# State University System Education and General 2021-2022 Legislative Budget Request Form I

University(s):	Florida Gulf Coast University		
Issue Title:	<b>University of Distinction</b>		
Date Issue Approved by University			
Board of Trustees:	Pending Approval		
Recurring Funds Requested:	\$4,000,000		
Non-Recurring Funds Requested:			
Total Funds Requested:	\$4,000,000		
Please check the issue type below:			
Shared Services/System-Wide Issue for Fiscal Year 2021-2022			
Unique Issue for Fiscal Year 2020-2021			

I. Description – 1. Describe the service or program to be provided and how this issue aligns with the goals and objectives of the strategic priorities and the 2019 University Accountability Plan established by your institution (include whether this is a new or expanded service/program). If expanded, what has been accomplished with the current service/program? 2. Describe any projected impact on academic programs, student enrollments, and student services.

This Legislative Budget Request for 2021–2022 to support The Water School at Florida Gulf Coast University is supplemental to the 2020-2021 LBR for \$3,000,000 approved by the Board of Governors of the State University System of Florida.

The Water School addresses water-related issues in Southwest Florida by combining expertise from different academic disciplines; forging partnerships with local communities and with organizations involved in environmental education/outreach; collaborating with research institutions across the state; and building research capacity in the region. Part of its charge is to educate and train the next generation of leaders responsible for addressing the region's environmental issues, especially those related to water. Core academic programs include undergraduate degrees in Marine Science, Environmental Geology, and Environmental Studies, and graduate (Master's) degrees in Environmental Science and Environmental Studies. In addition to the core faculty supporting these STEM programs, affiliate faculty have been appointed from across the university, representing four colleges and thirteen other departments.

This LBR aligns with multiple objectives associated with three of the five critical areas—pillars—that guide FGCU, as outlined in its 2017–2022 Strategic Plan.

## **Student Success**

- Improving retention and 4-year graduation rates
- Providing intentional opportunities for student engagement with faculty and staff to build a sense of community and an atmosphere designed to achieve success

### Academic Excellence

- Increasing externally sponsored research by 100% in next 5 years.
- Resources and structures to foster faculty research and scholarship while expanding opportunities for undergraduate and graduate student research

# Community Engagement & Outreach

- Increasing awareness of our people, programs and impact
- Strengthening our outreach, engagement and ties to our region
- Building partnerships and relationships with our five school districts, area businesses and organizations to optimize opportunities to put FGCU expertise to work to support the region's economy, model innovative and sustainable practices and advance the community

The LBR also supports two of the top three Key Initiatives and Investments in FGCU's 2019 Accountability Plan:

- Meeting the Workforce Needs of Southwest Florida
- Applied research to address issues critical to Southwest Florida

### Student Success

First year retention rates (2013–2017 cohorts) for undergraduate programs (80% Environmental Studies; 81% Marine Science) are in line with those for similar majors nationwide (CIP 03 Natural Resources and Conservation: 79%; CIP 40 Physical Sciences: 81%, respectively; NSCR Center 2019). Second year retention rates for these programs are 75% and 68%, respectively. A *Sophomore Experience Survey* conducted by the National Resource Center for the First Year Experience and Students in Transition (2017) reported that less than 15% of sophomores interacted in a significant way with faculty and that the only campus experience predicting positive outcomes for these sophomores was the level of interaction and satisfaction with faculty. In addition, many FGCU students work off campus to support their education or simply do not enroll in enough courses each semester to graduate within 4 years. For example, 23% of students in Environmental Studies and 19% of students in Marine Science enroll part time and 79% and 69%, respectively, take less than 15 credits per semester (2016–2019).

To improve these indicators of success, we will create and implement freshman orientation and sophomore retention programs for each undergraduate major in The Water School. Freshman orientation will give students a sense of connection to

each other as they begin their general education courses, introduce them to faculty and more senior students, and provide them an overview of program requirements and expectations. Sophomore retention events will connect students directly with their majors and future career paths, and will provide additional opportunities for them to interact with program faculty. The hiring of additional faculty will also increase the number of opportunities for Water School students to work alongside program faculty through internships and senior research projects. To promote timely graduation (4 years), The Water School will offer additional scholarships to encourage students to enroll for a minimum of 12 credits per semester.

