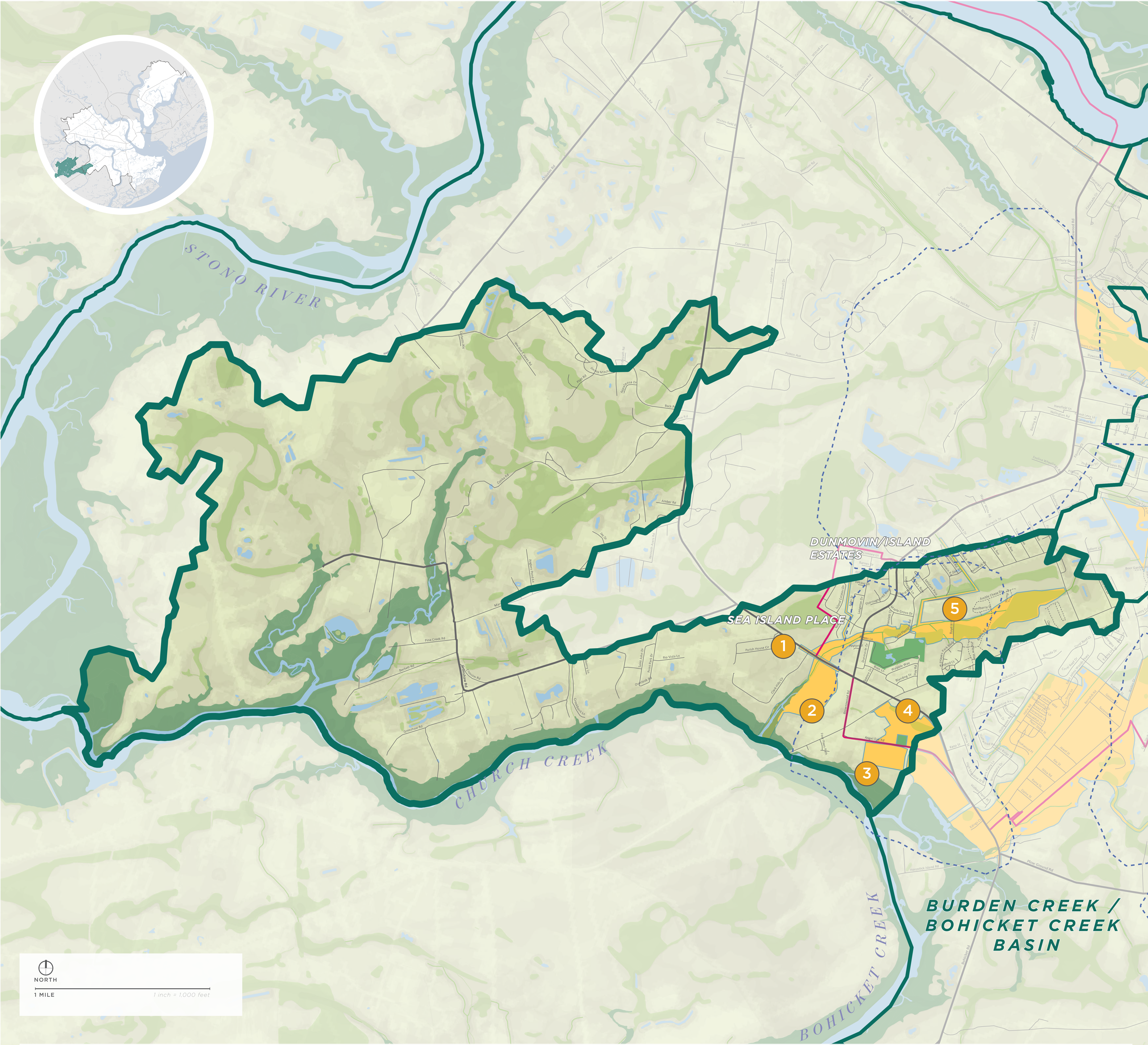
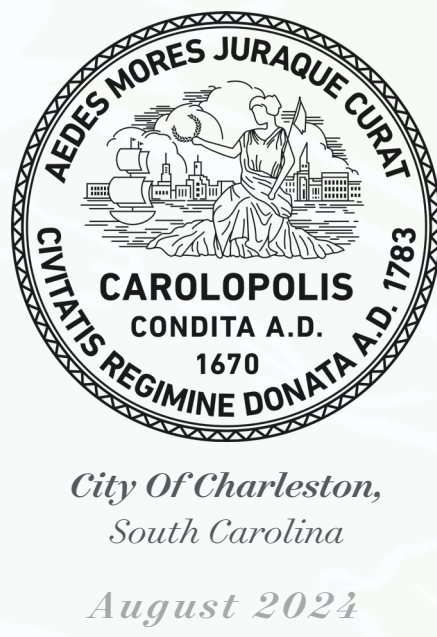


# Church Creek Basin

## 717 Acres - Johns Island



### BASIN OVERVIEW

Church Creek Basin is located on Johns Island and covers approximately 717 acres. Church Creek Basin is one of eight basins on Johns Island.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. Church Creek to the south defines this basin's edges.

The Urban Growth Boundary (UGB) is a line that surrounds the City of Charleston. Suburban or urban growth in rural areas outside of the UGB is discouraged. The eastern portion of Church Creek Basin is inside of the UGB.

The sea island landscape shapes development and flood risk on Johns Island. The ridge of high ground along Maybank holds this island's historic character and its safest land. The high ground throughout Johns Island creates an opportunity for appropriate development safe from surge and tidal flood risk. Land use and development practices should manage water in the upland and middle zones. Along the coastal edge, elevating key roads and facilitating marsh migration helps preserve both neighborhood access and critical habitat as sea levels rise. Attention to the island's important, contiguous tree canopy is a priority.

### MAP FEATURES

- TIDAL MARSH
- WETLANDS
- CITY PARKS
- URBAN GROWTH BOUNDARY
- WATER DRAINAGE BASINS
- STREETS
- AFRICAN AMERICAN SETTLEMENT AREA

- WATER PLAN PROJECTS
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN

- CITY STORMWATER PROJECTS
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

### PROJECTS

- WATER PLAN
- MAIN ROAD  
Road Raising
  - CHURCHILL LANDING  
Shoreline Adaptation
  - BOHICKET ROAD  
Shoreline Adaptation
  - ANGEL OAK  
Stormwater Park
  - SOUTHWICK DRIVE  
Stormwater Improvements

### MAINTENANCE

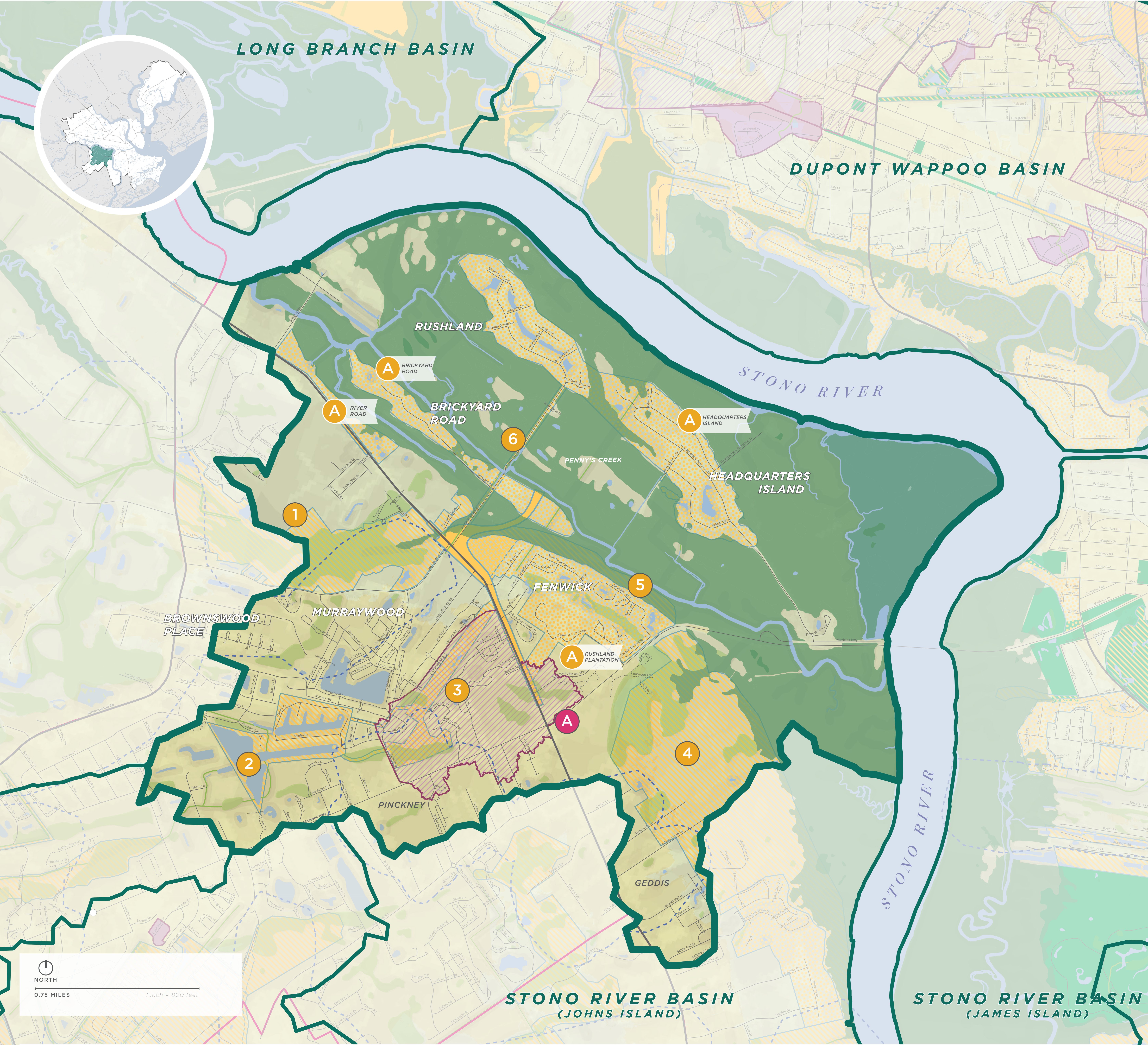
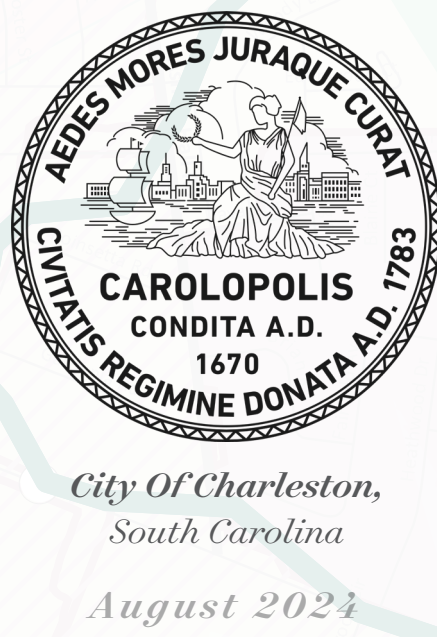
Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT, and private stormwater crews and subcontractors. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.

Roadside ditch maintenance and canal maintenance are a critical part of a functioning drainage system for Johns Island. Over the last five years, City Stormwater crews have averaged 18.2 miles of front ditch cleaning per year on city-owned streets. 46 unique rear ditch systems are hand-cleaned annually on Johns Island.



# Penny's Creek Basin

## 622 Acres - Johns Island



### BASIN OVERVIEW

Penny's Creek Basin is located on Johns Island and covers approximately 622 acres. Penny's Creek Basin is one of eight basins on Johns Island.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. The Stono River to the north and east and high ground along Maybank Highway to the south define this basin's edges.

The sea island landscape shapes development and flood risk on Johns Island. The ridge of high ground along Maybank holds this island's historic character and its safest land. The high ground throughout Johns Island creates an opportunity for appropriate development safe from surge and tidal flood risk. Land use and development practices should manage water in the upland and middle zones. Along the coastal edge, elevating key roads and facilitating marsh migration helps preserve both neighborhood access and critical habitat as sea levels rise. Attention to the island's important, contiguous tree canopy is a priority.

Flood risk may change across basins and over time. While water risk is multifaceted, a primary flood risk driver in each basin orients policy, investment, & redevelopment strategies.

### MAP FEATURES

- TIDAL MARSH
  - WETLANDS
  - CITY PARKS
  - URBAN GROWTH BOUNDARY
  - WATER DRAINAGE BASINS
  - STREETS
  - AFRICAN AMERICAN SETTLEMENT AREA
- WATER PLAN PROJECTS**
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN
- CITY STORMWATER PROJECTS**
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

### PROJECTS

- WATER PLAN**
- COMMUNITY ADAPTATION PLANS, AREA SPECIFIC**  
AREAS: Rushland Plantation, Headquarters Plantation, Brickyard Road, River Road
  - MURRYWOOD**  
Wetland Management & Conservation, Stormwater Storage
  - FENWICK HILLS**  
Stormwater Improvements
  - BARBERRY WOODS**  
Stormwater Improvements
  - STONO SHORELINE**  
Marsh Migration & Community Adaptation Plan
  - FENWICK SHORELINE**  
Marsh Migration & Community Adaptation Plan
  - RUSHLAND LANDING**  
Road Raising

**CITY STORMWATER**

- BARBERRY WOODS DRAINAGE IMPROVEMENTS**  
STATUS: In Development  
TOTAL COST: \$12,856,843  
FUNDING SOURCE: State SOCR Grant

**MAINTENANCE**

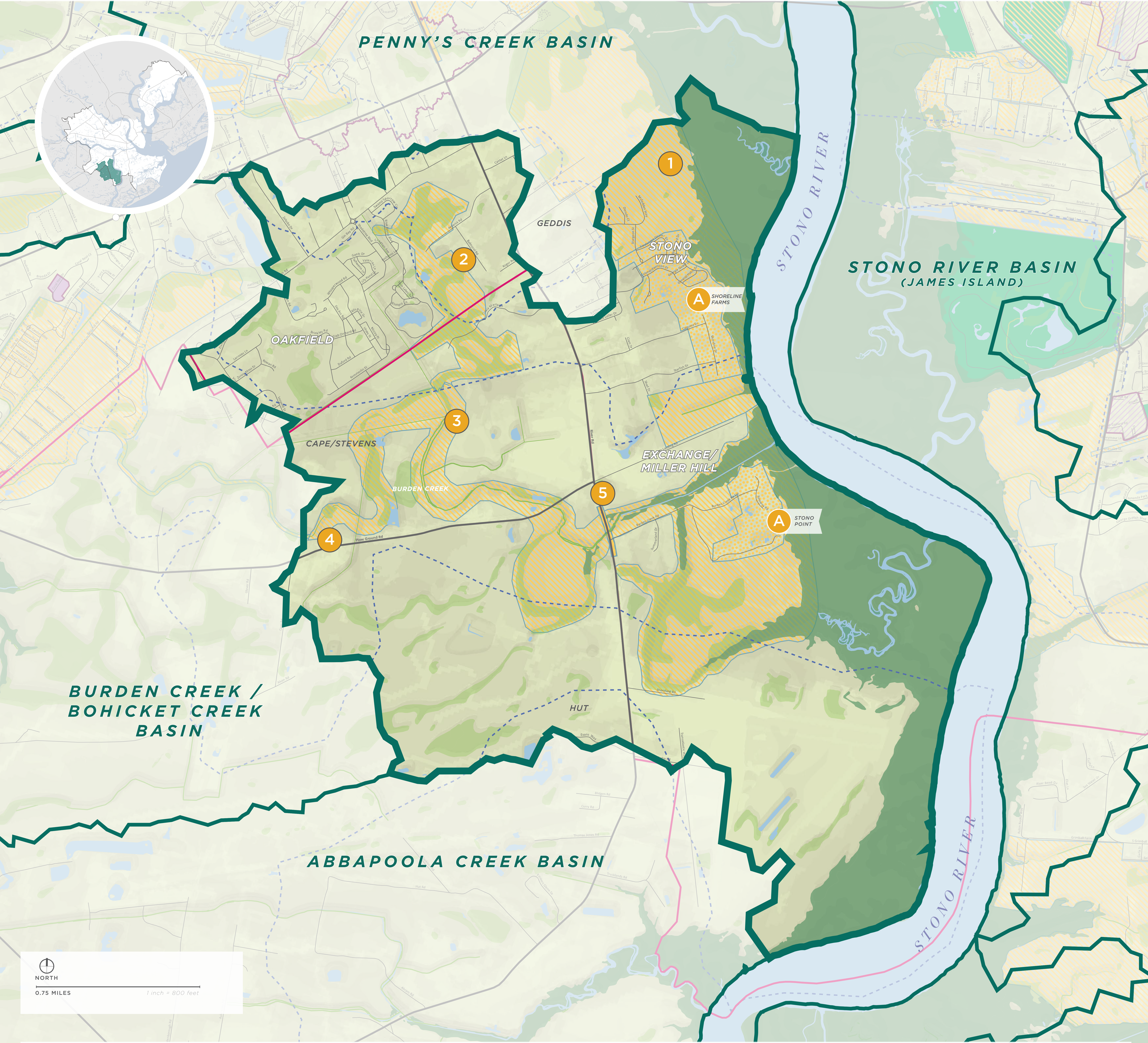
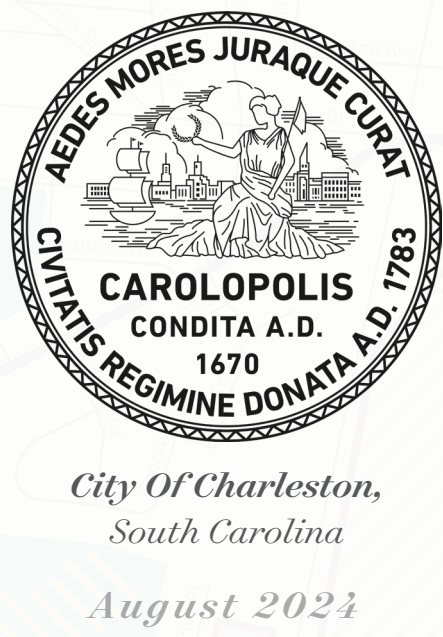
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Roadside ditch maintenance and canal maintenance are a critical part of a functioning drainage system for Johns Island. Over the last five years, City Stormwater crews have averaged 18.2 miles of front ditch cleaning per year on city-owned streets. 46 unique rear ditch systems are hand-cleaned annually on Johns Island.



