

# THE WILMINGTON CURRENT

BIJOU

*BLACK HISTORY  
MONTH AND WOMEN'S  
HISTORY MONTH*

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**CANOE/KAYAK  
LAUNCH**

**AT BRADLEY CREEK**

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**ENGINEERING  
STAFF HELP  
RESCUE  
UNCONSCIOUS  
DRIVER**

**DOWNTOWN PROJECTS:  
COMPLETED**

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**ANNUAL SURFACE  
WATER QUALITY  
REPORT**

**CITY OF  
WILMINGTON**  
NORTH CAROLINA

**PUBLIC INFORMATION REPORT  
SPRING 2023**



## ENGINEERING STAFF HELP RESCUE UNCONSCIOUS DRIVER

We're taking a moment to brag about a pair of great city employees.

Traffic Engineering Technicians Tim Collins and Deven Laverdure were working on a traffic signal at the intersection of Market Street and Kerr Avenue when they noticed a driver had passed out behind the wheel.

They were unable to wake the driver, so they called 911 and directed traffic around the car until help could arrive.

For their quick actions, Tim & Deven were honored during a City Council meeting. ■



## LOCAL FILM CREW AT WORK

Film production in NC topped \$258 million in 2022 according to the NC Department of Commerce. Here are just a few of the productions shot locally:

- "George and Tammy"
- "Welcome to Flatch"
- "Hightown"
- "The Summer I Turned Pretty"
- "The Supremes at Earl's All-You-Can-Eat"

You can currently spot the second production of 2023, "The Untitled J&L Project," around Wilmington. ■

## BRADLEY CREEK KAYAK/CANOE LAUNCH

This Parks Bond project consists of a new ADA accessible kayak/canoe launch at the end of Circular Drive and new parking spaces. The work is expected to begin this fall and take three months to complete. ■



## MASONBORO LOOP TRAIL

Construction on this 1.4-mile multi-use path is underway. When complete in October of this year, this Transportation Bond trail will run along the west side of Masonboro Loop Road from Pine Grove Drive to Navaho Trail. ■

## NCINO SPORTS PARK






A \$16.9 million project is underway to add and upgrade sports fields, lighting, and other facilities at the nCino Sports Park (a Parks Bond project). When complete, the facility, located at 205 Sutton Steam Plant Road, will have 11 fields and be home to lacrosse, soccer, football, ultimate frisbee, rugby, and more. ■

# Don't forget to **SCOOP** the **POOP**

## DID YOU KNOW?

Leaving pet waste on the ground isn't just smelly and annoying. It's also a major contributor to stormwater pollution. Leaving pet waste on the ground washes harmful bacteria and nutrients into our waterways when it rains. This degrades water quality, harms aquatic life, and transmits disease.

You can protect the quality of our creeks and waterways by remembering to...

-  Clean up after your pets on public property
-  Always carry a bag or scooper with you to collect pet waste
-  Dispose of your pet's waste in a closed trash can, not by flushing it down the toilet (CFPUA ordinance)

Local ordinances provide for a \$250 fine for not properly collecting and disposing of pet waste. Do your part to keep our public spaces, creeks, and waterways clean.

**Questions?**  
Call City of Wilmington  
Stormwater Compliance,  
**910.343.4777**

## HEWLETTS CREEK PROGRESS



Hewletts Creek is the largest tidal creek watershed within the city limits. The watershed, which is the area of land that drains into the creek, is 7,435 acres—almost twice the size of LAX airport!

Hewletts Creek includes an estuary, which is an area where freshwater and saltwater mix. This creates a unique habitat that supports popular commercial fish species, crabs, oysters, and many other aquatic organisms. Unfortunately for oyster lovers, shellfish harvest in Hewletts Creek is currently prohibited due to high bacteria levels from stormwater runoff.

To address these closures, City Council adopted a voluntary watershed restoration plan in 2012. The plan focuses on installing practices like rain barrels, cisterns, rain gardens, and man-made wetlands that can intercept stormwater runoff, filtering bacteria and other pollutants before reaching Hewletts Creek. The constructed wetland at Wade Park, for example, filters stormwater runoff from 590 acres of the Hewletts Creek Watershed. To date, the watershed residents and businesses are also helping to divert and filter 5,225,622 gallons of stormwater runoff from Hewletts Creek every time it rains. More efforts like these can help further improve water quality in Hewletts Creek. ■

 **Learn more and get involved in improving Hewletts Creek water quality at [healourwaterways.org](http://healourwaterways.org)**

## MONTHLY RAIN BARREL SALES



In cooperation with the City of Wilmington, the New Hanover Soil & Water Conservation District holds rain barrels sales for the public three times a month.

Using a rain barrel prevents stormwater pollution from draining into local creeks. Plants and gardens love naturally-collected rainwater. The IVY Rain Barrel holds 50 gallons and sells at a discounted rate of \$85.

