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## **TCC Wakulla Environmental Institute**

A Catalyst for Economic Development in Northwest Florida

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*Triumph Gulf Coast Funding Application*

November 20, 2018  
 Honorable Don Gaetz, Chairman  
 Triumph Gulf Coast, Inc.  
 Attn: Susan Skelton, Executive Director  
 P.O. Box 12007  
 Tallahassee, Florida 32317

Chairman Gaetz:

Please find enclosed Tallahassee Community College's application for funds for the **Wakulla Environmental Institute (WEI) Ocean Shellfish Nursery / Hatchery and Processing Facility**. This project will be transformational for our region and is uniquely positioned to help a nascent East Triumph industry to greatly expand, impacting jobs, GDP, and personal income. Under this project the College will build and operate the following:

- **Ocean Shellfish Nursery & Hatchery**
  - The WEI will construct a cutting edge, regionally unique facility that provides much-needed shellfish spat and larva to Triumph region aquaculturists.
- **Ocean Shellfish Processing Facility**
  - The WEI will build a state-of-the-art processing facility complete with Vibrio pasteurization and cold storage that allows for doubling of the per-unit market price of shellfish.
- **Ocean Shellfish Training Space**
  - The WEI will construct additional training space wherein prospective Shellfish farmers will receive TCC's groundbreaking Aquaculture curriculum, which leads to new local businesses and employees with every cycle.

These three components of the facility will allow the regional market to mature into a dominant local industry. This facility will directly enable the creation of over **500 jobs**, and indirect employment may exceed 15,000 jobs by year 7 of project implementation. Area GDP will be augmented by **\$480 Million**, and the GDP-to-Project ROI is **\$36:\$1**. Therefore, for every dollar Triumph invests in this project, TCC's Ocean Shellfish Nursery / Hatchery and Processing Facility will generate over \$36 of return into the regional economy.

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

Sincerely,

Jim Murdaugh, Ph.D.

President

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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 District Board of Trustees of Tallahassee Community College

Background of Applicant Individual/Entity/Organization: Please see Attachment A, Pg. 22

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Federal Employer Identification Number: 591141270

Contact Information:

Primary Contact Information: Jim Murdaugh, Ph.D.

Title: President

Mailing Address: 444 Appleyard Dr.

Tallahassee, FL 32304

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Phone: 850-201-8660

Email: MURDAUGJ@tcc.fl.edu

Website: www.tcc.fl.edu

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.

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

Total amount of funding requested from Triumph Gulf Coast: \$13,500,000

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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.

[In 2012, TCC was awarded \\$4.5 million in PECO funds for Phase I of the WEI.](#)

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[In 2014, TCC was awarded \\$1.5 million from the Economic Development](#)

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[Administration for infrastructure development for Phase I. The first building](#)

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[opened in 2016.](#)

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Describe the financial status of the applicant and any co-applicants or partners:

[Please see Attachment B, Pg. 22](#)

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

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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, Pg. 23](#)

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 filed for bankruptcy and the date of filing.

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(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, Pg. 24](#)

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(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, Pg. 30](#)

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(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, Pg. 34](#)

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(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, Pg. 36](#)

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(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, Pg. 37](#)

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(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, Pg. 39](#)

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(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, Pg. 41](#)

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(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, Pg. 44](#)

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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: Wakulla 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.**

### **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.?  
Approval from the President of Tallahassee Community College is 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.  
N/A
 (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 L, Pg. 51  
 (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 M, Pg. 53

**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.  
\$13,500,000 disbursed over 1 year (2019-2020) in conjunction with construction timelines.  
 (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.)  
The percentage requested is 53.4%. Please see Attachment N, Pg. 58  
 (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 O, Pg. 59  
 (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

This award will supplement the previous \$6 million secured for Phase I. The TCC Foundation is raising \$2 million in private funding to support Phase II.

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

A. Project/Program Costs:

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

Construction	<u>\$ 14,420,000</u>
<u>Reconstruction</u>	<u>\$ N/A</u>
<u>Design &amp; Engineering</u>	<u>\$ 1,638,000</u>
<u>Land Acquisition</u>	<u>\$ N/A</u>
<u>Land Improvement</u>	<u>\$ N/A</u>
<u>Equipment</u>	<u>\$ 3,000,000</u>

<u>Supplies</u>	<u>\$ N/A</u>
<u>Salaries</u>	<u>\$ 1,000,000</u>

<u>Other (Contingency)</u>	<u>\$ 942,000</u>
<u>Other (Indirect)</u>	<u>\$ 500,000</u>

<u>Total Project Costs:</u>	<u>\$ 21,500,000</u>
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B. Other Project Funding Sources:

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

<u>City/County</u>	<u>\$ N/A</u>
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<u>Private Sources</u>	<u>\$ 2,000,000</u>
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<u>Other (e.g., grants, etc.)</u>	<u>\$ 6,000,000</u>
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<u>Total Other Funding</u>	<u>\$ 8,000,000</u>
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<b>Total Amount Requested:</b>	<b><u>\$ 13,500,000</u></b>
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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 P, Pg. 61

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(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 WORKFORCE TRAINING PROPOSALS**

### 1. Program Requirements

- A. Will this proposal supports 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 Q, pg. 64](#)

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(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
- ☒ Strengthen career readiness initiatives
- ☒ 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 R, Pg. 65](#)

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(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

Yes, the education and workforce training programs to be offered

will cater to multiple employers in the region.

(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.

Wakulla County

(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 S, Pg. 67

(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

Please see Attachment T, Pg. 69

(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 T, Pg. 69](#)

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(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 T, Pg. 69](#)

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(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 U, Pg. 70](#)

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(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 V, Pg. 71](#)

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

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

[Please see Attachment W, Pg. 72](#)

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(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 X, Pg. 73](#)

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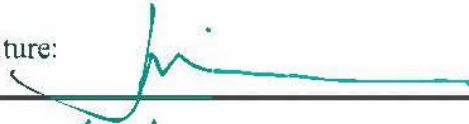
(If additional space is needed, please attach a Word document with your entire answer.)

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: The District Board of Trustees of Tallahassee Community College

Name and Title of Authorized Representative: Jim Murdaugh, Ph.D., President

Representative Signature:



Signature Date:



### **Attachment A: Applicant Information**

#### *Background of Applicant Individual / Entity / Organization:*

Tallahassee Community College (TCC) is one of the nation's top performing community colleges. Since its inception in 1966, the College has been at the forefront of advancing student success through education, workforce development and certification programs. On April 17, 2012, Governor Rick Scott signed Florida's budget, which included a \$4.5 million investment for TCC to construct the Wakulla Environmental Institute (WEI) in Wakulla County. In 2013, the College purchased 158 acres off Crawfordville Highway for the WEI and broke ground later that same year. The large, beautiful tract of land features a sinkhole, wetlands and a natural bridge. A year later, the Economic Development Administration (EDA) within the United States Department of Commerce awarded a grant of \$1.5 million to TCC for core infrastructure development that enabled the construction of Phase I of the WEI which opened in early 2016.

Located in one of North America's top five biodiversity hotspots, the WEI serves as a hub for education (job training), conservation and recreation in Northwest Florida for all environmental issues the state is facing today and in the future. The WEI provides job training in aquaculture and maritime occupations, leads efforts in environmental conservation and restoration, and promotes regional tourism and recreation activity to stimulate economic growth across the Big Bend. While the College developed the first phase of the Institute to support the revitalization of industries that collapsed because of the Deepwater Horizon oil spill, TCC's work in leading economic development activity in Wakulla County spawned new opportunities and initiatives that can be realized through the project described herein. Leveraging a record of sound financial and environmental stewardship, the proposed project will expand upon the burgeoning oyster farming training program and build a hatchery processing facility. This facility will directly enable the creation of over 500 jobs, and indirect employment may exceed 15,000 jobs by year 7 of project implementation. Area GDP will be augmented by \$480 Million, and the GDP-to-Project ROI is \$36:\$1. Therefore, for every dollar Triumph invests in this project, TCC's Ocean Shellfish Nursery / Hatchery and Processing Facility will generate over \$36 of return into the regional economy<sup>1</sup>.

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<sup>1</sup> Estimates, explained in later sections, are based upon new trainees and additional oyster spat made available to area entrepreneurs solely as a result of the WEI hatchery. The REMI Personal Income figure is derived from a sales-based projection with a \$500 Million input. Results reported are for Wakulla County.

**Attachment B: Applicant Information**

*Describe the financial status of the applicant and any co-applicants or partners:*

Tallahassee Community College is a comprehensive, public community college. The College's assets total \$165.3 million, with \$132.5 million in capital assets and \$37.4 million in operating revenue for the 2016-17 fiscal year.



**Attachment C: Applicant Information****EXHIBIT A**

**THE FLORIDA COLLEGE SYSTEM  
COLLEGE OPERATING BUDGET  
ANNUAL BUDGET SUMMARY  
FISCAL YEAR 2017-18**

**COLLEGE:** Tallahassee Community College

	<b>CURRENT FUNDS - UNRESTRICTED</b>
<b>BEGINNING FUND BALANCE - JULY 1, 2017:</b>	
ESTIMATED AFR FUND BALANCE - JUNE 30, 2017 (IF DEBIT BALANCE USE "MINUS SIGN")	\$9,556,768
ADD AMOUNT EXPECTED TO BE FINANCED IN FUTURE YEARS (USE PLUS SIGN)	0
<b>TOTAL RESERVE AND UNENCUMBERED FUND BALANCE - JULY 1, 2017</b>	<b>\$9,556,768</b>
ADD: REVENUES	\$57,894,057
TRANSFERS IN	\$1,000,000
<b>TOTAL RECEIPTS</b>	<b>\$58,894,057</b>
<b>TOTAL ESTIMATED AVAILABLE</b>	<b>\$68,450,825</b>
DEDUCT: EXPENDITURES	\$60,894,057
TRANSFERS OUT	\$0
<b>TOTAL DISBURSEMENTS</b>	<b>\$60,894,057</b>
<b>ESTIMATED FUND BALANCE - JUNE 30, 2018:</b>	
TOTAL AVAILABLE LESS DISBURSEMENTS	\$7,556,768
ADD ACCRUED LEAVE EXPENSE (GLC 59300)	\$0
<b>TOTAL ESTIMATED RESERVE AND UNENCUMBERED FUND BALANCE - JUNE 30, 2018</b>	<b>\$7,556,768</b>
LESS ESTIMATED AMOUNT EXPECTED TO BE FINANCED IN FUTURE YEARS (GLC 30800) - JUNE 30, 2018	\$0
<b>TOTAL ESTIMATED FUND BALANCE - JUNE 30, 2018</b>	<b>\$7,556,768</b>
ESTIMATED UNENCUMBERED FUND BALANCE - JUNE 30, 2018	\$4,996,164
(Includes GL's: 30200, 30300, 30400, 30500, 30600, 30700, 30900, and 31100)	
<b>PERCENT OF ESTIMATED UNENCUMBERED FUND BALANCE AS OF JUNE 30 2018, TO ESTIMATED FUNDS AVAILABLE</b>	<b>7.30%</b>

**CERTIFY BOARD OF TRUSTEES APPROVAL:**

  
\_\_\_\_\_  
**COLLEGE PRESIDENT**

6/19/17  
\_\_\_\_\_  
**DATE**

### **Attachment D: Eligibility Attachment, Question 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.*

#### **Wakulla Environmental Institute Ocean Shellfish Hatchery/Nursery and Processing Facility**

TCC's mission is "to provide a learning environment that prepares students for success in a global economy by offering higher education pathways, workforce opportunities and civic engagement experiences." The WEI Ocean Shellfish Hatchery/Nursery and Processing Facility is the manifestation of this mission, building on the College's success in Wakulla County over the past 10 years and provides the training, resources and facilities necessary to fundamentally change the livelihood for entrepreneurs and workers in the County and across Northwest Florida.

The WEI Ocean Shellfish Hatchery/Nursery and Processing Facility will provide the basis for Aquaculture Farmers to produce product which will utilize the entire water column. Our plan is to provide the seed, educate each entrepreneur on how to grow their crop, and provide the basis for safe, fresh shellfish processing to ensure the best product is available to customers worldwide. This will allow our focus to be on re-establishing a healthy aquaculture ecosystem with oysters being on top of the water column, scallops will utilize the middle, and clams will be produced on-bottom. The primary goal of the WEI Nursery/Hatchery will be on growing the Oyster Industry by responding to two crucial gaps within the rapidly expanding Gulf farmed oyster industry – provision of spawn and processing of mature oysters. Through the College's partnerships, it will offer an unparalleled ability to seed hundreds of entrepreneurs' operations and process them using revolutionary pasteurization technology. **The result of a fully operational and mature operation will be nothing short of the revival and enhancement of Florida Gulf seafood output to pre-BP spill levels.**

TCC's work through WEI has already led to the creation of over 100 new businesses with 150 new employees in sustainable seafood farming. In the past, a large portion of Wakulla County's commerce centered around seafood. However, the collapse of the seafood industry in nearby Apalachicola Bay, over harvesting/fishing and lifting of a net ban forced many of these businesses to close. WEI created its oyster aquaculture program in an effort to revive the seafood industry. Within just two years since opening the Institute and establishing its oyster aquaculture program, **Wakulla County is now a national leader in oyster production.**

Previously, WEI has partnered with Florida State University, the University of Florida, Florida A&M University and Auburn University to explore methods to further expand the number and operation of aquaculture and related businesses along the Gulf Coast. In addition, the WEI was recently awarded a grant from the *Gulf States Marine Fisheries Commission* for the experimentation of different oyster growing methods and spat retention in Oyster Bay. By experimenting and implementing novel farming methods, the WEI will decrease the number of acres needed per farm and maximize the number of oysters grown per site. All of these activities

will continue to drive economic development in the region and allow for research on sustainable approaches to Ocean Shellfish aquaculture – and **as a direct result, increase the demand for oyster seed at the beginning of each growing cycle and cleaning, packaging, and shipping at the end of each growing cycle.**

TCC seeks \$13.5 million from Triumph to help install and launch the WEI Ocean Shellfish Hatchery/Nursery and Processing Facility. This state-of-the-art facility will provide the College with the unique ability to enable 28 new oyster farmers annual (entrepreneur/business owner) to launch an operation each year with 3-5 employees per operation. After seven years of operation, this translates to over 500 new direct jobs in an export-oriented industry, which will enrich the region and enable supportive target industries (transportation / logistics) to flourish.

