NORTHWEST FLORIDA
STATE COLLEGE

100 College Boulevard • Niceville, FL 32578-1295 • (850) 678-5111 • www.nwfsc.edu

April 5, 2018

Honorable Don Gaetz, Chairman
Triumph Gulf Coast, Inc.
Attn: Susan Skelton, Executive Director
P.O. Box 12007
Tallahassee, Florida 32317

RE: Triumph Gulf Coast Application for the "***Gulf Coast Economy Enhancement Project***"

Dear Chairman Gaetz,

Please find enclosed Northwest Florida State College's Application for funds for the Gulf Coast Economy Enhancement Project.

As detailed in the Application, the *Gulf Coast Economy Enhancement Project* will:

(1) Establish a Marine Engineering Institute to provide a skilled labor force to keep pace with current and future demands of Northwest Florida's marine engineering industry. This shortfall is already hindering economic prosperity in the region, so obviously there is a significant need to prepare students for these careers.

(2) Expose Northwest Florida's K-12 students to the importance of our critical marine infrastructure in their formative years so that they develop an affinity and interest in pursuing professional careers in the marine engineering industry. Thereby, the STEM Education Component will act as a feeder program for NWFSC's Marine Engineering Institute.

(3) Provide economic and environmental improvements in Northwest Florida by collecting all marine-generated sewage that is produced by the boating community and properly disposing of this effluent so it can be processed by a central sewer system and thereby improve our collective economy and environment. The Program will also rotationally provide its pumpout boats to NWFSC's Marine Engineering Institute so that enrolled students can gain invaluable hands-on experience and professional certifications whilst servicing the pumpout boats.

Triumph's one-time investment in the *Gulf Coast Economy Enhancement Project* will fix three significant problems which currently limit economic prosperity in the 8-disproportionately affected counties and will implement a generational solution which will last forever. More effectively stated;

"This transformative marine infrastructure project will improve the overall quality of life for every student, resident, employer, and visitor to the Florida panhandle and position Northwest Florida with the aquatic capacity to accommodate future growth and prosperity for generations to come."

We appreciate the opportunity to submit this application and are looking forward to providing whatever additional information is needed.

Sincerely,

Dr. Devin Stephenson
President
Northwest Florida State College

Triumph Gulf Coast, Inc. Trust Fund
Application for Funds

Proposal Instructions: The Triumph Gulf Coast, Inc. Trust Fund Grant Application (this document) must be completed by the entity applying for the grant and signed, as applicable, by either the individual applying for funds, an individual authorized to bind the entity applying for funds, a chief elected official, the administrator for the governmental entity or their designee. Please read the Application carefully as some questions may require a separate narrative to be completed. In addition, please complete all Addendums that may be applicable to the proposed project or program.

Triumph Gulf Coast, Inc. will make awards from available funds to projects or programs that meet the priorities for economic recovery, diversification, and enhancement of the disproportionately affected counties. Triumph Gulf Coast, Inc. may make awards for:

- Ad valorem tax rate reduction within disproportionately affected counties;
- Local match requirements of s. 288.0655 for projects in the disproportionately affected counties;
- Public infrastructure projects for construction, expansion, or maintenance which are shown to enhance economic recovery, diversification, and enhancement of the disproportionately affected counties;
- Grants to local governments in the disproportionately affected counties to establish and maintain equipment and trained personnel for local action plans of response to respond to disasters, such as plans created for the Coastal Impacts Assistance Program;
- Grants to support programs that prepare students for future occupations and careers at K-20 institutions that have campuses in the disproportionately affected counties. Eligible programs include those that increase students' technology skills and knowledge; encourage industry certifications; provide rigorous, alternative pathways for students to meet high school graduation requirements; strengthen career readiness initiatives; fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors; and, similar to or the same as talent retention programs created by the Chancellor of the State University System and the Commission of Education; encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties;
- Grants to support programs that provide participants in the disproportionately affected counties with transferable, sustainable workforce skills that are not confined to a single employer; and
- Grants to the tourism entity created under s. 288.1226 for the purpose of advertising and promoting tourism and Fresh From Florida, and grants to promote workforce and infrastructure, on behalf of all of the disproportionately affected counties.

Pursuant to Florida Law, Triumph Gulf Coast, Inc. will provide priority consideration to Applications for projects or programs that:

- Generate maximum estimated economic benefits, based on tools and models not generally employed by economic input-output analyses, including cost-benefit, return-on-investment, or dynamic scoring techniques to determine how the long-term economic growth potential of the disproportionately affected counties may be enhanced by the investment.
- Increase household income in the disproportionately affected counties above national average household income.
- Leverage or further enhance key regional assets, including educational institutions, research facilities, and military bases.
- Partner with local governments to provide funds, infrastructure, land, or other assistance for the project.
- Benefit the environment, in addition to the economy.
- Provide outcome measures.
- Partner with K-20 educational institutions or school districts located within the disproportionately affected counties as of January 1, 2017.
- Are recommended by the board of county commissioners of the county in which the project or program will be located.
- Partner with convention and visitor bureaus, tourist development councils, or chambers of commerce located within the disproportionately affected counties.

Additionally, the Board of Triumph Gulf Coast, Inc. may provide discretionary priority to consideration of Applications for projects and programs that:

- Are considered transformational for the future of the Northwest Florida region.
- May be consummated quickly and efficiently.
- Promote net-new jobs in the private sector with an income above regional average household income.
- Align with Northwest Florida FORWARD, the regional strategic initiative for Northwest Florida economic transformation.
- Create net-new jobs in targeted industries to include: aerospace and defense, financial services/shared services, water transportation, artificial intelligence, cybersecurity, information technology, manufacturing, and robotics.
- Promote industry cluster impact for unique targeted industries.
- Create net-new jobs with wages above national average wage (*e.g.*, similar to EFI QTI program, measured on graduated scale).
- Are located in Rural Area of Opportunity as defined by the State of Florida (DEO).
- Provide a wider regional impact versus solely local impact.
- Align with other similar programs across the regions for greater regional impact, and not be duplicative of other existing projects or programs.
- Enhance research and innovative technologies in the region.
- Enhance a targeted industry cluster or create a Center of Excellence unique to Northwest Florida.

- Create a unique asset in the region that can be leveraged for regional growth of targeted industries.
- Demonstrate long-term financial sustainability following Triumph Gulf Coast, Inc. funding.
- Leverage funding from other government and private entity sources.
- Provide local investment and spending.
- Are supported by more than one governmental entity and/or private sector companies, in particular proposed projects or programs supported by more than one county in the region.
- Provide clear performance metrics over duration of project or program.
- Include deliverables-based payment system dependent upon achievement of interim performance metrics.
- Provide capacity building support for regional economic growth.
- Are environmentally conscious and business focused.
- Include Applicant and selected partners/vendors located in Northwest Florida.

Applications will be evaluated and scored based on compliance with the statutory requirements of the Triumph Gulf Coast legislation, including but not limited to the priorities identified therein and the geographic region served by the proposed project or program.

Applicant Information

Name of Individual (if applying in individual capacity): N/A

Name of Entity/Organization: The Choctawhatchee Basin Alliance of Northwest Florida State College

Background of Applicant Individual/Entity/Organization: The proposed project will be conducted under collaboration between the Choctawhatchee Basin Alliance and Northwest Florida State College. The Choctawhatchee Basin Alliance is a 22-year old 501(C)(3) organization chartered under Northwest Florida State College. Northwest Florida State College is a K-20 education institution with a primary campus located in Okaloosa County. The College was established in 1964.

(If additional space is needed, please attach a Word document with your entire answer.)

Federal Employer Identification Number: 59-1214054

Contact Information:

Primary Contact Information:	Alison McDowell
Title:	Director
Mailing Address:	100 College Boulevard Niceville, Florida 32548
Phone:	(850) 200-4173
Email:	mcdowel2@nwfsc.edu
Website:	www.nwfsc.edu / www.basinalliance.org

Identify any co-applicants, partners, or other entities or organizations that will have a role in the proposed project or program and such partners proposed roles.

The Project team (a formal collaboration between Northwest Florida State College, the Choctawhatchee Basin Alliance of Northwest Florida State College, the AmeriCorps Organization, and the Project's competitively-selected service provider) possesses extensive experience in successfully planning, budgeting, and executing a Project of this type and magnitude.

(If additional space is needed, please attach a Word document with your entire answer.)

Total amount of funding requested from Triumph Gulf Coast: $11,273,070.00

Has the applicant in the past requested or applied for funds for all or part of the proposed project/program?

☒ Yes ☐ No

If yes, please provide detailed information concerning the prior request for funding, including:

- the date the request/application for funding was made;
- the source to which the request/application for funding was made,
- the results of the request/application for funding, and
- projected or realized results and/or outcomes from prior funding.

Please see Attachment A.
(If additional space is needed, please attach a Word document with your entire answer.)

Describe the financial status of the applicant and any co-applicants or partners:
Please see Attachment B.
(If additional space is needed, please attach a Word document with your entire answer.)

In a separate attachment, please provide financial statements or information that details the financial status of the applicant and any co-applicants or partners.
Please see Attachment C.

Has the applicant or any co-applicants, partners or any associated or affiliated entities or individuals filed for bankruptcy in the last ten (10) years?

☐ Yes ☒ No

If yes, please identify the entity or individual that field for bankruptcy and the date of filing.

_____

_____
(If additional space is needed, please attach a Word document with your entire answer.)

Eligibility

Pursuant to Section 288.8017, Triumph Gulf Coast, Inc. was created to make awards from available funds to projects or programs that meet the priorities for economic recovery, diversification, and enhancement of the disproportionately affected counties. The disproportionately affected counties are: Bay County, Escambia County, Franklin County, Gulf County, Okaloosa County, Santa Rosa County, Walton County, or Wakulla County. *See*, Section 288.08012.

1. From the choices below, please check the box that describes the purpose of the proposed project or program (check all that apply):

- ☐ Ad valorem tax rate reduction within disproportionately affected counties;
- ☐ Local match requirements of s. 288.0655 for projects in the disproportionately affected counties;
- ☒ Public infrastructure projects for construction, expansion, or maintenance which are shown to enhance economic recovery, diversification, and enhancement of the disproportionately affected counties;
- ☐ Grants to local governments in the disproportionately affected counties to establish and maintain equipment and trained personnel for local action plans of response to respond to disasters, such as plans created for the Coastal Impacts Assistance Program;
- ☒ Grants to support programs that prepare students for future occupations and careers at K-20 institutions that have campuses in the disproportionately affected counties. Eligible programs include those that increase students' technology skills and knowledge; encourage industry certifications; provide rigorous, alternative pathways for students to meet high school graduation requirements; strengthen career readiness initiatives; fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors; and, similar to or the same as talent retention programs created by the Chancellor of the State University System and the Commission of Education, encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties;
- ☒ Grants to support programs that provide participants in the disproportionately affected counties with transferable, sustainable workforce skills that are not confined to a single employer; and
- ☐ Grants to the tourism entity created under s. 288.1226 for the purpose of advertising and promoting tourism and Fresh From Florida, and grants to promote workforce and infrastructure, on behalf of all of the disproportionately affected counties.

2. Provide the title and a detailed description of the proposed project or program, including the location of the proposed project or program, a detailed description of, and quantitative evidence demonstrating how the proposed project or program will promote economic recovery, diversification, and enhancement of the disproportionately affected counties, a proposed timeline for the proposed project or program, and the disproportionately affected counties that will be impacted by the proposed project or program.

Please see Attachment D.
(If additional space is needed, please attach a Word document with your entire answer.)

3. Explain how the proposed project or program is considered transformational and how it will effect the disproportionately affected counties in the next ten (10) years.

Please see Attachment E.
(If additional space is needed, please attach a Word document with your entire answer.)

4. Describe data or information available to demonstrate the viability of the proposed project or program.

Please see Attachment F.
(If additional space is needed, please attach a Word document with your entire answer.)

5. Describe how the impacts to the disproportionately affected counties will be measured long term.

Please see Attachment G.
(If additional space is needed, please attach a Word document with your entire answer.)

6. Describe how the proposed project or program is sustainable. (Note: Sustainable means how the proposed project or program will remain financially viable and continue to perform in the long-term after Triumph Gulf Coast, Inc. funding.)

Please see Attachment H.
(If additional space is needed, please attach a Word document with your entire answer.)

7. Describe how the deliverables for the proposed project or program will be measured.

Please see Attachment I.
(If additional space is needed, please attach a Word document with your entire answer.)

Priorities

1. Please check the box if the proposed project or program will meet any of the following priorities (check all that apply):

- ☐ Generate maximum estimated economic benefits, based on tools and models not generally employed by economic input-output analyses, including cost-benefit, return-on-investment, or dynamic scoring techniques to determine how the long- term economic growth potential of the disproportionately affected counties may be enhanced by the investment.
- ☐ Increase household income in the disproportionately affected counties above national average household income.
- ☐ Leverage or further enhance key regional assets, including educational institutions, research facilities, and military bases.
- ☐ Partner with local governments to provide funds, infrastructure, land, or other assistance for the project.
- ☐ Benefit the environment, in addition to the economy.
- ☐ Provide outcome measures.
- ☐ Partner with K-20 educational institutions or school districts located within the disproportionately affected counties as of January 1, 2017.
- ☐ Are recommended by the board of county commissioners of the county in which the project or program will be located.
- ☐ Partner with convention and visitor bureaus, tourist development councils, or chambers of commerce located within the disproportionately affected counties.

2. Please explain how the proposed project meets the priorities identified above.
Please see Attachment J.

(If additional space is needed, please attach a Word document with your entire answer.)

3. Please explain how the proposed project or program meets the discretionary priorities identified by the Board.

Please see Attachment K.

(If additional space is needed, please attach a Word document with your entire answer.)

4. In which of the eight disproportionately affected county/counties is the proposed project or program located? (Circle all that apply)

Escambia Santa Rosa Okaloosa Walton Bay Gulf Franklin Wakulla

5. Was this proposed project or program on a list of proposed projects and programs submitted to Triumph Gulf Coast, Inc., by one (or more) of the eight disproportionately affected Counties as a project and program located within its county?

☒ Yes ☐ No

If yes, list all Counties that apply: **Okaloosa County.**

6. Does the Board of County Commissioners for each County listed in response to question 5, above, recommend this project or program to Triumph?

☒ Yes ☐ No

**Please attach proof of recommendation(s) from each County identified.
Please see Attachment L.

Approvals and Authority

1. If the Applicant is awarded grant funds based on this proposal, what approvals must be obtained before Applicant can execute an agreement with Triumph Gulf Coast, Inc.?
No additional approvals are required.

(If additional space is needed, please attach a Word document with your entire answer.)

2. If approval of a board, commission, council or other group is needed prior to execution of an agreement between the entity and Triumph Gulf Coast:
   A. Provide the schedule of upcoming meetings for the group for a period of at least six months.
   B. State whether that group can hold special meetings, and if so, upon how many days' notice.

Not applicable.

(If additional space is needed, please attach a Word document with your entire answer.)

3. Describe the timeline for the proposed project or program if an award of funding is approved, including milestones that will be achieved following an award through completion of the proposed project or program.
Please see Attachment M.

(If additional space is needed, please attach a Word document with your entire answer.)

4. Attach evidence that the undersigned has all necessary authority to execute this proposal on behalf of the entity applying for funding. This evidence may take a variety of forms, including but not limited to: a delegation of authority, citation to relevant laws or codes, policy documents, etc. In addition, please attach any support letters from partners.
Please see Attachment N.

Funding and Budget:

Pursuant to Section 288.8017, awards may not be used to finance 100 percent of any project or program. An awardee may not receive all of the funds available in any given year.

1. Identify the amount of funding sought from Triumph Gulf Coast, Inc. and the time period over which funding is requested.
   Please See Attachment O.

   (If additional space is needed, please attach a Word document with your entire answer.)

2. What percentage of total program or project costs does the requested award from Triumph Gulf Coast, Inc. represent? (Please note that an award of funding will be for a defined monetary amount and will not be based on percentage of projected project costs.)

   Twenty-five percent (25%) of the Project total. Please see Attachment O.

   (If additional space is needed, please attach a Word document with your entire answer.)

3. Please describe the types and number of jobs expected from the proposed project or program and the expected average wage.

   Please See Attachment P.

   (If additional space is needed, please attach a Word document with your entire answer.)

4. Does the potential award supplement but not supplant existing funding sources? If yes, describe how the potential award supplements existing funding sources.
   ☒ Yes ☐ No

   Please See Attachment Q.

   (If additional space is needed, please attach a Word document with your entire answer.)

5. Please provide a Project/Program Budget. Include all applicable costs and other funding sources available to support the proposal.

   Please See Attachment R for Project Budget.

   A. Project/Program Costs:

   Example Costs (Note: Not exhaustive list of possible Cost categories.)
   Construction $_____

Reconstruction	$_____
Design & Engineering	$_____
Land Acquisition	$_____
Land Improvement	$_____
Equipment	$_____
Supplies	$_____
Salaries	$_____
Other (specify)	$_____

Please See Attachment R for Project Budget.

Total Project Costs: $ 46,940,085

B. Other Project Funding Sources:

Example Funding Sources (Note: Not an exhaustive list of possible Funding Sources.)

NW Florida State College	$ 649,218
City/County	$ 390,000
Private Sources	$ 0
Other grants 1	$ 24,234,294 (RESTORE ACT Direct Component)
Other grants 2	$ 9,931,552 (State & Federal)
Total Other Funding	$ 35,205,064
Total Amount Requested:	**$ 11,735,021**

Note: The total amount requested must equal the difference between the costs in 3A. and the other project funding sources in 3.B.

C. Provide a detailed budget narrative, including the timing and steps necessary to obtain the funding and any other pertinent budget-related information.

Please See Attachment S.

(If additional space is needed, please attach a Word document with your entire answer.)

Applicant understands that the Triumph Gulf Coast, Inc. statute requires that the award contract must include provisions requiring a performance report on the contracted activities, must account for the proper use of funds provided under the contract, and must include provisions for recovery of awards in the event the award was based upon fraudulent information or the awardee is not meeting the performance requirements of the award.

☒ Yes ☐ No

Applicant understands that awardees must regularly report to Triumph Gulf Coast, Inc. the expenditure of funds and the status of the project or program on a schedule determined by Triumph Gulf Coast, Inc.

☒ Yes ☐ No

Applicant acknowledges that Applicant and any co-Applicants will make books and records and other financial data available to Triumph Gulf Coast, Inc. as necessary to measure and confirm performance metrics and deliverables.

☒ Yes ☐ No

Applicant acknowledges that Triumph Gulf Coast, Inc. reserves the right to request additional information from Applicant concerning the proposed project or program.

☒ Yes ☐ No

ADDENDUM FOR INFRASTRUCTURE PROPOSALS:

1. Program Requirements

A. Is the infrastructure owned by the public?
☒ Yes ☐ No

B. Is the infrastructure for public use or does it predominately benefit the public?
☒ Yes ☐ No

C. Will the public infrastructure improvements be for the exclusive benefit of any single company, corporation or business entity?
☐ Yes ☒ No

D. Provide a detailed explanation of how the public infrastructure improvements will connect to a broader economic development vision for the community and benefit additional current and future businesses.

Please See Attachment T.

(If additional space is needed, please attach a Word document with your entire answer.)

E. Provide a detailed description of, and quantitative evidence demonstrating how the proposed public infrastructure project will promote:

- ◉ Economic Recovery
- ◉ Economic Diversification
- ◉ Enhancement of the Disproportionately Affected Counties
- ◉ Enhancement of a Targeted Industry

Please See Attachment U.

(If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

A. Is this project an expansion of existing infrastructure project?
☐ Yes ☒ No

B. Provide the proposed beginning commencement date and number of days required to complete construction of the infrastructure project.
The design for all components of the GCEE Project is 100% complete and as the Project Applicant, the Choctawhatchee Basin Alliance of Northwest Florida State

College is currently soliciting competitive bids (following a competitive procurement process that is being conducted in a manner providing full and open competition pursuant to 2 CFR 200.319(a)) from qualified service vendors to facilitate the Mobile Marine Pumpout component for a seven-year period under this grant.

Thus, work on the GCEE Project is ready to commence upon award of funding for the Project.

(If additional space is needed, please attach a Word document with your entire answer.)

C. What is the location of the public infrastructure? (Provide the road number, if applicable.)

The Infrastructure component of the Project (the Mobile Marine Pumpout program) will be wholly conducted upon the navigable waters of each of the 8 disproportionately affected counties. These navigable waters are publicly owned and are needed to support commerce and economic development.

(If additional space is needed, please attach a Word document with your entire answer.)

D. Who is responsible for maintenance and upkeep? (Indicate if more than one are applicable.)

The GCEE Project team (a collaboration of Northwest Florida State College, the Choctawhatchee Basin Alliance of Northwest Florida State College, and the Project's competitively-selected service provider are responsible for maintenance and upkeep of the public infrastructure.

(If additional space is needed, please attach a Word document with your entire answer.)

E. What permits are necessary for the infrastructure project?

The GCEE Project requires no lengthy or rigorous regulatory permits to be obtained prior to commencing work. In fact, only a business license in each of the 8 disproportionately affected Counties is required to conduct all components of the Project.

(If additional space is needed, please attach a Word document with your entire answer.)

Detail whether required permits have been secured, and if not, detail the timeline for securing these permits. Additionally, if any required permits are local permits, will these permits be prioritized?
A business license in each of the 8 disproportionately affected Counties can be

secured within 30 days.

(If additional space is needed, please attach a Word document with your entire answer.)

F. What is the future land use and zoning designation on the proposed site of the Infrastructure improvement, and will the improvements conform to those uses?

Not applicable for this Project.

(If additional space is needed, please attach a Word document with your entire answer.)

G. Will an amendment to the local comprehensive plan or a development order be required on the site of the proposed project or on adjacent property to accommodate the infrastructure and potential current or future job creation opportunities? If yes, please detail the timeline

☐ Yes ☒ No

(If additional space is needed, please attach a Word document with your entire answer.)

H. Does this project have a local match amount? If yes, please describe the entity providing the match and the amount.

☒ Yes ☐ No

Please see Attachment V.

(If additional space is needed, please attach a Word document with your entire answer.)

I. Provide any additional information or attachments to be considered for this proposal.

Please see the 21 Letters of Support on behalf of the Project which are included in Attachment AG.

(If additional space is needed, please attach a Word document with your entire answer.)

ADDENDUM FOR WORKFORCE TRAINING PROPOSALS

1. Program Requirements

A. Will this proposal support programs that prepare students for future occupations and careers at K-20 institutions that have campuses in the disproportionately affected counties? If yes, please identify where the campuses are located and provide details on how the proposed programs will prepare students for future occupations and at which K-20 institutions that programs will be provided.

☒ Yes ☐ No

Please see Attachment W.

(If additional space is needed, please attach a Word document with your entire answer.)

B. Will the proposed program (check all that apply):

- ☒ Increase students' technology skills and knowledge
- ☒ Encourage industry certifications
- ☒ Provide rigorous, alterative pathways for students to meet high school graduation requirements
- ☒ Strengthen career readiness initiatives
- ☒ Fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors
- ☒ Encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties (similar to or the same as talent retention programs created by the Chancellor of the State University System and the Commission on Education)

For each item checked above, describe how the proposed program will achieve these goals

Please see Attachment X.

(If additional space is needed, please attach a Word document with your entire answer.)

C. Will this proposal provide participants in the disproportionately affected counties with transferable, sustainable workforce skills but not confined to a single employer? If yes, please provide details.

☒ Yes ☐ No

Please see Attachment Y.

(If additional space is needed, please attach a Word document with your entire answer.)

D. Identify the disproportionately affected counties where the proposed programs will operate or provide participants with workforce skills.

The Marine Engineering Institute will be the only one of its kind in Northwest Florida and the STEM Education Component will be implemented in all 8 disproportionately affected counties, so the GCEE Project will provide participants with workforce skills in; Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, and Wakulla Counties.

(If additional space is needed, please attach a Word document with your entire answer.)

E. Provide a detailed description of, and quantitative evidence demonstrating how the proposed project or program will promote:

- Economic recovery,
- Economic Diversification,
- Enhancement of the disproportionately affected counties,
- Enhancement of a Targeted Industry.

Please see Attachment Z.

(If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

A. Is this an expansion of an existing training program? Is yes, describe how the proposed program will enhance or improve the existing program and how the proposal program will supplements but not supplant existing funding sources.

☐ Yes ☒ No

No. This is an entirely new training program that does not currently exist in Northwest Florida. All funds requested under this application are for start-up costs and the NWFSC becomes 100% self-sustaining after the first year.

(If additional space is needed, please attach a Word document with your entire answer.)

B. Indicate how the training will be delivered (*e.g.*, classroom-based, computer based, other).

If in-person, identify the location(s) (e.g., city, campus, etc.) where the training will be available.

If computer-based, identify the targeted location(s) (e.g., city, county) where the training will be available.

Please see Attachment AA.

(If additional space is needed, please attach a Word document with your entire answer.)

C. Identify the number of anticipated enrolled students and completers.

Please see Attachment AB.

(If additional space is needed, please attach a Word document with your entire answer.)

D. Indicate the length of the program (e.g, quarters, semesters, weeks, months, etc.) including anticipated beginning and ending dates.

Please see Attachment AC.

(If additional space is needed, please attach a Word document with your entire answer.)

E. Describe the plan to support the sustainability of the proposed program.

Please see Attachment AD.

(If additional space is needed, please attach a Word document with your entire answer.)

F. Identify any certifications, degrees, etc. that will result form the completion of the program.

Please see Attachment AE.

(If additional space is needed, please attach a Word document with your entire answer.)

G. Does this project have a local match amount? If yes, please describe the entity providing the match and the amount.

☒ Yes ☐ No

Please see Attachment AF.

(If additional space is needed, please attach a Word document with your entire answer.)

H. Provide any additional information or attachments to be considered for this proposal.

Please Attachment AG to see the 21 Letters of Support on behalf of the Project

(If additional space is needed, please attach a Word document with your entire answer.)

