



Planning Board Agenda

Town of Swansboro

Tuesday, June 06, 2023

I. Call to Order

II. Approval of Minutes

- a. April 4, 2023, Regular Meeting Minutes

III. Business

- a. **Wetland Policy/UDO Amendment**
Presenters: Andrea Correll, AICP-Planner and Rebecca Brehmer, Projects/Planning Coordinator

Further discussion on implementation of a wetland policy and possible UDO amendments is needed for the continued implementation of the adopted CAMA Land Use Plan Update.

Recommended Action: Discuss and provide further direction.

IV. Chairman/Board Thoughts/Staff Comments

V. Public Comments

VI. Adjournment

**Town of Swansboro
Planning Board
Regular Meeting Minutes
April 4, 2023**

Call to Order

The meeting was called to order at 5:32 pm. Board members in attendance were Michael Favata, Christina Ramsey, Scott Chadwick, Laurent Meilleur, Edward Binanay, and Ed McHale. Sherrie Hancock was absent.

Minutes

On a motion by Mr. Favata, seconded by Mr. Binanay, the minutes for the January 3, 2023, Regular Meeting were approved unanimously.

Business

Special Use Permit/ 108-4 W. Corbett Avenue

Planner Correll reviewed that Marc Howell, on behalf of Jessmarc Properties LLC, had applied for a special use permit to continue operating a Bed and Breakfast at 108-4 W. Corbett Avenue. The property was located in the B-2 zoning district and the use of “Bed and Breakfast Accommodations and Inns” was an allowance pursuant to the issuance of a special use permit.

Marc Howell on behalf of Jessmarc Properties LLC shared that he was unaware that he needed a special use permit and would like to obtain one so he can continue to operate his short-term rental Gone Costal Airbnb.

Mr. Chadwick entered into the recorded, a letter from Mr. Brent Lanier from Lanier Surveying company. (*See attachment A*)

In response to inquiries from the board, clarification was provided from Mr. Howell and Mrs. Correll on the following:

- The property is located near the By Bridge restaurant and a boutique.
- The customers park in River View Park and there is no agreement for use the River View Parking because it’s designated as public parking.
- Out of 53 reviews the property had a 4.89 rating and there’s been no mention of having any parking issues.
- The Bed and breakfast sleeps 3 people.
- No customers who have stayed at the bed and breakfast have docked there.

On a Motion by Mr. Meilleur and seconded by Mr. Binanay, the special use permit was unanimously recommended for approval.

Rezoning Request/1130 Hammock Beach Road

Planner Correll reviewed that property owner Justin Weiss had requested a rezoning for his property located at 1130 Hammocks Beach Road from RA (Residential Agricultural) to B-1 (Highway Business). The property is further identified as tax parcel ID 025381 which contains +/- 1.26 acres of land and abuts properties zoned R-8SF (Residential) and B-1 (Highway Business). The CAMA Land Use Plan Update (2019) identified the property as Suburban Town Center (STC).

In response to inquiries from the board, Mrs. Correll clarified the following:

- Advertising and notice to adjoining property owners were not required prior to Planning Board review, that process will occur prior to the public hearing with the Board of Commissioners in accordance with NCGS 160D.
- The properties across the street were a mix of commercial and residential zoning designations.
- This property was included in the Town Sidewalk plan under priority 3, currently there were still additional easements to be secured before installation of sidewalks by NCDOT.

On a motion by Mr. McHale and seconded by Mr. Favata, the rezoning request for 1130 Hammocks Beach Road unanimously recommended for approval was consistent with the Comprehensive Plan.

Board Comments

Mr. Binanay reminded the board of their joint meeting with the Board of Commissioners on April 10, 2023.

Mr. Chadwick thanked the subcommittee for their work on the review of the table of permitted uses in the Unified Development Ordinance.

Adjournment

On a motion by Mr. Meilleur, seconded by Mr. McHale, the meeting adjourned at 5:57 pm

LANIER

SURVEYING COMPANY

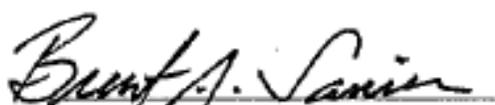
329 Foster Creek Road
Swansboro NC, 28584

Date: 1-19-2023

To: Town of Swansboro
For: Anthony Howell

Subject: Impact of Proposed Short Term Vacation Rental
108-4 West Corbett Avenue, Swansboro, N.C.

The proposed short-term rental at 108-4 West Corbett Avenue in my opinion would not have a significant negative impact. In my opinion, it would be a positive benefit to the town due to most rentals are on second floor. This rental has a ramp near the entrance that would benefit elderly and people with a disability. Vacation rentals with views of the river and access to downtown are few. As a former owner of Swansboro Paddle Boarding next unit over, it would be hard to believe this would have any negative impact on parking or otherwise, as have spent many days looking at people come and go during all seasons.


Brent A. Lanier PLS L-3611





Planning Board Meeting Agenda Item Submittal

Item To Be Considered: **Wetland Policy/UDO Amendments**

Board Meeting Date: **June 6, 2023**

Prepared By: **Andrea Correll, AICP-Planner and Rebecca Brehmer, Projects/Planning
Coordinator**

Overview: Further discussion on implementation of a wetland policy and possible UDO amendments is needed for the continued implementation of the adopted CAMA Land Use Plan Update.

Background Attachment(s):

1. July 13, 2020, BOC Meeting Minutes and PowerPoint,
2. September 21, 2020, BOC and PB Joint Meeting Minutes,
3. March 2, 2021, Planning Board Meeting Minutes,
4. August 18, 2022, Joint Retreat Summary,
5. Swansboro CAMA Land Use Excerpts,
6. NC Resilience Plan
7. Supreme Court resent decision on regulating wetland

Recommended Action: Discuss and provide further direction.