The WEI Ocean Shellfish Hatchery/Nursery and Processing Facility will house the most advanced Ocean Shellfish business catalyst in the state:

1. The **First Floor Nursery** will include grading, storage, shipping, algae production, state of the art upwelling system, and cleaning areas;
2. The **Second Floor Hatchery** will include larva cultivation
3. The **Second Floor Storage and Processing Center** will offer state-of-the-art cooling and freezing space, a patented pasteurization machine developed by scientists at FAMU, hatchery auxiliary space, and a vertical conveyance system; and
4. The **Second Floor Training and Administration Space** will provide classroom space and offices to train 28 new entrepreneurs each year and run the facility.

The WEI Hatchery/Nursery’s provision of primary product, training, and mature Ocean Shellfish processing facilities will **directly create over 500 jobs**, contribute to the creation of over **15,000 indirect and induced jobs**, and **increase area GDP by over \$480 million** upon seven years of operation. These figures are derived from a “but/for” scenario, which posits that without the increased oyster seed production, no new farms would be serviceable.

The Hatchery/Nursery will serve not only Wakulla County’s quickly growing aquaculture supply needs but also those of oyster farmers in Pensacola. With the pending closure of the Auburn Hatchery, the region will be dramatically under-supplied. Additionally, adjacent counties along the Florida Triumph Coast (e.g. Franklin, Gulf) are exploring feasibility of farming and will eventually augment demand for primary product (spat).

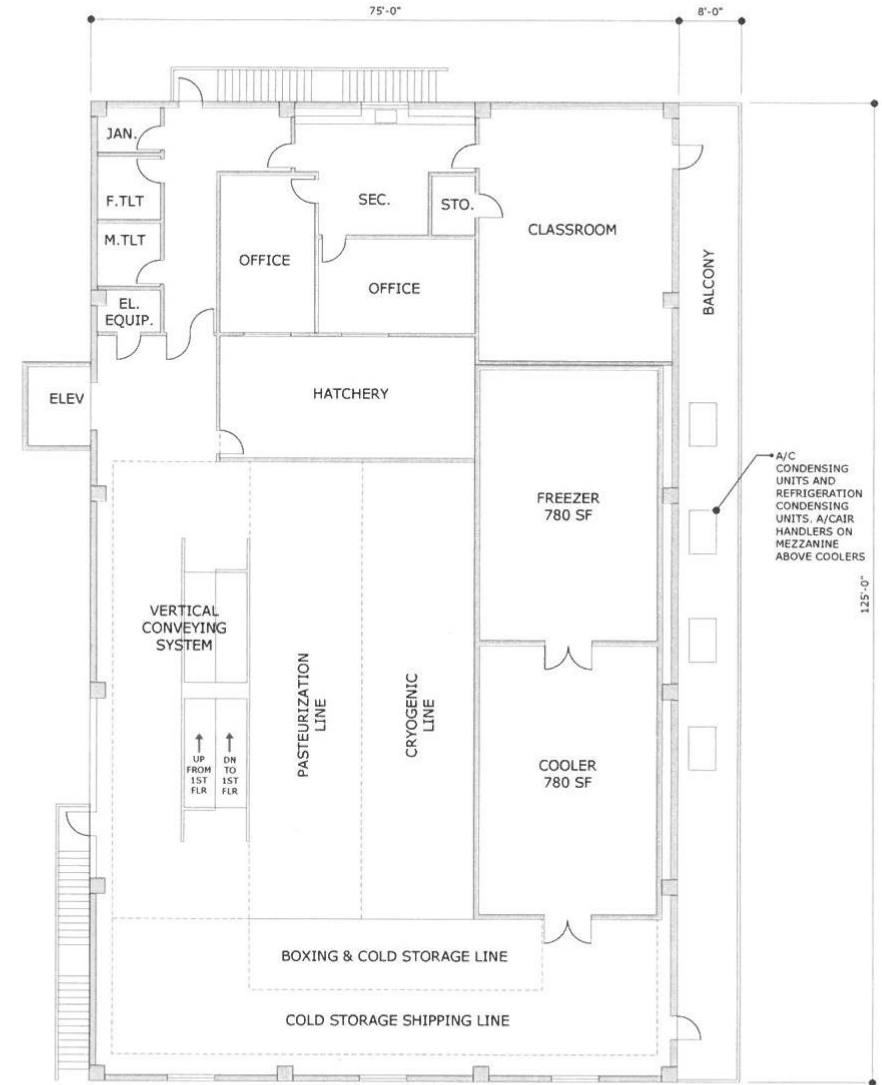
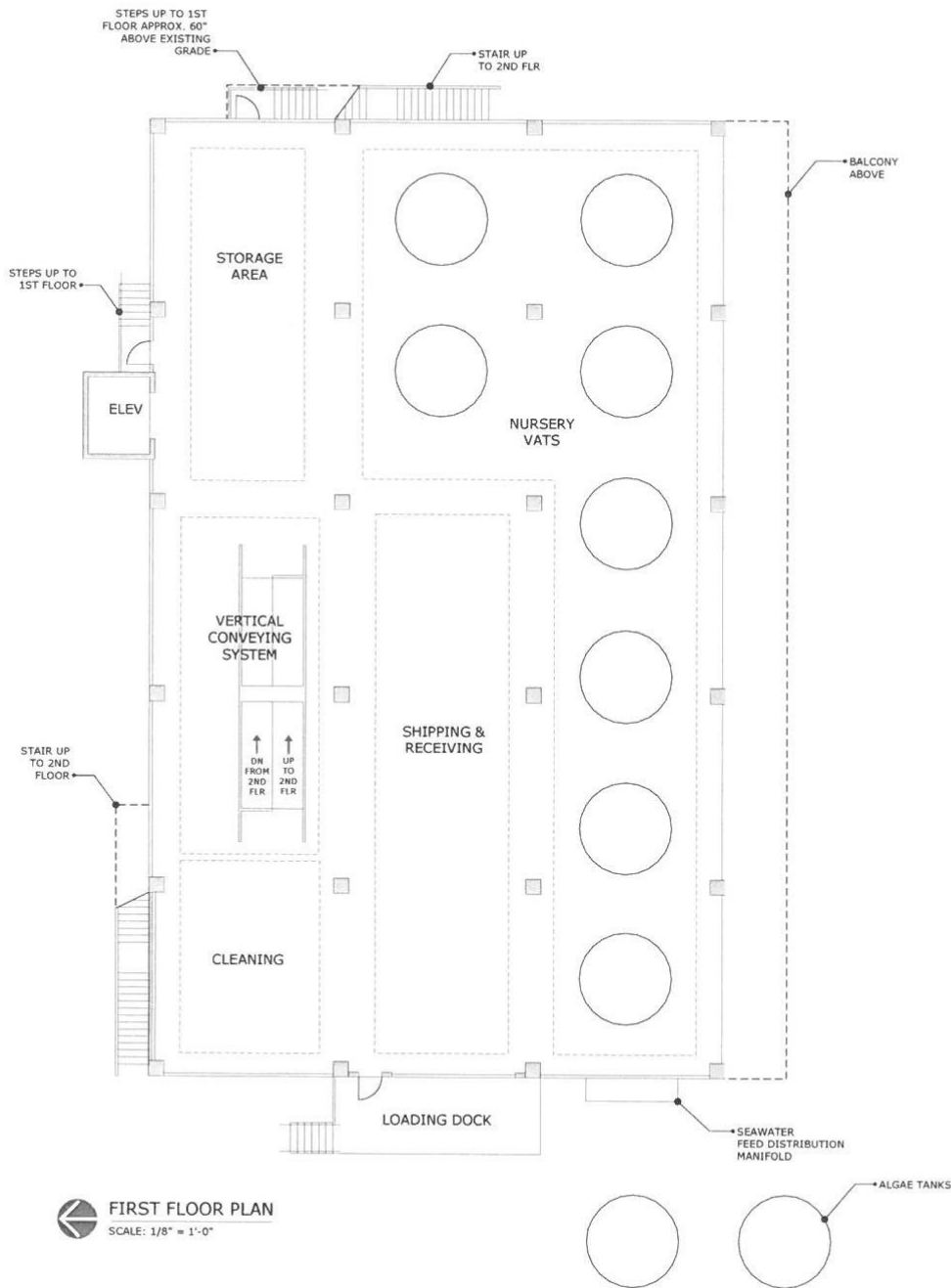
### ***Economic Resilience***

The WEI Ocean Shellfish Facility recognizes that the BP oil spill is not the final disaster that will occur in the region. Consequently, the construction, training, and equipment all manifest the importance of resilience. Building construction elements that will insulate the Hatchery from disruption include:

- Insulated concrete form construction that will ensure a well-insulated and airtight exterior envelope, allowing all heated and cooled spaces to function at high efficiency and withstand hurricane-force winds;

- Standing seam roofing that provides a more resilient response to hurricane and storm events, as well as a high Solar Reflectance Index rating, minimizing solar heat gain or heat island effects;
- ICF building stilts to minimize wave and related flood damage;
- Low-flow and water saving fixtures will be installed, and native, indigenous plantings will be specified to minimize any outdoor water needs; and
- Use of low-or-no volatile organic compounds paints, coatings and building materials will help provide a high indoor air quality. Environmentally resilient and responsible products will also be specified when possible.

Please refer to architectural rendering on the following page for further clarification.



PROPOSED OYSTER HATCHERY BUILDING  
WAKULLA ENVIRONMENTAL INSTITUTE &  
PANACEA OYSTER COOP  
PANACEA, FLORIDA

Farming techniques and equipment also need to be protected from hurricane destruction. The WEI currently provides and will augment its assistance to aquaculture farmers in helping them prepare for storms. Information about preparation and proper equipment is currently taught within the Aquaculture curriculum and will continue to be extended to incoming trainees and facility users. In the aftermath of Hurricane Michael, it is reported that farmers who followed the WEI's recommendations and utilized equipment experienced minimal losses, while those who did not experienced up to \$5,000,000 in losses (FDACS, *Hurricane Michael's Damage to Florida Agriculture*). This is crucial, as crop insurance extended to oyster farmers only becomes available after 3 years of continuous operation. These measures will help to protect farmers' investments during the interim.

The Hatchery will provide the WEI with the unique ability and flexibility to create new industries, employment and education opportunities that hugely enhance Triumph coast business formation, job creation, and environmental preservation. Further this facility will serve the entire 8 region community. All Aquaculturists in this region will be able to purchase spat and have their oysters processed at this facility. There will be a standard processing fee and cost for spat that will be the same for everyone. No competitive unfair advantages will be offered to larger operations. The goal of the facility is to grow this industry for everyone who wants to participate regardless of size.

### ***Processing Value Adds***

The Hatchery/Nursery is designed to integrate best-practice cultivation and processing workflows. It also integrates revolutionary new pasteurization technology workflow areas. In 2015, the World Health Organization (WHO) reported that annually, one in ten people worldwide (600 million people) fall ill and 420,000 people die from eating contaminated food. The Centers for Disease Control and Prevention (CDC) estimate that 48 million people get sick within the United States. Of that 48 million, 125,000 people are hospitalized, and 3,000 people die each year from foodborne pathogens. It has been reported in literature that widely varying *E. coli* concentrations were found in shellfish. Although the National Shellfish Sanitation Program is designed to ensure that shellfish harvested from certified waters do not contain these naturally occurring toxins, the increasing availability of raw oysters at restaurants has led to a dramatic increase in the rates of shellfish food poisoning in recent years. Eating raw oysters puts people with weak immune systems at risk of food poisoning from viral pathogens such as Norovirus and hepatitis A as well as bacterial pathogens including different *Vibrio sp.* Based on the WHO report, these pathogens together cause nearly 2 million infections every year and it leads to more than 70,000 deaths. Moreover, these numbers are sharply rising every year. The Wakulla Environmental Institute's Ocean Shellfish Nursery/Hatchery and Processing Facility will employ a unique pasteurization process that uses microwaves to increase the safety and shelf life of raw shellfish, in addition the oyster remains alive in its shell and the taste and texture is unchanged.

This process is highly cost-effective and results in the highest degree of food safety and acceptability to consumers. This will open new markets for oysters and increase the consumption of raw oysters at existing markets such as restaurants and oyster bars. Current experimental evidence has shown that the microwave pasteurization process keeps the oyster alive for  $16 \pm 3$  days in refrigerated conditions and consumers are unable to tell the difference between the pasteurized and unpasteurized ones. Through this, it is expected that **the price per mature harvested oyster will double, from ~50 cents to 1 dollar.**

### ***Educational Aquaculture Development and Training***

Currently, the U.S. has a \$13 billion seafood trade deficit and imports more than 90% (by value) of seafood consumed. The WEI is seeking to reverse this trend and has already created over 100 new aquaculture businesses through its oyster aquaculture program. The program was developed as a sustainable alternative to wild oyster harvesting in response to the depleting level of oysters in the waters of Wakulla, Franklin and Gulf Counties. Threats caused by overharvesting from fears of the BP oil spill and a narrowing of public combing areas led many to find work in alternative industries. Steering oystermen back into the industry creates a domino effect which will benefit the region's economy. This leads to new aquaculture businesses and a need for specialized equipment and facilities. Further, with the success of oysters it allows WEI to begin offering additional aquaculture training programs. The overall plan moving forward includes:

#### **Oysters**

In 2012 Florida was fourth in the US in Oyster Production with the majority coming from the Gulf in the Apalachicola Bay area. In 2016 that production dropped to ninth due to overharvesting and the lack of a seed source. There is a high demand market for oysters worldwide with China being the world's number one producer of oysters. Our goal is to bridge the gap and become the world's number one supplier with the Gulf of Mexico becoming the highest producer of Oysters in the US. With off-bottom production, we feel this is very achievable.

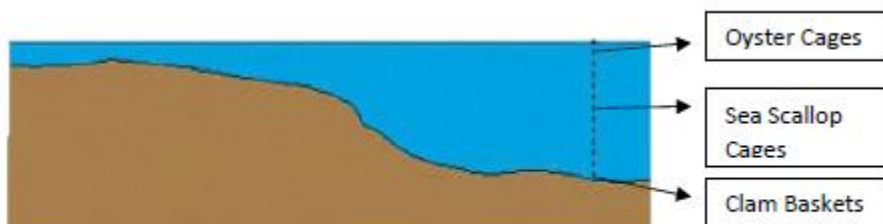
#### **Scallops**

WEI is partnering with Florida Fish and Wildlife Conservation Commission to provide training on the Aquaculture Farming of Scallops here in the Gulf Region. The US is the world's leader in scallop production. We would like to incorporate this area of Aquaculture farming to provide the necessary diversity in product development for this region, thus bringing a new market for business and job creation.