Monthly rain barrel sales are held:

- **2nd Thursday**, 9 a.m.-4:30 p.m., New Hanover County Arboretum
- **3rd Saturday**, 8 a.m.-1 p.m., Wilmington Farmer's Market at Tidal Creek Co-op
- **4th Tuesday**, 12 p.m.-7 p.m., New Hanover County Arboretum ■

Learn  
More  
→





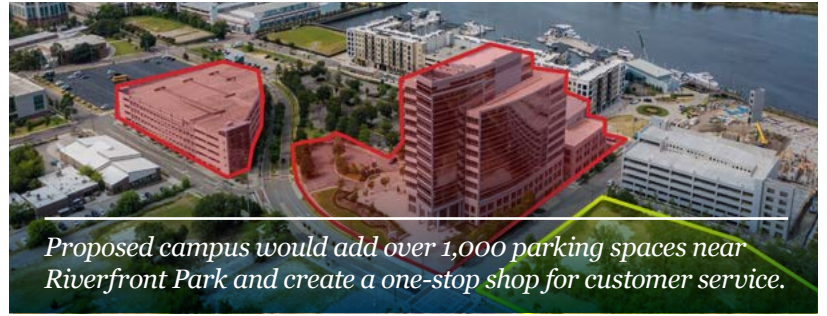
## ILM TREE INITIATIVE

The Wilmington Tree Initiative partner tree planting and tree giveaways 2020-2022:

- 873 trees planted by the City of Wilmington
- 9,164 trees and seedlings distributed through tree giveaways
- 2,422 trees planted by partner organizations

*The city continues to work with the Alliance for Cape Fear Trees to grow our urban canopy. Over 1,300 trees have been given away so far this year. Learn more at [allianceforcapefeartrees.com](http://allianceforcapefeartrees.com)*

## POTENTIAL DOWNTOWN CAMPUS



*Proposed campus would add over 1,000 parking spaces near Riverfront Park and create a one-stop shop for customer service.*

In January 2023, the City of Wilmington made an offer to purchase a 12.5-acre campus in northern downtown, which includes a 1,000-space parking deck, a large office building (commonly known as the former PPD headquarters building), and two adjoining development tracts. The campus would allow the city to add much-needed parking capacity near Riverfront Park and consolidate the city's departments under one roof for better operations and customer service. If approved, the city would seek to sell the adjoining development tracts and nine other properties currently used for city offices, which would no longer be needed. Historic Thalian Hall/City Hall would not be sold.

No tax increase would be required for the purchase. However, the city's financing plan must receive state approval for the purchase to move forward. That decision could occur in June. If approved, the city would purchase the entire campus for \$68 million and begin the process of selling its surplus properties to help offset the cost. The city has identified the purchase as a creative and more cost-effective solution to the city's current and future space needs. ■

## STORM PREP

With the Atlantic hurricane season right around the corner, make sure to do these three things to prepare for a storm:

- 1** Put together an emergency kit that includes extra batteries, flashlights, a first aid kit, bottled water, and prescription medications. Your kit should include enough supplies for a minimum of three days.
- 2** Secure important documents such as birth certificates, social security cards, and tax records.
- 3** Strengthen your home by covering windows, reinforcing doors, and bringing all outdoor furniture inside before the storm hits.

Prepare now so you're ready for when it happens. ■

**📍 For more tips, head to [ready.gov/hurricanes](http://ready.gov/hurricanes)**

## CITIZENS HELP PREVENT STORMWATER POLLUTION

Citizens play an integral role in identifying and reporting stormwater pollution. They are the "eyes and ears" in the community that have notified the city and reported pollution draining into Wilmington's stormwater system and waterways. Only rain is allowed in a storm drain or drainage ditch.

Reports from the community about these illicit discharges have included foaming soap suds in a creek, improperly maintained restaurant grease traps, yard waste and debris blown into storm drains, motor oil being dumped in a ditch, and illicit pipes carrying wastewater and sediment into local creeks.

Public Services Compliance Officers are tasked with investigating each reported instance of pollution and ensuring that violators correct the situation. When making a report, please include the date, time, location, source, type of pollution, and responsible party, if this information is known. Photos are also helpful for investigating a report. Your contact info is not required, but is helpful if Compliance Officers need more information. See the ad above for how to report stormwater pollution. ■



## ROAD RESURFACING

The Public Services division uses several techniques to keep our city streets in good shape.

**Pavement Rejuvenation** is a surface treatment for more recently resurfaced roads (*PCI between 70 and 85*). When the seal is applied, it improves the flexibility of the asphalt and slows down the rate of aging.

**Slurry Seal** is a low-cost option used to extend the life of asphalt pavements that are still in good condition (*PCI of 77 or greater*). Construction times are quick so traffic can resume in one to four hours.

**Micro Surfacing** is designed to prolong the life of asphalt pavements in good condition (*PCI of 70 or greater*). Due to quick construction times, traffic can resume within an hour.

**Traditional Milling & Resurfacing** is used on roads that have significant cracking and are in a failing condition (*PCI of 60 or lower for local streets; PCI of 70 or lower for collector streets*).

**Ultra Thin Lift Hot Mix Asphalt** is a mixed asphalt treatment consisting of paving grade asphalt and



*Crews applying a slurry seal to a residential street in Wilmington*

aggregate used on roads in good condition (*PCI of 70 or greater*). It allows for a quick return to traffic.