ADDENDUM FOR AD VALOREM TAX RATE REDUCTION:

1. Program Requirements

   A. Describe the property or transaction that will be supported by the ad valorem tax rate reduction.

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

   B. Provide a detailed explanation of how the ad valorem tax rate reduction will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

   C. Provide a detailed description of the quantitative evidence demonstrating how the proposed ad valorem tax reduction will promote:
      - Economic recovery,
      - Economic Diversification,
      - Enhancement of the disproportionately affected counties,
      - Enhancement of a Targeted Industry.

   _____

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

   A. What is the location of the property or transaction that will be supported by the ad valorem tax rate reduction?

   _____

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

   B. Detail the current status of the property or transaction that will be supported by the ad valorem tax rate reduction and provide a detailed description of when and how the ad valorem tax rate reduction will be implemented.

   _____

(If additional space is needed, please attach a Word document with your entire answer.)

C. Does this proposed project have a local match amount? If yes, please describe the entity providing the match and the amount.

☐ Yes ☐ No

(If additional space is needed, please attach a Word document with your entire answer.)

D. Provide any additional information or attachments to be considered for this proposal.

(If additional space is needed, please attach a Word document with your entire answer.)

ADDENDUM FOR LOCAL MATCH REQUIREMENTS OF SECTION 288.0655, FLORIDA STATUTES

1. Program Requirements

   A. Describe the local match requirements of Section 288.0655 and the underlying project, program or transaction that will be funded by the proposed award.

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

   B. Provide a detailed explanation of how the local match requirements and the underlying project or program will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

   C. Provide a detailed description of, and quantitative evidence demonstrating how the proposed local match requirements will promote:
      - Economic recovery,
      - Economic Diversification,
      - Enhancement of the disproportionately affected counties,
      - Enhancement of a Targeted Industry.

   _____

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

   A. What is the location of the property or transaction that will be supported by the local match requirements?

   _____

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

B. Detail the current status of the property or transaction that will be supported by the local match requirement and provide a detailed description of when and how the local match requirement will be implemented.

_____

_____

(If additional space is needed, please attach a Word document with your entire answer.)

C. Provide any additional information or attachments to be considered for this proposal.

_____

_____

_____

(If additional space is needed, please attach a Word document with your entire answer.)

ADDENDUM FOR LOCAL ACTION PLAN

1. Program Requirements

   A. Describe how the proposed award will establish and maintain equipment and trained personnel for local action plans of response to respond to disasters.

   B. Describe the type and amount of equipment and trained personnel that will be established or maintained by the proposed award.

   C. Identify the specific local action plans (*e.g.*, Coastal Impacts Assistance Program) that will benefit from the proposed award.

   D. Provide a detailed explanation of how the proposed award will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

   E. Provide a detailed description of the quantitative evidence demonstrating how the proposed will promote:
      - Economic recovery,
      - Economic Diversification,
      - Enhancement of the disproportionately affected counties,
      - Enhancement of a Targeted Industry.

   _____

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

   A. What is the location of the local action program that will be supported by the proposed award?

   _____

   _____

   (If additional space is needed, please attach a Word document with your entire answer.)

   B. Detail the current status of the local action plans (*e.g.*, new plans, existing plans, etc.) that will be supported by the proposed award and provide a detailed description of when and how the proposed award will be implemented.

_____

_____

(If additional space is needed, please attach a Word document with your entire answer.)

C. Provide any additional information or attachments to be considered for this proposal.

_____

_____

_____

(If additional space is needed, please attach a Word document with your entire answer.)

ADDENDUM FOR ADVERTISING/PROMOTION

1. Program Requirements

A. Is the applicant a tourism entity crated under s. 288.1226, Florida Statutes?
☐ Yes ☐ No

B. Does the applicant advertise and promote tourism and Fresh From Florida? If yes, provide details on how it advertises and promotes tourism and Fresh From Florida.
☐ Yes ☐ No

_____

_____
(If additional space is needed, please attach a Word document with your entire answer.)

C. Does the proposed award promote workforce and infrastructure on behalf of the disproportionately affected counties? If yes, describe how workforce and infrastructure is promoted on behalf of the disproportionately affected counties.
☐ Yes ☐ No

_____

_____
(If additional space is needed, please attach a Word document with your entire answer.)

D. Provide a detailed explanation of how the proposed award will connect to a broader economic recovery, diversification, enhancement of the disproportionately affected counties and/or enhancement of a targeted industry.

_____

_____
(If additional space is needed, please attach a Word document with your entire answer.)

E. Provide a detailed description of the quantitative evidence demonstrating how the proposed will promote:
- Economic recovery,
- Economic Diversification,
- Enhancement of the disproportionately affected counties,
- Enhancement of a Targeted Industry.

_____

(If additional space is needed, please attach a Word document with your entire answer.)

2. Additional Information

A. Describe the advertising and promotion mediums and locations where the advertising and promotion will occur.

(If additional space is needed, please attach a Word document with your entire answer.)

B. Detail the current status of the advertising and promotion (*e.g.*, new plans, existing plans, etc.) that will be supported by the proposed award and provide a detailed description of when and how the proposed award will be implemented.

(If additional space is needed, please attach a Word document with your entire answer.)

C. Provide any additional information or attachments to be considered for this proposal.

(If additional space is needed, please attach a Word document with your entire answer.)

To facilitate readability, the Triumph Gulf Coast grant application Questions are listed in Blue text in the following Attachments, and the Applicants answers are provided in Black text.

I, the undersigned, do hereby certify that I have express authority to sign this proposal on my behalf or on behalf of the above-described entity, organization, or governmental entity:

Name of Applicant: Choctawhatchee Basin Alliance of Northwest Florida State College

Name and Title of Authorized Representative: Alison McDowell, Director

Representative Signature: 

Signature Date: 4/9/2018

Attachment A

Response for Question 1 on page 5: **Has the applicant in the past requested or applied for funds for all or part of the proposed project/program?**

The Applicant has applied to the RESTORE Act Direct Component through Okaloosa County, Florida for matching grants related to the project as follows:

- In March of 2018, the Applicant applied for $24,234,294 in matching funds which represents the funds required for the portion of the Project that will be conducted wholly within Okaloosa County. The result of this request for funding is yet unknown.

- In March of 2018, the Applicant formally requested matching funds from the City of Destin. The City Council unanimously voted to move forward with an amendment to an Ordinance that will provide boat-mooring slips and the right for the Applicant to discharge marine sewage effluent recovered under the GCEE Project into its sewage collection facility and this contribution is valued at $390,000 over the life of the award period. Please see the attached Letter from the City of Destin in Attachment AG, Exhibit 6.

- The applicant is currently preparing detailed applications for submission to other private and public grants (for example, The National Fish and Wildlife Foundation, the Gulf Coast Ecosystem Restoration Council, and the National Resource Damage Assessment, etc.) to fund the balance of the Project. The Applicant has already briefed some of these grantors and is optimistic the balance of the Project will be funded.

Additionally, under this Project the Northwest Florida State College is contributing real property (plus security) at its Okaloosa County Campus to establish the Marine Engineering Institute. This contribution's estimated valued is $649,218 over the 7-year duration of the grant award period. The College has also invested 25% of the Choctawhatchee Basin Alliance of Northwest Florida State College Director's annual salary towards the Project and will do so through the remainder of the award period. Student tuition is also contributed to the Marine Engineering Institute so that it will break even after the first year's startup costs.

Attachment B

Response for Question 2 on page 5: **Describe the financial status of the applicant and any co-applicants or partners.**

Northwest Florida State College was incorporated in the State of Florida in 1964 and currently has approximately 700 employees.

The Choctawhatchee Basin Alliance is an official program of Northwest Florida State College and the College is the fiscal agent for the Choctawhatchee Basin Alliance which was established at the College in 1996.

The Applicant is audited each year by the State of Florida Auditor General (Sherrill F. Norman), and a copy of the statements for the last two fiscal years is provided in Attachment C.

Attachment C

Financial Statement

Northwest Florida State College

Statements of Net Position

June 30, 2016 and 2017

	2017		2016	
	College	Component Unit	College	Component Unit
ASSETS				
Current Assets:				
Cash and Cash Equivalents	$5,658,960	$521,105	$7,622,656	$570,068
Restricted Cash and Cash Equivalents	4,173,417	-	4,848,854	-
Restricted Investments	-	12,138,573	-	7,265,786
Accounts Receivable, Net	1,049,422	-	1,535,300	-
Notes Receivable, Net	1,064	-	1,369	-
Due from Other Governmental Agencies	344,546	-	381,689	-
Due from Component Unit	49,352	-	37,185	-
Inventories	24,543	-	29,752	-
Prepaid Expenses	406,469	19,101	391,241	21,529
Total Current Assets	11,707,773	12,678,779	14,848,046	7,857,383
Noncurrent Assets:				
Restricted Cash and Cash Equivalents	7,759,608	-	5,022,375	-
Restricted Investments	3,873	32,174,232	5,260	32,991,569
Depreciable Capital Assets, Net	106,410,764	3,819,581	110,068,816	3,987,837
Nondepreciable Capital Assets	4,001,109	254,001	4,747,968	254,001
Total Noncurrent Assets	118,175,354	36,247,814	119,844,419	37,233,407
TOTAL ASSETS	129,883,127	48,926,593	134,692,465	45,090,790
DEFERRED OUTFLOWS OF RESOURCES				
Deferred Amounts Related to Pensions	5,574,448	-	2,361,754	-
LIABILITIES				
Current Liabilities:				
Accounts Payable	155,338	8,650	51,417	11,033
Accrued Interest Payable	892	-	-	-
Salary and Payroll Taxes Payable	197,499	-	99,463	-
Due to College	-	49,352	-	37,185
Unearned Revenue	1,431	-	1,431	-
Deposits Held for Others	398,978	-	361,815	-
Long-Term Liabilities – Current Portion:				
Bonds Payable	17,000	-	23,000	-
Notes Payable	162,781	-	579,932	-
Capital Lease Payable	63,376	-	61,262	-
Special Termination Benefits Payable	97,588	-	169,720	-
Compensated Absences Payable	67,789	-	76,555	-

Net Pension Liability	164,289	-	183,023	-
Total Current Liabilities	1,326,961	58,002	1,607,618	48,218
Noncurrent Liabilities:				
Bonds Payable	147,000	-	164,000	-
Notes Payable	397,536	-	2,249,338	-
Capital Lease Payable	110,522	-	173,897	-
Special Termination Benefits Payable	52,927	-	59,155	-
Compensated Absences Payable	3,321,685	-	3,751,201	-
Other Postemployment Benefits Payable	345,324	-	315,585	-
Net Pension Liability	14,312,058	-	9,790,202	-
Total Noncurrent Liabilities	18,687,052	-	16,503,378	-
TOTAL LIABILITIES	20,014,013	-	18,110,996	48,218
DEFERRED INFLOWS OF RESOURCES				
Deferred Amounts Related to Pensions	923,183	-	1,717,308	-
NET POSITION				
Net Investment in Capital Assets	109,880,606	4,073,582	111,945,908	4,241,838
Restricted:				
Nonexpendable:				
Endowment	-	35,217,256	-	36,479,893
Expendable:				
Grants and Loans	4,263,976	-	4,869,842	-
Scholarships	30,568	-	41,590	-
Capital Projects	7,983,793	-	5,253,338	-
Debt Service	3,873	-	4,368	-
Other	-	12,138,573	-	7,265,786
Unrestricted	(7,642,397)	(2,560,820)	(4,889,131)	(2,944,945)
TOTAL NET POSITION	$114,520,419	$48,868,591	$117,225,915	$45,042,572

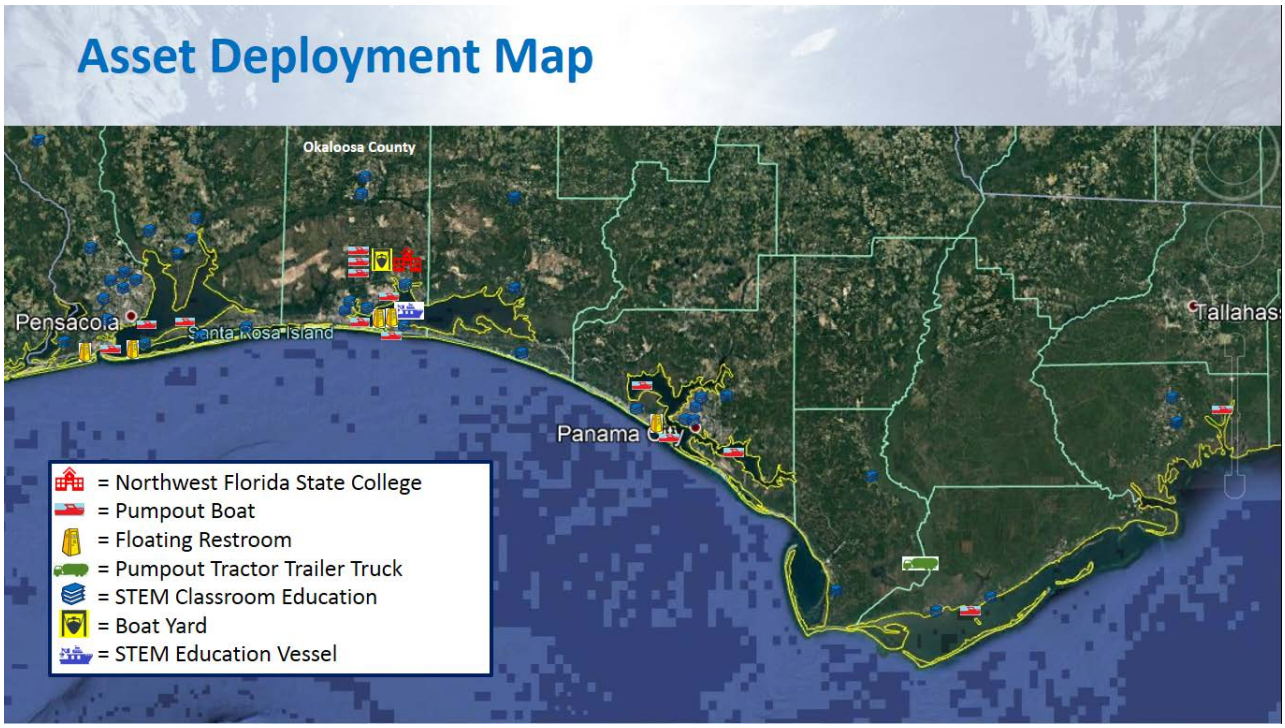
Attachment D

Response for Question 2 on Page 7: **Provide the title and a detailed description of the proposed project or program, including the location of the proposed project or program, a detailed description of, and quantitative evidence demonstrating how the proposed project or program will promote economic recovery, diversification, and enhancement of the disproportionately affected counties, a proposed timeline for the proposed project or program, and the disproportionately affected counties that will be impacted by the proposed project or program.**

Title: *Gulf Coast Economy Enhancement Project*

Location:

As depicted in the Asset Deployment Map below, the *Gulf Coast Economy Enhancement Project* (hereafter the *GCEE Project*) will be implemented (at varying scales) across all 8 disproportionately affected counties including: Escambia County; Santa Rosa County; Okaloosa County; Walton County; Bay County; Gulf County; Franklin County; and Wakulla County. The GCEE Project will benefit the health, safety, and welfare of all citizens, properties and businesses of the entire Florida Panhandle and its visitors.



Asset Deployment Map for overall 8-County Project

Detailed Project Description:

The GCEE Project is a three-prong enterprise focused on recovery, diversification, and enhancement of the marine-based economy of the 8 disproportionately affected counties of Northwest Florida. Three Project components synergistically align to measurable increase opportunities to achieve greater prosperity by focusing on education, technical job training, and clean-up related to the rich marine environment of these counties. The GCEE Project components are:

(1) Establishing a **Marine Engineering Institute** on the campus of Northwest Florida State College to provide a skilled labor force to keep pace with current and future demands of Northwest Florida's rapidly-growing marine engineering industry. The shortfall in skilled labor is already hindering economic prosperity in the region, so obviously there is a significant need to prepare students for these careers.

(2) Creating a **Science, Technology, Engineering and Math (STEM) Education Component** for secondary elective science students consistent with the needs of the School Districts within the 8 disproportionately affected counties. Exposing K-12 students to the importance of our critical marine habitat in their formative years will help ensure they develop an affinity for pursuing professional careers in the marine engineering industry. Thereby, the STEM Education Component will act as a feeder program for NWFSC's Marine Engineering Institute.

(3) Establishing a **Mobile Marine Pumpout Program** (modeled after an ultra-successful Monroe County-based program) that will provide economic and environmental improvements in the 8 disproportionately affected counties by collecting marine-generated sewage that is produced by the boating community and properly disposing of this effluent so it can be processed by a central sewer system. This Program will also rotationally provide its pumpout boats to NWFSC's Marine Engineering Institute so that enrolled students can gain invaluable hands-on experience and professional certifications whilst servicing the pumpout boats.

These three components work in concert with one another to leverage-up the economic output for the overall project. For example, elective students from the STEM Education Component gain interest, aptitude, and eligibility to enroll in the Northwest Florida State College Marine Engineering Institute. Students from the Marine Engineering Institute repair and maintain the pumpout boats from the Project's Mobile Marine Pumpout program and thereby earn degree certifications to land high-wage jobs – including being hired on as mechanics, captains, or managers in the Project's Mobile Marine Pumpout program. The Mobile Marine Pumpout Program mitigates the catastrophic effects of marine sewage and microplastic formation upon our waterways and positions Northwest Florida with the aquatic capacity to accommodate future growth and prosperity for generations to come. And the cycle self-perpetuates over time.

Economic Recovery, Diversification, and Enhancement:

The GCEE Project vision is inspired by the great need and opportunity to address three significant problems which currently diminish economic prosperity in the 8-county region: (1) a shortage of skilled labor to meet the demands of the marine industry – which is the region's fastest-growing economic sector; (2) lack of marine-related STEM education among secondary students needed for college and job preparedness; and (3) a local marine environment marred by marine-generated sewage effluent which poses serious risks to the local economy. These significant challenges – and the proven and practical methods of meeting these challenges implemented under the GCEE Project – are detailed below:

Problem 1: ***There is a significant shortage of skilled marine technicians to service vessels and take advantage of well-paid job opportunities***.

Northwest Florida has experienced explosive growth in the demand for marine engineers and mechanics yet none of the four Panhandle state colleges offer programs which raise the baseline of skills needed to do these jobs. This shortfall is already hindering economic prosperity in the region, so obviously there is a significant need to prepare students for these careers.

According to the labor market analytics firm Emsi, Inc. (http://www.economicmodeling.com/), the marine industry has grown by 75% in just the last five years alone, and in addition to the growth in the number of jobs, advances in marine engine technology have compounded the shortage in the labor supply of highly skilled technicians to service the more than 83,000 registered vessels in the 8 disproportionately affected counties.

Although the industry was able to attract and train technicians utilizing on-the-job training in the past, rapidly changing technologies now require an entry level technician to begin his or her career with highly developed technical skills and this has compounded the shortage in the labor supply of highly skilled technicians to service the growing number of boats in the 8-county region.

According to Emsi, the industries within the 8-county region that employ marine mechanics include boat dealers, marinas, marine cargo handling, ship building and repairing, and motorcycle and ATV dealers. And, the wage for this occupation averages $37,500 annually.

According to Emsi, the projected growth for marine engineers in the region is 15.4%, which is 290% higher than the national average of 5.3%. And in 2017, the number of jobs posted in the region for motorboat mechanics and service technical jobs in the region was well over twice the national average. None of the four Panhandle state colleges currently offer marine technician training programs, so the Project gives Northwest Florida State College the ability to seize the opportunity to work with local industry leaders to develop a state-of-the-art, short-term technical program (called the

Marine Engineering Institute) that enables students to get to work quickly – while enabling the local marine industry to meet its current workforce demands and grow this skilled sector of the regional job market.

The marine sector of the Panhandle's regional economy is projected to continue growing at this pace, and this growth exerts demands on the marine industry that the region's educational system is not currently prepared to meet. Concurrently, this growth will increasingly exacerbate Northwest Florida's already-prevalent marine pollution problem.

Solution 1: ***The GCEE Project will overcome this challenge by developing a technician/engineer workforce to meet the demand for skilled labor in the growing local marine industry. This will be accomplished by establishing a Marine Engineering Institute (one-year program focused on marine service technologies) based at Northwest Florida State College that rapidly deploys local skilled labor into the workplace where they receive well-paying jobs.***

The GCEE Project will establish a Marine Engineering Institute to provide a skilled labor force to keep pace with current and future demands of Northwest Florida's marine engineering industry.

The Marine Engineering Institute's Marine Service Technologies workforce development program is a one-year, post-secondary adult vocational program that prepares students for positions as marine technicians.

The program will include opportunities for students to earn college credit and industry certifications (in areas such as gas and diesel mechanics and fiberglass construction and repair) so they will be prepared to obtain positions in this high-demand field.

The program offers students access to the College's welding program, which prepares them for an industry certification. Additionally, for incumbent workers needing to increase their skills and earning power, the program will offer short-term (one semester) stand-alone preparation for the American Boat & Yacht Council's industry certifications in marine technical fields. Individuals with these credentials are more competitive in the job market and can expect a higher salary for multiple occupations.

The Marine Engineering Institute programs are a powerful way to prepare graduates to get to work quickly to strengthen the local economy and prepare for future economic expansion. These well-paid jobs for local citizens have secondary economic benefits as they raise household income and the propensity for local spending.

By working in close partnership with Northwest Florida's industry employers, the College is confident of the Marine Engineering Institute's relevance to the industry and the success of its graduates.

Problem 2: ***Lack of STEM education in K-12 classrooms that is connected to Northwest Florida's water-dependent economy and local marine environment. Need to ensure that Northwest Florida's K-12 students are educated to value its critical marine infrastructure and the inextricable link between the ecosystem and the regional economy, and ultimately choose professional careers in marine technology, engineering and science.***

The Choctawhatchee Basin Alliance of Northwest Florida State College will improve K-12 public education in the Panhandle by offering a STEM-centered education curriculum which will expose secondary elective science students to the importance of Northwest Florida's critical marine infrastructure and the inextricable link between that ecosystem and the regional economy. This curriculum will be introduced during the students' formative years so they develop an affinity for pursuing professional careers in the marine engineering and marine science industries.

Operating in this manner, the Project's STEM Education Component will act as a feeder program for NWFSC's Marine Engineering Institute aimed at preparing local residents for jobs in Northwest Florida's regional marine-based economy, with enduring benefits over the long-term.

Thus, there is a significant need to prepare the region's K-12 students for careers in marine engineering and marine sciences. The success of this endeavor ultimately rests with capturing the student's affinity and interest during their formative years so they have a chance to develop the requisite STEM skillset to qualify for entry into a college-level marine engineering program.

A 2006 economic analysis of the Contribution of Choctawhatchee Bay to Okaloosa and Walton Counties[8] conducted by the Haas Center for Business Research and Economic Development found that nearly all facets of the Panhandle's economic base (even including the military component) are tightly connected to the region's unique water assets. In fact, the region's economic reliance upon water-dependent activity has grown so quickly that boat and yacht dealerships now comprise the single fastest-growing industry in Northwest Florida over the past two decades.

Yet, the Choctawhatchee Basin Alliance of Northwest Florida State College has discovered that unlike many other areas of the state, Northwest Florida's regional K-12 education does not leverage this asset by exposing students to the potential of pursuing careers in the marine engineering and marine science fields. Thus, local students are devoid of opportunities to meet the current and future demand for skilled labor, with deleterious effects on economic prosperity in the region.

Solution 2: ***Implement a STEM program for secondary elective science students consistent with the needs of the School Districts of the 8 disproportionately affected counties and students – one that includes both curriculum-based and experiential learning tied to the Panhandle's marine resources and marine-based economy, and feeds the Marine Engineering Institute with motivated, prepared students.***

Under the GCEE Project the Choctawhatchee Basin Alliance of Northwest Florida State College will implement a STEM Education Component targeted to secondary elective science students consistent with needs of the eight school districts of the 8 disproportionately affected counties in the Panhandle. This Component will adhere to Florida's state education standards and feature an eight-module curriculum focused on the value of Northwest Florida's critical marine infrastructure and the link between marine ecosystem health and productivity and the regional economy.

MSCEC curriculum content will be integrated into monthly lesson plans and meet these (and other) Florida state education standards such as: SC.7.E.6.6 – *Human Impact on Earth (water quality)*, SC.7.L.17.3 – *Limiting Factors on Ecosystems and Impacts on Life (Human Activities)*, SC.8.N.4.1 – *Science Used in Informed Government Decision Making*, and SC.8.N.4.2 – *Societal Concerns Affecting Science*. These curriculum modules will consist of topics such as global ocean pollution, local pollution and related effects on ecosystems and the local economy.

The Choctawhatchee Basin Alliance of Northwest Florida State College will administer the Project's MSCEC professional development workshops to the participating faculty members of Panhandle schools prior to commencement of the school year. Lesson plans and training will be available to teachers via an online database accessible on a variety of classroom interfaces (e.g. smartboard, Google Chrome books, and classroom computers). This will enable teachers to administer lessons independently to fit individual classroom itineraries. The GCEE Project will also supply teachers with the materials and supplies needed for each monthly lesson. Two instructors from the Choctawhatchee Basin Alliance of Northwest Florida State College that are hired with grant funds will provide enhanced learning opportunities for the students with hands-on activities to bridge the conceptual knowledge and technical skills taught in these modules.

The eight modules will focus on the impacts of marine pollution, including marine sewage, on global and local marine ecosystems. Lessons will have real-world applications integrated within the activities. Using classroom technology and materials provided for each lesson, students will investigate situations where marine pollution has impacted ecosystems or economies and apply the module content taught to determine sources and solutions to these problems. Lessons will be structured to promote greater understanding of how classroom concepts intertwine with actual scenarios occurring within society.

The STEM Education Component will be implemented by three new education staff - one Education/Outreach Director, and two Education Technicians that are hired with grant funds.

The Education/Outreach Director will create content with the assistance of two new Education Technician positions. The content will be hosted by an online portal that will offer teacher support, as well as materials needed for lessons. The Outreach Coordinator will form relationships with curriculum directors from the eight School Districts to facilitate and incentivize (through professional development credits or stipends) participation in the program. The Education Coordinators will provide teacher trainings at two different central locations at the beginning of the school year where teachers will learn to implement lessons and receive supplies and materials. In addition, teachers and Education Coordinators will schedule two in-person, hands-on lessons delivered by the technicians.

