#### 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: University of West Florida Proposal Title: Water Quality Risk Assessment in Northwest Florida

Amount of Triumph Funds Requested: \$10,500.000

Total Estimated Project Cost: \$31,350,000

Brief Description of Individual/Entity/Organization: The University of West Florida is a regional comprehensive public university with its main campus located in Pensacola, FL. The University is a member of the State University System of Florida with an enrollment of over 15,000 students.

#### **Contact Information**

Primary Contact: Jaromy Kuhl

Title: Provost

Mailing Address: 11000 University Parkway

City: Pensacola State: FL Zip Code: 32514

Telephone Number: <u>850.473.7702</u> Email Address: <u>jkuhl@uwf.edu</u>

Website: www.uwf.edu

Names of co-applicants, partners or other entities, organizations that will have a role in the proposed project or program: None at this time.

# **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.

#### 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.

We proposed establishing a Water Research Lab (WRL) at University of West Florida to expand capabilities and capacities to address the water quality and associated environmental concerns faced by the citizens of Northwest Florida. The WRL will build intellectual capital and serve as a multidisciplinary hub for biologists, chemists, engineers, environmental economists, and social scientists to collaborate on addressing the most pressing water-related environmental issues that affect economic development and quality of life in Northwest Florida. Education will also be a primary focus, graduating next-generation environmental professionals who will contribute to the workforce needed for the region through participation in research projects and high-impact practice experiences for undergraduate and graduate students. Research programs will encompass both basic and applied aspects. Once established, new research faculty and postdoctoral researchers will be sustained research grants. Research grant funds are well-recognized as having a substantial economic multiplier impact, as the grant dollars are spent locally, create jobs, and support initiatives improving the environmental quality of the region. The mechanisms for securing grant dollars supporting high-impact research collaboration and commercial applications are numerous.

The Northwest Florida Gulf Coast is one of the most beautiful areas of our country and its economy is heavily influenced by water quality in its estuaries. A recent study by the Florida State University Center for Economic Forecasting and Analysis<sup>1</sup> reported that businesses within a half mile of a coastline generate approximately \$8 billion in sales and employ over 80,000 workers. The estuaries contribute \$2.7 billion to property values, yet they are highly sensitive to water quality. The beauty of this region belies the severity of its environmental problems since, for decades, the region has experienced some of the most severe air and water pollution in the US<sup>2</sup>. A single event, the Deepwater Horizon oil spill, resulted in over \$2 billion in lost industry output<sup>3</sup>.

UWF has a long history of delivering research products through basic and applied research that benefits the assessment and improvement of environmental health, while providing research and training opportunities to undergraduate and graduate students. In the early 2000s, UWF, through the efforts of the Center for Environmental Diagnostics Bioremediation (CEDB), joined with 32 regional partners to lead the Partnership for Environmental Research and Community Health (PERCH) Project to create the area's foremost source of information and education regarding environmental problems and solutions. During the Deepwater Horizon Oil spill, CEDB mobilized and conducted extensive sampling along Pensacola Beach and provided data on hydrocarbon contamination to local municipalities within 48 hrs so that they could best inform the public of the health of the beaches and local waters, faster than Federal labs. CEDB received approximately \$3 million in grants to work with other Florida Universities to examine the spill's impacts. The multidisciplinary design of WRL will allow flexibility to respond to a wide variety of environmental issues. Current concerns include resiliency after natural disasters (e.g., hurricanes and flooding events), including increases in harmful bacteria, nutrients, and sediment loading. The critical role that loss of habitat and vegetation (i.e., marshes, wetlands, riparian habitats, seagrasses) plays in resiliency, water quality, and ecosystem health. Contamination from domestic and industrial sources targets the need for microbial source tracking (MST) and per- and polyfluoroalkyl substances (PFAS) monitoring. The need for these types of research is only increasing, and the WRL will bring unique expertise to the region and become a major contributor to addressing these issues by forming data-driven conclusions to help local policy-makers and the new Panhandle Estuary Programs (Pensacola & Perdido Bays EP, Choctawhatchee EP, and St. Andrews and St. Josephs Bays EP). It will improve the lives of

<sup>&</sup>lt;sup>1</sup> Harrington, J., M. Holland, and G. Strode. 2022. An economic impact and valuation analysis of the Pensacola and Perdido Bays Estuary Program (PPBEP). The Florida State University Center for Economic Forecasting and Analysis.

<sup>&</sup>lt;sup>2</sup> Air and Water Quality: Report of the Special Grand Jury, June 1999

<sup>&</sup>lt;sup>3</sup> Court, C., A.W. Hodges, R.L. Clouser, S.L. Larkin. 2017. Economic impacts of cancelled recreational trips to northwest Florida after the Deepwater Horizon oil spill. Regional Science Policy & Practice 9(3) DOI: 10.111/rsp3.12099

the citizens who call northwest Florida home, attract more students to the university due to increased research opportunities, and allow a better experience for tourists.

### i. Amount of funds being sought from Triumph Gulf Coast

We are requesting a total amount of \$10,500,000 from Triumph Gulf Coast to fund the creation and program development of the Water Research Lab at the University of West Florida. Funds will be used to recruit new faculty and staff and to build and enhance research facilities and infrastructure to expand the capabilities of faculty, staff and students focusing on water quality issues in Northwest Florida.

#### ii. Amount and identity of other sources of funds for the proposed project or program

The University of West Florida will commit funds (\$2 M) to complete research laboratory spaces in buildings 58, 58C, and 83 and use of other existing equipment. UWF has committed \$1.5 M in startup costs and \$1.5 M in graduate student tuition waivers. Thirty percent of the CEDB director's efforts will be devoted to establishing and managing the new WRL (\$0.85M). Six new research faculty will be hired and after 5 years, their salaries will be covered by grants (\$3 M). It is anticipated that WRL faculty and research staff will generate approximately \$15 M in new research grants over the 10-year project period. Improvements in the University research infrastructure will also facilitate and support grants from other CEDB faculty and members of other academic departments (\$5 M grants and salaries).

#### iii. Location of the project or program

Escambia County. WRL will be primarily located in two buildings on the University of West Florida's main Pensacola campus, buildings 58 and 83. Other buildings may be included depending on the specific expertise of the new hires.

# 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.

The new WRL at UWF will significantly increase the region's research capabilities in water quality enabling a targeted approach to addressing local and regional environmental concerns, maintaining the quality of local waterways and their economic benefits to the region. Initial efforts will focus on the topics listed above. The expanded research program will offer new opportunities for undergraduate and graduate students and post-doctoral associates providing experiences best preparing them for entry into the workforce. Their efforts will lead to maintenance and improvements in water quality and coastal ecosystems that support jobs in all aspects of tourism and fisheries and improving real estate values. Results will improve aging infrastructure thus reducing the impacts of natural disasters and improve coastal resiliency.

# v. Summary of timeline for the proposed project

We envision a ten-year timeline. Years 1-2 will focus on renovations and infrastructure upgrades at UWF. Recruitment and faculty and staff will begin in year 1 and be completed by year 3. This staggered approach will facilitate integration into UWF without overwhelming university resources. Research grants will be pursued immediately. As each hire will be supported by Triumph funds for 5 years and then supported by research grants, the final hires will be supported through year 8. The final two years will ensure the smooth transition into support by other resources.