



DEP Florida Tax Watch Winners 2022

Technology/Innovation Category

Individual Award

Technology/Innovation Category

Aaron Koelker

Office of the Secretary
Office of Technology and Information Services

The DEP Hurricane Response Hub provides a single, authoritative, dynamic resource for accessing geospatial information to better inform the department's hurricane response. Aaron has distilled management requests for report summaries based on changing weather conditions and field status reports, along with easily shared maps and spreadsheets, to provide a web-based ESRI ArcGIS Online dashboard with a streamlined interface to access information from seven diverse program areas, from hazardous waste to aquatic preserves.

The emergency response maps previously were managed in GIS desktop software that was updated and analyzed by a dedicated GIS analyst staffing the ESF10 center at the state Emergency Operations Center during activations. With the new webbased dashboard, custom reports are issued at regular intervals during response for management review and action planning. The Office of Emergency Response (OER) staff can view dynamic maps, zoom in to areas of interest, change base maps from traditional street maps to satellite imagery as needed, and receive updated data more frequently. The ability to customize their geographic area of interest and dive into more detailed data at a certain site allows for better response. OER staff can also provide information to local and federal partners faster and in more detail - all by using the dashboard on their own at any time during the 24-hour support cycle.

Team Award

Technology/Innovation Category

Numeric Nutrient Criteria Total Maximum Daily Load Method Team Eric Tano, Ansel Bubel and Ken Weaver

Division of Environmental Assessment and Restoration

This tool provides an automated interface and algorithm that calculates a new analytical method for setting water quality restoration goals, also known as TMDLs.

Many years of experience setting complex nutrient-related TMDLs showed department staff that site-specific targets usually fell into the same range as the reference lake set.

There was a realization that department staff could test whether lakes would likely need a site-specific target or whether they were consistent with the existing criteria.

A method was developed to compare new lakes to the reference lake set. This approach was coded as a Python GIS tool in ArcPro by TMDL staff. They also wrote all Python code including an automated data extraction utility and a utility that creates graphs comparing the selected waterbody with the reference waterbodies. This tool has a user-friendly interface developed to look and function like any other GIS tool.

The benefits of this tool are most apparent when looking at the efficiency of existing TMDL staff. This tool allows for quicker TMDL model setup, which allows existing TMDL staff to develop TMDLs faster. Therefore, impaired lakes across Florida will likely receive a TMDL slightly sooner than they were previously. As these TMDL are implemented across the state, progress toward cleaner water will be faster.

Team Award

Technology/Innovation Category

Enterprise Grants Team

Joe Kahn, Sandy Waters, Amanda Peck, Jasmine Greene and Steve Lane Division of Water Restoration Assistance

This team developed and implemented a grant management database system that allows managers and leadership to track grant progress and query the database for projects in certain locations, project types and funding types. It also enables tracking by budget entity for high profile funding sources. Prior to this system, each grant manager had their own way to track their grants. This system is scalable and is currently being used by other divisions in our agency.

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Team Award

Technology/Innovation Category

Biennial Assessment Team Kevin O'Donnell, David Tyler, Katrina Yancey, Jessica Mostyn and Benjamin Ralys

Division of Environmental Assessment and Restoration

The Watershed Assessment Section has successfully transitioned from a five-year rotating basin assessment where 20% of the state's waters were being assessed annually, to a two-year state statewide biennial assessment where 100% of the state's waters are now assessed every two years. This transition has given stakeholders a more accurate evaluation of the health of the public's surface waters, in a more timely manner. This change has expedited the identification of priority waterbodies that are not attaining surface water quality standards, and it helps focus restoration efforts.

Team Award

Technology/Innovation Category

Total Maximum Daily Load Model Setup Toolset Team Eric Tano, Ali Merikhi, Lawrence Sekaluvu and Heather Moule

Division of Environmental Assessment and Restoration

Water quantity and quality models are critical tools in TMDL Development. These programs require extensive inputs on order to accurately simulate water quality. TMDL staff spend significant amounts of time gathering and formatting data in order to set up models. Much of the work required to set up BATHTUB model input files is routine and is the same across different projects. Further, the BATHTUB model is the most commonly used program for TMDL development. Therefore, the TMDL section sought to find a solution that would automate the routine aspects of setting up BATHTUB models.

Custom code was written by TMDL staff in order to create a new set of Python GIS tools in ArcPro. TMDL staff developed a new set of code and developed a graphical user interface in the ArcPro geospatial mapping software.

The primary benefit of this tool is to make existing TMDL staff more efficient at developing TMDLs. Although the benefits are focused on automating internal department processes, the public will see more restoration targets developed per TMDL developed. This may translate into slightly faster improvements in water quality.