Participating schools across the 8 disproportionately affected counties can share their experiences and data collected with other schools and participants by uploading content to the web portal, which may have a public interface (public website).

Connecting the STEM Education Component to the Marine Engineering Institute and the Marine Pumpout Program, the GCEE Project will also develop and implement an in-the-field, hands-on practical experience involving a STEM Education Vessel placed into service in Choctawhatchee Bay.

This STEM Education Vessel will be operated and maintained by a State of Florida-licensed STEM Education Vessel captain and staffed with two STEM Education Vessel Deckhands that are hired with grant funds. It will be used to bring the classroom outdoors and promote sensory learning to students. Teachers will have an opportunity to enhance and reinforce the concepts taught using the GCEE Project curriculum modules within the classroom.

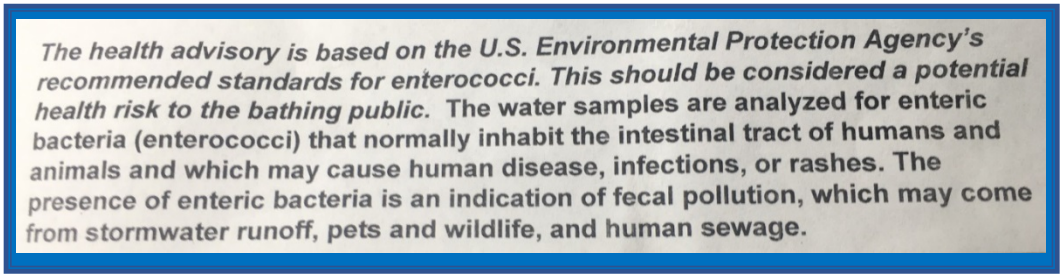
The STEM Education Vessel is a 36’ – 40’ custom-crafted powered catamaran watercraft that is specifically-designed to facilitate the unique needs of the GCEE Project. For example, the STEM Education Vessel is a shallow draft, catamaran which will accommodate up to 30 passengers. It has a large fold-down ramp so that students can easily and safely gain ingress and egress to the shallow waters of Choctawhatchee Bay to pull samples, etc. The Vessel is equipped with twin outboard engines, large washdown tables, custom lights, and a high-capacity generator to facilitate fresh and saltwater washdown pumps, collection tanks, and live-wells.

Working in tandem, the STEM Education Vessel and the STEM Education component will act as a feeder program for NWFSC’s Marine Engineering Institute which will help support Northwest Florida’s regional economy over the long-term.

Problem 3: ***All of the bays and tributaries in Northwest Florida are ecologically impaired due to high levels of Fecal Coliform, and this impairment negatively impacts and risks further harm to the greater regional economy.***

Poor water quality impacts tourism and human health (both directly and indirectly) and affects the quality of Northwest Florida's natural assets for both recreation and ecosystem services. There is a significant need to recover and properly dispose of marine generated sewage that is produced in the 8-county region.

Over the last 20 years the permanent population base of Northwest Florida has doubled, tourism has tripled, and water-dependent activity has grown six-fold. During this same timeframe communities in the Panhandle have invested billions in upland infrastructure to accommodate this growth, but there has been negligible corresponding investment in the quality of the region's marine infrastructure. Today, all the bays and estuaries in the 8 disproportionately affected counties are listed as "*Impaired*" on the EPA's Waterbody Quality Assessment Report[1] and water quality testing routinely returns poor results for elevated levels of fecal contamination.
Below is a photograph of a public warning message that was routinely issued to visitors of Henderson Beach State Park in Okaloosa County this past Summer.



And here is snapshot of a national television news cast from last Summer.

Such media reports are commonplace as evidenced by this headline in the April 5, 2018 edition of the Northwest Florida Daily News.

3 Okaloosa parks issued health advisories for fecal bacteria

Unfortunately, such conditions are prevalent across the entire Gulf Coast. In fact, there were five confirmed cases of flesh-eating bacteria (a disease process which has been scientifically linked to sewage effluent[3]) in neighboring Mobile Bay this past summer[2].

Clearly, Northwest Florida's tourism-based economy is directly related to the perception and reality of good water quality, and it is undeniable that these types of advisories produce negative consequences to Northwest Florida's number one economic engine. (Please see Attachment F for a detailed analysis of the potential Economic Losses from Tourism and Recreation that may be avoided by implementing the GCEE Project).

Solution 3: ***Replicate the Monroe County marine sewage collection program in Northwest Florida by collecting marine-generated sewage produced by the boating community and properly disposing the effluent to be processed by a central sewer system.***

Cognizant of the observable deterioration of its water bodies, in 1992 Monroe County, Florida moved aggressively to remove septic tanks, install a central sewer system, and to prevent illegal discharges of marine sewage by (1) deploying land-based sewage pumpout stations at docks throughout the Florida Keys, and (2) implementing regulatory measures to prevent illegal discharge of sewage that is generated by the boating community.

But, by 2010 it was evident that a more-comprehensive solution was needed. So, the Monroe County Commission, the Florida Department of Environmental Protection, the federal Clean Vessel Act, and Mote Marine Laboratory proactively partnered with a selected service vendor to help solve the County's marine sewage problem.

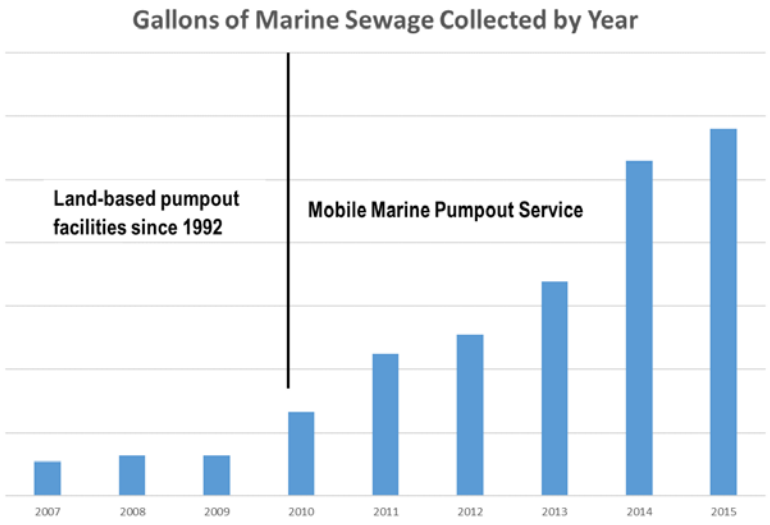
This Public/Private Partnership – which is the first and only of its kind in history - placed six specially-crafted mobile marine pump-out vessels into service to provide free pump-outs to the boating community in the Florida Keys. The results of the program are astounding;

- Even though significant investments in land-based pumpout facilities have occurred in Monroe County since 1992, last year the Public/Private Partnership collected and properly disposed of over 10 times the amount of sewage than all the land-based pumpout systems in the Florida Keys combined[4].

- Within only three years, the Public/Private Partnership had collected and properly disposed of more than 1,000,000 gallons of raw marine sewage and it is now recovering about 500,000 gallons per year.

- According to the FDEP, marine sewage is between 9 and 15 times more concentrated than household sewage[5], so the Public/Private Partnership has already prevented the net equivalent of more than 12,000,000 gallons of municipal sewage from entering the waterways of the Florida Keys.

- Most-importantly, the Public/Private Partnership is changing the culture and mindset in Monroe County regarding the illegal discharge of marine sewage. In fact, public pride in the program has cultivated citizen-driven compliance which is significantly improving water quality throughout the Florida Keys.



The data gathered through this Public/Private Partnership demonstrates that sewage generated by the boating community plays a <u>much</u> larger role in marine pollution than once imagined.

The waters of the 8-county region collectively comprise a public infrastructure system that is in dire need of maintenance and enhancement, so building on the successes of the ongoing Monroe County public/private partnership, the Choctawhatchee Basin Alliance of Northwest Florida State College aims to establish a similar program across the Florida Panhandle.

The objective of the GCEE Project's Mobile Marine Pumpout Program is to attain the same results that were achieved via the highly-successful and enduring Monroe County public/private partnership. Consistent with this objective, the GCEE Project will implement a marine pumpout program that will recover and properly dispose of marine-generated sewage in the 8 disproportionately affected counties and thereby benefit the health and welfare of all citizens, properties, businesses, and visitors in Northwest Florida.

As the Project Applicant, the Choctawhatchee Basin Alliance of Northwest Florida State College is soliciting competitive bids from qualified service vendors to place a fleet of special-purpose pumpout vessels and floating comfort stations (restrooms) into rotational service for a seven-year period under this grant. This competitive procurement will be conducted in a manner providing full and open competition pursuant to 2 CFR 200.319(a). It should be noted that floating comfort stations are not currently allowed to be deployed under Florida law. However, the Applicant met with the Deputy Secretary of Land and Recreation for the State of Florida Department of Environmental Protection to discuss this topic and feels confident the floating restrooms to be deployed under the GCEE Project will be granted probationary status which would facilitate deployment under the Project.

To perform this service across the entire 8-county region, the Project team will place fourteen mobile marine pump-out boats into rotational service within the overall Project Service Area.

Each of these marine pump-out boats will provide free pumpout services to all registered vessels (both commercial and recreationally-registered vessels) within Northwest Florida as well as to transient vessels that visit the Panhandle. The cost-free feature is the catalyst that delivers voluntary compliance without the need for regulatory enforcement.

Extrapolating the actual results of the Monroe County pumpout program suggests that implementing a similar program in the Panhandle (where there are more than 83,000 registered vessels) would collect and properly dispose of the net equivalent of over 92,000,000 gallons of raw household sewage that may otherwise be disposed overboard in the near shore waters of Northwest Florida over the next seven years. Even further, chemical additives (which are used to deodorize sewage holding tanks) further compound the harmful effects of marine sewage upon our critical marine environment[6].

Finally, according to scientists at the Environmental Protection Agency, micro-plastics – which are formed by the deterioration of larger plastic fragments – is

becoming an alarming problem along the Gulf Coast of Northwest Florida because it is ultimately ingested by humans, and animals such as fish stock, seabirds, marine mammals, and turtles. Therefore, under the GCEE Project each pumpout vessel place into service by the selected subcontractor will collect and dispose of household garbage it finds floating along its service area route. In addition to providing aesthetic environmental improvements, this service will prevent large floating debris from deteriorating into micro-plastics.

Timeline:

The design for the proposed GCEE Project is 100% complete and the Project team is aligned and ready.

Furthermore, the GCEE Project does not require lengthy or rigorous regulatory permits to be obtained prior to commencing work. In fact, only a business license in each of the 8 disproportionately affected counties is required to conduct all components of the Project. So, GCEE Project work is ready to commence upon award of funding.

Attachment E

Response for Question 3 on Page 7: **Explain how the proposed project or program is considered transformational and how it will effect the disproportionately affected counties in the next ten (10) years.**

Today, Northwest Florida is limited by the significant challenges described in Attachment D. Namely;

- There is a significant shortage of skilled marine labor to handle the current demands of Northwest Florida's leading growth industry and this shortfall is stymying economic growth.

- There is a significant lack focus on Northwest Florida's water-dependent assets in the K-12 education system and this lack of focus means the education system is ill-equipped to churn out qualified high school graduates to fill this industry void. And, this lack of focus is stymying economic growth.

- Every single one of the bays and tributaries within the 8 disproportionately affected counties are ecologically impaired due to high levels of Fecal Coliform, and this impairment is negatively impacting the greater regional economy. We have an imminent problem on our hands and sans immediate action it will get worse.

The purpose of the GCEE Project is to facilitate proven and practical solutions to overcome these identified systemic challenges. Thus, the GCEE Project is transformation for the 8 disproportionately affected counties because the solutions proposed by the Project will resolve each of these limitations within ten years.
Namely;

- The Marine Engineering Institute will prepare students to get to work quickly to strengthen the local economy and prepare the region for future economic expansion while providing well-paying jobs for local citizens.

- STEM-centered Education Component will expose secondary elective science students to the importance of Northwest Florida's critical marine infrastructure and the inextricable link between that ecosystem and the regional economy. This curriculum will be introduced during the students' formative years so they develop an affinity for pursuing professional careers in the marine engineering and marine science industries.

  Operating in this manner, the Project's STEM Education component will act as a feeder program for NWFSC's Marine Engineering Institute which will help support Northwest Florida's regional economy over the long-term.

- The Project's Mobile Marine Pumpout Program will ensure the waterways of Northwest Florida are clean and free from the deleterious effects of boating sewage which will

preserve and enhance Northwest Florida's number one economic driver. This Program will also completely change the culture and mindset of Northwest Florida's boating community as it relates to the responsible discharge of marine sewage and thereby improve water quality in perpetuity.

Attachment F

Response for Question 4 on Page 7: **Describe data or information available to demonstrate the viability of the proposed project or program.**

An in-depth viability/feasibility analysis and an Economic Impact Analysis for the GCEE Project follows:

VIABILITY ANALYSIS

Northwest Florida State College is very accomplished at identifying educational needs within the community and establishing degree and certification programs to prepare students fulfill this need.

For one example, NWFSC recently recognized the need to assist the construction industry by preparing students to succeed in pipe welder careers. So, in 2016 NWFSC established a Welding Technology program and this Program has quickly achieved the ability to position students to earn nationally recognized credentials from completion of the National Center for Construction Education and Research (NCCER) curriculum that is used in the Program. This process is exactly how the need for the Marine Engineering Institute was identified. The Institute curriculum has been designed in consultation with industry representatives and the College is equally confident that the Marine Engineering Institute will be successful.

Similarly, in 2011 the Choctawhatchee Basin Alliance of Northwest Florida State College identified a need to implement a hands-on, environmental education program in elementary schools across Okaloosa and Walton Counties to give students a direct role in the restoration of Choctawhatchee Bay. After seven years of success, the program – which is aligned with State of Florida STEM education standards and called "*Grasses In Classes*" has been implemented at 21 elementary schools, reaching over 2,300 students in 110 classrooms monthly. Through this program, CBA is inspiring the next generation of water stewards so that we can rely on our precious water resources for generations to come. The STEM Education Component for the GCEE Project has been designed following this successful model so the Choctawhatchee Basin Alliance of Northwest Florida State College is equally confident that this Component of the Project will be successful.

Finally, the Applicant has invested immense effort studying and learning from the stakeholders of the ongoing Monroe County, FL mobile marine pumpout program which has been an overwhelming success story for the Florida Keys. The Applicant even implemented free pumpouts in the Destin Harbor last summer to test the viability for a proposed Program in Northwest Florida and found there was overwhelming demand and support for such a Program as evidenced by Exhibits 11 and 12 of Attachment AG.

Furthermore, the Applicant has already adapted Monroe County's Scope of Services and Request for Proposals to improve performance for a pumpout program in the 8 disproportionately affected counties, so the Project team is absolutely confident in its ability to achieve the same level of success that the Florida Keys program has accomplished. Please refer to Attachment AG, Exhibits 3, 13, 16, 18, 19, 20, and 21 to see personal

testimonies from the stakeholders who know the Monroe County mobile marine pumpout program the best.

ECONOMIC IMPACT ANALYSIS OF THE GCEE PROJECT

As detailed in the Project Budget of Attachment R, the overall 7-year Project cost is $46,940,085. The Applicant seeks 25% funding ($11,735,021) from Triumph Gulf Coast which represents the expected startup costs for the Project. Therefore, every dollar invested by Triumph Gulf Coast will be leveraged four-fold by other Project investors.

The GCEE Project generates maximum estimated economic benefits for the long-term economic growth of Northwest Florida.

In fact, there are three separate primary mechanisms by which the GCEE Project either contributes directly to the economy or enables economic benefits via avoiding the costs of marine pollution in the 8 disproportionately affected counties.

(1) The first means is the **Direct Economic Impact** (job creation, salaries/wages paid, and other direct means).

(2) The second means is the **Economic Losses of Tourism and Recreation** and this measures the potential economic losses to tourism and recreation that may result should local waters become fouled or the public perception that local waters are fouled (such as occurred in Northwest Florida during the 2010 Deepwater Horizon Oil Spill).

(3) The third means is the **Losses of Economic Value of Ecological Services and Goods** which measures the potential losses of the intrinsic and extrinsic economic value of the goods and services of a typical bay system (for example Pensacola Bay) should local waters become fouled or the public perception that local waters are fouled (such as occurred in the Panhandle during the 2010 Deepwater Horizon Oil Spill).

The economic output model which follows portrays these three means. However, it should be noted that the above list is not comprehensive and there are several other direct mechanisms by which the GCEE Project contributes to or enables economic benefits via avoiding the costs of marine pollution in the 8 disproportionately affected counties and these mechanisms provide real and significant value.

One example of this type of factor that is not included in the model portrayed is the **Impact on Property Values** that either an ecological disaster or cleaner water might have. For example, *"a drop in property values associated with perceptions of degraded environmental quality, should it occur, would be an important economic impact of the [BP] spill."*[7]

More directly, findings show that changes to water quality result in changes to property values. *"Improvements in water clarity of a one-meter depth can raise lake-side property values by up to $81 per foot of frontage. In total, this equates to $9,000,000 increase in*

household utility. Strikingly, property value changes for an equivalent water deterioration of one meter clarity reduce property values up to $141 per foot of frontage, or approximately $16 million in total.

Water quality improvements in Choctawhatchee Bay would be associated with significant welfare implications. There is approximately 145 miles of residential Bay frontage along Choctawhatchee Bay. This equates to over 765,000 feet of residential shoreline that will be directly impacted from any change in water quality. Based on the hedonic literature, a one meter improvement in water quality will increase household values around the Bay by approximately $62 million. Again, economic theory suggests 3 percent of the wealth impact will be spent on high-end durable goods. This equates to an annual increase in household spending in the region of $1.8 million. The total economic impact the increase in property values is worth in excess of $750,000 in annual GRP to the region."[8]

Another factor that is not included in the model is the **Potential Economic Losses from Seafood Harvests**. This point is personified in an April 18, 2015 report from the Pensacola News Journal, which states "*The Pensacola area has a rich seafood history. Tourists and locals alike enjoyed a bounty of freshly caught Gulf and bay fish and shrimp and bay oysters. Almost immediately [after waters were perceived to be polluted by the BP Oil Spill], that love relationship came to a screeching halt when oil and the dispersant sprayed on the oil to break it up fouled the Gulf of Mexico and closed fishing grounds*" [9].

And, the Potential Economic Losses from Seafood Harvests calculated in proportion to sewage contamination found that "*Sewage pollution, not the more widely known PCB problem [polychlorinated biphenyls], is keeping vast areas of New Bedford Outer Harbor and Clarks Cove closed to shellfishing. PCB levels in shellfish of the Outer Harbor and Clarks Cove were found to be below the federal limit in 1981, but the areas had to remain closed to shellfish harvesting because of sewage pollution.*" And that "*the total economic activity that could be generated by the harvesting, processing, and distribution of shellfish from the currently closed areas of the Outer Harbor and Clarks Cove is nearly $22 million per year*"[10]

And a 2016 study found that "*When water pollution affects the safety of consuming seafood, consumer well-being and market demand are impacted – potentially reducing the market demand for unrelated species. Changes in fishing activity also impact seafood wholesalers, processors, restaurants, marine services firms, and communities that depend economically on fishing-related businesses.*"[11]

Still, another factor that is not included in the model is the **Potential Economic Losses due to Human and Marine-Specie Health** as a consequence of poor water quality. In fact, as Mr. Sean Cannon – Ports Director for the City of Marathon – explained in his letter (Attachment AG, Exhibit 13), it was this very contributor in the Florida Keys that became the genesis for establishing the Mobile Marine Pumpout Program in Monroe County, Florida. Unfortunately, this was the very first program of its kind in history and no one

anticipated the near-miraculous results this program would achieve. So, while marine scientists were involved in the discovery of the marine-generated sewage problem in the area and the design of the mobile marine pumpout public/private partnership, there was no scientific process implemented to establish a baseline condition and document the improvements delivered by that pumpout program over time.

Therefore, the economic and environmental improvements delivered to the local community via their mobile marine pumpout program are documented by personal testimony from the stakeholders that know the Monroe County mobile marine pumpout program the best. Please refer to Attachment AG, Exhibits 3, 13, 16, 18, 19, 20, and 21 to see personal testimonies from these stakeholders, including a letter from; the Mayor of the Monroe County Commission, the City of Marathon Ports Department, the Executive Director of Mote Marine Laboratory Tropical Research Lab, the Deputy City Manager for the City of Marathon, and several private marinas that participate as stakeholders in the program.

ECONOMIC OUTPUT MODEL

The following is a brief explanation and calculation for each of three mechanisms that are included in the economic output model as it relates to the GCEE Project.

1. **Direct Economic Impact**

The Haas Center for Business Research and Economic Development used quantifiable economic tools (the REMI PI+ Version 2.1.1 model) to evaluate the economic output for the GCEE Project. As demonstrated by its letter inserted below, Triumph Gulf Coast's investment in the Gulf Coast Economy Enhancement Project will be immediately met with a higher regional impact as Triumph's $11.7 million investment will create $12.5 million in output generated to the 8 disproportionately affected counties in the very first year.

Moreover, the investment will contribute long-term with the following Direct Economic Impact over the next 10 years to the 8 disproportionately affected counties:

- **$103.5 million in Value Added**
- **$176.8 million in Output**
- **$95.6 million in Personal Income**
- **1,504 Total Jobs**

Therefore;

The *Cost Per Job* created by the Triumph Investment is $7,803/job.

And;

the *Return on Investment (ROI)* for the Triumph Investment is 1,307% over the 10-year life of the investment.

This means that every $1.00 invested by Triumph Gulf Coast generates $15.07 additional dollars over 10 years.

And;

The *Internal Rate of Return (IRR)*, which measures the annualized rate of return for the investment, is 127.2%.

This incredible level of investment return is made possible because the three separate components of the GCEE Project work in concert to generate enhancement and diversity across the overall economy of the 8 disproportionately affected counties and because every dollar invested by Triumph Gulf Coast is leveraged four-fold by other Project investors.

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Haas Center
220 W. Garden Street
Suite 304
Pensacola, FL 32502

Economic Impact Analysis of Gulf Coast Economy Enhancement Project

The Choctawhatchee Basin Alliance of Northwest Florida State College has requested a brief economic impact analysis of the proposed *Gulf Coast Economy Enhancement Project* located within all 8 disproportionately affected counties of Northwest Florida. Information on the project was provided by the Choctawhatchee Basin Alliance and the project specifics were run through an econometric simulation model in order to determine the impact on the 8-county region should the project be implemented there. Results for the project, both the one time effects of equipment purchases and the continuing effects of the newly created jobs, are provided below. A list of modeling assumptions, a description of the model used and definitions of terms can be found after the project results tables.

Results

Project: 32 Jobs, $ 61,243.16 Average Annual Wage & Benefits, $710,013 Capital Investment in facility and equipment.

Category	Units	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Direct Employment		16	32	32	32	32	32	32	32	32	32
Additional Employment		112	130	132	130	126	122	118	113	110	106
Value Added	Millions of Current $	$7.3	$10.3	$10.7	$10.9	$10.9	$10.8	$10.8	$10.7	$10.6	$10.5
Output	Millions of Current $	$12.5	$17.7	$18.3	$18.6	$18.6	$18.5	$18.3	$18.2	$18.1	$18.0
Income Increase	Millions of Current $	$4.8	$7.3	$8.4	$9.2	$9.8	$10.3	$10.8	$11.2	$11.7	$12.1

Employment. Initial project development calls for adding 8 jobs in colleges and universities and 24 in waste services by 2019. By carrying this additional employment into the existing forecast of the economy, these jobs generate additional jobs in the community. This is due to the multiplier effect, which shows how wages earned and spent in a community circulate throughout that community creating more jobs and more spending. Because of this new employment, the income generated by all of the jobs in the 8-county region also increases as a result of both the new direct employment by Northwest Florida State College, the CBA, the Project's competitively-selected service provider, and the additional employment these jobs now support.

A portion of the activity and employment is attributed to the assumption that the project would results in an increase in tourism and visitor spending. The table below shows that a significant

office 850.439.5400
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share of the annual jobs would be concentrated in the Accommodation and Food Services industry, as well as the Arts, Entertainment, and Recreation industry. This estimate is based on the assumption that clean water improvements would lead to a 1.3% increase in visitation.[1]

Industry Category	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Forestry, Fishing, and Related Activities	0	0	0	0	0	0	0	0	0	0
Mining	0	1	1	1	1	1	0	0	0	0
Utilities	0	0	0	0	0	0	0	0	0	0
Construction	9	15	17	17	16	14	12	11	9	8
Manufacturing	1	1	1	1	1	1	1	1	0	0
Wholesale Trade	0	1	1	1	1	1	1	1	1	1
Retail Trade	13	16	16	16	16	15	15	15	15	14
Transportation and Warehousing	4	4	4	4	4	3	3	3	3	3
Information	0	0	0	0	0	0	0	0	0	0
Finance and Insurance	1	2	2	2	2	1	1	1	1	1
Real Estate and Rental and Leasing	2	3	3	3	3	3	3	3	3	3
Professional, Scientific, and Technical Services	2	3	4	4	4	4	4	4	4	3
Management of Companies and Enterprises	1	1	1	1	1	1	1	1	1	1
Administrative and Waste Management Services	18	33	33	33	32	32	32	32	32	32
Educational services; private	8	11	11	11	11	11	10	10	10	10
Health Care and Social Assistance	3	4	4	4	4	4	4	4	5	5
Arts, Entertainment, and Recreation	7	6	6	6	6	5	5	5	5	5
Accommodation and Food Services	51	51	50	48	47	45	44	42	41	40
Other Services, except Public Administration	3	4	4	3	3	3	3	3	3	3

The economic impact reflects the increase in the value of county goods and services – or in other words the overall net value of the economy minus the dollars that flow out through the purchasing of goods and services not created within the county economy.

[1] *Economic Analysis of the Contribution of Choctawhatchee Bay to Okaloosa and Walton Counties*, Haas Center, 2006.