*Note: Pavement Condition Index (PCI) is measured on a scale of 0 to 100, where 100 means a newly paved road.*

When deciding which streets require treatment, city staff use census tract data to analyze the average pavement condition index (PCI) values for all city-owned road segments. Areas with lower average PCI scores are prioritized higher for the purpose of resurfacing.

The goal is to use the data to achieve a more consistent average across the city so that the treatment of streets is equitable to all neighborhoods. ■

## BETTER WAY CAMPAIGN

The City of Wilmington and the United Way of the Cape Fear Area have partnered to establish the “Better Way to Give” initiative. As a comprehensive alternative to giving directly to individuals who solicit money in public places, this initiative provides an easy way to give to service providers that help these people move from crisis to stability.

### What is the "Better Way to Give" Initiative?

This initiative recognizes that many individuals who ask for money in public places, such as intersections and sidewalks, can face significant challenges like hunger and food insecurity, unemployment, substance abuse, and homelessness. These issues are complex and require smart, holistic solutions. Giving directly to individuals can provide temporary relief but does not address the root causes of their struggles. Giving instead to community organizations that

provide structured support can help these individuals move toward a better future.

The greater Wilmington area has several highly reputable organizations that work every day to meet the needs of those in crisis in a holistic and comprehensive way, making a positive and long-lasting impact on the lives of individuals.

### How You Can Donate

The United Way offers a simple and convenient way to donate through a dedicated public giving portal. Every dollar donated through the Better Way to Give initiative will go directly to human and social service organizations operating within the City of Wilmington. The United Way will manage the portal and distribute the funds. Learn more or make a donation at [wilmingtonnc.gov/betterway](http://wilmingtonnc.gov/betterway). ■



*“The funds collected will be distributed directly to the human and social service organizations operating within the City of Wilmington that provide direct client services for shelter and housing, food and nutrition, substance abuse recovery, and employment opportunity.”*

**TOMMY TAYLOR,  
UNITED WAY OF THE CAPE FEAR**





Amy Morris Bradley



Althea Gibson



Minnie Evans



Hannah Block

## BLACK HISTORY MONTH AND WOMEN'S HISTORY MONTH

Every year, the City of Wilmington is proud to celebrate Black History Month in February, followed by Women's History Month in March. These are important opportunities to recognize the significant contributions these historically marginalized groups have made to our city.

Here are just a few of their stories.

**Hannah Block** was the first woman elected to the Wilmington City Council and to serve as mayor pro-tem. During WWII, she volunteered with the Red Cross and headed up the local water safety program. She eventually became the first woman to be head lifeguard on North Carolina's coast.

Block, using her past as a jazz singer, volunteered her time to perform for the troops at the local USO. Block also recruited and trained a group of 60 young women who visited and entertained troops at military bases prior to deployment.

Her various wartime efforts earned her the title, "Mrs. World War II Wilmington." In 1997, the Wilmington Community Arts Center was renamed in her honor.

**Minnie Evans** was one of the best-known African American folk artists of the 20th century. Born in rural Pender County but raised in Wilmington, Evans first began to draw at the age of 43 when she heard a voice tell her she must "draw or die." This set off a torrent of artistic creation that earned her international recognition in the 1960s and 1970s.

Evans' artwork was often based on Bible-influenced dreams and visions that she had had since childhood. Her artwork hangs in prominent museums throughout the East Coast, including the Cameron Art Museum in Wilmington.

**Amy Morris Bradley** had a distinguished career as an influential educator who helped establish free education in North Carolina. After serving as a nurse in the Civil War, Bradley volunteered to head up a Boston philanthropic organization's effort to provide free schools for poor children in Wilmington.

Bradley arrived in Wilmington in December 1866 and went door-to-door to try and drum up support for her free school. In January 1867, she took over the abandoned Dry Pond Union Schoolhouse and welcomed her first three students. Two months later, the school would have more than it could handle, with students signing up for a waiting list. From November 1868 to January 1869 — thanks to generous donations from the Wilmington community and other prominent benefactors — Bradley opened the old Union School to 223 students and three teachers, the Hemenway School to 157 students, and the Pioneer School in Masonboro Sound to 45 students.

In two short years, Bradley's enterprise had grown from a one-teacher, three-student school to a complete school system with eight teachers, 435 students, and three buildings.

**Althea Gibson**, a 1949 graduate of Williston High School, was a tennis legend who smashed barriers to inclusion in the sports world on her way to becoming one of the most dominant tennis players in history.

Gibson, at just 23 years old in 1950, became the first African American to compete in what is now the U.S. Open. During a three-year stretch, she became the first African American to win the French Open (1956), the U.S. Open (1957, 1958), and Wimbledon (1957, 1958).

This impressive streak helped land her on the covers of Time Magazine and Sports Illustrated — the first time an African American woman had appeared on either cover.

Gibson's trailblazing accomplishments weren't just limited to the tennis court. At 37, she became the first African American woman to join the Ladies Professional Golf Association Tour.

