

2021 Resilient Cape Canaveral Action Plan Preparedness Targets

What follows is a bulleted summary of each Action Category and its associated Preparedness Targets, including each target's implementation period. Implementation periods range from continuous or "current" efforts (c), 5 years, 15 years and 30 years. There are a total of 56 Preparedness Targets across 8 Action Categories.

■ ACTION CATEGORY 1: GREEN AND RESILIENT ECONOMY

- Preparedness Target 1
 - Encourage green (eco-friendly) industries within the City. (c)
- Preparedness Target 2
 - Support clean energy industry jobs for residential and commercial projects, City facilities included. (c)
- Preparedness Target 3
 - Promote green business practices within the Community through the City's website, official social media pages, at events and through the Weekly Update. (c)
- Preparedness Target 4
 - Promote and build attractions that encourage ecotourism. (c)

■ ACTION CATEGORY 2: NATURAL SYSTEMS

- Preparedness Target 5
 - Ban the use and application of glyphosate-based herbicide products at all City owned properties, parks and facilities by City Staff and contractors. (5)
- Preparedness Target 6
 - Begin a volunteer outreach program that encourages the discontinuation of phosphorus and nitrogen based fertilizers, with the goal of at least 1000 Community members pledging to end applications on their properties. (5)
- Preparedness Target 7
 - Increase the number of registered Lagoon-Friendly Lawns within the City by 60% over the current listed number. This will also support Target 6. (5)
- Preparedness Target 8
 - Conduct a survey that documents all trees in/on City property, parks and facilities. (5)
- Preparedness Target 9
 - Increase mangrove habitats along the lagoon by at least 300 trees through a joint public-private program. (5)
- Preparedness Target 10
 - Increase urban tree canopy with a reforestation strategy striving to plant 2,000 new native and Florida-friendly trees on City properties. Residential and business

properties should be considered through a joint voluntary public-private planting initiative. (5)

- Preparedness Target 11
 - Continue annual sea oat plantings to double the amount of sea oats along the beach from the existing 110,000 to over 220,000 for increased dune stabilization. (15)
- Preparedness Target 12
 - Strive to increase the amount of properties connected to reclaim irrigation to help reduce and potentially eliminate the need for direct reclaim discharges into the Banana River Lagoon from the City's Water Reclamation Facility (WRF). (15)
- Preparedness Target 13
 - Establish annual oyster gardens at all current and future City-owned docks through the Brevard Zoo Oyster Gardening Program and showcase their benefits to the Community in order to encourage residents to participate in the program. A public-private partnership should be pursued in the maintenance of each oyster garden. Explore the feasibility of oyster reef construction along the City's lagoon shoreline and implement as appropriate and possible. (15)
- Preparedness Target 14
 - When new City owned buildings, parks and roadways are being considered, or existing ones are redeveloped, LID or xeriscape practices should be implemented. All City operated buildings should dedicate 25% of the site to LID/xeriscape techniques. (15)

■ ACTION CATEGORY 3: TRANSPORTATION

- Preparedness Target 15
 - Continue to support, maintain and expand appropriate infrastructure along portions of the East Coast Greenway Trail that run through the City along North Atlantic Ave and SR A1A. (c)
- Preparedness Target 16
 - Research and scope micromobility options for the City to increase transportation accessibility in and around the Community. (5)
- Preparedness Target 17
 - Establish a kayak trail along the City's lagoon shoreline to connect Banana River, Manatee Sanctuary, Long Point and Center Street Parks. Once established and if feasible, explore a partnership and connectivity with the proposed aquarium project via the Brevard Zoo. (5)
- Preparedness Target 18
 - Ensure all City facilities are universally EV accessible. (5)

- Preparedness Target 19
 - Implement a City vehicle fleet wide carbon dioxide emissions tracking program. (5)
- Preparedness Target 20
 - Work with the Florida Department of Transportation (FDOT) and the Space Coast Transportation Planning Organization (SCTPO) to explore and research innovative policies and technologies that improve vehicular and pedestrian safety along State Road (SR) A1A and implement as feasible and appropriate. (15)
- Preparedness Target 21
 - Ensure all EV charging stations based at City facilities are powered by renewable energy and are made grid-independent through the use of battery storage systems. (15)
- Preparedness Target 22
 - Convert all City fleet vehicles to alternative fueled vehicles. (15)
- Preparedness Target 23
 - Ensure all City bus stops are covered and appropriately illuminated via solar powered lighting. (15)
- Preparedness Target 24
 - Where feasible, transition City roadways to bikeable and walkable Complete Street designs that follow the City's Vision Statement and including the installation of ADA compliant sidewalks. (30)

■ ACTION CATEGORY 4: ENERGY

- Preparedness Target 25
 - Work with Florida Power and Light (FPL), industry experts and local universities to develop and implement smart and microgrid technologies where feasible. (c)
- Preparedness Target 26
 - Transition each of the City's mobile fuel-based light towers and generator units to electric, solar or wind powered equivalents. (5)
- Preparedness Target 27
 - Strive to become a SolSmart Program member with a "Gold" rating by encouraging solar use and providing resources to residents to make solar affordable and easier to acquire. (5)
- Preparedness Target 28
 - Work with FPL and other partners to research and scope a utility scale battery storage facility to deliver emergency power or peak operations City-wide. (5)
- Preparedness Target 29