Action: _____

Town of Swansboro
Board of Commissioners
July 13, 2020 Regular Meeting

In attendance: Mayor John Davis, Mayor Pro Tem Frank Tursi, Commissioner Pat Turner, Commissioner Harry PJ Pugliese, Commissioner Larry Philpott, and Commissioner Laurent Meilleur. It was noted that Mayor Pro Tem Tursi, Commissioner Meilleur and Commissioner Philpott participated remotely as allowed by NCGS 166A-19. Governor Cooper had declared a state of emergency due to the COVID-19 Pandemic in March 2020.

Call to Order/Opening Prayer/Pledge of Allegiance

The meeting was called to order at 5:30 pm. Mayor Davis gave the invocation.

Public Comment

Citizens were offered an opportunity to address the Board regarding items listed on the agenda. No comments were offered.

Adoption of Agenda

Manager Seaberg was asked and gave a brief on the Interlocal Agreement Amendment – Onslow County Fee Collections and the Debris Removal and Monitoring Contracts. Mayor Pro Tem Tursi asked that the contracts for Debris Removal and Monitoring be moved from Consent for discussion.

On a motion by Commissioner Turner, seconded by Commissioner Pugliese, the Agenda as amended and Consent Items below were unanimously approved.

a. Meeting Minutes

April 27, 2020 Regular Meeting Minutes

May 11, 2020 Regular Meeting Minutes

May 26, 2020 Special Meeting Minutes

b. Interlocal Agreement Amendment - Onslow County Fee Collections – the amendment allowed the County to collect unpaid charges resulting from nuisance abatements as a lien on the property.

Presentation

Rick Salvage, President of the NC Wetlands Association gave a presentation on Wetlands - *also attached to these minutes*. Mr. Savage and his team answered specific questions from the Board.

The restoration of wetlands was defined by example - when a wetland was disturbed, it would not function properly. Removing filament material was an example of restoring a wetland.

Restorations, trails and signage can be added that would suffice as park space. It really depended on the type of wetland present. Boardwalks were typically park space. Was there value in isolated wetlands – was there a trade-off? As an example, One Harbor Church was planning a constructed wetland to replace an existing isolated wetland. Mr. Savage believed it was dependent on the landscape of the wetland. Isolated wetlands usually housed amphibians and stored stormwater. This was probably a question for Federal/State officials to answer.

Swansboro had nice wetland areas according to Mr. Savage. Protection of the headwaters to streams was always important, especially when adjacent to wetlands. When reviewing development, Town officials should look for green solutions, anything that would help slow down the stormwater runoff headed to the streams.

Local government had no authority to exceed state regulations. The Town could look at incentives for developers to do more though.

On an inquiry whether a backyard pond was considered a wetland if it had genus Salix (willows and sallows) plants growing in it, Mr. Savage stated that the pond would have to be ½ acre or more to be considered a wetland.

To address existing issues created years ago, Mr. Savage recommended acquiring EPA 319 funding when possible to assist in projects that helped with runoffs and restoration. The Town had already been a recipient of such funds in partnership with the NC Coastal Federation.

Mayor Pro Tem Tursi thanked Mr. Savage for attending sharing that the Town was lucky to have this organization as a partner. He recommended a joint meeting with the Planning Board to review Land Use Plan policies for better assist in future recommendation to incorporate those policies into Code. The organization might also assist in identifying stream restoration opportunities.

A joint meeting with the Planning Board would be scheduled.

Recess at 6:19 pm/Reconvened at 6:25pm.

Business Non-Consent

Swansgate Revised Preliminary Plat – In May 2019, a preliminary plat was approved for Swansgate Subdivision consisting of 35 lots on 21.95 acres. The subdivision was proposed under the Residential Cluster Development standards of the Unified

Development Ordinance. Parker and Associates, on behalf of A. Sydes Construction, Inc., has submitted a revised preliminary plat to add two additional lots.

At their June 1 regular meeting, the Planning Board voted 4 to 2 to recommend approval of the revised preliminary plat with the conditions that 1) the sidewalk be extended to the property line along Main Street Extension, and 2) that the other items addressed in the TRC Comments be satisfied.

Multiple questions from the Board were addressed by Attorney Kyle Fountain, and Engineer Jonathan McDaniel, representing the developer and Planner Jennifer Ansell.

In response to whether the EPA violations had been corrected. Attorney Fountain indicated that everything would be built to state specs. There were some minor violations that the developer was working on.

Mayor Davis inquired whether the developer would be willing to place the wetlands in a trust or donate them to the Town. Mr. McDaniel's shared they would donate to the Town. Attorney Parson preferred that the wetlands be deeded to the Town, not just a dedication.

Mayor Pro Tem Tursi referred to Chapter 152.366 of the UDO, that required all projects, land disturbance activities, development, etc. adhere to all applicable state and federal law regulations. He noted that the development was in violation of its sediment/stormwater permits and asked had the developers received written compliance from the state. Mr. McDaniel indicated that they had had an inspection, a letter of violation was not issued. There were five items that needed to be corrected and the state would come back out to assure compliance, more like a punch list. Three items were in related to paperwork, the other two were regarding temporary seeding/stabilizing the ground. The lots were under construction and being graded so they were not ready for seeding. The other item was related to the old timber farm ditch that led to the wetlands in the back but that would be abandoned with stone protection added. Mr. McDaniel believed if the state inspected today all would be complying. Mayor Pro Tem Tursi further asked if the additional two lots would require a modification of the stormwater permit from the state and whether it would raise impervious surface limits? Mr. McDaniel's indicated that the development would remain low density.

Planner Ansell noted that the parks/rec fee non-payment had been caught during Technical Review for the proposed amendment. The project began under the former Planner's review and was missed.

Commissioner Philpott referred to the former timber farm use, noting it seemed to be part of the problem – had that been corrected. Mr. McDaniel did not know but did indicate that a couple of the lots in the rear did drain towards the Deer Run subdivision.

Commissioner Pugliese had taken complaint calls but hoped Deer Run would see drainage improvement once Swansgate was built out/developed. Mr. McDaniel indicated that some of the flow would still drain toward Deer Run.

Commissioner Meilleur inquired where he could find the average lot square footage. Planner Ansell referred to sheet 2 of the proposed plan which provided the average lot size would be 18,033 sq ft.

