



Operations and Funding Status Report
Brevard County
Environmentally Endangered Lands Program Referendum

Summary Overview

The Brevard County Environmentally Endangered Lands Program referendum and associated operational funding will sunset in 2024. Currently there is no mechanism in place to fund program operations beyond 2024. The following is a brief history summary of EEL Program funding.

1. In August 1990 Brevard County voters approved the first referendum for the EEL Program. It provided for an ad valorem tax with a maximum millage of 0.25 mil for 20 years and allowed bonding of up to \$55 million. \$43,090,000 was bonded over the 20 life of the referendum. The voter-approved maximum millage was assessed from 1991 through 2005 and was reduced in the last six years of the referendum resulting in a loss of nearly \$16 million in potential funding.
2. A long-term Financial Plan for the 1990 EEL Referendum was proposed to the County Commission in 1997 and was never adopted. This proposed plan included the establishment of a land management endowment fund and incrementally moving the program under the County's General Fund. At the time, the County Commission postponed the plan for future consideration until the referendum was due to sunset in 2011.
3. In November 2004 Brevard County voters approved the second referendum for the EEL Program. It provided for an ad valorem tax with a maximum millage of 0.2085 mil for 20 years and authorized bonding of up to \$60 million. \$45 million was bonded and \$4 million of that was defeased (paid back early) to reduce bond debt. The authorized maximum millage under the second referendum has not been assessed resulting in a loss of nearly \$30 million in potential funding to date. Together nearly \$46 million in potential funding for the EEL Program has not been collected.
4. In 2008, the State Legislature created a new rule that restricted the ability of a local government to raise voter-approved millage rates as needed within the voter-approved maximum rate range.
5. The 2008 recession caused declines in property values resulting in a revenue shortage which caused the EEL Program to begin reducing its operations budget in 2009. This resulted in a 26% loss in revenue and a 35% reduction in staffing over the following 8 years.
6. With the sunset of the first 1990 referendum in 2011 the program experienced an additional \$1 million loss in annual operating revenue. The option to bring the 2004 referendum millage rate up to the voter-approved maximum to make up for this loss in revenue, although still allowable under the County Charter, was now restricted by the new State rule enacted in 2008.

7. Between 2013 and 2018, the Program had to utilize \$3 million of the bond proceeds to support capital maintenance operations which limited the program's ability to continue land acquisition efforts.
8. Due to three consecutive years (2017, 2018 & 2019) of incremental rate increases by the County Commission at the maximum allowable under the new State law with a super-majority vote, the Program was able to prevent further budgetary reductions.

Preserving Brevard's Natural Landscapes

In 1990, Brevard County citizens overwhelmingly voted to protect unique places in our community by purchasing, protecting and maintaining Environmentally Endangered Lands. The referendum called for purchasing, protecting and maintaining environmentally endangered lands and making improvements as appropriate for passive recreation and environmental education. Due to the success of the program and ongoing public support, a second referendum was approved by the voters in 2004 to acquire even more endangered land and water areas to protect animal habitats, water resources, open spaces for public use and recreational opportunities.

The fundamental purpose of the Program is to protect the rich biological diversity and health of Brevard County's ecosystems, to manage for conservation, and to provide passive recreation and environmental education. The program has a primary focus on:

- Natural Communities by prioritizing the needs of threatened or endangered habitats, plants and animals.
- Forest Resources – by protection of forest types and their associated ecological values.
- Wetlands and Coastal Resources -
 - Conserve natural and aesthetic attributes
 - Improve buffers to enhance commercial and recreational saltwater and brackish fishing opportunities.
 - Improve the upland-wetland estuarine linkages.

Key Successes and Accomplishments:

- Preservation of 28,000 acres of upland and wetland habitats including over 37 miles of shoreline ecosystems that directly border the Indian River Lagoon and its major tributaries, along with more than 25 miles of additional frontage along smaller tributaries and major ditch systems that drain into the Indian River Lagoon and the St. Johns River.
- Creation of an extensive 75-mile multi-use trail network of passive recreation opportunities for citizens and visitors to enjoy the natural beauty of Brevard.

- The development and operation of three Management and Environmental Education Centers that provide regular educational programming and community events for Brevard citizens and visitors.
- Leveraged \$42 million in acquisition partner funding to acquire land considered critical to the long-term preservation of animal and plant diversity.
- Restoration and management projects on over 25,000 acres focused on improving natural systems to preserve ecosystem services such as: Water conservation, wildlife food sources, wildfire prevention, carbon sequestration, aesthetic and increased land values.
- Provides oversight, support and ongoing collaboration with volunteer scientific researchers to aid in the understanding, effective management and protection of biodiversity.
- Surveying, documentation and protection of cultural resource sites.