The Althea Gibson Tennis Complex at Empie Park in Wilmington is named in her honor and her historic contributions toward a more equitable society. ■

5. BERTHA 6. WHISTLER 8. AMY 9. BENJAMIN 11. ABRHAM 12. GIBSON  
14. HANNAH 15. JOHNSON 16. MICHAEL  
**DOWN:** 1. JOSEPH 4. ALEXANDER  
**ACROSS:** 2. LEMON 3. KATHERINE 7. HAYNES 10. CATERINA 13. EVANS

CROSSWORD PUZZLE ANSWER KEY:

# CREATIVE CORNER: CROSSWORD PUZZLE

## ACROSS:

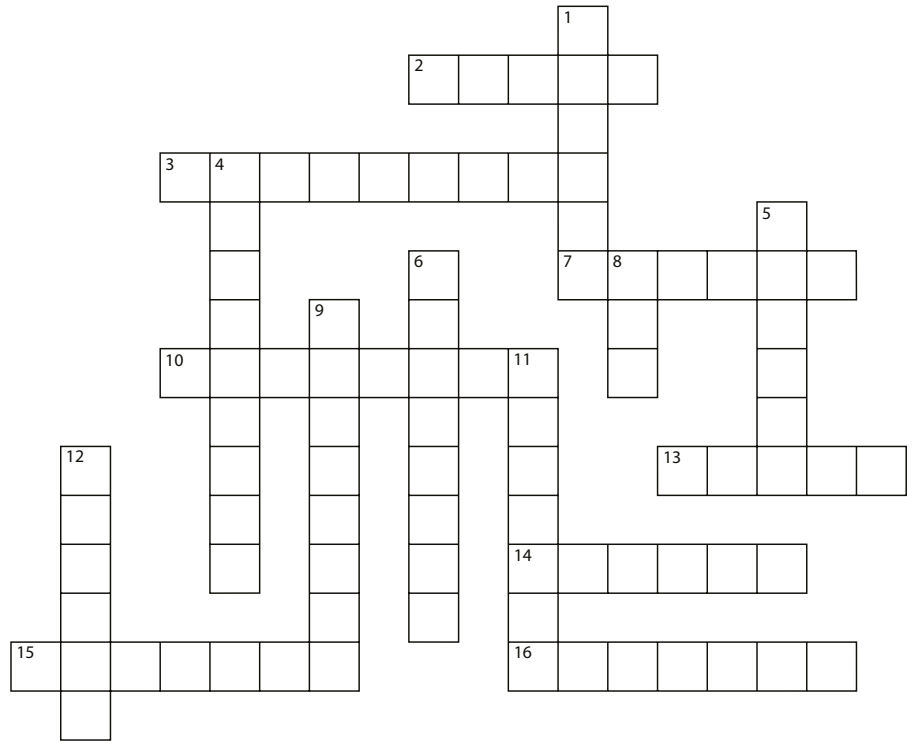
2. Meadowlark \_\_\_\_\_, who attended Williston Industrial School, was the Harlem Globetrotter known as the “Clown Prince of Basketball.”
3. \_\_\_\_\_ Cowan served as the first female mayor in NC and was also the only woman to serve as mayor in Wilmington.
7. Margaret \_\_\_\_\_ is currently serving as Wilmington’s mayor pro-tem.
10. \_\_\_\_\_ Jarboro, born in Wilmington, NC, was the first Black female opera singer to sing with a major company in the U.S.
13. Minnie \_\_\_\_\_ was an acclaimed folk painter who also worked at Airlie Gardens.
14. \_\_\_\_\_ Block, civic leader for more than six decades, was considered “Mrs. World War II Wilmington.”
15. Dorothy B. \_\_\_\_\_ was the first Black woman to win public county office since the 1890s in Wilmington when she was elected to the Board of Education in 1976.
16. \_\_\_\_\_ Jordan, who grew up in Wilmington, NC, is considered one of the best NBA players of all time.

## DOWN:

1. \_\_\_\_\_ McNeil made history by refusing to give up his seat at a segregated lunch counter in Greensboro.
4. \_\_\_\_\_ Manly worked as the Daily Record editor during 1898 coup d’état.

5. \_\_\_\_\_ Todd is an educator, author, civil rights advocate, and co-chaired the 1898 Centennial Foundation.
6. Anna \_\_\_\_\_ posed seated for her son’s famous painting.
8. \_\_\_\_\_ Bradley was an influential educator who championed free education in Wilmington and NC post-Civil War.

9. \_\_\_\_\_ Gould was a slave who chronicled his daring escape with 21 others at Orange Street Landing.
11. \_\_\_\_\_ Galloway was the former slave turned Union spy and then renowned statesman who met with President Lincoln.
12. Althea \_\_\_\_\_ was the first Black person to win a Grand Slam tennis event.



# WPD & WFD BY THE NUMBERS

## WFD

In 2022, the Wilmington Fire Department stayed true to its mission of providing the most talented and effective fire service to our community by responding to **12,277** calls for service, which resulted in:

- Nearly **\$200 million** in total property value saved
- **32** life-saving vehicle extrications
- **4** life-saving grabs from active structure fires

To help speed up the response time to those calls, last year saw the WFD change its deployment model to help facilitate quicker responses to emergency scenes. Crews had an average travel time of 3 minutes and 31 seconds.