- Convert at least 50% of the City's streetlights to solar power by 2035; while also working to convert 100% of the City's streetlights to solar power by 2050. (15)
- Preparedness Target 30
 - Ensure that all 12 City lift stations have backup power from renewable sources for at least 96 hours of grid-independent operations, complimenting existing diesel assets if necessary. (15)
- Preparedness Target 31
 - Convert all City facilities to run off of renewable energy with associated battery storage systems. (15)
- Preparedness Target 32
 - Transition the City to renewable energy sources. (30)

■ ACTION CATEGORY 5: BUILT ENVIRONMENT

- Preparedness Target 33
 - Develop policies that are in line with Peril of Flood (SB 1094) legislation that discourages increase building density in the 100-year floodplain, the Coastal Construction Control Line (CCCL), areas vulnerable to at least a Category 2 storm surge and the 2070 USACE High Projection Rate Curve for sea level rise. (5)
- Preparedness Target 34
 - Explore amendments to the City Code that would allow for elevated or floodable development with living spaces that are higher off the ground. (5)
- Preparedness Target 35
 - Explore amendments to the City Code of Ordnances require more stormwater retention onsite. (5)
- Preparedness Target 36
 - Ensure all City facilities have the ability to capture rainwater or stormwater for reuse through best management practices that include: stormwater chambers, rain barrels or green roofs. (15)
- Preparedness Target 37
 - At least 25% of all new City roads, parking lots and sidewalks square footage should be permeable. (30)
- Preparedness Target 38
 - Ensure that all City buildings are at least LEED Silver equivalent upon new construction or redevelopment. (30)
- Preparedness Target 39
 - Ensure all City facilities are net zero or energy positive upon new construction or redevelopment. (30)

■ ACTION CATEGORY 6: EQUITY AND QUALITY OF LIFE

- Preparedness Target 40
 - Maintain monthly workshop series for residents to engage with Staff and various experts in regard to the environment, resiliency and local initiatives that may affect the City. (c)
- Preparedness Target 41
 - Continue to maintain and promote the City's Kairos Community Garden while ensuring resources such as water and electricity are self-sustaining. (c)
- Preparedness Target 42
 - Develop an action plan that is in line with the World Health Organization's Global Network of Age-Friendly Cities and Communities' eight domains of livability. The domains are used as a framework for policy discussions for members of AARP's Network of Age-Friendly Communities. The domains provide a centralized source for information, examples and strategies about programs and policies that work to help communities become more livable places for all ages. (c)

■ ACTION CATEGORY 7: WASTE AND CONSUMPTION

- Preparedness Target 43
 - Eliminate single-use plastics and polystyrene within City operations where appropriate and feasible and instead switch to reusable and eco-friendly alternatives. Vendors would be asked to participate by declining to sell and distribute single-use plastics and polystyrene at City events. (5)
- Preparedness Target 44
 - Consider a feasibility study that determines the logistics and scope of a City-wide single-use plastics and polystyrene ban. (5)
- Preparedness Target 45
 - Increase educational signage at all City facilities and beach crossovers that promote litter awareness and proper recycling. (5)
- Preparedness Target 46
 - Develop a pilot program to recycle cigarette butt litter while increasing the amount of cigarette receptacles within the City to 100 units. (5)
- Preparedness Target 47
 - Establish a City-wide composting program for residents and business. (5)
- Preparedness Target 48
 - Decrease the City's recycling contamination rate from 35% to 10% or less. (15)
- Preparedness Target 49
 - Significantly minimize waste for all City operations and facilities by 2050. (30)

■ ACTION CATEGORY 8: STORM READINESS AND SEA LEVEL RISE

- Preparedness Target 50
 - Build at least three (3) new stormwater parks where appropriate and necessary to manage flooding and continue to implement subterranean exfiltration systems as needed for increased storage capacity. (15)
- Preparedness Target 51
 - Pursue a partnership with Brevard County to build a stormwater park with associated amenities such a perimeter walking trail, benches and water fountains at Cherie Down Park after conveyance of ownership. (15)
- Preparedness Target 52
 - Implement appropriate semi-permanent flood defenses at City facilities for protecting open access points such as doorways and garage doors to replace sandbags. (15)
- Preparedness Target 53
 - Dredge and strengthen the Central/Canaveral Ditch to improve erosion control and increase capacity while creating shoreline stabilization and improved stormwater management. (30)
- Preparedness Target 54
 - Work with FDOT and the SCTPO to redevelop SR A1A in order to reduce flood risks posed by minimum SLR projections (USACE 5.15 feet by 2100) depicted in the City's Vulnerability Assessment. (30)
- Preparedness Target 55
 - Research and implement climate-resilient engineering solutions such as wave attenuation devices, sea walls and berms in conjunction with green infrastructure around the perimeter of the City's Water Reclamation Facility. (30)
- Preparedness Target 56
 - Complete a City-wide stormwater outfall sea level rise threat assessment and explore solutions that reduce the threat of flooding due to storm surge events and sea level rise that could cause stormwater backups. (30)