#### **Clams**

Currently in the Gulf, only one specific area grows clams and that is out of Cedar Key. We would like the opportunity to expand this area and provide opportunities for growth in production and compete in a global market. This will also increase the number of businesses, jobs in this region.

Essentially an Aquaculture Farmer can grow all three crops on one lease and triple their business, while providing employment opportunities without the necessity of expanding the area of needed space. Oysters at the top of the water column, Scallops in the middle, and clams on-bottom.

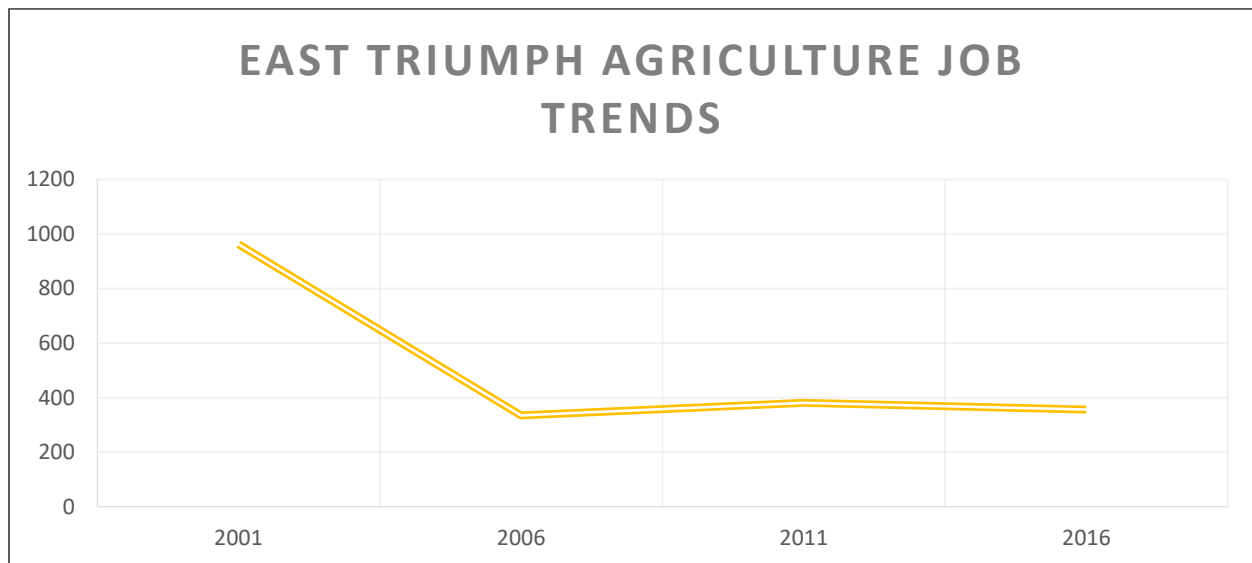




### **Attachment E: Eligibility Attachment, Question 3**

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

The story of water-dependent, resource-based livelihoods in the East Triumph (Franklin, Gulf, Wakulla) region has been one of difficulty and decline since the 1990s. Changes in regulations mandating minimum trawler net hole size and natural and man-made disasters have depleted oyster and finfish stock from the St. James Bay to Cape San Blas. According to Bureau of Labor Statistics data, industry employment in NAICS 11 (Agriculture, Forestry, Fishing, and Hunting) declined from a 2001 peak of 962 to just over 350 in 2016.



This is not to suggest that the region's rich estuarine systems and well-preserved coastline lack the capacity to support livelihoods that once thrived here. Rather, it will be through a public-private pivot – as seen by WEI and cooperative activities already taking place – that the coastal economy can evolve from wild fishing to cultivation and stewardship oriented livelihoods.

Current oyster farming activities, while robust, are at a standstill. This is due to several factors, including new 1-acre leases coming online from Department of Agriculture and Consumer Services and the expansion of the global market for *Crassostrea Virginica*, or "Panacea Pearl" oysters. Most importantly is the sunseting of a major hatchery operation run out of Auburn University. The Auburn University Shellfish Laboratory has provided millions of oyster spawn to regional farmers since the early 2000s, and with the cessation of its commercial spat provision a huge gap will open in the southeastern supply chain. WEI Hatchery will fill that void before it can pose a major dilemma to area farmers.

But the Hatchery won't simply fill in a hole in the supply chain – it will greatly increase the volume that Triumph counties have to work with. Through training, equipment, and larvae, the

facility **will take regional oyster production from 12.5 to 500 Million yearly within seven years.**

### **Economic and Job Impacts**

As direct result of Triumph investment, the Hatchery will create **529 direct jobs**, up to **15,200 indirect and induced forms of employment**, and up to **\$294 Million in additional personal income** by its seventh year of operation.

In an area currently sustaining around 350 Agriculture jobs, this represents a **149% increase in sector employment** and a doubling of total employment within Wakulla County.

The road to transformation consists of two main enabling factors – new business formation and higher per-oyster sales. Currently, 28 oyster farming businesses employing 3-14 people exist in Wakulla County. With an operational hatchery, processing facility, and additional training space, 28 new businesses per year, each employing 3-5 people can be created. Importantly, 100% of these businesses will stay in Triumph counties and employ locals. The following tables detail direct employment thus created:

*Table 1: New Sustained Hatchery Employment*

WEI Hatchery Direct Jobs	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	25	25	25	25	25	25	25

*Table 2: Hatchery-Enabled Business Formation and Associated Jobs*

New Oyster Business Formation Jobs	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	28	84	168	252	336	420	504

Direct impacts are enormous, yet sales projections indicate that positive impacts to the rest of the local economy are just as pronounced. The low-end price each oyster currently fetches at market is .45 cents. With the processing facility's pasteurization treatment, the price-per-oyster can jump to \$1, with large tourism clients in Florida already staking claim to this future treated inventory. As such, between 6,600 and 15,000 indirect jobs may be created by future oyster sales, and the GDP-to-Triumph investment will be over 36:1, as indicated by the following tables.

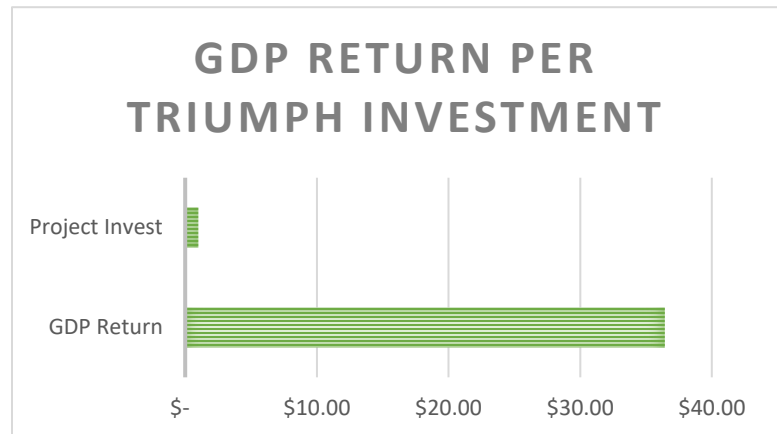


Table 3: Oyster Sales Projections, Low and High Scenarios

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7		
Oyster Sales Projections	\$ 11,250,000	\$ 22,500,000	\$ 45,000,000	\$ 90,000,000	\$ 180,000,000	\$ 225,000,000	\$ 225,000,000	0.45	Sale price per oyster w/out vibrio treatment
	\$ 25,000,000	\$ 50,000,000	\$ 100,000,000	\$ 200,000,000	\$ 400,000,000	\$ 500,000,000	\$ 500,000,000	1	Sale price per oyster with vibrio treatment

Table 4: REMI Model Outputs, Oyster Sales, Low Projection

<i><b>Oyster Sale Economic Impacts, Low Projection</b></i>	<b>Year 7</b>	<b>Average, first 7 years</b>
<b>Employment</b>	7,146	4,332
<b>Personal Income</b>	\$ 248,974,146	\$ 123,109,316
<b>GDP</b>	\$ 212,874,241	\$ 123,019,787

Table 5: REMI Outputs, Oyster Sales, High Projection

<i><b>Oyster Sale Economic Impacts, High Projection</b></i>	<b>Year 7</b>	<b>Average, first 7 years</b>
<b>Employment</b>	15,783	9,597
<b>Personal Income</b>	\$ 594,239,175	\$ 294,182,169
<b>GDP</b>	\$ 480,484,316	\$ 276,510,248

### **Attachment F: Eligibility Attachment, Question 4**

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

TCC proposes to build upon the success of Phase I of the WEI and the \$6 million that were procured in the initial creation of the Institute. One-hundred new businesses have been created and 150 new employees hired since 2016 because of the WEI's oyster aquaculture program. Phase II will allow the WEI to continue to grow its efforts and affords new opportunities for entrepreneurship and workforce training that will outshine even the current employment impacts.

Area demand for oyster cultivation training is high. In its first 5 years of operation, the WEI has trained over 100 entrepreneurs each year. From this, 150 employees have been hired. A survey of viable aquaculture leases in the Apalachee Bay area indicates that hundreds more acres exist to support oyster production. Prospective enrollment in the WEI training classes continues to max-out available spots. Regional, national, and international demand for *Crassostrea virginica* continues to outpace current local farmed supply by an order of magnitude. No other hatchery and processing facility currently exists with the volume and sophistication of the proposed equipment within 200 miles of the proposed project site. And while oyster farming yields up to 1,000,000 mature shells per acre, the act of maintaining buyer and logistics relationships can strain business owners beyond their time availabilities. As such, demand for training, management assistance, primary product, and processing facilities exists (supply-side) and demand for the product dwarves current supply.

TCC currently enrolls over 12,000 students and is **ranked number 8 in the nation** among community colleges by *SmartAsset.com*. Further, TCC was one of only 150 colleges in the U.S. selected to compete for the *Aspen Prize for Community College Excellence*. The prize recognizes institutions for exceptional student outcomes related to student learning, certificate and degree completion, employment and earnings, and access and success for minority and low-income students.

TCC was ranked among the top schools in *Military Advanced Education* magazine's 2015 Guide to Military-Friendly Colleges and Universities. This year, the College was also designated a military-friendly school by *Victory Media* for the second consecutive year. The College's successful track record ideally positions it to support veterans who are transitioning to civilian work across the region but need new workforce training opportunities.

TCC is one of 28 members of the Florida College System and has extensive experience in managing large federal, state and private awards and has all the necessary infrastructure including a Sponsored Program Office, in place to assure successful support and fiscal monitoring of this project. The College has operated for over 50 years and now has seven campus locations in its three-county service district. In addition to the main campus in Tallahassee, the College has service centers in Gadsden and Wakulla counties, and in downtown Tallahassee. TCC's healthcare professions programs are housed in the Ghazvini Center for Healthcare Education adjacent to Tallahassee Memorial Healthcare. The College also operates the Gadsden County-based Florida Public Safety Institute, home to the Pat Thomas Law Enforcement Academy.

TCC has five full-time employees dedicated to managing \$50 million in annual expenditures in federal, state, corporate and foundation grants. The College has the necessary experience to successfully create and manage a project of this scope and size.

**Attachment G: Eligibility Attachment, Question 5**

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

TCC will leverage three resources to measure the long-term impacts of this project:

1. The WEI Hatchery and Processing Center will collect data on direct impacts, including:
  - Number of trainees graduated;
  - Number of resultant businesses startups;
  - Number of employees per business;
  - Quantity of larval oysters produced yearly;
  - Quantity of mature oysters processed yearly, by business and for total facility; and,
  - Yearly estimated gross revenues, per participating business and as processed by the facility.
2. The College's Office of Institutional Effectiveness (OIE) is responsible for the systematic and comprehensive analysis of college planning and operations including strategic planning, assessment of institutional effectiveness and accreditation. The OIE uses data to assess and direct the institution's progress toward meeting its established goals. The office's major functions include institutional research, assessment of institutional effectiveness, accreditation leadership and educational research. The OIE will track student enrollment, graduations rates and job placements from this project.
3. The Apalachee Regional Planning Council will aid the College in monitoring the economic data of our region including GDP, Median Household Income by County, and other economic and demographic data that are pertinent to the long-term impact of this project.
4. Partnerships with workforce boards, economic development councils and Chambers of Commerce, and using multiple data sources including the:
  - Florida Department of Education's Division of Career and Adult Education and the *Comprehensive Industry Certifications List*;
  - Agency for Workforce Innovation;
  - Workforce Florida Board; and,
  - District Three Florida Agency for Workforce Innovation's *Regional Targeted Occupations List*.



**Attachment H: Eligibility Attachment, Question 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.)*

This innovative project will generate revenue via training tuition, larva sales, and processing/administrative fees provided to Cooperative members. Prevailing oyster seed pricing ranges from \$50 to \$110 per 1,000 seed, depending upon oyster variant and length. The below table plugs market seed rates into production forecasts to produce a revenue estimate during the first seven years solely for hatchery sales:

### Ocean Shellfish Hatchery/Nursery & Processing Revenue Projections

Spat Pricing		Production	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Source:			12,500,000	25,000,000	50,000,000	100,000,000	200,000,000	400,000,000	500,000,000
<a href="http://www.shorethingshellfish.com/products-and-pricing.html">http://www.shorethingshellfish.com/products-and-pricing.html</a>									
Triploid	Per 1000	Estimated Revenue (\$)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
1/4 inch	\$ 50.00		625,000	1,250,000	2,500,000	5,000,000	10,000,000	20,000,000	25,000,000
1/2 inch	\$ 80.00		1,000,000	2,000,000	4,000,000	8,000,000	16,000,000	32,000,000	40,000,000
3/4 inch	\$ 110.00		1,375,000	2,750,000	5,500,000	11,000,000	22,000,000	44,000,000	55,000,000
<hr/>									
Diploid									
1/2 inch	\$ 100.00		1,250,000.	2,500,000.	5,000,000.	10,000,000.	20,000,000.	40,000,000.	50,000,000

The above table indicates that Hatchery revenues alone will supply a per-worker gross revenue of 100,000 by year three (assuming the lowest price per oyster seed is obtained). Thus, the project should achieve full financial sustainability by year three and evolve into a robust mechanism that the coop and TCC can utilize to expand services an impact during the years following.