[Learn more: wilmingtonnc.gov/fire](https://wilmingtonnc.gov/fire)

WFD also marked its 125th anniversary of the department by attaining an ISO Class 1 designation — the highest designation a fire department can receive. Only 338 of nearly 30,000 fire departments across the country have earned the designation. ■

## WPD

Last year, the Wilmington Police Department responded to **149,922** calls while seeing a significant reduction in violent crimes within the city. The six percent decrease in violent crimes in 2022 is the largest in nearly 15 years.

The WPD also added a new horse, named Ranger, to its ranks, as well as four

additional crash investigators, and four ABC officers to patrol the downtown district. The department also completed wiring of intersections to generators so they still operate during power outages, and received a grant to purchase five e-bikes.

On March 29, WPD was joined by law enforcement officials, city leaders, and community members for a ribbon cutting ceremony celebrating the new Museum and Education Center. ■





# HISTORIC LANDMARKS

The City Council and the Historic Preservation Commission have taken action to establish and protect the significant and diverse historic landmarks in the City of Wilmington. With the recent addition of the Giblem Lodge, the city now has nine historic landmarks, which you can learn about below. ■

Learn  
More  
→



### Efid's-Einstein Brothers Department Store

(272 North Front Street) Built in 1907, the five-story department store served downtown Wilmington until its closing in 1975.



### Chestnut Street Presbyterian Church

(712 Chestnut Street) Built as a mission church in 1858, the church became one of the first all-black congregations in Wilmington in 1864.



### Dr. Hubert Eaton House

(1406 Orange Street & 213 South 14th Street) Dr. Eaton was a prominent black doctor and Civil Rights leader in Wilmington. He also had a passion for tennis and trained tennis legend Althea Gibson.



### Lazarus-Hill-Divine House

(314 Grace Street) Built in 1818 by Aaron Lazarus, the house has been a military academy, Franciscan convent, and emergency hospital through the years.



### Former Fire Station No. 5

(1702 Wrightsville Avenue) Built in 1931 during the city's "Build Now" campaign, the former fire station was built in an effort to relieve unemployment and provide civic improvements. It closed in 1965.



### Greenfield Lake Park and Gardens

(1701 & 1739 Burnett Boulevard) The lake and gardens cover over 200 acres and were originally part of a plantation. The city purchased the property in 1925.



### Cazaux-Williams-Crow House

(7413 & 7417 Masonboro Sound Road) Constructed in 1877, it is one of the oldest homes along Masonboro Sound Road.



### North 6th Street/Harry Forden Bridge

(Between Brunswick & Campbell streets) Built in 1911, it is the only remaining steel truss bridge from that era in Wilmington.



### Giblem Lodge

(19 North 8th Street) Constructed in 1873, it is the oldest Masonic Lodge in North Carolina and has served as a gathering space for the black community through the years.



# MEET YOUR CITY COUNCIL

The City of Wilmington is governed by a non-partisan City Council consisting of a Mayor, Mayor Pro-Tem, and five Councilmembers. All members of the Wilmington City Council are elected by the entire city. Councilmembers also serve on several boards and committees and represent the city at numerous community functions.

City Council meetings are generally held on the first and third Tuesday of the month at 6:30 p.m. in Council Chambers at City Hall. Meetings are streamed live on GTV8 (Spectrum Channel 8), [wilmingtonnc.gov/gtv](http://wilmingtonnc.gov/gtv), [youtube.com/user/cityofwilmington](https://youtube.com/user/cityofwilmington), or [thewilmingtoncurrent.com](http://thewilmingtoncurrent.com). Previous meetings are available on-demand at [wilmingtonnc.gov/gtv](http://wilmingtonnc.gov/gtv). ■

📍 Reach out directly to City Council with comments, questions, or concerns by sending an email to [council@wilmingtonnc.gov](mailto:council@wilmingtonnc.gov).



Mayor  
Bill Saffo



Mayor Pro-Tem  
Margaret Haynes



Councilmember  
Charlie Rivenbark



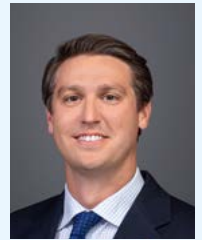
Councilmember  
Neil Anderson



Councilmember  
Clifford Barnett



Councilmember  
Kevin Spears



Councilmember  
Luke Waddell

# COME JOIN OUR TEAM AT THE CITY OF WILMINGTON!

We offer competitive pay and an excellent benefits package that includes health, dental, and vision insurance; paid vacation, sick time, and holidays; access to the state retirement program; and a 4.5% city contribution to deferred compensation programs (401k and ICMA 457). ■

📍 To apply, visit [wilmingtonnc.gov/jobs](http://wilmingtonnc.gov/jobs)



# YEAR IN REVIEW



2022 was a year of progress in the City of Wilmington. Take a look back at the milestones and accomplishments of the past year with this Year in Review video. ■