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Project impact over 10 years:

- $103.5 million in Value Added
- $176.8 million in Output
- $95.6 million in Personal Income
- 1,504 Total Jobs

Modeling Assumptions:

Project was modeled using Colleges and Universities and Septic Tank and Related Services as the industry

The capital investment was made in 2018 and produces a one-time impact in that year

All employment commenced in 2018 and 2019 and is maintained for 10 years

Increase in tourism due to decrease in water pollution is included as an increase in sales, approximately $9 million each year

Model impacts occurred from 2018 through 2027 and represent changes in the baseline forecast of the economy that presently exists.

REMI model

Econometric simulation models combine the sector detail and geography detail of input/output models but provide for functioning economic linkages between sectors and regions over time. The current study uses REMI PI+ Version 2.1.1 (Regional Economic Models Inc.), in a 67 region structural econometric model of the state of Florida. It incorporates the basic input/output linkages, but also uses econometrically estimated county-specific parameters, for example, interregional migration in response to changes in economic opportunities, in generating impact results. Because of these between-sector linkages, the model incorporates general equilibrium tendencies as the economy responds to shocks over time. That is, changes in spending in a region affect not just conditions in that market, but also in other markets within the region (economists term this a "general equilibrium") and outside the region (via trade and also via migration in response to changes in economic opportunities). This describes the phenomenon whereby, for example, a new financial services back office call center opens in a county, and bank managers throughout the county find they have to give staff a raise in order to keep them from leaving to take a job at the new call center. A traditional input-output model description of the economic

impact would have held everything else fixed (including bank wages across the county) and simply documented the employment and job creation effects resulting directly at the new call center and indirectly via businesses in its supply chain, as well as household spending induced by the new income flows.

A simulation model such as REMI captures not only the spending effects flowing from the call center and its local suppliers and employees and owners, but also the spillover effects into other markets as wages and prices change due to competition for the same employees and other resources. These effects are the general equilibrium (equilibrium across all markets simultaneously) tendencies of the model. It also simulates the adjustment path over time of these market responses, using historical parameters estimated specifically for that county (the dynamic component).

Glossary of terms

Output. Output is the amount of industry production, including all intermediate goods purchased as well as Value Added (compensation and profit). It can also be thought of as sales or supply. The components of Output are Self Supply and Exports.

Employment. Employment comprises estimates of the number of jobs, full-time plus part-time, by place of work. Full-time and part-time jobs are counted at equal weight. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included.

Multiplier. The multiplier is the ratio of the change in equilibrium divided by the original change in spending that causes the change. Each industry that produces goods and services generates demands for other goods and services. These demands ripple through the economy, multiplying the original economic impact.

Income. Income received by persons from all sources. It includes income received from employment or investments as well as government or employer transfer payments.

Value Added. Value Added is a measure of the contribution of each private industry and of government to a region's Gross Domestic Product. It is defined as an industry's gross output (which consists of sales or receipts and other operating income, commodity taxes, and inventory change) minus its intermediate inputs (which consist of energy, raw materials, semi-finished goods, and services that are purchased from domestic industries or from foreign sources). Value Added by industry can also be measured as the sum of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus.

Potential Economic Losses from Tourism and Recreation

Every single business owner in the 8 disproportionately affected counties can personally attest to the economic devastation imposed by the public perception of polluted waters that was caused by the Deepwater Horizon Oil Spill, despite less than 100 gallons of oil product ever touching the beaches of Northwest Florida.

Negative economic impacts resulting from a natural disaster such as the Deepwater Horizon Oil Spill will cause lost well-being of residents, visitors and others who value our natural assets. Accordingly, "*The input-output models do not account for the lost well-being of local residents, or that of visitors or others, perhaps unaffected financially by the spill, who nonetheless would willingly have paid something to avoid the disaster and its consequences, had they been able to do so. That is, it is relatively straightforward to measure lost profit to the hotelier or the charter boat operator resulting from a room night not sold or a charter trip not taken because a visitor chose not to come, because that transaction takes place in a market with well-defined prices. It is more difficult to measure the lost well-being to the visitor who would have paid to stay in that hotel room or take that charter trip. It is also difficult to measure the value of the lost well-being resulting from the disaster to those who care deeply that a beach has been fouled, but had not been paying a specific price in a specific market transaction for use of the beach.*"[7]

This point is perfectly illustrated in an April 18, 2015 report from the Pensacola News Journal, "*as soon as 24-hour media coverage made it clear BP's crude was slowly making its way to our shores, tourists quickly canceled hotel and vacation rental reservations all along Northwest Florida beaches. And, by June, Escambia County lodging revenue dropped 14.7 percent from the same period in 2009, and eventually tourist-dependent businesses reported 50-80 percent drop in revenue for June, July and August, a period that typically accounts for 58 percent of the annual tourist activity, according to a Visit Pensacola report on the oil spill. When business at beach restaurants and shops dropped off, seasonal employees lost jobs.*" [12]

While citations which illustrate the point that Economic Losses from Tourism and Recreation do result from a public perception of poor water quality are abundant, the Applicant has decided to focus this portion of its analysis on a lesser known, yet directly relatable local event which occurred on June 29, 2016 when "*One ATLANTA News*" falsely reported that Toxic Fecal Bacteria had closed beaches in Okaloosa and Walton Counties[13].

The Applicant conducted a survey of beachfront short-term lodging businesses to discover how this report affected businesses in the local area. To restate a portion of the Haas Center for Business Research and Economic Development report, our modeling assumption assumed an "*Increase in tourism due to decrease in water pollution is included as an increase in sales of approximately $9 million each year*", and thus the corollary would be true for an increase in water pollution.

As seen in the inserted letter below from Mr. Herb Profitt, General Manager of Pelican Beach Resort in Destin, Florida, this analysis shows that our assumption (*that an increase in water pollution or the mere public perception of water pollution is catastrophic to local tourism*) is accurate.

PELICAN BEACH MANAGEMENT, LLC.

Re: Room Cancellations Caused by the False Media Report About Toxic Fecal Bacteria

To Whom It May Concern:

Pelican Beach Resorts, operated by Pelican Beach Management Inc., manages the rentals of 260 beach-front condominiums in Destin, Florida.

This letter documents the effects that Pelican Beach Resorts witnessed as a consequence of the June 29, 2016 false media report claiming that some beaches in Okaloosa and Walton Counties were closed due to the presence of "Toxic Fecal Bacteria" in the waters.

For background, on June 29, 2016 at 3:30pm CDT, WSB – TV (ABC) "*One ATLANTA News*" Chief Meteorologist Glenn Burns broadcasted a news report that toxic fecal bacteria had closed the beaches in Okaloosa and Walton Counties (see: http://www.adweek.com/tvspy/wsb-sends-scare-with-flesh-eating-bacteria-water-warning/173642). Immediately thereafter, public health and tourism officials aggressively sought to have the misleading report corrected by the news station and within only hours the station issued a public retraction. Unfortunately, within minutes of the original newscast, the report had already gone viral on social media networks.

From the afternoon of June 29th to the morning of July 4th Pelican Beach Resort received approximately 90 telephone phone calls concerning this report and all callers were inquiring about ability and the cost to cancel their reservations. **The actual number cancellations that resulted from this one broadcast about poor water quality produced eighty-two (82) cancellations for the coming week.**

Fortunately, the news report was retracted so quickly that our staff was able to save many of these potential lost reservations and re-book the ones that were cancelled.

Sincerely,

Herb Profitt

General Manager, Pelican Beach Resort

1002 HWY 98 EAST • DESTIN, FLORIDA 32541 • (850) 654-1425
FOR RESERVATIONS CALL - (888) 654 - PELICAN

As Mr. Profitt stated, this one newscast concerning fecal bacteria created 82 room cancellations for the coming week (32% cancellations). If the news report was factual, and its staff was unable to re-book these cancellations, then Pelican Beach Resort would have experienced a

financial loss of $200,900 for the week (an average of $773/rental unit) and the Okaloosa County Tourist Development Council would have experienced a financial loss of $10,045 for the week. And that's from just one resort.

With approximately 60,448 rental units in the 8 disproportionately affected counties, the region would have experienced a financial loss of $46,591,801 and Bed Tax losses of $2,122,130 for a single week of lost occupancy.

Outbreaks of vibrio vulnificus (Flesh Eating Bacteria) which is related to high levels of fecal bacteria[3] typically last much longer than a single week, but this analysis only includes a single week of lost occupancy. And, this analysis only includes the economic loss attributable to lost occupancy, it does NOT include the certain widespread economic losses in the restaurant, retail, recreational and commercial fishing, and recreational equipment rental and outfitting operations, and to other local businesses.

Another study linked sewage effluent to an increase in the frequency and magnitude of harmful algal blooms such as red tide[14]. And, a 1995-1999 University of Florida study found that red tide events in the Fort Walton Beach and Destin areas reduced restaurant revenues by 29% and lodging revenues by 35% ($2.8 million and $3.7 million per month respectively), which is far greater than any losses associated with tropical storms and other weather-related events[15]. It is notable that the 35% lost lodging revenues due to poor water quality cited in this study closely matches the 32% lodging cancellations that was experienced by Pelican Beach Resort due to the report about fecal bacteria in local waterways.

Clearly, Northwest Florida's tourism-based economy is directly related to the perception of good water quality and the potential Economic Losses from Tourism and Recreation component that may be avoided by implementing the GCEE Project is substantial for the 8-county region.

Potential Loss of the Economic Value of Ecological Services and Goods

According to Dr. Rick Harper negative economic impacts resulting from a natural disaster such as the Deepwater Horizon Oil Spill "*will be seen lost well-being of residents, visitors and others who value our natural assets*"[7].

Seagrass, oyster beds, and tidal wetlands provide direct and indirect economic contributions to the well-being of humans and these contributions can be readily calculated by environmental scientists[16]. And, a 2016 analysis that was performed specifically for the Pensacola Bay System[17] found that "*the Pensacola Bay System habitats provide environmental goods and services that have economic value. The estimated total value of these services combined for seagrass meadow, oyster reef complexes, and tidal wetland habitats is as much as $226 million per year. It can be argued that this total annual value is approximately half as much as that for the same habitats 50-60 years ago prior to their decline in coverage. For perspective, the current annual total habitat value exceeds the 2015 real estate tax collection for Escambia County ($112million), the total tourist development tax collection ($9.1 million) and total toll revenue from the Bob Sikes Bridge ($3.9 million). The above habitat evaluations do not include values for tourism, recreation use, and seafood harvests.*"

The Pensacola Bay System is one of five such bay systems in the GCEE Project's 8-county service area and each of these bay systems cover approximately the same land mass and deliver similar ecological services and goods, so for the purposes of this component of the overall analysis, the Economic Value of Ecological Services and Goods for the Pensacola Bay System will be appropriated to the other five bay systems.

Therefore, the aggregate Economic Value of Ecological Services and Goods for the five bay systems in the 8 disproportionately affected county area is estimated to be $1,130,000,000 per year.

As demonstrated by via the Deepwater Horizon Oil Spill and the false news report by *One ATLANTA News*, it does not require actual water pollution to diminish the value of lost well-being of our region's bay systems to residents, visitors and others who value our natural assets. Just the public perception of poor water quality is enough to fundamentally diminish this valuation.

Attachment G

Response for Question 5 on Page 7: **Describe how the impacts to the disproportionately affected counties will be measured long term.**

The long-term impacts of the GCEE Project will be measured by the following four factors:

(1) How many new candidates are prepared to enter the workforce (and thereby ready to support Northwest Florida's single fastest-growing workforce industry)

(2) Number of direct and indirect jobs created by the Project

(3) The number of gallons of marine sewage effluent recovered (and thereby prevented from entering the near shore waters of Northwest Florida)

(4) The volume of floating garbage that is recovered from surface waters (and thereby prevented from forming microplastics in the near shore waters of Northwest Florida)

Attachment H

Response for Question 6 on Page 7: **Describe how the proposed project or program is sustainable. (Note: Sustainable means how the proposed project or program will remain financially viable and continue to perform in the long-term after Triumph Gulf Coast, Inc. funding.)**

As detailed in the Project Budget (Attachment R) and Budget Narrative (Attachment S), this grant application includes the substantial startup costs for the Marine Engineering Institute. However, the Institute generates tuition revenue estimated at $205,920 per year ($1,441,440 over the 7-year life of the grant period), and thus the operating expenses for the Marine Engineering Institute are covered by this student-paid tuition, so that it breaks even after the first year of operations.

As for the STEM Education Component, as an institution of higher learning and a non-profit entity, one of Choctawhatchee Basin Alliance of Northwest Florida State College's greatest strengths is the ability to leverage funding and partnerships to secure additional funding. Choctawhatchee Basin Alliance is entirely grant, donor and contract funded. As such, the organization is well-equipped to maintain and even expand programs through strategic and timely grant writing, along with donor and sponsor cultivation. CBA fully expects to maintain and grow the STEM Education Curriculum and the STEM Education Vessel components of the GCEE Project beyond this grant's period of performance. Obviously, the easiest scenario is to replace the original budget through additional grants, donors or sponsors. Because the GCEE Project will have a years-long record of success and name recognition, CBA will be able to pursue this outcome with optimal chance for success. To ensure continued success, we will also undertake other strategies for funding.

Additionally, some activities of the STEM Education Component will transition to low- or no-cost alternatives. For instance, maintenance of the STEM Education Vessel will be taken on by the Marine Engineering students and operation costs can be sponsored by local businesses. Other activities can be transitioned to a cost-sharing model. For example, CBA currently partners with the national service organization, AmeriCorps to deliver the *Grasses in Classes* environmental education program – at a fraction of what it would cost to man the program with full-time professionals. This *Grasses in Classes* campaign – after which the STEM Education Component is modelled – is a CBA success story that has been ongoing since 2011.

After the GCEE Project 's seven-year period of performance, the STEM education team will have created time-tested curriculum, mature partnerships with Panhandle school systems, and well-established routines and schedule. Such a fully developed program can transition from a staff of three professionals to a staff of one professional leading a team of pre-professionals made up of AmeriCorps members or the College's Teacher Education students. This type of funding and delivery model diversifies the costs while involving even more people in the project.

Finally, providing a definitive statement concerning the sustainability of the Mobile Marine Pumpout portion of the GCEE Project is virtually impossible since there has only been one similar program in history. But we can make a qualified judgement based on what is currently transpiring with the Monroe County, Florida public/private partnership for a mobile marine pumpout service.

And, as evidenced by the appended Letter of Support submitted by Mayor David Rice (Chairman of the Monroe County Board of County Commissioners), the public/private partnership for a marine pumpout program in Monroe County clearly demonstrates that project has been so successful that after its seventh year in existence, it is transitioning from a government grant sponsored program into a perpetually-funded, self-sustaining project. An excerpt from Mayor Rice's letter is inserted below:

> *"Most-importantly, the pumpout Program has changed the culture and mindset of the Florida Keys boating community. In the beginning, vessel owners were skeptical about pump-outs in general. Today, most boaters in the Keys not only support the program, but actively advocate on the Program's behalf. Our County has come to appreciate the Program so much that (just like household garbage collection services) it is now considered an "essential quality of life" service. The Monroe County Commission is currently in the process of determining how to implement dedicated funding sources to ensure the benefits of the Program are sustainable for generations to come."*
>
> - *Mayor David Rice, Chairman of the Monroe County Board of County Commissioners*

Mayor Rice's comparison between Monroe County's marine pumpout program and a household garbage collection service is a perfect analogy. In fact, Monroe County's experience with its marine pumpout program corresponds precisely to the way modern household waste collection services have evolved in America.

Historical records show that as recently as the mid-20th century, citizens of a community typically gathered their own household waste and hauled it to a shared landfill, lake, or ocean where they disposed of it themselves for free. Then at some point in time (likely due to the US Supreme Court banning the popular practice of dumping municipal waste into oceans in 1934) the community - in the name of health, safety, and welfare - establishes a new solid waste service utility that is to be paid for by the homeowners (the users). At the onset users typically do not see the benefit and oppose paying for a service they could heretofore do themselves for free, so the community wields its regulatory powers to force compliance. Soon though, homeowners come to appreciate the convenience and effectiveness of the new paid service, and before long they would never consider going back to the free option.

This perspective exactly corresponds the history of Monroe County's Public/Private partnership for a marine pumpout service. As Mayor Rice explained, *"the pumpout Program has changed the culture and mindset of the Florida Keys boating community. In the beginning, vessel owners were skeptical about pump-outs in general. Today, most boaters in the Keys not only support the program, but actively advocate on the Program's behalf".*

However, there is one notable difference between a mobile marine pumpout program and an upland solid waste service. Namely, marine sewage discharge takes place below the water line (which cannot be seen) and thus it is impossible to enforce compliance in any practical way. That is why Monroe County's early attempts to establish a pumpout program failed despite trying every regulatory enforcement means imaginable to force compliance. This deficiency ultimately became

the impetus for Monroe County's decision to offer free pumpouts to the entire boating community – a catalyst that rapidly gained 100% voluntary compliance with no regulatory enforcement.

Today - after seven years of free pumpouts, user advocacy has been clearly established. Mobile marine pumpouts have become a permanent way of life and the boating community in the Florida Keys will never consider going back to the free option of illegally discharging marine sewage overboard. And this has had a profound improvement in water quality - and thereby the regional economy of the Florida Keys. This improvement is best expressed by Mr. Sean Cannon, Ports Director for the City of Marathon, Florida in his attached letter which reads;

> "*When I first started working at the City Marina the water was very polluted and the clarity of the water was virtually zero. At least 100,000 gallons of raw sewage was being dumped into the water each year making the water very toxic. But now thanks to the mobile pumpout service it is now a vibrant marine environment teaming with wildlife and recreational boaters. The water has become clear and we can now see the bottom in many places. The boater's attitude about sewage has completely changed. Now the first question is how do we arrange for a pumpout?"*

All 8 disproportionately affected counties have already enacted steps to stablish that clean water is a priority and public benefit that contributes value to every person, every property, and every business. And just like the Public/Private Partnership in Monroe County, a short-term investment by Triumph Gulf Coast to provide free pumpouts to the boating community will be rewarded in the long-term by changing the culture and mindset in Northwest Florida regarding the responsible discharge of marine sewage. Within seven years the Panhandle's boating community will have grown to rely upon and appreciate the program so much that they will come to consider this marine pumpout program to be an essential quality of life service just like they do their own household garbage collection service. They will not only support a user fee-based approach, they will demand it. In this manner the Mobile Marine Pumpout component of the GCEE Project will demonstrate long-term financial sustainability after the 7-year grant funding period by Triumph Gulf Coast.

Triumph Gulf Coast's one-time investment in the *Gulf Coast Economy Enhancement Project* will fix three significant problems which currently limit economic prosperity in the 8 disproportionately affected counties and will implement generational solutions which will last forever. More effectively stated;

"This transformative 'marine infrastructure' project will improve the overall quality of life for every student, resident, employer, and visitor to the Florida panhandle and position Northwest Florida with the aquatic capacity to accommodate future growth and prosperity for generations to come."

Attachment I

Response for Question 7 on Page 7: **Describe how the deliverables for the proposed project or program will be measured.**

As detailed in Attachment D, the overarching objectives of the GCEE Project are to (1) establish a Marine Engineering Institute to provide a skilled labor force to keep pace with current and future demands of Northwest Florida's marine engineering industry, (2) implement a STEM Education curriculum within K-12 education facilities to educate Panhandle students about our critical marine resources and thereby prepare them to compete for future jobs in the realm of science and technology, and (3) provide economic and environmental improvements in the 8 disproportionately affected counties by collecting the marine-generated sewage that is produced by the boating community and properly disposing of this effluent so it can be processed by a central sewer system.

The GCEE Project will incorporate a monitoring program to evaluate project success for each of these objectives. For Objective (1) the Applicant will monitor and track student enrollment and success-achievement using its Banner by Elucian ERP system.

For Objective (2), The curriculum for the GCEE Project will align with the State of Florida Standards and lesson plans, and thus the school districts in the 8 disproportionately affected counties (and the Applicant) will monitor and track student success for this Objective in the same manner that is required for all other School District programs.

For Objective (3), the GCEE Project incorporates a customer onboarding process which encourages all registered vessels to register in the pumpout service and thereby become eligible to receive pumpouts. The customer onboarding process for the GCEE Project is modelled after the one used under the Monroe County Public/Private partnership which has proven to be highly effective.

The GCEE Project will also leverage a custom software application which will help facilitate this customer onboarding process which will record the geographic mooring location of each customer, the customer's state registration number, the size, type, name, and point of contact for each customer, and will be real-time synced to a satellite-based system so that it can precisely track the amount of marine sewage effluent that is collected from each customer. This methodology will enable the Applicant to collect data to monitor the program and to evaluate project success. And, the Applicant will use this data to generate monthly reports which will be distributed to the Grantor, the public, stakeholders, and policy leaders to ensure the GCEE Project remains on course. Additionally, the GCEE Project will ensure that at the end of each service day each pumpout vessel captain will digitally photograph the household garbage that it finds floating along its service area route before it is disposed of. The GCEE Project team will assimilate these daily photographs into a digital archive which can be monitored and inspected by stakeholders.

These databases will be incorporated into Monthly and Annual Reports to the Project stakeholders and the public to ensure the GCEE Project remains on track to meet its quantifiable outcome measures, and to ensure the economic and environmental benefits of the GCEE Project are generationally sustainable.

Attachment J

Response for Question 2 on Page 8: **Please explain how the proposed project meets the priorities identified above.**

Generates maximum economic benefits:

Please see Attachment F.

Increase household income:

According to the US Department of Labor, Bureau of Labor Statistics[18], the Project's average annual wage of $45,546 per year is 28.0% higher than the average annual mean wage for the Northwest Florida nonmetropolitan area.

Leverage key Regional assets:

The GCEE Project leverages partnerships between the Northwest Florida State College, tourism organizations, local governments, economic development organizations, chambers of commerce, military installations, and other key regional assets across Northwest Florida.

Partner with local Governments:

The City Council for the City of Destin has preliminarily committed by unanimous vote to provide boat-mooring slips and the right to discharge marine sewage effluent recovered under the GCEE Project into its sewage collection facility and this contribution is valued at $390,000 over the life of the award period.

The Applicant is also working with other local governments and industry partners in the Project area to secure additional services, infrastructure, land, and other valuable assistance on behalf of the GCEE Project.

Benefit to the Environment:

It would be hard to envision any project that could benefit the environment of Northwest Florida as much as the GCEE Project.

Provide Outcome Measures:

Please see Attachment I.

Partner with K-20 educational institutions or school districts:

The Applicant is a K-20 educational institution and the GCEE Project will partner with the school district from each of the 8 disproportionately affected counties. Please see the letter from the Okaloosa County School Board Superintendent included in Attachment AG, Exhibit 5.

Recommended by the Board of County Commissioners in which the project will be located:

PLACEHOLDER FOR A RESOLUTION BY THE OKALOOSA COUNTY BOARD OF COUNTY COMMISSIONERS.

The GCEE Project is scheduled to be considered by the Okaloosa County Board of County Commissioners at its April 17, 2018 meeting.

Partner with tourist development councils, or chambers of commerce:

The GCEE Project will leverage partnerships with tourist development councils and chambers of commerce within the 8 disproportionately affected counties to facilitate the Customer Onboarding Process for the Mobile Marine Pumpout Program. Please see the letters of support from the Greater Fort Walton Beach Chamber of Commerce and the Destin Chamber of Commerce included in Attachment AG, Exhibits 8 and 9.

Attachment K

Response for Question 3 on Page 8: **Please explain how the proposed project or program meets the discretionary priorities identified by the Board.**

The Gulf Coast Economy Enhancement Project is consistent with all 22 of the discretionary priorities identified by the Board of Triumph Gulf Coast, Inc.

(1) Are considered transformational for the future of the Northwest Florida region.

Each of the three synergistic Components of the GCEE Project are transformational for the future of Northwest Florida.

- Growth of the marine technologies industry in NW Florida is currently stalled because there is not a skilled workforce to fill the demand for jobs. The Marine Engineering Institute overcomes this limitation and thus transforms our skilled workforce.

- Even though almost every facet of our regional economy is tied to our unique water resources, Northwest Florida is one of the few areas of the State of Florida that does not leverage this asset in its K-12 education programs. The consequence is that not enough students are exposed to the potential of pursuing careers in the marine engineering and marine science fields and today there is insufficient skilled labor to keep pace with the current and future demand. The STEM Education Component overcomes this limitation by working in concert with the Marine Engineering Institute to transform our skilled workforce.

- The communities of Northwest Florida carefully manage and invest in our upland infrastructure so that it is capable of sustaining growth. However, as detailed in Attachment A, the same cannot be said of our marine infrastructure and today the nearshore waters of Northwest Florida are in dire need of maintenance and enhancement. The Mobile Marine Pumpout Program is a proven, practical, and proactive solution to enhance our marine infrastructure and ensure that it is prepared to accommodate future growth and thus it is truly transformational for the future of Northwest Florida region.

(2) May be consummated quickly and efficiently.

As detailed in Attachment M (which follows), the GCEE Project can be consummated quickly and efficiently.

(3) Promote net-new jobs in the private sector with an income above regional average household income.

According to the US Department of Labor, Bureau of Labor Statistics[18], the Project's average annual wage of $45,546 per year is 28.0% higher than the average annual mean wage for the Northwest Florida nonmetropolitan area.

(4) Align with Northwest Florida FORWARD, the regional strategic initiative for Northwest Florida economic transformation.

Please See Attachment T which details the manner in which the GCEE Project is wholly aligned with Northwest Florida FORWARD, the regional strategic initiative for Northwest Florida Economic Transformation.

(5) Create net-new jobs in targeted industries to include: aerospace and defense, financial services/shared services, water transportation, artificial intelligence, cybersecurity, information technology, manufacturing, and robotics.

As detailed in Attachments F and P, the GCEE Project is expected to create a total of 1,504 net new long term private-sector jobs - many of which are in a Rural Economic Opportunity Area as defined by the State of Florida Department of Economic Opportunity. A large majority of these jobs are directly related to *water transportation* or *manufacturing*.

(6) Promote industry cluster impact for unique targeted industries.

Each of the three components of the GCEE Project contributes to the growth of the "*water transportation*" industry sector.

(7) Create net-new jobs with wages above national average wage (*e.g.*, similar to EFI QTI program, measured on graduated scale).