There is a robust and growing workforce need for graduates of Water School programs. At the state level, projected job openings for related fields number over 7,900, with a projected 10% growth for 2019–2027; in Southwest Florida projected job openings total 313 for the same period, with a projected growth of 11% (FDEO 2020). To help meet these workforce needs, as identified as a Key Initiative and Investment in the 2019 Accountability Plan, we will use LBR funding to connect Water School students with future career paths through the proposed sophomore retention program and by organizing and sponsoring an annual career fair that specifically targets our majors.

# Academic Excellence

Southwest Florida is known for water-related issues that threaten its economy, human health, natural resources, and quality of life. In response, The Water School has invested significant research effort in the areas of climate change, hurricanes, sea level rise and coastal vulnerability, harmful algal blooms, water quality, and environmental restoration. This research is applied, collaborative with other institutions and community partners, and addresses issues that are critical to the region (see 2019 Accountability Plan). We will use a significant portion of this LBR to enhance research productivity and stimulate additional external grant funding in these and other critical areas by hiring new faculty and staff from various disciplines. These individuals will contribute to the understanding of how water issues impact the region—including the human, economic, and social dimensions of these impacts.

Funding will also go toward expanding opportunities for undergraduate and graduate research. Undergraduate research helps students hone their critical thinking and communication skills, and trains them to develop specific skill sets needed to be successful in STEM careers or graduate school. Graduate-level research is more focused and prepares students to enter the workforce at a more advanced level with concomitantly higher salaries. External funding from faculty research helps drive undergraduate and graduate research.

# Community Engagement & Outreach

FGCU will use LBR funding to expand significantly its community outreach and engagement efforts in Southwest Florida. We will partner with school districts to

expand participation in the semester-long Watershed Teacher Leadership Academy (WeTLAnd) directed by The Water School, and we will formalize our STEM Summer Camp for High School Girls, initially funded through the Southwest Florida Community Foundation. We will expand participation in The Water School Leadership Academy, a yearlong program that takes a cohort of community leaders through immersive education, training, and networking on water-related issues at strategic sites throughout the region. We will continue to help support the work of the Southwest Florida Regional Resiliency Compact that, when implemented, will bring together representatives from three counties and ten municipalities to develop a regional plan for adapting to climate change and increasing coastal resilience. We will also expand our in house lecture series The Water School Presents to bring eminent speakers from around the country to engage community members as well as FGCU students, faculty, and staff in important issues of our time related to water, the environment, and their human, economic, and social dimensions. To facilitate communication with local communities, The Water School will create a new social media footprint to engage local communities and will develop and operate a new web site that will function as a portal to special events, highlight research conducted at FGCU and its relevance to the region, and provide insight on important water-related issues by FGCU experts.

# **Budget Description**

The spending plan (LBR Form II) advances the objectives of The Water School by providing necessary faculty, staff, student support, operating funds, and equipment. Faculty positions comprise 15 full-time equivalent (FTE) lines spanning multiple academic disciplines. Funding will also target faculty retention. New faculty will support academic programs within The Water School and create additional interdisciplinary connections across academic units. Instructor positions will help accommodate general education enrollment and support release time for faculty active in research to seek external grants and mentor student research. Staff positions (5 FTE) will support operational needs and outreach programs and will include an Environmental Education Coordinator, a Web and Social Media Coordinator, a Grants Specialist, and research technicians to assist faculty research and supervise undergraduate and graduate students. This LBR will also fund summer internships for undergraduate research experience and assistantships to support graduate student research. Scholarships will allow us to recruit and retain highquality undergraduate (30 x \$12,000) and graduate students (8 x \$15,000) to Water School programs (STEM) and to encourage timely graduation.

