

DEP CONTRACT / GRANT REVIEW FORM

DEP Contract No. WM991 - Original Contract/Agreement

A #1

CONTRACTOR / GRANTEE INFORMATION

Name	Physical & Remit Address	City, State, ZIP	Contact Person	Phone	FY End	FEID
Texas A&M University	400 Harvey Mitchell Parkway South, Suite 300	College Station, Texas 77845-4375	Travis Young (Admin) Robin Brinkmeyer (Technical)	979-845-0206 (Admin) 409-741-7178 (Tech)	09/30	74-6000531

DEP CONTRACT / GRANT INFORMATION

DEP Contract/Grant No.:	WM991	DEP Original Contract / Grant Agreement:	N	Amendment No.:		Funding Increment No.:	
Type:	☒ Services ☐ Grants ☐ Commodities ☐ Visitor Services ☐ Other Type	Procurement Method: Exempt-Southern Assoc. Colleges					
Change Order No.:		Is travel cost reimbursable?	N	DMS/Class Group:	991-378	Program Reference:	GOMA
Grant Information	Are federal funds supporting this Contract?	Y	Are State funds supporting this contract being used as match to a federal grant?	N	Enter Federal Grant here & CFDA# in FUNDING INFORMATION section.	11.473	
Land/Equipment Ownership	Are equipment purchases authorized under this Contract?	N	Will DEP retain ownership?		Are land purchases authorized under Contract?	N	Will DEP/BOT retain ownership?
Is this a Certified Minority Business?	N	If Yes, Certified MBE:		Registered Minority Business?	N	If Yes, Registered MBE Code:	
Contract Begin Date:	Execution	End Date:	January-16, 2013	Cost Reimb.	☐	Cost Reimb./Fixed Fee	☒ Fixed Price ☐ Fee Schedule ☐ Advance Pmt.
Subject/Brief Description of Contract:							

Study introduction of High-Risk HAB's to Gulf of Mexico via ships' ballast water

FUNDING INFORMATION

Contract Ceiling Amount, if any	\$0.00			Funding Change Type	☒ Increase Funding Amount ☐ Decrease Funding Amount ☒ No Change to Funding			Change Amount	\$0.00		Contract Funding Amount	\$8,024.24	
Org Code	EO	Object Code	Fund/ FID	BE	Category	YR	GAA L	CSFA/ CFDA	Rec. Type	Grant No.	OCA/ Module No.	Project No.	Amount
37304040000	LR	132600	261019	37300100	140076	12	10488	11:473	N/A	F0973		WM991	\$8,024.24
Specify County or Counties where work is being performed.													
Out-of-state										For projects containing an object code of 75XXXX or 79XXXX, CFSA or CFDA and Recipient Type must be completed.			
										Journal Transfer Info (29 digit code)			
										B/F Object			

MANAGEMENT INFORMATION

Division/District/Office:	DEAR	Bureau/Office:	BARS
Contract Manager:	Kate Muldoon	Phone No. of Manager:	850-245-8579
		Mail Station #:	3525

REVIEW AND EXECUTION INFORMATION

Review Role	Approved By - Signature	Date Approved	Identify Delegation of Authority for Person Executing Contract:
Contract Manager:	<i>[Signature]</i>	1/25/2013	PROSH Extension to March 15, 2013 Procurement Initials JR
Budget Representative:	<i>[Signature]</i>	1-29-2013	
Bureau Chief:	<i>[Signature]</i>	1/28/13	
Division/District Director:	<i>[Signature]</i>	1/29/13	
Quality Assurance:	N/A		
Contracts Administrator:	<i>[Signature]</i>	1/5/13	
General Counsel:	<i>[Signature]</i>		
Division/District IRM:	N/A		
Department CIO:	N/A		
Required ☒ M/FMP Registered? Transaction Fee Exemption Form? ☐ Y ☐ N/A Required ☒ Vendor/Recipient Relationship Checklist? Insurance Certificates? ☐ Y ☐ N/A Required ☒ Summary of Contractual Services Agreement (CSA) Form? Other Requirements?			

