

Resiliency and Sustainability Advisory Committee Meeting

November 9, 2023

Welcome and Moment of Silence

By: Mayor John Tecklenburg, Chairman

Agenda

1. Welcome, Moment of Silence Mayor John Tecklenburg
2. Resilience Updates: Dale Morris
Comprehensive Water Plan update
Union Pier review
Tidal and Inland Flooding Feasibility Project
Hagood Improvement Plan
3. Nature Based Exchange Achievements Dr. Liz Fly, The Nature Conservancy
4. Sustainability Updates: Katie McKain
Drive Electric Charleston Event Recap
Progress on Leaf Blower Transition
Single-Use Plastics Data: Pre vs. Post Regulations
& Review Draft Amendment Addressing Extra Thick Bags
Charleston Rainproof: Fall 2023 Program Results
Charleston Composts Data Dashboard and Growth
Federal Grant Funding Strategy
5. Progress on Street Light Transition to LEDs Danny Kassis, Dominion Energy
6. Public Comment Period*

Resilience Updates

By: Dale Morris, Chief Resilience Officer



Comprehensive Water Plan 2050: Key Water Levels – Peninsula

Legend



Marsh



Water

Annual, more frequent risk:

- Avg. annual highest tide level (5.1' NAVD88)*
- Avg. annual highest tide level* +1.5' SLR (6.6' NAVD88)
- Avg. annual highest tide level* +2.5' SLR (7.6' NAVD88)

Compound Flood Risk Zone
(Combined Stormwater & Tidal Impacts)**

Most severe, less common risk:

- 100 YR Floodplain***
- 500 YR Floodplain***

Key Infrastructure:

- Major Roads
- 0-35.9" Pipes
- 36+" Pipes

* based off 2012-2022 NOAA Tide Gage daily highest tide records

** from Land & Water Analysis

*** USACE SACS Floodplain



Comprehensive Water Plan 2050: Inner West Ashley

Legend



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Comprehensive Water Plan 2050, Outer West Ashley

Legend



Water

Annual, more frequent risk:

Avg. annual highest tide level
(5.1' NAVD88)*



Avg. annual highest tide level* +1.5'
SLR (6.6' NAVD88)



Avg. annual highest tide level* +2.5'
SLR (7.6' NAVD88)



Compound Flood Risk Zone
(Combined Stormwater & Tidal
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Most severe, less common risk:



100 YR Floodplain***



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Key Infrastructure:



Major Roads



0-35.9" Pipes

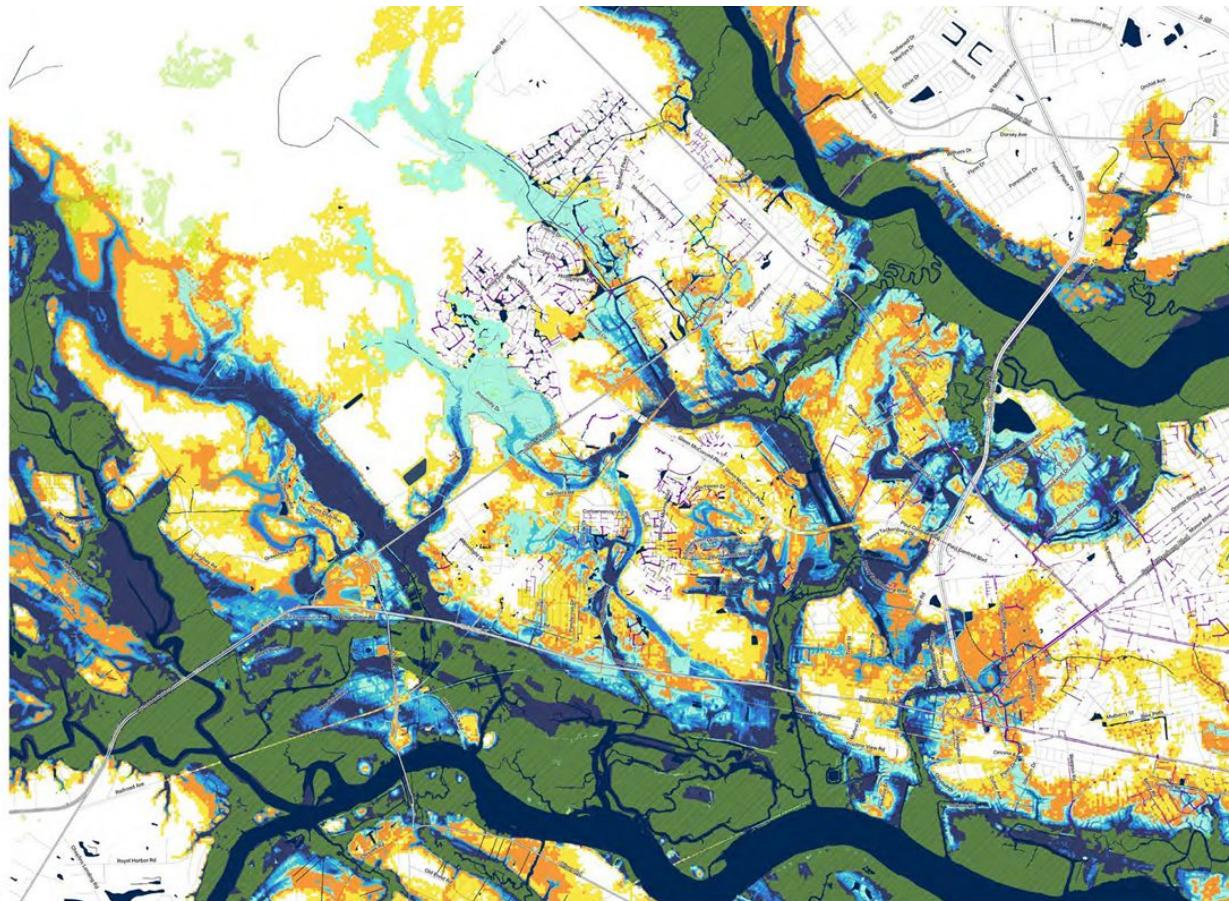


36+" Pipes

* based off 2012-2022 NOAA Tide Gage
daily highest tide records

** from Land & Water Analysis

*** USACE SACS Floodplain

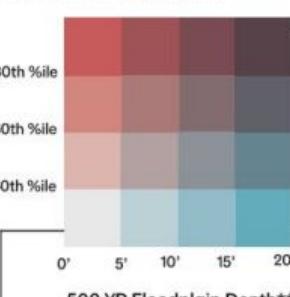


ENVIRONMENTAL JUSTICE + FLOOD RISK

Legend

EJ and 500 YR Floodplain

EJ Community Score*



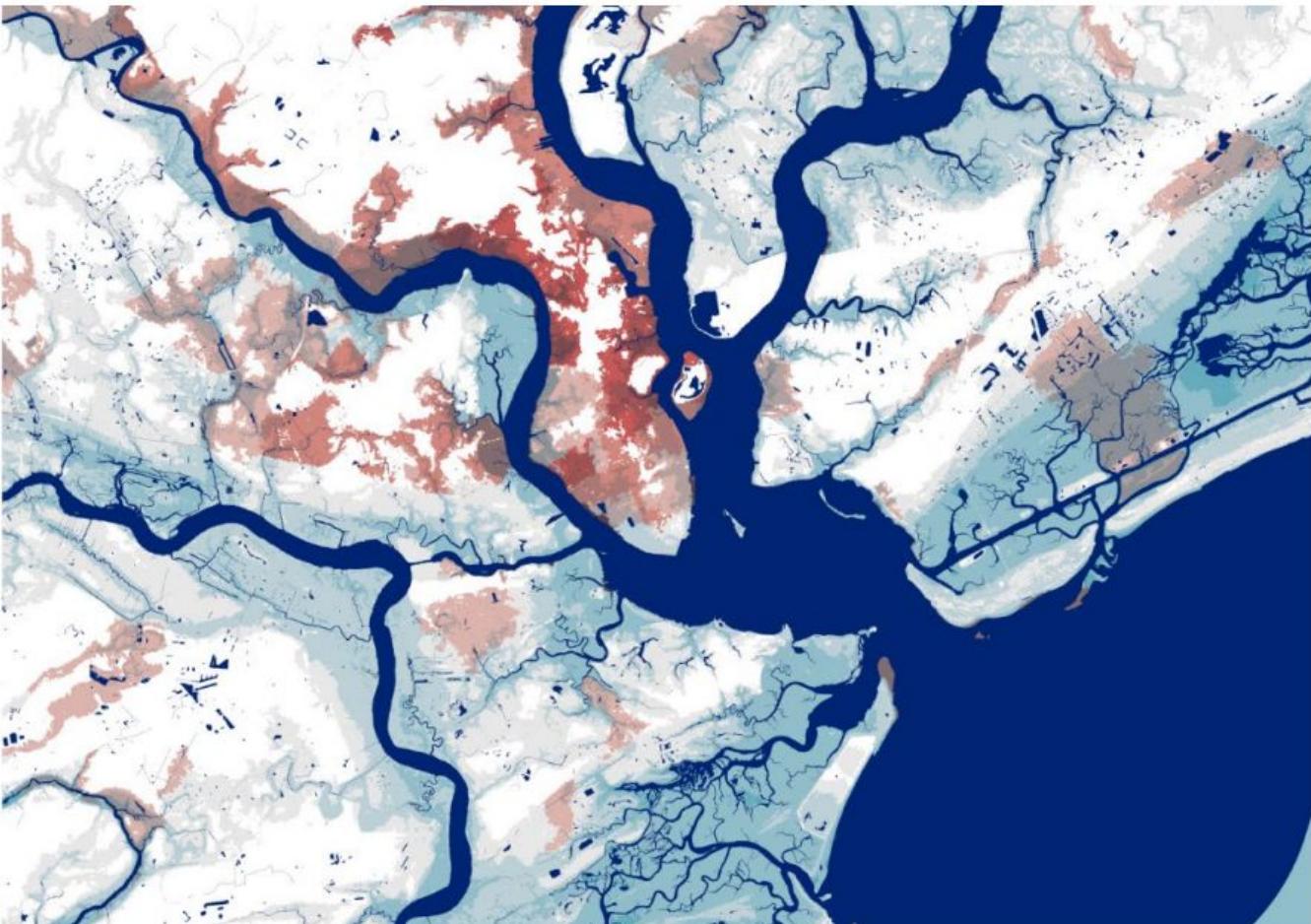
Highest EJ Index Scores & Deepest Flood Depth