Mayor Pro Tem Tursi noted reservations with approval when the violations had not been corrected and the fact that there would be drainage from some of the lots onto neighboring property. Commissioner Meilleur agreed noting the pending violations had not been addressed. Mayor Davis asked if the wetland areas could be restored? Mr. McDaniel believed it would be a great restoration project, there was still timber on the property. Manager Seaberg asked Rick Savage of the Wetland Association if he would take a look at the property to see if it would qualify for EPA319 funding. Mr. Savage confirmed he would do so.

On a motion by Commissioner Turner, seconded by Commissioner Pugliese, the revised preliminary plat for Swansgate was unanimously approved.

Future Agenda Items – Each meeting an opportunity was provided for the Board to review future agenda items and introduce items of interest and subsequent direction for placement on future agendas, which would allow staff the opportunity to plan accordingly.

In addition to the items listed in the memo, Staff informed that it had taken the suggestion by the Board regarding food truck sales back to the Planning Board but their recommendation was still to deny the text amendment stating that it was incompatible with the Land Use Plan. Direction was sought whether to proceed with the public hearing since the recommendation was still for denial; the applicant wished to proceed. At least two Chamber members verbally supported the new use. Regulations/fees from areas jurisdictions that allowed food trucks had also been provided to the Planning Board. Board members agreed to proceed, requiring that the applicant be in attendance.

Debris Removal and Monitoring – Mayor Pro Tem Tursi asked if he understood there would only be one contractor for the entire county. Did we have any assurances that our debris would be picked up in a timely manner? Manager Seaberg was confident in the contract terms and relationship with the County. The secondary contract would be put in place in the event the primary contractor failed to follow through.

On a motion by Commissioner Turner, seconded by Commissioner Pugliese, the Debris Removal and Monitoring Contracts were unanimously approved.

Public Comments

Citizens were offered an opportunity to address the Board regarding items not listed on the agenda. No comments were offered.

Commissioner Meilleur shared additional concerns regarding the Swansgate Subdivision. He believed the deeded wetlands reduced the average lot size in Swansgate which was zoned R20. He would like the Town to consider separation between small and large lots and to consider reducing the credit for wetland dedication. Mayor Davis did not agree with reducing the credit for wetland dedication. Although Commissioner Turner did not disagree with Commissioner Meilleur comments she noted that the Board had adopted goals/priorities for the year. If the Board changed its course or added more for the staff to do every meeting, the staff would never be able to fulfill the goals/priorities.

Manager's Comments

Manager Seaberg asked the Board if they would like to return to ZOOM Meetings in light of the recent increase of COVID 19 cases. Three Board members were participating remotely. Board members preferred the hybrid meeting style, which allowed some to participate remotely by law as long as the Governor's State of Emergency remained in effect.

Emergency Operations Center Update – A new building would cost roughly \$500/sq foot. Manager Seaberg would update the report he gave in July. He was not able to find any federal funding opportunities. USDA may have funding.

Board Comments

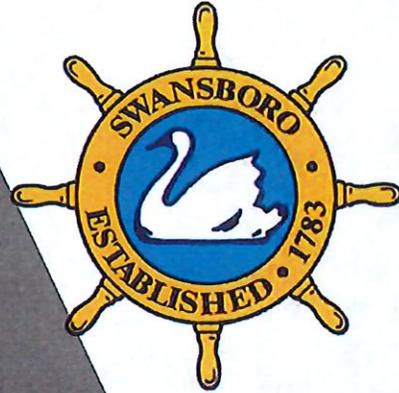
Mayor Pro Tem Tursi inquired when Ward Shore would have finishing touches added. Manager Seaberg shared that Public Works was working on stormwater projects and completing the parking lot at Municipal Park. They would return to Ward Shore after those were completed.

Mayor Davis thanked staff and looked forward to the plexiglass separations to be installed by the next meeting. He asked the Staff to research the possibility of broadcasting its meetings like the County did.

Adjournment

On a motion by Commissioner Pugliese, seconded by Commissioner Turner, the meeting adjourned at 7:45pm.

Regular Meeting July 13, 2020



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1. Please turn cell phones to "off" or "vibrate".

2. The Board offers the public three opportunities to speak during the meeting:

A comment period is offered at the beginning and end of the meeting. Please note that a separate opportunity is provided for those items requiring a public hearing.

Public Hearing(s) – There are no public hearings scheduled for this meeting.

3. Individuals making presentations or comments are asked to adjust the microphone as necessary and to speak directly into the microphone.

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PUBLIC COMMENT

Citizen opportunity to address the Board for items listed on the agenda.

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AGENDA AND CONSENT ITEMS

***Action Needed:** Motion to Adopt the Agenda as prepared (or amended) and approval of the Consent Items*

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Wetlands Presentation

The Board indicated interest in gaining a better understanding of wetlands. Rick Salvage, President of the NC Wetlands Association is scheduled to give a brief presentation and will be available for Q&A after the presentation.

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Town of Swansboro Board of Commissioners
July 13, 2020



Presenters:

- Rick Savage, President
- Norton Webster, Treasurer
- David Shouse, Policy Committee

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Carolina Wetlands Association (CWA)

MISSION STATEMENT

The Carolina Wetlands Association promotes the understanding, protection, restoration, and enjoyment of North and South Carolina's wetlands and associated ecosystems through science-based programs, education, and advocacy.