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CONTRACT/GRANT REVIEW PROCESS

Note: The Contract/Grant Review Process should only be initiated after the Department's Procurement Section has developed and/or approved the contractual agreement. The purpose of this review process is to demonstrate concurrence with the contractual or grant agreement as written. It is the Contract/Grant Manager's responsibility to insure that the Contract/Grant Review Process has been completed prior to contract/grant execution.

Position		Purpose/Requirement
Contract/Grant Manager		Signature indicates concurrence with the contract or grant agreement as written. If the Contract/Grant Manager has the authority to execute contracts/grant agreements, he/she must not do so. Someone with proper delegated authority in a supervisory role over the Contract/Grant Manager must be responsible for contract/grant agreement execution.
Budget Representative		Signature indicates concurrence with the payment arrangements included in the contract/grant, including the funding sources depicted on the Contract/Grant Review Form. If changes to the funding information are made, the Procurement Section must be contacted regarding possible impacts to the contract or grant agreement language as a result of the funding change.
Bureau Chief or Comparable Position		Signature indicates concurrence with the contract or grant agreement as written. If the Bureau Chief is delegated authority to execute the contract or grant agreement, review and approval by the Division/District Director may not be required.
Division/District Director		Signature indicates concurrence with the contract or grant agreement as written. If the Bureau Chief is delegated authority to execute the contract or grant agreement, then the review and approval of the Division/District Director may not be required.
Quality Assurance		Signature demonstrating concurrence with the quality assurance language contained in the contract must be obtained in cases where water, soil or air sampling and/or analysis will be performed under the contract. The Division of Air Resources Management will be responsible for approving all quality assurance language regarding air sampling/analysis activities. The Environmental Assessment Section with the Division of Environmental Assessment and Restoration will be responsible for approving all quality assurance language regarding water and soil sampling/analysis activities.
Contracts Administrator		Unless specifically waived by DEP Directives 315, 316, and 317, review and approval by the Department's Contract Administrator (Procurement Administrator or designee) is required on all agency contracts.
General Counsel		The Office of General Counsel is required to review and approve all Department contracts or grant agreements which exceed the purchasing threshold category three. In addition, review and approval of contracts and grant agreements funded with federal dollars which fall under the purchasing threshold category three must be conducted by the General Counsel's Office. The Office of General Counsel reviews and approves contracts or grant agreements regarding form and legality. Review/approval by the Office of General Counsel is not required for state funded activities which utilize DEP 55-205 and are not in excess of Purchasing Category Three.
Division/District IRM and Department CIO		Approval required for contracts or grant agreements in which the Department is procuring information technology goods or services.

CONTRACT/GRANT AGREEMENT DISTRIBUTION PROCESS

Upon full execution of the contract, the Contract/Grant Manager is responsible for distributing copies of the Contract or Amendment and this form as follows:

Entity	Distribution Process Steps									
Procurement Section (MS93)	Send original executed contract, grant agreement, or contract/grant amendment and a photocopy of the Contract Review Form. This is not required for agreements that fall under DEP Directive 316.									
Contracts Disbursements Section (MS78)	Send two photocopies of the executed contract or grant agreement and two photocopies of the Contract/Grant Review Form.									
Contract Manager	Maintain a photocopy of the executed contract or grant agreement and the original Contract/Grant Review Form.									
Contractor	Send the remaining originally executed contract or grant agreement to the Contractor for its records.									

RECIPIENT TYPE CODES FOR STATE AND FEDERAL FINANCIAL ASSISTANCE

A	B	C	D	E	F	G	H	I	J
Non-Profit Corporation	For-Profit Entity	Local Government & WMD	State Community College	District School Board	Another State Agency	State Universities	No Subrecipient	Mixed Sub-recipient (federal assistance only)	Federal Agency

DEP CONTRACT NO. WM991
AMENDMENT NO. 1

RUSH

THIS CONTRACT as entered into on the 17th day of July, 2012, between the FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (hereinafter referred to as the "Department") and TEXAS A & M UNIVERSITY (hereinafter referred to as the "Contractor") is hereby amended as follows:

- Paragraph 4 is hereby revised to change the completion date of the Contract from January 16, 2013 to March 15, 2013 (a two (2) month no-cost extension).
- In order to revise the Time Schedules for Completion of the tasks, Attachment A, Scope of Work, is hereby deleted in its entirety and replaced with Attachment A-1, Revised Scope of Services, attached hereto and made a part hereof. All references in the Contract to Attachment A shall hereinafter refer to Attachment A-1.