Lowest EJ Index Scores & Shallowest Flood Depth

Lowest EJ Index Scores & Deepest Flood Depth

* from EPA EJ Screen, Overall Index

** from USACE SACS Floodplain



USACE Tidal and Inland (rainfall) Study, kick-off 2024

Tidal & Inland study authorized in 2020,
funded in 2023.

Recommended projects cost-shared
65% - 35%.

Priority areas identified in
Comprehensive Water Plan to
jump-start feasibility scoping.

Informal kickoff meeting with USACE on
Nov 7.

**WRDA 2022, S 8106: flooding
associated with:**

tidally influenced rivers, bays, and
estuaries

rainfall of any magnitude or frequency

tide of any magnitude or frequency

groundwater emergence

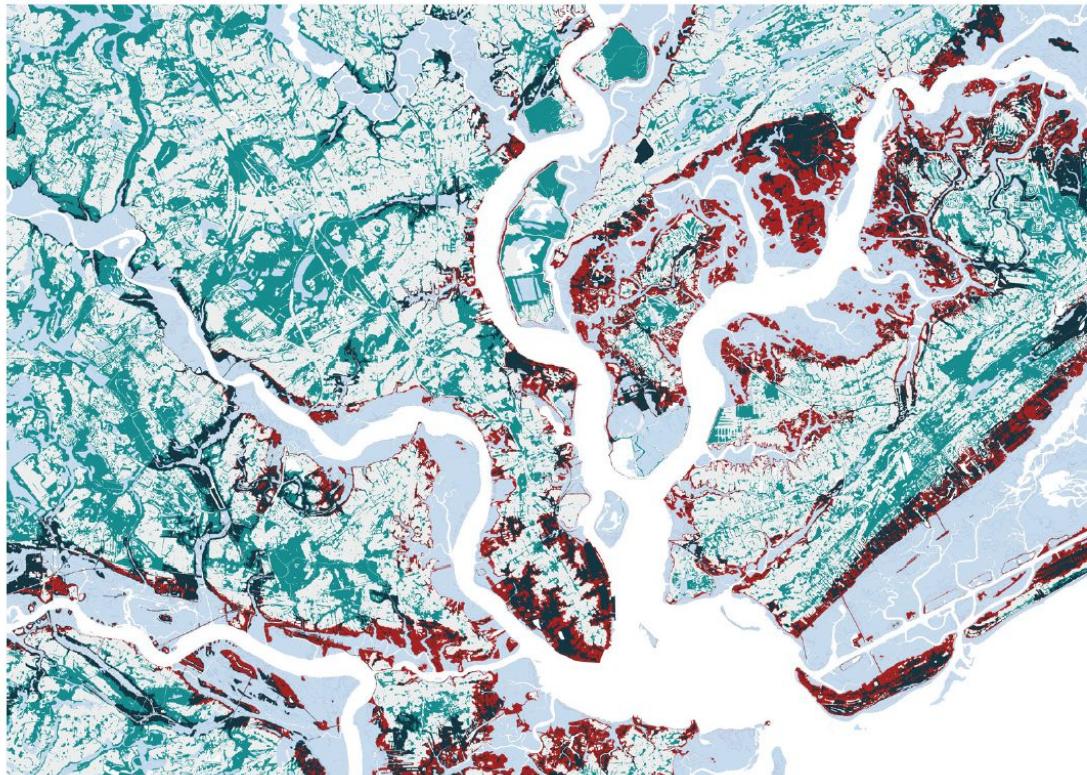
sea level rise

subsidence

Woodwell mapping (county) NOAA Regional Resilience

Rainfall vs Storm Surge
100-Year Flood

Wetlands Storm Surge
Rainfall Both





What's going on with the 'seawall'?

How can I stay informed?

For the most up to date information and answers
to common questions on the

PENINSULA PERIMETER PROTECTION PROJECT,

please scan below or visit charleston-sc.gov/SLR



City of Charleston

Union Pier: Water Plan Team. 5 tasks

PM, Meetings and Coordination

Riley Center

Advisory Group

Sasaki (planner hired by Riley Center)

Peninsula Plan Team

Review / Assessment of previous analysis and infrastructure

Review of 2D H&H modeling by Port (Sherwood and Thomas & Hutton)

CIWP Coastal and Stormwater Analysis

UPT and nearby basins (beyond adjacent basins)

Assume USACE perimeter protection

Conceptual drainage analysis of UPT and nearby basins to understand target (water) volumes and locations and techniques to manage those volumes

Key Findings / Recommendations

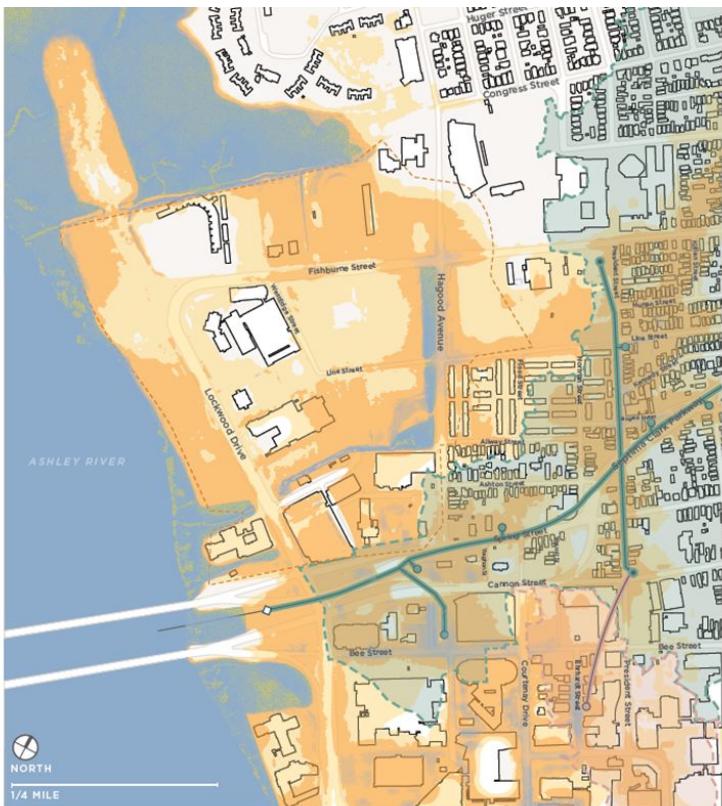
Urban (water) Design Framework for all forces of water and SLR

Support to Peninsula Plan team for Waterfront Development District / Comp Plan Amendment

Hagood Improvement Plan

City of Charleston
DESIGN DIVISION
REPORT 12

HAGOOD AVENUE STUDY



ELEVATION, TIDE, TUNNEL

Much of this area is impacted by tidal flooding and by stormwater from mild to severe weather events. The area is at risk for coastal storm surge flooding; most of the land is below elevation 12'.