Over the past 30 years, these strategies have established an important conservation and educational framework integral to our local communities. With ongoing funding support, this framework offers a strong base to continue preserving and enhancing Brevard for its residents and visitors for decades to come.

Completing Wildlife Corridors

Protecting lands where white-tailed deer, Florida scrub jays, bobcats, black bear, otters, bald eagles and many other species is an ongoing and essential EEL strategy to create wildlife corridors for species that are key to Florida's diverse landscape and character. Although much has been accomplished, there are still many landscape connectivity gaps where acquisition is critical to complete these corridors. Incomplete acquisition of these landscapes limits the program's ability to implement land management actions that are critical to protect biodiversity and maintain listed species.

Most remaining lands identified within the EEL acquisition strategy are small tracts to fill important gaps existing between larger conservation areas. Completing these important habitat connections is critical to the long-term protection of biological diversity. The Indian River Lagoon will benefit from acquisition of key land linkages along the northern shoreline; proper management of shoreline parcels works to protect the biodiversity and water quality of this important waterway.

The Program has a long history of cooperation with local developers by offering development mitigation opportunities through direct land donation and habitat restoration projects. The Program has also received direct acquisition support from the United States Air Force to create off-site mitigation opportunities for development projects at the Cape Canaveral Air Force Station. Brevard County Government has also utilized the EEL Program as a mechanism to satisfy project development mitigation requirements. State permitting agencies approved these donations and projects on the condition they would be managed by the County in perpetuity as conservation lands and developers were required to contribute a one-time management fee to the County to support long-term management. Most of these properties and project areas are also encumbered by conservation easements that are held by the permitting agencies.

Approximately \$15 million dollars from the first referendum to support future acquisitions and capital improvements remains unbonded. The potential for issuing these remaining bonds is unlikely due to the limited time remaining in the life of the referendum.

Maintaining Natural Areas for Future Generations

In the fragmented landscapes of Brevard County, it is critical to implement management actions on a regular basis to ensure the referendum objectives are met. Keeping prescribed fire cycles and controlling invasive exotic species cannot occur without active management. Most Florida habitats have evolved under the constant influence of fire and depend on its rejuvenating properties for long-term survival.

Prescribed fire and regular land management actions are of critical importance to maintain healthy and diverse plant and animal populations. EEL lands support a variety of threatened and endangered species including the Florida Scrub-Jay which is directly dependent upon ongoing habitat management for its continued survival. Protecting native biodiversity is the first and overriding objective of the EEL Program.

Further reductions in funding and/or staffing resources will further restrict the ability of the Program to maintain prescribed fire cycles. Over the past 25 years extensive resources have been committed to reintroduce recurring fire cycles into the fire-dependent natural communities managed by the Program. If fire cycles are unable to continue, many natural habitats will again become overgrown resulting in the decline of wildlife food sources and general biological diversity. Overgrown natural landscapes become a wildfire hazard which increases fire severity causing more potential harmful impacts to wildlife, plant species and adjacent homes and businesses.

If left unburned for long periods, EEL Sanctuaries become more vulnerable to wildfire, increasing the potential for impacts to nearby homes and businesses. Maintaining regular burn rotations reduces fuel build-up and protects homes and businesses from wildfire. Wildfires, unlike prescribed burns, can have a significant negative impact on natural habitats and wildlife.

The Program currently maintains over 100 miles of fire control lines throughout the nature sanctuary network. These fire lines require regular maintenance with a tractor and disk harrow to prevent vegetation from growing to prevent the spread of fire during both controlled and wildfire events. Fire control lines need to be maintained at least 3 times annually and in some cases more often depending on the type of habitat. The line width typically requires 3 passes with the tractor during each maintenance action with translates to over 300 miles per action and over 900 miles per year.

Invasive and exotic plant and animal species have established within our native habitats in Florida. To prevent invasive species from taking over our native landscapes, regular maintenance and monitoring is required to keep harmful species under control. The EEL Program has worked closely with the State of Florida Invasive Plant Management Program to invest over \$4.3 million dollars in State grant funding to remove non-native species and maintain exotic-free areas. Invasive plant spreading from surrounding private property must be monitored and controlled to maintain existing habitat restoration efforts.

Over the past 25 years, the Program has significantly reduced the negative impacts invasive plant and animal species have had on our natural landscapes. Ongoing efforts are critical to ensure that non-native seed banks and newly-introduced non-native species remain controlled. The suspension of these control efforts will allow for the re-establishment of many non-native species which are under a weekly maintenance schedule. The proliferation of feral swine has created a constant need to maintain regular control efforts to protect native plants and wildlife. Since there is currently no methodology to fully eradicate feral swine from Florida, it is critically important to maintain regular and varied population control methods to prevent this invasive species from outcompeting and overtaking our native wildlife species.



