



Brevard County Board of County Commissioners

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Legislation Text

File #: 4994, **Version:** 1

Subject:

Approval, Re: Tourist Development Council (TDC) FY 2022-2023 Tourism + Lagoon Grant Program grant recommendations

Fiscal Impact:

FY 2022-2023: Total funding of \$939,343 from the TDC Beach Improvement fund # 1442-293100.

Dept/Office:

Tourism Development Office

Requested Action:

It is requested the Brevard County Board of County Commissioners approve the Tourist Development Council FY 2022-2023 TDC Tourism + Lagoon Grant Program recommendations for funding for 10 projects:

1. Derelict Vessel Removal-Brevard Country Natural Resources; Boating & Waterways, \$49,300
2. Innovative Solutions for Protecting our Public Spaces-Marine Resource Council, \$49,999
3. New Swell Mangrove Restoration and Outreach Project-Sea Redwine, \$37,266
4. Satellite Beach Adopt-A-Canal-City of Satellite Beach, \$49,999
5. Restoration of native clam communities in the Indian River Lagoon for improved water quality and economic resiliency-University of Florida Whitney Laboratory. \$49,100
6. Samsons Island Submerged Lands Restoration, Phase 3-City of Satellite Beach, \$49,839
7. Titusville Causeway Multi-trophic Shoreline Stabilization and Resiliency Action Project, Phase 2c.- Brevard County Natural Resources, \$250,000
8. Brevard County Oyster Restoration-Brevard Zoo, \$113,840
9. Restoring Seagrass for Improved Natural Resilience-Brevard County Natural Resources, \$250,000
10. KBB Flex Team North Banana River Drive Litter Removal-Keep Brevard Beautiful, \$40,000

Further, based on the facts specified for each grant, by approving this agenda item, the Board will make the following legislative findings: (1) the Indian River Lagoon is an estuary with multiple public access points for tourism purposes and a long history of use by tourists, and (2) each project specifically improves, maintains, re-nourishes, restores, protects or assists with erosion control in either the Indian River, the Banana River, or the Mosquito Lagoon (all part of the Indian River Lagoon); and (3) each project is authorized purpose for the expenditure of Tourist Development Tax revenue under section 125.0104(5)(a)5, Florida Statutes and section 102119(4)(a) of the Brevard County Code of Ordinances.

Additionally, it requested that the Tourism Development Office Director be authorized to negotiate and sign all necessary grant agreements and related documents upon County Attorney Office, Risk Management and Purchasing Services approval and authorize the County Manager to execute necessary budget change requests

Summary Explanation and Background:

These FY 2022-2023 Tourism + Lagoon Grant Program projects are verified by the County Attorney's Office to be viable projects to receive support with Tourist Development Tax dollars per State Statute and local ordinance. Reimbursable grant awards are available to support projects that benefit tourism on the Space Coast and promote the health of the Indian River Lagoon. These Tourism + Lagoon Grant Program projects are approved and supported through the Beach Improvement Committee plan.

The Beach Improvement Committee at their July 18, 2022 meeting, and the Tourist Development Council at their July 27, 2022 meeting, voted unanimously to recommended the Board to approve the (10) projects, out of 14 submitted, listed below.

Derelict Vessel Removal

Brevard Country Natural Resources; Boating & Waterways

\$49,300

Description of Project. Brevard County is constantly combating the abandonment of vessels within our Indian River Lagoon system. Once left deserted and/or discarded within our waterways, the remnants of these vessels become debris that is a hazard to recreation, navigation and the environment. This Derelict Vessel Removal project, at seven locations spanning from Micco in South Brevard to Hwy 520 and the Port Canaveral area in North Brevard, will be an immediate improvement to the health of the IRL and a positive impact to local tourism. This project will improve recreational access and restore waterway habitat through vessel debris removal at waterway destination areas. Our project goals directly align with the TDC Tourism & Lagoon Grant Program goals of improved Waterway Destinations & Access and Habitat Restoration.