Deep Tunnel Service Area ; Calhoun-West	7' Tide Impacts
Tunnel Location	8' Tide Impacts
Access Shaft	Area Below 6'
Ehrhardt Street Tunnel Service Area	Area Below 8'
Ehrhardt Tunnel Location	Landfill Extents

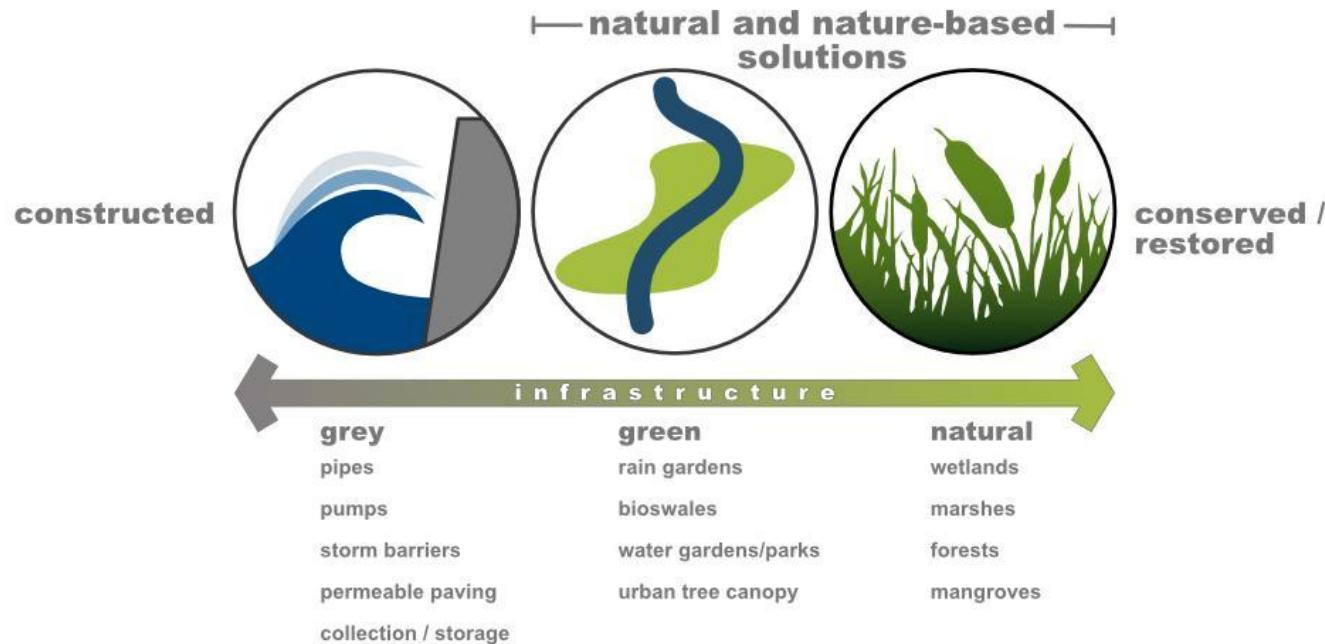
Nature-Based Exchange Achievements

By: Dr. Liz Fly, The Nature Conservancy

The Nature-Based Exchange

Elizabeth Fly, Ph.D.
Director of Resilience & Ocean Conservation
The Nature Conservancy South Carolina





Defining Natural & Nature-Based Solutions

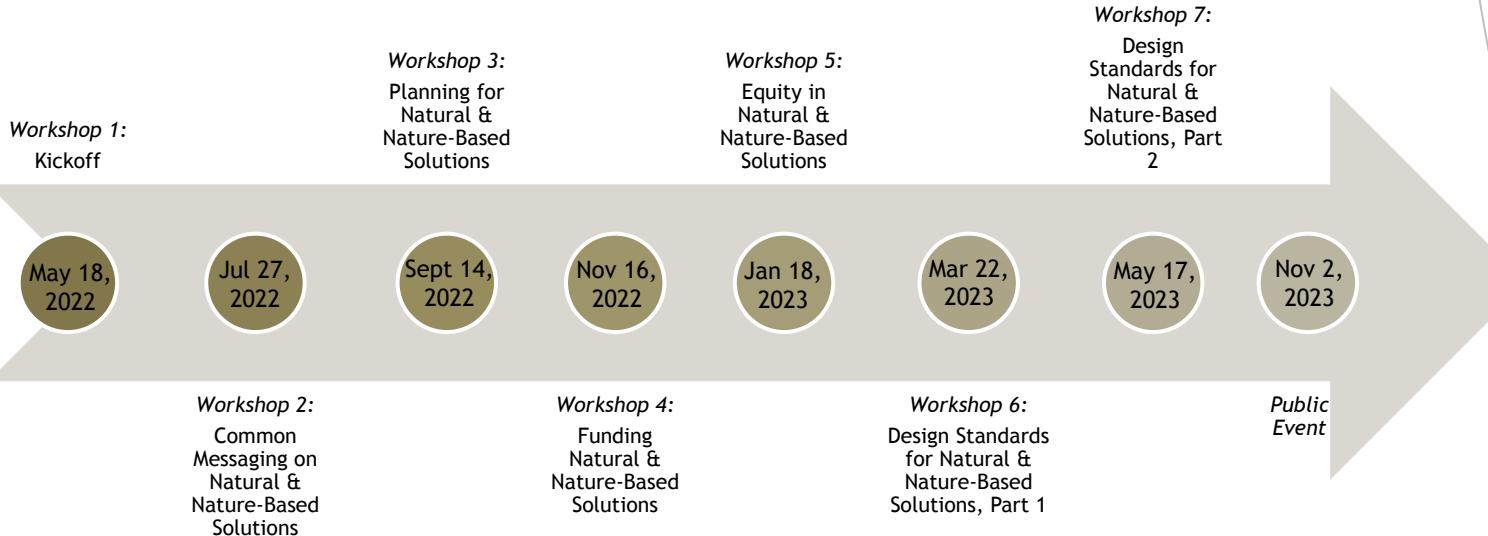


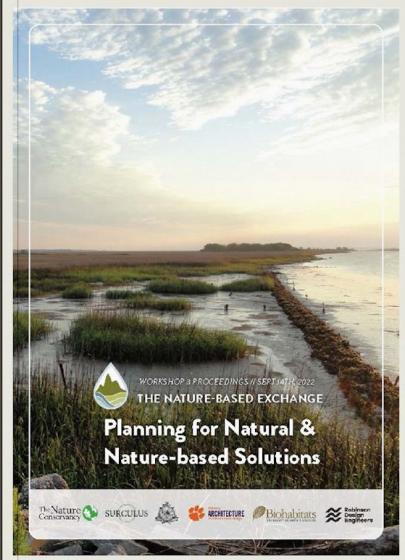
Goal:

Synthesize existing knowledge and information on natural and nature-based solutions, align it with opportunities and barriers *within the state of South Carolina*, and create practical and equitable steps for implementation.

Outcomes:

- ❖ Natural and nature-based solutions become recognized throughout the state as practical and effective tools to address resilience issues.
- ❖ Impediments and barriers to natural and nature-based solutions are recognized and pragmatic pathways to overcome these barriers are identified and initiated.
- ❖ State and local jurisdictions employ more natural and nature-based solutions, alone or in tandem with gray infrastructure.





WORKSHOP 3 PROCEEDINGS // PLENARY PRESENTATION

Landscape Typologies

COASTAL EDGE COMMUNITY
Coastal Edge Communities include areas of coastal wetlands from major rivers to salt marshes that are ideal for flood risk mitigation.

LOWLAND FLOODPLAIN
Lowland Floodplains include areas between and on the edges of floodplains that are ideal for the storage of floodwater and infiltration through soil.

UPLAND RIDGES
Upland Ridges are higher areas that are ideal for infiltration and drainage while also storing floodwater through soil infiltration and infiltration through soil.

URBAN/SUBURBAN REFORESTATION
Urban/Suburban Reforestation is a green solution that can be used to mitigate flooding and infiltration while also creating connectivity.

As part of our work with the City of Charleston Land & Water Analysis, they developed a series of Landscape Typologies relative to the specific geographic, soil, hydrologic, and hydrodynamic conditions throughout the City. These typologies provide guidance for design and development of natural landscape mitigation and introduced plant communities throughout the region.

Graphics above are credited to Salmann.

WORKSHOP 3 PROCEEDINGS // PLENARY PRESENTATION

Case Study

Bridgepoint Ecological Park
The Bridgepoint Ecological Park, which replaces 32 townhomes which were demolished after being repeatedly flooded, design creates a series of wetland inlets to allow water to flow across and pool within the site. Native plant communities will be introduced to stabilize the soils and provide habitat for wildlife.

Graphics above are credited to Biohabitats and SURGULUS.

Big picture thinking is needed to shift plan, design, and implement NNBS. We need to consider large spatial scales and long timeframes.

Plans need to create guidelines, provide options and recommendations, and establish expectations to increase the use of nature-based solutions.