Service Delivery Improvement Category

Individual Award

Service Delivery Improvement Category

Tony Cole

Ecosystem Restoration
Office of Resilience and Coastal Protection

Within one month of Tony's start date, he worked on a heavy piece of equipment called the Posi-track that had been down for two months prior and slated to be repaired or replaced. Tony took apart, rebuilt and reassembled a piece of equipment that is instrumental in helping the department reach our resource management goals. He was also able to guide other staff members through the process.

It did not take long before Tony approached management about starting a maintenance and operation initiative program. The details he perceives as important might appear to be inconsequential to many employees. However, these adjustments can save thousands of dollars and many hours if not addressed and attended to at the proper time.

Team Award

Service Delivery Improvement Category

OneDEP HAZWOPER Training Team Neil Hornick, Matt Harris, Jeff Gregg and Joe Foote

Northeast District Office

Safety is the true embodiment of environmental protection. DEP Northeast District OSHA instructors not only provide this protection to our own employees but share this valuable knowledge and skill development with employees of any and all local, city, county, state and federal agencies. This course not only provides safety training but it does so at no cost to the recipients, which is a win-win for all involved. By sharing this information within our own agency as well as with other state agencies and institutions throughout all of Florida, the OneDEP OSHA instructors truly exemplify the brand of OneDEP.

DEP requires certain employees to have the OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) training in order to pursue the department's mission. In 2011, there were no DEP employees who could instruct this course. As such, there was a need for new local OSHA instructors to continue providing this course, thus saving the department significant training costs.

Neil Hornick and Matthew Harris of the Northeast District completed the U.S. EPA-provided HAZWOPER Train the Trainer Course in September 2011. Neil and Matt began teaching the 24-hour Initial Course and Eight-Hour OSHA Refresher Course in June 2012. The 24-hour Initial Course is conducted each year, and the 8-hour OSHA Refresher Course is conducted twice a year.

These courses were initially completed in-person for attendees at the Northeast District; however, with improvements in technology, the instructors provide training for all levels of government across the entire state.

Quality of Life Category

Individual Award

Quality of Life Category

Stephen Pindel

Land and Recreation
Division of Recreation and Parks

While maintaining his routine duties, Park Services Specialist Steven Pindel re-decked 448 feet of boardwalk and obtained a permit to repair an additional 325 feet at Delnor-Wiggins Pass State Park.

Due to age and environmental conditions, Delnor-Wiggins Pass State Park was facing constant boardwalk repairs. At the time, the park was replacing only several damaged boards at a time. The park manager decided to call a contractor to get a quote for the replacement of one boardwalk, which came back over \$131,000. The contractor's price was prohibitive due to amount and the immediate need for repairs.

Steve met with staff from the DEP Office of Resilience and Coastal Protection Coastal

Construction Control Line Field Permitting and Compliance and Collier County Growth Management to determine what repairs we could make without engineering and permitting. As explained to Steve, we could only re-deck the boardwalks but not alter the underlaying supports. Working with management, Steve developed a plan to remove the boardwalks not needed to access the bathhouses and replace them with a sand path. He re-decked the boardwalks that accessed the bathhouses, provided they did not need new supports.

With the help of park staff, Steve was able to re-deck approximately 8 feet of boardwalk a day even while the park experienced high visitation and the demand for visitor services.

Team Award

Quality of Life Category

Gamble Rogers Memorial State Recreation Area at Flagler Beach Staff
Matt Bledsoe, Lynna Flannery, Kevin Callahan, Tom Redsecker and Rusty Price
Division of Recreation and Parks

The staff and volunteers at Gamble Rogers Memorial SRA installed in-house an ADA accessible kayak launch, saving the park approximately \$80,000.

The park's kayak launch initially was a natural, sandy shoreline along the Intracoastal Waterway. While the old launch was adequate for many visitors, it did not provide access for all. The kayak launch arrived as a kit that needed to be assembled on-site. Adding to the load of assembly, the kit did not come with any directions nor the hardware needed to complete the installation! It took innovative problem-solving to devise solutions to the barriers that were presented to the team.

Each team member brought their own strengths and expertise, which resulted in a final product that will allow a more diverse group of visitors to enjoy what Gamble Rogers Memorial State Recreation Area has to offer. The very same day the new and improved kayak launch was completed, a visitor named George Casares was traveling through the area with his father. George suffered a spinal injury in 2016 because of a diving accident that left him paralyzed. George was an avid outdoorsman who adapted his vehicle, camper and other recreational equipment since his injury so he could continue to enjoy the outdoors. He was thrilled to see that Florida State Parks were committed to funding and installing accessible equipment to help those, like himself, overcome their physical challenges.