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Carolina Wetlands Association (CWA)

- Non-partisan, science-based organization advocating for wetlands
- Formed in 2015
- 501(c)(3) non-profit in North Carolina
- Governed by a 13-member Board of Directors
- 100% volunteer-based organization

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Board of Directors



**Rick Savage, Retired, NC DENR*

**Kim Matthews, RTI*

**Kristie Gianopulos, Consultant*

**Norton Webster, Consultant*

Tara Alden, Kimley-Horn

Kristine Cherry, South Atlantic Partners

**Heather Clarkson, Defenders of
Wildlife*

Geoff Gisler, Southern Environmental

Law Center

Curt Richardson, Duke University

Shaefny Grays, NC State University

Daniel Hitchcock, Clemson University

George Howard, Restoration Systems

George Matthis, River Guardian

Foundation

** Executive Committee members*

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Helpful Relationships with State Agencies

- **NC Division of Coastal Management (NCDCM)**
 - CAMA funding
 - Resilience planning and funding
- **NC Office of Recovery and Resilience (NCORR)**
 - Planning
 - FEMA and HUD funding
- **Other State Agencies** can help with funding:
 - Clean Water Management Trust Fund
 - Section 319 of Clean Water Act grants
 - Others

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Natural and Working Lands Initiative (NWL)

- CWA invited to participate in NWL initiative by Governor Cooper & NC Dept. Environmental Quality
- **Focus:** to recommend actions to restore wetlands and forests, & other Nature Based Solutions (NBS) to sequester carbon
- NBS co-benefits:
 - ✓ flood mitigation
 - ✓ water quality
 - ✓ recreation
 - ✓ community resilience
- NWL Report, published June 2020, part of the States' Climate Risk Assessment and Resilience Plan
 - <https://deq.nc.gov/energy-climate/climate-change/nc-climate-change-interagency-council/climate-change-clean->

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NCCOR Disaster Recovery Task Force (DRTF)

- CWA asked to join the Environmental Recovery Support Function of the DRTF
- **Focus:** recommending actions specific to the use of NBS & restoration for environmental recovery
- CWA provided input on the best use of FEMA and HUD funds from an environmental perspective
 - Efforts are ongoing as expenditures are planned for the near future

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How CWA Helps Local Communities

- Designed a workshop to help local decision makers understand
 - ✓ wetland value,
 - ✓ spectrum of NBS, and
 - ✓ building community resilience.
- Work with communities to find the right solution for their flooding issues
 - Wetland acquisition, restoration and management
 - Highlight co-benefits such as community recreation, environmental equity, water quality, eco-tourism
 - Contribute to community resilience
- Provide access to expertise through our supporters & partners

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Swansboro is set for Success

Watershed Restoration Plan (2017)

- data, inventories, and recommendations

CAMA Land Use Plan (updated 2019)

- proposing Future Land Use

Other small capital projects

- converting impervious surfaces
- adding cisterns

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Environmental Goals of Swansboro's Plans

- **Conserve** wetlands, open space & environmentally sensitive lands
- **Scrutinize development** in environmentally sensitive and flood-susceptible areas *Conservation Priority Areas (CPAs)*
- **Create & implement zoning standards & strategies** to address development in CPAs
- **Preserve water quality** by restricting development of natural areas, especially in floodplains, to preserve
- **Contribute to community resiliency** of systems (environmental, financial, social, cultural) through use of conservation zoning

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Opportunities in Swansboro Plans

- ✓ **Define** appropriate development or protections for environmentally-sensitive and flood-susceptible areas
- ✓ **Mitigate flooding** issues
- ✓ **Increase civic education** → support & prioritization of projects
- ✓ **Improve water quality** and the natural environment
- ✓ **Increase resiliency** for long term climate issues
- ✓ **Attract funding partnerships**

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Case Studies & Considerations

- Carrot-and-stick vs. regulatory “hammer”
- Use of **incentives** to developers
 - Example: donation of wetlands to be protected
- Resiliency is an emerging and recognized issue
 - Town of Nags Head’s plan for resilience
 - Engaged state agencies, universities & active conservation network
 - Beaufort & Charleston SC’s resilience plans
 - Wetlands Watch in Norfolk, VA

Swansboro is well-positioned at the forefront.

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Carolina Wetlands Framework in Action

Stony Run Project, Dunn, NC:

- Community outreach and education
 - Partner with local organizations, local government, other nonprofits, and restoration companies to provide expertise
- Develop a detailed project plan
- Identify funding sources for land acquisition & restoration:
 - Work with landowners to acquire wetlands
 - Conduct restoration work
 - Create a community wetland park
- Results stay in the community to protect, preserve, and manage

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So what's next?

- CWA's Strategic Plan includes helping communities understand:
 - What is the value of wetlands
 - How wetlands provide ecosystem services
- CWA involvement in State initiatives (*Natural & Working Lands Initiative; Disaster Recovery Task Force*) has focused us on working directly with local communities to implement their plans.
- CWA offers its expertise to help the Town of Swansboro meet the objectives of your Land Use Plan
- Next steps:
 - Meet with the Planning Board?
 - Other suggestions?

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Thank You!

The Swansboro Team of the Carolina Wetlands Association

- | | |
|--|------------------|
| • Rick Savage | • David Shouse |
| • Rick.savage@carolinawetlands.org | • Sara Bazemore |
| • Kim Matthews | • Amanda Johnson |
| • Norton Webster | • Chad Guthrie |

Sponsors

- | | |
|-----------------------------|----------------------------|
| • Axion Environmental, Inc | • Restoration Systems, LLC |
| • Backwater Environmental | • Water & Land Solutions |
| • Kris Bass Engineering | • Wildlands Engineering |
| • Land Mechanic Design, Inc | |