WORKSHOP 4 PROCEEDINGS // NOV 18TH, 2022
THE NATURE-BASED EXCHANGE

Funding NNBS: Navigating Grants, Risk Assessment, and Costs Benefit Analysis

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The Nature Conservancy SURCUS ARCHITECTURE Biohabitats Robinson Design Engineers

WORKSHOP 4 PROCEEDINGS // PANEL DISCUSSION 11

Panel Discussion

EXTERNAL FUNDING PANELISTS

Discuss moderated by Joanne Thrope, Rockbridge

Emily Bentley, SACE, SACE, Office of the US Secretary of the Interior, US Department of the Interior

Eric Thrope, USACE, US Army Corps of Engineers, US Army Corps of Engineers, US Army Corps of Engineers

Heidi Schubert, USACE, US Army Corps of Engineers, US Army Corps of Engineers, US Army Corps of Engineers

Janine Thrope, Rockbridge, Rockbridge

FEMA Disaster and Hazard Mitigation Assistance Programs

HUD-CDBG and State Resilience Funds

National Oceanic and Atmospheric Administration Grants

National Coastal Resilience Fund (NCRF)

EXTERNAL FUNDING

COMMON FEDERAL GRANTS FOR RESILIENCE & NBS FUNDING

FEMA

HUD

NOAA

NFWF

Bolton, Barone, Infrastructure & Communities (BBC)

Community Development Block Grant Program

Disaster Recovery Funds (DRF) (DRAFT)

Coastal Resilience and Protection Grants for Underserved Communities

Environmental Habitat Restoration Grants

General Coastal Protection Fund (NCRF)

Habitat Mitigation Grants Program (HMG)

Community Development Block Grant Program: Mitigation Funds (CDBG-MIT)

Restoring Ecosystems through Permit Removal

Obtaining the full range of resources available for nature-based solutions that have been developed since the last time I heard about funding this topic. This is a comprehensive list of funding sources for resilience and NBS projects.

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WORKSHOP 4 PROCEEDINGS // PANEL DISCUSSION 11

In the applications that you see, what commonalities makes an application successful? What are the pitfalls that make an application unsuccessful?

Pitfalls that may make an application unsuccessful include:

- Upfront scoping and design costs
- Match requirements
- Environmental and historical preservation reviews (which can require time and money to complete)
- Being an under-resourced community without access to additional capacity

Successful applications:

- Follow the instructions
- Answer all questions with clear and detailed language
- Bring in partners
- Consider community impacts

How does science and data play a role in the application process?

JOANNE THROPE: When designing these projects, science and data are very important, but I do want to add that stakeholder engagement at every step of the process is equally important. The projects are in the pipeline – it's just as important as the science and the data. And I want to make that point because many of these grants we're talking about – these project opportunities – really have to include multiple parts of the community. Getting the science and data right is important, but so is getting the community involved.

WARD SCHNABOLIK: I'd say any time you can bolster your argument and back it up with some science and some data will allow the reader or agency to see where you're coming from with your ideas.

How do nature-based solutions fit into the funding stream for NBS?

ERIC FOSMIRE: Green is huge in resilience planning, and the entire

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If you start gearing our application proposal towards just research, it's not going to be as competitive."

– Joanne Thrope

the science and the data, translating it to the community, and having it accepted and understood is an important piece of these project proposals.

EMILY BENTLEY: I would echo that, and I'd add that we've been looking at creating a connection to help with the need for technical assistance. By drawing in institutions' higher education, we can try to engage them in the process for some of the science and data to support the BCA or design of nature-based projects.

WARD SCHNABOLIK: I'd say any time you can bolster your argument and back it up with some science and some data will allow the reader or agency to see where you're coming from with your ideas.

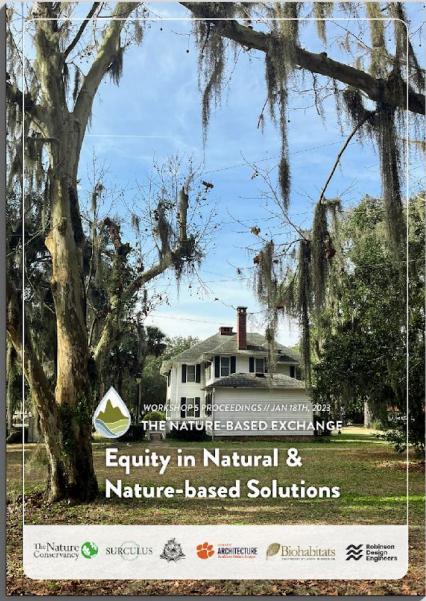
How do nature-based solutions fit into the funding stream for NBS?

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Completing the BCA can be difficult for NNBS because of the challenge of quantifying the benefits of nature-based solutions.

Fortunately, FEMA has been working towards removing barriers to implementing NNBS through its ecosystem service policy, which assigns monetary value to ecosystem services.



WORKSHOP PROCEEDINGS // OMAR MUHAMMAD



Omar Muhammad
Executive Director, Lowcountry
Alliance for Model Communities

Omar has worked as a community advocate and activist since 2007 as a volunteer for the Lowcountry Environmental Action Coalition (LAMC). He has served as LAMC's web-site content coordinator and community engagement liaison. Currently, he serves as LAMC's Executive Director. Omar recently completed a 9 month training with the U.S. Environmental Protection Agency (US-EPA) Region IV's Environmental Justice Academy and was selected IV and South Carolina Department of Health and Environmental Control Leaders in Environmental Action Pilot (LEAP) inaugural class. He is also a past participant in a joint EPA Region

Office for Environmental Quality lead efforts to engage the LAMC communities through various workshops. Omar has successfully funded community research initiatives to train residents. Under a community-based health survey to assess health service gaps at the community level, conduct a zoning analysis for Environmental Justice communities and several other Climate Science projects. Omar has been instrumental in leveraging relationships with academics and governmental agencies.

WORKSHOP PROCEEDINGS // OMAR MUHAMMAD

Community Capacity Building & Nature-Based Flood Resiliency - Omar Muhammad

To overcome problems with equity and environmental justice, we must have meaningful engagement with low-wealth communities. We must recognize these communities have value and that their residents are knowledgeable experts on their community. They do not want us to talk to them or for them; rather, they want to see us act on their behalf and include them in the entire process, from planning through evaluation. As the Lowcountry Alliance for Model Communities, it is our job to help empower communities – to tap into their existing power and capacity and use it to advocate for the community's best interest. In communities such as Rosemont in Charleston, where residents feel forgotten and overlooked, engagement can result in more community action, such as through science and data collection, and participation in community planning and design.

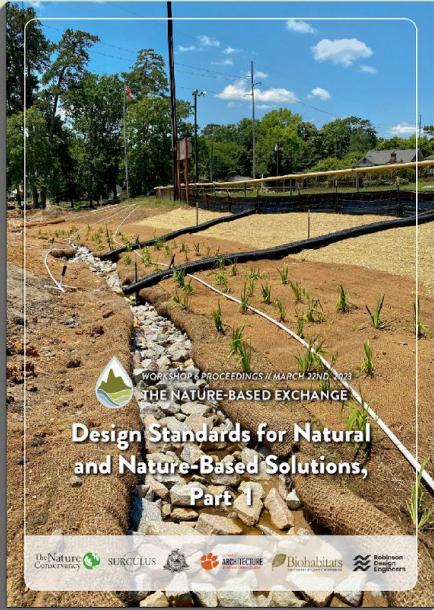
When beginning work in a low-wealth community, we must first listen to the residents so that we can understand how they see their space and their place. To ensure meaningful engagement, we must meet them where they are and schedule meetings that consider factors such as:

- Time of day – Is the time of day chosen accessible to community members based on their work and family schedules?
- Location – Is the meeting held in a location that is convenient and accessible for the community, such as in their neighborhood or near a bus stop?
 - Childcare – Is childcare available?
 - Compensation – Is there money available to pay the residents who attend for their time and expertise?

We must remember that this work is a give and take process; we learn from the residents as they learn from us, and we should compensate them for providing that knowledge. We must also respect their interests and concerns, not just ours. This means addressing the problems that are impacting them, such as housing, economics, and education in addition to concerns of flooding and climate change. This work can be challenging and time-intensive, but it can have huge impacts when done thoughtfully and equitably.

**Resilience is more than just water and flood mitigation.
Resilience is recognizing the inherent strengths of a
community and enhancing those strengths in the face of
adversity.**

**Community engagement should be done in a meaningful way
where we **educate, empower, and engage**. We must learn
from community members as they learn from us.**



Offering clients multiple design concepts that range from green to gray allows the designer to demonstrate the benefits of nature-based solutions while allowing the client to select the option that best suits their needs and desires.

Risk is inherently part of the design process, but there are ways to manage risk that support the long-term co-benefits provided by nature-based solutions.

