TRIUMPH GULF COAST, INC. PRE-APPLICATION FORM Triumph Gulf Coast, Inc. ("Triumph Gulf Coast") has created a pre-application process to provide initial consideration of eligibility for potential ideas of projects or programs that may seek an award of funding. Applicants are required to participate in the pre-application process. Notwithstanding the response from Triumph Gulf Coast on the pre-application form, an Applicant may still elect to submit an Application.

APPLICANT INFORMATION

Name of Individual/Entity/Organization:

Panacea Oyster Co-Op Corporation
In Partnership with Florida Agriculture and Mechanical University (FAMU)

Proposal Title:

Dedicated Program to Expand Oyster Ranching in Wakulla County and Resurrect Aquaculture in Apalachee Bay

Amount of Triumph Funds Requested:

\$19,241,000

Total Estimated Project Cost:

\$27,320,000

Brief Description of Individual/Entity/Organization:

Panacea Oyster Co-op Corporation was founded to aid in the economic and environmental recovery, diversification and enhancement of Wakulla and surrounding counties. This area was disproportionality affected by the oil spill. Our co-op is comprised of more than 20 ranchers and growing, who come from around the area and are from various economic backgrounds. The Co-op is devoted to the aquaculture ranching of mollusks in Apalachee Bay. Our ongoing mission is resurrecting a sustainable aquaculture system to improve the health, diversity and abundance of fish in Apalachee Bay and beyond; the creation of jobs and career paths in the aquaculture and ecotourism industries; and lifting the economy of the surrounding business community to allow our area to once again thrive.

Contact Information Primary Contact:

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Names of co-applicants, partners or other entities, organizations that will have a role in the proposed project or program:

Florida Agriculture and Mechanical University (see attached Letter of Commitment)

There will be many other partners, supporters and entities that will be a part of the program, including the Wakulla School District, the Wakulla Chamber of Commerce, local elected officials and numerous local business leaders who will be part of the success and implementation of the project. Letters of support from these parties will be included in the final application submission.

REQUIRED EXECUTIVE SUMMARY In a maximum of two (2) pages, please describe the proposed project or program and anticipated outcomes including (i) the amount of funds being sought from Triumph Gulf Coast; (ii) the amount and identity of other sources of funds for the proposed project or program; (iii) the location of the project or program; (iv) summary description of the proposed program, including how the program will be transformational and promote economic recovery, diversification, and enhancement of the disproportionately affected counties, and (v) a summary timeline for the proposed project or program.

See attached Executive Summary

IMPORTANT NOTICE This pre-application process will not result in an award of funding by Triumph Gulf Coast. Rather, this process is designed to facilitate submission of ideas for potential projects or programs before the Applicant expends time and/or resources to complete a full Application. All Applicants for funding are required to complete an Application, which will be reviewed and then considered for award at the discretion of Triumph Gulf Coast Board. Updated 5/1/18 1 Please Select the Proposal's Eligibility Category(s) 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. Updated 5/1/1





Dedicated Program to Expand Oyster Ranching in Wakulla County and Resurrect Aquaculture in Apalachee Bay

Aquaculture is critical to resolving the world's food insecurity and projected future food shortages. Food production needs to double by 2050 in order to feed the projected world population. The world's oceans represent the greatest potential source of protein by generating 30 x more yield per acre of water versus an acre of land. Aquaculture will be an ever-growing portion of the seafood industry and will enable us to have available, accessible and affordable seafood while bringing much needed economic development.

The ocean ecosystem depends upon a vibrant oyster population. The individual oyster is capable of filtering up to 50 gallons of water a day, thereby greatly improving the surrounding water quality and setting into motion the nutrient stream that underpins the entire food chain.

The federal government recognizes the importance of growing the aquaculture industry. The National Oceanic and Atmospheric Administration (NOAA) has stated that marine aquaculture is an important part of its strategy for building economic and environmental resiliency in coastal communities. (Ref., https://www.fisheries.noaa.gov/leadership-message/momentum-grows-aquaculture-united-states, September 2017)

Current data indicate more than 85% of the world's oyster beds have died. Along Florida's expansive coastline, the situation is more dire - more than 95% of native oyster beds having disappeared. This decline precipitously accelerated following the BP Oil Spill of 2010, where Apalachee Bay Oyster harvests declined from ~10 million per year to zero in less than 5 years. This ecological event in Wakulla and surrounding counties was devastating and resulted in the loss of oyster-related jobs and challenged the future viability of this critical Florida industry, as well as all commercial fishing enterprises.