The Qualified Target Industry (QTI) is a tool available in Florida to encourage quality job growth in targeted, high value-added industries for applicants that pay an average annual wage that is at least 115 percent of the metropolitan statistical area (MSA). As detailed in Attachment P, the GCEE Project's average annual wage of $45,546 per year is 28.0% higher than the average annual mean wage for the Northwest Florida nonmetropolitan area.[18]

Additionally, many of these new jobs will be created in a rural county, a qualified Enterprise Zone, and a qualified Rural Economic Opportunity Area.

(8) Are located in Rural Area of Opportunity as defined by the State of Florida (DEO).

As previously detailed, many of the 32 net new long term private-sector jobs to be created by the GCEE Project or the 1,472 indirect or induced jobs to the created by the GCEE Project will be created in a Rural Economic Opportunity Area as defined by the State of Florida Department of Economic Opportunity.

(9) Provide a wider regional impact versus solely local impact.

The GEEP will be implemented across all 8 disproportionately affected counties including: Okaloosa County; Bay County; Escambia County; Franklin County; Gulf County; Santa Rosa County; Wakulla County; and Walton County. Thus, the Project delivers a wider regional impact versus solely a local impact.

(10) Align with other similar programs across the regions for greater regional impact, and not be duplicative of other existing projects or programs.

None of the four panhandle state colleges currently offer marine technician training programs. Northwest Florida State College is prepared to seize the opportunity to work with local industry leaders to develop a state-of-the-art, short-term technical program to serve the entire region that will enable the industry to meet its current workforce demands and grow this skilled sector of the regional economy.

(11) Enhance research and innovative technologies in the region.

The GCEE Project will enhance research and innovative technologies in the region in two ways. First, the Marine Engineering Institute at Northwest Florida State College will align with industry partners to acquire advanced marine propulsion equipment which will be used by professors and students to elevate technology skill sets in the region. Second, as explained in Attachment H and F, the Monroe County public/private partnership for a mobile marine pumpout program is the only other such program in history. Thus, the solutions provided under the GCEE Project are enhancing innovative technologies in the region.

(12) Enhance a targeted industry cluster or create a Center of Excellence unique to Northwest Florida.

There are three marine centers of excellence in Florida where students can prepare for professional careers in marine technologies. One in the Gold Coast, One in the Treasure Coast, and one in Key West. The Marine Engineering Institute at Northwest Florida State College is a Center of Excellence that will be unique to Northwest Florida.

(13) Create a unique asset in the region that can be leveraged for regional growth of targeted industries.

The GCEE Project is a paradigm-shifting project because it creates three new unique assets in the region that can be leveraged for regional growth of targeted industries. First, the Marine Engineering Institute is the first and only of its kind in the Panhandle of Florida. This educational institute is the asset which literally opens the window of opportunity for recruiting marine technology-based industries to the area. In fact, the Applicant has already been contacted by a marine propulsion company that has an interest in expanding into Northwest Florida if the Marine Engineering Institute is established. The STEM Education component reinforces this education asset by creating a steady-state influx of skilled workforce talent. Finally, as detailed in Attachment T, the Mobile Marine Pumpout Program is synergistically-aligned with each of the prominent "Focus Areas" of Northwest Florida FORWARD. And, since the Marine Pumpout Program maintains and enhances our critical marine infrastructure that has become dilapidated over time, it will make Northwest Florida a place that is appealing to existing residents and visitors as well as to a new generation of talented and creative individuals and companies.

(14) Demonstrate long-term financial sustainability following Triumph Gulf Coast, Inc. funding.

As detailed in Attachment H, the GCEE Project will demonstrate long-term financial sustainability long after the 7-year grant funding period by Triumph Gulf Coast, Inc.

(15) Leverage funding from other government and private entity sources.

As noted in Attachment Q, the Northwest Florida State College is contributing real property (and the cost of security) at its Okaloosa County Campus to establish the Marine Engineering Institute. This contribution's estimated valued is $649,218 over the 7-year duration of the grant award period. The College has also invested 25% of the Director's annual salary towards the Project and will do so through the remainder of the award period. Student tuition is also contributed so the Marine Engineering Institute will break even after the first year's startup costs. The City of Destin City Council voted unanimously to amend a Land Development Code ordinance to facilitate the City's contribution of boat-mooring slips and the right to discharge marine sewage effluent recovered under this Project into its sewage collection facility. The City's contribution is estimated at $390,000 over the life of the award period.

Finally, the Applicant has filed a grant application under the RESTORE Act Direct Component under Okaloosa County in the amount of $24,234,294 as a match for this Project. The Applicant is also working with other local governments and industry in the Project area to secure additional valuable assistance to the Project.

Finally, the applicant is preparing detailed applications for submission to other private and public grants (for example, The National Fish and Wildlife Foundation, the Gulf Coast Ecosystem Restoration Council, and the National Resource Damage Assessment, etc.) to fund the balance of the Project. The Applicant has already briefed some of these grantors and is optimistic the balance of the Project will be funded.

(16) Provide local investment and spending.

The Applicant and project partners are investing $35,205,064 as a match to the Triumph Gulf Coast investment of $11,735,021 and all of these funds will be spent in the 8 disproportionately affected counties. And, as detailed in Attachment F, the GCEE Project is estimated to generate, on average, $103.5 million in Value Added, $176.8 million in Output, $95.6 million in Personal Income, and $1,504 Total Jobs in the 8 disproportionately affected counties.

(17) Are supported by more than one governmental entity and/or private sector companies, in particular proposed projects or programs supported by more than one county in the region.

The GCEE Project is supported by Okaloosa County, the Okaloosa County School District, the City of Destin, and many private sector companies as demonstrated in Attachment AG, Exhibits 1, 5, 6, 10, 11, 12, 14, and 15.

(18) Provide clear performance metrics over duration of project or program.

As detailed in Attachments G and I, the GCEE Project provides clear performance metrics over the duration of the Project. And the success of the Project will be measured by the following four factors:

(1) How many new candidates are prepared to enter the workforce (and thereby ready to support Northwest Florida's single fastest-growing workforce industry)

(2) Number of direct and indirect jobs created by the Project

(3) The number of vessels that are registered in the pumpout service and the number of gallons of marine sewage effluent recovered (and thereby prevented from entering the near shore waters of Northwest Florida)

(4) The number of drums of floating garbage that is recovered from surface waters (and thereby prevented from forming microplastics in the near shore waters of Northwest Florida)

These quantifiable outcome measures will be incorporated into Monthly and Annual Reports to the Project stakeholders (including Triumph Gulf Coast, Inc.) and the public to ensure the GCEE Project remains on track to meet its objectives.

(19) Include deliverables-based payment system dependent upon achievement of interim performance metrics.

Deliverables for the Marine Engineering Institute and the STEM Education Component will be the documented expenditures related to the establishment of these components.

Finally, the contractor that will be competitively-selected to provide the Mobile Marine Pumpout Component of the GCEE Project must conform to a strict deliverables-based performance standard or it will not be paid.

(20) Provide capacity building support for regional economic growth.

Each of the three components of the GCEE Project is specifically designed to provide new capacity which will support regional economic growth.

(21) Are environmentally conscious and business focused.

As detailed in Attachments D and F, it would be difficult to envision any project that would be more environmentally conscious and business focused for the 8 disproportionately affected counties than the GCEE Project.

(22) Include Applicant and selected partners/vendors located in Northwest Florida.

The Applicant has been located in Northwest Florida since 1964 and the evaluation and selection process for the competitively-selected vendor to provide the Mobile Marine Pumpout services contains a local business preference provision.

Attachment L

Response for Question 6 on Page 9: ****Please attach proof of recommendation(s) from each County identified.**

PLACEHOLDER FOR A RESOLUTION BY THE OKALOOSA COUNTY BOARD OF COUNTY COMMISSIONERS.

The GCEE Project is scheduled to be considered by the Okaloosa County Board of County Commissioners at its April 17, 2018 meeting.

Attachment M

Response for Question 3 on Page 9: **Describe the timeline for the proposed project or program if an award of funding is approved, including milestones that will be achieved following an award through completion of the proposed project or program.**

This Project is unique in that it does not require lengthy or rigorous regulatory permits to be obtained prior to commencing work.

The Marine Engineering Institute Curriculum has already been completed and is consistent with State Standards. The Marine Engineering Institute will offer three semesters per calendar year and the first classes will commence on the first day of the semester following Project funding.

The STEM Education Component curriculum and lesson plans have been completed and they have been found to align with State of Florida Standards. The STEM Education Component will follow the established class schedules of school districts within each of the 8 disproportionately affected counties and will commence on the first day of the semester following Project funding.

Detailed Request for Proposals for both the STEM Education Vessel and the Mobile Marine Pumpout Program have been completed and have already been advertised in a manner providing full and open competition pursuant to 2 CFR 200.319(a).

It is estimated that the Project's vendor selection will be completed by June 30th, and the detailed Scope of Services for the RFP requires the competitively-selected vendors to be ready to commence work under the Project within 30 days written notice.

Attachment N

Response for Question 4 on Page 9: **Attach evidence that the undersigned has all necessary authority to execute this proposal on behalf of the entity applying for funding.**

Florida Statute 1001.65 (Florida College System Institution Presidents; Powers and Duties) provides Dr. Devin Stephenson – President of Northwest Florida State College – with all necessary authority to direct the execution of this proposal by the Applicant.

Attachment O

Response for Question 1 on Page 11: **Identify the amount of funding sought from Triumph Gulf Coast, Inc. and the time period over which funding is requested**.

As detailed in the Project Budget, the Applicant seeks $11,735,021 from Triumph Gulf Coast which effectively represents the Project startup costs. Applicant requests 50% ($5,867,511) be made available by July 2018 and 50% ($5,867,511) be made available by January 2019 at which time the Project startup phase will be completed.

Please See Attachment R for the Project Budget.

Attachment P

Response for Question 3 on Page 10: **Please describe the types and number of jobs expected from the proposed project or program and the expected average wage.**

The Project generates maximum economic benefits, no government expansion, and is expected to create a total of 32 net new long term private-sector jobs (many of which are in a Rural Economic Opportunity Area as defined by the State of Florida Department of Economic Opportunity). The Project pays wages and benefits of more than $13,700,000 over the seven-year award period ($1,959,780/year). Additionally, the Project is expected to create 1,472 induced and indirect jobs at various wage scales.

According to the US Department of Labor, Bureau of Labor Statistics, the Project's average annual wage of $45,546 per year is 28.0% higher than the average annual mean wage for the Northwest Florida nonmetropolitan area.[18]

The chart below details these positions and anticipated wage scale:

Job Classification	Number of Jobs	Term	Wage Scale (excluding Fringes)	Extended Wages Paid (excluding Fringes)
Marine Engineering Institute Professor	2	Long Term	$50,000	$100,000
Education/Outreach Director	1	Long Term	$38,000	$38,000
Education Technician	2	Long Term	$32,000	$64,000
STEM Education Vessel Captain	1	Long Term	$30,000	$30,000
STEM Education Vessel Deckhand	2	Long Term	$22,000	$44,000
The following positions will be filled via competitive procurement which will be conducted in a manner providing full and open competition pursuant to 2 CFR 200.319(a), so the wage scales listed are estimates based on the job classifications as detailed in the RFP Scope of Services.				
Pumpout Boat Captain	14	Long Term	$37,000	$518,000
Service Area Manager	1	Long Term	$65,000	$65,000
Logistics Manager	2	Long Term	$37,000	$74,000
Outboard Engine Mechanic	1	Long Term	$55,000	$55,000
Customer Onboarding Manager	1	Long Term	$60,500	$60,500
Customer Onboarding Support	1	Long Term	$32,500	$32,500
Book Keeper	1	Long Term	$50,000	$50,000
Program Compliance Officer	1	Long Term	$45,000	$45,000
Overall Program Manager	1	Long Term	$125,000	$125,000
Systems and Network Administrator	1	Long Term	$50,000	$50,000
TOTAL:	**32**			**$1,457,475 ÷ 32 = $45,546/year *includes a 3% COLA adjustment**

Attachment Q

Response for Question 4 on Page 10: **Does the potential award supplement but not supplant existing funding sources? If yes, describe how the potential award supplements existing funding sources.**

The potential award from Triumph will supplement the following contributions made to the Project by the Applicant, its partners, local governments, and other grant sources:

Northwest Florida State College is contributing real property (and the cost of security) at its Okaloosa County Campus to establish the Marine Engineering Institute. This contribution's estimated valued is $649,218 over the 7-year duration of the grant award period. The College has also invested 25% of the Director's annual salary towards the Project and will do so through the remainder of the award period. Student tuition is also contributed so the Marine Engineering Institute will break even after the first year's startup costs. The City of Destin City Council voted unanimously to amend a Land Development Code ordinance to facilitate the City's contribution of boat-mooring slips and the right to discharge marine sewage effluent recovered under this Project into its sewage collection facility. The City's contribution is estimated at $390,000 over the life of the award period.

Finally, the Applicant has filed a grant application under the RESTORE Act Direct Component under Okaloosa County in the amount of $24,234,294 as a match for this Project. The Applicant is also working with other local governments and industry in the Project area to secure additional valuable assistance to the Project.

Finally, the applicant is preparing detailed applications for submission to other private and public grants (for example, The National Fish and Wildlife Foundation, the Gulf Coast Ecosystem Restoration Council, and the National Resource Damage Assessment, etc.) to fund the balance of the Project. The Applicant has already briefed some of these grantors and is optimistic the balance of the Project will be funded.

The Project leverages partnerships between the Northwest Florida State College, tourism organizations, economic development organizations, chambers of commerce, military installations, and others across the region.

Attachment R

Response for Question 5A on Page 10 and 5B on Page 11: **Please provide a Project/Program Budget. Include all applicable costs and other funding sources available to support the proposal.**

PROJECT BUDGET INFORMATION								
BUDGET CATEGORIES								
Cost Classification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	TOTAL
a. Personnel	$ 296,500	$ 304,235	$ 312,179	$ 320,337	$ 328,716	$ 337,322	$ 346,161	$ 2,245,451
b. Fringe Benefits	$ 86,566	$ 88,829	$ 91,153	$ 93,540	$ 95,991	$ 98,509	$ 101,096	$ 655,684
c. Travel	$ 136,444	$ 138,761	$ 141,118	$ 143,515	$ 145,953	$ 148,432	$ 150,956	$ 1,005,179
d. Equipment	$ 710,013	$ -	$ -	$ -	$ -	$ -	$ -	$ 710,013
e. Supplies	$ 840,499	$ 80,035	$ 81,147	$ 82,275	$ 87,920	$ 84,583	$ 85,762	$ 1,342,222
f. Contractual (outsourced services)	$ 10,028,677	$ 4,631,465	$ 4,637,056	$ 5,199,189	$ 4,816,161	$ 5,110,591	$ 5,559,003	$ 39,982,142
g. Other (specify)								
Cost of Rent for Marine Eng. Inst. & STEM Ed. Comp.	$ 90,000	$ 90,900	$ 91,809	$ 92,727	$ 93,654	$ 94,591	$ 95,537	$ 649,218
Insurance (P&I, Commercial General Liability, etc.)	$ 18,450	$ 18,764	$ 19,083	$ 19,407	$ 19,737	$ 20,072	$ 20,414	$ 135,926
Regulatory Licenses and Permits	$ 1,100	$ 1,119	$ 1,138	$ 1,157	$ 1,177	$ 1,197	$ 1,217	$ 8,104
Postage and Delivery	$ 2,250	$ 2,286	$ 2,323	$ 2,360	$ 2,398	$ 2,437	$ 2,476	$ 16,531
Telecommunications and Internet	$ 6,480	$ 6,590	$ 6,702	$ 6,816	$ 6,932	$ 7,050	$ 7,170	$ 47,740
Professional Fees (legal and accounting)	$ 1,950	$ 1,983	$ 2,017	$ 2,051	$ 2,086	$ 2,121	$ 2,158	$ 14,366
Rents	$ 14,400	$ 14,645	$ 14,894	$ 15,147	$ 15,404	$ 15,666	$ 15,933	$ 106,089
Disaster Preparedness and Post-Disaster Recovery	$ 1,429	$ 1,429	$ 1,429	$ 1,429	$ 1,429	$ 1,429	$ 1,429	$ 10,000
Incidental Expenses (unforeseen events, etc.)	$ 1,550	$ 1,576	$ 1,603	$ 1,630	$ 1,658	$ 1,686	$ 1,715	$ 11,419
h. Total Direct Charges (sum a-g)	**$ 12,236,308**	**$ 5,382,617**	**$ 5,403,650**	**$ 5,981,581**	**$ 5,619,217**	**$ 5,925,687**	**$ 6,391,026**	**$ 46,940,085**
Total Direct Charges (Years 1 - 7)	**$ 46,940,085**							
25% Investment by Triumph	**$ 11,735,021**							
Triumph Investment by Year	**$ 5,867,511**	**$ 5,867,511**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 11,735,021**

A. Project/Program Costs:

Example Costs (Note: Not exhaustive list of possible Cost categories.)

Construction	$ See above
Reconstruction	$ See above
Design & Engineering	$ See above
Land Acquisition	$ See above
Land Improvement	$ See above
Equipment	$ See above
Supplies	$ See above
Salaries	$ See above
Other (specify)	$ See above

Total Project Costs: $ 46,940,085

D. Other Project Funding Sources:

Example Funding Sources (Note: Not an exhaustive list of possible Funding Sources.)

NW Florida State College	$ 649,218
City/County	$ 390,000
Private Sources	$ 0
Other grants 1	$ 24,234,294 (RESTORE ACT Direct Component)
Other grants 2	$ 9,931,552 (State & Federal)
Total Other Funding	$ 35,205,064
Total Amount Requested:	**$ 11,735,021**

Attachment S

Response for Question 5C on Page 11: **Provide a detailed budget narrative, including the timing and steps necessary to obtain the funding and any other pertinent budget-related information.**

The specific duty or purpose for each category of the budget (See Attachment R) is detailed in the Budget Narrative below. The Budget Narrative details why each of these expenditures is allowable, necessary, and reasonable.

The "Personnel" and "Fringe Benefits" categories of the Budget Narrative includes items under the "Contractual" category (row 6.f. of the Budget in Attachment R) which will be required to fulfill the Scope of Services obligations for the competitively-bid portion of the Project:

Budget Narrative

a. Personnel – Total Wages Paid (excluding Fringes): $10,202,000
Total New Direct Jobs Created: 32

Marine Engineering Institute Professor – There are 2 employees in this classification and the average salary for this classification is $50,000 plus benefits which will be covered for the entire 84 months under the Project award. The Marine Engineering Institute Professor is a tenure-track faculty position will provide tutelage to students of Northwest Florida State College Maine Engineering Institute. Professors will be required to have a Masters degree from an accredited college or university in Marine or Mechanical Engineering or a related field, such as naval architecture, naval engineering, or nuclear engineering. Relevant disciplines for this position include; acoustics and vibration, marine structures, marine hydrodynamics, marine design, fluid-structure interactions, marine engineering, autonomous vehicles, electrification, control and dynamics, condition monitoring, distributed systems, sensing, and navigation with applications in marine platforms and vessels.

The Professors will instruct enrolled students to provide service and maintenance for the 14 marine pumpout vessels that are placed into service under this Project. In this manner these students will receive practical hands-on experience which will prepare them to enter professional careers in the marine engineering industry – especially in the areas of vessel manufacturing, propulsion, power distribution systems, and auxiliary systems.

Marine Engineering Institute Adjunct Professor – There is 1 employee in this classification. This is a part time position and thus it is not included in the "Positions Created" chart included in Attachment P. The Marine Engineering Institute Adjunct Professor will provide overflow capabilities to the Marine Engineering Institute on an as-needed basis.

Education/Outreach Director – There is 1 employee in this classification and the average salary for this classification is $38,000 plus benefits and will be covered for the entire 84 months under the Project award. The Education/Outreach Director will create curriculum content which will be hosted in an online portal that will offer teacher support, as well as materials needed for lessons. The Education/Outreach Coordinator will form relationships with curriculum directors from the service area school systems to facilitate and incentivize (through professional development credits or stipends) participation in the program. The Education/Outreach Coordinator will also provide teacher trainings at two different central locations at the beginning of the school year whereby teachers will learn to implement lessons and receive supplies and materials.

Education Technician - There are 2 employees in this classification and the average salary for this classification is $32,000 plus benefits and will be covered for the entire 84 months under the Project award. The Education Technicians from CBA will provide two enhanced learning opportunities for the students with hands-on activities to bridge the conceptual knowledge and technical skills taught in these modules.

STEM Education Vessel Captain – There is 1 employee in this classification and the average salary for this classification is $30,000 plus benefits and will be covered for the entire 84 months under the Project award. The STEM Education Vessel Captain will be licensed under the State of Florida, and this sea captain will operate the Project's STEM Education Vessel on a daily basis.

STEM Education Vessel Deckhand – There are 2 employees in this classification and the average salary for this classification is $22,000 plus benefits and will be covered for the entire 84 months under the Project award. The STEM Education Vessel deckhands will assist the STEM Education Vessel Captain to operate the Project's STEM Education Vessel on a daily basis.

Pumpout Boat Captains – There are 14 employees in this classification which will be covered for the entire 84 months under the Project award. The Boat Captains are licensed under the State of Florida, and these sea captains will operate the Program's marine pumpout vessels on a daily basis. Boat Captains will be hazmat trained.

Service Area Manager – There is 1 employee in this classification which will be covered for the entire 84 months under the Project award. The Service Area Manager oversees the overall operational facets of the pumpout program and will spend 100% of his/her time hiring and training staff, supervising, and resource allocation. The Service Manager will be hazmat trained.

Logistics Manager – There are 2 employees in this classification which will be covered for the entire 84 months under the Project award. The Logistics Manager works for the Service Area Manager and is responsible for managing local delivery, and materials, and inventory. The Logistics Manager will be hazmat trained.

Outboard Engine Mechanic – There is 1 employee in this classification which will be covered for the entire 84 months under the Project award. The Engine Mechanic will be industry certified and hazmat trained. This Outboard Engine Mechanic will be an employee of the competitively-selected service contractor and will be responsible for emergency engine repairs (non-routine, non-scheduled routine engine maintenance that is provided by the Northwest Florida Marine Engineering Institute) for pumpout vessels which are actively providing pumpout services.

Customer Onboarding Manager – There is one employee in this classification which will be covered for the entire 84 months under the Project award. The Customer Onboarding Manager is responsible for managing the pumpout customer onboarding process to ensuring this process is meeting specific milestones to ensure the Project remains on track to meet its quantifiable outcome measures. This position starts tapering down and becomes a part-time position during year three.

Customer Onboarding Support – There is one employee in this classification which will be covered for the entire 84 months under the Project award. The Customer Onboarding Support member supports the Customer Onboarding Manager throughout the 8-county territory service area under the Project.

Book keeper - There is 1 employee in this classification which will be covered for the entire 84 months under the Project award. As the title implies, the Book keeper will perform general accounting and book keeping processes to ensure the Project's expenses are synergistically aligned with the Project Budget.

Program Compliance Officer – There is 1 employee in this classification which will be covered for the entire 84 months under the Project award. The Program Compliance Officer will be responsible for ensuring the Project and its deliverables remain wholly consistent with requirements of each Project investor.

Overall Program Director – There is 1 employee in this classification which will be covered for the entire 84 months under the Project award. The Program Director will be responsible for the overall performance of the Project.

Systems and Network Administrator – This is a Part Time Position for 1 employee in the classification which will be covered for the entire 84 months under the Project award. The Systems and Network Administrator will manage the wide array of electronic communication infrastructure for the entire Project.

Finally, this Project incorporates training and development for all staff dedicated to this Project. And, all field-operation staff placed into service under the competitively - bid portion of this Project (listed in row f. "Contractual) will be HAZMAT trained.

The total seven-year "Personnel" costs for the Project is $10,202,000.

b. Fringe Benefits - Total: $3,516,139

Fringe Benefits will be paid at current published US Department of Labor rates and includes legally required benefits such as; Social Security, Medicare, Unemployment Insurance, Workers Compensation. Fringes for some salaried employees include Life, Health, Disability Insurance, Paid Leave (vacation, holidays, sick leave and personal), average employer contribution to retirement savings, and Supplemental pay.

The total seven-year "Fringe Benefits" costs for the Project is $3,516,139.

c. Travel - Total: $1,005,179

This category includes all travel expenses related to the public education component and the public outreach component. As the name of this category suggests, this includes all reimbursable travel expenses for employees who use their personal automobiles in the conduct of the Project which will be reimbursed at the government rate.

This category also includes the operational costs for the STEM Education Vessel which will provide students with in-the-field experience to reinforce the STEM education curriculum that is delivered in the classroom. Examples of costs within this category includes fuel and oil, minor maintenance, consumable cleaning supplies and materials, etc.

The total seven-year "Travel" costs for the Project is $1,005,179.

d. Equipment - Total: $710,013

This category includes capital equipment required by the Project that has an acquisition cost of $5,000 or more. This equipment is required to establish the Marine Engineering Institute and includes items such as; EFI ignition system trainers, marine gear case trainers, AC/DC electrical training systems, marine fuel system trainers, jet 13" geared head speed controls, journeyman mechanic tool sets, master mechanic hand tool sets, and an electrical systems trainer kit.

The total seven-year "Equipment" costs for the Project is $710,013.

e. Supplies - Total: $1,342,222

This category generally includes non-capital equipment with an acquisition cost less than $5,000 and materials, supplies, and the repairs and maintenance of the materials and supplies which are consumed in the course of implementing the Marine Engineering Institute, the STEM Education Component and the Public Outreach portions of this Project. Examples include; classroom materials, office equipment, office furniture and fixtures

(such as computers, phones, and copiers, as well as office furniture such as chairs, tables, etc.), office supplies (such as binders, file folders, printer paper, toner, staples, etc.), printing and website production (includes the cost of producing marketing materials, the computer website, handouts, etc., and the costs of production, advertising buys, search engine optimization, etc.), dues and subscriptions (including computer software), and employee uniforms.

This category also includes supplies and consumable materials for the STEM Education Vessel such cleaning supplies, ropes, drinking water, ice, filters, spark plugs, and employee uniforms.

The total seven-year "Supplies" costs for the Project is $1,342,222.

f. Contractual (outsourced services) Total: $39,982,142

This category includes the two portions of the Project that will be competitively bid separately by the Applicant.