Resulting Outputs

<https://tnc.app.box.com/s/jczaa4eqrj1x4wphgz0oh2uvcjrkgsw>

The Nature-Based Exchange Compendium

NATURAL & NATURE-BASED SOLUTIONS IN SOUTH CAROLINA



Want to know more?

The guide was produced by the Nature-Based Solutions, a collaborative effort by the Nature Conservancy, Clemson University's Resilient Urban Design Program, the City of Charleston, Bokelstok, Inc., Robinson Design Engineers, and the South Carolina Department of Natural Resources. It was developed with the support of a network of local partners to develop natural and nature-based solutions for South Carolina. The creative distribution of this guide is the result of a partnership between the Conservancy and the City of Charleston. Pamphlet was designed by Amy Nguyen and Julie Weaver.

Cover photo: Constructed stormwater wetlands designed by Robinson Design Engineers (RDE) in a James Island neighborhood, Fen Hollow. Photo provided by RDE.

QR code: Scan to visit our website for a more in-depth view of the Nature-Based Ecosystems.

WHAT ARE NNBS?

Natural and nature-based solutions (NNBS) are methods to address ecosystem challenges in both natural and human-dominated systems. When implemented correctly, NNBS can protect and restore habitat, prevent wildlife loss, create greater cities, and address issues such as extreme weather, food production, and water management.

CONSTRUCTED **RESTORED/CONSERVED**

GRAY	GREEN	GREEN
Roads	Rain Gardens	Wetlands
Power	Bioretention	Marine
Soil Barriers	Wetlands	Shrubs
Permeable Paving	Water Parks	Streams
Concreting/Steel Systems	Urban Canopy	Vegetation

NNBS exist on a spectrum from gray to green. Gray infrastructure is traditional hard infrastructure, such as a concrete seawall. Natural infrastructure is a natural system, such as a forest or wetland, as a natural wetland or forest. Green infrastructure lies between the two and offers a hybrid approach – typically engineered or constructed systems that include a natural component. Green infrastructure can take many forms and include different ratios of gray to green.

ISSUES ADDRESSED

As their name suggests, NNBS are solutions designed to address one or more issues. Not only can they address the issue at hand, but they also bring added social, economic, and ecological benefits to the project site and beyond. Some of the most common issues addressed with NNBS in South Carolina include:

- Inland Flooding (Invasive Flooding)
- Shoreline Erosion
- Urban Flooding (stormwater and sewer overflow)
- Water Quality Impairment
- Coastal Flooding (tidal flooding and storm surge)
- Drought
- Biodiversity Loss
- Wildfire
- Air Pollution
- Soil and Sediment Loss
- Urban Heat

SCALE

NNBS should be designed and built at a scale appropriate for the project's goals and purpose.



Watershed Scale: Address issues spanning a large geographic area. Build infrastructure that can withstand space, requiring long-term planning and coordination.

Examples: wetland protection, forest restoration, marsh creation



Neighborhood Scale: Address issues that span multiple properties. Address some planning and coordination among property owners but are a less space intensive than watershed scale projects.

Examples: tree retention, stream daylighting, tree buffering



Site Scale: Address small-scale, local issues on property that belong to a single owner.

Examples: living shorelines, rain gardens, green roofs

THE COLLECTIVE HISTORY

For millennia, NNBS have been used to protect, manage, restore, and enhance natural resources, including water, soil, and wildlife. From beavers that shaped whole river systems to indigenous people who used sustainable, regenerative methods of harvesting natural resources, NNBS have been used across landscapes and timescales to promote healthy and thriving ecosystems.

With the growth of industry and technology, less emphasis has been placed on the natural solutions. However, people are finally to lose touch with nature. But not everyone. Native communities for self, indigenous cultures continue to pass down their knowledge of natural resources and conservation practices still study and protect nature.

Today, there is growing interest in bringing nature back to the forefront by using only sustainably built land infrastructure and better utilizing the spectrum of hybrid and natural systems. While these systems are not new, they are not fully accepted or understood by everyone, there is an increasing movement among environmentalists, designers, planners, and the public to incorporate these natural solutions into our modern landscapes.

This guide serves as an introduction to NNBS: it explores the types of NNBS, the issues they address, where to find them in the landscape, and how to implement them.

BENEFITS

Well-designed NNBS can offer multiple benefits, including, but not limited to:

- Reduced greenhouse gas emissions
- Enhanced carbon storage
- Reduction of major climate risks
- Job opportunities
- Improved water and air quality
- Fish, timber, and other natural products
- Recreational opportunities and access
- More resilient infrastructure
- Improved physical and mental health
- Cultural benefits
- Biodiversity and wildlife support
- Community development and economic revitalization

LANDSCAPE ZONES



Coastal: stabilizes the shoreline, reduce erosion and buffer the coast from storm impacts.



Riverine: creation and restoration of hydrological flow in rivers, streams, and associated habitat.



Inland: adaptable to all landscapes and can include rain gardens, urban gardens, tree buffers, and native plant restoration.

LAND USE



Developed: Land that has been built on or heavily altered for human use. It may include houses, roads, utilities, and other infrastructure.



Undeveloped: Land that has not been built on or heavily altered for human use. It includes buildings, infrastructure, and trees and is considered a rural area.

Resulting Outputs



Next Steps

In-depth trainings and continuing education programs

Topic

Risk Management and Risk Reduction: Using Nature-Based Solutions in a Changing Landscape

Effective Inclusion of NNBS in Complex Stormwater Management

Native Coastal Plants and Soils

Coastal Landscape Ecology and Land Use Planning

Develop the next generation of professionals

- Support students and interns

Co-creation of NNBS project with communities

Sustainability Updates

By: Katie McKain, Director of Sustainability

Drive Electric Charleston Event Recap

September 23, 2023

- 30 EVs on display- trucks, sedans, SUVs, e-bikes, ebus
- 13 Vendors
- 300 attendees
- Sustainable Event (used guide)







WORLD
CENTRIC

FOR A BETTER WORLD









CITY OF CHARLESTON
All America City

TRADESMAN
BREWING CO.

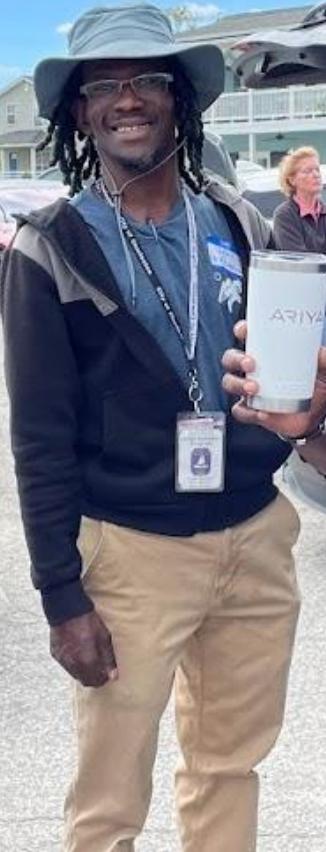
CITY OF CHARLESTON
All America City







The Sierra Club's Clean
Transportation for All Cam





Progress on Leaf Blower Transition

City passed a resolution in 2021 to transition all City owned gas powered leaf blowers that have viable alternatives by 2023.

89 Blowers among 3 Departments

- Parks Department
- Recreation Department
- Stormwater Department

Handheld & Backpack Blower Electric Inventory

- Parks: 45 / 45
- Recreation: 35/35
 - Golf Course: 4/5 (still testing)
- Stormwater: 2 /4 (finishing useful life)

86 Electric / 89 Total

= 97% transitioned

Push and Pull Blowers do not yet have practical replacements available, so these are not included in above figures.



Emissions Savings

Assumptions:

- 11 lbs of CO₂e per hour of use (EPA)
- Average use per blower: 16 hours/week for 50 weeks
- 68,800 hours per year for 86 blowers

Emissions Savings:

- 344 MT CO₂e saved per year
- 1,720 MT CO₂e saved over 5 years

Single-Use Plastics Success

Comparing litter sweep data
before and after the single-use
plastic code took place
(Jan 2020).

The code is working!

Comparison Pre vs. Post Plastic Ban

This data is from Waterfront Park and Harborview Road site litter sweeps in 2013 vs. 2021, as reported in Jessica Wenclawiak's M.S. thesis and Hope Wertz' M.S. thesis, both at College of Charleston.

Abundance of Banned Items					
Highlight indicates a decrease	# of plastic bags	# of foam pieces	# of containers (foam)	# of cups (foam)	total
2013	182	86	37	264	773
2021	37	275	2	21	485

... PLASTIC
BAG?

NO, THANKS!
ALREADY GOT
ONE...



