, and email address.
- d) The name of each natural resource manager on the team, including their affiliation, complete address, phone number, and email address.
- e) The specific natural resource management decision to be addressed.
- f) Requested funding amounts for each fiscal year with and without ship funding.

NOTE: Applicants may suggest merit reviewers on a page after the summary title page.

Element 3: Abstract

• One-page maximum, single spaced, 12-point font, one-inch margins

The abstract should appear on a separate single page, headed with:

- a) The proposal title.
- b) The name, institution, and email address for the lead investigator, natural resource manager(s), co-production lead, and other co-investigators on the project team. Unfunded collaborators that are not on the project team but are making a substantial contribution to the project should also be identified.
- c) The total proposed cost (including shiptime, if any).
- d) The funding period.

The abstract should include a brief introduction to the natural resource management decision that will be addressed, including its context and related uncertainties that could be reduced by additional research; the research questions and proposed methods; and a brief summary of the plan to have project findings and products applied to the specific natural resource management decision.

The abstract should be written in the third person.

Element 4: Project Narrative

• 10-page maximum, single spaced, 12-point font, one-inch margins

The project narrative must describe the project and indicate its relevance to the program priority described in the funding announcement (see Section I.B).

Specifically, it should:

- a) Describe the specific natural resource management decision that the project will address, including its context, related uncertainties that would be informed or reduced by additional research, and its geographic extent. Applicants should also outline the timeline and specific steps for the decision and highlight steps where additional research findings and products could inform the decision.
- b) Describe the research questions related to the uncertainties developed during the design phase, proposed methods to conduct the research to address those questions, and an approach for incorporating new information needs into the project's design should they emerge.
- c) Describe the types of findings and products expected to come from the research and how they are expected to reduce uncertainties associated with the specific natural resource management decision.
- d) Describe the strategy and timeline for developing, transferring, and applying the findings and products to their specific natural resource management decision.
- e) Describe the specific activities and steps the project team has taken to build and maintain relationships among team members and complete the scoping and design phases of their project.
- f) Describe the composition of the project team and the responsibilities of each team member. The project team must include one or more natural resource managers, one or more researchers, and one or more representatives from the stakeholder community (e.g., resource users). A co-production lead from among the team should be identified, and important collaborators that are not on the project team should be listed.
- g) Describe how the project team will operate and ensure accountability going forward, including how decisions and disputes will be addressed and how the team will periodically self-assess its co-production process.

Element 5: Statement of Diversity, Equity, and Inclusion

• One-page maximum, single spaced, 12-point font, one-inch margins

In this statement, describe how the proposed project incorporates the principles of diversity, equity, and inclusion. Applicants may also highlight past diversity, equity, and inclusion efforts and the value those experiences will add to the proposal.

Element 6: Data Management Plan

• Two-page maximum, single spaced, 12-point font, one-inch margins

The data management plan should describe how metadata and data collected as part of the proposed project would be disseminated to the broader community, and plans for long-term archiving of these data.

A typical plan should include:

- a) Descriptions of the types of environmental data and information expected to be created during the course of the project.
- b) The tentative date by which data will be shared.
- c) The standards to be used for data/metadata format and content.
- d) Methods for providing data access.
- e) Approximate total volume of data to be collected.
- f) Prior experience in making such data accessible.

The Science Program will not offer specific technical guidance; however, use of open-standard formats and methods is encouraged.

Accepted submission of data to the NOAA National Centers for Environmental Information (NCEI) is one way to satisfy data sharing requirements; however, NCEI is not obligated to accept all submissions and may charge a fee, particularly for large or unusual datasets. Applicants that propose to collaborate with data centers or networks, except the NCEI, are advised to obtain letters of commitment that affirm the collaboration. Where possible, applicants are strongly encouraged to use existing data centers and data portals to archive and disseminate their data.

Costs associated with data archiving may be included in the proposed budget (see Element 15).

Refer to Section VIII.A in the funding announcement for specific Data Management Guidance.

Element 7: References Cited

• Single spaced, 12-point font, one-inch margins

Each reference must include the names of all authors in the same sequence they appear in the publication, the article title, volume number, page numbers, and year of publication.

