

ENVIRONMENT AND SUSTAINABILITY

DEPARTMENT MISSION STATEMENT

We are dedicated to providing the highest quality services to our community by developing and implementing adaptation and mitigation initiatives to preserve, protect, and enhance our natural resources.

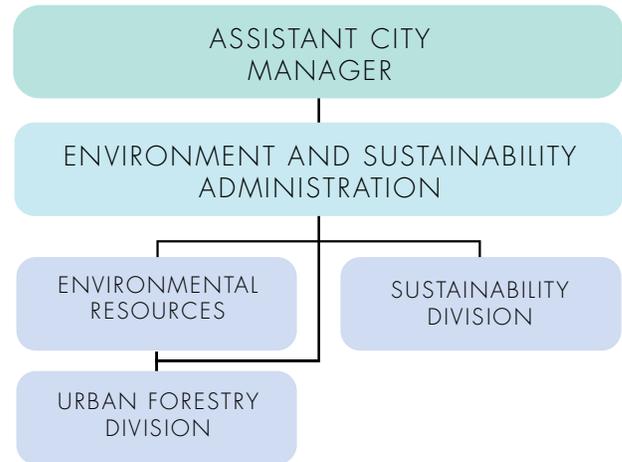
DEPARTMENT DESCRIPTION

The Environment and Sustainability Department is represented by professional, semi-professional, and licensed disciplines working in Administration, Environmental Resources, Sustainability, and Urban Forestry.

The Environmental Resources Management Division provides internal support across City departments to ensure all public projects, not just those labeled as environmental, avoid, minimize, and mitigate environmental impacts, as well as enhance the natural environment through their design. This Division serves as the City’s in-house environmental consultant and is the liaison between the City and other government agencies for environmental concerns. Services provided by this Division include natural resource management, environmental permitting assistance, regulatory compliance oversight, plan review, technical advisory, and staff and community trainings.

The Sustainability Division works across all City departments to improve the sustainability of government operations to save money, improve processes, and enhance the environment. This Division handles climate change mitigation efforts with a focus on reducing greenhouse emissions from government operations and community-wide activities, reducing internal operational costs and improving operational efficiencies, and assisting with the development of the Resiliency Strategic Plan. This Division focuses on energy reduction, water conservation, recycling and waste reduction, and education and outreach.

The Urban Forestry Division oversees the urban forest by providing regulatory supervision and management. The Division maintains the citywide Geographical Information System Tree Inventory and was successful in developing the City’s first Urban Forestry Master Plan, which was unanimously adopted in October 2020 by the City Commission. The Urban Forestry Division is currently working on implementing the goals and recommendations established by the Urban Forestry Master Plan. Since the inception of the City’s Tree Preservation Ordinance on June 15, 2015, this Division issues tree permits, oversees tree mitigation, conducts heritage tree evaluations, conducts tree protection barrier inspections, provides tree risk assessments, and reviews plans for citywide tree selection/installations. The Division also oversees the Commemorative Tree Program.



FISCAL ENVIRONMENT

The Environment and Sustainability Department is primarily funded from the General Fund. The General Fund charges an administrative fee to Enterprise Fund departments, the Redevelopment Agency (RDA), and the Resort Tax Fund to cover the cost of various administrative support functions provided by the General Fund.

The Environment and Sustainability Department is also supported through revenues generated from Sustainable Initiatives Contributions from the franchisee waste haulers. This fund provides financial support to the department by partially funding personnel service costs, as well as environmental and sustainability initiatives and programs. The waste haulers franchisees and the beachfront concessionaires’ agreements include provisions to provide environmental grants to non-profit organizations. These competitive grants provide funding to community-based organizations with the capacity and experience to undertake projects that leverage the work from the Environment and Sustainability Department. In FY 2020, eight local non-profits organizations were granted funds to support projects related to sustainable practices, restoration and enhancement of our natural environment, water quality, wildlife conservation, as well as outreach and education through voluntarism and youth engagement.

In January 2016, the City Commission created the Sustainability and Resiliency Fund. This fund generates revenues from developments that elect to pay a fee in lieu of providing electric vehicle charging stations and developments that elect to pay a fee in lieu of building to the City’s green building standards. By ordinance, this money is required to be used for projects that enhance the community’s environmental sustainability. In FY 2021 \$68,430 was generated from fees and these funds will be soon allocated to public improvements projects related to sustainability and resilience.