In order to address this economic "tipping point" the residents of the Wakulla County engaged local higher education leaders to create a dedicated Oyster Rancher training program predicated upon best practices from around the world. The result was the creation of the state of Florida's first Oyster Rancher Training Program that utilizes the proven Australian/Canadian "full water column" ranching approach. This sustainable method of oyster ranching has already been proven to work in Florida's coastal waters.

Recognizing that "full water column" aquaculture offers a pathway toward a sustainable future for seafood harvesting, local citizens created the Panacea Cooperative as a critical first step to resurrect and transform the Oyster industry in Florida. These important community-based efforts involving oysters and other mollusks in Apalachee Bay have helped launch the environmental and economic

reclamation of these important waters and their surrounding communities. New jobs and the return of important species of sea life are in progress thanks to these dedicated oyster ranchers.

Currently, the Panacea Cooperative consists of 20 members utilizing 30 acres of state water leases. These members currently have more than 5.5 million oysters in production and a projected production of more than 15 million oysters by December 2018. These oysters represent a market value of more than \$10 million and an overall economic impact of exceeding \$35 million for Wakulla County. The Cooperative was externally validated in 2017 by the Fish 2.0 Competition in which the Cooperative was awarded "the most innovative aquaculture strategy in the US."

The members of Cooperative believe that this innovative process can be expanded to include more than 100 ranchers involving more than 150 acres of state water leases producing more than 190 million oysters per year within 7 years. This would represent a projected economic impact of more than \$460 million per year for Wakulla County. However, the business ecosystem to undergird this critical industry expansion must be developed if Wakulla County is to meet its economic destiny.

Like many other ranchers, the Cooperative, is experiencing the impact of critical rate-limiting issues: lack of dedicated hatchery support; lack of dedicated flash freezing facilities; and lack of adequate nutrients for the oysters in the form of dedicated algae supplementation. In order to rapidly expand the scope and scale of the Oyster Ranching industry in Wakulla County, these impediments must be resolved.

In order to expedite our program, the Panacea Oyster Co-Op has teamed with Florida A&M University (FAMU) to help meet our K-20 education needs, as well as select private industry entities. We are seeking \$19.2M in funds to develop a full circle, multi-trophic aquaculture ecosystem within Wakulla County. The project will provide transferable, sustainable workforce skills to participants and offer future occupations and careers to K-20 institutions in the STEM areas, particularly within minority and disconnected communities. Our efforts will also promote eco-tourism and position Florida as the country's leader in aquaculture. The jobs created through this effort will increase household income above the national average and generate maximum economic benefits both directly and indirectly for Wakulla County.

The project proposes to utilize property currently owned by Panacea Co-Op, within the city limits of Panacea as well as its existing headquarters in Crawfordville to develop a dedicated nursery, hatchery, algae farm and expand current the co-op's post-harvesting operations through the use of innovative technologies. Our vision is that these same facilities will also serve to draw eco-tourism, public education and training related to aquaculture into Wakulla County. FAMU has pledged its facilities and Agricultural Extension programs to meet education and training purposes, including the development of innovated technologies applicable to the aquaculture industry among minority populations within the region.

Other fund sources will include private investment and utilizing existing Co-Op assets. Our partnerships with local governments will further extend the economic and environmental impacts of the project. Our proposal enjoys the support of local elected officials, local chambers of commerce, as well as local businesses and we will engage local visitor bureaus and tourist councils. We also intend to leverage our local assets by enhancing research and innovative technologies in the region. The timeline for this project will be five years to build out the facilities and launch the educational programs at the K-20 level.



Florida Agricultural and Alechanical University

Tallahassee, Florida 32307-3200

Excellence with Caring

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July 27, 2018

Triumph Gulf Coast Fund BP Oil Spill Restoration Board

SUBJECT: Letter of Commitment

To Whom It May Concern:

I am pleased to provide Florida A&M University's (FAMU) Letter of Commitment regarding our full support to the Panacea Cooperative for their proposed project entitled: "Dedicated Program to Expand Oyster Ranching in Wakulla County and Resurrect Aquaculture in Apalachee Bay."

We are convinced that this project will increase the rate of environmental reclamation along Florida's Gulf Coast and serve to economic growth and diversification in Wakulla County and surrounding areas. We believe that the Panacea Cooperative's efforts to date serve to confirm the validity and value of this proposed project. Further, we believe that the economic impact to Wakulla County will be positive and profound especially among minority and disconnected communities within the county.

Florida A&M University pledges to provide educational, technical and environmental support to the Panacea team throughout the course of this project. We are fully prepared to move forward promptly if the proposal is approved for funding. Further we will provide contractual support and financial control to ensure the project's overall success.

Please do not hesitate to contact me if you have any questions regarding our role in this important environmental and economic proposal.

Sincerely

Timethy E. Moore, Ph.D. Vice President for Research