Innovative Solutions for Protecting our Public Spaces

Marine Resource Council

\$49,999

Description of Project. The project location is at the Lagoon House, a city of Palm Bay owned property located on a highly traveled and visible section of U.S. Highway 1 in the heart of Florida's Space Coast and overlooking the Indian River Lagoon. The proposed project is the continuation of a 1,000-foot-long living shoreline restoration demonstration site which has received previous support from the TDC. The project has already dramatically altered

the once ravaged xeric mixed canopy hammock bluff. The property is home to the Ted Moorhead Lagoon House, which houses MRC headquarters, an environmental learning center, and is a welcome center for the Indian River Lagoon National Scenic Byway. It is home to a shell midden, forested trails, lagoon overlooks including a 100-foot boardwalk, native plant and low impact development demonstrations, a pond with a native shoreline demonstration, and more. In partnership with the City of Palm Bay, MRC is engineering the site to develop it into a fully accessible, world-class regional destination, featuring its various demonstration showcases and to grow its significance as an environmental learning experience and destination. Funding this proposal will continue to help bring seagrasses back while protecting the City of Palm Bay public shoreline. This site is an emerging, and with continued support, a great educational and wildlife viewing destination for

tourists, restoration professionals, and local residents. It will be a natural solution in helping our seagrasses to return while improving the lagoon's water quality, enhancing wildlife habitat, and adding eco-tourism value to the important economic flow resulting from an estimated 11.1 million annual lagoon visitors. The initial phase of this project was funded by the TDC in 2019 and performed exceptionally well, accreting several feet of horizontal and vertical sediment, stabilizing the nearby sediments well enough for seagrass to grow, and attracting abundant wildlife including benthic filter feeders, fish, and birds. MRC has been monitoring this initial phase for three years in partnership with a volunteer drone pilot and other partners.

New Swell Mangrove Restoration and Outreach Project

Sea Redwine

\$37,266

Description of Project. This proposed project aims to leverages both creativity and community connections to 1) institute high profile restoration in collaboration with waterfront business owners to change the paradigm of incompatibility of mangroves and business and 2) demonstrate restoration in areas once considered too difficult to restore due to shoreline armoring with novel techniques to plant armored shoreline areas with the overall result being increased mangrove coverage and a change in perspective of waterfront businesses and mangrove co-existence. Ecosystems services such as erosion protection, habitat creation for fish and other wildlife, water quality improvement, and nutrient storage, have tremendous ecological value, which translates to economic value when aquatic resources provide recreation, aesthetics, and opportunities for tourism. In the Indian River Lagoon (IRL) ecosystem, the need for living shorelines, specifically mangrove habitat expansion, has been identified by the IRL Council and prioritized as a top-tier restoration activity due to its documented improvements to both ecosystem and economy. Combined, these benefits to both the lagoon and our community views will enhance the tourism experience in Brevard County.

Satellite Beach Adopt-A-Canal

City of Satellite Beach

\$49,999

Description of Project. The proposed Adopt-A-Canal Program is the first of its kind within the state, inspired by programs that focus on businesses adopting a local canal to clean. This program takes a multifaceted approach to encourage waterfront residents to become actively engaged in water quality improvements within their own canals. Through a six-pronged approach the City of Satellite Beach hopes to build a program that is reproducible in municipalities throughout the county and state. The proposed project will be composed of several tasks that are relevant to reduction of impacts to local canals, the Banana River and the Indian River Lagoon (IRL). By selecting a pilot canal the City of Satellite Beach will be able to initiate the City-wide program through outreach, hands on education, and baseline metrics. The City will obtain qualitative measures through surveys (pre, during, and post) and engagement during the one-year pilot, as well as quantitative measures with data collected via water testing, reef monitoring, native plant photos, wildlife surveys, and ecotour participation. The City of Satellite Beach has 255 waterfront homes along the west side, that are either on a canal or directly on the Banana River. There is approximately 30,506 linear feet of waterfront residential properties, and an additional 2,156 linear feet of canals on City owned property. With anthropogenic disturbances such as muck, lack of permeable surfaces, fertilizers, and pet waste the