ENVIRONMENT AND SUSTAINABILITY

FISCAL ENVIRONMENT CONT'D

Beach Renourishment – The 4th amendment to the RDA Interlocal Agreement with Miami Dade County included a requirement that the City set aside \$1.5 million (for each of the six years outlined in the agreement) each year to help fund County led beach renourishment. For FY 2020, the County provided the City \$75,000 to fund a dune enhancement study.

The Urban Forestry Division is partially funded from the General Fund and the Tree Preservation Trust Fund. The Tree Preservation Trust Fund generates revenues via the City’s Tree Preservation Program, which includes fees associated with tree permit plan review, inspections, code violations, fines, contributions, and mitigation. Additional revenue is generated through donations made to the Commemorative Tree Program, which are then deposited into the Commemorative Tree Trust Fund. The Tree Preservation Trust Fund covers ancillary and personnel expenses related to the Tree Preservation Program such as reforestation efforts, tree giveaways, reforestation related brochures, and related supplies. The Commemorative Tree Trust Fund covers the expenses related to the Commemorative Tree Program such as commemorative tree plantings, one-time commemorative tree replacement costs, certificate issuance, and related supplies.

BUSINESS ENVIRONMENT

The Environment and Sustainability Department works with other City departments to integrate a holistic resiliency approach to climate change mitigation and adaptation efforts. The department focuses on protecting and enhancing our natural environment through sea level rise adaption efforts, natural resource management, and environmental compliance.



STRATEGIC ALIGNMENT

Main Vision Area:

Environment & Infrastructure

Management Objectives:



- **Environment & Infrastructure**

- Work regionally and nationally to protect Biscayne Bay water quality and to maintain a healthy dune and beach system
- Reduce greenhouse gas emissions and heat
- Make existing and new government buildings assets, and fleet efficient, sustainable and resilient

- **Mobility**

- Improve the walking and biking experience

- **Organization Innovation**

- Support all objectives to improve strategic decision making and financial stewardship, making the city more business friendly and user friendly, with an employee culture of problem solving and engagement
- Implement the General Obligation Bond

Strategic Plan Actions:

- **COMPLETE** the Beach walk
- **MAKE** substantial progress (towards completion of entire) Bay walk

Budget Enhancement Actions:

- On-Site Mitigation Inventory & Assessment

Resilient305 Actions

- **PRESERVE** and Restore Biscayne Bay
- **BUILD** Reef Biodiversity and Defenses
- **NATURE-BASED** Infrastructure – More than Just Habitat!
- **IMPLEMENT** Sea Level Rise strategy
- **DEVELOP** Sea Level Rise Checklist for Capital Projects
- **REDUCE** “Back-Bay Flooding”
- **RESILIENT** Parks
- **RESILIENT** 35 in the 305 Network
- **STRENGTHEN** Resilience Planning
- **EXPAND** Renewable Energy
- **RISE** to the Rescue

ENVIRONMENT AND SUSTAINABILITY

SIGNIFICANT ACCOMPLISHMENTS

- Completed project with Miami-Dade County, the state of Florida and the U.S. Army Corps of Engineers to bring 305,000 cubic yards of sand to erosional hotspot beaches in the vicinity of 65th Street, 55th Street, 46th Street and 28th Street
- Passed the City's Fertilizer Restriction Ordinance to help reduce nutrients from entering Biscayne Bay
- Developed and implemented the virtual outreach series #Sustainachella during COVID-19, which reached over 54,000 people
- Planted over 520 trees within the last year as part of reforestation efforts through grant initiatives and GOB Projects
- Completed and adopted the City's first Urban Forestry Master Plan in October 2020, which sets out goals and recommendations for future reforestation and development throughout the City of Miami Beach to create a resilient tree canopy and enhance quality of life
- Designated by the Arbor Day Foundation and the Food and Agricultural Organization of the United Nations (FAO) as a Tree City of the World
- The Urban Forestry Division adopted new tree permit application procedures and review process to provide 100% contactless service
- Updated the resilience portal with exclusive information on resilience, sustainability, climate change, and sea level rise (www.mbrisingabove.com) and the virtual resilience tour app funded by a grant awarded by the Miami Foundation which features a self-guided kayak tour
- Implemented the City's first community compost hub to divert food waste, reduce greenhouse gas emissions, and provide educational opportunities to the community

Passed the City's Fertilizer Restriction Ordinance to help reduce nutrients from entering Biscayne Bay.