This section should include bibliographic citations only and should not be used to provide parenthetical information outside of the Project Narrative (Element 4).

Element 8: Natural Resource Management Letter of Participation

Each proposal must include a letter of participation from each natural resource management body represented on the project team. The letter should:

- a) Describe their roles in the proposed project.
- b) Describe how they were previously involved in the scoping and design phases of the project and two key insights they gained from those phases.
- c) Describe their plan for how and when they intend to use the findings and products from the project to inform their specific natural resource management decision.

Element 9: Milestone Chart

As shown in the example on the next page, provide the anticipated timelines of major tasks and milestones associated with the proposed project.

Applicants are required to use the milestone chart template (which includes an example) included with the electronic proposal package (and also available at https://restoreactscienceprogram.noaa.gov/resources; OMB Control No. 0648-0384).

			2023	2	2024												2028																			
Task	Task Category	Task Start Date		Q1	(Q2	Q3		Q4		Q1	Q2	2	Q3		Q4	Q1	1	Q2		Q3	Q4	1	Q1		Q2	\Box	Q3	Q4		Q1	Q	2	Q3		Q4
		Date	Date	O N	D J	J F	МА	M J	J	A S	O N	D J	F	M A I	M J	J A	s o	N D	J F	- М	A M	J J	A S	0 1	N D	J F	M	А М	J J	A S	0 N	D J	F M	A M	1 J .	J A S
Milestone 1: Meetings					- -		- -	- -							- -	- - -	- -							- -		- -		- -						- -		x
1.1 Project team meeting - planning refresh	Meetings	10/1/2023	10/31/2023						П				П								\Box	\neg	П	П			П								П	\top
1.2 Project team meetings with external stakeholders		11/1/2023	3/31/2028																								\Box									
Project team meetings - adaptive planning of research 1.3 design/methods		12/1/2023	1/31/2027																																	\Box
1.4 Project team - communications and transfer of findings		8/1/2024											-			\rightarrow	_					+	+	+-			+			_	_		+		+	++
,	14	10/1/2024			\vdash	+	_		++				+			-			+++			+	+		+		++		-	_			++		+	+
Project team - application of findings check in Conference calls with technical monitors	Meetings Meetings	10/1/2024					+		+	+			+			+			++	++		+			+	\vdash	+		+	-			++		+	\blacksquare
1.7 Site visit with technical monitors (annual)		8/1/2024					_		+				+			\rightarrow			+	_		+	+		+	\vdash	+		+	+			+		-	++
Milestone 2: Field Data Collection	Meetings	8/1/2024	9/30/2027		\vdash	+										- Y							-						- Y	+			++		++	++
2.1 Expedition #1: Pre-Expedition Preparation	0	3/1/2024	4/30/2024	\vdash	\vdash	-	-		-	-			- 1		- -	- ^						-	-	-	-		-		- ^	+		\vdash	++	++	++	++
2.1 Expedition #1: Pre-Expedition Preparation 2.2 Expedition #1: Full Depth Cruise	Cruise	5/1/2024		-	\vdash	+				+	\vdash	_	\vdash	\rightarrow	+	+	+	\vdash	++	++	+	+	\vdash	++	+	\vdash	+	+	+	+	-	\vdash	++	++	++	++
2.3 Expedition #1: Full Depth Cruise 2.3 Expedition #2: Pre-Expedition Preparation	Cruise	3/1/2024	0,00,00		\vdash	+	+			+			\vdash		+	+	+		+	++	+	+	+	++	+	\vdash	+	+	+	+			++	++	++	++
2.4 Expedition #2: Mesophotic Cruise 1	Cruise	5/1/2025			\vdash	+	_	\vdash	+	+	\vdash	_	Н			$\overline{}$	_	\vdash	+++	+	+	+	+	+	_	\vdash	+	+	+	_			++	++	+	++
2.5 Expedition #3: Pre-Expedition Preparation	Cruise	3/1/2026		-	\vdash	+	+	\vdash	+	+	\vdash	\vdash	+			+	+	+	++			+	+	++	+	\vdash	+	+	+	+	\vdash	\vdash	++	++	++	++
2.6 Expedition #3: Mesophotic Cruise 2	Cruise	5/1/2026		-	\vdash	+	+	\vdash	+	+	\vdash	-	\vdash		+	-	+	\vdash	+				\vdash	+	+	\vdash	+	+	+	+			+	+	++	++
2.7 Expedition #4: Pre-Expedition Preparation	Cruise	3/1/2027			\vdash	+	+	\vdash	+	+	\vdash	\vdash	+		+	+	+	\vdash	++	++			\vdash	++	+	\vdash			+	+	-		++	++	++	++
2.8 Expedition #4: Mesophotic Cruise 3	Cruise	5/1/2027			\vdash	+	+	\vdash	+	+	\vdash	_	+	\rightarrow	+	\rightarrow	_	\vdash	+	+	+	+	\vdash	+	+	\vdash				+	-		+	+	+	++
Milestone 3: Field Data Processing	Cruise	3/1/202/	0/30/2027		\vdash	+	+	\vdash								- - -							l. l.				1. 1						l. l.		l. I.	×