Learn More ↓



# CONTACT US!

- City Information ..... 910.341.7800
- Cape Fear Public Utility Auth ..... 910.332.6550
- Code Enforcement ..... 910.341.3266
- Fire Non-emergency..... 910.341.7846
- Parking..... 910.762.5678
- Parks and Recreation ..... 910.341.7855
- Police Non-emergency ..... 910.343.3600
- Street Maintenance ..... 910.341.7879
- Stormwater..... 910.341.4646
- Trash and Recycling ..... 910.341.7875
- Zoning ..... 910.254.0900

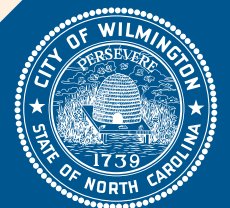
# STAY CURRENT

Stay up-to-date with what's happening in the city:

- 📍 @cityofwilmington
- 📍 cityofwilmington
- 📍 @cityofwilm
- 📍 wilmingtonnc.gov
- 📍 @cityofwilm
- 📍 910.341.7800



Get weekly updates delivered to your inbox by subscribing to the Wilmington Current newsletter: [thewilmingtoncurrent.com](http://thewilmingtoncurrent.com)



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# THE STATE OF WILMINGTON'S WATERWAYS

## 2022 UNCW SURFACE WATER QUALITY REPORT

(The following is a summary of the condition of major creeks and waterways, not drinking water, within the city limits.)

The State of Wilmington's Waterways 2022 UNCW Surface Water Quality Report is a summary of the current health and condition of the major creeks and waterbodies that fall within Wilmington's city limits. UNCW water quality sampling information was provided by Dr. Michael Mallin of the UNCW Center for Marine Science and lead scientist for the Wilmington Watersheds Project. The water quality sampling summary is based on data collected between the months of January-December 2022 and is presented from a watershed perspective, regardless of political boundaries.

The summary describes each watershed by size, state classification, state status, reason for impairment, and UNCW sampling summary. For more information on the current health of Wilmington's waterways or to read Dr. Mallin's entire report, please visit:

<http://uncw.edu/cms/aelab/research.html>

### Water Definitions

**Algal Bloom** Rapidly occurring growth and accumulation of algae in a waterway resulting from excess nutrients that can lead to low dissolved oxygen levels and fish kills. (Sources: fertilizers, grass clippings, pet waste)

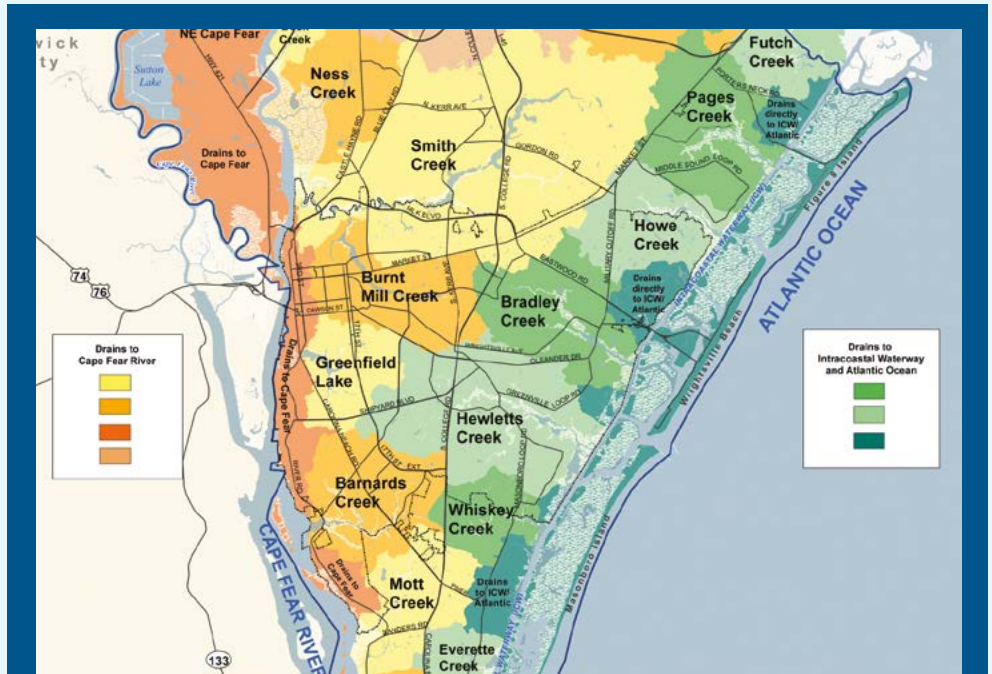
**Biological Integrity** The ability of an ecosystem to support and maintain a balanced and indigenous community of organisms.

**Best Management Practice (BMP)** An action or landscape modification that reduces the amount of pollution and/or the quantity of stormwater flowing into waterways. BMPs can be actions, such as picking up after your pet, or on-the-ground practices, such as rain barrels and rain gardens.

**Chlorophyll a** Allows plants to photosynthesize and gives plants their green color. Waters that have high chlorophyll a levels are typically high in nutrients (phosphorus and nitrogen), which cause algae to grow or bloom. When algae die, it depletes oxygen from the water and can cause fish kills.