Site security monitoring and timely vandalism repairs are critical to protecting the ecological resources. Sites not patrolled by staff on a regular basis attract inappropriate activities both damaging ecological resources and compromising the recreational experiences of visitors. Limited staffing and declining financial resources have significantly delayed patrols from once a week to once a month. A host of problems can occur under a lack of safety monitoring, such as fence and gate vandalism, dumping, wildlife poaching, off-road vehicle damage and other inappropriate activities likely to gravitate to remote and unsupervised locations.

Repairs to vandalized or generally degrading facilities are a weekly occurrence. The Program currently maintains over 61 miles of boundary fences and 152 access gates that require regular maintenance to prevent off-road vehicle access, dumping and illegal hunting. Boundary signs along the boundaries must also be monitored and replaced frequently to meet statutory posting requirements.

Staff is also very limited in their ability to perform regular species monitoring in order to effectively measure accomplishments in achieving biodiversity preservation objectives. Although the program has established Friends Groups at the education centers and benefits from a significant amount of volunteer support annually, the volunteers cannot provide for the level of continuity necessary to adequately meet program objectives.

Site Specific Management Plans are required for all properties managed under the Program to guide the management of the site. These management plans are required to be updated and re-approved every 10 years. Most of the lands managed under the Program are State-owned and require a State Land Management Review every 5 years in order to determine if the site is being managed according to the goals and strategies of the approved management plan. The management plan approval and amendment process requires significant staff time and can take up to a year or more to complete depending on the status of site management priorities.

Creating and Maintaining Passive Outdoor Recreation Opportunities

More than 75 miles of public use trails for passive recreation including hiking, mountain biking, horseback riding, nature observation, paddling, fishing and camping provide outdoor opportunities for citizens and visitors. EEL has worked with 56 Eagle Scouts to date to construct many public use resources in support of visitor activities. Other facility resources include 49 miles of access and maintenance roads, 33 trailheads and parking areas with 51 information kiosks.



Oversight and maintenance of public use resources is essential to ensure proper function for visitors and to verify that facilities and amenities do not negatively impact plant and animal species. Without proper oversight, trails systems and parking areas can be vandalized or used inappropriately. A quick response to these issues helps discourage them from happening in the future. The Program's trail system requires staff inspection and maintenance at a minimum once a month and more often as storm events occur. Management actions include mowing, fallen tree removal, erosion repairs, boardwalk, overlook, bridge repairs and trail marker replacement. Trailhead

parking areas can be a magnet for inappropriate activities which can only be deterred by a regular staff presence.

Educating Visitors About Conservation Benefits

Three Management and Environmental Education Centers currently operate under the EEL Program: The Enchanted Forest, Sams House at Pine Island and the Barrier Island Center. These popular centers collectively host between 70,000 and 90,000 visitors annually. As annual visitation continues to increase, funding to maintain and grow these quality experiences has declined.



The Management and Education Centers are open to the public six days a week (Tuesday – Sunday) from 9am-5pm. One full-time and two part-time staff members (one part time at Barrier Island Center) are dedicated to the day-to-day operations of the center. This includes assisting visitors, scheduling and implementing educational programs, coordinating facility rentals, volunteer coordination, curriculum development and coordinating special events.

The budget and staff reductions at the centers have impacted program efficiency and the Program's ability to be responsive to community needs and interests for environmental education. Reductions in the land management positions and/or hours have made it more difficult for center staff to complete their regular weekly workload. Current funding limitations are preventing the Program from completing the development of its fourth and final education center proposed for the Malabar Scrub Sanctuary. The development of this last Management and Environmental Education Center is highly-supported by the Town of Malabar.

The regular maintenance and upkeep of the three Management and Education Centers requires regular staff support and funding resources. Each facility has grounds maintenance needs that include mowing, pressure washing, painting, window cleaning, access road repairs, signage, etc.

Sustaining Operational Support

The EEL Program administrative office provides operational oversight for annual budget development, annual expenditures, personnel management, land acquisition, contracts administration, advisory committee coordination, management plan development and amendments, purchasing, coordination of equipment and fleet maintenance, county

commission agendas, State management leases, equipment and supply inventory, safety training, incident / accident reporting, public records requests, grants management, warehouse storage and supply distribution, annual reporting and public relations.

Over the last 14 years, the administrative staff has been reduced by 50%. The Program's accounting support was absorbed by Parks and Recreation staff in Viera. Staff at the Program office have had to absorb more administrative responsibilities previously held by other staff such as office visitor reception, human resource issues, grants, contracts administration, public records requests and general office management.

The Program's annual operations budget (excluding land acquisition expenses) is between \$2.5 and \$3 million. Annual operations costs fluctuate depending on the need for capital expenses related to equipment initial restoration project costs.