Education and workforce training programs are sustained at TCC through a combination of:

- Tuition\*;
- Students fees;
- Activity fees;
- Support from the TCC Foundation;
- Contracts and grants;
- State funding; and
- Corporate partnerships.

\*The majority of TCC students receive a combination of financial assistance that includes federal financial aid, scholarships, Veterans Affairs funding, CareerSource funding and Vocational Rehabilitation funding. The aid reduces the financial burden on TCC students and offsets a majority of their out-of-pocket expenses.

### **Attachment I: Eligibility Attachment, Question 7**

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

#### **Formative Evaluation**

In addition to the description of measurement provided in the response to Question 5, TCC will also employ a formative evaluation protocol which will analyze relevant data to determine the ongoing success of the project toward achieving its objectives.

Through internal monitoring and evaluation of the WEI Hatchery and Processing facility, the following formative evaluation questions will be answered:

1. Is Ocean Shellfish seed production and processing scaling at initial projected rates?
2. Are entrepreneurs being trained, graduating, and forming businesses in accordance with projected rates?
3. Is the project on track to meet its financial sustainability timeline (year 3)?
4. Are the resources and activities adequate to achieve the long-term impacts, and are process improvements that can increase resilience of this climate-sensitive industry being considered?
5. Is WEI making adequate progress towards the long-term impacts listed below in summative evaluation?
6. How will changes be implemented to ensure that the long-term impacts are realized?

This protocol will afford the WEI the opportunity to address any ongoing concerns.

#### **Summative Evaluation**

A summative evaluation will occur at the end of each program year and at completion of the project. Relevant data will be used to analyze:

- Student enrollment;
- Program completion rates;
- Number of new jobs created;
- GDP change for select Triumph counties
- Median Household Income change for select Triumph counties; and
- Average Annual Wage Rate changes for select Triumph counties.
- Environmental survey of species diversity, water quality, and benthic regions of project area.

Upon analyzing the data above, the following summative evaluation questions will be answered:

1. Did the Hatchery and Processing Facility lead to over five hundred new direct jobs created?

2. Did the Hatchery and Processing Facility directly enable a production increase of 4000% (from 12.5 Million/year to 500 Million/year)?
3. How were the Eastern Triumph counties affected economically by this project?
4. How were the Eastern Triumph counties affected environmentally by this project?

This protocol will ensure that the WEI Hatchery is evaluated in terms of economic and environmental impacts, both at its onset and at maturity of operation.

## **Attachment J: Priorities, Question 2**

*Please explain how the proposed project meets the priorities identified above.*

*1. Generates maximum economic benefits:*

The WEI Hatchery and Processing Facility provides the “but/for” circuitry to electrify the regional economy. It does this by filling the central gap inhibiting production gains in this sector, which has proven its value proposition during the first three years of cultivation and sales. By enabling a leap from 12.5 Million to 500 Million oysters grown and sold per year, the Hatchery will support over 100 new micro-enterprises, 500+ direct hires, and between \$225 and \$500 million in new annual sales.

*2. Increase household income:*

People working in Wakulla County are predominantly employed in manufacturing, fishing, retail, and food service industries. Many residents have chosen the county to live in for its rural atmosphere and strong public school system, drawing their wages from work in Leon County. Hence, the average annual wage rate remains low yet median household incomes are quite high. The average annual compensation rate and median household income of residents living in Wakulla County is presented in the chart below.

### **Current Socio-Economic Snapshot: Wakulla County**

*Income and Compensation, Wakulla County*

<b>Metric</b>	<b>Year</b>	<b>Value</b>
<b>Average Annual Compensation Rate (Private, All Industries)</b>	2016	\$23,204
<b>Median Household Income</b>	2016	\$54,078

*Data Source: REMI for AACR, ACS for MHI*

This project will bring high-revenue capabilities to small businesses located in and employing Eastern Triumph County-area residents. Hence, it will add higher-wage jobs to a county wherein the Median Household Income obscures the fact that it represents wages earned outside Wakulla. Currently, Aquaculture annual wage rates provide slightly higher payment than the average rate within Wakulla, as shown by the table below:

### Annual Mean Wages, Florida Occupations 2016

Metric	Year	Value
<b>SOC 45-2093 Aquaculture, Annual Mean Wage</b>	2017	\$25,350
<b>Oyster Farm Worker, Annual Mean Wage</b>	2018	\$27,456

*Data Source: Bureau of Labor Statistics, OES 2017 and Calculations based on Virginia Marine Institute*

These statistics may not accurately capture the compensation rates of oyster farming in the Apalachee Bay. As sales projections indicate, a large increase in Personal Income will result from pasteurized oyster sales, which is correlated with higher annual wage rates.

3. *Leverage key regional assets:*

The purpose behind the creation of the WEI was to leverage the key regional asset of Wakulla County: the environment. The region is regarded as one of the top five biodiversity hotspots in all North America. The Institute property is situated on 158 acres off Crawfordville Highway and features a sinkhole, wetlands and a natural bridge. The parcel boasts immediate access to the coast in Wakulla County, which is the proving ground for Wakulla's nascent Ocean Shellfish farming industry.

Oyster Bay, St. George Sound, St. Mark's Wildlife Refuge, and the greater Apalachee Bay have remained all but dormant during the decline of the region's traditional extractive seafood industry. By pairing TCC's educational capacity with area economic pioneers, the College and partners have proven a concept: that the rich estuarine waters of this area make ideal habitat for Ocean Shellfish farming. This project leverages the ample nearshore water acreage, endemic familiarity of regional workers with seafood trades, and access to state-of-the-art facilities to truly maximize environmental and human capital assets.

4. *Partner with local governments:*

TCC has fostered a long and productive partnership with Wakulla County for over 50 years. As with all its projects in Wakulla, the College will continue to partner with the County, and takes great pride that this proposal was one of the few that the County approved for funding from Triumph.

5. *Benefit to environment:*

The WEI Hatchery and Processing facility will strive to have minimal environmental impact, as indicated by construction methods. Built into its evaluation and stemming from its status as a public-private partnership, the facility will hew in green standards to its commercial activities, such as shipping and electrification. Finally, the impact of Ocean Shellfish farming on the environment is generally positive, acting as a means to reintroduce mollusks – and thus mollusk-dependent ecosystems – into areas that have converted into open water. As farmed oysters release spawn that become wild, the region's fish will have increased habitat to nest and feed, potentially leading to an increase in mollusk-symbiotic fish, amphibian, and animal species in the region's waters. Secondly, Ocean Shellfish

habitats, when in the form of underwater berms, attenuate wave activity and protect wetlands and estuaries further landward. As the past three hurricane seasons have shown, and predictions indicate increasing storm frequency and intensity in the future, the importance of Ocean Shellfish habitat as wave attenuator will be increasingly appreciable and necessary.

The WEI's efforts with longleaf pine restoration offers a second example of the Institute's positive impact on the environment. An estimated 29 threatened and endangered species inhabit areas associated with the longleaf ecosystem. Restoration of longleaf pine, combined with its ability to sustain regular prescribed burning from 1-year post planting until harvest, is important for the recovery of threatened and endangered species such as red-cockaded woodpeckers, flatwoods salamanders, quail and gopher tortoises present in the targeted counties. Wakulla County has nearly 8,000 residential parcels that are over one acre, with an average parcel size of 5.67 acres. The Institute serves as a living model as to how land can be restored, and the environment protected and nourished, so it will be available for future generations. The WEI will continue to be the good and proper steward of the natural resource in the region and offer education and training programs that promote effective environmental restoration and stewardship.

6. *Provide outcome measures:*

As described by Attachment I, Question 7, The Hatchery and Processing facility will be evaluated through continual internal monitoring, socio-economic data gathering, business and revenue survey, and evaluation of environmental impacts. These will combine to provide a comprehensive picture, through outcome measures, of the project.

7. *Partner with K-20 educational institutions:*

TCC will continue its longstanding partnerships with FSU, FAMU and Wakulla County Schools.

8. *Recommended by the board of county commissioners in Wakulla County:*

The Hatchery was one of the recommended proposals approved by the Wakulla County Board of Commissioners at its December 3, 2018 meeting (see Appendix B).

9. *Partner with convention and visitor bureaus:*

TCC maintains close ties with the Tourism Development Councils of the region, recognizing that eco-tourism plays a central role in driving visitation to the East Triumph area. Through the WEI's current Green Guide program, trainees are certified in a skillset that renders them capable of outfitting and guiding tours of the natural environment.

As the Hatchery develops, it will become a key asset that Green Guides and eco-tours can highlight on explorations of Wakulla. TCC will ensure that areas safe for visitation are included in brochures and other marketing materials published by Wakulla TDC.

### **Attachment K: Priorities, Question 3**

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

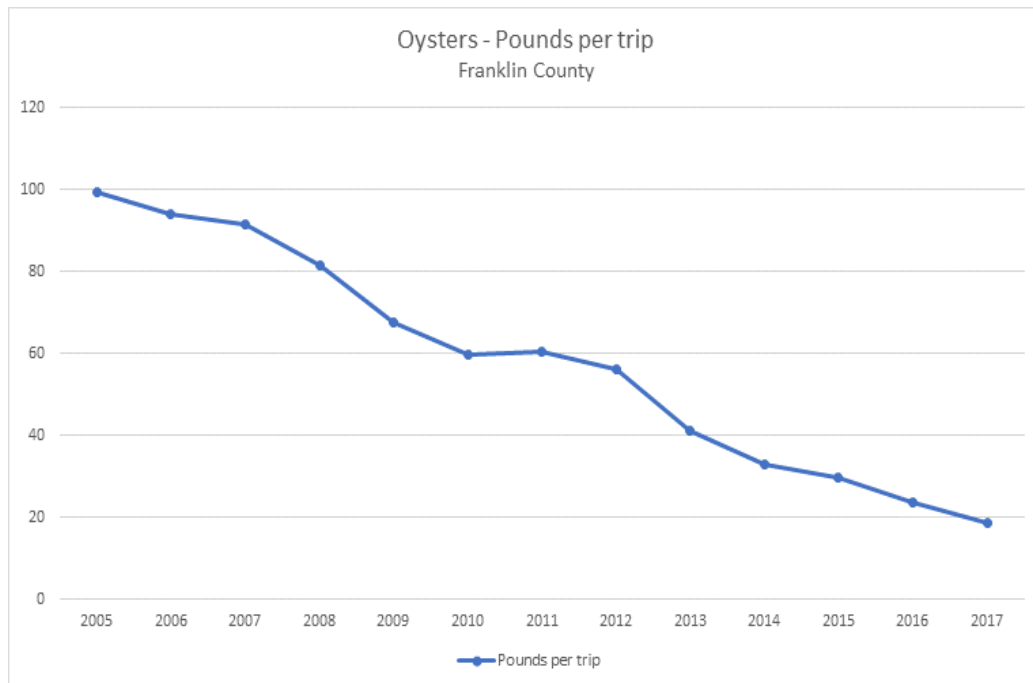
The Wakulla Environmental Institute Hatchery and Processing Facility meets all applicable discretionary priorities identified by the Triumph Gulf Coast Board of Directors.

1. *Are considered transformational for the future of the Northwest Florida region.*  
The WEI Hatchery and Processing facility will create/directly enable 529 jobs in oyster aquaculture and thousands more in indirect and induced positions. It will cement the role of oyster aquaculture as a new regional industry and benefits will flow throughout the East Triumph economy.
2. *May be consummated quickly and efficiently.*  
The WEI will break ground on Hatchery construction immediately following the award of funding. TCC has already obtained architectural plans for the building and have core staff ready and available to initiate larva cultivation, training, processing, and monitoring activities.
3. *Promote net-new jobs in the private sector with an income above regional average household income.*  
New business formations project **504 new jobs** will be created by this project. Further, the average salary of jobs created will be 18% higher than the current average salary in Wakulla County (\$27,456 vs. \$23,204) (Data Source: Bureau of Labor Statistics, OES 2016).
4. *Align with Northwest Florida FORWARD, the regional strategic initiative for Northwest Florida economic transformation.*  
This project aligns with the majority of the regional strategic initiatives, including:

#### **GOAL 1. TALENT**

- **1.3, 1.7 Training focused on underemployed and long-term unemployed residents.**  
Finfishing and Shell fishing in the Apalachee Region has experienced steady declines over the past several decades. Data for neighboring Franklin County indicate a loss of 80% of wild catch sizes for oysters between 2005 and 2017:





Hatchery facilities and training will target this loss of wild landings by instituting aquaculture that is capable of replacing lost sales and absorbing workers who have been underemployed for over a decade.

TCC approaches training and certification for under and un-employed workers as a core part of its services to the North Florida Region, boasting a successful record of supporting long-term unemployed and underemployed residents with training for in-demand careers. Its workforce programs are specifically designed to recruit and work with this population. Partnering with CareerSource and other community-based partners, the College facilitates collaboration to recruit and create new programs that serve the community. TCC is an inclusive institution that welcomes all who desire to learn, regardless of wealth, heritage or previous academic experience. The College serves all segments of society by providing an open-door to postsecondary education and training to all. TCC's responsiveness to community needs is demonstrated by its comprehensive programming portfolio. The range of programs that is offered, from short-term skills and adult basic education/ESL to high-demand workforce and transfer programs, fuels the development of both individuals and the community and serves as an engine for economic development.

- **1.5 Expand work-based learning and career exploration opportunities for students.**

The Hatchery is a hands-on training facility geared towards exposing new trainees to the entire lifecycle of an oyster crop. Students will directly participate in oyster seed rearing, establishment of post-larval spat in water-leased cage areas, maintenance, harvesting, and processing. This experience will fully expose the prospective entrepreneur to the life of an Oyster Farmer and leave no "stone unturned" as they prepare to start a business.

## GOAL 2. BUSINESS VITALITY

- **2.1 Ensure the growth of region's key industry clusters.**

The WEI Hatchery and Processing Facility targets aquaculturists, who in turn directly support local floating cage, line, and associated oyster farming apparatus manufacturers. REMI modeling outputs indicate that spending via the aquaculture industry will create 5-6 jobs in financial services (NAICS 52) and 79 jobs in Professional/Scientific/Technical services (NAICS 54) as well.