3.1 Voucher specimens curation	Data Processing	7/1/2023	12/1/2027		\vdash	+		\vdash																			_									-
3.2 DNA extractions	Data Processing	8/1/2023			\vdash	+		\vdash					\vdash							+	+	_					+							+	+	++
3.3 DNA barcoding	Data Processing	11/1/2024		_		+																+													+	++
3.4 Publication of DNA barcoding data on GenBank	Data Management	5/1/2028				+		\vdash	+							\dashv						+	+				+									
3.5 RAD Sequencing Contracting	Admin	8/1/2024			\vdash	+		\vdash			\vdash		\vdash		\top	-		\vdash	+	+	+	+	+	+	+	\vdash	+	\dashv	+	+			+		_	_
3.6 RAD Sequencing	Data Processing	9/1/2024		_	\vdash	\top		\vdash	\top						\top						\top	+						\top	\top					\vdash	+	++
3.7 RADseq data QAQC and filtering	Data Processing	1/1/2025		-					\top				Н								\top	\top													+	+
Milestone 4: Data Interpretation	Data 1 100000mig	17172020	0/01/2020						\top				П				- -					. -						- -								- x
4.1 Analyses of spatial population genetic structuring	Data Analysis	4/1/2025	6/30/2028		\vdash	\top		\vdash	\top	\top			\vdash			\neg					$\overline{}$			т			\Box									
4.2 Analyses of genetic connectivity rate and directionality	Data Analysis	71/25			\vdash	\top		\vdash	\top	\top			H					\vdash	++	\top				+	\top	\vdash	11									+
4.3 Integration of population genetic and modeling data	Modeling	8/1/2025			\vdash	\top		\vdash	\top	\top			\vdash																							
4.4 Larval Dispersal modeling	Modeling	11/1/2026			\vdash	\top		\vdash	+	\top			\vdash		\top												+							+	+	
Milestone 4: Publications	Wodeling	11/1/2020	0/01/2020		\vdash	+	\top	-	I				- I.		. .					- 1.				1. 1.			1.									>
5.1 Cruise Reports	Publication	6/1/2024	7/31/2027		\vdash	+	+						т														_									
5.2 Dissemination of cruise metadata	Data Management				\vdash	+	+			+			+				+			++	+++		-				++	\dashv		+			++	++	++	++
5.3 Completion of peer-reviewed publications	Publication	1/1/2024			\vdash	+	+	\vdash	+	+			+		+	+	+							+	+											
Milestone 6: Outreach	Publication	1/1/2020	9/30/2020		\vdash	+	_																										- v			+
6.1 Stakeholder workshops		F/4/0004	0/00/0000		\vdash	+	+			_			- 1									-		-			-						- ^	-	++	++
		5/1/2024			\vdash	+	_		+	+			+			\dashv				+	+	+	+		+		+	+	_	_				++	++	++
6.2 Training sessions for resource managers					\vdash	+	+	\vdash	++				\vdash											+			++							\vdash	++	++
6.3 Scientific Meeting	Presentations	9/1/2024		-	\vdash	+	_	\vdash	+				\vdash									-		+			+							-	++	++
6.4 End of Project workshop	Workshop	3/1/2028	3/31/2028		\vdash	+							\vdash										-				+									
Milestone 7: Reporting					\vdash		- -			-					- -	- - -			- -			- -	- -		- -		- 1	- -								- ×
7.1 Progress reports	Data Management	3/1/2024		-	\vdash	+		\vdash	+				Н		+	+		-	++		+	+		-	+	-		\rightarrow	_					-	+	+
7.2 Final Report Archive annotated video frames at DSCRTP w/in 6	Data Management	7/1/2028	9/30/2028		\vdash	+	_						\vdash				_			+	\rightarrow		\vdash	+	_		+	-						-		+
Archive annotated video frames at DSCRTP w/in 6 7.3 months after cruise	Data Management	7/1/2024	8/31/2028																																	
Archive coral specimens at NOAA/Harvey	Data management	1,112024	0,01/2020		\vdash	+	\perp				\vdash			+				\vdash			+			+	+									+		
7.4 Mudd/Smithsonian within 1 yr from collection	Data Management	2/1/2025	2/28/2028		\Box	\perp												\Box					\Box													$\perp \! \! \perp$
7.5 Archive CTD data at NCEI within 1 year from collection	Data Management	2/1/2025	2/28/2028																																\Box	
7.6 Archive video at NCEI at end of project	Data Management	11/1/2027	8/31/2028																																	
Archive genetic data at NCBI/Dryad at time of publication	Data Management	11/1/2027	8/31/2028																			T														
7.8 Archive model output at NCEI at time of publication	Data Management				\Box	\top			\top	\top			П			\dashv	\top			\top	\dashv	\top		\top			\top								\top	