In all other respects, the Contract of which this is an Amendment, and attachments relative thereto, shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have caused this Amendment to be duly executed the day and year last written below.

TEXAS A & M UNIVERSITY

By: Katherine V. Kissmann
Title: Katherine V. Kissmann
Director, Contracts & Grants
Date: January 16, 2013

FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

By: [Signature]
Director, Division of Environmental Assessment
And Restoration or designee

Date: 1/29/13

Kate Muldoon 1/25/2013
Kate Muldoon, DEP Contract Manager

[Signature]
DEP Contracts Administrator

Approved as to form and legality:

[Signature]
DEP Attorney

List of attachments/exhibits included as part of this Amendment:

Type	Letter/Number	Description
Attachment	A-1	Revised Scope of Services (4 pages)

ATTACHMENT A-1

REVISED SCOPE OF SERVICES

GOMA Project— Compile information to identify high-risk Harmful algal blooms (HAB) introduction and transfer mechanisms and identify areas already known to be high risk or hotspots.

For this project, the Contractor will specifically examine ships' ballast water as a transfer mechanism for HABs.

Introduction— Increased transportation of ships' ballast water from port to port has attributed to an increase in the number of harmful algal blooms (HABs) occurring globally over the last several decades (Anderson, 2009). The combination of larger ballast tanks, accelerated international commerce, and shorter transit times contribute to the increasing rate of successful HAB invasions in coastal bays and estuaries (Cohen and Carlton, 1998). Already in the early 1900's ships ballast water was suspected as a vector for a bloom of an Asian species of *Odontella sinensis* (*Biddulphia*) in the North Sea. More recently, Burkholder and colleagues (2007) reported on the presence of 100 phytoplankton species (23 potentially harmful) in 62 ballast tank samples collected from U.S. Navy ships docking at the west and east coasts of the U.S.

Preliminary data—The Contractor has been analyzing ships' ballast water uptake and discharge records for the Port of Houston. In 2010, 9,488,177 metric tons of 'domestic' and 11,605,291 metric tons of 'foreign' ships' ballast water were discharged into Port of Houston waters (figs 1 and 2) (Morris and Brinkmeyer, in prep). These data were obtained from National Ballast Information Clearinghouse (NBIC) database (<http://invasions.si.edu>) maintained by the Smithsonian Institute and the U.S. Coast Guard. For every U.S. port, the NBIC receives ballast uptake and discharge information that includes ship name, IMO call number, last port visited, number of ballast tanks, latitude/longitude of ballast water uptake, exchange, and discharge plus the volumes, method of ballast water management, and notes on exceptions (i.e. justification to forego ballast water exchange (BWE)). The forms are submitted to the database via internet or fax. Ballast water 'source' is delineated by the U.S. Coast Guard using the Exclusive Economic Zone (EEZ; between 3 and 200 nautical miles (nm) offshore—note for Texas and western Florida it is between 9 and 200 nm). Ballast water is either 'overseas' i.e. taken on at foreign ports or in blue water outside of the U.S. EEZ or 'coastwise' if taken up within the EEZ. During the Contractor's review of 2010 Ballast Reporting records for the Port of Houston, several ships were found that utilize ambiguities in the U.S. federal regulations. The definition of 'overseas' and 'coastwise' in the regulations is obviously interpreted rather loosely by some ships. To paraphrase '33 CFR 151.2036' of the U.S. Code of Federal Regulations (CFR), "ballast water taken up in U.S. ports or within the EEZ or within 200 nm is classified as coastwise". This means that ballast water taken up at ports in the U.S. Virgin Islands, Puerto Rico, or any other U.S. territory, regardless of geographic location, ocean, etc., can be discharged at ports in the contiguous U.S. without implementing BWE in open water. The rationale for BWE in open water is to flush out fresh water organisms, typical of ports, and take up salt water so that the freshwater organisms that remain cannot survive. More interesting, from a biologist's perspective, is the finding that ships taking up ballast water at ports in the Bahamas and most of the Pan-American ports (e.g. Mexico, Central and South America-Southern Gulf of Mexico, Pacific or Caribbean) also do not undergo BWE if they sail within the 200 nm boundary and then cite the 33 CFR 151.2036 to justify discharge of 'foreign' water at U.S. ports.