- **2.6 Support the growth of microenterprises and small businesses in the region, particularly in rural areas and minority communities.**

The WEI Hatchery is specifically designed to launch and support 28 oyster aquaculture businesses per year. Each enterprise is forecast to employ 3-5 workers earning 118% of the current Wakulla mean wage rate.

## GOAL 4. ENTREPRENEURSHIP AND INNOVATION

- **4.1, 4.5 Develop the region's entrepreneurial hubs and connect them with industry clusters, assets, services, networks, facilities, tools, and expertise.**

WEI has been a magnet for drawing business startups focusing on environmental professions (aquaculture, ecotourism) southward, and the Hatchery will further expand the web of entrepreneurship support in this region. Furthermore, the entrepreneurship this supports complements Tallahassee's target industry clusters, which focus on professional, scientific, and technical applications. In sum, this project fortifies Wakulla's strongest entrepreneurial niche – Agriculture/Aquaculture and Tourism.

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.*

The Ocean Shellfish aquaculture cluster will indirectly support financial services/shared services and manufacturing. New businesses will need hundreds of millions in commercial and personal income serviced by area banks, and this activity will support job creation at all levels within the financial cluster. Second, emergent manufacturing entities are already serving commercial aquaculture demands for oyster cages, lines, boats, domes and other specialty products. As total oyster production scales so too will aquaculture-facing manufacturing.

6. *Promote industry cluster impact for unique targeted industries.*

Through its impacts to the “advanced aquaculture” sector developing in East Triunph counties, the WEI Hatchery and Processing facility will support financial and manufacturing clusters, as described above. Ocean Shellfish farming is particularly suited to the Apalachee Bay region (Wakulla), thanks to its rich alluvial waters and warmer temperatures. Unlike the 18-month cycle required to cultivate Virginia / Massachusetts oyster, the “Panacea Pearl” can be harvested every 9 months. This provides a unique competitive advantage to this emerging cluster and its impact.

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

The average salary of new jobs created by the Hatchery is estimated to be 18% higher than the current average salary earned in Wakulla County (\$27,456 vs. \$23,204) (Data Source: Bureau of Labor Statistics, OES 2016).

8. *Are located in Rural Area of Opportunity as defined by the State of Florida (DEO).*  
Wakulla, Gulf and Franklin Counties are all located in a Rural Area of Opportunity.

9. *Provide a wider regional impact versus solely local impact.*

The WEI Hatchery will serve Wakulla-based entrepreneurs who employ personnel from rural coastal counties within 50 miles. Additionally, Pensacola-based oyster-culturists have expressed interest in purchasing spat. Thus, positive impacts will extend to Western Triumph agricultural supply chains as well.

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

Through its oyster aquaculture program, the Institute is already working with the FSU Coastal Marine Laboratory and their Apalachicola Bay System Initiative (ABSI), a research program that addresses key issues relevant to the status and recovery of oyster populations. Their work aligns with and informs current and future WEI oyster aquaculture initiatives. The continued cooperation and partnership will synergistically support both programs and our region to further enhance this burgeoning industry.

11. *Enhance research and innovative technologies in the region.*

The WEI Hatchery will expand knowledge regarding Ocean Shellfish breeding techniques that create an environmentally resilient oyster. To that end, the WEI was recently awarded a grant from the *Gulf States Marine Fisheries Commission*, which is an organization comprised of five states (Texas, Louisiana, Mississippi, Alabama and Florida), that was created by an act of Congress in 1949. Its principal objective is the conservation, development and full utilization of the fishery resources of the Gulf of Mexico, to provide food, employment, income and recreation to the people of the United States. The grant from the Commission supports the experimentation of different oyster growing methods and spat retention in Oyster Bay. By experimenting and implementing other farming methods, the WEI hopes to greatly expand the number of lease sites available to farmers. Further, by determining which systems prove effective, the WEI is seeking to maximize the number of oysters grown per site.

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

The WEI Hatchery-served cluster includes industries in NAICS 11 (Agriculture), 31-33 (Manufacturing), 42 (Wholesale trade), 48-49 (Transportation/Warehousing, and 54 (Professional/Scientific/Technical). Because of the natural habitat in which the farms operate, it is highly unique to Northwest Florida and demonstrates the local economic resilience after the BP Oil spill.

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

The WEI Hatchery and Processing facility will be the only hatchery in the Triumph Region. It will offer processing technologies (pasteurization) that cannot be found anywhere in the United States. Entrepreneurs from across the Triumph region will leverage this resource to cement a vast new benefit to the North Florida economy.

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

As supported by the analysis provided by Attachment H, Question 6, the Hatchery and Processing plant will create budget surpluses by its third year in operation. This will be supported by tuition and regularly recurring revenue flows at TCC.

TCC has operated for over 50 years to serve students who invest in programming that provides a better opportunity for their future. Regularly recurring revenue at all TCC institutions is realized by a combination of the following:

- Tuition;
- Students fees;
- Activity fees;
- Support from the TCC Foundation;
- Contracts and grants;
- State funding; and
- Corporate partnerships.

*15. Leverage funding from other government and private entity sources.*

TCC was previously awarded \$6 million for Phase I of the WEI. The state allocated \$4.5 million for its construction and the EDA awarded the College \$1.5 million for infrastructure development at the Institute's campus.

The Hatchery and Processing facility comprises the main economic development and job creation ensemble included in a second phase of expanded WEI impact. For Phase II, the EDA has asked TCC to apply for a \$5 million grant to support the construction of an expanded workforce development training center. This workforce development training center will pair numerous in-demand occupational training courses with the Ocean Shellfish farming centerpiece project at the Hatchery. In this way, funding sources are being smartly compiled to exponentially expand the WEI's skills and jobs impact.

As state assistance for education wanes and the cost of higher education continues to rise, private support is becoming increasingly necessary for TCC's growth and ability to maintain its standards of excellence as one of the country's preeminent community colleges. To support the College's efforts to implement Phase II of the Institute (including the Hatchery), the TCC Foundation established a local committee with the singular goal of identifying \$2 million in private funding that will provide additional resources for this next phase. The funds will be placed in an endowment, to be held in perpetuity, which will provide critical dollars annually that support innovative programs for the WEI, scholarships to students from Wakulla County and facility enhancements as programs and enrollment grow at the campus.

*16. Provide clear performance metrics over duration of project or program.*

As explained in Attachment I, Eligibility Question 7, direct and indirect metrics will be used to measure the Hatchery's effects. These metrics will follow cash flow, logistics, training, sales, and broader economic impacts.

*17. Include deliverables-based payment system dependent upon achievement of interim performance metrics.*

Project deliverables will be the documented construction expenditures of the WEI Hatchery and Processing Facility. Since this project consists of a construction-enabled job creation facility, interim metrics can be assessed based upon student enrollees for future oyster farming classes (extending out several years) and preliminary contracts with oyster cooperative farmers to buy oyster larvae and process a minimum bulk of product per year at the facility. Performance metrics during construction project implementation are thus:

<i>Metric</i>	<i>Month 1-6</i>	<i>Month 7-12</i>	<i>Month 13-18</i>
<i>Oyster Farm Training Enrollees</i>	56	112	168
<i>Oyster Cooperative Cultch pre-sales agreements</i>	\$10,000	\$30,000	\$50,000
<i>Oyster Cooperative Oyster pre-processing agreements</i>	\$5,000	\$10,000	\$20,000

*18. Provide capacity building support for regional economic growth.*

By virtue of TCC's (as an organization) capacity as a long-standing workforce development institution and the Hatchery's (as a facility) capacity to integrate trainees and serve as a circuit board for unified aquaculture business activity, this project will enhance human and industry-wide capacity in aquaculture, leading to sustained economic growth. High-quality training programs lay the groundwork for sustainable aquaculture business models. A cooperative structure for buying, processing, marketing, and selling Ocean Shellfish product lays the groundwork for industry-wide maturation. Together, these dual capacity augmentations will support the entire East Triumph region economy.

*19. Are environmentally conscious and business focused?*

The environment in Northwest Florida is the most precious and important resource this region has, and preserving, enhancing and realizing both its economic and intrinsic value is one of the core tenants of the WEI Hatchery and Training Center. From the design of the environmentally-conscious facility, to the restoration of natural habitats by oyster cultch propagation, to green jobs training and workforce education and the promotion of ecotourism in Wakulla County and the region, environmentally conscious decisions permeate each detail of the WEI project.

The Institute's *Hatchery* will promote jobs and business creation while utilizing the natural resources of the environment. As effective stewards over those resources, preserving and expanding those natural resources will be one of the Institute's top priorities.

*20. Include Applicant and selected partners/vendors located in Northwest Florida.*

From the architect, to the building construction contractors, and instructors, all partners and vendors will be located in Northwest Florida.

**Attachment L: Approvals and Authority, Question 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.*

<b><i>Project Activities</i></b>	<b><i>2018 – 2019 Year 1</i></b>	<b><i>2019 – 2020 Year 2</i></b>	<b><i>2020 – 2021 Year 3</i></b>
<b>Objective 1: Construct WEI Phase II, Hatchery and Processing Facility</b>			
1.1 Finalize architectural plans, conduct geotech, surveys and environmental assessments	√		
1.2 Begin and complete site development	√		
1.3 Begin construction of building	√		
1.4 Finish construction of building		√	
<b>Objective 2: Install equipment for Hatchery and Processing Facility</b>			
2.1A Install Oyster Nursery Vats		√	
2.2 Install Pasteurization Line Equipment		√	
2.3A Install Vertical Conveying System		√	
2.4A Install Algae Tanks		√	
2.5A Install Cryogenic Line Equipment		√	
2.1B Install cooler and freezer		√	
2.2B Install boxing and cold storage line equipment		√	
2.3B Install Hatchery, Office, and Classroom Equipment		√	

<i><b>Project Activities</b></i>	<i><b>2018 – 2019</b></i> <b>Year 1</b>	<i><b>2019 – 2020</b></i> <b>Year 2</b>	<i><b>2020 – 2021</b></i> <b>Year 3</b>
<b>Objective 3: Launch Hatchery and Processing Facility Operations</b>			
3.1A Oyster Larvae First Yield		√	
3.2A Aquaculture Management Classes		√	
3.3A Aquaculture Technology Classes		√	
3.4A Oyster Processing First Run		√	
3.1B Oyster Larvae Second Yield			√
3.2B Aquaculture Management Classes			√
3.3B Aquaculture Technology Classes			√
3.4B Oyster Processing Second Run			√



### **Attachment M: Approvals and Authority, Question 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.*

#### **TALLAHASSEE COMMUNITY COLLEGE DISTRICT BOARD OF TRUSTEES POLICY**

<b>TITLE:</b> Federal, State, and College-Funded Grants	<b>NUMBER:</b> 09-21
<b>AUTHORITY:</b> Florida Statute: 1001.64; 1001.65 Florida Administrative Code: 6A-14.0247	<b>SEE ALSO:</b> <ul style="list-style-type: none"> <li>• <a href="#">Administrative Procedure 09-21AP: Federal, State, and College-Funded Grants</a></li> </ul>
<b>DATE ADOPTED:</b> 12/01/1997; Revised 08/01/99; 05/17/10; 02/20/17	

College faculty and staff are encouraged to take advantage of all grants that will assist in their programs and/or help achieve the goals of the College. Also, the College shall pursue vigorously those federal and state grants that will facilitate the efforts of the College in assisting students and in providing equal access/equal opportunity to quality higher education for all who qualify.

The President or designee is authorized to establish and maintain federal, state, and College-funded grant provisions in accordance with Florida Statutes, Federal Regulation, and appropriate rules.

The Vice President for Administrative Services or designee provides assistance and coordination in preparing all grant proposals other than Financial Aid. Each area working with the Vice President has the responsibility of preparing the paperwork necessary for grant application. All work may be reviewed and approved by the Assistant Vice President for Administrative Services or designee before submission. This approval is in addition to all other signatures required by sources of grants.

Grant Awards, primary contracts, and related amendments will be presented to the Board of Trustees for approval at the first regular board meeting after the executed agreement is received. After approval by the Board of Trustees or designee, the Vice President for Administrative Services has the primary responsibility for coordination and administration of all grants submitted by the College.

The College shall participate in Federal and State programs that are appropriate for community college students or that are in the best interest of the College, or where participation is mandated by either Federal or State law.



PANACEA WATERFRONTS FLORIDA PARTNERSHIP, INC.  
P. O. BOX 212  
PANACEA, FLORIDA 32346

April 14, 2018

To Whom It May Concern:

I am writing in support of the proposal submitted by the Wakulla Environmental Institute (WEI) entitled, "Phase II Campus Build Out for Wakulla Environmental Institute". We have watched the success of this program with oyster farmers and believe the WEI can put these funds to good use. The expansion will add essential tools to the community that will benefit this new, exciting industry that supports rural, coastal communities.

Off-bottom oyster aquaculture adds to the options available for residents to make a living working the water – a critical addition in the Florida Panhandle. To date, WEI has made a significant impact in the community, and this opportunity will allow them to build on that effort. I hope that this proposal will receive your full consideration.

Sincerely,

A handwritten signature in blue ink that reads "Mark Mitchell".

Mark Mitchell, Chairman  
Panacea Waterfronts Florida Partnership, Inc.

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FLORIDA STATE  
UNIVERSITY

OFFICE *of the* VICE PRESIDENT *for* RESEARCH



April 3, 2018

Board Members  
Triumph Gulf Coast, Inc.  
P.O. Box 12007  
Tallahassee, FL 32317

Dear Board Members,

Florida State University and the Tallahassee Community College have enjoyed a decades long collegial and productive affiliation. Many informal and formal relationships exist as we address our shared responsibilities around the education and service to over 50,000 students in the Florida Panhandle.

Florida State University offers its strong support for Tallahassee Community College's Wakulla Environmental Institute (WEI) Training Center of Excellence project. We understand that the WEI Training Center of Excellence programming will revolve around education (job training), conservation and recreation. Clearly, there is an opportunity for collaboration between our two institutions. We applaud TCC's efforts to commercialize oyster aquaculture in the region and create viable businesses to support this burgeoning industry. The University is certainly available and willing to provide expertise and know-how where appropriate in support of the WEI effort.

Thank you for your consideration of this worthwhile endeavor.