Element 10: Biographical sketches

• Two-page maximum per person, single spaced, 12-point font, one-inch margins

The lead investigator and each co-investigator (including natural resource managers) must provide a summary of up to two pages that includes:

- a) Their email and mailing address.
- b) A list of professional and academic credentials and accomplishments.
- c) A list of up to five examples or publications that describe their past experience working with researcher and natural resource manager partnerships and transferring and applying research findings and products in a natural resource management context.
- d) A list of up to five archived datasets most closely related to the proposed project.

Element 11: Current and Pending Support

Using the form on the next page, describe all current and pending financial/funding support (*e.g.*, federal, state, not-for-profit, industry), including continuing grants, for the lead investigator, each co-investigator (including natural resource managers), and each unfunded collaborator making a substantial contribution to the project.

The capability of the investigators and collaborators to complete the proposed work in light of present commitments to other projects should be addressed. Therefore, please discuss the percentage of time investigators and collaborators have devoted to other federal or non-federal projects, as compared to the time that will be devoted to the project solicited under this notice.

A fillable version of the Current and Pending Support form is available at this link: https://coastalscience.noaa.gov/about/funding-opportunities/application-forms/.

You must respond to the requirement whether or not you have any current and/or pending support.

CURRENT AND PENDING SUPPORT FORM

OMB Approval: 0648-0384 Expiration Date: 01/31/2025

The following information must be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.

<u>Investigator</u> :	
Other agencies to which this proposal has been/will be submitted:	
Support: Current Pending Submission Planned in Near Future *Transfer of Support	t
<u>Project/Proposal Title</u> :	
Source of Support:	
Total Award Amount: \$	
<u>Total Award Period Covered</u> :	
<u>Location of Project</u> :	
Months of Your Time Committed to the Project: FY XX: FY XX: FY XX: FY XX: Total:	_
Support: Current Pending Submission Planned in Near Future *Transfer of Support	ţ
Project/Proposal Title:	
Source of Support:	
Total Award Amount: \$	
Total Award Period Covered:	
Location of Project:	
Months of Your Time Committed to the Project: FY XX: FY XX: FY XX: FY XX: FY XX: Total:	_
Support: Current Pending Submission Planned in Near Future *Transfer of Support	t
Project/Proposal Title:	
Source of Support:	
Total Award Amount: \$	
Total Award Period Covered:	
Location of Project:	
Months of Your Time Committed to the Project: FY XX: FY XX: FY XX: FY XX: FY XX: Total:	_
Support: Current Pending Submission Planned in Near Future *Transfer of Support	t
Project/Proposal Title:	
Source of Support:	
Total Award Amount: \$	
Total Award Period Covered:	
Location of Project:	
Months of Your Time Committed to the Project: FY XX: FY XX: FY XX: FY XX: Total:	
	_
*If this project has previously been funded by another entity, please list and furnish information for immediately preceding funding period.	