# Stono River Basin

## 644 Acres - Johns Island



### BASIN OVERVIEW

Stono River Basin (Johns Island) is located on Johns Island and covers approximately 644 acres. Stono River Basin is one of eight basins on Johns Island.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. The Stono River to the east defines this basin's edges.

The Urban Growth Boundary (UGB) is a line that surrounds the City of Charleston. Suburban or urban growth in rural areas outside of the UGB is discouraged. The eastern and northern portions of Stono River Basin are inside the UGB.

The sea island landscape shapes development and flood risk on Johns Island. The ridge of high ground along Maybank holds this island's historic character and its safest land. The high ground throughout Johns Island creates an opportunity for appropriate development safe from surge and tidal flood risk. Land use and development practices should manage water in the upland and middle zones. Along the coastal edge, elevating key roads and facilitating marsh migration helps preserve both neighborhood access and critical habitat as sea levels rise. Attention to the island's important, contiguous tree canopy is a priority.

### MAP FEATURES

- TIDAL MARSH
- WETLANDS
- CITY PARKS
- URBAN GROWTH BOUNDARY
- WATER DRAINAGE BASINS
- STREETS
- AFRICAN AMERICAN SETTLEMENT AREA

- WATER PLAN PROJECTS
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN

- CITY STORMWATER PROJECTS
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

### PROJECTS

- WATER PLAN
- COMMUNITY ADAPTATION PLANS, AREA SPECIFIC  
AREAS: Shoreline Farms, Stono Point
  - STONO SHORELINE  
Marsh Migration & Community Adaptation Plan
  - TWIN LAKES - BURDEN CREEK HEADWATERS  
Stormwater Improvements
  - BURDEN CREEK - EAST  
Wetlands Management & Conservation, Emergent Connection
  - CHURCH/BURDEN CREEK  
Wetlands Management & Conservation, Emergent Connection
  - RIVER ROAD  
Road Raising

### MAINTENANCE

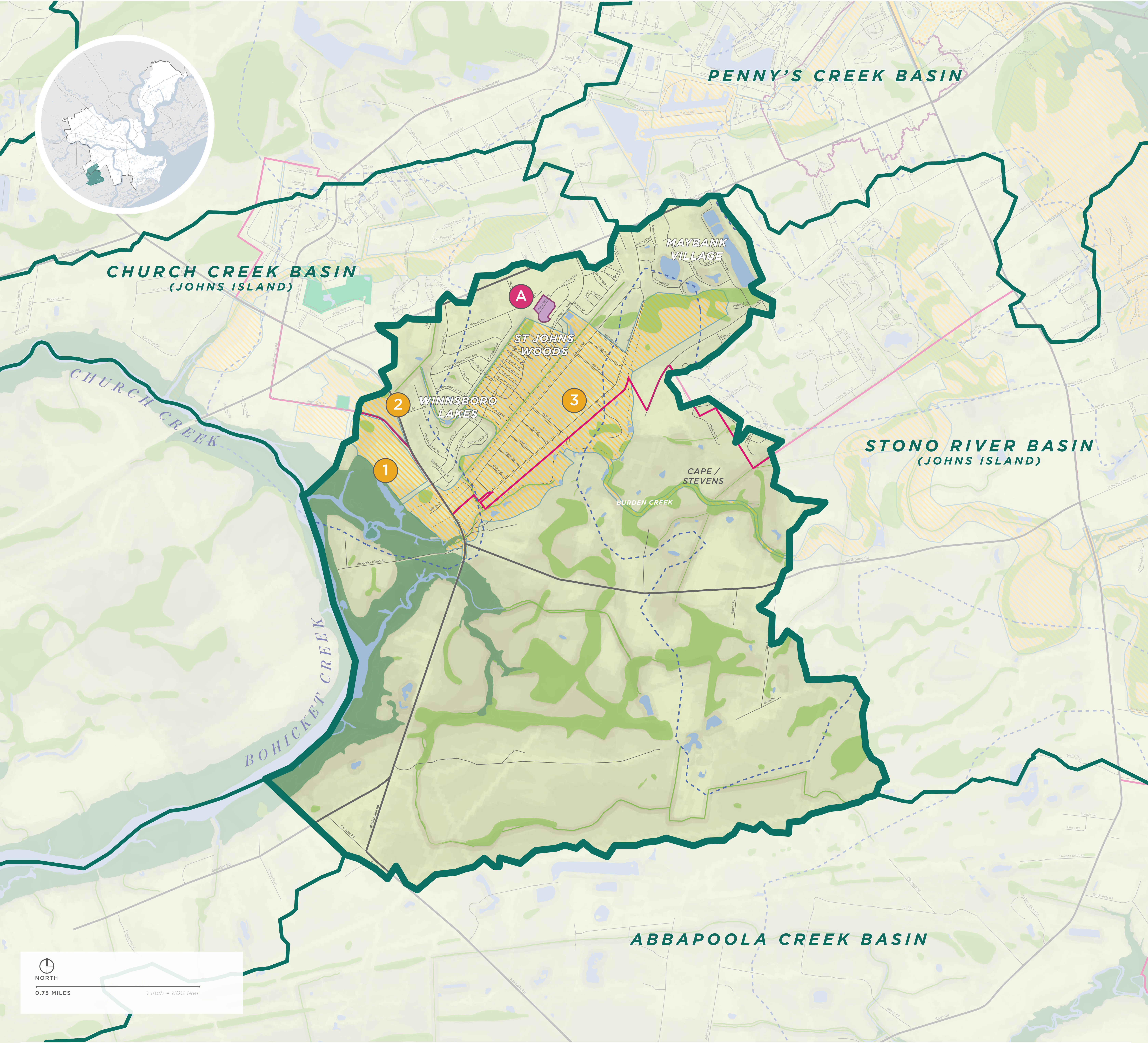
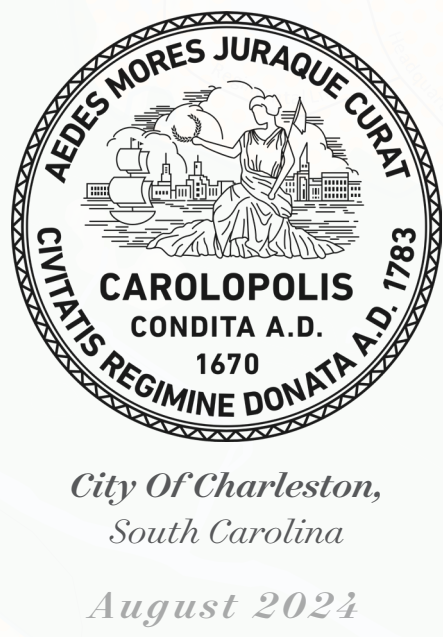
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Roadside ditch maintenance and canal maintenance are a critical part of a functioning drainage system for Johns Island. Over the last five years, City Stormwater crews have averaged 18.2 miles of front ditch cleaning per year on city-owned streets. 46 unique rear ditch systems are hand-cleaned annually on Johns Island.



# Burden Creek / Bohicket Creek Basin

477 Acres - Johns Island



## BASIN OVERVIEW

*Burden Creek / Bohicket Creek Basin is located on Johns Island and covers approximately 477 acres. Burden Creek / Bohicket Creek Basin is one of eight basins on Johns Island.*

*A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. Church Creek and Bohicket Creek to the west and high ground along Maybank Highway to the north define this basin's edges.*

*The Urban Growth Boundary (UGB) is a line that surrounds the City of Charleston. Suburban or urban growth in rural areas outside of the UGB is discouraged. The northern portion of Burden Creek Basin is inside the UGB.*

*Burden Creek is a tidal waterway that historically flowed into both the Stono River and Church Creek / Bohicket Creek. Restoring the historic creek helps alleviate the drainage challenges in the surrounding neighborhood and pave way for future marsh migration. Attention to the island's important, contiguous tree canopy is a priority.*

## MAP FEATURES

- TIDAL MARSH
- WETLANDS
- CITY PARKS
- URBAN GROWTH BOUNDARY
- WATER DRAINAGE BASINS
- STREETS
- AFRICAN AMERICAN SETTLEMENT AREA

- WATER PLAN PROJECTS
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN

- CITY STORMWATER PROJECTS
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

## PROJECTS

- WATER PLAN
- 1 BOHICKET ROAD  
Shoreline Adaptation
  - 2 ANGEL OAK  
Stormwater Park
  - 3 BURDEN CREEK - WEST  
Stormwater Park & Stormwater Improvements

- CITY STORMWATER
- A CORAL REEF DITCH PIPING  
STATUS: Completed  
TOTAL COST: \$63,000  
FUNDING SOURCE: Stormwater Operations Fund

**MAINTENANCE**

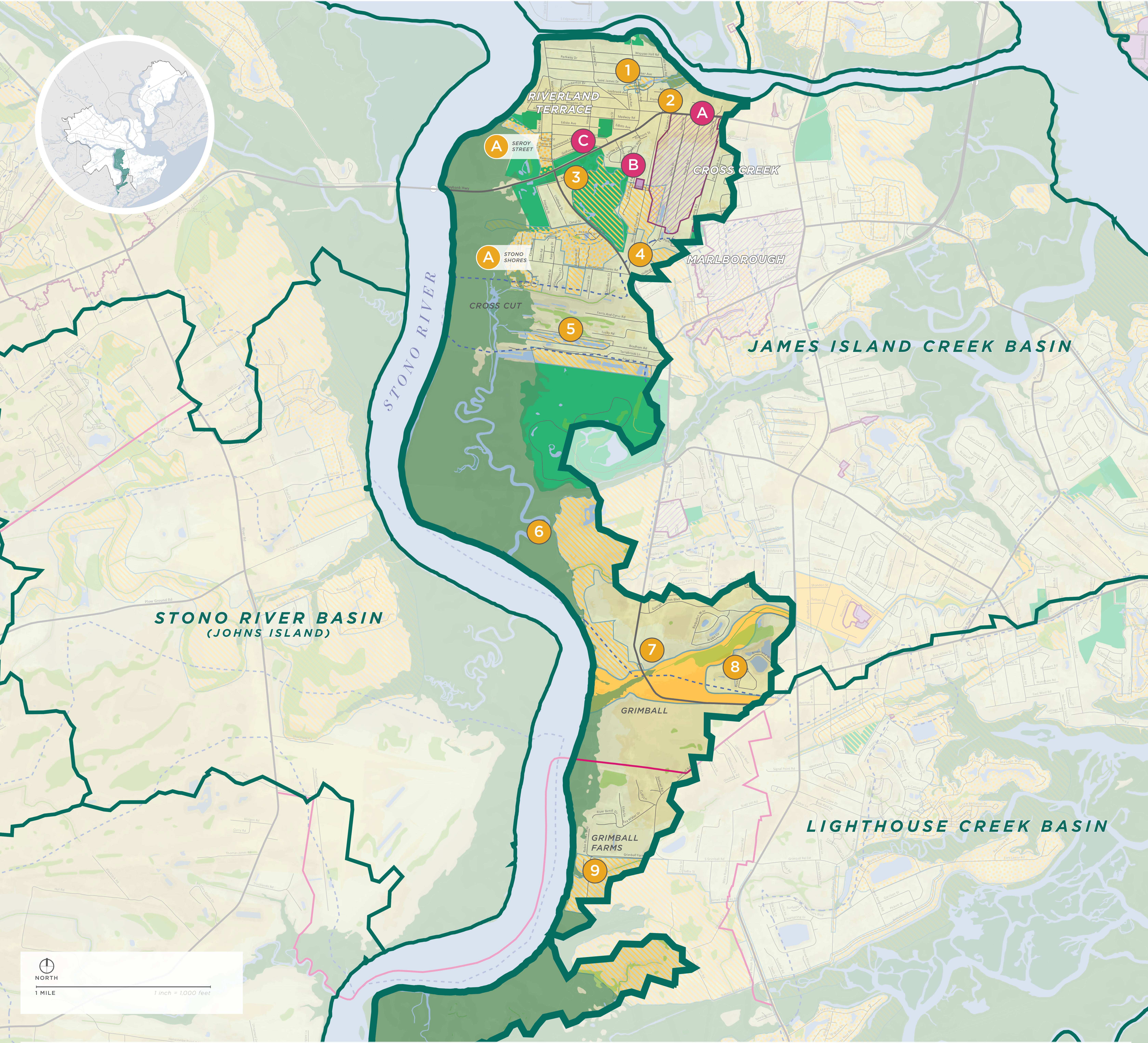
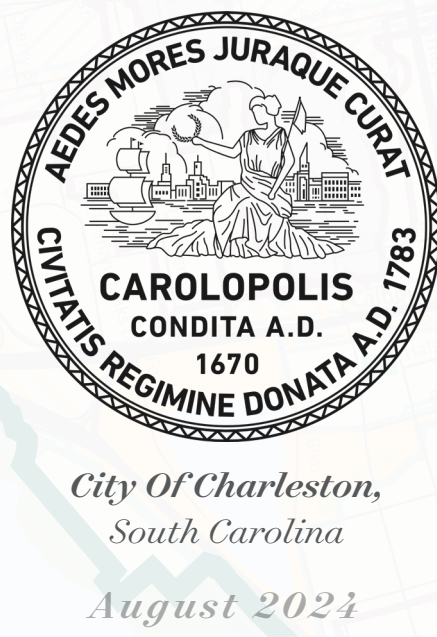
*Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT, and private stormwater crews and subcontractors. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.*

*Roadside ditch maintenance and canal maintenance are a critical part of a functioning drainage system for Johns Island. Over the last five years, City Stormwater crews have averaged 18.2 miles of front ditch cleaning per year on city-owned streets. 46 unique rear ditch systems are hand-cleaned annually on Johns Island.*



# Stono River Basin

## 435 Acres - James Island



### BASIN OVERVIEW

*Stono River Basin (James Island) is located on James Island and covers approximately 435 acres. Stono River Basin is one of three basins on James Island.*

*A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. The Stono River to the west and Wappoo Creek to the north define this basin's edges.*

*James Island consists of two developing sea islands, divided by James Island Creek. These sea islands face sea level rise and storm surge along their coastal edges and constricted, multi-jurisdictional drainage systems in their interiors. Low-lying, interior neighborhoods with slab-on-grade homes often experience tidal and compound flooding. These islands have a significant need for residential adaptation and marsh mitigation plans, along with limited opportunities for appropriate growth along the high ridges.*

*Expanding both drainage capacity and governmental coordination will help alleviate rainfall flood risk in flat low-lying neighborhoods.*

### MAP FEATURES

- TIDAL MARSH
- WETLANDS
- CITY PARKS
- URBAN GROWTH BOUNDARY
- WATER DRAINAGE BASINS
- STREETS
- AFRICAN AMERICAN SETTLEMENT AREA

- #### WATER PLAN PROJECTS
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN

- #### CITY STORMWATER PROJECTS
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