Sincerely,

A handwritten signature in blue ink, reading "Gary K. Ostrander".

Gary K. Ostrander, Ph.D.  
Vice President for Research  
Florida State University



## COLLEGE OF AGRICULTURE

April 4, 2018

To Whom It May Concern:

I am writing in support of the proposal submitted by the Wakulla Environmental Institute (WEI) entitled, "*Phase II Campus Build Out for Wakulla Environmental Institute*". I have watched the success of this program as a colleague working with oyster farmers in Alabama and Mississippi and believe that WEI can put these funds to good use. The expansion will add essential tools to the community that will benefit this new, exciting industry that supports rural, coastal communities.

Off-bottom oyster aquaculture adds to the options available for residents to make a living working the water – a critical addition in the Florida Panhandle. To date, WEI has made a significant impact in the community, and this opportunity will allow them to build on that effort. I hope that this proposal will receive your full consideration.

Sincerely,

William C. Walton, M.Sc., Ph.D.  
Associate Professor and Extension Specialist  
Auburn University Shellfish Laboratory  
Auburn University School of Fisheries, Aquaculture & Aquatic Sciences  
Alabama Cooperative Extension System

AUBURN UNIVERSITY  
SHELLFISH LABORATORY  
150 AGASSIZ STREET  
DAUPHIN ISLAND, AL 36528

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SCHOOL OF FISHERIES,  
AQUACULTURES &  
AQUATIC SCIENCES

203 SWINGLE HALL  
AUBURN, AL 36849-5419

TELEPHONE:  
334-844-4786

FAX:  
334-844-9208

WWW.AUBURN.EDU

## Attachment N: Funding and Budget, Question 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.)*

**Wakulla Environmental Institute Phase I and II Budget**

<b>Name of Award</b>	<b>Amount</b>	<b>Percentage</b>
State PECO Phase I	\$4,500,000	21%
EDA Grant Phase 1	\$1,500,000	7%
Triumph Fund Phase II	\$13,500,000	63%
Private Local Dollars Phase II	\$2,000,000	9%
Total	\$21,500,000	100%

**Attachment O: Funding and Budget, Question 3**

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

<b>Proposed Program</b>	<b>Proposed Total Number of Jobs Created by Year 7 of Operation</b>
<b>Facility Management</b>	
Operations and Training	25
<b>Aquaculture</b>	
Aquaculture Management	196
Oyster Aquaculture	308
<b>Total</b>	<b>529</b>

It is estimated that over **15,783 new jobs** (direct, indirect, induced) will be created with this project. In addition, the average salary will be higher than the current average salary earned in Wakulla County (\$27,456 vs. \$23,204) (*Data Source: Bureau of Labor Statistics, OES 2016, REMI*).

**Attachment P: Funding and Budget, Question 5C**

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

**Background**

TCC is one of the top performing community colleges in the nation. Since its inception in 1966, the College has been at the forefront of advancing student success through education, workforce development and certification programs. In 2013, TCC began construction of Phase I of the WEI. The Institute site is 158 acres and features a sinkhole, wetlands and a natural bridge. The Institute's three-part mission is centered on education, conservation and recreation for the benefit of Wakulla County and the region.

The table below displays the budget for Phases I and II of the Institute construction.

**Budget Summary by Source**

			Phase I	Phase II
Triumph	\$ 13,500,00		-	\$ 13,500,000
EDA	\$ 1,500,000		\$ 1,500,000	-
State PECO	\$ 4,500,000		\$ 4,500,00	-
TCC Foundation	\$ 2,000,000		-	\$ 2,000,000
<b>Total</b>	<b>\$ 21,500,000</b>		<b>\$ 6,000,000</b>	<b>\$ 15,000,000</b>

**Phase I**

The first phase of the WEI was constructed with a \$4.5 million investment from the State of Florida, and a \$1.5 million grant from the EDA to construct the initial building and provide infrastructure for future growth. Initially, the WEI established an oyster aquaculture program in an effort to revive the oyster industry. **In just two years since starting the program, Wakulla County became now a national leader in oyster production.**

While the College developed Phase I of the Institute to support the revitalization of industries that collapsed because of the Deepwater Horizon oil spill, TCC's work in leading economic development activity in Wakulla County spawned new opportunities and initiatives that can only be completed with the addition of a second phase.

## Phase II

The College seeks \$15 million (\$13.5 million from the Triumph fund, \$2 million from the TCC Foundation) to support the construction of the second phase of the WEI and create a Hatchery and Training Center of Excellence. The environmental assessments and surveys will begin promptly with the initial site development beginning during the 2019 fiscal year. Construction of the Hatchery and Processing Facility will occur during 2019. The building will include Ocean Shellfish cultivation and processing facilities as well as teaching space. Phase II will be an economic driver for Wakulla County and the surrounding region.

The table below displays the budget for the Triumph Funds.

### Budget for Phase II

Budget Item	Area	Cost/SF	Total Cost
First Floor – foundation and superstructure for second floor support	10,000	200	\$2,000,000
Second Floor – exterior envelope, superstructure and roof	10,000	300	\$3,000,000
Training Classroom	1,000	250	\$250,000
Storage Rooms	500	100	\$50,000
Offices	500	150	\$75,000
Processing pipework & seawater pumping station			\$100,000
Toilets and Custodial Areas	500	100	\$50,000
Interior Circulation @ 10%	2,000	100	\$200,000
Site Development Costs			\$1,000,000
Freight Elevator			\$200,000
Generator			\$75,000
Solar Array			\$400,000
Fixtures, Furniture and Equipment Allowance			\$3,000,000
Hurricane-based inflationary effects			\$520,000
Soft costs – AE fees, Geotech, Surveys, Environ Assessment, etc.			\$1,638,000
Contingency @ 5%			\$942,000
<b>Total Project Cost</b>			<b>\$13,500,000</b>



**Long-term Impact**

The WEI has already created 100 new businesses and 150 new employees in sustainable seafood farming. **In just two years since starting the oyster aquaculture program, Wakulla County is now a national leader in oyster production.**

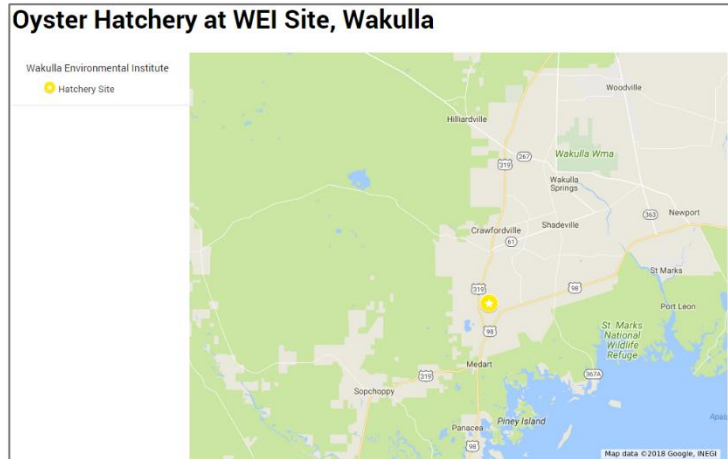
The *Apalachicola Regional Planning Council* conducted a REMI economic analysis, forecasting that over the next 7 years **529 direct and thousands and** between 6,600 and 15,000 indirect jobs **will be created** and **\$276 million** added to the GDP of the area as a result of the Hatchery's programs and operations. The projected GDP-to-Project Cost return on the Triumph fund investment is \$20 for every \$1 funded (\$36:\$1 when you factor the indirect jobs). Project direct job gains represent 6% of the current Wakulla labor force and represent 54% of the GDP. Additionally, the jobs created by this project will have an average salary higher than the average salary currently earned in Wakulla County.

**Attachment Q: Addendum for Workforce Training Proposals, Question 1 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.*

The WEI parcel featuring the existing Institute and future Hatchery and Processing Plant is located in Wakulla County.

Paramount to this expansion is the enabling of entrepreneurs – the backbone of American growth and international competitiveness. Graduates from the Oyster aquaculture program will emerge not only with the skills necessary to work in the region and around the county in aquaculture operations, but – most importantly – the majority will launch businesses themselves and take on employees, conferring skills to others. In this “training of trainers” scenario, the farmer-graduates add greater value to the local and state economy than being job-seekers alone, as they will bear the torch of diversification and expansion in the East Triump economies.



## **Attachment R: Addendum for Workforce Training Proposals, Question 1 B**

1. *Increase students' technology skills and knowledge:*

The Nursery/Hatchery and Processing Facility will train and equip students with skills in this emerging North Florida agriculture farming and technology sector.

2. *Encourage industry certifications:*

There is currently no industry training certification for aquaculturists, however all graduates entering into business in the State of Florida obtain an FWC Division of Aquaculture Certificate of Registration.

3. *Strengthen career readiness initiatives:*

Agriculture, Forestry, Fishing, and Hunting (NAICS 11) is the dominant sector outside Public Administration in all East Triumph counties. Therefore, training in this sector track prepares students to remain and earn livable wages in the region for years to come.

4. *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)*

There are many ways that TCC's WEI can encourage students to pursue postsecondary education. One of the most effective ways is through dual enrollment. The College maintains 14 active dual enrollment agreements with the Gadsden, Leon, Liberty and Wakulla County school districts. It has also developed agreements with nine private and charter schools and works directly with home school students. Dual enrollment accelerates students to certificates and degrees and saves them money by allowing them to take classes at TCC while they are still attending high school. These partnerships will be recognized to the extent possible by the Nursery/Hatchery and Processing Facility.

Students can choose two different dual enrollment tracks:

### ***Early Admission Dual Enrollment Track***

Early Admission allows eligible secondary school students to enroll in a postsecondary institution on a full-time basis (minimum of 12 credit hours and maximum of 15 credit hours) in courses that are counted toward a high school diploma and college degree.

### ***Career Dual Enrollment Track***

Career dual enrollment allows students to earn a high school diploma and complete a career-preparatory certificate program with elective credit.

As reported by the [Tallahassee Democrat](#) on May 4, 2017, Sherry Lohmeyer, assistant principal at Wakulla High School, said she's seeing more students attempting to earn their high school diploma and AA degree at the same time. Six Wakulla high students received their TCC degrees while they graduated from high school last year. "We are a rural county and a lot of our families benefit from this economically," Lohmeyer said. "It's a good fit because many of our students want to go to TCC when they graduate high school."

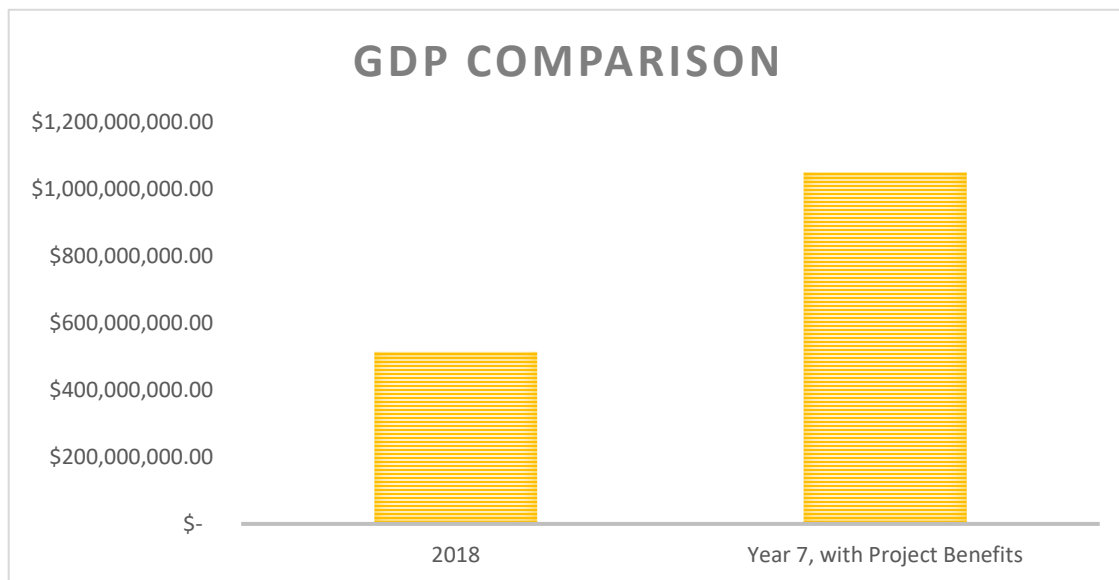
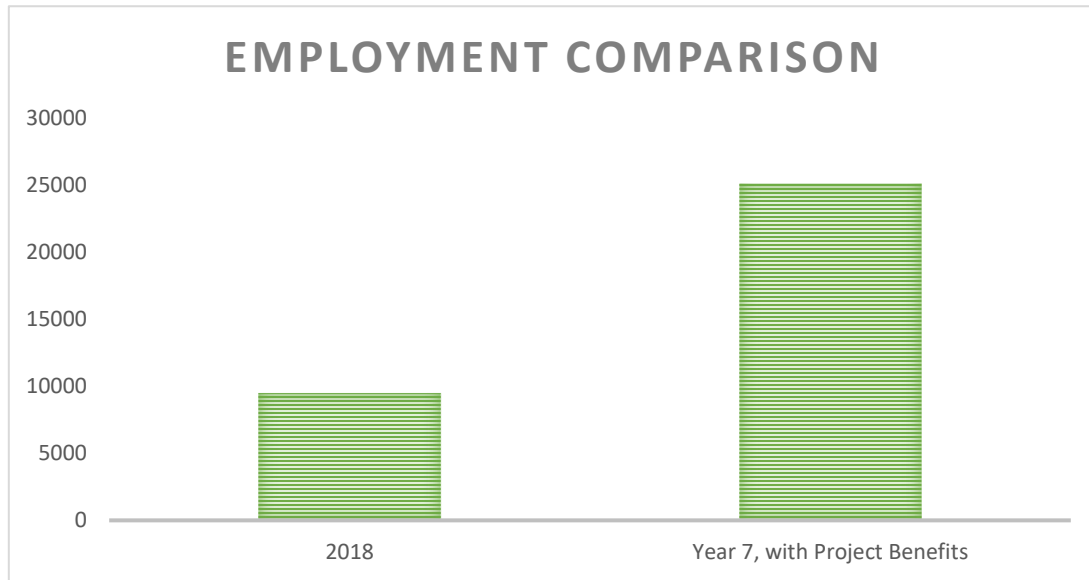
Through its dual enrollment program, TCC advisors work closely with schools, guidance counselors, teachers and administrators. Further, access to the WEI and its programming will supplement an already successful dual enrollment option and provide additional accelerated mechanisms to degrees and industry-recognized credentials for area high school students.