Draft Amendment to Address Extra Thick Plastic Bags, Reduce Waste & Save Businesses Money

1. Extra thick plastic bags would no longer be allowed by altering the definition of what a reusable bag is
 - a. Affects <1% of businesses, all of which have large footprints

2. Disposable to-go cutlery is distributed upon the customer's request or from a self service station
 - a. Affects drive thru's and online food ordering

It allows a six month grace period for a smooth transition.

Charleston Rainproof

Fall 2023 Program Results

Charleston Rainproof Mini Grants

Results in 1 million gallons of rainwater/year is absorbing into our soils instead of entering the City's central stormwater system.

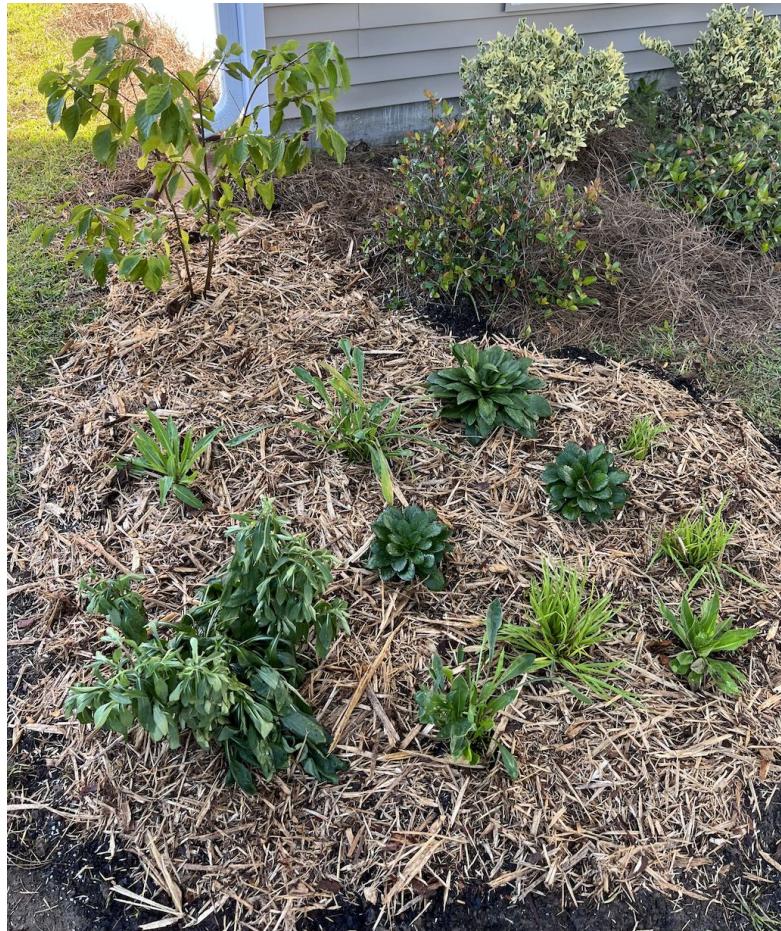
Total Projects:

- 60 Rain Gardens
- 16 Rainwater Harvesting Systems









Charleston Composts

Data Dashboard
and Program Growth



**Growth to 14
Drop Sites**



**CHARLESTON
COMPOSTS**

City hosts 6 sites

Partners host 8:

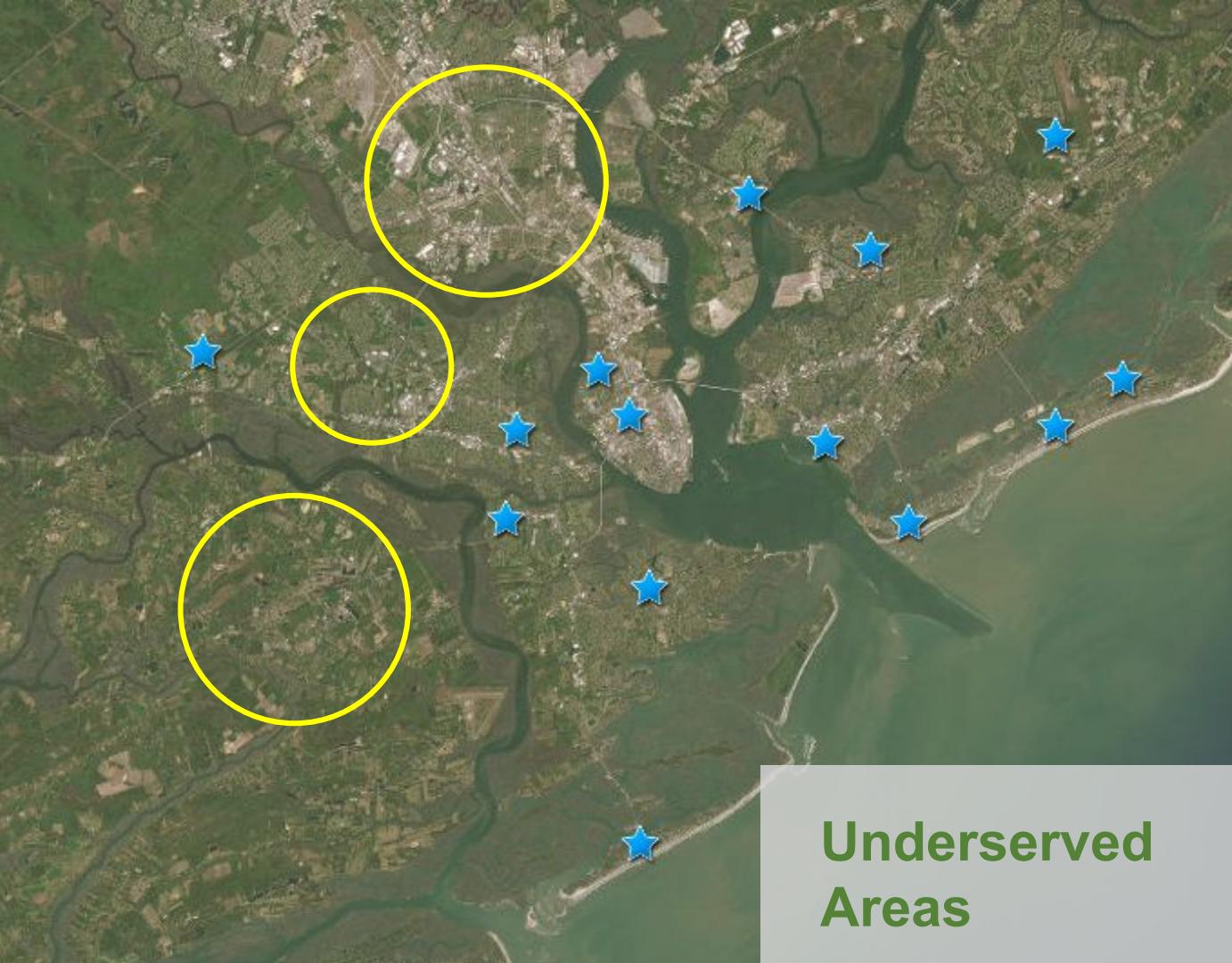
Chs. County-1

Folly Beach-1

Isle of Palms-2

Mount Pleasant-3

Sullivan's Island-1



**Underserved
Areas**



Underserved Areas:

- North Charleston
- Middle West Ashley
- Johns Island

Form online to
suggest a drop site



Bees Ferry Compost Bin



New in 2023!

Growth includes
more options to
compost
pumpkins.

**Bees Ferry Bin
open Nov 1-30**

DON'T TRASH IT, SMASH IT!

JOIN CHARLESTON'S FIRST

PUMPKIN SMASH

FOR A FUN WAY TO COMPOST PUMPKINS

Sunday, Nov. 19, 12pm - 4pm
West Ashley Farmers Market

For details and other FREE
ways to compost pumpkins, visit:
charleston-sc.gov/compost



New in 2023!

Pumpkin Smash
at West Ashley
Farmers Market

Sunday, Nov 19
Noon - 4pm



Food waste takes up over 25% of landfill space and generates methane, which is 30 times more harmful to our atmosphere than carbon dioxide. Composting food scraps, instead of sending them to landfills, reduces garbage costs, conserves landfill space, and protects our environment. [Charleston Composts](#) is a free residential food scrap drop off program open to all residents in the Charleston region.

Composting data is reported to the City of Charleston monthly by [SMART Recycling U.S.](#) in carts of compost collected. Based off of historic data, the City applies an average of .11095 tons of residential food scraps composted by the carts collected. One garbage truck can carry approximately 14.29 tons of waste.

This dashboard was created collaboratively between the Mayor's Office of Innovation and the Office of Sustainability. Questions can be sent to innovation@charleston-sc.gov.