### PROJECTS

- #### WATER PLAN
- A** COMMUNITY ADAPTATION PLANS, AREA SPECIFIC  
AREAS: Seroy Street, Stono Shores
- 1 PLYMOUTH AVE  
Road Raising
  - 2 PLYMOUTH CREEK  
Creek Restoration
  - 3 CHARLESTON MUNICIPAL COURSE  
Stormwater Park
  - 4 WOODLAND SHORES  
Emergent Creek Restoration & Stormwater Storage
  - 5 STONO SHORES  
Stormwater Park
  - 6 DILL TRACT  
Marsh Migration
  - 7 RIVERLAND DRIVE  
Road Raising
  - 8 WILLOW WALK  
Stormwater Park & Stormwater Improvements
  - 9 GRIMBALL ROAD  
Community Adaptation Plan & Marsh Migration

- #### CITY STORMWATER
- A** HOWLE AVE GREENBELT POND  
STATUS: In Progress  
TOTAL COST: \$1,600,000  
FUNDING SOURCE: Greenbelt, NFWF Grant, Stormwater Operation Budget
- B** PAWPAW ST DRAINAGE IMPROVEMENT  
STATUS: Completed  
TOTAL COST: \$10,000  
FUNDING SOURCE: Stormwater Operations Budget
- C** CHARLESTON MUNICIPAL COURSE STORMWATER STORAGE  
STATUS: Completed  
FUNDING SOURCE: County, Stormwater Operations Budget

#### MAINTENANCE

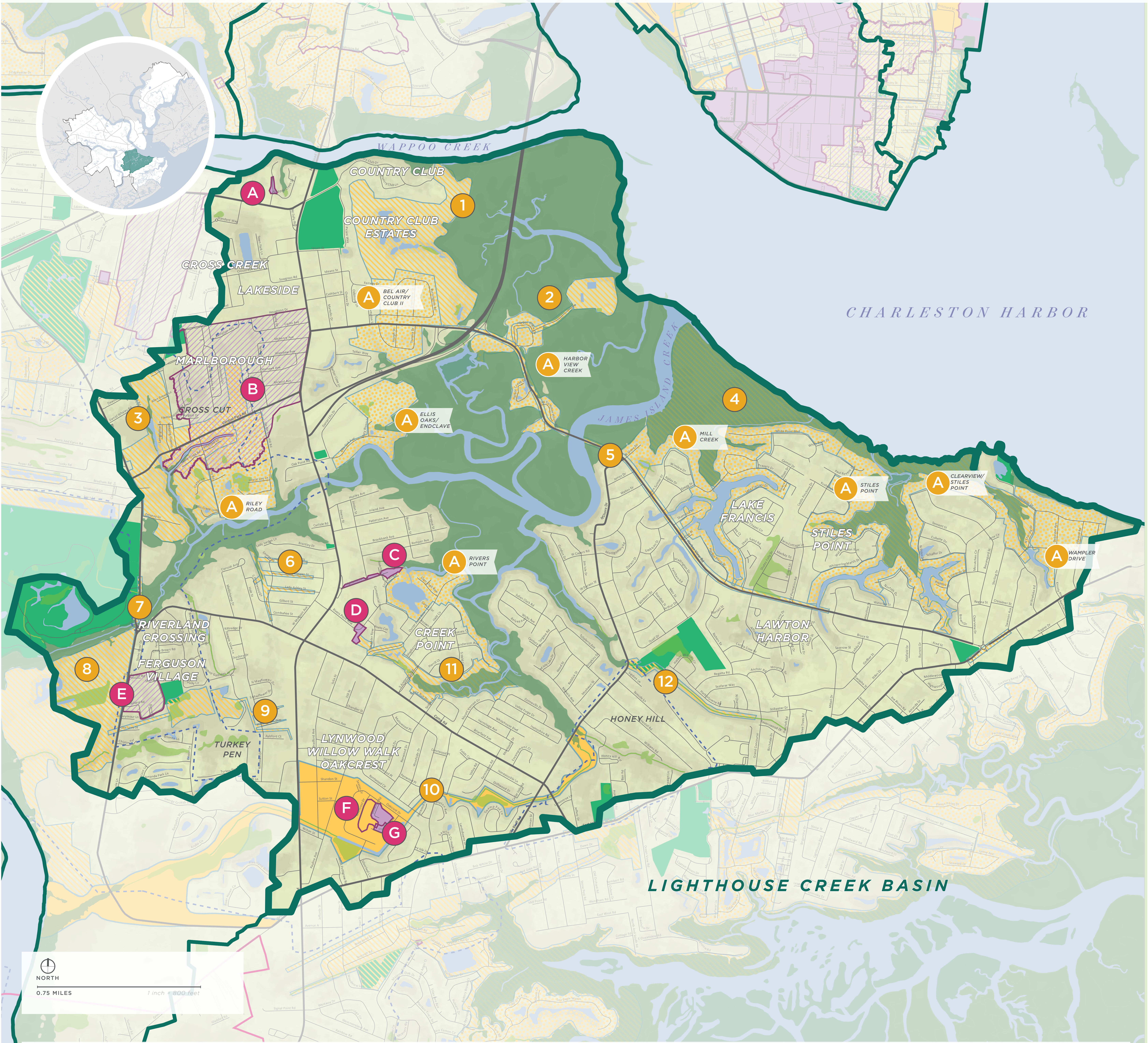
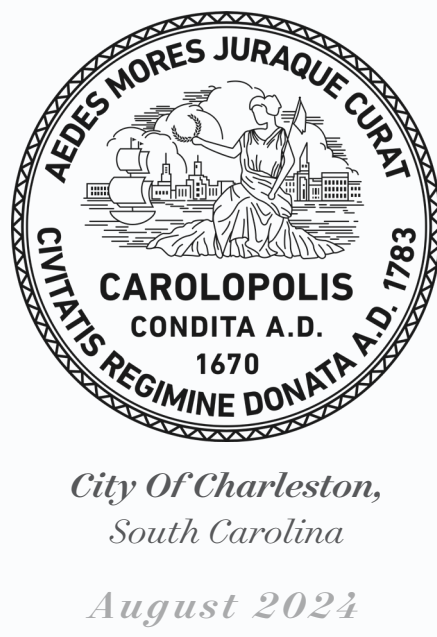
Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT, the Town of James Island, and private stormwater crews and subcontractors. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.

**144 unique rear ditch systems are hand-cleaned annually on James Island.** Over the last five years, City Stormwater crews have averaged 18.2 miles of front ditch cleaning per year on city-owned streets.



# James Island Creek Basin

## 865 Acres - James Island



### BASIN OVERVIEW

James Island Creek Basin is located on James Island and covers approximately 865 acres. James Island Creek Basin is one of three basins on James Island.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. James Island Creek to the east and Fort Johnson Road to the south define this basin's edges.

James Island consists of two developing sea islands, divided by James Island Creek. These sea islands face sea level rise and storm surge along their coastal edges and constricted, multi-jurisdictional drainage systems in their interiors. Low-lying, interior neighborhoods with slab-on-grade homes often experience tidal and compound flooding. These islands have a significant need for residential adaptation and marsh mitigation plans, along with limited opportunities for appropriate growth along the high ridges.

Expanding both drainage capacity and governmental coordination will help alleviate rainfall flood risk in flat low-lying neighborhoods. Elevating road access to high ground corridors like Maybank Highway and critical infrastructure like Plum Island Water Treatment Plant will become necessary as sea levels rise.

### MAP FEATURES

- TIDAL MARSH
  - WETLANDS
  - CITY PARKS
  - URBAN GROWTH BOUNDARY
  - WATER DRAINAGE BASINS
  - STREETS
  - AFRICAN AMERICAN SETTLEMENT AREA
- WATER PLAN PROJECTS**
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN
- CITY STORMWATER PROJECTS**
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

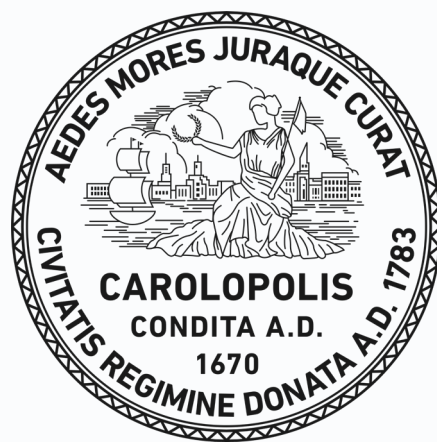
### PROJECTS

- WATER PLAN**
- A COMMUNITY ADAPTATION PLANS, AREA SPECIFIC**  
AREAS: Charleston County Club II, Ellis Oaks / Enclave, Riley Road, Rivers Point, Mill Creek, Stiles Point, Clearview, Wampler Drive
- 1 CHARLESTON COUNTRY CLUB  
Marsh Migration
  - 2 PLUM ISLAND & CIRCLE PLACE  
Road Raising & Adaptation Plan
  - 3 WOODLAND SHORES  
Emergent Creek Restoration & Stormwater Storage
  - 4 MILL POND & KUSHIWAH CREEK  
Shoreline Adaptation
  - 5 HARBOR VIEW ROAD  
Road Raising
  - 6 CENTERVILLE  
Drainage Improvements
  - 7 RIVERLAND DRIVE  
Road Raising
  - 8 DILL TRACT  
Marsh Migration
  - 9 YORKTOWN  
Drainage Improvements
  - 10 WILLOW WALK  
Stormwater Park & Stormwater Improvements
  - 11 WOLF PIT RUN  
Creek Restoration
  - 12 JAMES ISLAND HIGH SCHOOL  
Creek Restoration
- CITY STORMWATER**
- A WAPPOO CREEK PLACE DRIVE PONDING REPAIR**  
STATUS: Completed  
TOTAL COST: \$51,000  
FUNDING SOURCE: Stormwater Operations Budget
- B CENTRAL PARK DRAINAGE**  
STATUS: In Development  
TOTAL COST: \$5,000,000  
FUNDING SOURCE: Drainage Fund
- C HIGHLAND OUTFALL**  
STATUS: Completed  
TOTAL COST: \$70,000 (City part)  
FUNDING SOURCE: Cost Share with Town of James Island, Stormwater Operations Budget
- D RIVERS POINT ROW**  
STATUS: Completed  
TOTAL COST: \$43,220  
FUNDING SOURCE: Stormwater Operations Budget
- E FERGUSON VILLAGE DRAINAGE (EASEMENTS PHASE)**  
STATUS: In Progress  
TOTAL COST: \$60,000  
FUNDING SOURCE: Stormwater Operations Budget
- F WILLOW WALK SWALE**  
STATUS: Phase 1 Completed, Phase 2 In Development  
TOTAL COST: \$175,000  
FUNDING SOURCE: Stormwater Operations Budget
- G SHOREHAM ROAD PROPERTY RETROFIT**  
STATUS: Completed  
TOTAL COST: \$50,000  
FUNDING SOURCE: Stormwater Operations Budget
- MAINTENANCE**  
Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT, the Town of James Island, and private stormwater crews and subcontractors. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.

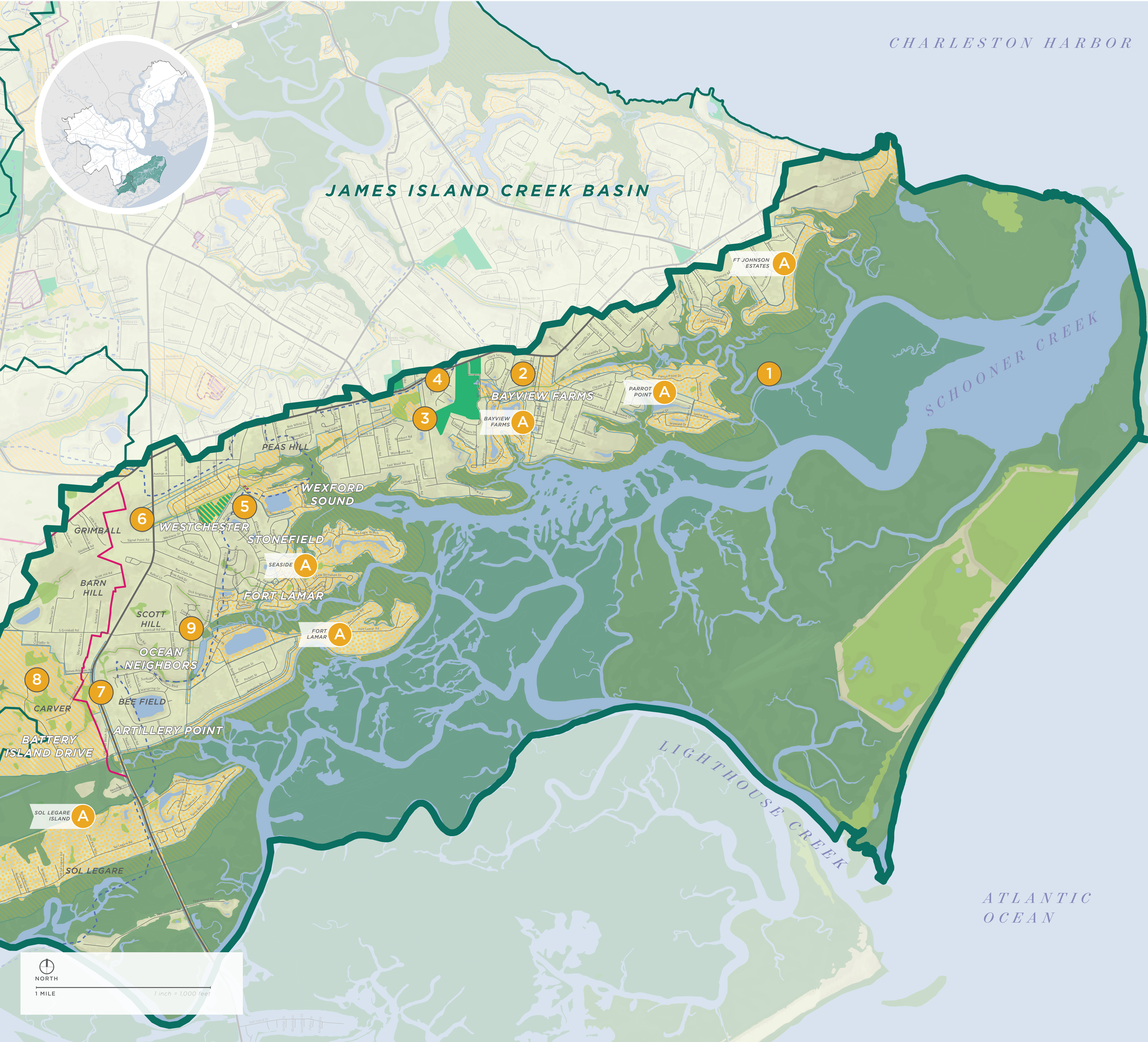


# Lighthouse Creek Basin

1,613 Acres - James Island



City Of Charleston,  
South Carolina  
August 2024



## BASIN OVERVIEW

The Lighthouse Creek Basin is located on James Island and covers approximately 1,613 acres. Lighthouse Creek Basin is the largest of three basins on James Island.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. Fort Johnson Road to the north and Lighthouse Creek to the south define this basin's edges.

James Island consists of two developing sea islands, divided by James Island Creek. These sea islands face sea level rise and storm surge along their coastal edges and constricted, multi-jurisdictional drainage systems in their interiors. Low-lying, interior neighborhoods with slab-on-grade homes often experience tidal and compound flooding. These islands have a significant need for residential adaptation and marsh mitigation plans, along with limited opportunities for appropriate growth along the high ridges.