degradation of the Indian River Lagoon has become a major concern for residents and tourism. Along with residential canals and riverfront property the City has canals that feed directly into the Banana River. Desoto Park has a small finger canal that is the winter home for hundreds of manatees. The City owned canals off Cassia Blvd. and Jamaica Blvd. are home to several species of aquatic turtles and are the fresh water source for resident gopher tortoises. These canals feed to the IRL so City staff will be adding the components of the project to these canals. The City has chosen the Chevy Chase canal to be the location of the pilot Adopt-A-Canal Program. The impetus being that the canal is wide, and the end of the canal has a City owned easement. Residents along this canal have been supportive with the City, stakeholders, and partners using the canal in past environmental programs.

Restoration of native clam communities in the Indian River Lagoon for improved water quality and economic resiliency

University of Florida Whitney Laboratory

\$49,100

Description of Project. Restoration of impacted clam populations is a critical step towards restoring the IRL to a macrophyte dominated ecosystem, as existed prior to the onset of major harmful algal blooms in 2011 (IRL Consortium, 2015; Philips et al. 2015). As water filtration is a significant ecosystem service provided by these organisms and a critical link to IRL recovery, bivalve population restoration has become a primary objective in restoration planning (see IRL Council- Habitat Restoration Priorities). We assert that natural selection pressures from algal blooms and related hypoxia events have favored phenotypes (genetic varieties) with significant genetic resistance to these stressors. Hence, repatriation of native, surviving genotypes of bivalves will immediately improve water quality and clarity and contribute to the recovery of seagrasses in the IRL. The primary goal of this proposed restoration activity is to continue our ongoing clam restoration activities in the IRL by repatriating hardy varieties of native clam species, known now as the "IRL Super Clam" that we have already successfully collected and spawned in our hatchery at the UF Whitney Laboratory on scales that provide for reproductive success. We have chosen to utilize high profile locations; adjacent to Kelly Park West boat ramp off 528 and the causeway boat ramps off of 520. These locations attract both local fishermen, recreators and tourists alike and thus are good locations for educating the public about the value of filter feeders in the IRL ecosystem and how we are working to restore them to their once bountiful populations. There are suitable planting areas proximate to both of these boat ramps, and as such both planting activities and the planned informational kiosks constructed onsite will be both educational and a persistent reminder that restoration activities of all kinds are underway in a massive effort to restore the lagoon. As both of these boat ramps and associated parks serve an estimated 500+ people per day, the number of local and visiting public that will be exposed to this work is significant. Further, being in popular places also ensures our project is a recognizable feature, where a series of these sites have been added each year since 2018, the most impactful of which is located at River Rocks restaurant in Rockledge where our first kiosk was installed in 2019 with help from the TDC. The TDC has funded this program two times previously with great success and we are employing an even more aggressive outreach campaign with this year's program enhancements to continue the restoration work and broaden our outreach campaign.

Samsons Island Submerged Lands Restoration, Phase 3
City of Satellite Beach

\$49,839

Description of Project. The project is located at Latitude 28.10'54.00 and Longitude -80.36'50.00. This is the western side of Samsons Island, a 52-acre nature preserve in the IRL. The preserve is owned and maintained by the City of Satellite Beach. The project location for

monitoring component of SISLR Phase 3 will be the same project site as Phases 1 and 2. This will also be the main highlight during the city eco-tour. The Samsons Island Submerged Lands Restoration (SISLR) project Phase 3 will address multiple problems facing the lagoon.

