

STEM Scholars Summer Field Site Experience Florida Department of Environmental Protection and Wakulla STEM Scholars

Participating School Districts



Panhandle Area Educational Consortium

Patrick L. McDaniel, Executive Director

Calhoun

Franklin

Gadsden

Gulf

Holmes

Jackson

Jefferson

Liberty

Madison

Taylor

Wakulla

Walton

Washington



Heartland Educational Consortium

Dr. Debra Elliott, Executive Director

DeSoto

Glades

Hardee

Hendry

Highlands

Okeechobee



North East Florida Educational Consortium

James Surrency, Ph.D., Executive Director

Columbia

Flagler

Gilchrist

Lafayette

Levy

P.K. Yonge

Putnam

Union

Through the Panhandle Area Educational Consortium's, *FloridaLearns STEM Scholars* Project STEM Talent Development Program, talented and gifted high school juniors and seniors from small and rural districts across Florida had the opportunity to take part in locally-available Field Site/Workplace Experiences this summer. These experiences, made possible through partnerships with leaders in STEM (Science, Technology Engineering, and Math), such as industries, local businesses, agencies, the military, and higher education faculty, gave students an opportunity to actively engage in doing "real" STEM work.

Water is vitally important to every aspect of life on Earth and Florida's bodies of water are treasured resources. STEM Scholars from Wakulla High School had a unique opportunity to learn this first hand through an 8-day field experience, provided by the Florida Department of Environmental Protection. Throughout the experience Scholars were engaged in conducting a watershed survey at various area sites including Lake Lafayette, Lake Munson, Tallahassee Wastewater Treatment Facility, Leon Sinks Geological Area, Wakulla Springs State Park, San Marco de Apalache, and St. Marks National Wildlife Refuge. This hands-on learning opportunity involved thematic mapping of the watershed boundaries, conducting water quality monitoring using the World Water Monitoring Challenge system and a variety of water quality monitoring equipment, and applying what was learned to develop a watershed teaching packet for educators. Students learned from and worked alongside experts from the Department of Environmental Protection, the City of Tallahassee, and the Northwest Florida Water Management District. Greg Ira, Director, and Kennedy Hanson and Jacquelyn Zimmerman, Environmental Education Specialists, all with the Office of Environmental Education and Sustainable Initiatives, Florida Department of Environmental Protection coordinated student activities and led the field work. Wakulla School District teachers, Suzanne Fielder and Nicholas Weaver were the onsite teacher leaders.

Three days into the experience, Wakulla High School teacher Suzanne Fielder stated, "I am thankful for the privilege of leading these students. The activities have been well planned and fun for the kids. The people from DEP have an amazing wealth of knowledge and the students have learned a lot already." Greater insights into STEM career options and a keener understanding of the relevance of the rigorous STEM courses they are taking while in high school were important outcomes for students. They also benefited by learning why ongoing water quality monitoring is critical to protect our waterways from pollution and how monitoring is carried out.



Wakulla High School STEM Scholars, left to right, Jacen Jones, Ben West, Thomas Plasay, and Oakley Ward, Wakulla High School students, scrutinize water quality data they've just obtained.