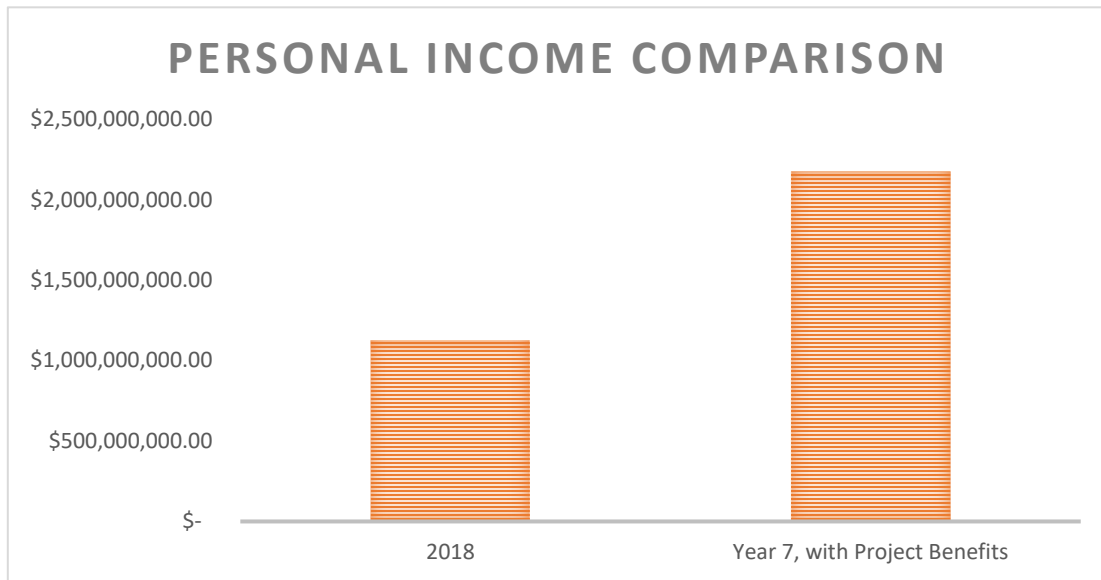
**Attachment S: Addendum for Workforce Training Proposals, Question 1 E**

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

○ *Economic recovery,*

The economic analysis of projected business formation, employment, and sales spurred by the WEI Nursery/Hatchery and Processing Facility indicates robust gains from 2010 levels. The following charts indicate employment, GDP, and Personal Income levels by year seven of project implementation.





As all of the above bars on the right indicate, each metric is greatly assisted by the project. The marginal gains – above natural growth – are substantial for employment, GDP, and Personal Income.

○ *Economic Diversification,*

The WEI facility will diversify the Wakulla economy by jump-starting an Oyster aquaculture industry concentration in the area. Thus, personal income flows – typically provided by out-of-county State employment (in Tallahassee) will be diversified by a powerful local basic economy.

○ *Enhancement of the disproportionately affected counties,*

While the WEI is located in Wakulla County, it is creating new jobs and industries for the Gulf Coast and Northwest Florida. It has established regional partnerships with industry and universities. The Nursery & Hatchery will have enough stock to sell shellfish to farmers from Escambia eastward.

○ *Enhancement of a Targeted Industry.*

The WEI has introduced an innovative approach to oyster farming in Florida that is transforming the seafood industry. The Shellfish hatchery will add tremendous fuel to this East Triumph primary sector and help fully modernize it. As the narrative under Attachment D: Eligibility Attachment, Question 2 makes clear, a blossoming of Aquaculture tech and industry logistical and producer services will all happen under one roof.

**Attachment T: Addendum for Workforce Training Proposals, Questions 2 A, B, C,****Question 2 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 supplement but not supplant existing funding sources.*

The Ocean Shellfish Nursery / Hatchery and Processing facility is an extension and intensification of the signature WEI Phase I accomplishment – oyster aquaculture training. It will add a critical piece of research, development, and processing infrastructure that heretofore did not exist in the area. Furthermore, it will replace a Nursery / Hatchery gap being created by the loss of Auburn University’s Hatchery. The WEI Phase II Ocean Shellfish facility is the logical next step to support this transformative East Triumph industry.

**Question 2 B**

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

Training will be delivered through a combination of hands-on field work, lab work and classroom-based instruction. All training programs will be available at the WEI Nursery/Hatchery and Processing Facility. This is essential to accomplish the “applied science” approach of Ocean Shellfish farming that will ready participants for business launch and installation at a Wakulla lease site.

**Question 2 C**

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

The Ocean Shellfish Nursery / Hatchery and Processing facility forecasts serving 28 students per year (as new trainees). The number of total users, however, will be much higher. Oyster farmers within the Panacea Oyster Cooperative will access and utilize the processing facility, and shellfish cultivators from within a 300-mile radius will be able to purchase seed and larva. Thus, the facility will positively impact students-come-graduates for years after course completion.

**Attachment U: Addendum for Workforce Training Proposals, Questions 2 D**

*Indicate the length of the program*

Proposed Program	Length of Program
<b>Aquaculture</b>	
Oyster Aquaculture	15 Weeks
Aquaculture Management	6 Semesters
Aquaculture Technology	2 Semesters



### **Attachment V: Addendum for Workforce Training Proposals, Questions 2 E**

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

The WEI Hatchery and Processing Facility occupies a unique position within the set of publicly owned Community College assets. This is because services will be provided according to volume of larva and mature oyster processed at fair market rates. Revenue forecasts indicate that this will become one of the largest income generators for the non-profit, and proceeds will not only fully fund the hatchery, but allow for continuous expansion of WEI and TCC training programs in accordance with the mission of the College.

Reproduced from attachment H, the Ocean Shellfish Hatchery/Nursery and Processing Facility is as follows:

#### Ocean Shellfish Hatchery/Nursery & Processing Revenue Projections

Spat Pricing		Production	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Source:	<a href="http://www.shorethingshellfish.com/products-and-pricing.html">http://www.shorethingshellfish.com/products-and-pricing.html</a>		12,500,000	25,000,000	50,000,000	100,000,000	200,000,000	400,000,000	500,000,000
Triploid	Per 1000	Estimated Revenue (\$)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
1/4 inch	\$ 50.00		625,000	1,250,000	2,500,000	5,000,000	10,000,000	20,000,000	25,000,000
1/2 inch	\$ 80.00		1,000,000	2,000,000	4,000,000	8,000,000	16,000,000	32,000,000	40,000,000
3/4 inch	\$ 110.00		1,375,000	2,750,000	5,500,000	11,000,000	22,000,000	44,000,000	55,000,000
Diploid									
1/2 inch	\$ 100.00		1,250,000	2,500,000	5,000,000	10,000,000	20,000,000	40,000,000	50,000,000

In addition to the unique circumstances surrounding the Ocean Shellfish Hatchery/Nursery , TCC continues to fund itself and its activities through the following activities:

- Tuition;
- Students fees;
- Activity fees;
- Support from the TCC Foundation;
- Contracts and grants;
- State funding; and
- Corporate partnerships.

**Attachment W: Addendum for Workforce Training Proposals, Question 2 F**

*Identify any certifications, degrees, etc. that will result from the completion of the program.*

Proposed Program	<b>Program Designation</b> <ul style="list-style-type: none"> <li>• AA or AS Degree</li> <li>• College Credit Certificate (CCC)</li> <li>• Post-Secondary Adult Vocational Program (PSAV) Certificate</li> <li>• Continuing Workforce Education (CWE)</li> </ul>
<b>Aquaculture</b>	
Oyster Aquaculture	CWE
Aquaculture Management	AS
Aquaculture Technology	CCC

**Attachment X: Addendum for Workforce Training Proposals, Question 2 G**

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

To support the College's efforts to implement Phase II of the WEI, the TCC Foundation established a local committee with the singular goal of identifying \$2 million in private funding that will provide a sustainable pool of resources for the next phase. These funds will be placed in an endowment, to be held in perpetuity, which will provide critical dollars annually that supports innovative programs for the Institute, scholarships to students from Wakulla County and facility enhancements as programs grow at the campus.

## **Appendix A: Economic Impact Forecasts from Apalachee Regional Planning Council**

### Context

This memorandum presents outputs from a REMI model scenario of the proposed TCC Electrical and Communications Utilities Training project. The described scenario assesses impacts of an initial ~\$1.5 Million investment in terms of additional employment, gross domestic product, and personal income brought about by occupational training and resultant higher employment <sup>1</sup>.

Of note – *these outputs do not include positive impacts to the economy brought about by project construction, only the resulting economic activity.* Were construction costs to be included, the impacts to employment, value added (GDP), and personal income shown would be higher.

### Table of Outputs

The below table contains outputs describing average improvements in employment, value added, and personal income at year 6 of the project horizon.

<b>Output</b>	<b>Average Change</b>
<b>Employment</b>	+ 1,090
<b>Gross Domestic Product</b>	+ \$ 178,250,491
<b>Personal Income</b>	+ \$ 61,711,263

### Discussion

The above table indicates that positive shocks to the local economy, brought about by training that will prepare 110 people per year for high-wage Utility sector (NAICS 22) jobs. These jobs will produce ~1,090 new forms of Employment, \$178 Million of additional GDP, and \$61 Million of additional Personal Income. Thus, the project will have a positive impact on the East Triumph (Franklin, Gulf, Wakulla counties) economy during the period described. As shown below, the Return-on-Investment in terms of Triumph expenditure to Franklin, Gulf, and Wakulla GDP adds is \$205.87 to 1. The cost per average direct and indirect job created (average of six years) is \$1,376.10.

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<sup>1</sup> Via Mean-Delta ( $\mu \Delta$ ), or average difference between the control and simulation over the variable-input time period.

## Methodology & Variable Inputs

For this scenario, input values were derived from the Triumph Gulf Coast pre-application form, which indicates that as a consequence of \$1,500,000 used to implement the training, hundreds of new jobs will result.

<b>Project Investment: Triumph</b>	\$1,500,000
<b>Variable Input 1: WEI Direct Employment</b>	3 positions sustained during project life
<b>Variable 2 Input: Occupational Training</b>	110 Trainees per year
<b>Variable 3: NAICS 22 Employment</b>	82.5 per year

Model inputs consist of yearly doubling of shellfish production for each of seven years after the facility is built. Inputs are as follows:

### Input – WEI Instructor Employment

	2020	2021	2022	2023	2024	2025
Variable 1 Inputs - Teacher / Trainer Employment	3	3	3	3	3	3

## Outputs – WEI Instructor Employment

								Averages	
Variable 1 - Trainer Employment	Employment	3.27	3.33	3.35	3.34	3.33	3.31		3.3
	Personal Income	32.30	35.31	42.44	49.88	57.16	64.06	\$	46,858.83
	GDP	47.84	51.33	53.01	53.61	53.58	53.26	\$	52,105.00

## Input – Occupational Training

		2020	2021	2022	2023	2024	2025
Variable 2 Inputs - Occupational Training	Electrical Line Service and Repair	50	50	50	50	50	50
	Electrical Substation maintenance and relay tech	10	10	10	10	10	10
	Cell and Wireless Comm Tower Technician	50	50	50	50	50	50

## Output – Occupational Training

	Employment	0.03	0.20	0.48	0.84	1.25	1.69		1
Variable 2 - Occupational Training	Personal Income	-35.41	-80.98	-135.40	-195.19	-259.70	-332.55	\$	(173,204.83)
	GDP	7.11	18.74	34.26	52.32	71.67	91.47	\$	45,926.50

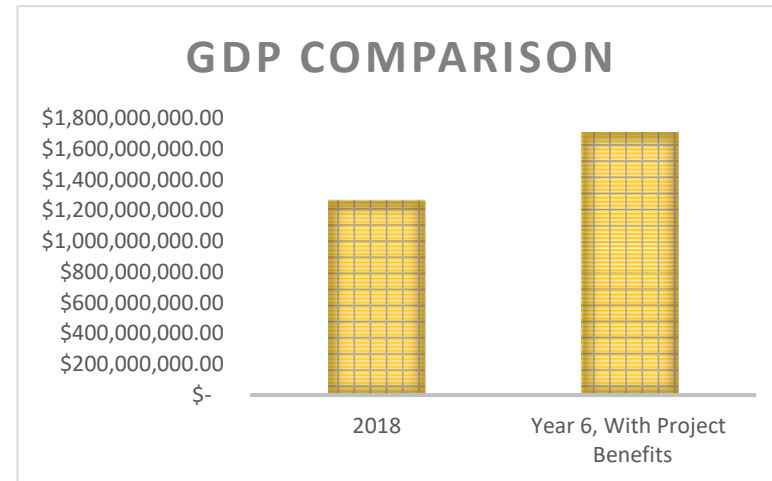
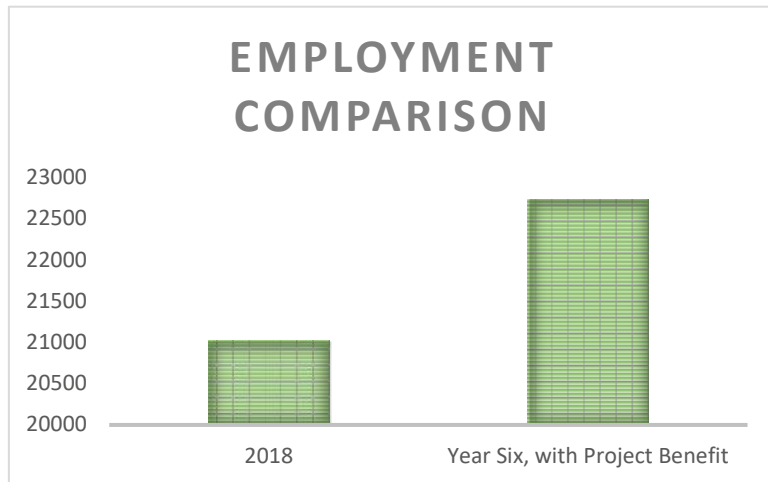
## Input – Utilities Employment

	2017	2021	2022	2023	2024	2025
Variable 3 Inputs - New Employment	Electrical Line Service and Repair	37.5	75	112.5	150	187.5
	Electrical Substation maintenance and relay tech	7.5	15	22.5	30	37.5
	Cell and Wireless Comm Tower Technician	37.5	75	112.5	150	187.5

## Output – Utilities Employment

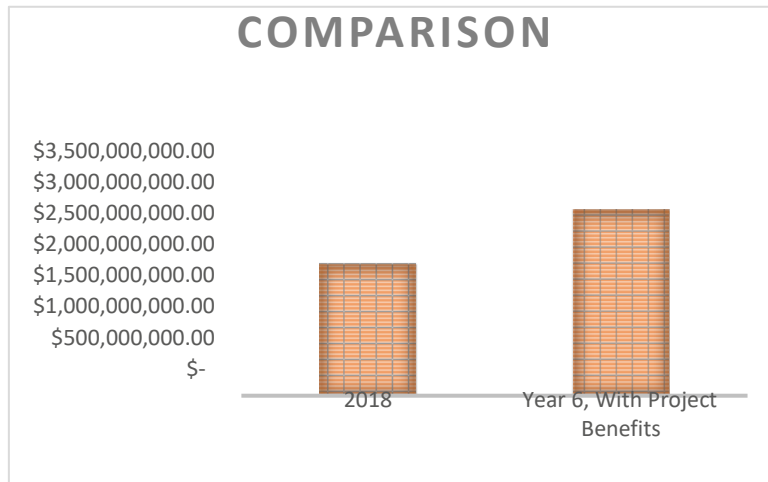
	Employment	296.77	670.10	1076.05	1490.09	1896.81		1086
Variable 3 - Employment	Personal Income	14565.17	34148.64	58086.90	85693.40	116693.94	\$	61,837,609.60
	GDP	53279.98	112430.37	175421.75	240971.46	308658.74	\$	178,152,460.00

The following charts illustrate year 1 versus year 6 statistics for the East Triumph region, with project impacts integrated.