One is the size of the Indian River Lagoon (IRL) itself, where the 156-mile length of the IRL makes it difficult to know where large scale restoration projects should be implemented. Another is a lack of personal connection to the IRL where residents and visitors alike do not have a clear understanding of what is being done in the community by concerned residents and scientists to restore the Lagoon. There is an immediate need to quantify the success of the SISLR project over time to confirm that the work done in Phases 1 and 2 are repeatable. There is also a need to continue monitoring the survivorship and growth of the seagrasses, clam and

oyster planted, dispersed, and recruited inside the project site in Phase 2. It is equally important to share the data we collect from the project with scientists and the community. To do that, we need to collect data over time using the same standards and methods of the permitting agencies, state agencies, universities, nonprofits, and others that have previously and are currently collecting data on similar projects across the IRL. This monitoring, data collection and reporting will be one component of SISLR Phase 3. The second component of SISLR Phase 3 is a frequent eco-tour that communicates the lagoon and community benefits of the SISLR Project Phases 1, 2, and 3, as well as other lagoon restoration projects in the vicinity. A robust monitoring program tied to an eco-tour benefits the community. Today, the need for both public education and restoration is urgent.

Titusville Causeway Multi-trophic Shoreline Stabilization and Resiliency Action Project, Phase 2c.

Brevard County Natural Resources

\$250,000

Description of Project. For decades the south eastern shoreline along the Titusville Causeway has been exposed to erosion. This has negatively impacted the Indian River Lagoon (IRL) in this area, including the recreational use of this public access to the lagoon. The eastern Titusville Causeway has experienced this erosion, and the current strategy for protection of this important shoreline is not sustainable nor effective. Efforts to protect the shoreline along the County Causeways, have commonly used concrete rubble along the shoreline. This strategy has not reduced sand erosion and ultimately results in an unsafe and unpleasant scenario for recreational use. The TDC awarded funding for a Feasibility Study and also for the permitting and design of this project. The placement of Wave Attenuation Devices (WADs) can feasibly prevent any more destabilization during typical rain events and especially during another devastating storm like Irma. The installation and construction of WADs to protect the southern shoreline is sustainable and in addition will help promote ecological and recreational uses of this sandy shoreline beach and preserve the causeway as a recreational destination. Greater appeal to tourists results in higher tourism revenue. Once constructed it is anticipated that shoreline stabilization will reduce erosion and increased seagrass restoration in the Indian River Lagoon which provides habitat for a variety of estuarine wildlife including recreationally and commercially important fish, invertebrates and birds.

Brevard County Oyster Restoration

Brevard Zoo

\$113,840

Description of Project. Brevard Zoo's Restore Our Shores program (ROS), has been involved in oyster and living shoreline restoration in the Indian River Lagoon since 2009 and has been a partner of MDC's Shuck & Share project since 2014. Since 2014, Brevard Zoo has recycled 5.6 million pounds of shell from local restaurants, an oyster shucking house, and various other vendors and festivals. This recycled shell has been used to support various oyster restoration projects in the Indian River Lagoon, including Brevard Zoo's Oyster Gardening project and the construction of over 60 oyster reefs in partnership with Brevard County Natural Resources Management Department. Over the last four years, Shuck & Share has gone from recycling from only one partner in Brevard to 24 and has expanded the shell pickup route to serve restaurants along the entire length of the county. Since August 2018, Brevard Zoo has collected 1 million pounds of shell from these restaurants with the help of Tourism + Lagoon grant funding. To accomplish oyster restoration in the IRL, a significant amount of recycled oyster shell is needed as project material. Twenty linear miles of oyster restoration is planned for Brevard County as part of the Save Our Indian River Lagoon Project Plan. This plan was passed in November 2016 by Brevard County voters and project construction funded through a half-cent sales tax. These planned oyster restoration projects will require a minimum of 16.7 million pounds of oyster shells over 10 years as shell substrate is the most widely used fundamental material for oyster restoration. Shortage of shell for oyster restoration projects is an issue nationwide as shell disposed of from restaurants most often ends up in the landfill, diverted for use in filling roads, or ground to supplement poultry diets. To meet the demand restoration projects have for shells, many states, counties, and NGOs in the Southeastern US operate robust shell recycling programs. Currently, Brevard Zoo's Restore Our Shores program is the only organization collecting oyster shell from area restaurants and seafood vendors in Brevard County. The Brevard Zoo requests \$113,840 for Shuck & Share to expand the project to a total of 30 recycling partners, increase reef building efficiency, and expand restaurant marketing and visitor engagement. This funding will support the direct costs of shell collection labor, shell collection materials, shell transport fees from facilities with high shell production, a skid-steer and trailer to move shell and materials to restoration sites, and marketing and event materials for restaurants and visitor engagement.