The regulations for discharge of ballast water from domestic sources are also interpreted loosely. For example, ships taking on ballast water at ports along the upper East Coast remain within the EEZ en route to the Gulf of Mexico and then discharge their ballast without undergoing any type of ballast water management like BWE. According to the U.S. Coast Guard, all waters within 200 nm of the U.S. coast are the 'same geographic' ocean. BWE often requires several days and can be hazardous for ships due to potential listing (tilting). The cost of fuel and the time delay for BWE, are the greatest motivation for ships to find creative ways to use loose definitions of the CFRs to classify their ballast water as the 'same geographic water'. Inclement weather and rough seas are also an accepted justification to forego BWE.

The opening of the newly widened Panama Canal in 2014 is expected to more than quadruple imports from Asia to the Port of Houston. The Port of Houston is currently constructing additional deep draft terminals to accommodate the 12,000 to 14,000 Twenty-foot equivalent (TEU) container 'Post-Panamax' mega-sized container ships. In anticipation of these new markets, large chain stores such as Walmart are building their own terminals at the Port of Houston Bayport complex (portofhouston.org). Ports in other Gulf States are making similar preparations.

Based upon the screening of ships ballast water reporting data for just one year, it is obvious that there is much to learn and understand about the activities of the shipping industry in the Gulf of Mexico.