The first competitively bid item is the acquisition of the STEM Education Vessel. The STEM Education Vessel is a 35'- 40' powered catamaran watercraft that is specifically-designed to facilitate to the unique needs of this Project. For example, the STEM Education Vessel is a shallow draft, catamaran which will accommodate up to 30 passengers. It will have a large fold-down ramp so that students can easily and safely gain ingress and egress to the shallow waters of Choctawhatchee Bay. The Vessel will be equipped with twin outboard engines, large washdown tables, custom lights, and a high-capacity generator to facilitate fresh and saltwater washdown pumps, collection tanks, and live-wells. The expected acquisition cost for the STEM Education Vessel is ~$500,000.

The second competitively bid item is to procure the Mobile Marine Pumpout Services for the Project. The scope of services for this category (detailed in the "*Third Purpose*" answer to Question B.1 "Proposed Scope of Work"), includes providing all the personnel, equipment, and supplies necessary to facilitate the pumpout scope of services under this Project.

The Applicant has already prepared a Request for Proposals (RFP) with a detailed Scope of Services for each of these items and will soon advertise the solicitations.

The total seven-year "Contractual" costs for the Project is anticipated to be $39,982,142.

g. Other - Total: $999,393

This category includes the cost of rent (plus security) for the Marine Engineering Institute and STEM Education Component), insurance (including; Protection & Indemnity, Maritime, Commercial General Liability, automobile, etc.), regulatory licenses and permits

(including; licenses for business operations, pumpout boats, trailers, trucks and service vehicles), postage and delivery (category includes shipping and freight expenses, postage expense, and local delivery expenses consumed on behalf of the Project), telecommunications and internet expense (which includes all telephone, communications, and internet expenses for the wide area network), repairs, professional fees (which includes outsourced professional fees for legal and accounting), cost of space (such as the cost of rent for dock space, boat trailer storage, boat yard, and office rent including utilities), disaster Preparedness and Post-Disaster Recovery expenses (This category includes the potential mobilization costs of evacuating all equipment and crews to pre-established safe zones in preparation of natural disasters. This category also includes the costs of relocating and re-commencing full-up operations immediately after the natural disaster has passed. For budgetary purposes, the Project team has budgeted for two events over the 7-year grant investment period), and incidental expenses (such as the costs associated with unforeseen and unpredictable operating costs such as bad fuel, etc.).

The total seven-year "Other" costs for the Project is $999,393.

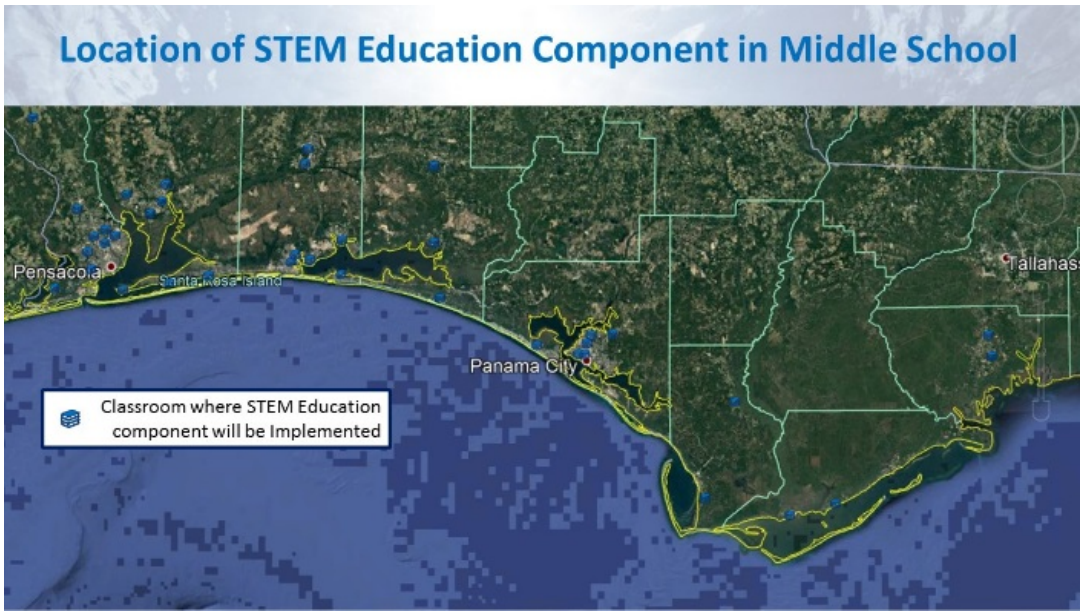
Attachment T

Response for Question 1D on Page 13 (ADDENDUM FOR INFRASTRUCTURE PROPOSALS): **Provide a detailed explanation of how the public infrastructure improvements will connect to a broader economic development vision for the community and benefit additional current and future businesses.**

This *Addendum for Infrastructure Proposals* is completed for the Mobile Marine Pumpout Program component of the overall Project. However, the Marine Engineering Institute component and the STEM Education Component fall under the category of Workforce Training Proposals and both of those components also contribute to the broader economic development vision for the community and benefit additional current and future businesses. Therefore, the Addendum for Workforce Training Proposals is also included with the application.

The Mobile Marine Pumpout Program component of the overall Project is synergistically-aligned with each of the prominent "Focus Areas" of Northwest Florida FORWARD which is the regional strategic initiative for Northwest Florida's economic transformation. These five Focus Areas - Talent Strategies, Business Vitality Strategies, Infrastructure Strategies, Entrepreneurship and Innovation Strategies, and Quality of Place Strategies - serve as aspirational goals to promote future growth and vitality for Northwest Florida. The specific way in which the Mobile Marine Pumpout Program component helps promote these Focus Areas is detailed below:

- **Talent Strategies –**
  - Aspirational Goal: *Expand the promotion of science, technology, engineering, and math (STEM) programs and technical skills development as early as grade school to build long-term talent supply in the region.*
    - Project contribution: As the grant Applicant, Northwest Florida State College (NWFSC) and the Choctawhatchee Basin Alliance (which is a 501(c)3 program chartered under NWFSC) will establish a Marine Engineering Institute at the College campus and will integrate a service-area-wide STEM education program in each of the 38 middle schools across the Project service area. Both of these STEM-focused components are specifically intended to increase students' technology skills and prepare them for future occupations. In conjunction with the Project's comprehensive Sustainability Plan, this partnership will provide continual outreach to the public, stakeholders, and policy-makers to ensure the Project remains on track to meet its quantifiable outcome measures and will ensure the economic and environmental benefits of the Project are generationally sustainable.
  - Aspirational Goal: *Increase employability skills training programs to reduce employment barriers for all students and adults, with a particular focus on underserved populations.*
    - Project contribution: Both the Marine Engineering Institute and the STEM education curriculum to be implemented under this Project are perfectly aligned with this Goal. The graphic below depicts the geographic location of the 38 middle schools in the Project service area where this STEM curriculum will be implemented. As depicted in the graphic, many of these locals are considered underserved populations.



- **Business Vitality Strategies -**
  - *Aspirational Goal: Market and promote Northwest Florida as a destination for new investment and employment.*
    - Project contribution: Enterprise Florida invokes Florida's quality of life to help it promote Northwest Florida as a premier destination for new investment and employment. It further invokes six principle highlights to explain why Florida's quality of life is one of the best in the United States and three of those six, (education, recreation, and tourism) are directly enhanced by this Project.
      Education: As detailed within, the STEM education component to be implemented under this Project will enhance increase students' technology skills and prepare them for future occupations, thereby bolstering the Education principle.

      Recreation: Water dependent recreational activity is the leading growth component in the recreation sector. In fact, water-dependent recreational activity has grown in Northwest Florida by 600% over the last 20 years. Protecting and enhancing our public water infrastructure is pivotal in providing the aquatic capacity for continued growth.

      Tourism: Northwest Florida is famous for its pristine beaches and beautiful emerald-green waters and it is these assets which make it one of the top tourist destinations in the world. In fact, Northwest Florida's tourism industry offers great business opportunities as well as a dynamic, growing market for companies. This Project enhances Northwest Florida's number one asset for attracting those new business opportunities.

- Aspirational Goal: *Expand and leverage tourism to support industry attraction.*

  Project contribution: In northwest Florida tourism is the most-vital component of the economic health of the Panhandle region and tourist spending has a direct impact on area sales levels, employment numbers, labor income, and tax revenues. To use this asset as a tool to grow our economic base it is essential that we protect and enhance the actual asset itself and even the perception of the asset.

  In fact, according to VisitFlorida.org, tourism was responsible for the creation of more than 200,000 in the Florida Panhandle in 2016 alone. But, to be blunt, the tourism industry simply does not exist in Northwest Florida without the area's beautiful and healthy waters. And, according to economic development leaders, the single best way to enhance our future economy is to protect and enhance the major drivers behind the Gulf Coast's existing economic engine. This Project is a proven, practical and proactive way to not only sustain our number one economic driver, but to transformationally enhance it like never before.

- **Infrastructure Strategies**
  - Aspirational Goal: *Ensure that the necessary infrastructure improvements to ports and airports to accommodate new private investment and employment are funded and completed.*
    - Project contribution: One of the principal benefits of the Mobile Marine Pumpout Component of the GCEE Project is to provide improvements to port infrastructure throughout the 8 disproportionately affected counties in order to accommodate new private investment and employment.
- **Entrepreneurship and Innovation Strategies**
  - Aspirational Goal: *Promote rural entrepreneurship.*
    - Project contribution: The principle goal of the Rural Infrastructure Fund under Chapter 288.0655 F.S. is to facilitate infrastructure projects in rural communities which will encourage job creation, capital investment, and the strengthening and diversification of rural economies by promoting tourism, trade, and economic development. This Project supports this goal by creating 32 net new private-sector jobs and 1,472 indirect or induced jobs, many of which are in a Rural Economic Opportunity Area as defined by the State of Florida Department of Economic Opportunity.
  - Aspirational Goal: *Market regional entrepreneurial success stories.*
    - Project contribution: The Public/Private Partnership for a marine pumpout program in Monroe County is viewed throughout South Florida as a massive success story, in fact it is so popular that it has literally gained a cult-like following. This proposed Project is approximately four times larger than the one in The Keys and it takes place across an 8-county region in Northwest Florida which is now Florida's second-largest

tourism drive market behind Orlando. Tourists visit Northwest Florida from all over the nation and this Project – just like the Public/Private Partnership in Monroe county – will become an amazing regional entrepreneurial success story.

- **Aspirational Goal:** *Support entrepreneurial programs and curriculum in the K-20 continuum to foster a culture of innovation and cultivate an entrepreneurial spirit in the region.*
  - Project contribution: The Marine Engineering Institute and the STEM Education Component that will be implemented under this Program will help foster a culture of innovation and cultivate an entrepreneurial spirit across the region. Moreover, the most-important purpose of the STEM Education Vessel placed into service under this Project is to provide students with in-the-field experience to reinforce the STEM education curriculum that is delivered in the classroom. If the desire is to cultivate an entrepreneurial spirit in the K-20 curriculum then this Project is a model for how it is done.

- **Quality of Place Strategies** – Make Northwest Florida a place that is appealing to existing residents and visitors as well as to a new generation of talented and creative individuals and companies.
  - **Aspirational Goal:** *Enhance and protect the Region's quality of life while laying the foundation for sustainable economic growth.*
    - Project contribution: Enhancing and protecting the Region's quality of life - which will lay the foundation for sustainable economic growth - is one of the primary deliverables of this Project. Northwest Florida's remarkable quality of life is one of the region's biggest assets. It makes the Panhandle one of the best places to live in the United States, attracting both companies and employees to the state. The Project will ensure that Northwest Florida's economy is primed for growth by protecting and enhancing the region's primary economic driver – our water infrastructure.

Attachment U

Response for Question 1E on Page 13 (under ADDENDUM FOR INFRASTRUCTURE PROPOSALS): **Provide a detailed description of, and quantitative evidence demonstrating how the proposed public infrastructure project will promote:**

- Economic Recovery
- Economic Diversification
- Enhancement of the Disproportionately Affected Counties
- Enhancement of a Targeted Industry

- **Economic Recovery:**

  The 2010 Deepwater Horizon Oil Spill caused widespread economic depression in Northwest Florida. While this depression was felt in many ways, lowered tax revenues in the 8 disproportionately affected counties significantly limited the amount of resources available to local governments to invest in infrastructure improvements. As a result, infrastructure maintenance was deferred and today our critical marine infrastructure (which supports Northwest Florida's number one industry) is literally teetering on the brink of catastrophe. Just one confirmed case of flesh eating bacteria will collapse tourism in the region as it did in Mobile, Alabama last year.

  The GCEE Project will play a pivotal role in the economic recovery of the region by ensuring our critical marine infrastructure is improved and can support future growth and prosperity.

- **Economic Diversification:**

  The GCEE Project will deliver economic diversification by implementing a STEM Education component that is entirely new for the Florida Panhandle. Working in concert, the Project's STEM Education Component and the Marine Engineering Institute will provide an educated workforce in an entirely new industry which, in turn, will attract new businesses and new jobs within an industry that is entirely new for Northwest Florida.

- **Enhancement of the Disproportionately Affected Counties:**

  As detailed in Attachment D, the GCEE Project will be implemented across all 8 disproportionately affected counties and will provide health, safety, and welfare benefits to all citizens, properties and businesses of the entire Florida Panhandle and its visitors.

- **Enhancement of a Targeted Industry:**

  As detailed in Attachment F and P, the GCEE Project is expected to create a total of 1,504 net new long term private-sector jobs in the 8 disproportionately affected counties and large majority of these jobs are directly related to *Water Transportation* or *Manufacturing* targeted industries.

  Furthermore, as detailed in Attachment T, the Mobile Marine Pumpout Program is

synergistically-aligned with each of the prominent "Focus Areas" of Northwest Florida FORWARD. And, since the Marine Pumpout Program maintains and enhances our critical marine infrastructure that has become dilapidated over time, it will make Northwest Florida a place that is appealing to existing residents and visitors as well as to a new generation of talented and creative individuals and companies.

In conclusion, the Mobile Marine Pumpout Program of the GCEE Project clearly contributes to the growth of the "*Water Transportation*" and "*Manufacturing*" industry sectors.

Attachment V

Response for Question 2H on Page 15 (ADDENDUM FOR INFRASTRUCTURE PROPOSALS):
Does this project have a local match amount? If yes, please describe the entity providing the match and the amount.

Under the GCEE Project, Northwest Florida State College is contributing real property at its Okaloosa County Campus to establish the Marine Engineering Institute. This contribution's estimated valued is $649,218 over the 7-year duration of the grant award period. The College has also invested 25% of the Director's annual salary towards the GCEE Project and will do so through the remainder of the award period. Student tuition is also contributed so the Marine Engineering Institute will break even after the first year's startup costs. The City Council for the City of Destin has preliminarily committed by unanimous vote to provide boat-mooring slips and the right to discharge marine sewage effluent recovered under the GCEE Project into its sewage collection facility and this contribution is valued at $390,000 over the life of the award period. In March the Applicant filed a RESTORE Act Direct Component Application in Okaloosa County in the amount of $24,234,294 as a match for this Project. The Applicant is also working with other local governments and industry partners in the Project area to secure additional services, infrastructure, land, and other valuable assistance on behalf of the GCEE Project.

Finally, the applicant is preparing detailed applications for submission to other private and public grants (for example, The National Fish and Wildlife Foundation, the Gulf Coast Ecosystem Restoration Council, and the National Resource Damage Assessment, etc.) to fund the balance of the Project. The Applicant has already briefed some of these grantors and is optimistic the balance of the Project will be funded.

The GCEE Project leverages partnerships between the Northwest Florida State College, tourism organizations, local governments, economic development organizations, chambers of commerce, military installations, and others across the region.

Attachment W

Response for Question 1.A. on Page 16 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **Will this proposal support programs that prepare students for future occupations and careers at K-20 institutions that have campuses in the disproportionately affected counties? If yes, please identify where the campuses are located and provide details on how the proposed programs will prepare students for future occupations and at which K-20 institutions that programs will be provided.**

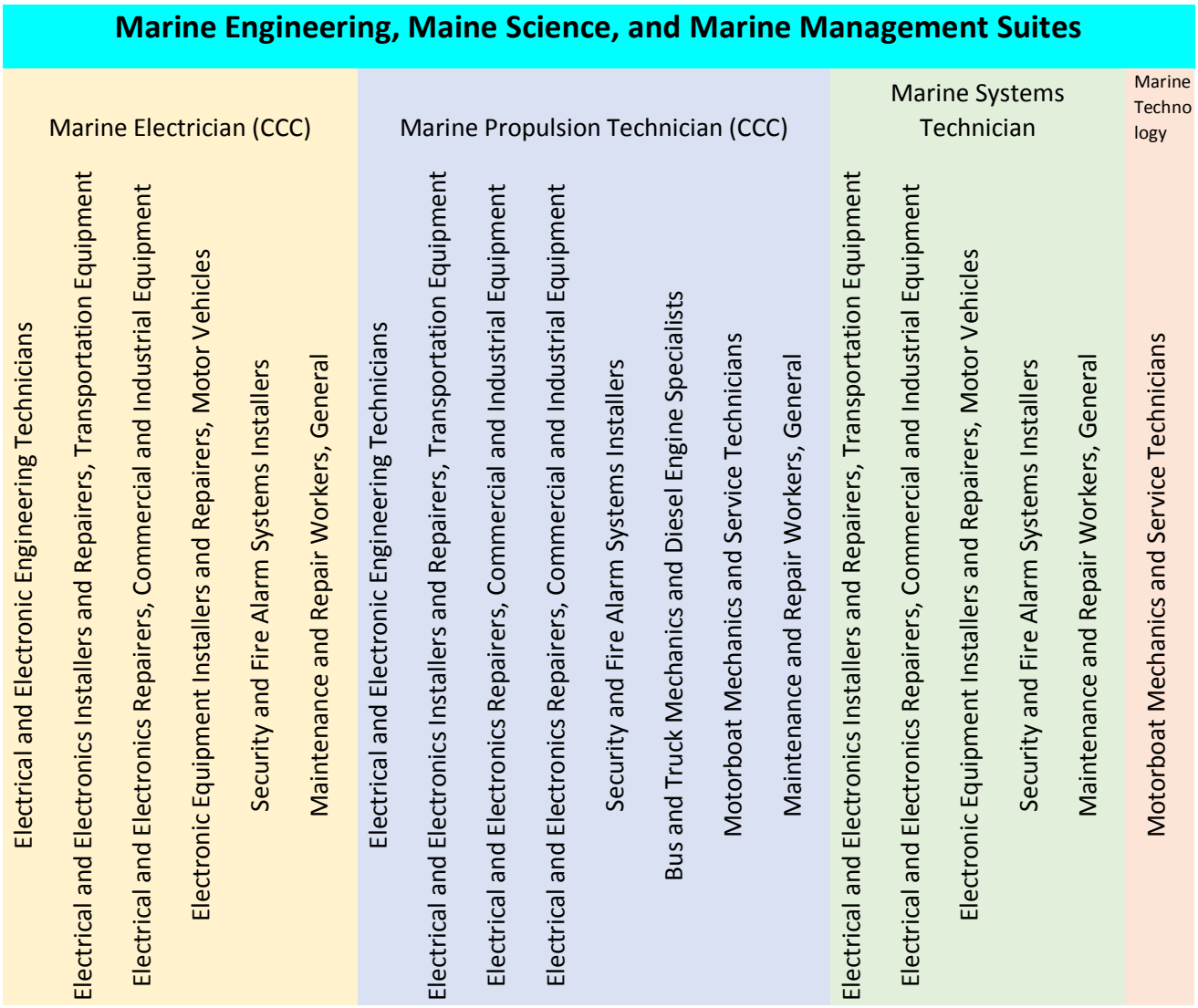
The **Marine Engineering Institute** of the GCEE Project will be implemented at the Okaloosa campus of Northwest Florida State College and the Choctawhatchee Basin Alliance of Northwest Florida State College will offer the STEM Education Component to secondary elective science students in each of the 8 disproportionately affected counties.

The Marine Engineering Institute will provide a workforce development degree program with elective certification in: Marine Electrical, Marine Propulsion Technician, Marine Systems Technician, and Marine Technology. Industry partners in Northwest Florida have confirmed that a workforce development program structured in this manner will directly address workforce needs that are currently lacking in the marine industry.

Marine power systems, marine electrical systems, and boat infrastructure are becoming ever more complex requiring detailed technological skills. One of the fundamental roles of the Marine Engineering Institute is to diagnose and repair the GCEE Project's fleet of mobile marine pumpout boats. These Project components are perfectly complimentary because the extreme engine burn rate for the pumpout boat fleet will require new engines and sub-systems nearly every year, so the students who are enrolled in the Institute will always be working on the latest and greatest technology and will thereby gain practical hands-on training in a real working environment that will prepare them for success in the work place for generations to come.

This Marine Engineering program has been developed to perform as an educational suite to suit the individual interests of students. For example, students who enter these programs may begin by selecting particular fields of interest, such as Marine Technology and then "stack" their certifications until they ultimately attain an Associates level degree which may then be used to transfer into Bachelor level engineering programs.

The chart below depicts the Marine Engineering Institute's suite of "stackable" elective fields:



The **STEM Education Component** will be delivered at secondary school campuses as prioritized by local school districts in all 8 disproportionately affected counties including; Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, and Wakulla Counties.

The STEM Education Component will consist of several learning modules that meet Florida STEM education standards for the grade level. The modules will provide place-based, experiential learning that will strengthen students understanding of STEM content and attract more individuals into STEM career pathways through interaction with STEM professionals. This project will employ place-based education (PBE) to immerse students in local landscapes, opportunities and experiences, using these as a foundation for the study of STEM. In this case, the curriculum will focus on local surface water resources. Using the Panhandle estuaries as a classroom, the Education Director and Education Technicians will design content that offers students real world applications of STEM topics and experience of selected STEM careers. For instance, a module on Water

Quality includes background lecture materials, interaction with working environmental technicians, and hands-on field experience collecting samples using appropriate technology. A module on Marine Sewage includes background materials on the nature of the problem in the estuarine environment and case study of a successful marine sewage abatement program. The Marine Engineering Module pairs secondary students with postsecondary students in the NWFSC Marine Engineering program to explore marine propulsion technology, and includes problem solving through conceptual design and engineering of a pump out boat. Each module will end by correlating the STEM skill or topic to potential STEM career pathways and identifying Florida schools that provide those programs.

Attachment X

Response for Question 1.B. on Page 16 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **For each item checked above, describe how the proposed program will achieve these goals.**

(1) Increase students' technology skills and knowledge

Northwest Florida State College's proposal for the GCEE Project is built on offering training based on the Florida Department of Education's curriculum frameworks. These frameworks are developed with statewide input from industry and educators to assure the instructional content addresses the knowledge and skill requirements of the modern workforce.

Furthermore, while most students have a strong aptitude for learning, their particular learning styles vary significantly. Many students may have difficulty grasping new technology skills and knowledge if presented in an abstract manner devoid of practical applications. The STEM Education Component integrates technology into real-world applications and practical problem solving based on students' needs and this makes the technology skills and knowledge approachable and relevant.

(2) Encourage industry certifications

Students attending Northwest Florida State College's educational programs are encouraged to test for appropriate industry certification exams. The College assists students with meeting this goal by building the fees for the exams into the course fees and in some circumstances the college offers scholarships for the expenses when funds are available from the college's Foundation or other industry sources.

Moreover, as detailed in Attachment W, students who enter these programs may begin by selecting particular fields of interest, such as Marine Technology and then "stack" their certifications until they ultimately attain an Associates level degree which may then be used to transfer into Bachelor level engineering programs.

(3) Provide rigorous, alterative pathways for students to meet high school graduation requirements

Northwest Florida State College proactively partners with Okaloosa and Walton county schools to offer programs as "dual enrollment" whenever possible. In some cases, the College partners with the school districts by sharing facilities and equipment to provide the K-12 student a clear pathway for their professional development. Please See Attachment AG, Exhibit 5 to see the Okaloosa County School District Letter of Support for the GCEE Project.

(4) Strengthen career readiness initiatives

All educational programs under this proposal are career and technical education (CTE) programs and one of the fundamental objectives of CTE programs is to instruct and assess career readiness skills throughout the program. These efforts are supported and strengthened by the college's connection to the business and technical professional community through advisory committees, which are utilized for all CTE programs.

(5) Fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors

The college has established Articulation Agreements between our Associate of Science programs and our Bachelor of Science programs. Many students attend the college initially in an AA or AS degree program and once completed continue their education in one of our BAS programs. The college is continually evaluating the need for additional BAS programs and will be developing additional offerings within the next few years. Additionally, the college engages with our state universities to develop articulation agreements whenever possible. Current university articulations agreements exist with the University of West Florida and Florida State University at Panama City.

(6) Encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties (similar to or the same as talent retention programs created by the Chancellor of the State University System and the Commission on Education)

Northwest Florida State College recognizes the national need for students to enroll and succeed in STEM related programming and to facilitate this need it regularly meets with K-12 administration and counselors to bring dual enrollment opportunities to them and to help students discover productive pathways to college. In fact, the Choctawhatchee Basin Alliance of Northwest Florida State College are subject matter experts at introducing K-12 students to Marine STEM occupations through its "*Grasses In Classes*" Program.

The STEM Education Component of the GCEE Project will combine place-based education (PBE) and field experiences to make STEM learning more meaningful and engaging. As detailed in Attachment W, each learning module will correlate STEM skills and knowledge learned with STEM career pathways. In addition, the Education Team will compile a list of resources for students that identifies postsecondary programs in the Florida College system that align with student interests and topics studied.

Attachment Y

Response for Question 1.C. on Page 16 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **Will this proposal provide participants in the disproportionately affected counties with transferable, sustainable workforce skills but not confined to a single employer? If yes, please provide details.**

Yes, all the workforce training programs of the GCEE Project are specifically designed to address industry needs and none of the programs are design-based for a single employer. All identified programs are focused on developing transferable and sustainable workforce skills in addition to the professional skills identified in the State of Florida's curriculum frameworks.