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NEW BUSINESS/NON-CONSENT

Swansgate Revised Preliminary Plat

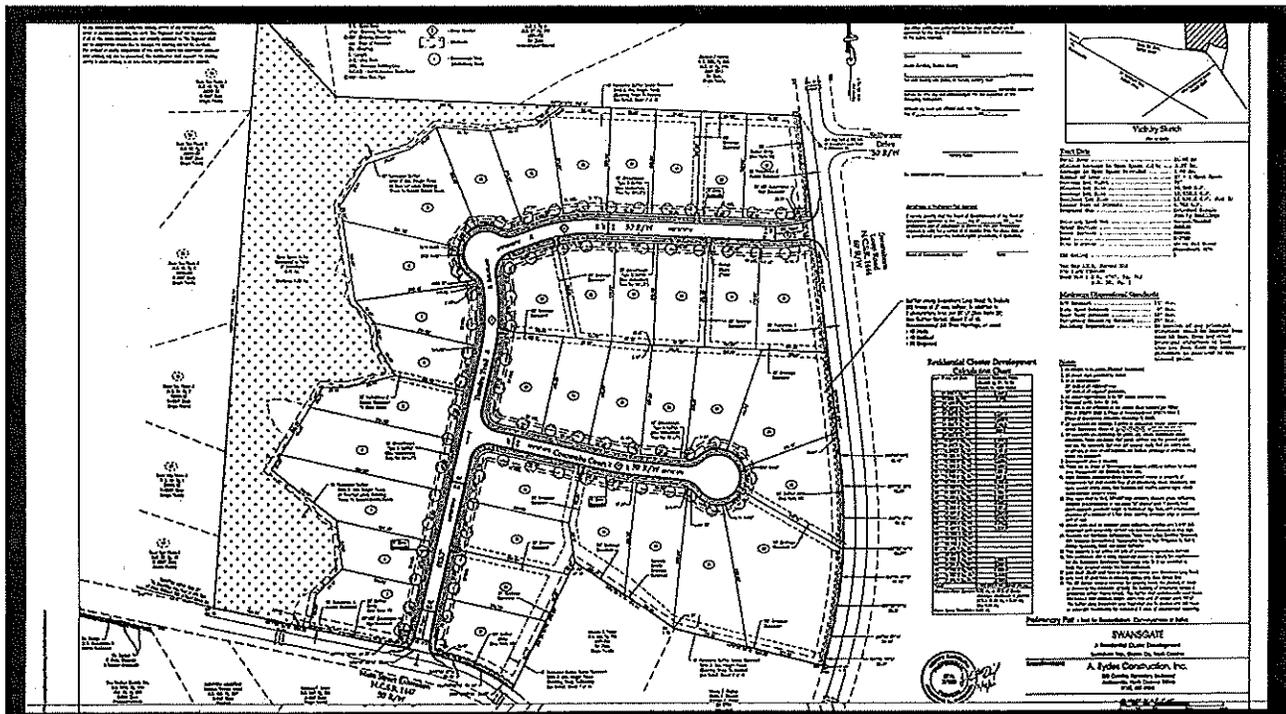
In May 2019, a preliminary plat was approved for Swansgate Subdivision consisting of 35 lots on 21.95 acres. The subdivision was proposed under the Residential Cluster Development standards of the Unified Development Ordinance. Parker and Associates, on behalf of A. Sydes Construction, Inc., has submitted a revised preliminary plat to add two additional lots. At their June 1 regular meeting, the Planning Board voted 4 to 2 to recommend approval of the revised preliminary plat with the conditions that 1) the sidewalk be extended to the property line along Main Street Extension, and 2) that the other items addressed in the TRC Comments are satisfied.

Action Needed: Consider Preliminary Plat Revision

- a) If approval is granted it shall be valid for a period of 12 months from the date of approval of the plat by the Board unless an extension of time is applied for and granted by the Board, or unless a longer time period is established under applicable vested rights provisions. Preliminary plats whose approval has elapsed shall be resubmitted in accordance with the provisions of this section.
- b) If the Board conditionally approves the preliminary plat, the conditions and reasons thereof shall be stated in writing.
- c) If the Board disapproves the preliminary plat, the reasons for disapproval shall be stated in writing and reference shall be made to the specific section(s) of the UDO which the plat does not comply.

Presenter: Jennifer Ansell/Planner

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NEW BUSINESS/NON-CONSENT

Future Agenda Items

The purpose of this memo is to provide the Board with matters that staff anticipates/proposes for upcoming meetings. It should be noted that these items are tentatively scheduled for the specified monthly agenda but are subject to change due to preparation of materials, public notice requirements, etc.

In providing this memo each month, we hope it will also provide opportunity for the Board to introduce items of interest and subsequent direction for placement on future agendas, which will allow staff the opportunity to plan accordingly.

***Action Needed:** Discussion and guidance to staff on future agenda items*

Presenter: Paula Webb – Assistant Manager/Town Clerk

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PUBLIC COMMENT

Citizen opportunity to address the Board.