## MAP FEATURES

- TIDAL MARSH
- WETLANDS
- CITY PARKS
- URBAN GROWTH BOUNDARY
- WATER DRAINAGE BASINS
- STREETS
- AFRICAN AMERICAN SETTLEMENT AREA

- WATER PLAN PROJECTS
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN

- CITY STORMWATER PROJECTS
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

## PROJECTS

### WATER PLAN

- COMMUNITY ADAPTATION PLANS, AREA SPECIFIC**  
AREAS: Fort Johnson Estates, Parrot Point Drive Community, Bayview Farms, Seaside, Fort Lamar, Sol Legare Island
- JAMES ISLAND LIVING SHORELINE**  
Shoreline Adaptation
- CREEKSIDE DRIVE**  
Marsh Migration & Stormwater Park
- STONE POST & OCEAN VIEW**  
Wetlands Management
- FORT JOHNSON ROAD**  
Road Raising
- WESTCHESTER**  
Stormwater Park
- SIGNAL POINT**  
Drainage Improvements
- FOLLY ROAD**  
Road Raising & Shoreline Adaptation
- GRIMBALL ROAD**  
Community Adaptation Plan & Marsh Migration
- OLD MILITARY ROAD**  
Road Raising

### MAINTENANCE

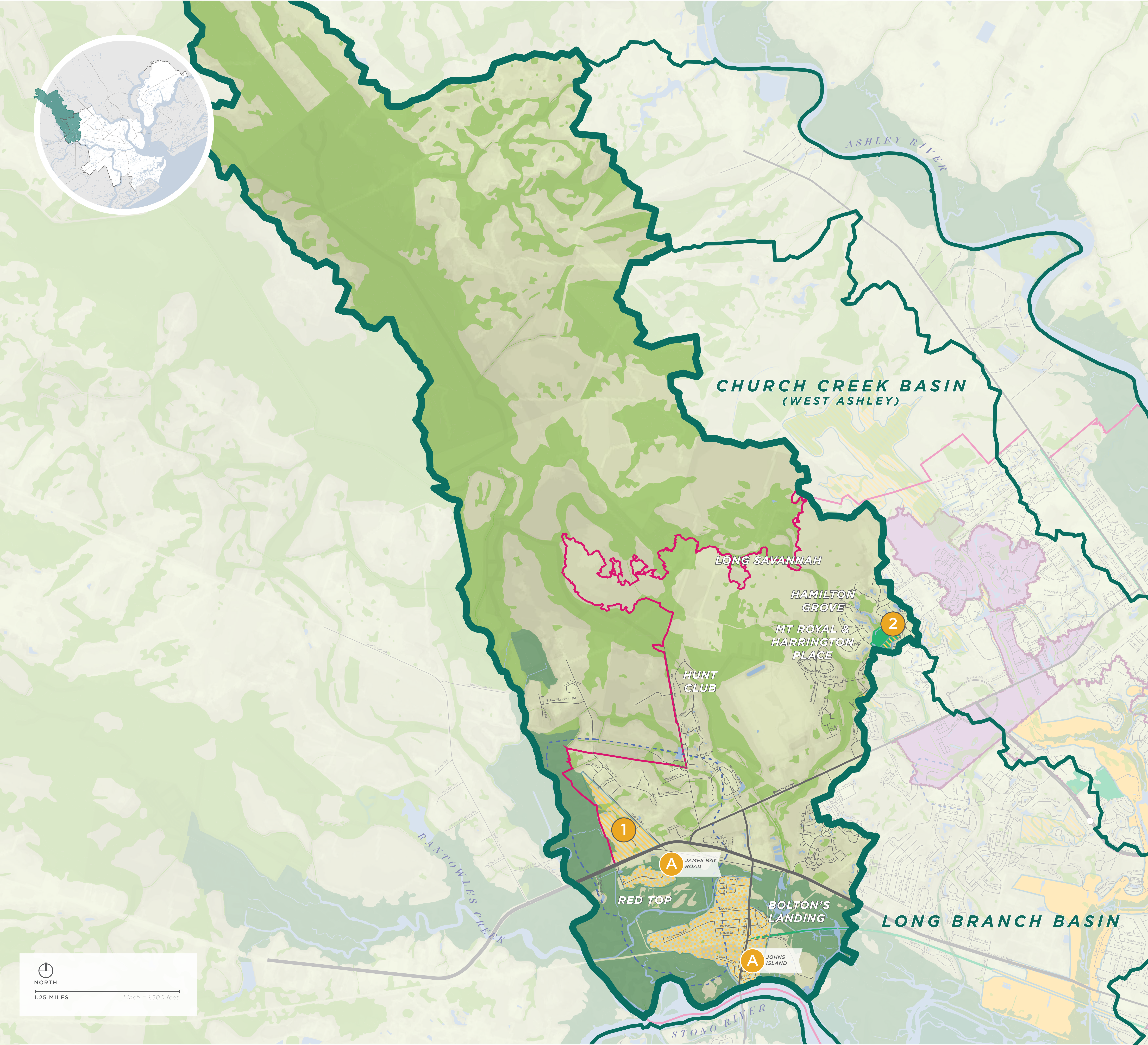
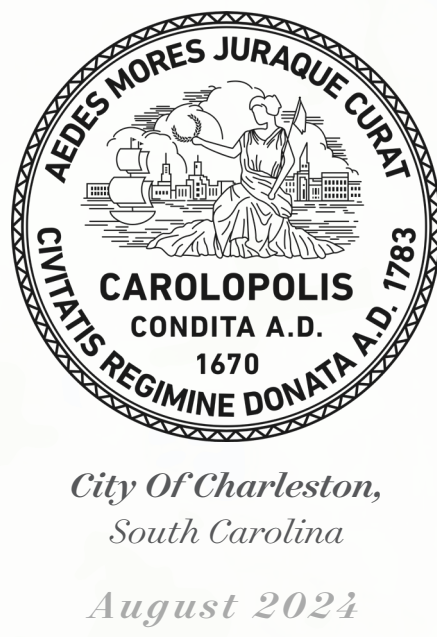
Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT, the Town of James Island, and private stormwater crews and subcontractors. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.

144 unique rear ditch systems are hand-cleaned annually on James Island. Over the last five years, City Stormwater crews have averaged 18.2 miles of front ditch cleaning per year on city-owned streets.



# Bear Swamp Basin

## 2,019 Acres - West Ashley



### BASIN OVERVIEW

*Bear Swamp Basin is located in West Ashley and covers approximately 2,019 acres. Bear Swamp Basin is the largest of seven basins in West Ashley.*

*A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. The Stono River to the south and high ground to the east define this basin's edges.*

*The Urban Growth Boundary (UGB) is a line that surrounds the City of Charleston. Suburban or urban growth in rural areas outside of the UGB is discouraged. The southern portion of Bear Swamp Basin is inside of the UGB.*

*West Ashley is comprised of a network of creeks and transforming future sea islands. The future of West Ashley will be shaped by water from the Ashley & Stono Rivers but also from several tidal and freshwater creeks throughout area. With rising seas, higher tides, and heavier storms, low-lying neighborhoods will need support to adapt, while applicable development shifts towards appropriate density along high ground ridges.*

### MAP FEATURES

- TIDAL MARSH
- WETLANDS
- CITY PARKS
- URBAN GROWTH BOUNDARY
- WATER DRAINAGE BASINS
- STREETS
- AFRICAN AMERICAN SETTLEMENT AREA

- #### WATER PLAN PROJECTS
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN

- #### CITY STORMWATER PROJECTS
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

### PROJECTS

- #### WATER PLAN
- A** COMMUNITY ADAPTATION PLANS, AREA SPECIFIC  
AREAS: James Bay Road, Johns Island (West Ashley)
  - 1** RANTOWLES CREEK  
Wetlands Management & Conservation
  - 2** UPPER CHURCH CREEK  
Wetland Management & Stormwater Improvements

### MAINTENANCE

Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT stormwater crews. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.

Canals and roadside drainage (open ditch and closed pipes) are the main stormwater infrastructure for West Ashley. Over the last five years, **City Stormwater crews have averaged 18.2 miles of front ditch rehabilitation per year on city-owned streets. 219 unique rear ditch systems are hand-cleaned annually in West Ashley.**

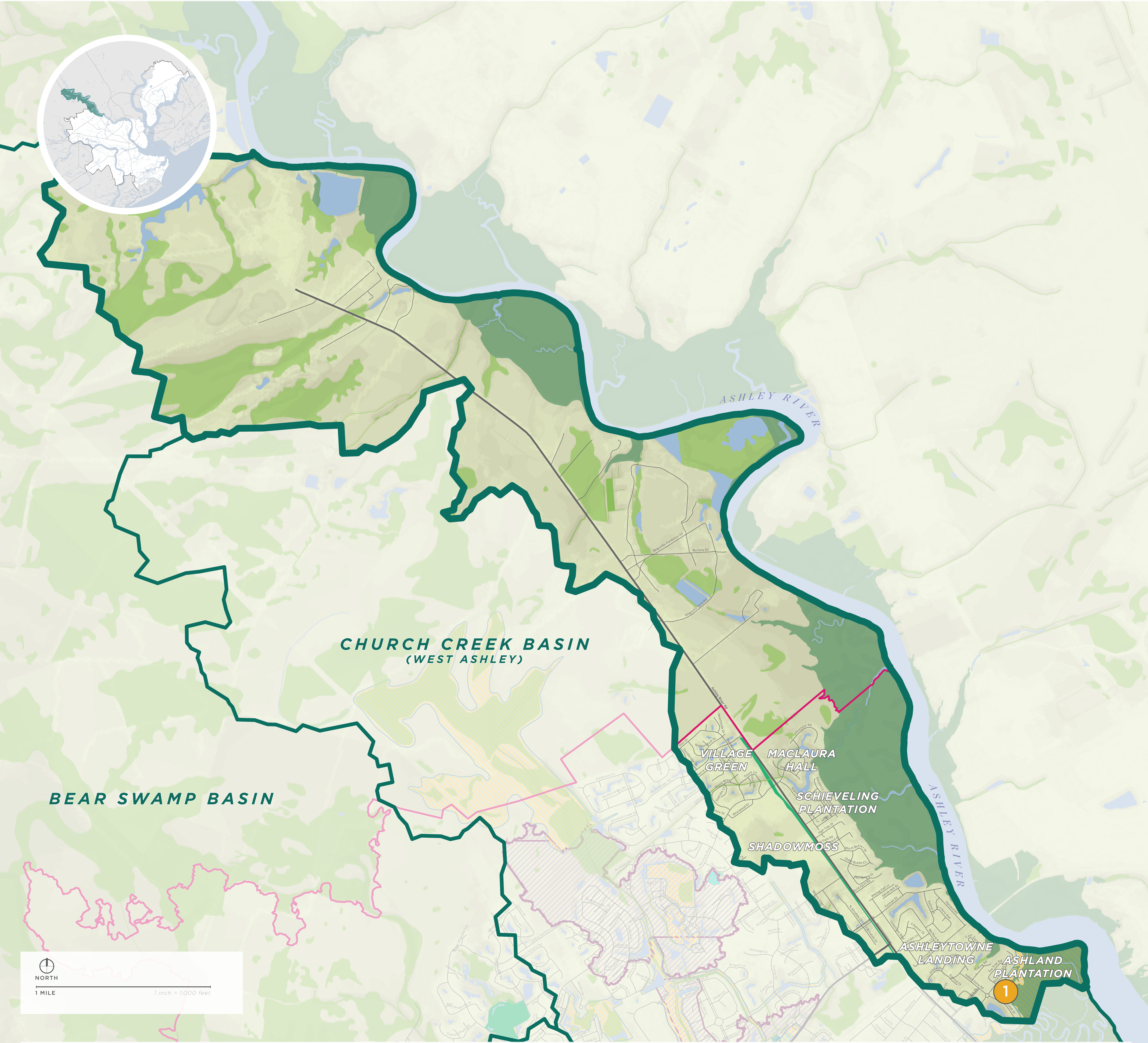
Vac truck crews work to clean out surface drains and sumps within street inlets. They also respond to acute clogging issues with pipe cleaning and support the roadside open ditch rehabilitation crew by cleaning the driveway culverts and outfall pipes.

The heavy equipment maintenance crew has been working through major drainage channels and canals, rebuilding maintenance roads along those canals and restoring the canals back to original functionality.



# Ashley River Basin

## 633 Acres - West Ashley



### BASIN OVERVIEW

Ashley River Basin (West Ashley) is located in West Ashley and covers approximately 633 acres. Ashley River Basin is one of seven basins in West Ashley.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. The Ashley River to the east and the Church Creek watershed to the west defines this basin's edges.

The Urban Growth Boundary (UGB) is a line that surrounds the City of Charleston. Suburban or urban growth in rural areas outside of the UGB is discouraged. The southern portion of Ashley River Basin is inside of the UGB.

The future of West Ashley will be shaped by water from the Ashley & Stono Rivers but also from several tidal and freshwater creeks throughout area.

### MAP FEATURES

- TIDAL MARSH
- WETLANDS
- CITY PARKS
- URBAN GROWTH BOUNDARY
- WATER DRAINAGE BASINS
- STREETS
- AFRICAN AMERICAN SETTLEMENT AREA

### WATER PLAN PROJECTS

- FEATURED
- RECOMMENDED
- COMMUNITY ADAPTATION PLAN

### CITY STORMWATER PROJECTS

- COMPLETED
- IN PROGRESS
- IN DEVELOPMENT

### PROJECTS

- WATER PLAN**
- 1** LONG BRANCH CREEK Interconnected System

### MAINTENANCE

Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT stormwater crews. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.

Canals and roadside drainage (open ditch and closed pipes) are the main stormwater infrastructure for West Ashley. Over the last five years, **City Stormwater crews have averaged 18.2 miles of front ditch rehabilitation** per year on city-owned streets. **219 unique rear ditch systems are hand-cleaned annually in West Ashley.**

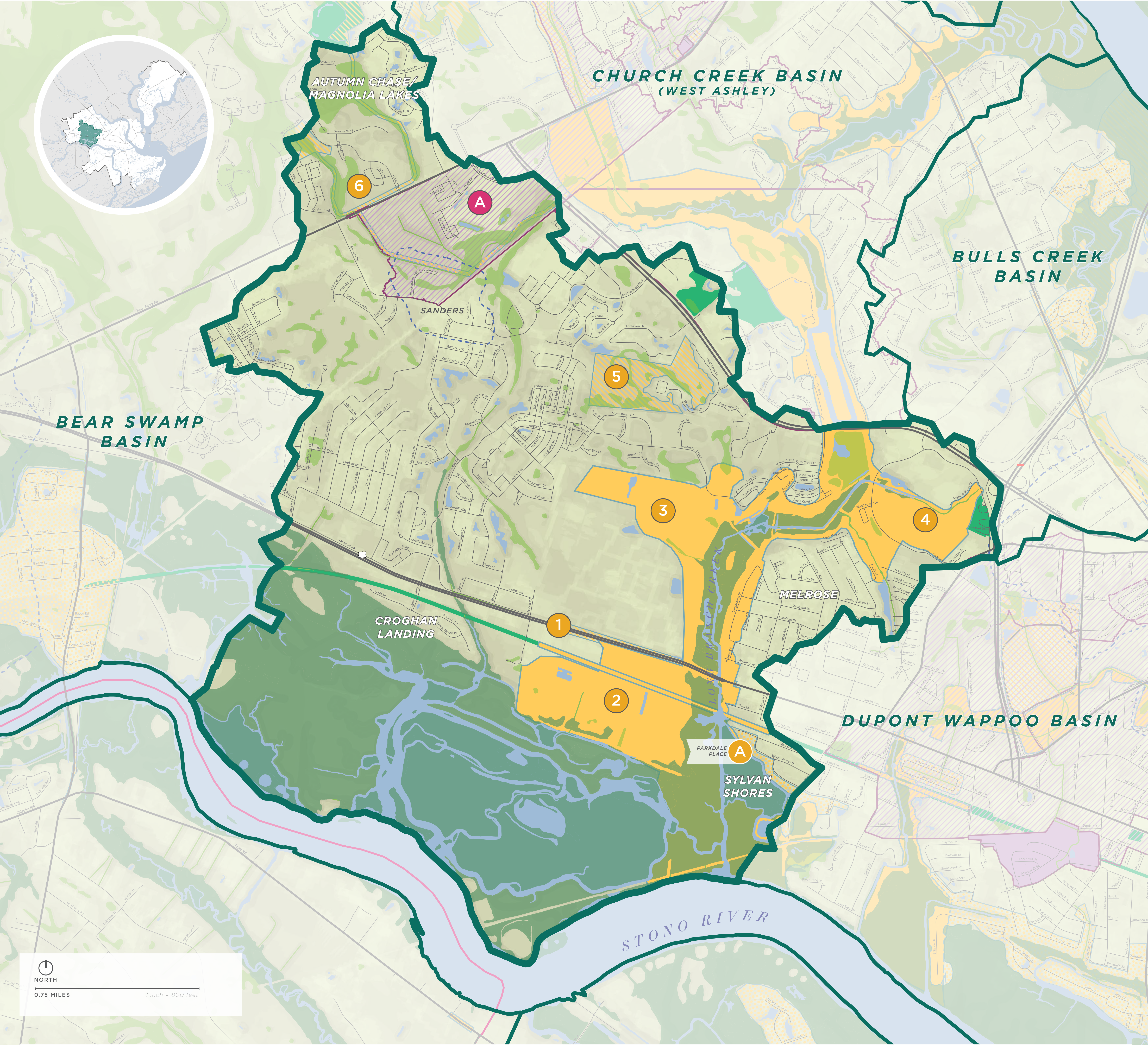
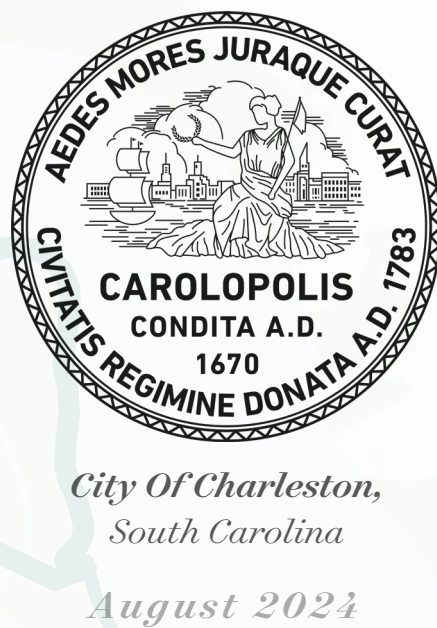
Vac truck crews work to clean out surface drains and sumps within street inlets. They also respond to acute clogging issues with pipe cleaning and support the roadside open ditch rehabilitation crew by cleaning the driveway culverts and outfall pipes.