NOTE: Use additional sheets as necessary

Element 12: Accomplishments from Prior Support

• Single spaced, 12-point font, one-inch margins

If the lead investigator or any co-investigators have received federal or state funding awards in the past five years for research relevant to this funding opportunity, information on the awards is required.

The following information must be provided:

- a) The award number, amount, and period of support.
- b) The title of the project.
- c) A summary of the results of the completed work.
- d) Publications resulting from the award.
- e) Archived datasets resulting from the award.
- f) A brief description of outputs and outcomes, especially the application of research findings and products in a natural resource management context.
- g) As appropriate, a description of the relation of the completed work to the proposed work.

Element 13: Permits

• Single spaced, 12-point font, one-inch margins

Provide a list of all applicable permits that will be required to perform the proposed work.

You must respond to this requirement element whether or not permits are required.

Element 14: Standard Form-424A

The Standard Form (SF)-424A Budget Form identifies the budget for each fiscal year of the proposal. For this announcement, applicants may apply for one (1) to five (5) years of funding.

Place each fiscal year in separate columns in section B of page 1 on the SF-424A. This revised SF-424A section B format is a NOAA requirement that is not reflected in the Instructions for the SF-424A.

For proposals requesting five (5) years of funding, noting that the SF-424A only has four columns (see page 2), you should use two SF-424A forms, as follows:

- 1. Place the first four years on one of the forms in Section B, columns (1) through (4).
- 2. Total the first four years in column (5).
- 3. Place the total from the first form (from column (5)) onto the second SF-424A form in Section B column (1) and use column (2) for the fifth year budget figures.
- 4. Total all five years in column (5) on the second SF-424A.

The budget figures must correspond with the description contained in the budget justification.

Multi-investigator proposals using a subaward approach must submit a SF-424A for each subaward that has the same budget figures as its corresponding budget justification. The lead institution should list the total for subcontracts under 6.f. "Contractual" and the total for subawards under 6.h. "Other" in their SF-424A.

A fillable version of this form and the form instructions may be downloaded from: http://www.grants.gov/web/grants/forms/sf-424-family.html.

An example set of SF-424As is provided on the next six pages.

OMB Number: 4040-0006 Expiration Date: 01/31/2019

SECTION A - BUDGET SUMMARY

Grant Program Function or	Catalog of Federal Domestic Assistance	Estimated Unob	ligated Funds		New or Revised Budget	
Activity	Number	Federal	Non-Federal	Federal	Non-Federal	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1. NOAA RESTORE	11.451	\$	\$	\$ 3,318,550.00	\$	\$ 3,318,550.00
Science						
Program						
2.						
3.						
4.						
4.						
5. Totals		\$	\$	\$ 3,318,550.00	\$	\$ 3,318,550.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	T			GRANT PROGRAM, F	UN	CTION OR ACTIVITY			Total
o. Object Sidoo Odtogorioo	(1)		(2)		(3)		(4)		(5)
		Year 1		Year 2		Year 3		Year 4	Total Years 1 - 4
a. Personnel	\$	100,000.00	\$	100,000.00	\$	150,000.00	\$	150,000.00	\$ 500,000.00
b. Fringe Benefits		33,000.00		33,000.00		49,500.00		49,500.00	165,000.00
c. Travel		10,000.00		15,000.00		10,000.00		12,000.00	47,000.00
d. Equipment		0.00		50,000.00		0.00		0.00	50,000.00
e. Supplies		75,000.00		75,000.00		60,000.00		50,000.00	260,000.00
f. Contractual		250,000.00		250,000.00		250,000.00		250,000.00	1,000,000.00
g. Construction		0.00		0.00		0.00		0.00	0.00
h. Other		50,000.00		50,000.00		50,000.00		50,000.00	200,000.00
i. Total Direct Charges (sum of 6a-6h)		518,000.00		573,000.00		569,500.00		561,500.00	\$ 2,222,000.00
j. Indirect Charges		95,400.00		111,900.00		110,850.00		108,450.00	\$ 426,600.00
k. TOTALS (sum of 6i and 6j)	\$	613,400.00	\$	684,900.00	\$	680,350.00	\$	669,950.00	\$ 2,648,600.00
7. Program Income	\$		\$		\$		\$		\$ Poly 7, 07)