Filter by Year

All

Estimated Tons of Residential Food Scraps Composted

175

Estimate of Co2 Emissions Eliminated (metric tons)

286

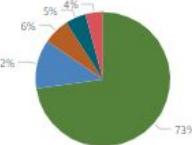
Garbage Truck Trips Avoided through Composting

12

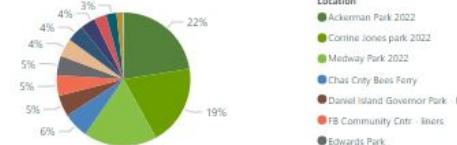
Households Participating in Charleston Composts

1966

Tons of Residential Food Scraps Composted by Service Area

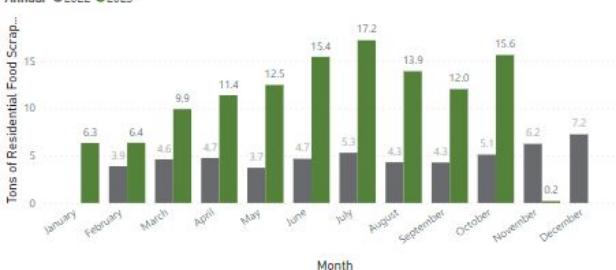


Tons of Residential Food Scraps Composted by Drop Site



Tons of Residential Food Scraps Composted

Annual ● 2022 ● 2023



Goal: 150 tons in 2023



New in 2023!

Data Dashboard

- Goal progress
- Transparency
- Analytics help improve the program

[View Data Here](#)

Federal Grant Funding Strategy

With over 300 programs,
prioritization is imperative!

- Waiting on many programs to be created and announced
- Coordinating on state, regional and local grant projects
- Support from technical experts
- Planning for future grant cycles
- Most bang for buck that aligns with our priorities

IRA and BIL Funding

\$663,623,291,289

Funding

178

New Programs

115

Existing Programs

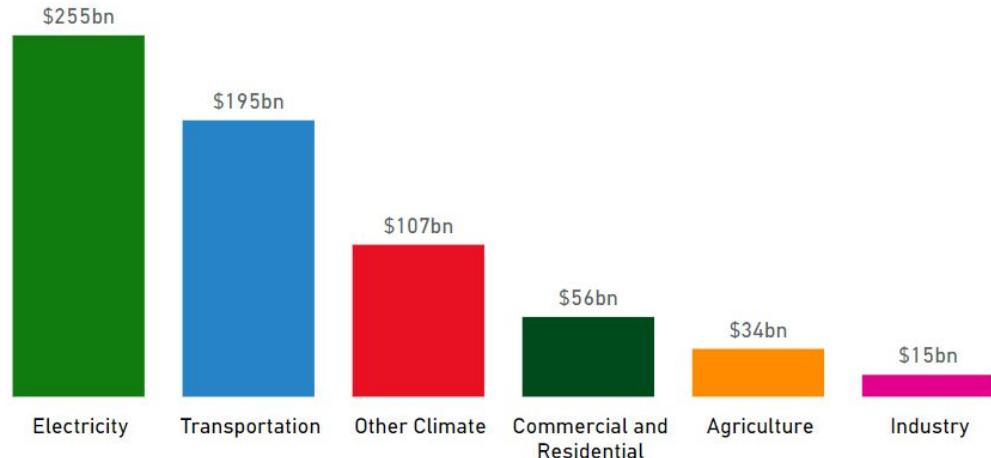
83%

Avg Federal Cost Share

Share of Funding by Law



Funding by Sector



Progress on Street Light Transition to LEDs

By: Danny Kassis, Dominion Energy

City of Charleston Transition to LED Street Lights: Progress Update

Nov. 9, 2023

**Danny Kassis
General Manager, New Business and Customer Solutions**



Dominion Energy South Carolina Charleston LED Conversion Update

54% Complete

Estimated Time
to Complete

6 months

Current Progress
(Night Work)

Wagener Terrace

Between
Hampton Park
& Fishburne St.

Planned
Schedule

West of King St &
North of Calhoun St.

Charleston – West Ashley

DSM Progress

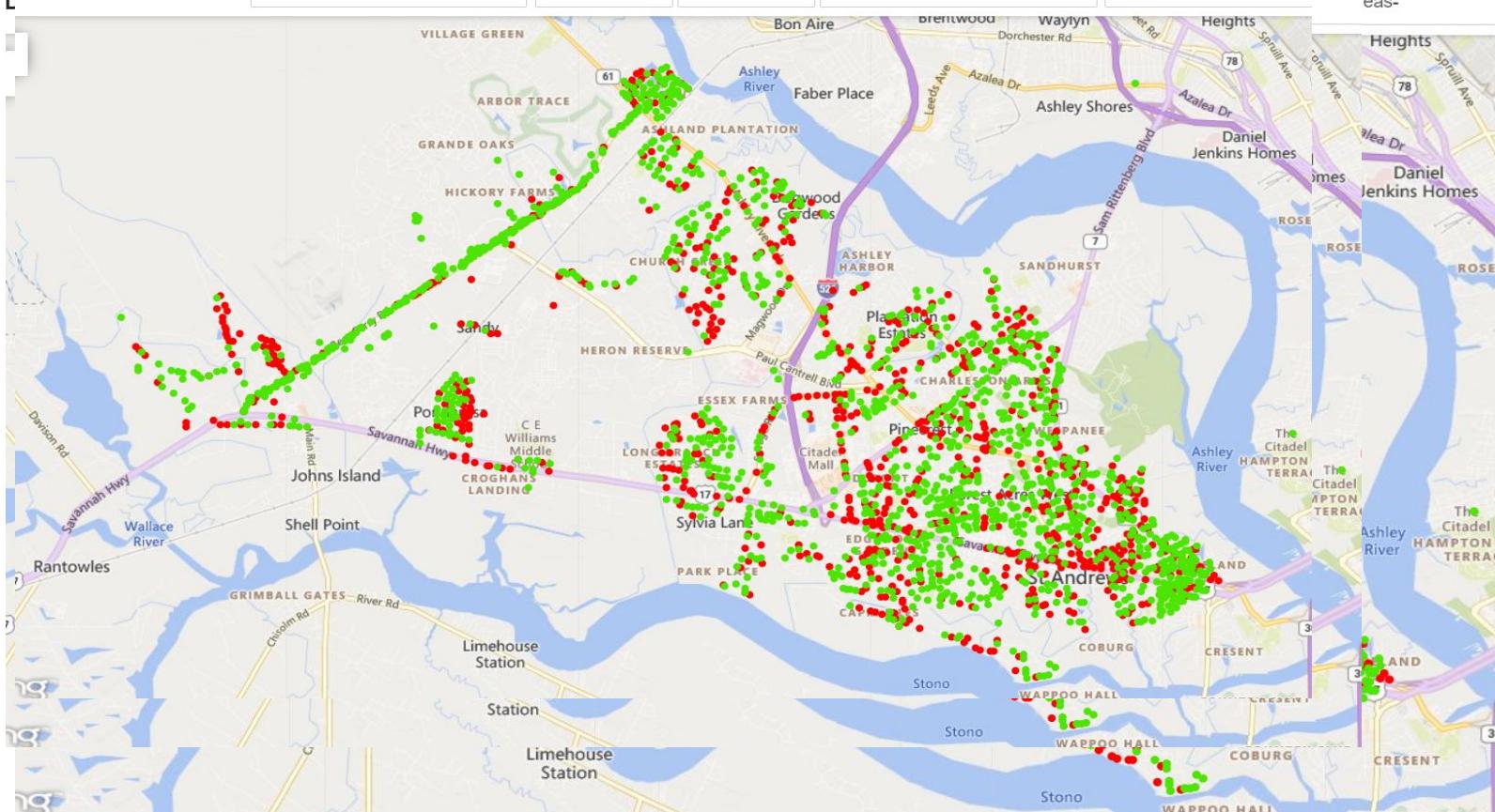
-All FixtureTypes-

-All Installers-

-All Progress-

CHARLESTON(3/3)