The heavy equipment maintenance crew has been working through major drainage channels and canals, rebuilding maintenance roads along those canals and restoring the canals back to original functionality.



# Long Branch Basin

## 705 Acres - West Ashley



### BASIN OVERVIEW

Long Branch Basin is located in West Ashley and covers approximately 705 acres. Long Branch Basin is one of seven basins in West Ashley.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. Long Branch Creek to the east and south define this basin's edges.

West Ashley is comprised of a network of creeks and transforming future sea islands. Major roads like Sam Rittenberg and Savannah Highway are located at higher elevations than many neighborhoods along the rivers' edges. The future of West Ashley will be shaped by water from the Ashley & Stono Rivers but also from several tidal and freshwater creeks throughout area.

With rising seas, higher tides, and heavier storms, low-lying neighborhoods will need support to adapt, while applicable development shifts towards appropriate density along high ground ridges.

### MAP FEATURES

- TIDAL MARSH
  - WETLANDS
  - CITY PARKS
  - URBAN GROWTH BOUNDARY
  - WATER DRAINAGE BASINS
  - STREETS
  - AFRICAN AMERICAN SETTLEMENT AREA
- WATER PLAN PROJECTS**
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN
- CITY STORMWATER PROJECTS**
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

### PROJECTS

- WATER PLAN**
- A** COMMUNITY ADAPTATION PLANS, AREA SPECIFIC  
AREAS: Parkdale Place
  - 1** SAVANNAH HIGHWAY  
Road Raising
  - 2** AGRICULTURE RESEARCH CENTER  
Marsh Migration
  - 3** LONG BRANCH CREEK & CHURCH CREEK  
Interconnected System
  - 4** TECKLENBERG DRIVE  
Wetland Management & Conservation
  - 5** ESSEX FARMS / RUTHERTON WAY  
Wetland Management & Conservation
  - 6** UPPER CHURCH CREEK  
Wetland Management & Stormwater Improvements

- CITY STORMWATER**
- A** CHURCH CREEK FLOOD STORAGE  
STATUS: In Progress  
TOTAL COST: \$6,313,446  
FUNDING SOURCE: Drainage Fund & Federal Grants

**MAINTENANCE**

Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT stormwater crews. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.

Canals and roadside drainage (open ditch and closed pipes) are the main stormwater infrastructure for West Ashley. Over the last five years, City Stormwater crews have averaged 18.2 miles of front ditch rehabilitation per year on city-owned streets. 219 unique rear ditch systems are hand-cleaned annually in West Ashley.

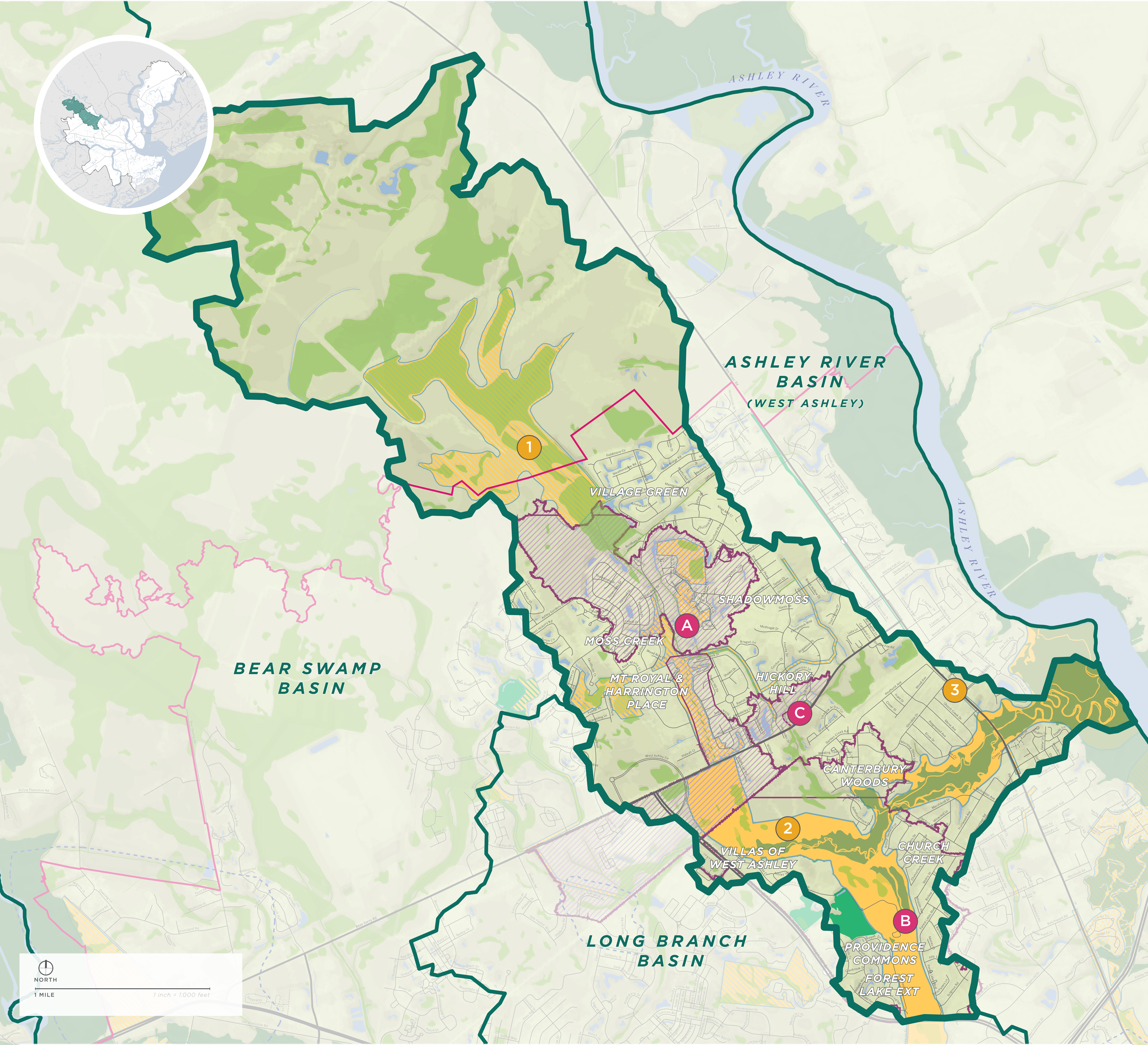
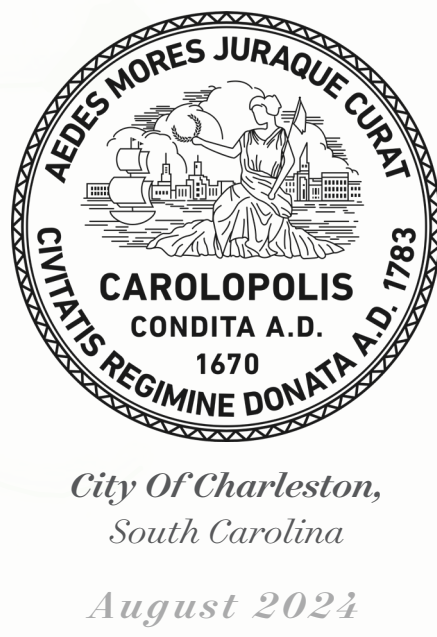
Vac truck crews work to clean out surface drains and sumps within street inlets. They also respond to acute clogging issues with pipe cleaning and support the roadside open ditch rehabilitation crew by cleaning the driveway culverts and outfall pipes.

The heavy equipment maintenance crew has been working through major drainage channels and canals, rebuilding maintenance roads along those canals and restoring the canals back to original functionality.



# Church Creek Basin

## 872 Acres - West Ashley



### BASIN OVERVIEW

Church Creek Basin (West Ashley) is located in West Ashley and covers approximately 872 acres. Church Creek Basin (West Ashley) is one of seven basins in West Ashley.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. Church Creek in its interior defines this basin's edges.

West Ashley is comprised of a network of creeks and transforming future sea islands. Major roads like Sam Rittenberg and Savannah Highway are located at higher elevations than many neighborhoods along the rivers' edges. The future of West Ashley will be shaped by water from the Ashley & Stono Rivers but also from several tidal and freshwater creeks throughout area.

With rising seas, higher tides, and heavier storms, low-lying neighborhoods will need support to adapt, while applicable development shifts towards appropriate density along high ground ridges.

### MAP FEATURES

- TIDAL MARSH
- WETLANDS
- CITY PARKS
- URBAN GROWTH BOUNDARY
- WATER DRAINAGE BASINS
- STREETS
- AFRICAN AMERICAN SETTLEMENT AREA

- #### WATER PLAN PROJECTS
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN

- #### CITY STORMWATER PROJECTS
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

### PROJECTS

- #### WATER PLAN
- 1 UPPER CHURCH CREEK  
Wetland Management & Stormwater Improvements
  - 2 LONG BRANCH CREEK & CHURCH CREEK  
Interconnected System
  - 3 ASHLEY RIVER ROAD  
Road Raising

- #### CITY STORMWATER
- A CHURCH CREEK FLOOD STORAGE  
STATUS: In Progress  
TOTAL COST: \$6,313,446  
FUNDING SOURCE: Drainage Fund & Federal Grants
  - B LAKE DOTTERER DRAINAGE IMPROVEMENTS  
STATUS: In Development  
TOTAL COST: \$2,290,179  
FUNDING SOURCE: Drainage Fund & Charleston County
  - C MOWLER CT FLOOD PROPERTY RETROFIT  
STATUS: Completed  
TOTAL COST: \$100,000  
FUNDING SOURCE: Stormwater Operations Budget

#### MAINTENANCE

Existing Stormwater and Drainage Infrastructure systems are maintained by a combination of City, County, SCDOT stormwater crews. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.

Canals and roadside drainage (open ditch and closed pipes) are the main stormwater infrastructure for West Ashley. Over the last five years, City Stormwater crews have averaged 18.2 miles of front ditch rehabilitation per year on city-owned streets. 219 unique rear ditch systems are hand-cleaned annually in West Ashley.

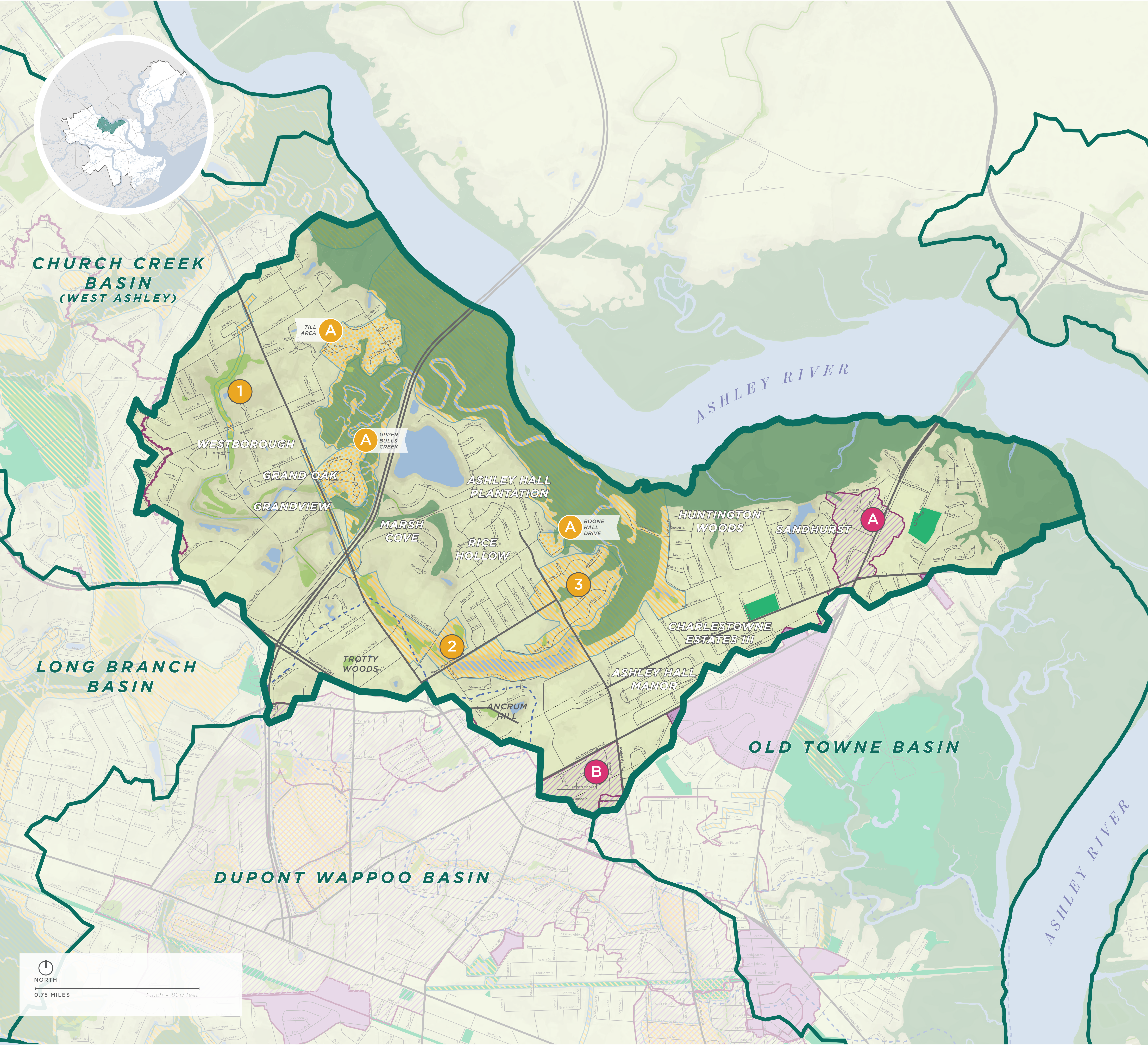
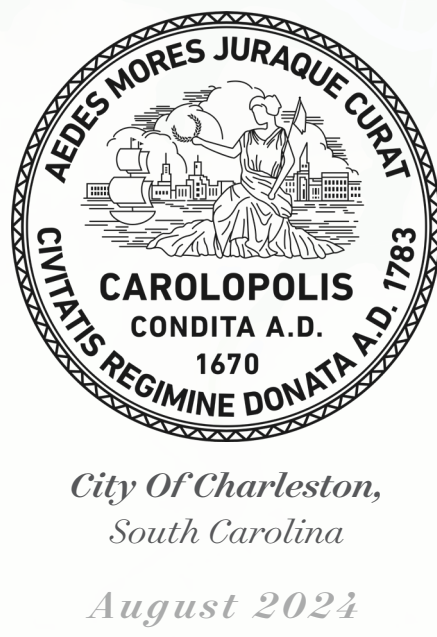
Vac truck crews work to clean out surface drains and sumps within street inlets. They also respond to acute clogging issues with pipe cleaning and support the roadside open ditch rehabilitation crew by cleaning the driveway culverts and outfall pipes.

The heavy equipment maintenance crew has been working through major drainage channels and canals, rebuilding maintenance roads along those canals and restoring the canals back to original functionality.



# Bulls Creek Basin

## 465 Acres - West Ashley



### BASIN OVERVIEW

**Bulls Creek Basin is located in West Ashley and covers approximately 465 acres. Bulls Creek Basin is one of seven basins in West Ashley.**

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. Bulls Creek in its interior and the Ashley River to the north define this basin's edges.

West Ashley is comprised of a network of creeks and transforming future sea islands. Major roads like Sam Rittenberg and Savannah Highway are located at higher elevations than many neighborhoods along the rivers' edges. The future of West Ashley will be shaped by water from the Ashley & Stono Rivers but also from several tidal and freshwater creeks throughout area.

With rising seas, higher tides, and heavier storms, low-lying neighborhoods will need support to adapt, while applicable development shifts towards appropriate density along high ground ridges.

