



**State University System
Education and General
Performance Funds from FY 2020-2021
University of Distinction Reporting Template
Quarter 4 Update
(July 1, 2020-June 30, 2021)
(Page Limit: 10)**

University:	Florida Gulf Coast University
Amount Allocated:	\$3,000,000
Total Spending in 2020-21 FY:	\$1,292,887
Carryforward:	\$1,707,113

In describing the use of the 2020-2021 FY Pillars of Excellence funds allocated to your university, this form consists of the following six parts:

- I. Using the table below, provide a comprehensive list of all initiatives funded during the 2020-21 FY. Please list the specific initiative(s), the total amount spent on each initiative, and current progress on each initiative. Please be as specific as possible when reporting progress on initiatives (e.g., number of students receiving scholarships or stipends, number of courses redesigned, etc.). Where possible, provide a detailed narrative on current progress compared to goals.*

Table 1

University Initiative	Spending as of June 30, 2021	Progress on Initiative as of June 30, 2021
The Water School: Increased research and scholarship relevant to character, challenges and opportunities in Southwest Florida	\$1,255,316	Funds were used to enhance research capacity and to support undergraduate and graduate student research.

ii. Using the table below, please provide additional details on the institution's current efforts to hire faculty and staff. Please note the amount of the FTE funded in each section to date, the amount of FTE that was not funded during the 2020-21 FY, and the institution's timeline for hiring the remaining FTE (e.g., 20 FTE funded out of expected 100 FTE, or 20% for FY 2020-21). Where possible, provide a detailed narrative on current progress compared to goals.

Table 2

University Hires	Spending as of June 30, 2021	Progress on Hiring Goals as of June 30, 2021
Hired 1 out of 13 Faculty FTE	\$0	One new faculty member was hired for Fall 2021, one search is ongoing, another search was terminated due to lack of qualified applicants, and a fourth position was advertised in Q4. Hired 1 out of 13 Faculty FTE (7.7%).
Hired 1.375 out of 5 Staff FTE	\$37,571	Hired Research Lab Coordinator I and part-time Dive Safety Officer (27.5%)

iii. Please provide a detailed narrative of each university initiative listed in Tables 1 & 2– including the anticipated return on investment, progress on the first-year metric or other related metrics.

The Water School – Increased Research and Scholarship: The Water School at Florida Gulf Coast University was established to address water issues in Southwest Florida by bringing together faculty from across the university, forging partnerships with local communities, working with local organizations involved in environmental education and outreach, collaborating with research institutions across the state, and building research capacity to tackle these issues. A major component of this initiative 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 Environmental Geology, Environmental Studies, and Marine Science, and graduate degrees in Environmental Science and Environmental Studies. In addition to the core faculty supporting these STEM programs, affiliate Water School faculty have been appointed from across the university, representing four colleges and thirteen other departments. The expenditures listed through the third quarter are representative of general operations of The Water School, in conjunction with key capital expenditures to build research capacity, as well as support for student research. As the University moves forward, expenditures will increase as hiring of positions and growth of the operation commence. However, due to the pandemic the rate at which these expenditures occur may not be linear. It is the full intent of the university to mobilize funding in a manner that is conscious of the risks and restrictions posed by the pandemic while at the same time moving The Water School forward with the greatest possible haste.

FGCU will hire a significant number of faculty in support of its academic and research programs. Several of these positions will be interdisciplinary and will consist of joint appointments with other departments within the College of Arts and Sciences and with other colleges across campus. New faculty will broaden available course offerings for students and provide additional faculty mentors to supervise undergraduate research. Additional faculty will also loosen a major constraint to enrollment growth in the M.S. Environmental Science program—the availability of graduate advisors for students completing their thesis research. Instructors will also be hired to increase course offerings. This will enhance General Education capacity—potentially resulting in additional recruitment to STEM programs—and will make available release time for faculty who are active and productive in scholarship.

Significant resources will be allocated to enhance research capacity and productivity and to stimulate external grant funding. Research experience helps undergraduates hone their critical thinking and communication competencies, and trains them to develop specific skills needed to be successful in STEM careers or graduate school. Graduate-level research prepares students to enter the workforce at a more advanced level with concomitantly higher salaries. External funding provided through faculty research helps drive undergraduate and graduate research. By hiring research-active faculty, adding staff to support research and outreach, and increasing financial support for students, The Water School will be able to enhance research productivity in the areas of harmful algal blooms, coastal vulnerability/sea level rise, climate change/hurricanes, environmental education and communication, water quality and management, and ecological restoration.