CRITICAL SUCCESS FACTORS

- Improve quality of life through better air, water, and environmental quality
- Improve the City's environmental regulatory compliance
- Increase the City's natural habitat to enhance ecosystem function and biodiversity
- Maintain recreation, environmental, and storm protection functions of the beach/dune system
- Increase the quality and quantity of the City's urban tree canopy
- Increase awareness regarding the City's resilience and sustainability initiatives
- Look into investments for the City's sustainability and resilience improvements that can lead to short-term and long-term cost savings for the City
- Improve the City's operational and environmental sustainability
- Willingness and commitment to share information and standardize data (integration)

FUTURE OUTLOOK

The Environment & Sustainability Department will continue to focus on protecting and enhancing our natural environment through sea level rise adaptation efforts, natural resource management, and environmental compliance. The Environmental Resources Division will continue providing internal support across City departments to ensure all public projects, not just those labeled as environmental, avoid, minimize, and mitigate environmental impacts, while enhancing the natural environment through their design. The Environmental Resources Division will also continue to serve as the in-house environmental consultant and liaison between the City and other government agencies for environmental concerns. Furthermore, the Environmental Resources Division will continue providing existing services to further improve the environmental compliance of the community, as well as protect, restore, and manage the City's natural resources.

Creating a more sustainable community includes improving resource efficiencies, preventing harm to the natural environment, and protecting human health, while benefiting the social, economic, and environmental well-being of the community for present and future generations. The Sustainability Division will continue working with all City departments in order to improve internal sustainability efforts to save money, improve processes, and enhance the environment. This Division will continue to assess the sustainability of current programs and identify opportunities to save money and increase efficiencies. This Division will also continue to develop and implement specific initiatives including conducting energy audits, developing EnergyCAP reporting, improving recycling and waste reduction, continuing education and outreach, and developing policies that enhance the community. The Sustainability Division is currently working on the development of a Climate Action Plan which will provide actions to be prioritized by the City to further reduce greenhouse gas emissions.

ENVIRONMENT AND SUSTAINABILITY

FUTURE OUTLOOK CONT'D

The Sustainability Division is collaborating with the Property Management and Parking Departments to develop a plan to transition the City's fleet to low or no-emissions vehicles and upgrade our electrical infrastructure to support the future fleet.

Urban trees are a vital part of City infrastructure, providing numerous environmental, economic, social, and health benefits. Among the identified benefits are cleaner air, reduced energy usage, less storm water runoff, amelioration of high urban temperatures and UV Rays, higher property values, improved aesthetics, a greater sense of health and well-being, and lower crime rates. The Urban Forestry Division will begin the implementation of the City's first Urban Forestry Masterplan, continue to promote and enhance the Commemorative Tree Program, and continue to refine the Tree Preservation Program with increased resilient reforestation efforts.

FUTURE OUTLOOK CONT'D

The Department will continue to collaborate with all City departments to enhance sustainability efforts throughout our government operations and our community, strengthen resilience, and explore innovative adaptation and mitigation solutions for the City through:

- Developing solutions to issues in public health and safety, real estate and historic properties, architectural standards, energy consumption, income inequality, affordable housing, disaster preparation and recovery, community building, governance, community diversity, etc.
- Focusing on flexible, low-regret strategies
- Capitalizing on adaptation opportunities that accommodate to a changing environment and protect the character of our diverse community
- Adapting to changes in the City landscape based on natural disasters
- Prioritizing natural infrastructure solutions to sea level rise, such as citywide beach & dune system restoration, the use of bioswales and tree plantings to mitigate stormwater runoff, and the enhancement and expansion of living shorelines
- Maintaining a high quality of life for all of Miami Beach's residents, businesses and visitors