### MAP FEATURES

- TIDAL MARSH
  - WETLANDS
  - CITY PARKS
  - URBAN GROWTH BOUNDARY
  - WATER DRAINAGE BASINS
  - STREETS
  - AFRICAN AMERICAN SETTLEMENT AREA
- WATER PLAN PROJECTS**
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN
- CITY STORMWATER PROJECTS**
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

### PROJECTS

- WATER PLAN**
- COMMUNITY ADAPTATION PLANS, AREA SPECIFIC**  
AREAS: Till Area, Upper Bulls Creek, Boone Hall Drive
  - PIERPOINT**  
Stormwater Improvements
  - THE OXBOW**  
Interconnected System
  - ASHLEY HALL ROAD**  
Road Raising & Community Adaptation

- CITY STORMWATER**
- SANDHURST CONVEYANCE IMPROVEMENT**  
STATUS: In Progress  
TOTAL COST: \$250,000  
FUNDING SOURCE: Drainage Fund
  - DUPONT WAPPOO DRAINAGE**  
STATUS: In Progress  
TOTAL COST: \$5,500,000  
FUNDING SOURCE: TIF

**MAINTENANCE**

Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT stormwater crews. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.

Canals and roadside drainage (open ditch and closed pipes) are the main stormwater infrastructure for West Ashley. Over the last five years, **City Stormwater crews have averaged 18.2 miles of front ditch rehabilitation** per year on city-owned streets. **219 unique rear ditch systems are hand-cleaned annually in West Ashley.**

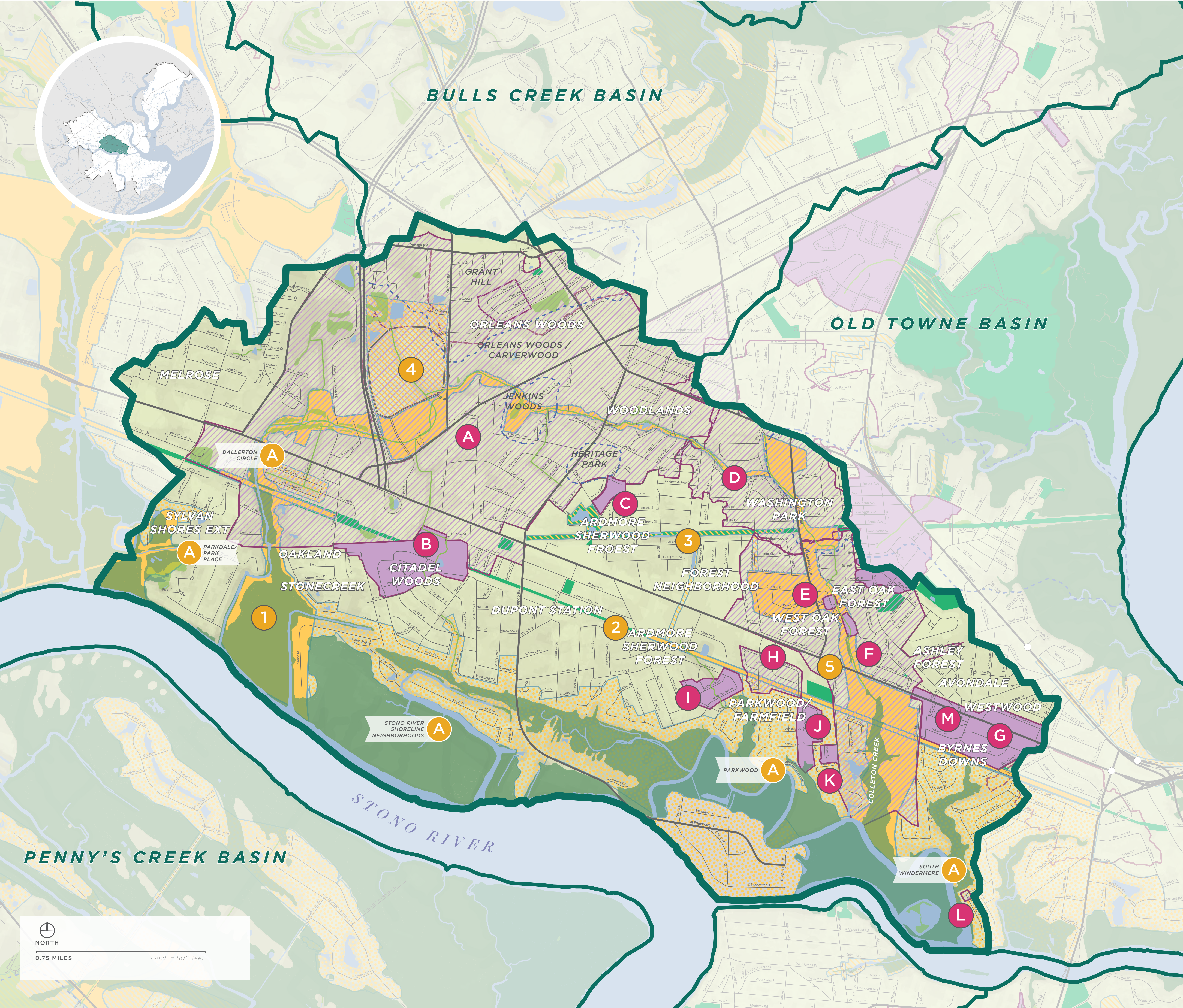
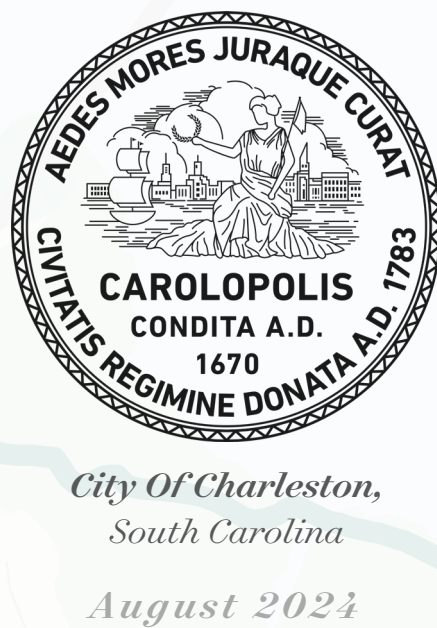
Vac truck crews work to clean out surface drains and sumps within street inlets. They also respond to acute clogging issues with pipe cleaning and support the roadside open ditch rehabilitation crew by cleaning the driveway culverts and outfall pipes.

The heavy equipment maintenance crew has been working through major drainage channels and canals, rebuilding maintenance roads along those canals and restoring the canals back to original functionality.



# Dupont Wappoo Basin

## 660 Acres - West Ashley



### BASIN OVERVIEW

Dupont Wappoo Basin is located in West Ashley and covers approximately 660 acres. Dupont Wappoo Basin is one of seven basins in West Ashley.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. Wappoo Creek and the Stono River to the south and high ground along St Andrews Blvd to the north define this basin's edges.

West Ashley is comprised of a network of creeks and transforming future sea islands. Major roads like Sam Rittenberg and Savannah Highway are located at higher elevations than many neighborhoods along the rivers' edges, where homes are increasingly susceptible to multiple types of flooding.

The future of West Ashley will be shaped by water from the Ashley & Stono Rivers but also from several tidal and freshwater creeks throughout area. With rising seas, higher tides, and heavier storms, low-lying neighborhoods will need support to adapt, while applicable development shifts towards appropriate density along high ground ridges. The resulting pattern will begin to take the shape of several "islands" surrounded by a network of creeks, marsh migration zones, and accessible green space.

### MAP FEATURES

- TIDAL MARSH
  - WETLANDS
  - CITY PARKS
  - URBAN GROWTH BOUNDARY
  - WATER DRAINAGE BASINS
  - STREETS
  - AFRICAN AMERICAN SETTLEMENT AREA
- WATER PLAN PROJECTS
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN
- CITY STORMWATER PROJECTS
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

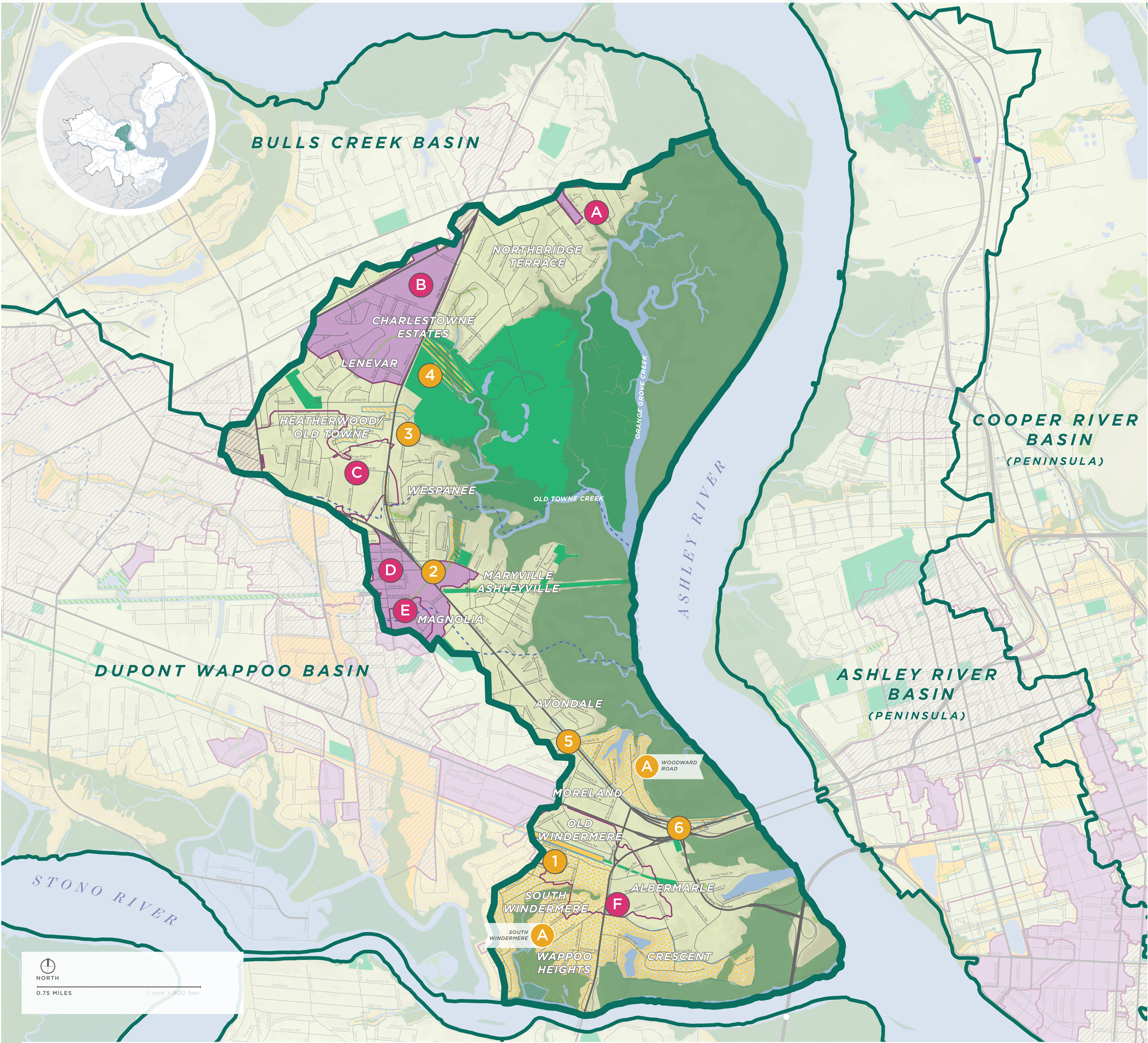
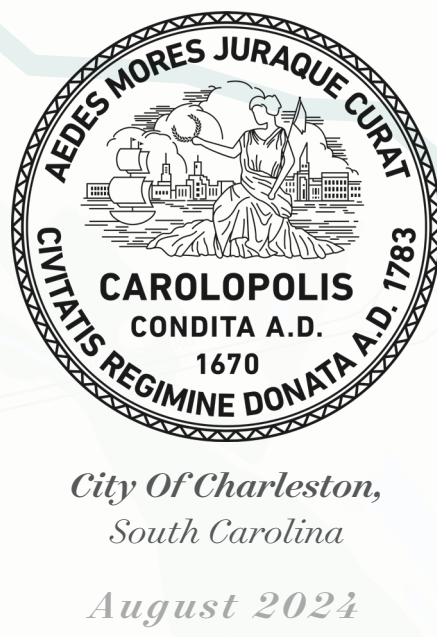
### PROJECTS

- WATER PLAN**
- COMMUNITY ADAPTATION PLANS, AREA SPECIFIC**  
AREAS: Stono River Shoreline Neighborhoods, Parkwood, South Windermere, Parkdale/ Park Place, Dallerton Circle
  - THE BLUE CRESCENT**  
Interconnected System
  - WEST ASHLEY GREENWAY**  
Road Raising
  - SHERWOOD FOREST**  
Stormwater Improvements
  - CITADEL MALL**  
Stormwater park & Resilient Development
  - SAVANNAH HIGHWAY**  
Road Raising
- CITY STORMWATER**
- DUPONT WAPPOO DRAINAGE**  
STATUS: In Progress  
TOTAL COST: \$5,500,000  
FUNDING SOURCE: TIF, State
  - DUNBAR STREET FLOOD STORAGE**  
STATUS: Completed  
TOTAL COST: \$100,000  
FUNDING SOURCE: Drainage Fund
  - SHERWOOD FOREST DRAINAGE**  
STATUS: Completed  
TOTAL COST: \$50,000  
FUNDING SOURCE: Drainage Fund
  - FOREST ACRES**  
STATUS: Phase 1 Complete, Phase 2 In Progress  
TOTAL COST: \$25,458,873  
FUNDING SOURCE: Local Option Permit & Stormwater Operations Fund
  - OAK FOREST DR FLOOD PROPERTY**  
STATUS: Completed  
TOTAL COST: \$100,000  
FUNDING SOURCE: Stormwater Operations Fund & Grant
  - OAK FOREST OUTFALL SYSTEM**  
STATUS: In Progress  
TOTAL COST: \$150,000  
FUNDING SOURCE: Stormwater Operations Fund
  - BYRNES DOWNS OUTFALL**  
STATUS: Completed  
TOTAL COST: \$100,000  
FUNDING SOURCE: Stormwater Operations Fund
  - ASHBURY PIPE UPSIZING**  
STATUS: In Progress  
TOTAL COST: \$100,000  
FUNDING SOURCE: Stormwater Operations Fund
  - LORD CALVERT**  
STATUS: Completed  
TOTAL COST: \$19,922  
FUNDING SOURCE: Stormwater Operations Fund
  - DEVONSHIRE CLEANING**  
STATUS: Complete  
TOTAL COST: \$150,000  
FUNDING SOURCE: Stormwater Operations Fund
  - BELFAST ROADSIDE DRAINAGE**  
STATUS: Completed  
TOTAL COST: \$10,000  
FUNDING SOURCE: Stormwater Operations Fund
  - REBELLION ROAD OUTFALL**  
STATUS: In Progress  
TOTAL COST: \$90,000  
FUNDING SOURCE: Stormwater Operations Fund
  - SAVANNAH HIGHWAY SIDEWALK DRAINAGE**  
STATUS: Complete
- MAINTENANCE**
- Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT stormwater crews. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.
- Canals and roadside drainage (open ditch and closed pipes) are the main stormwater infrastructure for West Ashley. Over the last five years, City Stormwater crews have averaged 18.2 miles of front ditch rehabilitation per year on city-owned streets. 219 unique rear ditch systems are hand-cleaned annually in West Ashley.
- Vac truck crews work to clean out surface drains and sumps within street inlets. They also respond to acute clogging issues with pipe cleaning and support the roadside open ditch rehabilitation crew by cleaning the driveway culverts and outfall pipes.
- The heavy equipment maintenance crew has been working through major drainage channels and canals, rebuilding maintenance roads along those canals and restoring the canals back to original functionality.



# Old Towne Creek Basin

## 457 Acres - West Ashley



### BASIN OVERVIEW

Old Towne Creek Basin is located in West Ashley and covers approximately 457 acres. Old Towne Creek Basin is one of seven basins in West Ashley.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. Old Towne Creek to the east and high ground along St Andrews Blvd and Sam Rittenberg Blvd define this basin's edges.

West Ashley is comprised of a network of creeks and transforming future sea islands. Major roads like Sam Rittenberg and Savannah Highway are located at higher elevations than many neighborhoods along the rivers' edges, where homes are increasingly susceptible to multiple types of flooding. The future of West Ashley will be shaped by water from the Ashley & Stono Rivers but also from several tidal and freshwater creeks throughout area.

With rising seas, higher tides, and heavier storms, low-lying neighborhoods will need support to adapt, while applicable development shifts towards appropriate density along high ground ridges. The resulting pattern will begin to take the shape of several "islands" surrounded by a network of creeks, marsh migration zones, and accessible green space.