**Dissolved Oxygen (DO)** The amount of oxygen available in water. Fish and aquatic organisms require adequate levels of DO to survive.

**Fecal Coliform Bacteria** Bacteria present in the intestines and feces of warm-blooded animals. High counts of fecal coliform bacteria in a waterway indicate the presence of other disease-causing pathogens which can cause sickness and disease in humans and animals. (Sources: pet/animal waste, sewer overflows, septic system failure)



### UNCW Results Summary:

Lower Burnt Mill Creek and upper Bradley Creek maintain some of the most polluted waters in the city. Note that upper Bradley Creek is currently undergoing large-scale stream restoration work.

Greenfield Lake continues to host nuisance algal blooms and the tributary creeks of Jumping Run Branch and Squash Branch continue to load high fecal bacteria and nutrients into the lake. Under a grant from the NC 319 program, extensive water sampling in upper Jumping Run Branch was conducted for the past two years and design plans for wetland rehabilitation to remove nutrients were recently completed.

**Hypoxia** Low dissolved oxygen levels in a waterway which can result in fish kills.

**Nutrients** Substances (i.e. nitrogen and phosphorous) needed by plants and animals for growth; however, excessive nutrients in a waterway can lead to harmful aquatic weed and algae growth, low DO levels and fish kills. (Sources: fertilizers, yard waste, pet waste)

**Pathogens** Disease-causing organisms such as bacteria and viruses. (Sources: pet waste)

### PAHs (Polycyclic Aromatic Hydrocarbons)

Toxic by-products of petroleum and fossil fuels, which can be harmful to humans and aquatic life and can persist in the environment for a long time. (Sources: auto exhaust, motor oil, parking lot sealcoats, roofing tars, coal power plants)

**Sediment** Particles of silt, clay, dirt, or sand that wash into waterways caused by land-disturbing activities or natural weathering. Sediment can settle to the bottom or remain suspended in water. (Sources: construction sites with failing/erosion control, eroding streambanks, and exposed soil)

**Tidal Creek** A saltwater creek that is influenced by tides. Many tidal creeks have oyster reefs along their shorelines.

**Turbidity** A cloudy condition in water caused by suspended sediment.

**Watershed** An area of land that drains into a specific body of water such as a creek, lake, or river.

### Water Classifications

The NC Division of Water Resources applies classifications to waterways which define the best uses to be protected within those waters (e.g. swimming, fishing, drinking water supply, aquatic life). These classifications have an associated set of water quality standards to protect their designated uses. These standards may be designed to protect water quality, fish and wildlife, the free flowing nature of a stream, or other special characteristics. In addition, there may be a **supplemental classification** applied to protect several different uses



or special characteristics within the same same waterbody. Listed below are the freshwater and saltwater classifications that apply to Wilmington's waterways. For more information, visit: <https://deq.nc.gov/about/divisions/water-resources/planning/classification-standards/classifications>

### **Freshwater Classifications**

**Class C** Waters protected for secondary recreation (fishing, boating, and other activities involving minimal and infrequent skin contact), wildlife, agriculture, biological integrity, and fish/aquatic life propagation and survival.

### **Supplemental Classification**

**Swamp Waters (Sw)** Waters that naturally have low flow and other characteristics which differ from creeks that drain land with steeper topography.

### **Saltwater Classifications**

**Class SC** Saltwaters protected for secondary recreation (fishing, boating, and other activities involving minimal skin contact), fish and noncommercial shellfish consumption, fish/aquatic life propagation and survival, and wildlife.

**Class SB** Saltwaters used for primary recreation, such as swimming, and all Class SC uses.

**Class SA** Saltwaters used for commercial shellfishing and all Class SC/SB uses. SA waters are also High Quality Waters (HQW) by supplemental classification.

### **Supplemental Classifications**

**High Quality Waters (HQW)** Waters rated excellent based on biological, physical, and chemical characteristics and having primary or functional nursery areas.

### **Outstanding Resource Waters (ORW)**

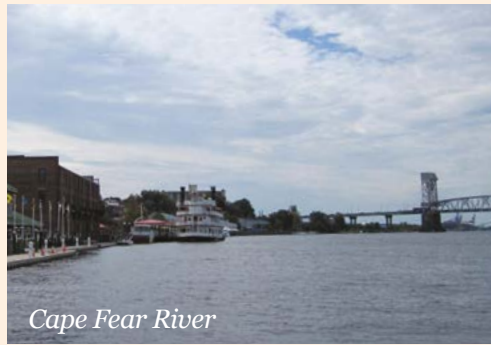
Unique and special waters having excellent water quality and being of exceptional state or national ecological or recreational significance.

### **State Status/Reason**

Indicates whether or not a creek is supporting its State classification/use and the reason why.

### **NC 303(d) List of Impaired Waters**

Section 303(d) of the Clean Water Act requires states to develop and frequently update a list of waters that do not meet water quality standards or have impaired uses. This newsletter is based on the NC 303(d) List, which is available for viewing at: <https://deq.nc.gov/about/divisions/water-resources/water-planning/modeling-assessment/water-quality-data-assessment/integrated-report-files>. Unfortunately, several of Wilmington's waterways are on the 303(d) list because of pollution, such as bacteria and nutrients, which is washed from the land by stormwater runoff.