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			SECTION	C ·	- NON-FEI	ERAL RESO	UR	RCES						
	(a) Grant Program				(b) A	plicant		(c) State		(d) Other Sources		(e)TOTALS		
8.	NOAA RESTORE Science Program			\$		0.00	\$	0.00	\$	0.00	\$ [0.00		
9.														
10.											[
11.														
12. 7	TOTAL (sum of lines 8-11)			\$		0.00	\$	0.00	\$	0.00	\$	0.00		
			SECTION	D	- FORECA	STED CASH	NE	EDS						
			Total for 1st Year		1st	Quarter	١,	2nd Quarter		3rd Quarter		4th Quarter		
13. I	Federal	\$_	613,400.00	\$		13,400.00	\$	200,000.00	\$	200,000.00	\$	200,000.00		
14. ľ	Non-Federal	\$												
15. 7	FOTAL (sum of lines 13 and 14)	\$	613,400.00	\$		13,400.00	\$	200,000.00	\$	200,000.00	\$	200,000.00		
		GE	T ESTIMATES OF FE	DE	ERAL FUN	DS NEEDED	FO	R BALANCE OF THE						
	(a) Grant Program							FUTURE FUNDING	PE					
				╀	(b)First	<u> </u>	(c) Second	_	(d) Third	<u> </u>	(e) Fourth		
16.	NOAA RESTORE Science Program			\$		684,900.00	\$	680,350.00	\$	669,950.00	\$	669,950.00		
17.														
18.														
19.														
20.	TOTAL (sum of lines 16 - 19)			\$		684,900.00	\$	680,350.00	\$	669,950.00	\$	669,950.00		
	SECTION F - OTHER BUDGET INFORMATION													
21. [21. Direct Charges: 22. Indirect Charges: 30% of modified direct charges													
23. F	Remarks:		23. Remarks:											

OMB Number: 4040-0006 Expiration Date: 01/31/2019

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a) Catalog of Federal Domestic Assistance Number (b) Estimated Unobligated Funds New or Revised Budget Non-Federal (c) (d) \$ 1.	Total (g)
	(g)
2.	
3.	
4.	
5. Totals \$ \$ \$ \$ \$ \$	

SECTION B - BUDGET CATEGORIES

6. Object Class Categories				GRANT PROGRAM, F	=UN	NCTION OR ACTIVITY		Total
o. Object Glass Gategories	(1)		(2))	(3)		4)	(5)
		Total Years 1 - 4		Year 5				Total Years 1 - 5
a. Personnel	\$	500,000.00	\$	150,000.00	\$		S	\$ 650,000.00
b. Fringe Benefits		165,000.00		49,500.00				214,500.00
c. Travel		47,000.00		12,000.00				59,000.00
d. Equipment		50,000.00		0.00				50,000.00
e. Supplies		260,000.00		50,000.00				310,000.00
f. Contractual		1,000,000.00		250,000.00				1,250,000.00
g. Construction		0.00		0.00				0.00
h. Other		200,000.00		50,000.00				250,000.00
i. Total Direct Charges (sum of 6a-6h)		2,222,000.00		561,500.00				\$ 2,783,500.00
j. Indirect Charges		426,600.00		108,450.00				\$ 535,050.00
k. TOTALS (sum of 6i and 6j)	\$	2,648,600.00	\$	669,950.00	\$		3	\$ 3,318,550.00
7. Program Income	\$		\$		\$			\$