### MAP FEATURES

- TIDAL MARSH
  - WETLANDS
  - CITY PARKS
  - URBAN GROWTH BOUNDARY
  - WATER DRAINAGE BASINS
  - STREETS
  - AFRICAN AMERICAN SETTLEMENT AREA
- WATER PLAN PROJECTS**
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN
- CITY STORMWATER PROJECTS**
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

### PROJECTS

#### WATER PLAN

- A COMMUNITY ADAPTATION PLANS, AREA SPECIFIC**  
AREAS: South Windermere, Woodward Road
- 1 WEST ASHLEY GREENWAY**  
Road Raising
- 2 MARYVILLE**  
Stormwater Improvements
- 3 ST. AUGUSTINE / MARVIN AVE**  
Stormwater Improvements
- 4 OLD TOWNE CREEK**  
Stormwater Improvements
- 5 ST ANDREWS BLVD**  
Road Raising
- 6 ASHLEY RIVER BRIDGE LANDING**  
Road Raising

#### CITY STORMWATER

- A MULLER DRAINAGE IMPROVEMENT**  
STATUS: Completed  
TOTAL COST: \$20,000  
FUNDING SOURCE: Stormwater Operation Budget

- B DOWDEN AREA DRAINAGE**  
STATUS: Completed  
TOTAL COST: \$150,000  
FUNDING SOURCE: Stormwater Operation Budget

- C WESPANEE DRAINAGE**  
STATUS: In Development  
TOTAL COST: \$2,500,000  
FUNDING SOURCE: Drainage Fund

- D FOREST ACRES**  
STATUS: Phase 1 Complete, Phase 2 In Progress  
TOTAL COST: \$25,458,873  
FUNDING SOURCE: Local Option Permit & Drainage Fund

- E ANITA DRIVE**  
STATUS: In Progress  
TOTAL COST: \$100,000  
FUNDING SOURCE: Stormwater Operation Budget

- F WINDERMERE DRAINAGE**  
STATUS: IN Development  
TOTAL COST: \$8,215,943  
FUNDING SOURCE: Drainage Fund & State Grant

### MAINTENANCE

Existing Stormwater and Drainage infrastructure systems are maintained by a combination of City, County, SCDOT stormwater crews. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.

Canals and roadside drainage (open ditch and closed pipes) are the main stormwater infrastructure for West Ashley. Over the last five years, **City Stormwater crews have averaged 18.2 miles of front ditch rehabilitation** per year on city-owned streets. **219 unique rear ditch systems are hand-cleaned annually in West Ashley.**

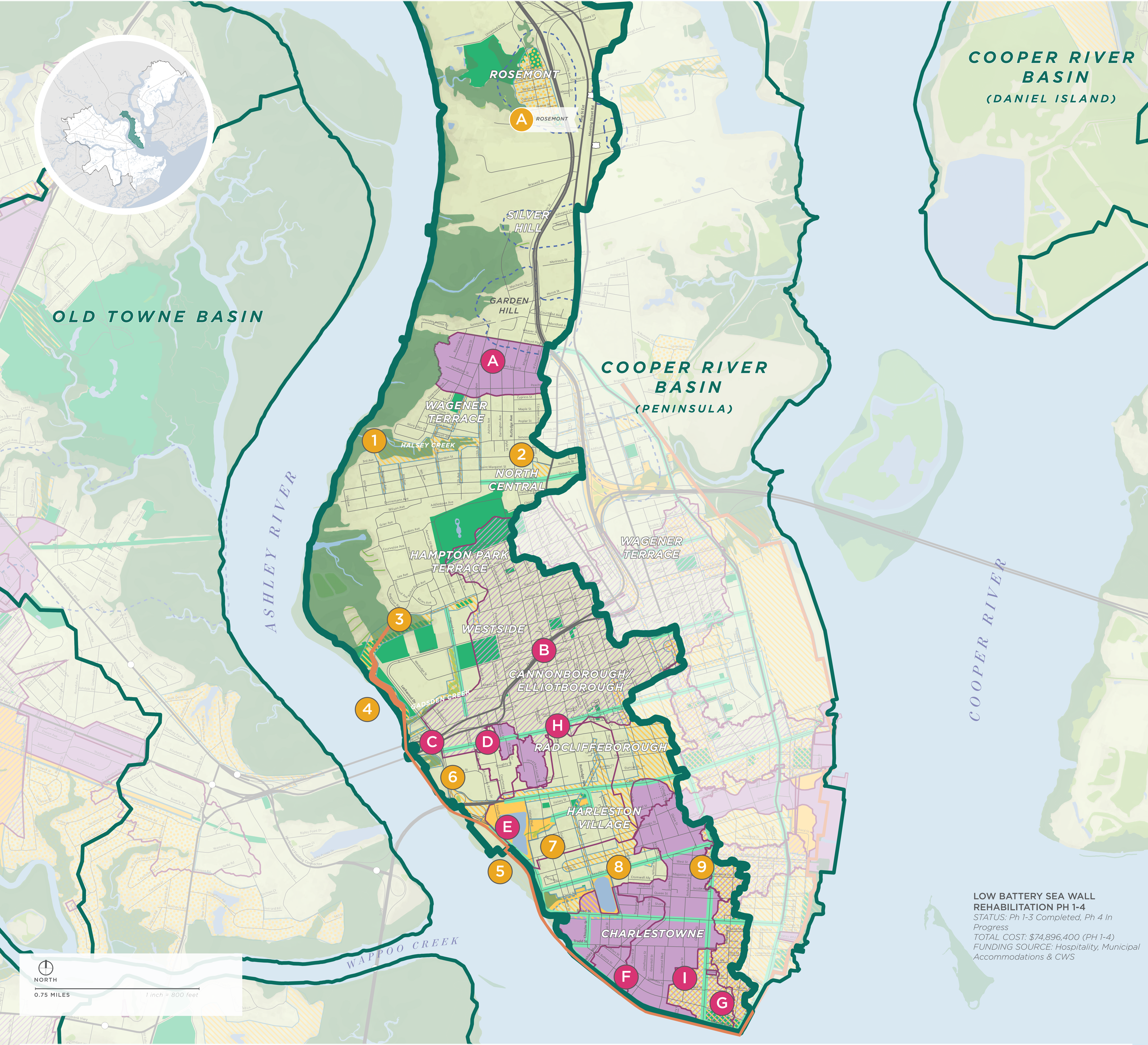
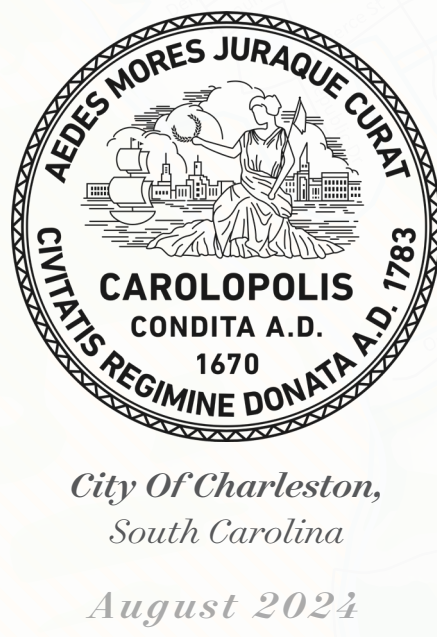
Vac truck crews work to clean out surface drains and sumps within street inlets. They also respond to acute clogging issues with pipe cleaning and support the roadside open ditch rehabilitation crew by cleaning the driveway culverts and outfall pipes.

The heavy equipment maintenance crew has been working through major drainage channels and canals, rebuilding maintenance roads along those canals and restoring the canals back to original functionality.



# Ashley River Basin

## 473 Acres - Peninsula



**LOW BATTERY SEA WALL REHABILITATION PH 1-4**  
STATUS: Ph 1-3 Completed, Ph 4 In Progress  
TOTAL COST: \$74,896,400 (PH 1-4)  
FUNDING SOURCE: Hospitality, Municipal Accommodations & CWS

### BASIN OVERVIEW

Ashley River Basin (Peninsula) is located on the Peninsula and covers approximately 473 acres. Ashley River Basin (Peninsula) is one of two basins on the Peninsula.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. The Ashley River to the west and high ground down the spine of the peninsula to the east define this basin's edges. The Ashley River Basin includes Halsey Creek and Gadsden Creek.

The Charleston Peninsula contains some of the lowest developed ground in the region, yet is home to iconic places, built and natural. The process of adapting the Charleston Peninsula is a generational project.

To maintain its historic character and economic vitality, the future lower Peninsula is envisioned with an Extension of the Battery on the Ashley and Cooper Rivers and an interconnected interior water system for stormwater management, groundwater balance, and public amenities. In the Neck, nature-based adaptation should be employed to protect from storm surge and make space for marsh migration, with elevated structures and infrastructure.

### MAP FEATURES

- TIDAL MARSH
  - WETLANDS
  - CITY PARKS
  - URBAN GROWTH BOUNDARY
  - WATER DRAINAGE BASINS
  - STREETS
  - AFRICAN AMERICAN SETTLEMENT AREA
- WATER PLAN PROJECTS**
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN
  - BLUE-GREEN STREETS
  - BATTERY EXTENSION
- CITY STORMWATER PROJECTS**
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

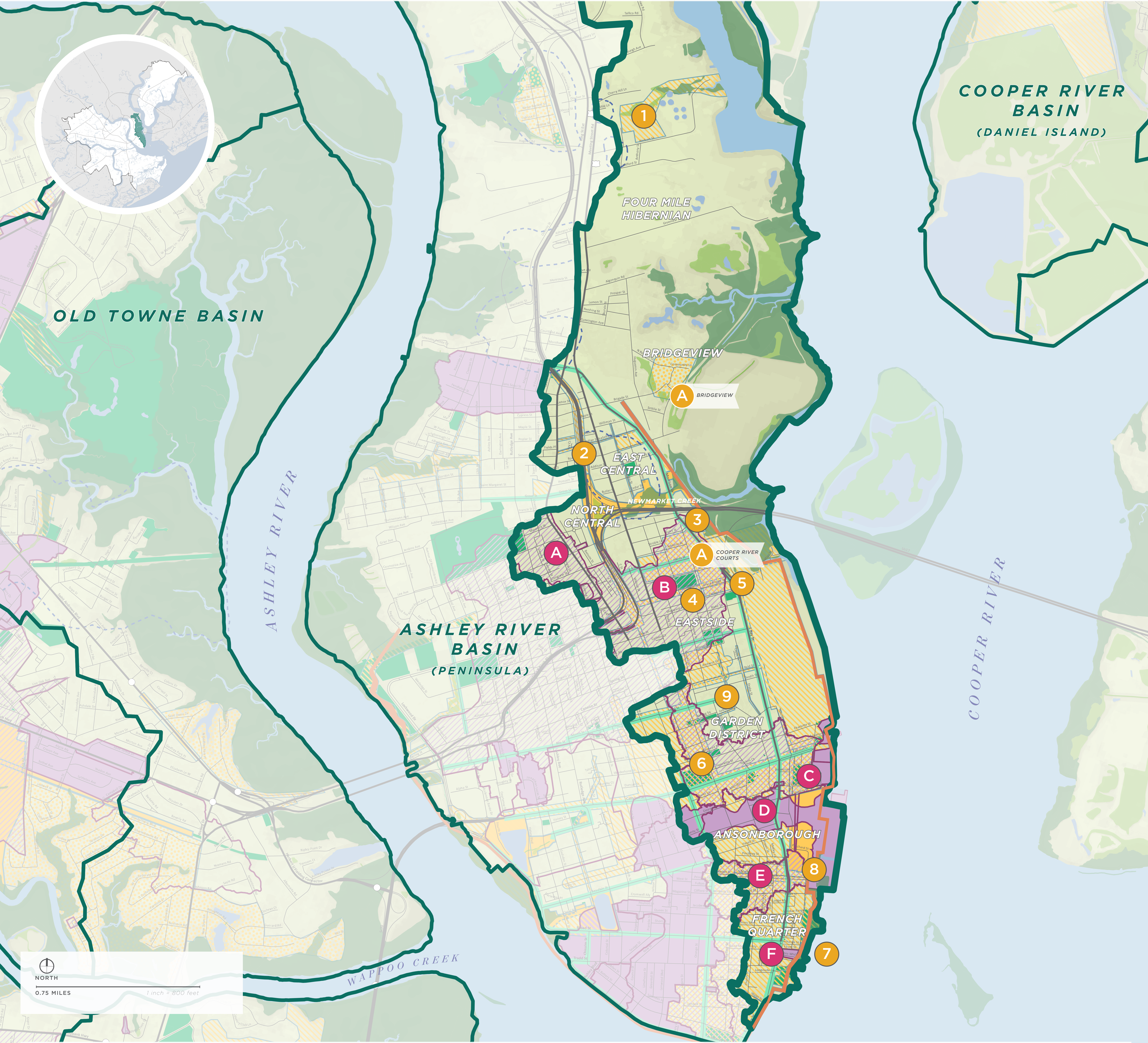
### PROJECTS

- WATER PLAN**
- A** COMMUNITY ADAPTATION PLANS, AREA SPECIFIC  
AREA: Rosemont
  - 1** HALSEY CREEK  
Stormwater Improvements
  - 2** KINGS PLAZA  
Stormwater Park
  - 3** CITADEL MARSH  
Interconnected System
  - 4** BRITTLEBANK PARK  
Shoreline Adaptation
  - 5** LOCKWOOD WETLANDS  
Shoreline Adaptation
  - 6** ASHLEY RIVER INTEGRATED WATER MANAGEMENT  
Interconnected System
  - 7** LOCKWOOD LAKES  
Stormwater Park
  - 8** CALHOUN WEST STORMWATER  
Stormwater Improvements
  - 9** HISTORIC BRICK ARCH REHABILITATION  
Stormwater Improvement
- CITY STORMWATER**
- A** PEACHTREE OUTFALL  
STATUS: Completed  
TOTAL COST: \$210,000  
FUNDING SOURCE: Stormwater Operations Budget
  - B** SPRING/FISHBURNE/US-17 DRAINAGE IMPROVEMENTS (PH 1-4)  
STATUS: Complete  
TOTAL COST: \$47,500,000  
FUNDING SOURCE: TIF & State Grants, Federal Grant
  - C** SPRING/FISHBURNE/US-17 DRAINAGE PUMP STATION (PH 5)  
STATUS: In Progress  
TOTAL COST: \$50,206,623  
FUNDING SOURCE: TIF & State Grants
  - D** MUSC PUMP STATION UPFIT  
STATUS: In Development  
TOTAL COST: \$1,500,000  
FUNDING SOURCE: Drainage Fund & Federal Grants
  - E** ALBERTA LONG LAKE DRAINAGE  
STATUS: In Development  
TOTAL COST: \$1,500,000  
FUNDING SOURCE: Drainage Fund
- G** LOW BATTERY SEA WALL REHABILITATION PH 1-3  
STATUS: Completed  
TOTAL COST: \$48,576,431 (PH 1-3)  
FUNDING SOURCE: Hospitality, Municipal Accommodations & CWS
  - G** LOW BATTERY SEA WALL REHABILITATION PH 4  
STATUS: In Progress  
FUNDING SOURCE: Hospitality, Municipal Accommodations & CWS
  - H** EHRHARDT STREET TUNNEL EXTENSION  
STATUS: Complete  
TOTAL COST: \$17,855,519  
FUNDING SOURCE: Drainage Fund & Federal Grants
  - I** LIMEHOUSE BRICK ARCH REHAB  
STATUS: Complete  
TOTAL COST: \$4,400,000  
FUNDING SOURCE: Drainage Fund
- MAINTENANCE**
- Existing Stormwater and Drainage infrastructure systems are maintained by City stormwater crews and subcontractors. This work includes outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, brick arch repair, pipe repair, water level management pre-storm and other rehabilitation efforts for the entire system.



# Cooper River Basin

## 380 Acres - Peninsula



### BASIN OVERVIEW

Cooper River Basin (Peninsula) is located on the Peninsula and covers approximately 380 acres. Cooper River Basin (Peninsula) is one of two basins on the Peninsula.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. The Cooper River to the east and high ground down the spine of the peninsula to the west define this basin's edges. The Cooper River Basin includes Newmarket Creek.

The Charleston Peninsula contains some of the lowest developed ground in the region, yet is home to iconic places, built and natural. The process of adapting the Charleston Peninsula is a generational project.

To maintain its historic character and economic vitality, the future lower Peninsula is envisioned with an Extension of the Battery on the Ashley and Cooper Rivers and an interconnected interior water system for stormwater management, groundwater balance, and public amenities. In the Neck, nature-based adaptation should be employed to protect from storm surge and make space for marsh migration, with elevated structures and infrastructure.