Attachment Z

Response for Question 1.E. on Page 17 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **Provide a detailed description of, and quantitative evidence demonstrating how the proposed project or program will promote:**

- Economic Recovery
- Economic Diversification
- Enhancement of the Disproportionately Affected Counties
- Enhancement of a Targeted Industry

- **Economic Recovery:**

The ability for Northwest Florida to meet its marine industry workforce needs is severely depressed. In fact, data from Emsi demonstrates that this year alone there were 876 openings in the marine industry that went unfilled, and currently there are no Marine Engineering programs or STEM Education programs which feature marine sciences or marine engineering in the 8 disproportionately affected counties to fill this void.

The GCEE Project will overcome this challenge by graduating students with certified credentials that are immediately able to assume professional careers in the marine industry. As depicted in the Table of Attachment AB, in less than eight years, the Marine Engineering Institute will have already graduated more than a quarter of the students necessary to fill these 876 annual openings. And with the STEM Education Component driving student interest in Marine Science and Engineering during their formative years, the enrollment/graduation rate for the Marine Engineering Institute ensures that 100% of industry needs will be met within 20 years.

- **Economic Diversification:**

Despite being Northwest Florida's number one growth sector, there are no Marine Engineering programs or STEM Education programs in the 8 disproportionately affected counties which feature marine sciences or marine engineering and this educational void has created massive shortfall in workforce development which has resulted in stymied economic growth in the region.

The GCEE Project will diversify the economy in Northwest Florida by establishing the Marine Engineering Institute and the STEM Education Component so that this critical need is fulfilled.

- **Enhancement of the Disproportionately Affected Counties:**

The single best way to enhance the future economy of the 8 disproportionately affected counties is to enhance the major drivers behind the Gulf Coast's existing economic engine. As detailed in Attachment D, the marine sector is the region's fastest growing industry, yet the economic growth of that industry is limited because there is not a skilled workforce available to meet the demand. The GCEE Project will enhance the disproportionately affected counties by creating the means to meet this demand and by establishing new capacity in the region's

educational system. That is why so many stakeholders believe the GCEE Project is a proven, practical and proactive way to not only sustain our number one economic driver, but to transformationally enhance the disproportionately affected counties like never before.

- **Enhancement of a Targeted Industry:**

As detailed in Attachment F and P, the GCEE Project is expected to create a total of 1,504 net new long term private-sector jobs in the 8 disproportionately affected counties and a large majority of these jobs are directly related to *Water Transportation* or *Manufacturing*.

Furthermore, a survey of corporate site selection consultants ranked "work force" as the single-most important factor in considering where to start a business. The conclusion shows that investing in people is the most-effective economic growth strategy.[19] If we are serious about enhancing Targeted Industries, then our growth strategy must center around developing a skilled workforce and that is best accomplish by creating new targeted educational capacity, which the GCEE Project is designed to deliver.

The GCEE Project is paradigm-shifting because it creates three new unique assets in the region that can be leveraged for regional growth of targeted industries. First, the Marine Engineering Institute is the first and only of its kind in the Panhandle of Florida. This educational institute is the asset which literally opens the window of opportunity for recruiting marine technology-based industries to the area. In fact, the Applicant has already been contacted by a marine propulsion company that is interested in expanding into Northwest Florida should the Marine Engineering Institute be established. Second, the STEM Education component to be introduced in K-12 reinforces the Marine Engineering Institute by creating a steady-state influx of impassioned students that will excel in the Institute's programs. Finally, as detailed in Attachment T, the Mobile Marine Pumpout Program is synergistically-aligned with each of the prominent "Focus Areas" of Northwest Florida FORWARD. And, since the Marine Pumpout Program maintains and enhances our critical marine infrastructure that has become dilapidated over time, it will make Northwest Florida a place that is appealing to existing residents and visitors as well as to a new generation of talented and creative individuals and companies.

In conclusion, each of the three components of the GCEE Project contributes to the growth of the "*Water Transportation*" and "*Manufacturing*" industry sectors.

Attachment AA

Response for Question 2.B. on Page 17 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **Indicate how the training will be delivered (*e.g.*, classroom-based, computer based, other). If in-person, identify the location(s) (e.g., city, campus, etc.) where the training will be available. If computer-based, identify the targeted location(s) (e.g., city, county) where the training will be available.**

Marine Engineering Institute

The majority of this program will be held in a hands-on training facility at the Okaloosa Campus of the College that is designed to provide a real-life work environment for the student. This facility will be based on the same premise as our award-winning welding facility. Students literally, "come to work" and are provided a first class "apprenticeship" from the best experts in their fields.

Classroom and other space is available for general education requirements and for foundational concept learning. NWF State College operates on a semester schedule with the fall term beginning in August, the spring term beginning in January, and the summer term beginning in May. Each semester, course formats include traditional on campus courses, web, weekend, hybrid, and fast-track college classes. Each Fall, Spring, and Summer term the college offers two Fast-Track terms. Hybrid classes offer the convenience and cost savings of fewer trips to campus yet allow students to benefit from valuable face-to-face instruction and direct interaction with classmates and the instructor. Online Campus/Distance Learning classes are for students whose schedules make it inconvenient or impossible to enroll in classes offered in the traditional format.

STEM Education Component

The STEM Education Component team will design eight modules for each county with customization allowing for geographical and grade-level differences. The multi-media content will be hosted online and teachers from each school district will receive materials, training, and professional development so that they can implement six of the modules.

The Choctawhatchee Basin Alliance at Northwest Florida State College will administer the GCEE Project's MSCEC professional development workshops to the participating faculty members of Panhandle schools prior to commencement of the school year. Lesson plans and training will be available to teachers via an online database accessible on a variety of classroom interfaces (e.g. smartboard, Google Chrome books, and classroom computers) enabling teachers to administer lessons independently to fit individual classroom itineraries. Teachers will also be provided the materials and supplies needed for each monthly lesson. Additionally, two grant-allotted instructors from the Choctawhatchee Basin Alliance will provide two enhanced learning opportunities for the students with hands-on activities to bridge the conceptual knowledge and technical skills taught in these modules.

The student curriculum content will be hosted in an online portal that will offer teacher support, as well as materials needed for lessons.

Additionally, the field trip module is an important component in overcoming students' lack of knowledge of and confidence in STEM skills and directing students toward STEM fields. Field trips are recognized as important moments in learning; a shared social experience that provides the opportunity for students to encounter and explore novel things in an authentic setting. Their importance is supported by professional organizations such as the National Science Teachers Association which asserts field trips can "deepen and enhance" classroom study (NSTA 1999) and the National Research Council who assert a quality science curriculum is one that extends beyond the walls of the classroom (1996). Field trips expose students to new experiences and can increase interest and engagement in science regardless of prior interest in a topic[20]. Field trips will be aboard the STEM Education Vessel, which will be outfitted to allow for students' guided exploration of the estuary. Immersion in this environment will enhance STEM learning and foster an appreciation of our natural resources and their importance to our local economy. The STEM Education Vessel will also be used for intensive summer programs that target student populations that are often underserved by STEM initiatives.

Designing the STEM Education Component content and deliver in this manner ensures that participating schools across the 8 disproportionately affected counties can share their experiences and data collected with other schools and participants by uploading content to the web portal.

Attachment AB

Response for Question 2.C. on Page 18 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **Identify the number of anticipated enrolled students and completers**

Anticipated student enrollment and program completers for the Marine Engineering Institute is calculated in the table below:

Marine Engineering Institute Student Participation	Anticipated Enrollment at Startup 2019	Cumulative Student Completers		
		Year		
		2022	2027	2032
Marine Engineering	24	24	84	151
Marine Electrician	5	8	20	38
Marine Propulsion	5	8	20	38
Marine Systems Technician	5	8	20	38
Marine Technology	5	8	20	38
TOTAL:	44	56	164	303

The Marine Engineering Institute expects 44 enrolled students upon startup (in either 2018 or 2019) with enrollment growing rapidly each year thereafter. Likewise, the Institute expects 56 completers from its inaugural class (the table shows more completers than 3-year program enrollees because the aggregate number of completers comprises a combination of 1-year, 2-year, and 3-year program completers) with rapid growth of completers each year thereafter.

For the STEM Education Component, the Choctawhatchee Basin Alliance anticipates 3,800 enrolled students in its inaugural class (in either 2018 or 2019) with rapid growth anticipated due to the expected popularity of the STEM Education programs. All enrollees are expected to become completers because the curriculum for the STEM Education Component will align with the State of Florida Standards and lesson plans, and thus the school districts in the 8 disproportionately affected counties (and the Applicant) will monitor and track student success in the same manner that is required for all other School District programs.

Student enrollment and student completers is something that will be tracked and monitored very carefully under the GCEE Project and these outcome measures will be continually provided to Project stakeholder in the form of monthly and annual reports to ensure the Project remains on track to meet its objectives.

Attachment AC

Response for Question 2.D. on Page 18 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **Indicate the length of the program (e.g, quarters, semesters, weeks, months, etc.) including anticipated beginning and ending dates.**

The length and credential of each academic program of the **Marine Engineering Institute** is noted below. While Triumph Gulf Coast funds are sought for start-up costs, the GCEE Project becomes fully self-sustaining after the first year due to tuition revenue in the amount of $205,920 per year.

Academic Program	Hours	Avg Semesters for FT Student	Credential	Start Date
Marine Engineering	66 Credit Hours	4+Summer	AAS	Fall 2019
Marine Electrician	24 Credit Hours	1+Summer	CCC	Fall 2019
Marine Propulsion	12 Credit Hours	1	CCC	Fall 2019
Marine Systems Technician	30 Credit Hours	2	CCC	Fall 2019
Marine Technology	34 Credit Hours	2+Summer	CCC	Fall 2019

(Note: Credential abbreviations are AAS – Associate of Applied Science; CCC – College Credit Certificate)

For the **STEM Education Component**, the length of the curriculum is measured by semesters and will correspond to the class schedules provided by each of the school districts within the 8 disproportionately affected counties.

Attachment AD

Response for Question 2.E. on Page 18 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **Describe the plan to support the sustainability of the proposed program.**

Marine Engineering Institute

As detailed in the Project Budget (Attachment R) and Budget Narrative (Attachment S), this grant application includes the substantial startup costs for the Marine Engineering Institute. However, the Institute generates tuition revenue estimated at $205,920 per year ($1,441,440 over the 7-year life of the grant period), and thus the operating expenses for the Marine Engineering Institute are covered by this student-paid tuition, so that it breaks even after the first year of operations.

STEM Education Component

As an institution of higher learning and a non-profit entity, one of Choctawhatchee Basin Alliance of Northwest Florida State College's greatest strengths is the ability to leverage funding and partnerships to secure additional funding. Choctawhatchee Basin Alliance is entirely grant, donor and contract funded. As such, the organization is well-equipped to maintain and even expand programs through strategic and timely grant writing, along with donor and sponsor cultivation. CBA fully expects to maintain and grow the STEM Education Curriculum and the STEM Education Vessel components of the Project beyond this grant's period of performance. The easiest scenario is to replace the original budget through additional grants, donors or sponsors. Because the Project will have a years-long record of success and name recognition, CBA will pursue this outcome with a good chance for success. To ensure continued success, we will also undertake other strategies for funding.

Some activities will transition to low- or no-cost alternatives. For instance, maintenance of the STEM Education Vessel can be taken on by the Marine Engineering students and operation costs can be sponsored by local businesses. Other activities can be transitioned to a cost-sharing model. For example, CBA currently partners with the national service organization, AmeriCorps to deliver the Grasses in Classes environmental education program at a fraction of what it would cost to man the program with full-time professionals. After the Gulf Coast Economy Enhancement Project's seven-year period of performance, the STEM education team will have created time-tested curriculum, mature partnerships with Panhandle school systems, and well-established routines and schedule. Such a fully developed program can transition from a staff of three professionals to a staff of one professional leading a team of pre-professionals made up of AmeriCorps members or the College's Teacher Education students. This type of funding and delivery model diversifies the costs while recruiting more people to STEM career pathways.

Attachment AE

Response for Question 2.F. on Page 18 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **Identify any certifications, degrees, etc. that will result from the completion of the program.**

As indicated in the table of Attachment AC, students enrolled in the Marine Engineering Institute will earn certifications and degrees including; Associate of Applied Science (AAS), and College Credit Certificate (CCC).

Marine Engineering Technology Program (AAS)

The **Marine Engineering Technology Program** offers options for students who want to specialize in a particular area of engineering and enter the work force after just two years. The program prepares students with an associate degree to become an engineering technologist or engineering technician in the Marine industry Furthermore the program provides a very affordable hands-on foundation for further engineering bachelor degrees. The academic programs include: Automation, Pneumatics, Hydraulics and Motors for Manufacturing (Machine Repair), Maintenance Technician, and Mechatronics program tracks. Students earn Associate Science degrees or College Credit Certificate. Student learning outcomes are specified below for each program area. The program is a 66-hour program which leads to a ASS degree and would start in the fall of 2019.

Marine Propulsion Technician (CCC)

Employers want well-prepared maintenance and service personal who also have the soft skills which allow them to work well with customers and peers. Graduates from the Marine Propulsion Technician Certification program will learn to service and maintain the modern diesel engines being produced today by makers such as Honda, Kohler, Volvo Penta, Yanmar, Detroit Diesel, Yamaha, MAN and more. Graduates will understand operational theory of two and four-cycle diesel and gasoline engines. compression and combustion, cooling, lubrication, pump and injection systems. Instructors will take a hands-on approach to diagnosing and repairing with real-life experiential training.

The Marine Propulsion Technician is 24 credit hours and graduates receive a College Credit Certificate. The program would start in the fall of 2019.

Marine Electrician (CCC)

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Transportation, Distribution and Logistics career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Transportation, Distribution and Logistics career cluster.

The content includes but is not limited to vessel nomenclature, safety, installation, diagnosing and troubleshooting marine electronic devices and systems.

The program will be 12 credits and would start in the fall of 2019.

Marine Systems Technician (CCC)

The content includes but is not limited to installation and operation; propeller selection; corrosion control; fiberglass hull repair; vessel nomenclature; safety, installation, diagnosing and troubleshooting marine electronic devices and systems including MSD, A/C and Refrigeration, desalinization systems, windless, hydraulics, fire suppression, and CNG and LPG systems.

This program track consists of 30 credit hours and graduates earn a College Credit Certificate and would start in the fall of 2019.

Marine Technology (CCC)

The content includes but is not limited to installation and operation of diesel and gasoline engines; troubleshooting for diesel and gasoline engines; engine maintenance; propeller selection; and corrosion control.

This program track consists of 34 credit hours and graduates earn a College Credit Certificate and would start in the fall of 2019.

Attachment AF

Response for Question 2.G. on Page 19 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **Does this project have a local match amount? If yes, please describe the entity providing the match and the amount.**

Under the GCEE Project, Northwest Florida State College is contributing real property (plus security) at its Okaloosa County Campus to establish the Marine Engineering Institute. This contribution's estimated valued is $649,218 over the 7-year duration of the grant award period. The College has also invested 25% of the Choctawhatchee Basin Alliance of Northwest Florida State College Director's annual salary towards the Project and will continue to do so through the remainder of the award period. Student tuition is also contributed to the Marine Engineering Institute so that it will break even after the first year's startup costs.

Finally, the Applicant has filed a grant application under the RESTORE Act Direct Component under Okaloosa County as a match for this Project. And, the Applicant is also working with other local governments and industry in the Project area to secure additional valuable assistance to the Project.

Attachment AG

Response for Question 2.H. on Page 19 (ADDENDUM FOR WORKFORCE TRAINING PROPOSALS): **Provide any additional information or attachments to be considered for this proposal.**

Letters of Support on behalf of the GCEE Project are included here as Exhibits:

Exhibit 1: Placeholder for Resolution from the Board of County Commissioners of Okaloosa County

Exhibit 2: Northwest Florida State College Letter of Support

Exhibit 3: Letter from Mayor of Monroe County Commission

Exhibit 4: Department of the Air Force Letter of Support

Exhibit 5: Okaloosa School District Letter of Support

Exhibit 6: City of Destin Letter of Support

Exhibit 7: Tri-County Community Partnership Letter of Support

Exhibit 8: Greater FWB Chamber of Commerce Support Letter

Exhibit 9: Destin Chamber of Commerce Letter of Support

Exhibit 10: Destin Water Users Inc Letter of Support

Exhibit 11: Destin Charter Boat Association Letter of Support

Exhibit 12: Destin Tour Boat Operators Letter of Support

Exhibit 13: City of Marathon Letter of Support

Exhibit 14: Galati Yacht Sales Inc Letter of Support

Exhibit 15: Auer Marine Inc Letter of Support

Exhibit 16: Dr. David Vaughan – Mote Marine Laboratory Letter of Support

Exhibit 17: Rear Admiral Philip Dur, USN (ret) Letter of Support

Exhibit 18: City Manager George Garrett Letter of Support

Exhibit 19: Water's Edge Marina LLC Letter of Support

Exhibit 20: Boca Chica Marine Inc Letter of Support

Exhibit 21: Banana Bay Resort Inc Letter of Support

Attachment AG

Exhibit 1:

Placeholder for Resolution of Support from the Board of County Commissioners of Okaloosa County

Exhibit 2:

NORTHWEST FLORIDA
STATE COLLEGE

100 College Boulevard • Niceville, FL 32578-1295 • (850) 678-5111 • www.nwfsc.edu

February 26, 2018

Okaloosa County RESTORE Act – Direct Component
Attention: Jane Evans, Grants and RESTORE Manager
County Administration, 1250 North Eglin Parkway, Suite 102, Shalimar, FL 32579

RE: Support for the *Gulf Coast Economy Enhancement Project*

Dear Ms. Evans:

This letter serves as our College's strong pledge of support for the *Gulf Coast Economy Enhancement Project*. The applicant, the Choctawhatchee Basin Alliance of Northwest Florida State College, will implement three separate but synergistically-aligned components under the proposed Project:

(1) A Marine Engineering Institute (led by Northwest Florida State College Faculty on the Niceville Campus) that is designed to prepare students to enter professional careers in the marine industries, specifically vessel manufacturing, propulsion, power distribution systems, and auxiliary systems. The grant amount requested for the Institute is limited to the first-year startup costs and will become revenue positive thereafter.

(2) A STEM Education component that will be implemented via online curriculum within eighth grade classrooms in Okaloosa County. The curriculum will expose students to the precious nature of Northwest Florida's critical marine habitat. This component will also provide students with in-the-field hands-on experience by placing a STEM Education Vessel into service in the Choctawhatchee Bay. The STEM Education Vessel will be utilized to take students on explorative, educational trips with Choctawhatchee Basin Alliance scientists so they can personally participate in important marine research and even snorkel to observe Okaloosa County's underwater marine habitats first-hand.

(3) A marine pump-out program that will (A) collect and properly dispose of all marine-generated sewage in Okaloosa County (Project is estimated to recover the net equivalent of more than 26,400,000 gallons of household sewage over the seven-year cycle of the grant award in Okaloosa County alone), (B) collect and properly dispose of floating household garbage so that microplastic formation can be prevented, and (C) provide the 14 marine pump-out vessels that are deployed under the overall marine pump-out program for servicing by NWFSC's Marine Engineering Institute so that enrolled students can gain practical hands-on experience.

The *Gulf Coast Economy Enhancement Project* has demonstrated to be a proven, proactive, practical, and comprehensive solution to solve these pressing problems and for this reason, Northwest Florida State College and the Choctawhatchee Basin Alliance wholeheartedly endorse the Project and pledge our strong support to deliver a quality and impactful project on behalf of the citizens of Okaloosa County.

Sincerely,

Dr. Devin Stephenson, President

Exhibit 3:

County of Monroe
The Florida Keys

Mayor David Rice
9400 Overseas Highway, Suite 210
Marathon Airport Terminal Building
Marathon, FL 33050
305.289.6000
Boccdis4@monroecounty-fl.gov

January 19, 2018

RE: Monroe County Marine Pumpout Program

To Whom It May Concern:

Residents and visitors from all over the world are drawn to the Florida Keys by our clear and bountiful waters. In fact, tourism is the County's chief economic driver. The Monroe County Commission has determined that clean water benefits every person, property, and business in the Florida Keys.

Historically, Monroe County has been vitally concerned about the health and vitality of our water resources. We have has moved aggressively to eliminate point sources of pollution (such as septic tanks). The Florida Legislature required the County and Florida Keys Aqueduct Authority establish Keys-Wide central sewer collection and treatment. And, Monroe County deployed land-based pumpout facilities throughout the Keys to prevent the unlawful discharge of marine sewage.

Despite these efforts over many years, most of our nearshore waters remained imperiled due to the high concentration of boats. A few years ago, the Monroe County Commission entered into a public/private partnership with the Florida DEP, the Federal Clean Vessel Act, Mote Marine Laboratory and PumpOut USA, Inc., to establish a first-of-its-kind mobile marine pumpout service, which provides FREE pumpouts to the Keys boating community.

Monroe County's mobile marine pumpout program run by PumpOut USA, Inc. (the Program) is working amazingly well. For example, despite Monroe County's investments in land-based (marina) pumpout systems (since 1992), this past year the Program collected and properly disposed of over 10 times the combined amount of marine sewage than all Keys land-based sewage pumpout facilities.

We have recently learned through the data collected through the Program that marine-generated sewage has played a leading role in the decline in Keys water quality. Within three years, the Program had already recovered and properly disposed of more than a Million gallons of marine sewage. The Program is now recovering almost half million gallons of raw marine sewage each year. This is critical to our water quality. According to the FDEP, marine sewage is between 9 and 15 times more concentrated than household sewage, and the chemical additives (which are used to deodorize marine sewage holding tanks) further compound the harmful effects on our marine environment. Monroe County's Program is presently recovering the net equivalent of 4 – 8 million gallons of household sewage each year!

The effect this Program has had on nearshore water quality in the Florida Keys cannot be overstated. Since this Program commenced the water bodies, once imperiled, are now plentiful with wildlife and are again enjoyed by our residents and millions of our visitors.

Most-importantly, the pumpout Program has changed the culture and mindset of the Florida Keys boating community. In the beginning, vessel owners were skeptical about pump-outs in general. Today, most boaters in the Keys not only support the program, but actively advocate on the Program's behalf. Our County has come to appreciate the Program so much that (just like household garbage collection services) it is now consider an "essential quality of life" service. The Monroe County Commission is currently in the process of determining how to implement dedicated funding sources to ensure the benefits of the Program are sustainable for generations to come.

In conclusion, as Mayor of Monroe County, I can personally attest to the fact that the Monroe County Marine Pumpout Program has become a proactive, practical, and comprehensive solution to our marine pollution problems. For all these reasons, I am pleased to recommend the expansion of a similar program in other coastal regions.

Sincerely,

David Rice, Mayor
Monroe County Board of Commissioners

Exhibit 4:

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 96TH TEST WING (AFMC)
EGLIN AIR FORCE BASE FLORIDA

FEB 1 2018

MEMORANDUM FOR MR. CRAIG BARKER
PUMPOUT USA, INC.
1150 HWY 83 NORTH
DEFUNIAK SPRINGS FL 32433

FROM: 96 CEG/CC
501 De Leon Street, Suite 100
Eglin AFB FL 32542

SUBJECT: Eglin AFB Endorses the "*Gulf Coast Economic Preservation Project*"

1. Eglin AFB shares the same concerns as the Tri-County Community Partnership (TCPI) about the environmental and ecological impacts of intercostal vessel sewage dumping. The preservation, protection and improvement of marine environment is essential to the livelihood and well-being of our local communities.

2. Recent briefing received about a marine pump-out program in Monroe County, Florida where data showed the negative environmental and ecological impacts of sewage dumping to water bodies coupled with the number of marine vessels registered in the Florida Panhandle (more than 80,000) makes the *Gulf Coast Economic Preservation Project* a very practical, proactive and comprehensive solution to mitigate pollution.

3. The *Gulf Coast Economic Preservation Project* provides the opportunity to implement a similar program in the Florida Panhandle. This type of investment will collect and prevent the net equivalent of 240 million gallons of raw municipal sewage from entering the waterways of the Florida Panhandle. This project will preserve, protect and enhance not only the aquatic environments but will improve the quality of life of residents and visitors of our local communities.

4. Eglin AFB recognizes the importance of maintaining and improving the state's waterways and being good stewards of the environment; Eglin AFB endorses the *Gulf Coast Economic Preservation Project*.

JOHN D. SCHULIGER, Colonel, USAF
Commander, 96th Civil Engineer Group

Exhibit 5:

SCHOOL DISTRICT OF OKALOOSA COUNTY

April 5, 2018

RE: Okaloosa County School District Support for the "***Gulf Coast Economy Enhancement Project***"

Dear Grant Coordinator,

The Okaloosa County School District staff recently met with the Choctawhatchee Basin Alliance of Northwest Florida State College (CBA) and learned about the *Gulf Coast Economy Enhancement Project.* This project proposes to leverage K-20 education in Northwest Florida in the following ways:

(1) Launch a Marine Engineering Institute at Northwest Florida State College to prepare students for careers in marine technologies and therefore provide a skilled labor force to keep pace with the current and future demands of Northwest Florida's marine engineering industry.

(2) Establish a Science, Technology, Engineering and Math (STEM) Education Component for secondary elective science students that is consistent with the needs of school districts across Northwest Florida. This proposed STEM Education Component will expose K-12 students to the importance of our critical marine habitat in their formative years so they develop an affinity for pursuing professional careers in the marine engineering and marine science industries. Thereby, the STEM Education Component will act as a feeder program for NWFSC's Marine Engineering Institute.

Research by the CBA has found that nearly all facets of the Panhandle's economy are inextricably tied to the region's unique water assets. In fact, the marine sector is the fastest growing industry in Okaloosa County over the past two decades. Yet, Northwest Florida's regional K-12 education does not currently leverage this asset by exposing students to the potential of pursuing careers in the marine engineering and marine science fields. As a result, there is insufficient skilled labor to keep pace with the current and future demand and this shortfall is hindering full economic potential in the region.

For these reasons the Okaloosa County School District enthusiastically supports the Gulf Coast Economy Enhancement Project and looks forward to working with the CBA to implement these educational electives in the classrooms of Okaloosa County.