The Value of Land Conservation to Brevard County Citizens

Numerous studies have shown that natural areas and open space contribute positive economic benefits to local communities. In recognition of the importance of cost-benefit analyses to assist program planning and annual budget allocations, the EEL Program is encouraged to identify and quantify the economic costs and benefits of EEL sanctuaries. In 2020 the program contracted with Closewaters LLC to evaluate program accomplishments in an effort to quantify the economic value of the EEL Program to Brevard County and the value to the County of continuing program operations into the future.

A variety of categories of value were analyzed:

- Eco-Tourism
- Contribution to restoration of the Indian River Lagoon
- Taxed value to constituents
- Volunteer labor
- Value to the development community for mitigation
- Leveraged State and Federal funding

The analysis determined that the Present Value of the Program to the County is \$496 million.

A variety of additional categories were identified as likely having significant economic value but were beyond the limited scope of this particular analysis. These categories include; quality of life, wildfire risk protection, local government development mitigation potential, water resource protection and aquifer replenishment, flood protection, carbon sequestration, air quality, human health benefits, endangered species protection, and environmental education programming.

As we consider our ability to keep up with the land management actions required to maintain program objectives with decreasing resources, it is clear a long-term funding strategy must be considered. The continued success of the Program relies on adequate staffing and equipment to carry out land management actions, educational programming and to maintain program infrastructure.

Funding History Summary

The EEL Program was approved by the voters of Brevard County to ensure the long-term preservation of our natural heritage and biological diversity for future generations. It is anticipated the Program will continue to see its millage rate lowered each fiscal year, and there is currently no long-term funding plan in place to address program operations after 2024 when the referendum sunsets.

In 1997, at the request of the County Commission, the EEL Program Selection and Management Committee recommended a Financial Plan to ensure the Program would meet its capital bond debt-service obligations and have sufficient funds for long-term management. The proposed plan used a combination of annually appropriated general revenue and EEL Program ad valorem revenue not required for bond debt to pay Program costs. The proposal recommended establishing an endowment fund and the maximization of the voter-approved millage collection at 0.25 mils.

The funding support structure established in the 1990 and 2004 referenda provided for two 20-year bonding periods. Due to the termination of the 1990 referendum in 2011, over \$1 million in program operational revenue was lost. This revenue loss coupled with the current funding limitations of the 2004 referendum, has created a need to establish an alternative long-term funding option to continue Program operations.

On September 23, 1997, the Board of County Commissioners chose to fund EEL operations through the use of the ad valorem millage that was not required for bond debt service. At that time it was noted, the Board of County Commissioners would consider funding options and financial resources to address the operations of the EEL Program pursuant to the directives of the 1990 voter-approved referendum after 2011. During the first 15 years of the Program, the maximum millage approved by the voters was levied at 0.25 mils. Starting in 2007, this millage rate was lowered and eventually declined 34% by the time the referendum ended in 2011. The reduction in the annual millage rate of the 1990 referendum represented nearly \$16 million in uncollected revenue.

In 2004, a second EEL referendum was approved by the voters to continue funding land acquisition and management in an additional 20-year timeframe. The structure of the 2004 funding source was similar to the 1990 referendum by funding program operations with the excess ad valorem taxes not required for bond debt service. The maximum millage rate of .2085 has never been levied. The millage levy began at 16%

(0.1760 mills) below the voter-approved maximum and has continued on a downward trend to its current rate 0.1114 or 46.6% below the voter-approved maximum. During fiscal years 2008/09 and 2009/10, the millage rate dropped 37% below the voter approved maximum. Further reductions of the millage rate of the 2004 referendum through Fiscal Year 20/21 will amount to an additional \$46 million of uncollected revenue.

The bonding associated with the 1990 referendum never reached its full voter-approved maximum capacity of \$55 million. The first referendum bonds were issued in 1991, 1993 and 2005 totaling \$43,090,000. Only \$45 million of the voter-approved maximum capacity of \$60 million has been issued under the 2004 referendum, and \$4 million of these bond proceeds were used to pay off bond debt in 2011.



Declining millage rates of the past 13 fiscal years have required the EEL Program to reduce the annual operations budget by 26% and staffing by 30%. The decline in operational resources has significantly impacted the Program's ability to meet operational goals and maintain effective operations efficiently. Many management tasks cannot be completed in a timely manner. For example, it is not possible with the decline in staff support to maintain more than 102 miles of fire control lines on EEL sanctuaries, keep up with annual prescribed burns, maintain over 75 miles of public use trails, control non-native species, regularly monitor plant and animal populations, meet the community's environmental education needs and be responsive in a timely manner to unforeseen daily issues.