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	SECTION C - NON-FEDERAL RESOURCES												
		(a) Grant Program				(b) Ap	plicant		(c) State	(d)	Other Sources		(e)TOTALS
8.					\$		0.00	\$	0.00	\$	0.00	\$ [0.00
9.													
10.													
11.													
12.	TOTAL (sum of li	nes 8-11)			\$		0.00	\$	0.00	\$	0.00	\$	0.00
				SECTION	D.	- FORECA	STED CASH	NE	EEDS				
				Total for 1st Year		1st	Quarter	١,	2nd Quarter		3rd Quarter	_	4th Quarter
13.	Federal		\$	0.00	\$		0.00	\$	0.00	\$	0.00	\$_	0.00
14. I	Non-Federal		\$	0.00			0.00		0.00		0.00		0.00
15. ⁻	TOTAL (sum of li	nes 13 and 14)	\$	0.00	\$		0.00	\$	0.00	\$	0.00	\$	0.00
		SECTION E - BUD	GET	ESTIMATES OF FE	DE	RAL FUN	DS NEEDED	FO	OR BALANCE OF THE P	RO	JECT		
		(a) Grant Program							FUTURE FUNDING P	ERI			
						(b)First		(c) Second		(d) Third		(e) Fourth
16.					\$			\$	3	\$		\$	
17.													
18.													
19.													
20.	TOTAL (sum of li	nes 16 - 19)			\$			\$	S	\$		\$	
	SECTION F - OTHER BUDGET INFORMATION												
21.	21. Direct Charges: 22. Indirect Charges:												
23. I	23. Remarks:												

Element 15: Budget Narratives

• Single spaced, 12-point font, one-inch margins

All proposals must include a detailed budget narrative covering the proposed period of performance with a justification to support all proposed budget categories for each fiscal year. For additional information concerning each of the required budget categories and appropriate level of disclosure please see: https://www.noaa.gov/sites/default/files/legacy/document/2019/Jun/gmd budget narrative guidance - 05-24-2017 final.pdf.

Personnel costs should be broken out for each named investigator, number of months, and percentage of time requested per investigator. Support for each investigator should be commensurate with their stated involvement each year. Unnamed personnel (e.g., graduate students, postdoctoral researchers, technicians) should be identified by their job title and their personnel costs explained similar to investigator personnel costs above. The contribution of any personnel to the project goals should be explained.

Travel costs should be broken out by number of people traveling, destination and purpose of travel, and projected costs per person. Equipment costs should describe the equipment to be purchased and its contribution to the achievement of the project goals. Applicants may include publication costs.

Proposals are permitted to include the costs of project-level data management, including coordinating, organizing, documenting, formatting, or otherwise preparing datasets for submission to NOAA or non-NOAA data facilities; establishing and maintaining data access tools and services and related metadata; and managing non-digital data that are not required to be made publicly accessible, including laboratory notebooks, preliminary analyses, drafts of scientific papers, plans for future research, peer review reports, communications with colleagues, or physical objects such as laboratory specimens.

A separate budget narrative is required for each institution that is proposed to receive funds through a subaward or subcontract to the lead institution. The budget narratives should describe the work to be supported and indicate the applicability or necessity to the project. When a collaborator or contractor is known before applying, signed approval from the institution of each subaward and subcontract must accompany its budget justification. The lead institution is responsible for sending funds to its subaward and subcontract institutions. For acquisition contracts, the purpose and cost or price must be fully justified and the contract must comply with 2 C.F.R. 200.317-.326.

Element 16: CD-511, Certification Regarding Lobbying

Required only for the lead institution, which may submit this form through the <u>Grants.gov</u> CD511 document placeholder without a hard signature because electronic signatures are allowed on documents from the submitting institution.

The form is on the next page and may also be downloaded from: http://www.grants.gov/web/grants/forms/sf-424-family.html.

CERTIFICATION REGARDING LOBBYING

(REV 1-05)

Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, 'New Restrictions on Lobbying.' The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Commerce determines to award the covered transaction, grant, or cooperative agreement.

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying.' in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying,' in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

* NAME OF APPLI	CANT			
* AWARD NUMBE	R	1	* PROJECT NAME	
Prefix:	* First Name:		Middle Name:	
* Last Name:				Suffix:
* Title:				
* SIGNATURE:			* DATE:	
				28

Element 17: SF-424B, Assurances - Non-Construction Programs

Required only for the lead institution, which may submit this form through the <u>Grants.gov</u> SF-424B document placeholder without a hard signature because electronic signatures are allowed on documents from the submitting institutions.

The form is on the next two pages and may also be downloaded from: http://www.grants.gov/web/grants/forms/sf-424-family.html.