Restoring Seagrass for Improved Natural Resilience

Brevard County Natural Resources

\$250,000

Description of Project. Thirty-thousand acres of seagrasses have been lost in the Indian River Lagoon. Modified nutrient cycling and destabilized sediments limit light necessary for seagrass growth by promoting algae blooms and resuspension. In 2020-2021 an unusual mortality event was documented for manatees in the region and attributed to emaciation from limited seagrass and macroalgae food availability (Florida Fish and Wildlife Conservation Commission). By planting a 1.5-acre area of seagrass, this project will contribute to restoration efforts of this critical habitat in the Indian River Lagoon. Seagrass meadows provide many ecosystem services, including attenuation of wave energy and providing food and nursery habitat for many fish species. This project will plant seagrass via multiple methods including herbivore exclusion cages and enhancements to the sediment to better understand how to successfully and efficiently augment seagrass recovery through

restoration efforts. The project is planned, subject to permitting, for 4522 Highway A1A, Melbourne Beach, Florida at a property owned by Brevard County and managed by the Environmentally Endangered Lands program. This site provides access for staging, deployment, and future monitoring of the seagrass planting. There are 10 acres available at this location for the 1.5 acres of seagrass planting and additional 0.5-acre control monitoring plots. The project is scalable to grant fund availability and permitting. Benthic surveys were conducted in September 2021, to assess any existing benthic resources (i.e. seagrass, macroalgae) and sediment and water depth suitability for seagrass planting. Water depths are within the range recommended for seagrass persistence (Morris et al. 2022), with appropriate sediment to support seagrass growth.

KBB Flex Team North Banana River Drive Litter Removal

Keep Brevard Beautiful

\$40,000

Description of Project. Keep Brevard Beautiful (KBB) has existing contracts with the TDC and other government entities in Brevard County to remove litter from roadways along the Indian River Lagoon (IRL). Specifically, we have had a contract for several years with the TDC that provides for litter removal along four causeways, including SR 528. However, those contracts were constrained on frequency and didn't provide the flexibility for KBB to focus additional attention where needed in order to prevent or minimize litter entering the IRL and damaging the delicate ecosystem. Since the pandemic, there has been a significant increase in the number of visitors enjoying the IRL along the causeways, with a commensurate increase in litter left behind. This litter removal project will occur predominantly along North Banana River Drive on Merritt Island near the 528 Causeway but other problem spots along other causeways may be included, as needed. This road was chosen, because of its extremely high resident and tourist traffic, since it is adjacent to 528, a main artery. Litter along this stretch of road finds its way very quickly into the Banana River from both sides of the road and harms the fragile ecosystem of the IRL. KBB has focused much of its attention on keeping the beaches themselves clean and welcoming to tourists and residents and has done weekly cleanups along the causeways and in the rivers. However, we had not had the funding to ensure consistent litter removal to the level currently needed, given the significant increase in IRL usage until we were awarded last year's grant. This grant would allow us to continue our efforts to impact tourism and help the IRL. Based on our years of experience managing volunteer cleanups and dedicating staff where volunteers cannot satisfy the need, as well as litter removal in this area during the 2021-2022 grant cycle, we believe KBB will continue to succeed and make a significant impact.

Clerk to the Board Instructions:

Please return a memo of the Board's action to the Tourism Development Office and CAO.