Sincerely,

Mary Beth Jackson
Superintendent, Okaloosa County School District

ADMINISTRATION COMPLEX-120 LOWERY PLACE S.E.-FORT WALTON BEACH, FLORIDA 32548
TELEPHONE (850) 833-3100 FAX (850) 833-3436

CARVER HILL ADMINISTRATION COMPLEX-461 W. SCHOOL AVENUE-CRESTVIEW, FLORIDA 32536
TELEPHONE (850) 689-7117 FAX (850) 689-7121

Exhibit 6:

Office of the City Manager

4200 Indian Bayou Trail | Destin, FL 32541 | Phone: 850-837-4242 | Fax: 850-650-9250 | www.cityofdestin.com

March 28, 2018

RE: Direct Component Application for the *"Gulf Coast Enhancement Project"*

To Whom It May Concern,

At the March 19, 2018 Destin City Council meeting, the *Gulf Coast Economy Enhancement Project* was presented to the City Council along with a request to support the project through an "in-kind" partnership. The City Council voted unanimously to direct staff to bring back a formal letter of support and the necessary changes to the Code of Ordinances to allow PumpOut USA to utilize the City's pump out station at Joe's Bayou and to dock both pump out boats overnight at Joe's Bayou's during the life of the grant. Both of these items will be on the Destin City Council's April 16, 2018 meeting for formal approval.

During the presentation at the March 19th meeting, the City Council was very impressed with the project and made numerous positive comments about the benefits to our residents, visitors, economy and the environmental protection of our local waterways. I can state with all confidence that the City of Destin supports this project and we look forward to our partnership with the Northwest Florida State College and CBA.

Please accept this letter of support for the *Gulf Coast Economy Enhancement Project* in the interim, and when the City Council formalizes their support at the April 16th meeting, I will immediately provide you with the official letter signed by Mayor Jarvis.

You may contact me directly via my email address clejeune@cityofdestin.com or call me at (850) 837-4242 if you have any questions.

On behalf of the Destin City Council,

Carisse LeJeune
City Manager

Exhibit 7:

Economic Development Council
of Okaloosa County, Florida

February 2, 2018

Mr. Craig Barker
Pumpout USA Inc.
1150 Highway 83 North
DeFuniak Springs, FL 32433

Dear Mr. Barker:

As you know, the Economic Development Council of Okaloosa County created the Tri-County Community Partnership Initiative (TCPI) in 2013 to assist area military installations and the communities that host them with identifying and executing mutually beneficial partnership projects. This initiative is overseen by a 30 member TCPI Advisory Board, comprised of local governments, installation representatives, service providers, utility companies, financial and real property experts, chambers of commerce, etc. Along with the Advisory Board, five specific work groups are tasked with identifying and vetting specific partnership opportunities.

We greatly appreciate you attending our October 2017 TCPI Advisory Board meeting at the invitation of our Environmental and Ecotourism Work Group. Your presentation highlighting the environmental and ecological impacts of intercoastal marine vessel sewage dumping was most enlightening, as was the information you provided about the success of a pilot marine pump-out program in Monroe County.

With the economic and environmental well-being of our region being so closely aligned, the Tri-County Community Partnership Initiative is keenly interested in how such a targeted marine vessel pump-out program could collect and prevent the net equivalent of 92 million gallons of raw municipal sewage from entering the waterways of the Florida Panhandle. Moreover, we stand in full support of your Gulf Coast Economic Preservation application with Triumph Gulf Coast as a means of securing the necessary resources to effectively mitigate the highlighted impacts of intercoastal vessel sewage dumping.

Sincerely,

Nathan Sparks, CEcD
Chairman
Tri-County Community Partnership Initiative

CC: Erika Zambello, Co-Chair, TCPI Environmental & Ecotourism Work Group
Tom Tolbert, Community Planner, 96th Civil Engineering Group, Eglin AFB

Exhibit 8:

GREATER FORT WALTON BEACH CHAMBER OF COMMERCE

34 Miracle Strip Parkway, S.E. • P.O. Box 640
Fort Walton Beach, FL 32549
Office: 850-244-8191 • Fax: 850-244-1935
www.fwbchamber.com

"Building Bridges for our Community"

January 18, 2018:

RE: The Greater Fort Walton Beach Chamber of Commerce endorses the "*Gulf Coast Economic Preservation Project*"

Dear Grant Coordinator:

The Greater Fort Walton Beach Chamber of Commerce recently received a briefing about a marine pumpout program in Monroe County, Florida, the results of which demonstrate that marine-generated sewage plays a much larger role in marine pollution than once believed. This is an important fact because according to the Florida DEP, a single overboard discharge of human waste can be detected in up to a one square mile area of shallow enclosed water (such as Choctawhatchee Bay) and can close down shellfish beds for harvesting.

Extrapolating the actual results of that pumpout program suggests that implementing a similar program in the Florida Panhandle (where there are over 83,000 registered vessels) would collect and properly dispose of over 7,500,000 gallons of raw marine sewage. And because marine sewage is approximately 12 times more concentrated than household sewage, this program would remove the equivalent of ~92,000,000 gallons of raw untreated household sewage that may be disposed overboard in the near shore waters of northwest Florida. Even further, chemical additives (which are used to deodorize sewage holding tanks) further compound the harmful effects of marine sewage upon our critical marine environment.

The Greater Fort Walton Beach Chamber of Commerce believes the *Gulf Coast Economic Preservation Project* is important for Northwest Florida because most of the bays and estuaries of northwest Florida are listed as "*Impaired*" on the EPA's Waterbody Quality Assessment Report and because water quality testing in our area routinely returns poor results for elevated levels of enterococci – which indicates the presence of fecal contamination which is a known contributor towards life-threatening diseases such as cholera, and hepatitis. Furthermore, sewage effluent has been linked to an increase in the frequency and magnitude of harmful algal blooms such as red tide and studies have shown that such events in the Fort Walton Beach and Destin areas reduced restaurant and lodging revenues in the localized area by $2.8 million and $3.7 million per month respectively, which is far greater than any losses associated with tropical storms and other weather-related events.

GREATER FORT WALTON BEACH CHAMBER OF COMMERCE

34 Miracle Strip Parkway, S.E. • P.O. Box 640
Fort Walton Beach, FL 32549
Office: 850-244-8191 • Fax: 850-244-1935
www.fwbchamber.com

"Building Bridges for our Community"

The *Gulf Coast Economic Preservation Project* has demonstrated to be a proactive, practical, and comprehensive solution to mitigate marine pollution and for these reasons the Greater Fort Walton Beach Chamber of Commerce endorses the *Project* and requests that other community and financial stakeholders consider the same.

Sincerely,

Nick Chubb
Chairman of the Board of Directors
Greater Fort Walton Beach Chamber of Commerce

Exhibit 9:

Destin
CHAMBER
Advocating for Businesses - Strengthening our Community

March 26, 2018

Please accept this letter as support from the Destin Chamber of Commerce Board of Directors for the Gulf Coast Economic Preservation Project.

Sustaining a clean Choctawhatchee Basin Watershed is vital to Destin's economy. Our natural resources, such as Choctawhatchee Bay and the Gulf of Mexico, draw millions of tourists and recreation boating enthusiasts to our community each year. The charter fishing industry is a major driver in our economic success. For this to continue, clean waterways are a must.

The proposed pump-out project helps us maintain those natural resources. By protecting and sustaining our bays and waterways, we will continue to create jobs and keep money flowing through our economy. Our community will continue to be the great place to live, work, and play that it is today.

It is with pleasure we submit this letter of support from the Destin Chamber of Commerce for the Gulf Coast Economic Preservation Project.

Sincerely,

Bob Perry, Destin Commons
Chairman of the Board

Exhibit 10:

DESTIN WATER USERS, INC.
P.O. BOX 308 DESTIN, FL 32540-0308
850-837-6146 FAX 850-654-5173

March 26, 2018

RE: Gulf Coast Economy Enhancement Project

To Whom It May Concern,

Destin Water Users has been approached and asked to provide a letter of support for the Gulf Coast Economy Enhancement Program. We agree there is a need for and support the three components of the program to provide training to meet the marine industry workforce demands, enhance STEM education, and to clean up our environment through the mobile marine pumpout program.

As an industry that relies on specially trained individuals with a STEM background, we recognize the need for the training and education components of this program. Additionally, we understand that raw marine sewage is a contributing factor to poor water quality reports.

We are talking with the project sponsors to work through the details to properly dispose of the pumpout waste and are confident that we will reach a resolution.

In the meantime, we lend our support to the Gulf Coast Economy Enhancement Program and hope that it will be favorably considered for funding.

Sincerely,

Lockwood Wernet
General Manager

Exhibit 11:

Destin Charter Boat Association

February 12, 2018

RE: Support for a Marine Pumpout Program

To Whom It May Concern:

The Destin Charter Boat Association is made up of the Destin Charter Boat Captains and their families that represent the fishing heritage and tradition that helped found Destin and supported the Destin families throughout the years. Many of the Captains and mates in Destin are 2nd and 3rd generation fishermen and are a part of the fabric that makes up the fishing community.

And the livelihood of the fishing community itself is supported by visitors from all over North America who choose to spend their vacation along the Gulf Coast because of our emerald green waters which are bountiful with pelagic and reef fish. As the largest charter fishing fleet in North America, the membership of the Destin Charter Boat Association is vitally concerned that we do everything within our power and reason to ensure we maintain these waters in a pristine condition.

We were recently shown results of a public/partnership for a marine pumpout program in the Florida Keys. This program is widely supported by the residents, visitors, and the fishermen in the Florida Keys because it is convenient, cost-free, and effective. In fact, that program is currently collecting and disposing the net equivalent of 6,000,000 gallons of household sewage each year.

That is impressive. And we support the implementation of a similar program in Northwest Florida where there are more than three times as many registered boats.

Sincerely,

Jim Green,

President, Destin Charter Boat Association

Exhibit 12:

P.O. Box 1713
Destin, Florida 32540

850-296-0896 ▪ 855-269-0896
www.DestinPirateShip.com

Buccaneer
pirate cruise

February 26, 2018

To Whom It May Concern:

One of the primary economic forces in Northwest Florida is tourism, and the tourism business prospers in this region primarily because of clean and bountiful waters.

Given the extremely high volume of recreational boating activity in our area, it is often times challenging and unsafe to pilot our vessels to within proximity of a land-based pumpout facility. This summer, members of the Destin Tour Boat Operators Association participated in a pilot program to test the viability of a mobile marine pumpout service. We found the mobile service to be a safer, more convenient alternative which allowed us to focus on more-effectively serving our customers. We also like the fact that the *Gulf Coast Economic Preservation Project* will enhance the visual aesthetics of our community by disposing of floating rubbish.

This pilot program was modeled after a successful ongoing program in the Florida Keys, which has demonstrated that marine-generated sewage plays a much larger role in marine pollution than once believed. According to the Florida DEP, marine sewage is significantly more concentrated than household sewage, and a single overboard discharge of human waste can be detected in up to a one square mile area of shallow enclosed water, such as Choctawhatchee Bay.

The *Gulf Coast Economic Preservation Project* is important for Northwest Florida because most of the Choctawhatchee Basin in which we operate is listed as "*Impaired*" on the EPA's Waterbody Quality Assessment Report, and because water quality testing in our area routinely returns poor results for elevated levels of fecal coliform. Moreover, it has been brought to our attention that sewage effluent is linked to an increase in the frequency and magnitude of red tide events which have been shown to reduce restaurant and lodging revenues in the localized area by $2.8 million and $3.7 million per month, respectively. These losses are far greater than any losses associated with tropical storms and other weather-related events.

Our members rely upon clean water to earn our livelihoods, and thus, our organization is committed to upholding the highest standard of water quality possible. This proposed Project has demonstrated to be a proactive, practical, and comprehensive solution to mitigate marine pollution. For these reasons the Destin Tour Boat Operators Association endorses the *Gulf Coast Economic Preservation Project* and encourages others to do the same.

Sincerely,

Capt Cliff Atwell

Cliff Atwell
Chairman, Destin Tour Boat Operators Association

Exhibit 13

CITY OF
MARATHON, FLORIDA
Ports Department
Latitude 24° 42' 33.8" N Longitute 81° 5' 29.1" W

Subject: Expansion of Marine Pumpout Program

To Whom It May Concern,

I am the Ports Director for the City Of Marathon in the Florida Keys, and I am pleased to comment on the effectiveness of our mobile Pumpout program.

We have placed 2 pumpout boats into service since 2002 and the effects this marine Pumpout program has had on the water quality of Boot Key Harbor has been outstanding.

For example, when I first started working at the City Marina the water was very polluted and the clarity of the water was virtually zero. At least 100,000 gallons of raw sewage was being dumped into the water each year making the water very toxic. But now thanks to the mobile Pumpout service it is now a vibrant marine environment teaming with wildlife and recreational boaters. The water has become clear and we can now see the bottom in many places. The boater's attitude about sewage has completely changed. Now the first question is how do we arrange for a pumpout?

The pumpout program has demonstrated to be a proactive , practical and comprehensive solution to mitigate marine pollution and for these reasons I am pleased to recommend the expansion of this program in other coastal regions.

Sincerely,

Sean Cannon, Ports Director
Boot Key Harbor City Marina
800 – 35th Street Ocean
Marathon, FL 33050
cannons@ci.marathon.fl.us
305-289-8877 Office
305-393-3573 Cellular

Exhibit 14:

GALATI YACHT SALES

February 14, 2018

RE: Support for the "*Gulf Coast Economic Preservation Project*"

To Grant Coordinator:

Galati Yachts has been committed to exceeding our customer's expectations since 1970. The Company has ten locations throughout the Gulf Coast which covers the States of Florida, Alabama and Texas, in addition to international offices in Costa Rica and Mexico. Our team can tell you that we succeed in large part because people from all over the world are drawn to the Emerald Coast by its clear and bountiful waters and white sand beaches.

We recently learned of an effort to establish a marine pumpout service in Northwest Florida. This program is modelled after a successful ongoing program in the Florida Keys which demonstrated that marine-generated sewage plays a much larger role in marine pollution than anyone once believed. That is primarily because according to the Florida DEP, marine sewage is significantly more concentrated than household sewage and a single overboard discharge of human waste can be detected in up to a one square mile area of shallow enclosed water such as Choctawhatchee Bay.

The Galati team members rely upon a good economy and clean waters to put food on their family's table and this program has proven effective in enhancing both. Therefore, we strongly support the Gulf Coast Economy Preservation project and encourage others to follow suit.

Sincerely,

Joe Galati
President – Galati Yacht Sales

126 Harbor Boulevard • Destin, FL 32541 • 850-654-1575 • Fax 850-654-1306

Exhibit 15:

AUER MARINE

33 Beal Pkwy NW • Fort Walton Beach • FL 32548 • (850) 243-7163

March 15, 2018

Attn: Northwest Florida State College

To Whom It May Concern:

I understand that Northwest Florida State College maybe starting a Marine Engineering Institute. I think this would be a great asset to Okaloosa and surrounding Counties.

Auer Marine has been in business for 48 years in Okaloosa County and we have found a significant need for Marine technicians over the years. As time has gone by we find it harder to hire technicians with the skills that are needed. In the world today it seems easy to find technicians that can work on the computer side of the engines. However, finding marine technicians that know the nuts and bolts about the mechanics side of marine products has become a lot tougher.

A technician in the marine field can make a good living in this area with the right training. A good percentage of our employees have been with the company more than 20 years.

Thank you,

Pat Fought

General Manager, Auer Marine

Exhibit 16:

MOTE MARINE LABORATORY

August 8, 2016

PumpOut USA
Capt. Donnie Brown

Dear, Captain Brown,

As the Executive Director of the Mote Tropical Research Lab in the Florida Keys, I am pleased to be able to comment on the exceptional impact that PumpOut USA has had on the water quality of the Florida Keys. It has come to everyone's attention in the Florida Keys that our near shore water quality affects our quality of life and the condition of our corals reefs. All efforts to control storm water runoff, advanced wastewater treatment instead of septic systems have made a large improvement in our water quality conditions. But all local and regional stressors must be brought under control for us to continue to improve our tropical environment, coral reefs, seagrass beds and fisheries populations. With increasing human impacts, we must be more diligent in addressing our "no-discharge" regulations for our Florida Keys National Marine Sanctuary. To do this we must continue to provide an alternative to illegal discharging from marine vessels if there is no easy way for vessel to get wastes removed. This program proved the large volume of waste water that would have been illegally discharged under a "business as usual" program of previous years. This "no-charge" program is the only way this large volume of waste is going to get handled legally and removed as a threat to our delicate ecosystem.

I encourage this system to be continued as the only viable way to insure the wastes produced are not illegally discharged. The research is clear, from the sheer volumes of waste handled when pump outs are easy and free. I hope this very important solution is continued here and at other locations

David E. Vaughan, PhD
Executive Director,
Mote Tropical Research Lab

Exhibit 17:

126 Indian Bayou Drive

Destin, Florida 32541

12 March 2018

To whom it May Concern:

This letter is written in support of the Gulf Coast Economy Enhancement Project. I am a retired Naval Officer and an eighteen-year resident of the Gulf Coast in Mississippi and Florida. I am an avid boater and a member of the Florida Wildlife and Fisheries Commission Boating Advisory Council.

In the course of my residence in Florida and my boating experience in Florida waters from Destin in the northwest corner to Fernandina Beach in the northeast corner, I have had occasion to witness first-hand the impact of human waste and other pollutants that despoil these beautiful waters. It is no exaggeration to assert that the quality of the waters in the closed bays and bayous which define much of our coastline are a reflection of the density of boating traffic and the frequent disregard for laws governing the discharge of heads and holding tanks by boaters, both recreational and commercial.

The proposals advanced by advocates of the Project make eminent sense. The precedents set in Monroe County and the Florida Keys are illustrative of what could be done in the rest of Florida and most specifically in Escambia, Santa Rosa, Okaloosa, and Walton Counties. The establishment of mobile pump out vessels to relieve human waste in the resident and transient boating in our waters is an attainable goal. The potential economies that may be realized in the enhanced attraction of tourists and visitors to our shore are obvious. Similarly, the improved quality of coastal waters in populated coastal communities cannot be discounted.

I intend to table this Project's goals at a forthcoming meeting of the Boating Advisory Counci, and recommend that the State of Florida support its worthy objectives.

Sincerely,

Philip A. Dur

Rear Admiral, USN (ret)

Exhibit 18:

Donnie:

Monroe County and the City of Marathon have had the absolute pleasure of working with Capt. Donnie Brown and Pump Out USA for nearly a decade and a half . Within the Keys and Florida Keys National Marine Sanctuary we have collectively succeeded in approving a No Discharge Zone for both state and federal waters. Key to implementation of this 2,900 nautical square mile zone has been the ability to provide adequate pump out facilities and service to those vessels and boaters that don't have immediate pump-out services at dockside. It part, this has been facilitated by the $1 B dollar construction of centralized wastewater improvements throughout the Keys. It's all about reducing the nutrient impacts to our nutrient limited nearshore waters.

The services of Pump-Out USA have been invaluable over the years to reducing the wastewater and resulting nutrient impacts to the nearshore waters of the Florida Keys. Notably, in the first year after acquisition of the Donnie Brown's first pump-out platform, we pumped over 100,000 gallons of vessel effluent from those boats located in Boot Key Harbor, Marathon. That was twelve years ago. The improvements in water quality and clarity in the harbor today are marked. The County continues to use Pump-Out USA services to pump-out vessel throughout the Keys. I cannot speak highly enough about Donnie Brown, Pump-out USA, and the impacts that his entrepreneurial business have had toward improving water quality in the Florida Keys.

Best

George Garrett
Deputy City Manager / Planning Director
City of Marathon, Florida
9805 Overseas Highway
Marathon, Florida 33050
305 289 4111
garrettg@ci.marathon.fl.us

Exhibit 19:

January 17, 2018

PumpOut USA, FL Keys
PO Box 510454
Key Colony Beach, FL 33051

To Whom It May Concern:

We want to extend our utmost appreciation for providing Marathon Marina with pumpout service beginning November 6, 2017 through the end of the year.

Immediately after Hurricane Irma, some of our employees returned to begin the monumental task of rebuilding. Others were unable to return due to losing their homes.

We were fortunate that we got our pumpout system working with minimal repair, but then realized that we did not have the manpower necessary to continue rebuilding our facility and take care of the pumpout needs for our guests that were beginning to trickle back into the Keys.

PumpOut USA and Max McManus to the rescue! Seriously, if not for Max, I would not have known that we could temporarily use your service. Without PumpOut USA, we would not have been able to open our doors to visitors to the Florida Keys as quickly as we did.

The service that Max provided us through PumpOut USA was above and beyond. Max is not only capable in his job, but easy to work with and most importantly kind, understanding and generous in his dealings with the various boat owners.

Thank you again from Marathon Marina and our guests.

Susan Prichard

Susan Prichard
General Manager
Water's Edge Marina, LLC
dba Marathon Marina

Water's Edge Marina, LLC
d/b/a Marathon Marina and Boat Yard
1021 11th Street Ocean
Marathon, FL 33050
(305) 743-6575 / Fax (305) 743-5509

Exhibit 20:

MORALE, WELFARE AND RECREATION

Pump Out USA
PO Box 510454
Key Colony Beach, FL 33051

January 30, 2018

Don Brown,

MWR/Boca Chica Marina would like to thank Pump Out USA for your quick response after Hurricane Irma to assist our boaters with their black water pump out requirements. Our facility lost electricity to our pump out station and without your assistance our boaters would not have been able to empty their holding tanks.

We appreciate your assistance and applaud your continued service to our boaters.

Sincerely,

Billie Adkins, Marina Manager
Boca Chica Marina Staff
MWR/NAS Key West

Exhibit 21:

banana bay
RESORT & MARINA

Bob,

I want to thank Pump Out U.S.A for helping Banana Bay Marina with pumping out our guest's boats while our system was being repaired. You saved us from disaster. You offer a great service to the boating community and we are very appreciative.

Thanks again!

Flint Firestone

Dockmaster
Banana Bay Resort & Marina

4590 Overseas Highway | Marathon, FL 33050 Mile Marker 49.5

Hotel: 305 743 3500 | Reservations: 888 662 4683

www.BananaBay.com

Literature Cited

[1] United States Environmental Protection Agency, Waterbody Quality Assessment Report. 2010. For one example, see "EPA Waterbody Report for Choctawhatchee Bay (Lower Segment)": https://iaspub.epa.gov/waters10/attains_waterbody.control?p_list_id=FL778A&p_cycle=2010&p_report_type=

[2] Specker, L. (July 28, 2017). "Fifth flesh-eating bacterial case confirmed in Mobile". *AL.com*. http://www.al.com/news/mobile/index.ssf/2017/07/fifth_vibrio_case_confirmed_in.html

[3] O'Neill, K.R., Jones, S.H. (1992). "Seasonal Incidence of Vibrio vulnificus in the Great Bay Estuary of New Hampshire and Maine." *Applied and Environmental Microbiology* 58:3257-3262.

[4] According to data from the Florida Department of Environmental Protection, the average land-based pumpout facility in the Florida Keys collects 6,606 gallons of marine sewage per year. However, FDEP data shows the land-based pumpout facility at Stock Island Marina collected 534,507 gallons last year which is more than 80 times the average. The Harbor Master reports this anomaly is due to routine pumping of mega-yachts. The Public/Private Partnership for Monroe County's marine pumpout program is not designed to service mega yachts and cruise ships so this anomaly was removed from the data set.

[5] Florida Department of Environmental Protection - Clean Marina Program, "*Clean Boating Habits*". Third printing, p. 20.

[6] Florida Department of Environmental Protection - Clean Marina Program, "*Clean Boating Habits*". Third printing, p. 21.

[7] Harper, R., Ph.D. "The Economic Impact to Northwest Florida of the Deepwater Horizon Oil Spill." Haas Center for Business Research and Economic Development. P.4.

[8] Harper, R., Ph.D, Morgan, A. PhD., Morgan, C. MBA. (2006) "Economic Analysis of the Contribution of Choctawhatchee Bay to Okaloosa and Walton Counties." Haas Center for Business Research and Economic Development. P. 48.

[9] (April 18, 2015). "Despite buzzing beaches and slick ads, the coast is not clear when it comes to the Deepwater Horizon oil spill impacts". Pensacola News Journal.

[10] Conservation Law Foundation of New England (1998). "Lost Harvest: Sewage, Shellfish, and Economic Losses in the New Bedford Area"

[11] Evans, K., Athearn, K., Chen, X., Bell, K., Johnson, T. (2016). "Measuring the impact of pollution closures on commercial shellfish harvests: The case of soft-shell clams in Machias Bay, Maine". Ocean & Coastal Management 130 (2016) 196e204.

[12] https://www.pnj.com/story/news/local/pensacola/beaches/2015/04/18/oil-spill-report-card/26002141/

[13] Blanks, A. (June 29, 2016). "TV Report About Bacteria in Local Waters Was False, Local Officials Say". *Northwest Florida Daily News.* http://www.nwfdailynews.com/news/20160629/tv-report-about-bacteria-in-local-waters-was-false-local-officials-say

[14] Yentsch, C.S., Lapointe, B.E., Poulton, N. and Phinney, D.A. (2008). "Anatomy of a red tide bloom off the southwest coast of Florida." *Harmful Algae* 7(6), 817–26. DOI: 10.1016/j.hal.2008.04.008.

[15] Larkin, S.L. and Adams, C.M. (2007). “Harmful Algal Blooms and Coastal Business: Economic Consequences in Florida.” *Society and Natural Resources* 20, 849–59. DOI: 10.1080/08941920601171683.

[16] USDOI. 1996b. Northeastern Gulf of Mexico Coastal and Marine Ecosystem Program: Data search and Synthesis, Annotated Bibliography, Appendix F, Part 1: Socioeconomics. OCS Study MMS 96-0020, NBS 96-01, U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico Region, New Orleans, LA. 55 p.

[17] Lewis, Michael, J. Taylor Kirschenfeld, and Traci Goodheart. Environmental Quality of the Pensacola Bay System: Retrospective Review for Future Resource Management and Rehabilitation. U.S. Environmental Protection Agency, Gulf Breeze, FL, EPA/600/R-16/169, 2016.

[18] United States Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics. May 2016, Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates. https://www.bls.gov/oes/2016/may/oes_1200001.htm.

[19] Good, L., La Prad, J., (2013). “Educational Attainment as an Economic Driver for States, Regions and Communities.” Michigan State University Center for Community and Economic Development, EDA University Center for Regional Economic Innovation (REI).

[20] Kisiel, 2005; Bonderup Dohn, 2011.