Operating expenses will support research activities and student research projects, enabling us to purchase software, non-capital equipment, and consumables required for the day-to-day operation of on- and off-campus facilities. A recurring equipment budget will support start-up funds for new faculty, enhance existing research capacity and develop additional capacity to target emerging research questions and will allow for maintenance and replacement of existing equipment,

instrumentation, vehicles, and vessels as necessary. We will also use operating expenses to implement new programs such as *The Water School Presents* lecture series, fully fund existing programs such as the STEM Summer Camp for High School Girls and The Water School Leadership Academy, and expand existing environmental education and outreach programs such as WeTLAnd.

**II. Return on Investment -** Describe the outcome(s) anticipated, dashboard indicator(s) to be improved, or return on investment. Be specific. For example, if this issue focuses on improving retention rates, indicate the current retention rate and the expected increase in the retention rate. Similarly, if the issue focuses on expanding access to academic programs or student services, indicate the current and expected outcomes.

Program outcomes 1–4 for this LBR (Table 1) focus on STEM degree production and research and have been carried over from the 2020–2021 LBR (targets were not adjusted due to COVID-19 related uncertainties and new targets may need to be adjusted for this LBR for the same reason). Outcomes 5–8 are new and focus on student success and community outreach/engagement. All outcomes are Water School specific. Data were mined using Tableau data visualization software.

Table 1. Metrics used to evaluate program effectiveness of The Water School. Historic benchmarks: 2014–2015 (1–4), Fall 2016 (5), 2013 cohort (6), 2011 cohort (7), and 2018–2019 (8). Current/recent data: 2018–2018 (1–4), Fall 2019 (5), 2017 cohort (6), 2015 cohort (7), and 2019–2020 (8). Trend w/o investment projections made using regressions, when significant, or 5-year averages.

			Trend w/o	Trend w/ Investment
	Historic	Current/	Investment	2022-2023
Program Outcomes	Benchmark	Recent	2022-2023	(% Improvement)
1. STEM degrees UG/GR)	64	114	146	162 (11.0)
2. Research expenditures	\$1,272,684	\$853,504	\$425,334	\$1,200,000 (182.1)
3. Graduate Assistantships	19	27	27	30 (11.1)
4. Undergraduate Research	46	67	86	100 (16.3)
5. Students ≥12 Credits	76%	82%	78%	79% (1.3)
6. Retention (Sophomore-Junior)	67%	67%	70%	72% (2.9)
7. 4 Year Graduation Rate	23%	43%	25%	27% (8.0)
8. Number Teachers Trained	0	5	15	20 (33.3)

We expect in the first year of funding to see growth in research expenditures.

- ✓ One-year Goal: 2021-2022: \$1.1 million in externally funded research expenditures in support of water research
- **III. Facilities** (*If this issue requires an expansion or construction of a facility, please complete the following table.*):

Not Applicable

# 2021-2022 Legislative Budget Request Education and General Position and Fiscal Summary Operating Budget Form II

<b>University:</b>	Florida Gulf Co		
Issue Title:	The Water School		•
	RECURRING	NON- RECURRING	TOTAL
Positions Positions			
Faculty	15.00	0.00	15.00
Other (A&P/USPS)	5.00	0.00	5.00
Total	20.00	0.00	20.00
Salary Rate (for all positions n	oted above)		
Faculty	\$1,428,947	\$0	\$1,428,947
Other (A&P/USPS)	\$225,000	\$0	\$225,000
Total	\$1,653,947 ======	\$0 =====	\$1,653,947 ======
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Salaries and Benefits	\$2,129,945	\$0	\$2,129,945
Other Personal Services	\$281,050	\$0	\$281,050
Expenses	\$839,005	\$0	\$839,005
Operating Capital Outlay Scholarships	\$250,000 \$500,000	\$0 \$0	\$250,000 \$500,000
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Total All Categories	\$4,000,000	\$0 =====	\$4,000,000