Outreach and partnerships transform the research and scholarship conducted at The Water School and enhance its value by using it to inform K-12 education, translating the results for citizens, training decision makers, and providing actionable information for stakeholders and government agencies. The Water School is partnering with the school districts of Lee and Collier Counties and with local non-profit organizations to implement several programs focusing on environmental education and outreach. Through its Center for Environment and Society, The Water School is also identifying potential federal partners to support these programs through competitive grants. Outreach funding will also be used to support the work of the Southwest Florida Regional Resiliency Compact. This effort brings together representatives from three counties and eleven municipalities to develop a regional plan for communities to adapt to climate change and increase coastal resilience.

- a. **Progress on Initiative:** Due to the financial impacts of the pandemic and uncertainties regarding the potential for additional impacts, FGCU took a judicious and very conservative approach in its stewardship of Universities of Distinction funds during 2020–2021. Expenditures were restricted primarily to the use of non-recurring funds during 2020–2021 so as not to make long-term commitments. As anticipated, spending in Q4 increased substantially as the full impacts of the pandemic on University funding became more clear. However, challenges surrounding the pandemic (i.e., delays in hiring, restrictions in travel, reduction in team size for laboratory and field work) created additional challenges, especially with respect to hiring.

Building research capacity. — In 2020–2021, \$340,364 was expended to acquire additional instrumentation and equipment in support of faculty and student research at The Water School. Primary purchases for the year included a boat to support research in coastal waters (\$51,555); a LISST-HAB to measure/map cell size and concentration in harmful algal blooms (\$53,145); a sonde for measuring water quality (\$23,880); a quantitative PCR for measuring gene expression (\$18,000); a solar-powered environmental data logger (\$7,403); an Imaging FlowCytobot (\$135,300) for identifying and quantifying phytoplankton (including harmful algal bloom species); and a high performance desktop computing system (\$5,800). In Q4, an additional \$975,721 in capital equipment and \$83,759 in general expenses were encumbered, including a Liquid Chromatography – Tandem Mass Spectrometer (\$407,015), Gas Chromatography – Tandem Mass Spectrometer (\$151,046), HORIBA Water Treatment Plant Analyzer (\$73,615), Portable Photosynthesis and Fluorescence System (\$69,791), Aerodynamic Particle Sizer Spectrometer (\$65,451), Chlorophyll Fluorometer Microscopy PAM (\$45,655), air compressor for filling dive tanks (\$34,870), and a truck with towing capability (\$33,408).

Faculty/Staff hiring. — The search for an Assistant Professor in Environmental Psychology, a joint appointment between The Water School and the Department of Psychology in the College of Arts and Sciences, was successful, with the new faculty member scheduled to join FGCU in Fall 2021. A second search is still underway for an Assistant/Associate Professor in Land Use, and the search for a third position – Eminent Scholar in Marine Conservation Biology – was terminated due to a lack of qualified applicants but will begin anew in Fall 2021. During Q4, we also began advertising for a Visiting Public Scholar (Assistant Professor) in Environmental Justice. That search was ongoing as of June 30, 2021. During 2020–2021 The Water School also hired a Research Laboratory Coordinator (see Table 2) to support harmful algal bloom research and a part-time Dive Safety Officer (see Table 2) to support underwater research and the training of students and faculty in scientific diving.

Student funding. — Water School faculty submitted proposals to create and support research opportunities for undergraduate students in Spring 2021, resulting in ten funded proposals (i.e., ten students), with student stipends totaling \$50,000. A total of \$50,702 was expended to support undergraduate students as of June 30, 2021). During 2020–2021 \$67,562 was expended on graduate research assistantships (scholarships) and OPS student research assistantships (5 graduate students).

Outreach and Partnerships. — The Water School partnership with the School District of Lee County continued to grow during 2020–2021. The second module of this year's Wetland Academy partnered nine teachers with FGCU researchers to learn about water quality and water sampling techniques in the field and then met for a day of lesson sharing and peer feedback at School District headquarters. Two of our faculty partnered with the School District and the Sanibel Sea School at the Sanibel Captiva Conservation Foundation (a local non-profit) to conduct a weeklong Spring Break Marine Science Camp. The School District provided daily transportation for the students from their schools to Sanibel Island and assisted with recruiting students from Title I schools.

The Water School and the FGCU Foundation initiated discussions with Babcock Ranch—a sustainable community in Southwest Florida known as America’s first solar powered town—on a proposed partnership for a residential environmental education and research center there. We have also partnered with Cemex Corporation, a leading vertically integrated heavy building materials company, to develop educational programming focused on a local Cemex mining operation that will soon be sunsetting and moving into the reclamation phase of the project. We continued planning and implementation of the National Oceanic and Atmospheric Administration/North American Association for Environmental Education grant-funded Watershed Education for Resilience in Southwest Florida (WATERS) project with Grace Place for Children and Families, and Boys and Girls Club of Collier County. The Water School was also recently awarded a grant from the National Oceanic and Atmospheric Administration to train STEM teachers at Title I schools in Lee County on environmental education for standards-based learning.