OMB Number: 4040-0007 Expiration Date: 02/28/2022

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes 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. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE:

Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

- Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
- Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
- Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
- Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
- 5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
- 6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C.§§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation

- Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U. S.C. §§6101-6107), which prohibits discrimination on the basis of age: (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
- 7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
- Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

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- 9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
- 10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
- 11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514: (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
- Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

- 13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
- 14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
- 15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
- Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
- 17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
- 18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
- 19. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
APPLICANT ORGANIZATION	DATE SUBMITTED

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Element 18: Alphabetized list of collaborators, advisors, and advisees

Provide ONE spreadsheet per proposal that includes ALL collaborators, advisors, and advisees and their respective institutions for EACH investigator (lead investigator, co-investigators, postdocs, sub-awardees, etc.).

The combined and alphabetized list should be on a spreadsheet with individual column headers for First Name, Last Name, and Institution.

Collaborators are individuals who have participated in a project or publication within the last 48 months with any investigator, including co-authors on publications. Collaborators also include those persons with whom the investigators may have ongoing collaboration negotiations.

Advisees are persons with whom the individual investigator has had an association as thesis or dissertation advisor or postdoctoral sponsor. Advisors include an individual's own graduate and postgraduate advisors. Advisees and advisors do not have a time limit.

Unfunded participants in the proposed study should also be included on the list, but not their collaborators.

This information is critical for identifying potential conflicts of interests and avoiding bias in the selection of reviewers.

Optional Elements

Optional Element 1: Additional Letters of Support or Commitment

Letters of support or commitment in addition to the required natural resource management letter of participation (see element 8) are strongly encouraged, but not required. Consider providing letters from partners that confirm contributions to and support for the proposed work, such as team members included in the project but not funded in the budget, natural resource management bodies and other end users not represented on the project team who play a role in the natural resource management decision, and individuals or groups that provide access to data or other needs for the proposed project. If applicable, the letter should summarize how input from those not on the team will be considered and how the applicants will coordinate with them on the development, transfer, and application of research findings and products.

Optional Element 2: Indirect Costs Rate Agreement

Proposals that request funds for indirect costs for institutions that have a current federally approved rate should provide the indirect cost rate agreement for the lead institution and each institution that is proposed to receive funds through a subaward or subcontract to the lead institution. An applicant without a federally approved rate should refer to Section IV.F of the Announcement regarding options.

Optional Element 3: SF-LLL Disclosure of Lobbying Activities

If lobbying activity is or has been secured to influence the outcome of a covered federal action, complete the SF-LLL standard lobbying disclosure form, which may be found on the next page and at https://www.grants.gov/web/grants/forms/sf-424-family.html, and submit it with your full proposal.

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

OMB Number: 4040-0013 Expiration Date: 02/28/2022

1. * Type of Federal Action:	2. * Status of Federal Action:	3. * Report Type:
a. contract	a. bid/offer/application	a. initial filing
b. grant	b. initial award	b. material change
c. cooperative agreement	c. post-award	
d. loan		
e. loan guarantee		
f. loan insurance		
4. Name and Address of Reporting Entity:		
Prime SubAwardee		
* Name		
* Street 2		
* City	State	Zip
Congressional District, if known:		
5. If Reporting Entity in No.4 is Subawardee, Enter Name and Address of Prime:		
6. * Federal Department/Agency: 7. * Federal Program Name/Description:		
CEDA Number if amiliable.		
8. Federal Action Number, if known: 9. Award Amount, if known:		
6. Federal Action Number, II known.		it, ii kilowii.
10. a. Name and Address of Lobbying Registrant:		
Prefix * First Name Middle Name		
* Last Name Suffix		
* Street 1	Street 2	
* City	State	Zip
b. Individual Performing Services (including address if different from No. 10a)		
Prefix * First Name Middle Name		
* Last Name Suffix		
* Street 2		
* City	State	Zip
	- Clare	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to		
the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.		
* Signature:		
	e Middle N	ame [
*Name: Prefix *First Nam	Middle N	ame
* Last Name	Sut	fix
Title:	Telephone No.:	Date:
Authorized for Local Department on		
Federal Use Only:		Standard Form - LLL (Rev. 7-97)