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MANAGER'S COMMENTS

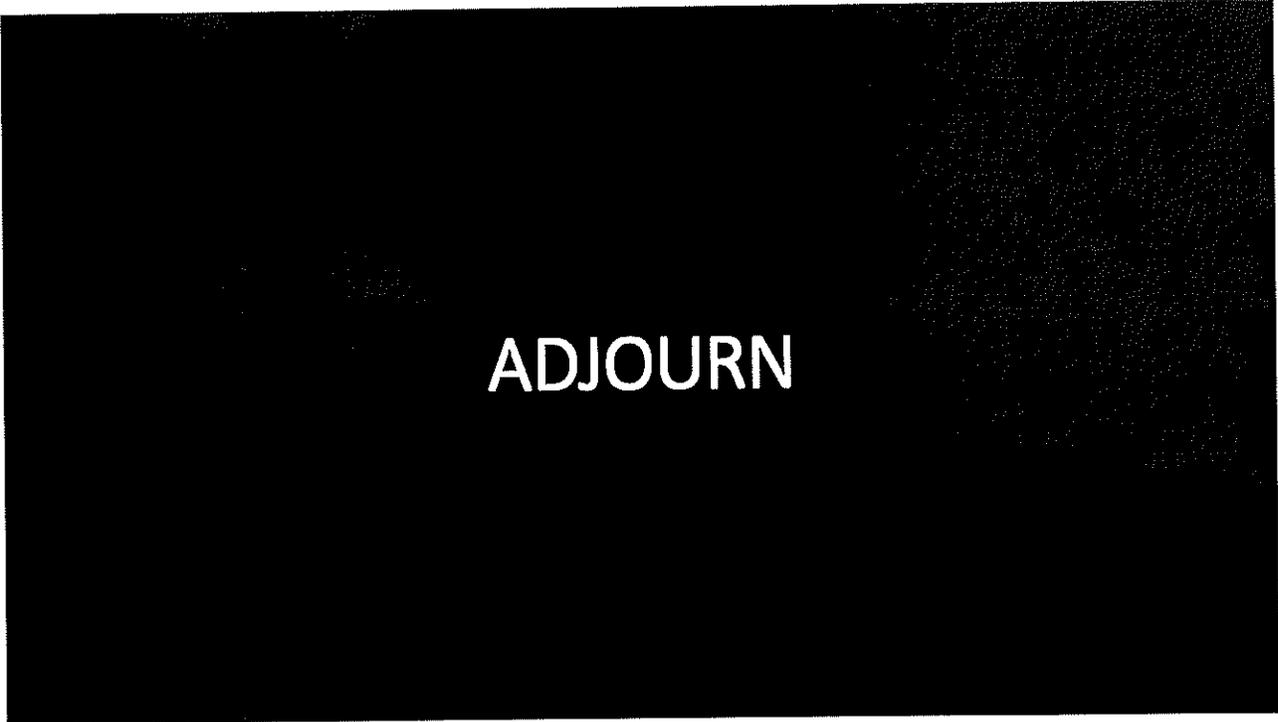
Chris Seaberg, Town Manager

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BOARD COMMENTS

Mayor John Davis
Mayor Pro Tem Frank Tursi
Commissioner Pat Turner
Commissioner Harry "PJ" Pugliese
Commissioner Larry Philpott
Commissioner Laurent Meilleur

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Town of Swansboro
Board of Commissioners and Planning Board
September 21, 2019 Joint Meeting
2020

In attendance: Mayor John Davis, Mayor Pro Tem Frank Tursi, Commissioner Pat Turner, Commissioner Harry "PJ" Pugliese, Commissioner Larry Philpott, Commissioner Laurent Meilleur, Planning Chair Scott Chadwick, Ed McHale, Brad Buckley, Jeff Conaway, David Mohr, and Michael Favata. It was noted that Mayor Pro Tem Tursi, Commissioner Meilleur, and Commissioner Harry "PJ" Pugliese participated remotely as allowed by NCGS 166A-19. Governor Cooper had declared a state of emergency due to the COVID-19 Pandemic in March 2020. Planning Board Vice Chair Christina Ramsey arrived at 6:00pm.

Call to Order

The special joint meeting of the Board of Commissioners and Planning Board was called to order by both Mayor Davis and Chairman Chadwick at 5:30 pm. The purpose of the meeting was to receive a presentation (*herein attached power point*) from the Carolina Wetlands Association.

Mayor Davis added that the Board's goals for this meeting were 1) to be educated on how to protect our wetlands, waterways, and neighborhoods both present and future; 2) to provide guidance to the Planning Board for future ordinance amendment review and recommendations related to wetland protection and utilization of the Town's Watershed Restoration Plan; and 3) how the Staff could identify restoration projects, implementation of plan policies, identify areas that need attention.

Carolina Wetlands Association (CWA) members, David Shouse and Norton Webster were present with Rick Savage and Chad Guthrie participating remotely. Following the presentation, association members shared that funding was coming through various agencies to assist in protection projects and Swansboro was well equipped with three major plans in place and was encouraged to apply for those funds. CWA was available to help as needed.

Mayor Davis asked if there were legal options for regulations above/beyond the federal/state levels; was there land to be purchased to assist in stormwater runoff, and incentive ideas for developers to do more.

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Land could be purchased and used for conservation, usually project specific, and best used when a community had a specific issue/task to accomplish. Project specific examples were purchases for farm/table uses, creating viewable site such as the Blue Ridge Parkway. Incentives for developers could be encouraged – one was density transfer, defined as *“a method of retaining areas of significance on a property by compacting density, usually near already existing areas of urbanization, allowing for maintenance of open spaces, historic or sensitive areas, etc.”* CWA would love to assist in helping the Town identify more incentives. Property buyouts/mitigations were also common, especially those that continually flood.

A brief recess was taken at 6:30pm/reconvening at 6:35pm.

CWA steered the Town from regulations above/beyond the state/federal levels, noting that it probably would not be successful legally.

Chairman Chadwick noted that some of the Town’s plans did not have enough “teeth” so to speak. He gave an example of a recent project constructed in Swansboro; the wetland was mitigated at \$120,000. Those funds were then spent in Carteret County. Was there any movement to change where the mitigated funds would/could be spent? CWA shared that there was no movement to change that fact.

Christina Ramsey shared that the Nature Conservancy worked with the Town in developing its plans and no area in Swansboro was identified as being so sensitive that it should be purchased to eliminate it from being developed; only that the Town should protect what wetlands it had.

Commissioner Philpott stated that the Town had developers who had built adjacent to unregulated wetlands and major issues were a result during heavy rainfalls. What the Town was looking for was a way to mitigate the issues and/or regulations to hold the developer responsible and/or how to limit the development. CWA indicated that they would speak with state agencies on these issues.

Commissioner Meilleur asked if there were examples of other towns whose stormwater mitigation was successful. Was there assistance to the Town to help with upgrades to the stormwater system. New development runoff, once it hit the Town’s stormwater system was overwhelming. CWA would like to take the questions received today, do some research and come back with as many answers as possible.

So not to dive into a separate issue of stormwater, Mayor Pro Tem Tursi redirected the conversation back to the goals for this meeting. He stated that the Land Use Plan had elements that needed to be codified. The Board of Commissioners needed to give the Planning Board policy directives from the Land Use Plan so they can effectively provide recommendation on future development, especially when wetlands were involved.

Commissioner Meilleur felt he understood the difference in the types of wetlands. He supported the implementation of density transfer and asked if there were greenways that might be identified as sensitive areas.

Mayor Davis asked Mayor Pro Tursi if he had guidance to share. Again, Mayor Pro Tem Tursi felt incentives to include density transfer should also be considered. All of which, the Planning Board could work toward such recommendations. If a directive was needed tonight, he believed it would be to ask the Planning Board to develop such incentives and recommend codifying Land Use policy.

Mayor Davis asked CWA if they wanted to assist in such development and if so, what would the cost be? CWA would assist and bring in additional resources to help the Town at some limited costs.

Any further questions should be sent to the Paula Webb, compiled and sent back out to all attending on Friday, September 25.