### MAP FEATURES

- TIDAL MARSH
- WETLANDS
- CITY PARKS
- URBAN GROWTH BOUNDARY
- WATER DRAINAGE BASINS
- STREETS
- AFRICAN AMERICAN SETTLEMENT AREA
- WATER PLAN PROJECTS
- FEATURED
- RECOMMENDED
- COMMUNITY ADAPTATION PLAN
- BLUE-GREEN STREETS
- BATTERY EXTENSION
- CITY STORMWATER PROJECTS
- COMPLETED
- IN PROGRESS
- IN DEVELOPMENT

### PROJECTS

- WATER PLAN**
- COMMUNITY ADAPTATION PLANS, AREA SPECIFIC**  
AREAS: Bridgeview, Cooper River Courts
- FOURMILE HOUSE STREAM**  
Stormwater Park & Stormwater Improvements
- LOWCOUNTRY LOWLINE**  
Stormwater Park
- COOPER RIVER INTEGRATED WATER MANAGEMENT**  
Interconnected System
- EASTSIDE POLDER**  
Interconnected System
- VARDELLS CREEK & COOPER STREET DRAINAGE**  
Interconnected System
- HISTORIC BRICK ARCH REHABILITATION**  
Stormwater Improvement
- WATERFRONT PARK**  
Marsh Migration
- UNION PIER**  
Resilient Development
- REID/AMERICA STREET DRAINAGE**  
Drainage Improvements
- CITY STORMWATER**
- KING/HUGER DRAINAGE IMPROVEMENT**  
STATUS: In Progress  
TOTAL COST: \$16,361,670  
FUNDING SOURCE: Drainage Fund & State Grant
- COOPER JACKSON DRAINAGE**  
STATUS: In Progress  
TOTAL COST: \$11,172,000  
FUNDING SOURCE: TIF
- CONCORD STREET PUMP STATION**  
STATUS: Design Completed, Construction In Progress  
TOTAL COST: \$14,237,782  
FUNDING SOURCE: Drainage Fund & Local Option Permit & Hospitality Fund
- SOCIETY BRICK ARCH REHABILITATION**  
STATUS: Completed
- MARKET STREET SURFACE COLLECTION**  
STATUS: In Development  
TOTAL COST: \$23,280,056  
FUNDING SOURCE: Drainage Fund & Bonds & CWS
- CONCORD STREET DRAINAGE**  
STATUS: Completed  
TOTAL COST: \$40,000  
FUNDING SOURCE: Drainage Fund

### MAINTENANCE

Existing Stormwater and Drainage infrastructure systems are maintained by City stormwater crews and subcontractors. This work includes outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, brick arch repair, pipe repair, water level management pre-storm and other rehabilitation efforts for the entire system.

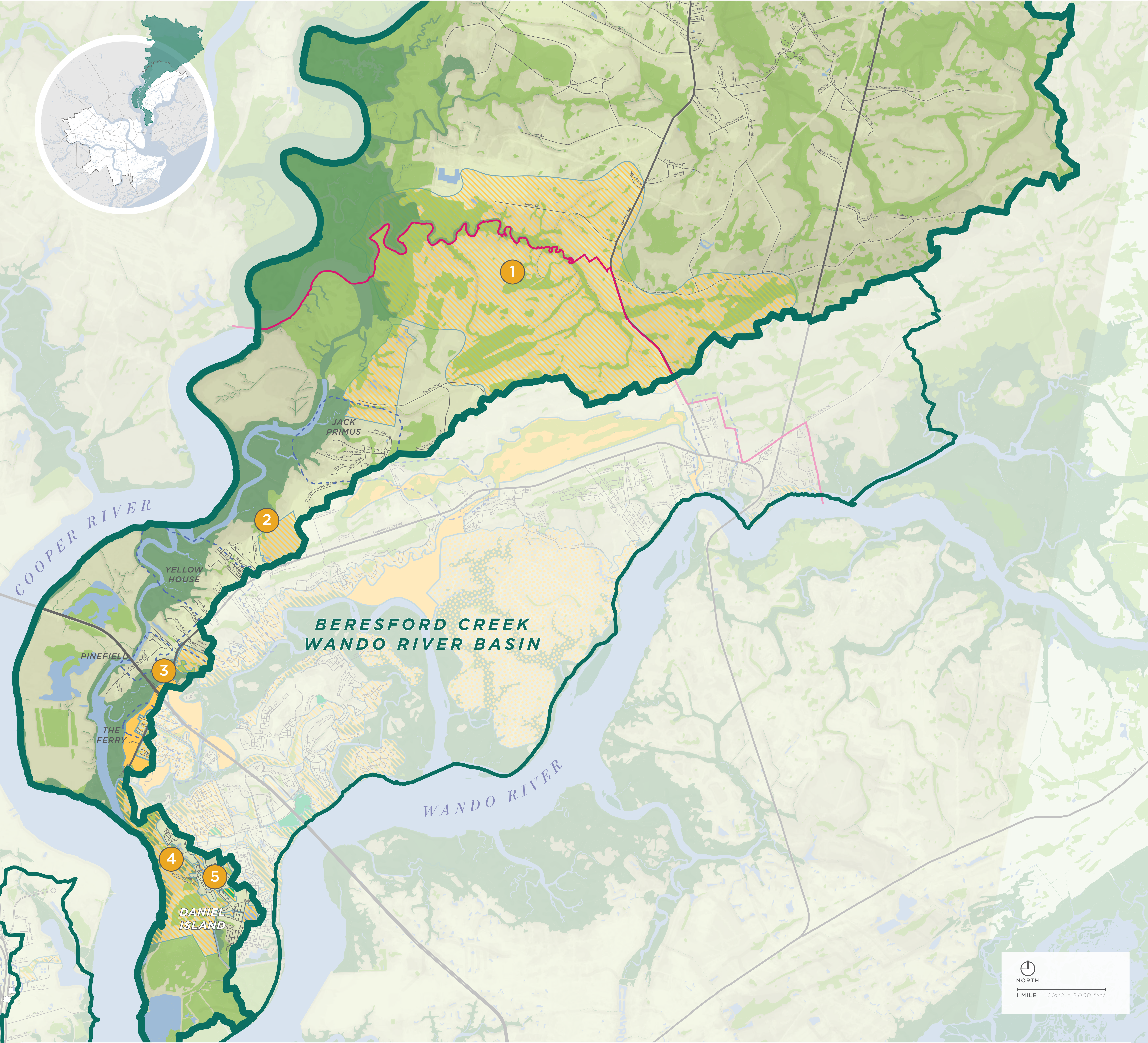
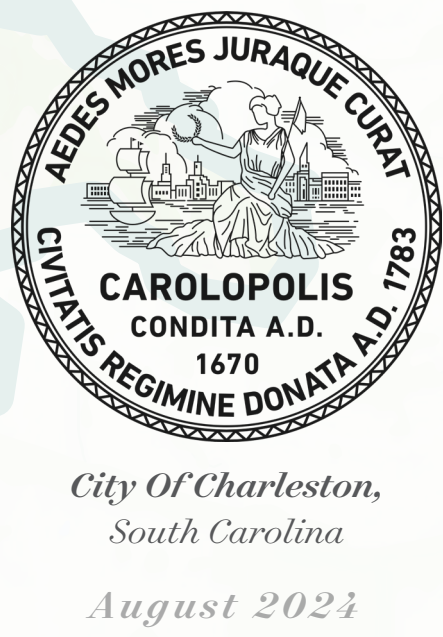
Much of the peninsula system is old; installed with less capacity than would be required today.

Vac truck crews work to clean out surface drains and sumps within street inlets, covering more than 500 locations on the peninsula each year. They also respond to acute clogging issues with pipe cleaning and support the roadside open ditch rehabilitation crew by cleaning the driveway culverts and outfall pipes.



# Cooper River Basin

5,757 Acres - Daniel Island / Cainhoy



## BASIN OVERVIEW

Cooper River Basin (Daniel Island/Cainhoy) is located in Daniel Island/Cainhoy and covers approximately 5,757 acres. Cooper River Basin is one of two basins in Daniel Island/Cainhoy.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. The Cooper River to the west and Clements Ferry Road defines this basin's edges.

The Urban Growth Boundary (UGB) is a line that surrounds the City of Charleston. Suburban or urban growth in rural areas outside of the UGB is discouraged. The southern portion of Cooper River Basin is inside of the UGB.

The once-remote Daniel Island/Cainhoy area was connected to the surrounding region via Interstate-526 in the late 1980's, spurring rapid development. In both of these areas, ecological considerations overlap with development and flood concerns. For development to continue without creating downstream impacts, the function of the natural system must be preserved.

## MAP FEATURES

- TIDAL MARSH
- WETLANDS
- CITY PARKS
- URBAN GROWTH BOUNDARY
- WATER DRAINAGE BASINS
- STREETS
- AFRICAN AMERICAN SETTLEMENT AREA

- WATER PLAN PROJECTS
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN

- CITY STORMWATER PROJECTS
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

## PROJECTS

### WATER PLAN

- BLACK SLACK CREEK & SANDERS CREEK  
Wetland Management & Conservation
- CLEMENTS FERRY BORROW PIT  
Stormwater Improvements
- ST THOMAS ISLAND DRIVE & CLEMENTS FERRY ROAD  
Road Raising
- PARKLINE DUNHAM  
Wetland Management & Conservation
- DANIEL ISLAND STORM DRAINAGE SYSTEM  
Stormwater Improvements

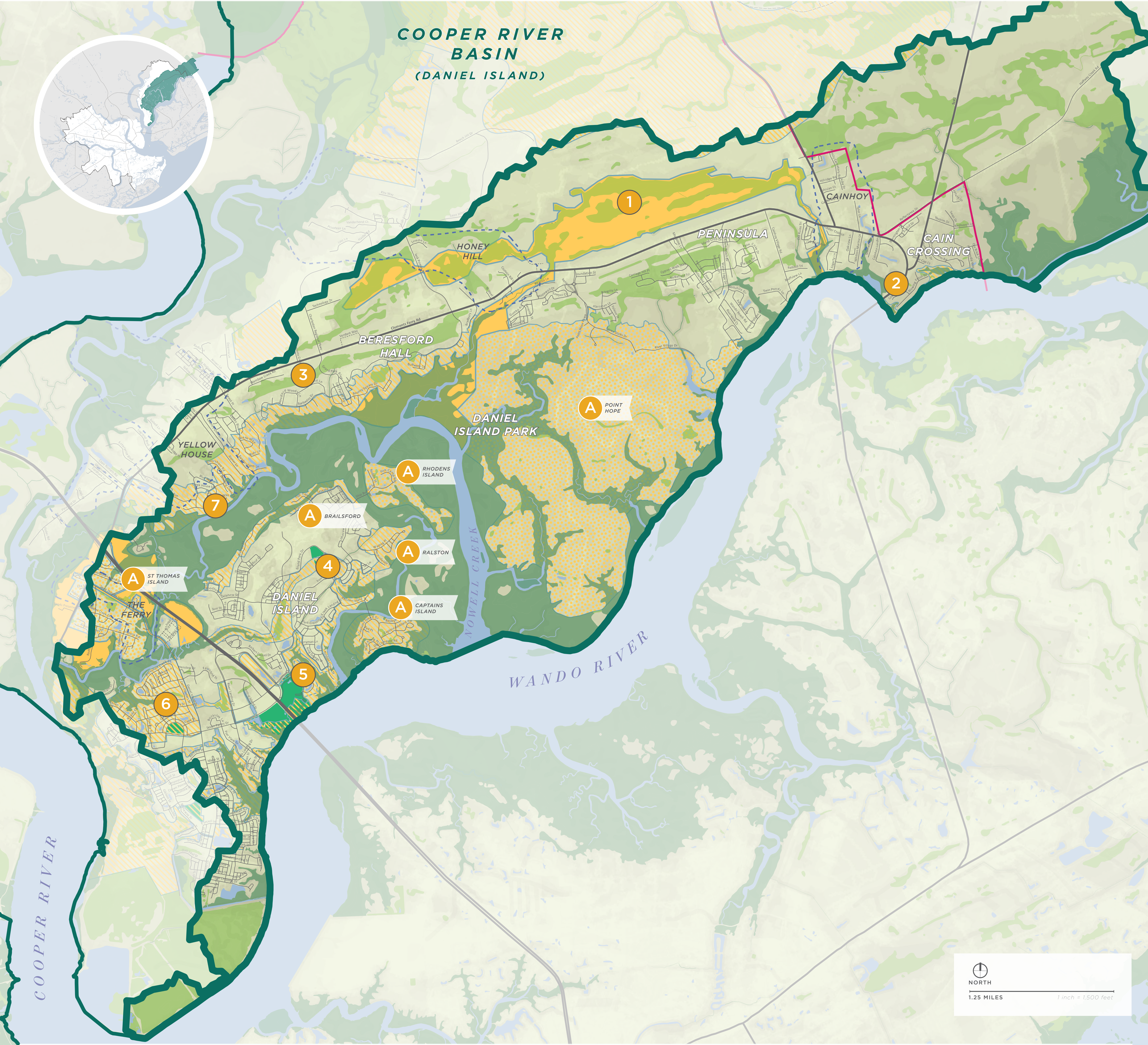
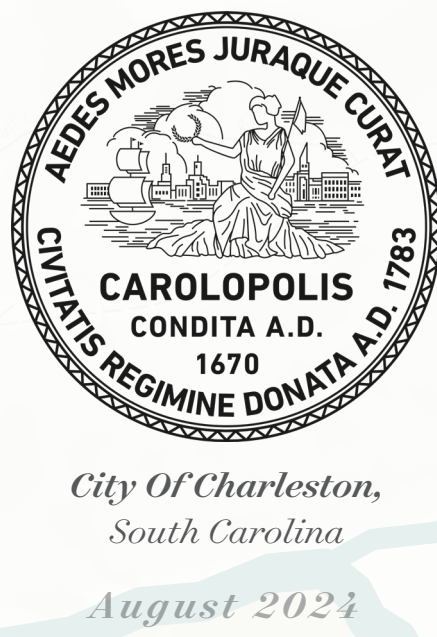
### MAINTENANCE

Existing Stormwater and Drainage infrastructure systems are maintained by City stormwater crews and subcontractors. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.



# Bersford Creek / Wando River Basin

2,260 Acres - Daniel Island / Cainhoy



## BASIN OVERVIEW

Bersford Creek-Wando River Basin is located in Daniel Island/Cainhoy and covers approximately 2,260 acres. Bersford Creek-Wando River Basin is one of two basins in Daniel Island/Cainhoy.

A basin, sometimes called a watershed, is an area of land where all water flows to the same location, like a river or the ocean. The Wando River to the east and Clements Ferry Road defines this basin's edges.

The Urban Growth Boundary (UGB) is a line that surrounds the City of Charleston. Suburban or urban growth in rural areas outside of the UGB is discouraged. The southern portion of Cooper River Basin is inside of the UGB.

The once-remote Daniel Island/Cainhoy area was connected to the surrounding region via Interstate-526 in the late 1980's, spurring rapid development. In both of these areas, ecological considerations overlap with development and flood concerns. For development to continue without creating downstream impacts, the function of the natural system must be preserved.

## MAP FEATURES

- TIDAL MARSH
  - WETLANDS
  - CITY PARKS
  - URBAN GROWTH BOUNDARY
  - WATER DRAINAGE BASINS
  - STREETS
  - AFRICAN AMERICAN SETTLEMENT AREA
- WATER PLAN PROJECTS**
- FEATURED
  - RECOMMENDED
  - COMMUNITY ADAPTATION PLAN
- CITY STORMWATER PROJECTS**
- COMPLETED
  - IN PROGRESS
  - IN DEVELOPMENT

## PROJECTS

- WATER PLAN**
- COMMUNITY ADAPTATION PLANS, AREA SPECIFIC**  
AREAS: Point Hope, Rhodens Island, St Thomas Island, Brailsford, Ralston, Captains Island
  - MARTIN CREEK**  
Emergent Creek Restoration
  - TUXBERRY FARM**  
Wetland Management & Conservation
  - BERESFORD CREEK**  
Marsh Migration & Community Adaptation Plan
  - BERESFORD CREEK**  
Emergent Creek Restoration & Wetland Management
  - DANIEL ISLAND TRAIL**  
Marsh Migration & Wetland Management
  - DANIEL ISLAND STORM DRAINAGE SYSTEM**  
Stormwater Improvements
  - UPPER NOWELL**  
Marsh Migration

**MAINTENANCE**

Existing Stormwater and Drainage infrastructure systems are maintained by City stormwater crews and subcontractors. This work includes ditch cleaning, outfall cleaning, drain cleaning via vac truck, post-storm clean up, mowing, trimming, pipe repair, and other rehabilitation efforts for the entire system.