## **Watersheds that drain to the Cape Fear River (CFR)**

### **Smith Creek**

**Size of watershed:** 16,650 acres

**State classification/Use:** C, Sw

**State Status:** Currently supporting use

**Reason:** Meets standards for Class C waters

**UNCW Sampling Summary:** Smith Creek is normally sampled at the Castle Hayne Street bridge; however, the bridge was under repair all year and sampling was not performed due to safety issues.

### **Burnt Mill Creek**

**Size of watershed:** 4,207 acres

**State classification/Use:** C, Sw

**State Status:** Impaired. On NC 303(d) List

**Reason:** Does not meet standards for Class C waters, specifically for biological integrity of benthos (bottom dwelling organisms)

**UNCW Sampling Summary:** The upper creek maintained good dissolved oxygen levels and low turbidity, but had occasional fecal bacterial issues and algal blooms; there was a notable bloom in May. The lower creek had good dissolved oxygen levels and low turbidity, but was impacted by a large algal bloom in May and had some high fecal bacteria counts.

### **Greenfield Lake**

**Size of watershed:** 2,465 acres

**State classification/Use:** C, Sw

**State Status:** Impaired. On NC 303(d) List

**Reason:** Does not meet standards for Class C waters, specifically for Chlorophyll a

**UNCW Sampling Summary:** The Squash Branch tributary into the lake was severely impacted by low dissolved oxygen levels, but the Jumping Run Branch tributary was not. However, both streams suffered from high fecal coliform counts. These tributaries are the main contributors of elevated nitrogen and phosphorus to the lake. The lake itself continued to suffer from high fecal coliform counts and algal blooms, particularly at the park dock.

### **Barnards Creek**

**Size of watershed:** 4,173 acres

**State classification/Use:** C, Sw

**State Status:** Currently supporting use

**Reason:** Meets standards for Class C waters

**UNCW Sampling Summary:** Barnards Creek is sampled at two locations which showed problems with fecal coliform, and algal blooms at one station.

### **Mott Creek**

**Size of watershed:** 3,342 acres

**State classification/Use:** C, Sw

**State Status:** Currently supporting use

**Reason:** Meets standards for Class C waters

**UNCW Sampling Summary:** Not sampled in 2022.



## **Watersheds that drain to the Intracoastal Waterway (ICW)**

### **Howe Creek**

**Size of watershed:** 3,516 acres

**State classification/Use:** SA, ORW

**State Status:** Impaired. On NC 303(d) List; closed to shellfishing

**Reason:** Does not meet standards for Class SA waters, specifically for fecal coliform bacteria; a portion of Howe Creek is also impaired for dissolved oxygen

**UNCW Sampling Summary:** Not sampled in 2022.

### **Bradley Creek**

**Size of watershed:** 4,583 acres

**State classification/Use:** SC, HQW

**State Status:** Currently supporting use

**Reason:** Meets standards for Class SC waters

**UNCW Sampling Summary:** Bradley Creek is sampled at two sites along Wrightsville Avenue and two sites in the upper north branch (Clear Run). The upper sites were impacted by low dissolved oxygen and high fecal coliform counts, and an algal bloom in February 2022. The two Wrightsville Avenue sampling stations had generally good water quality.

### **Hewletts Creek**

**Size of watershed:** 7,478 acres

**State classification/Use:** SA, HQW

**State Status:** Impaired. On NC 303(d) List; closed to shellfishing

**Reason:** Does not meet standards for Class SA waters, specifically for fecal coliform bacteria

**UNCW Sampling Summary:** Hewletts Creek did not experience algal blooms or elevated turbidity and dissolved oxygen was generally good.

However, fecal coliform counts were elevated on most sampling occasions in the middle tributary branch entering the main creek.

### **Whiskey Creek**

**Size of watershed:** 2,078 acres

**State classification/Use:** SA, HQW

**State Status:** Impaired. On NC 303(d) List; closed to shellfishing

**Reason:** Fecal coliform bacteria

**UNCW Sampling Summary:** Not sampled in 2022.

*\*All waters in the State of North Carolina are impaired for mercury, based on high levels found in the tissues of several fish species.*



## DOWNTOWN PROJECTS

**January marked the formal completion of two significant downtown projects—the renovation of Bijou Park and Phase 2 of the Front Street Streetscape Project.**

### North Front Street

This \$3.5 million project, conducted jointly with CFPUA, built upon the 2010 Front Street renovations, which ran from Market Street to Chestnut Street. It involved new water, sewer, stormwater, underground electrical, pavement, granite curbing, sidewalks, decorative bricks, lighting, landscaping, and street furnishings between Chestnut Street and Walnut Street.

### Bijou Park

This signature open space serves as the connection gateway from the mid-block of Front Street through River Place to Water Street and the Cape Fear River. This \$800,000 renovation project involved demolition, installation of new stormwater infrastructure, underground utilities, an interpretive historical sign, decorative concrete, a new entrance sign, decorative pavers, landscaping, and furnishings. The remaining original tiles from the old theater were preserved. ■