The Water School facilitated the planning and ratification of the Southwest Florida Regional Resiliency Compact—a coalition of county and municipal governments coming together “to collaboratively identify, prepare for, adapt to, and mitigate climate change impacts” (<https://fl.audubon.org/fag/southwest-florida-regional-resiliency-compact>). The compact has now been ratified by all of the partner counties and municipalities. The Water School has engaged the FCRC Consensus Center at Florida State University to facilitate the operationalization of the Compact. As the project moves forward, we expect The Water School to maintain a leadership role for the Compact, serving as an objective agent for the region.

The Water School continues to partner with the Conservancy of Southwest Florida, Community Foundation of Collier County, and the Southwest Florida Community Foundation to support Growing Climate Solutions, a grassroots regional climate initiative hosted by the Conservancy with the goal of bringing together local organizations, leaders and citizens to build climate awareness, protect natural assets and empower residents, businesses and civic institutions to support and engage in climate solutions.

- b. Return on Investment:** The increase in research expenditures to date for 2020–2021 reflects a 375% gain over the 2018–2019 baseline. This increase will provide additional research opportunities for undergraduate and graduate students and result in additional research productivity (e.g., peer-reviewed publications, conference presentations) in the years following. Increased research expenditures will also benefit Florida’s economy through purchases made through local and state businesses and vendors.
- c. Progress on first-year metric:** Metric 4, which focuses on increasing research expenditures in support of water studies (see Table 3), has been attained. This metric was selected to document progress during year one of the initiative. Research expenditures for Q4 totaled \$961,941, for a combined total for 2020–2021 of \$4,057,657. ***This represents a 375% increase over the baseline (see Table 3) and a 306% increase over the target (\$1 mill) set for this year.***
- d. Plan for year 2:** The two ongoing faculty searches for an Assistant/Associate Professor in Land Use and a Visiting Public Scholar in Environmental Justice should be completed in the first quarter of 2021–2022. The search for an Eminent

Scholar in Marine Conservation Biology that was cancelled this year 2021 due to the qualifications and background of the applicant pool will be restarted in Fall 2021.

New hires for 2021–2022 will include six new faculty positions, two of which will be joint hires, and three new staff positions, an Administrative Assistant and an Outreach Coordinator for the Center for Environment and Society at The Water School, and a Research Laboratory Technician to operate some of the new instrumentation purchased through this year’s funding. Additional capital expenditures will be made to continue to build research capacity. The Water School hired an external higher education consultant who hosted focus groups for strategic planning in the third quarter. The findings from the focus groups were shared in Q4 with the Leadership Team for The Water School, and an ad-hoc committee is scheduled to bring the completed strategic plan for 2021–2026 before the faculty in Q1 2021–2022.

IV. Please list all year-one metrics and performance on metrics in Table 3.

Table 3

Year-One Metric	Status before July 1	Progress on Metric as of June 30, 2021
<u>Metric 4</u> : \$1 million externally funded research expenditures	\$853,504 (FY 2019)	\$4,057,657 in research expenditures in support of water research for 2020–2021

V. Please provide any updates or progress (if any) on any other metrics.

Table 4

Additional Metrics	Status before July 1	Progress on Metric as of June 30, 2021
<u>Metric 1</u> : Number STEM degrees	114 (FY 2019)	Not available
<u>Metric 2</u> : Applied water science & policy	71% (FY 2019)	Not available
<u>Metric 3</u> : Research active faculty	77% (FY 2019)	Not available
<u>Metric 4</u> : External funding		See Table 3 above
<u>Metric 5</u> : Graduate assistantships	27 (FY 2019)	Not available
<u>Metric 6</u> : Undergraduate research	67 (FY 2019)	Not available

VI. If carrying forward funds into the 2021-22 FY, please provide a summary of how funds will be used, noting specific initiatives and timeline for expenditure of funds. Where possible, provide a detailed narrative on the timeline for expending carryforward funds.

Carryforward funds (\$1,707,113) are being used to complete purchases initiated during Q4 to build additional research capacity at The Water School. Several of the instruments purchased are not readily stocked by the vendors, so delivery dates and invoices will fall outside of Q4.

Table 5

University Initiative	Status as of July 1, 2021	Anticipated expenditure timeline
Complete purchases from Year 1 to build research capacity	All purchases encumbered or in planning.	Anticipated delivery/ payment by December 31, 2021