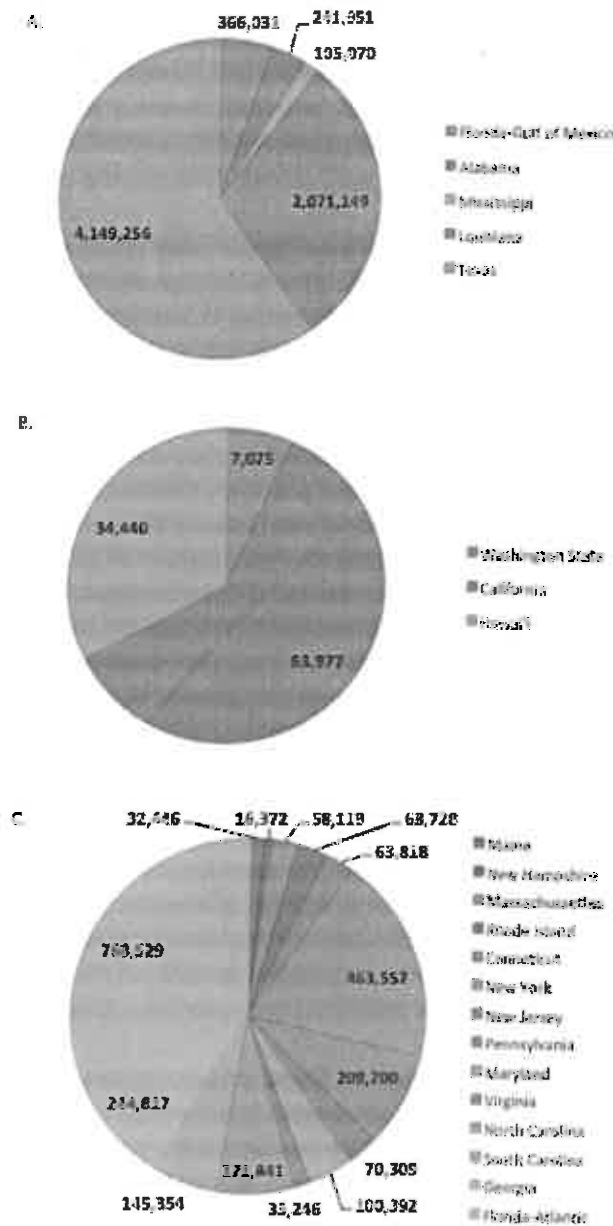


Figure 1. Ships' ballast water (metric tons) discharged at the Port of Houston in 2010 from U.S. ports (Data are combined per ocean and state).

a) Gulf of Mexico States; b) Pacific Ocean States; c) Atlantic Ocean States.

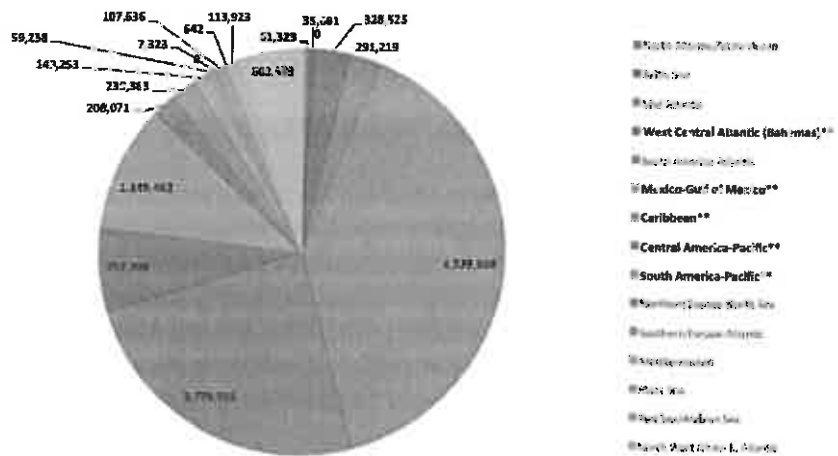


Figure 2. Foreign water sources of ships' ballast water (metric tons) discharged at the Port of Houston in 2010. Double asterisks next to ocean names in the legend indicate frequent lack of BWE by ships with the justification that these and U.S. waters are geographically the same.

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Schedule of Tasks, Deliverables and Invoice Amounts

The Contractor shall be responsible for the completion of the following tasks and for the submittal of the deliverables by the specified due dates.

Task	Due Date	Deliverable	Performance Measures	Financial Consequences	Invoice Amount
1) Compilation of available ballast management records from January 1, 2008 to present for ships entering and leaving the major ports in the Gulf of Mexico(GOM), (data would include relevant info such as ship type, recent ports of call, volume and source(s) of ballast water discharged at GOM ports, or exchange in GOM waters).	4 weeks after contract execution				
2) Literature review of risk analyses studies for HAB species introduction by ballast water from ballasting/de-ballasting practices.	8 weeks after contract execution				
3) The identification of potential 'high risk' areas or 'hot-spots' in the Gulf of Mexico based on information gathered for objectives 1 and 2. These could be ports, ballast water exchange zones, or lightering areas.	16 weeks after contract execution	Electronic summary of raw data. These data will also be included in final report.	Data will be reviewed by DEP staff and comments will be provided for inclusion in written report.	No payment for unsatisfactory work*	\$ 6,000.00
4) Create a written report that presents the findings from obj. 1-3, as well as recommended next steps	March 1, 2013	Written Report (three hard copies and electronic file) including findings and recommendations	Report will be reviewed by DEP staff to ensure that comments have been incorporated and scope of work is fully addressed.	No payment for unsatisfactory work*	\$ 2,024.24
TOTAL:					\$ 8,024.24

*Payment will be made for deliverables deemed acceptable to DEP. DEP's acceptance of services and deliverables will not be unreasonably withheld and will be based on TAMU's completion of services and deliverables in accordance with the terms of this Agreement and the Project Scope of Work.

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