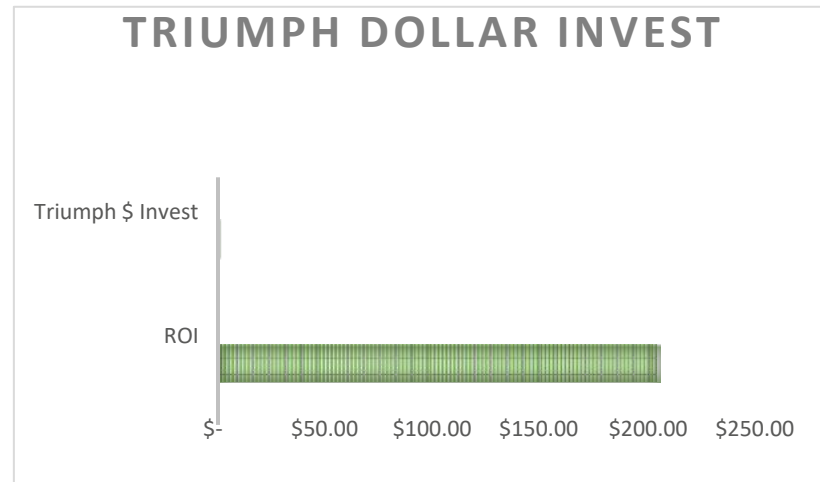




## PERSONAL INCOME COMPARISON



## GDP RETURN PER TRIUMPH DOLLAR INVEST



For every Triumph dollar invested, this project will generate \$205.87 of otherwise unrealized GDP within the Franklin, Gulf, and Wakulla economies.

The following attachment provides a spreadsheet overview of inputs and outputs from the REMI model that was used to compile this memorandum's take-aways.

TCC Training Program 1: Communication and Power Utility Training Programs									
Variable	2019	2020	2021	2022	2023	2024	2025	Averages	* Note: Variable Input 1-3 were not in a combined forecast; therefore, the output was
Employment	327	333	335		334	333	331	3.3	Identical. They should not be added together as it is a reflection of all three affecting the Waluila
Personal Income	32.30	35.31	42.44		49.80	57.16	60.06	\$ 48,838.83	economy in concert.
GDP	47.84	51.33	58.01		53.61	53.58	53.36	\$ 51,165.00	
Employment	0.03	0.30	0.48		0.84	1.25	1.59	1	* Note: Variable Input 1-3 were not in a combined forecast; therefore, the output was
Personal Income	35.45	40.96	126.40		195.05	219.30	120.05	\$ (172,264.82)	Identical. They should not be added together as it is a reflection of all three affecting the Waluila
GDP	7.11	18.79	34.26		53.32	71.47	91.47	\$ 45,936.50	economy in concert.
Employment	236.77	670.80	1076.05		1493.09		1895.05	1086	* Note: Variable Input 1-3 were not in a combined forecast; therefore, the output was
Personal Income	14545.17	36168.44	58860.90		85493.40		113403.94	\$ 61,837,459.40	Identical. They should not be added together as it is a reflection of all three affecting the Waluila
GDP	5279.08	11340.37	17545.75		24097.46		30863.74	\$ 178,112,460.00	economy in concert.
Sum of Inputs, 2025									
Franklin	5305.05	5458			Employment	1501.80	Net Average Employment	1090	
GDP	8023.706	8534.363			Personal Income	\$ 116,425,443.00	Net Average Personal Income	\$ 61,771,343.60	\$ 4,587.02
Waluila	9487.405	1050.466			GDP	\$ 108,803,467.00	Net Average GDP	\$ 178,235,491.00	
ROI (GDP/2025 to Project Cost)									
						61.7600004	ROI (Avg GDP to Project Cost)	\$ 35.65	
Franklin	3334283.896	391091.895			Employment % 2018	9.0%	Employment % 2025	5.2%	
GDP	388887.472	649832.813			Employment % 2025	9.5%	Employment % 2025	5.2%	
Waluila	512518.458	554829.576			GDP % 2018	24.4%	GDP % 2018	1.41%	
GDP% 2025									
						22.5%	GDP% 2025	13.8%	
Cost per job									
							\$	4,587.02	

	2019	2020	2021	2022	2023	2024	2025
Variable 1 Input: Number of Jobs	1	2	3	1	2	3	1
Variable 2 Input: Number of Jobs							
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Variable 213 Input: Number of Jobs							

## Context

This memorandum presents outputs from a REMI model scenario of the proposed TCC Ocean Shellfish Nursery / Hatchery and Processing Facility project. The described scenario assesses impacts of an initial ~\$13 Million investment in terms of additional employment, gross domestic product, and personal income brought about by increased shellfish sales<sup>1</sup>.

Of note – *these outputs do not include positive impacts to the economy brought about by project construction, only the resulting economic activity.* Were construction costs to be included, the impacts to employment, value added (GDP), and personal income shown would be higher.

## Table of Outputs

The below table contains outputs describing average improvements in employment, value added, and personal income at year 7 of the project horizon.

Output	Average Change
Employment	+ 9597
Gross Domestic Product	+ \$ 276,510,248
Personal Income	+ \$ 294,182,168

## Discussion

The above table indicates that positive shocks to the local economy, brought about by a robust uptick in shellfish sales and price/unit, will produce ~9600 new forms of Employment, \$276 Million of additional GDP, and \$294 Million of additional Personal Income as an average of the first six years' impact. Thus, the project will have a positive impact on the Wakulla County economy during the period described.

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<sup>1</sup> Via Mean-Delta ( $\mu \Delta$ ), or average difference between the control and simulation over the variable-input time period.

## Methodology & Variable Inputs

For this scenario, input values were derived from the Triumph Gulf Coast pre-application form, which indicates that as a consequence of \$13,185,900 used to construct the facility, tens of millions of dollars in yearly shellfish sales increases will result

Project Investment: Triumph	\$13,185,900
Variable Input 1: Sales (NAICS 11)	\$500,000,000 by year 7

Model inputs consist of yearly doubling of shellfish production for each of seven years after the facility is built. Inputs are as follows:

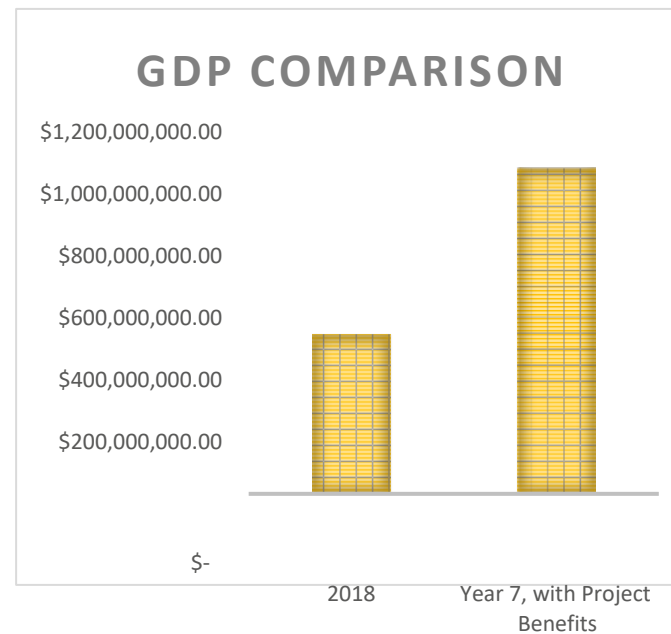
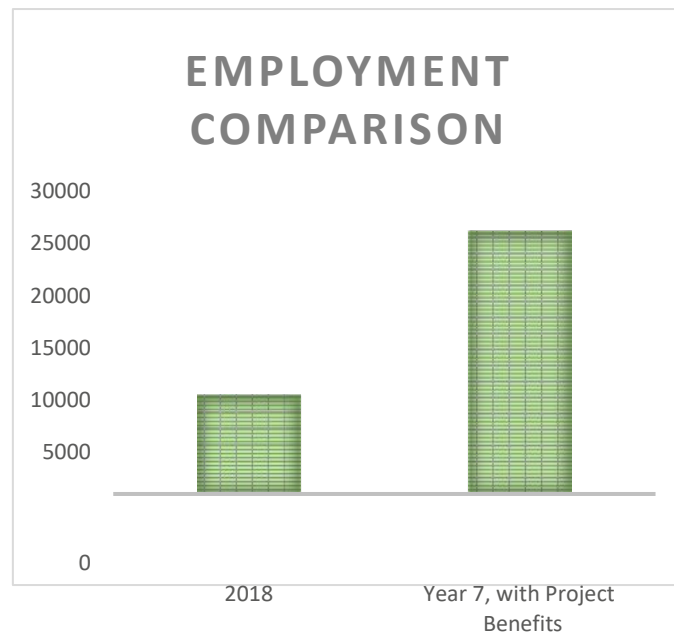
Input – Sales, High Projection (\$1 per Oyster)

	Y1	Y2	Y3	Y4	Y5	Y6	Y7			
Variable 4 Inputs -Oyster Sales	11,250,000	22500000	45000000	90000000	180000000	225000000	225000000	\$	0.45	Sale price per oyster w/out vibrio treatment
	25000000	50000000	100000000	200000000	400000000	500000000	500000000	\$	1.00	Sale price per oyster with vibrio treatment

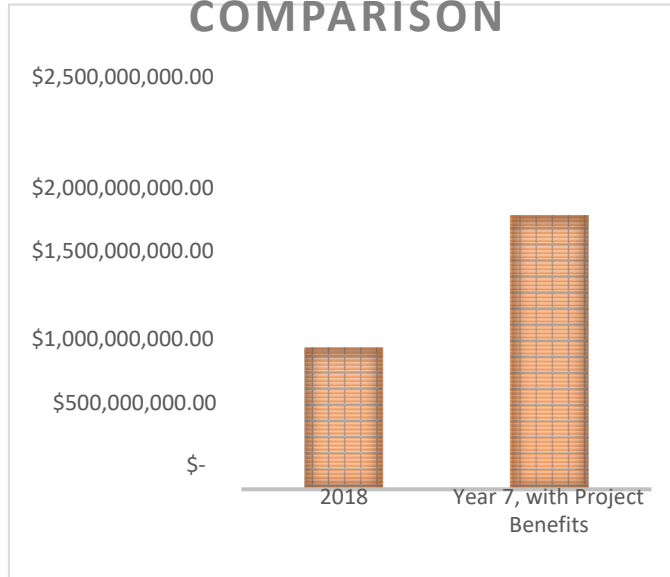
The low projection of .45 cents/oyster is also shown above and results presented in the technical outputs. The price augmentation will occur thanks to a patented vibrio-treatment device that will be installed at the processing facility.

## Outputs – Employment, GDP, Personal Income

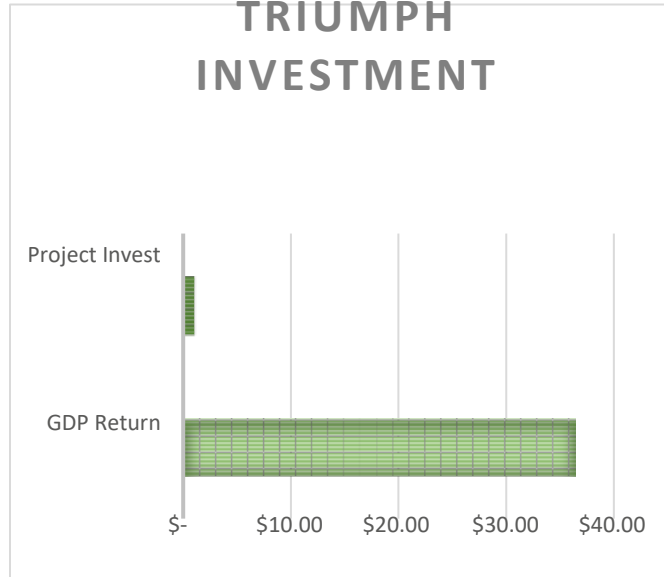
Wakulla		2018	Year 7, with Project Benefits			
Employment		9497	25100	GDP Return	36.44	Project Invest
GDP	\$	512,518,458.00	\$ 1,048,823,946.00	\$		\$ 1.00
Personal Income	\$	1,126,427,681.00	\$ 2,174,681,868.00			



## PERSONAL INCOME COMPARISON



## GDP RETURN PER TRIUMPH INVESTMENT



The following attachment provides a spreadsheet overview of inputs and outputs from the REMI model that was used to compile this memorandum's take-aways.

[illegible][illegible]

