

MIAMI BEACH

COMMITTEE MEMORANDUM

TO: Land Use and Sustainability Committee Members

FROM: Eric Carpenter, City Manager

DATE: February 20, 2025

TITLE: DISCUSS A PROPOSAL ESTABLISHING A HOMEOWNER ASSISTANCE PROGRAM FOR SINGLE FAMILY HOMES TO RESTORE FLOOD-DAMAGED LANDSCAPING.

RECOMMENDATION

The Administration does not recommend establishing a new homeowner assistance program for single family homes to restore flood-damaged landscaping. Instead, the Administration recommends that a robust education program be initiated, wherein the public is provided with information on the best plants to use on their property, specifically for the purpose of withstanding the environmental challenges of stormwater and king tide flooding on low-lying areas of their properties. This information can be provided within the City's dedicated Flood Awareness webpage and through communications channels (www.miamibeachfl.gov/flood-awareness).

BACKGROUND/HISTORY

On November 20, 2024, at the request of Commissioner Alex Fernandez, the Mayor and City Commission (City Commission) approved item C4Q (Attachment A), a Referral to the Land Use and Sustainability Committee (LUSC) to discuss a program aimed at assisting homeowners in single family homes who have invested in landscaping and vegetation to enhance the privacy, sustainability, or aesthetic value of their homes, whose landscape becomes damaged or is destroyed due to flooding caused by stormwater or king tides.

Said program would ideally provide targeted assistance to homeowners in single family homes whose properties are located within areas designated for a Neighborhood Improvement Project or Critical Needs Project, which are aimed to address issues such as flooding through long-term resiliency improvements. The City can offer technical support in the form of information pamphlets and dedicated landing pages on the City's websites on how to select the most appropriate plants based on existing site locations.

ANALYSIS

Landscape resilience in the face of flooding: certain distinctions must be made. The term "Salt Tolerant" usually refers to plants that have a high tolerance for salty wind and salt-water spray directly affecting the plant's foliage. Alternately, "Salt Water Inundation" occurs when the root zone of the vegetation is flooded with salt water for a short period of time, as is the case in a storm surge, or with standing salt or brackish water for a prolonged period of time, as in the case of storm or king tide events. While the list of Florida-native salt tolerant plants is lengthy, there are relatively few plants that can tolerate a flooded root zone for any meaningful length of time.

The table below shows a list of plants that stand the highest chance of survival during a flood event in South Florida. Residents that own properties that are prone to flooding are encouraged to consider using these plants in order to increase the likelihood of plant survival.

TREES					
Common Name	Botanical Name	Culture	Salt Water Flood Tolerance	Salt Spray/ Salt Soil Tolerance	Drought Tolerance
Cinnecord	<i>Vachellia choriophylla</i>	Full Sun	Storm Surge	Moderate	High
Gumbo Limbo	<i>Bursera simaruba</i>	Full Sun – Part Shade	Storm Surge	Some	High
Jamaican Caper	<i>Quadrella jamaicensis</i>	Full Sun – Part Shade	Storm Surge	Moderate	High
Live Oak	<i>Quercus virginiana</i>	Full Sun – Shade	Storm Surge	Moderate	High
Orange Geiger	<i>Cordia sebestena</i>	Full Sun – Part Shade	Storm Surge	High	High
Sabal Palm	<i>Sabal Palmetto</i>	Full Sun – Shade	Storm Surge	Moderate	High
Southern Red Cedar	<i>Juniperus virginiana silicola</i>	Full Sun	Storm Surge	High	High
Sweet Acacia	<i>Vachellia farnesiana</i>	Full Sun	Storm Surge	High	High
Thatch Palm	<i>Thrinax radiata</i>	Full Sun – Part Shade	Storm Surge	High	Low
Wild Lime	<i>Zanthoxylum fagara</i>	Full Sun – Part Shade	Storm Surge	Some	High
Wild Tamarind	<i>Lysiloma latisiliquum</i>	Full Sun	Storm Surge	Low	High
Pitch Apple	<i>Clusia rosea</i>	Full Sun - Part Shade	Storm Surge	Some	High