Adjournment

On a motion by Member Ramsey, seconded by Member Conaway the meeting adjourned at 7:35 pm.

On a motion by Commissioner Turner, Commissioner Philpott the meeting adjourned at 7:35 pm.

**TOWN OF SWANSBORO
PLANNING BOARD
REGULAR MEETING MINUTES
MARCH 2, 2021**

Call to Order

The meeting was called to order at 5:30 pm. Board members in attendance were Michael Favata, David Mohr, Christina Ramsey, Scott Chadwick, Jeff Conaway, Brad Buckley, and Ed McHale.

It was noted that members Jeff Conaway and Brad Buckley attended via ZOOM, an electronic platform put into place to allow virtual meetings due to the COVID-19 pandemic that had recently taken a huge toll on the United States and other parts of the world requiring social distancing and limited public appearances.

Election of Chair & Vice Chair

On a motion by Mrs. Ramsey, the Board unanimously approved for Scott Chadwick to be appointed as Chair.

On a motion by Mr. Chadwick, the Board unanimously approved for Mrs. Ramsey to be appointed as Vice- Chair.

Minutes

On a motion by Mr. Conaway, seconded by Mrs. Ramsey the October 6, 2020 Regular Meeting minutes were approved unanimously.

Old Business

Preservation of Wetlands

The Carolina Wetlands Association initiated discussion on steps we can take to revise our ordinances to protect and aid in the restoration of wetlands.

David Shouse, Rick Savage, Mackenzie Taggart, and Amanda Willis of the Carolina Wetland Association were present through the Zoom platform.

Mr. Shouse reviewed that the Town of Swansboro has 3 established plans; Watershed Restoration Plan, Economic Strategy, and CAMA Land Use plan, all speak to the conservation and recognition of wetlands and stream corridors. He shared that there could be an ability to entice landowners in many ways such as waive or reduce stormwater costs, land taxes, and other financial assistance on properties that have wetlands.

In response to inquiries from the Board the following details were clarified:

- ETJ areas could be challenging due to the boundaries of streams and wetlands having overlaps
- The Watershed Restoration Plan and the CAMA Land Use Plan identified the geographic areas of wetlands in the Town of Swansboro, of those areas the ones with most concern for protection should be identified
- Further mapping in the CAMA Land Use Plan would be needed because that plan lumps wetlands, forestry, and flood plains together
- Foreseen stumbling blocks on wetlands would occur with who owns the property more than the boundaries of the wetlands, but could also be perceived as an opportunity

- There was an application submitted for Division of Coastal Management Resilient Coast Community's Program grant and the first phase is a planning grant that includes identifying wetlands to protect the community.

During discussion, it was noted that the recently approved Swansgate Subdivision elected to use the residential cluster development regulations provided through the towns UDO and the development was able to have higher density. The provided regulation could be reviewed, and that portion of the ordinance updated to add incentives.

In response to an inquiry from the Board on how properties with wetland are evaluated, Mrs. Ansell share that the Onslow County Tax administration does have a scale they use to evaluate properties. She offered reach out and see if a representative from that department could attend an upcoming meeting to cover those protocols.

Land Use Plan Implementation-Program of Work

In February of 2019, the Planning Board established a timeline for the implementation of the CAMA Land Use Plan Update. In May of 2019, it was revised to reflect those items remaining, however a timeline was not established. At the February 3, 2020 regular meeting, the Board revised the program of work to reflect their immediate goals and forthcoming amendments. The Board of Commissioners has made implementation of the plan a high priority for this budget cycle, FY 21-22.

Mr. Chadwick shared that the board should consider having a special meeting each month over the next several months to handles items in the program of work. The Board agreed to holding a special meeting on the 3rd Monday of the month until further notice to review/recommend implementation measures for the Land Use Plan. At each meeting, the board would provide directives for which item they would review at the next meeting.

Mrs. Ansell stated she could have the Residential Cluster Development Regulations ready for review at that first special meeting on March 15th and would reach out to Onslow County Tax Administration to see if they were available to provide details to the board at that meeting as well.

Adjournment

On a motion by Mrs. Ramsey, seconded by Mr. McHale, the meeting adjourned at 6:22 pm.

SUMMER JOINT RETREAT SUMMARY

BACKGROUND

On August 18, 2022, members of the Planning Board and the Town Commissioners of the Town of Swansboro held a joint meeting to discuss the continued implementation of the adopted Town of Swansboro CAMA Land Use Plan Update (adopted January 22, 2019). Since the original adoption of that plan, there has been significant progress in accomplishing or pursuing the action steps outlined therein. Also since adoption, there have been events that have arisen that were not anticipated by the plan or have changed the circumstances related to implementation.

The summary of this joint meeting, recorded herein, should help lay out a path forward for the Commissioners, Planning Board, and Town Staff, as they seek to implement the vision of the Plan. Other associated materials from this joint meeting are held by Town Staff and may be accessed upon request.

THEMES FROM THE 2019 PLAN



PROGRESS

The following were identified as areas where progress had been made since plan adoption by the Planning Board and/or Town staff.

- Flood Damage Prevention Ordinance – updated 2020, but could be revisited for additional elevation or opportunities for expanded protections.
- NC General Statutes Chapter 160D revisions completed.
- Resilient Coastal Communities Plan phases 1 and 2.
- Addition of public docking space at Moore Street.
- ADA Transition Plan.
- Opportunities for subdivision clustering to avoid negative environmental impacts.
- Interconnectivity standards updated, but not yet using Fire Code Appendix D.

- Continuation of commercial, nonresidential appearance and design standards.
- Investigation of ways of realigning the existing zoning to the future land use map, particularly as it relates to Low Density Suburban Residential future land use character area.
- Conversion to one-way in downtown has been a success.
- Little effort has been made to identify street ends as a way to enhance public trust water access points.

INTERVENING CIRCUMSTANCES AND ISSUES

The recently adopted NC GS Chapter 160D regulations re-organized zoning and development regulation ordinances statewide and required local governments to review and revise their own ordinances accordingly.