-All WorkAreas-



Charleston – James Island

DSM Progress

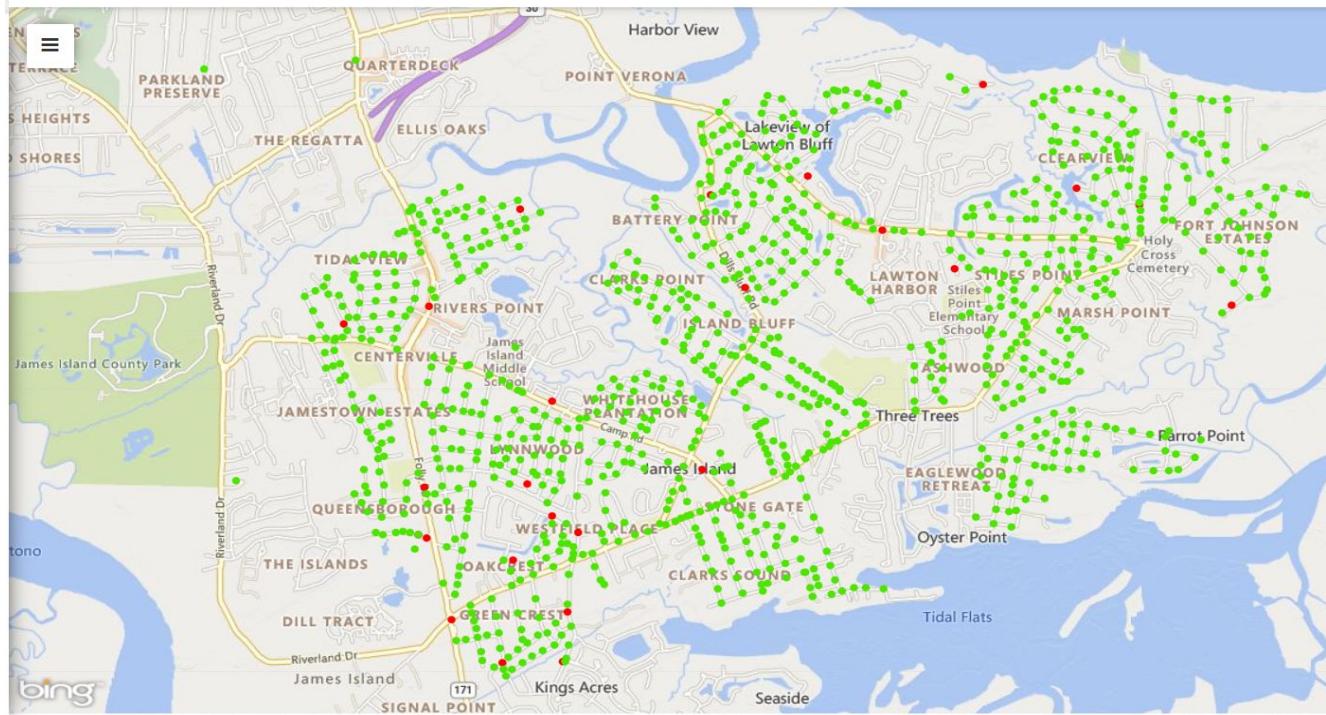
-All FixtureTypes-

-All Installers-

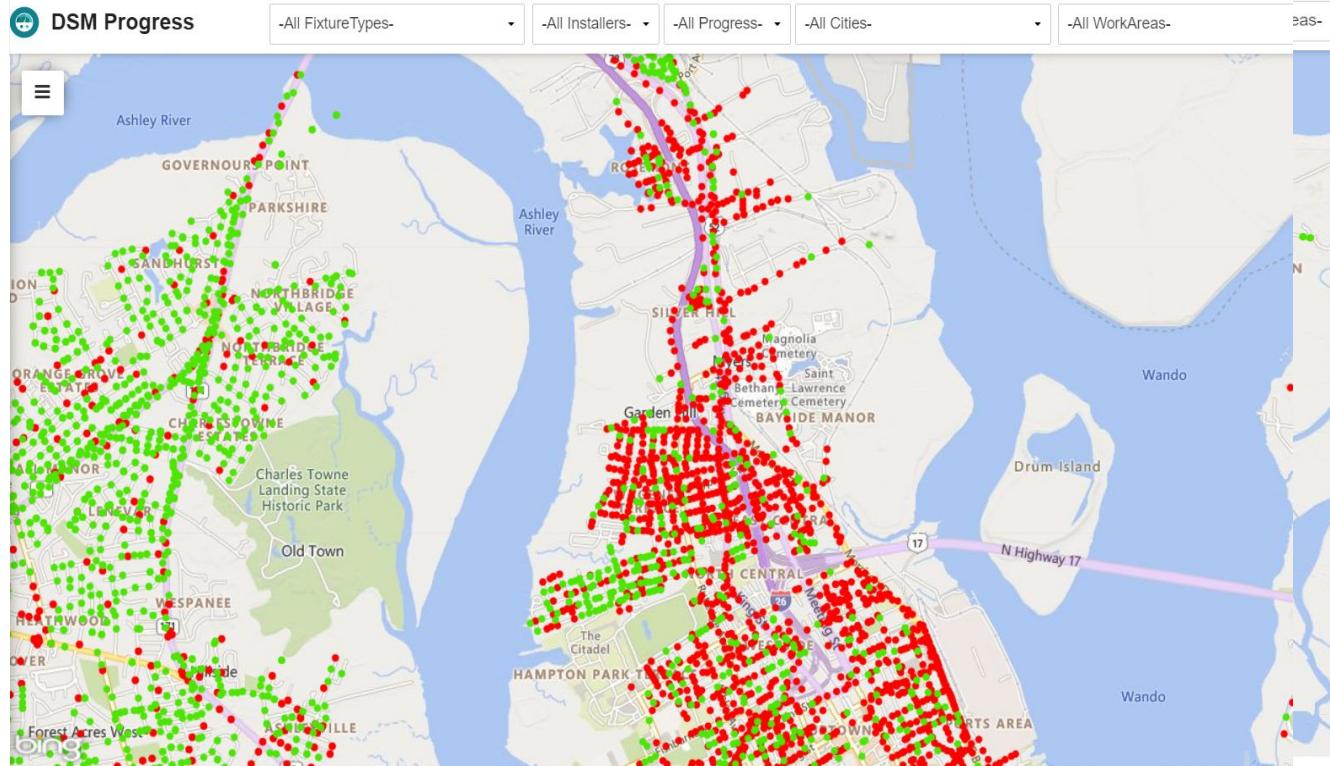
-All Progress-

CHARLESTON(3/3)

-All WorkAreas-



Charleston Peninsula #1



Charleston Peninsula #2

DSM Progress

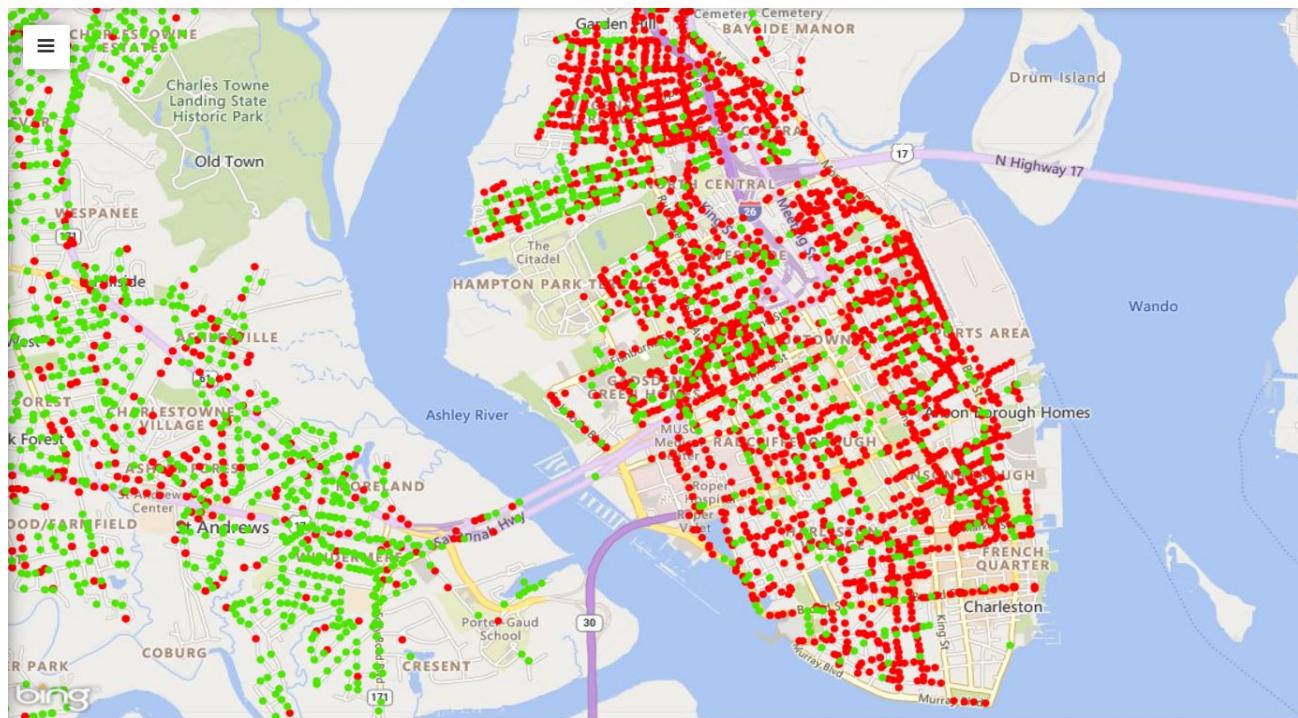
-All FixtureTypes-

-All Installers-

-All Progress-

-All Cities-

-All WorkAreas-



Public Comment Period