SHRUBS					
Common Name	Botanical Name	Culture	Salt Water Flood Tolerance	Salt Spray/ Salt Soil Tolerance	Drought Tolerance
Adams Needle	<i>Yucca filamentosa</i>	Full Sun - Part Shade	Storm Surge	Moderate	High
Christmas Berry	<i>Lycium carolinianum</i>	Full Sun	Tolerant	High	Low
Cocoplum	<i>Chrysobalanus icaco</i>	Full Sun - Part Shade	Tolerant	Moderate	High
Florida Privet	<i>Forestiera segregata</i>	Full Sun - Part Shade	Storm Surge	Moderate	Moderate
Sea Grape	<i>Coccoloba uvifera</i>	Full Sun - Part Shade	Storm Surge	High	High
Sea Oxeye Daisy	<i>Borrchia frutescens</i>	Full Sun	Tolerant	High	Low
Beach Cedar	<i>Suriana maritima</i>	Full Sun - Part Shade	Storm Surge	High	High
Beach Elder	<i>Iva frutescens</i>	Full Sun	Tolerant	High	None
Spanish Stopper	<i>Myrcianthes foetida</i>	Full Sun - Part Shade	Storm Surge	Moderate	Moderate
White Stopper	<i>Myrcianthes axillaris</i>	Full Sun - Part Shade	Storm Surge	Some salt wind	Moderate
Wax Myrtle	<i>Morella cerifera</i>	Full Sun - Part Shade	Storm Surge	Moderate	Moderate
Wild Sage	<i>Lantana involucrata</i>	Full Sun - Part Shade	Storm Surge	Some	High
Yaupon Holly	<i>Ilex vomitoria</i>	Full Sun - Part Shade	Tolerant	Moderate	High
Beach Creeper	<i>Ernodea littoralis</i>	Full Sun - Part Shade	Storm Surge	Moderate	High

Necklacepod	<i>Sophora tomentosa</i>	Full Sun	Storm Surge	High	High
Coontie	<i>Zamia integrifolia</i>	Full Sun - Shade	Tolerant	Some	High
Snowberry	<i>Chiococca alba</i>	Part Shade - Shade	Tolerant	Some	High

WILDFLOWERS					
Common Name	Botanical Name	Culture	Salt Water Flood Tolerance	Salt Spray/ Salt Soil Tolerance	Drought Tolerance
Seaside Goldenrod	<i>Solidago sempervirens</i>	Full Sun	Tolerant	Moderate	High
Spider Lily	<i>Crinum americanum</i>	Full Sun - Shade	Tolerant	Some	None
Seaside Ageratum	<i>Ageratum maritimum</i>	Full Sun - Part Shade	Storm Surge	Moderate	High
Key West Morning Glory	<i>Jacquemontia pentanthos</i>	Full Sun	Storm Surge	High	Low

GRASSES					
Common Name	Botanical Name	Culture	Salt Water Flood Tolerance	Salt Spray/ Salt Soil Tolerance	Drought Tolerance
Muhly Grass	<i>Muhlenbergia capillaris</i>	Full Sun	Storm Surge	Moderate	High
Salt Meadow Cordgrass	<i>Spartina patens</i>	Full Sun - Part Shade	Storm Surge	High	None
Sea Oats	<i>Uniola paniculata</i>	Full Sun	Storm Surge	High	High

GROUND COVERS					
Common Name	Botanical Name	Culture	Salt Water Flood Tolerance	Salt Spray/ Salt Soil Tolerance	Drought Tolerance
Sea Purslane	<i>Sesuvium portulacastrum</i>	Full Sun	Tolerant	High	Moderate

FERNS					
Common Name	Botanical Name	Culture	Salt Water Flood Tolerance	Salt Spray/ Salt Soil Tolerance	Drought Tolerance
Leather Fern	<i>Acrostichum danaeifolium</i>	Part Shade	Tolerant	High	None

FISCAL IMPACT STATEMENT

No fiscal impact.

CONCLUSION

The Administration recommends that a robust education program be initiated, wherein the public is provided with information on the best plants to use on their property, specifically for the purpose of withstanding the environmental challenges of stormwater and king tide flooding on low-lying areas of their properties. This information can be provided within the City's dedicated Flood

Awareness webpage and through communications channels (www.miamibeachfl.gov/flood-awareness).

Applicable Area

Citywide

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-17?

Yes

Is this item related to a G.O. Bond Project?

No

Was this Agenda Item initially requested by a lobbyist which, as defined in Code Sec. 2-481, includes a principal engaged in lobbying? No

If so, specify the name of lobbyist(s) and principal(s):

Department

Public Works

Sponsor(s)

Commissioner Alex Fernandez

Condensed Title

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