The following table represents the relative advantages and disadvantages of each decision-making process relative to different stakeholders.

| | Public Participation | Predictability (for Applicant) | Private-Sector Expense/Risk | Local Discretion |
|-----------------------|----------------------|--------------------------------|-----------------------------|------------------|
| Administrative | Low/None | High | Low | Low/None |
| Legislative | High | Medium | Low/Medium | High |
| Quasi-Judicial | Low | Low | High | Variable |

In addition to the Covid-19 pandemic, other intervening circumstances have sometimes necessitated taking a second look at priorities identified in the 2019 plan document. For instance, the following items are identified:

- Superstreet is currently unfunded, but has had preliminary design; the NCDOT street design will very likely impact businesses.
- Wastewater Treatment Plant decommissioning, shifting treatment to Camp Lejeune.
- Walmart entrance realignment at Norris Road; connectivity limitations, but helped improve conditions.
- The roadway alignment at Leslie Lane presents an opportunity for a major intersection, but lack of connectivity.
- Development continues just outside the Town’s limit and likely will continue.
- Census 2010-2020 population growth was significant, at about 25%.

MOVING FORWARD

The most discussed and probably most agreed-upon opportunity for Planning Board-related progress seemed to be the discussion related to land use and development regulation decision making processes. The following table represents a best practices perspective regarding land use and development decision-making and review procedures. It is not necessarily appropriate for every jurisdiction and deference should be given to local conditions and capabilities. For instance, NC GS 160D-803(c) identifies a quasi-judicial process for reviewing and approving subdivision requests. The pros and cons of different approaches should be weighed in conversation with Town staff and legal advisors to find a best fit for the Town.

| Administrative | Planning Board | Board of Adjustment | Town Council |
|--|---------------------------------------|------------------------|----------------------|
| Zoning Permits (sign, fence, change of use, etc.) | Rezoning (recommendation) | Special Use Permits | Rezoning |
| Subdivisions and Plats | Ordinance Amendments (recommendation) | Variations | Ordinance Amendments |
| Administrative Amendments (e.g. – to previously approved development plans), Traffic Impact Analysis, etc. | | Administrative Appeals | |
| Site Plans | | | |

The following ideas or issues were also discussed and are presented in no particular order or priority:

- Creating a wetland easement program as an incentive for private property owners to protect wetlands on their property. Overall, this may blossom into a more extensive examination of ways to prevent wetland filling or destruction and could lead to revising or adding policy language to the CAMA land use plan to prohibit negative impacts to wetlands.
- Finding and downzoning undeveloped, unentitled properties to a more appropriate zoning district based on the adopted future land use map.
- Identifying and reexamining the Suburban Town Center nodes in the future land use map, given recent changes (Norris Road driveway realignment, future NCDOT Hwy 24 street design, etc.) and consider realignments of the map to better fit expected future conditions.
- Possible development of another residential or agricultural district that better bridges the gap between the existing zoning districts and the future land use map without creating an overabundance of nonconforming parcels.
- Examine updates to Town ordinances, such as the table of permitted uses, to streamline regulations and make as much as possible administratively processed. Many towns that are not used to handling certain development applications will process them as quasi-

judicial items, such as special use permits. However, with the right development standards in place, many of these can be handled administratively, but care must be taken to ensure that what you ask for is what you want. A study of the old town character, as primarily occurs in the Coastal Traditional Neighborhood area, could also be undertaken, with subsequent codification of those design standards to allow new parts of Swansboro to resemble the older parts of town. Conversations with emergency services and public works departments can help ensure that the best of the old is combined with the best practices of today. If concern remains, the use of special use permit review could be tiered, such that development of particular impact always triggers this heightened level of scrutiny. The following standards could be considered:

- In addition to the listed uses requiring special use review by the table of permitted uses, the following development types have significant town-wide impacts and require special use permits:
 - Any nonresidential or mixed-use development encompassing 100,000 or more square feet of gross floor area or more.
 - Any residential development or subdivision involving 200 dwelling units or more.
- Reviewing and updating all adopted Town plans. Some town plans are no longer relevant or sorely outdated. The Planning Board could review them one-by-one, retain recommendations that are still relevant and update those that are outdated. These should then be brought to Council for review and readoption. Staff or board members should be identified for implementing each plan or plan element and regular reporting or accountability should become a standard procedure. Establishing quarterly progress reports can help Council remain aware of implementation and prioritize resources to accomplish plan goals.
- Additional facade grants or appearance incentives along Hwy 24 could enhance the appearance of the Town for travelers. Identification of additional or realigned roadways could also help provide connectivity and an intuitive street network. Coordination with NCDOT and future Hwy 24 design plans will be necessary.
- Research the annexation of existing “doughnut” parcels – tracts that are surrounded by current corporate town limits – and pursue annexation. This may require coordination with the state legislature.
- Review current annexation policies and formalize triggers for the exact moment when voluntary annexation should be applied for by the land owner. For instance, it could be required prior to platting or prior to building permit issuance.
- Additional standards for Traffic Impact Analyses could help prevent negative impacts to the transportation network. For instance, the following might be useful triggers:
 - A Traffic Impact Analysis (TIA) shall be required for projects that are anticipated to generate 100 or more peak hour vehicle trips, based on the latest edition of the Institute of Transportation Engineers (ITE) Traffic Generation Manual.
 - A TIA shall be required for projects that are anticipated to generate 1,000 or more average daily trips (ADT), based on the latest edition of the ITE Traffic Generation Manual.
 - A TIA may also be required, at the discretion of the Planning Director, Town Engineer, and/or the decision-making body in the following instances:

- Major or minor thoroughfares near the site are experiencing significant delays.
- Traffic safety issues or high vehicle crash history exist at intersection(s) served by the proposed development.
- The site is located in a highly congested area (where volume-to-capacity ratios are greater than 1.0).
- An associated or proposed rezoning to a more intensive district would create more intensive trip generation than the current Comprehensive Plan anticipates.

SWANSBORO
FRIENDLY CITY BY THE SEA *North Carolina*

CAMA LAND USE PLAN UPDATE



TOWN ADOPTED: JANUARY 22, 2019
NC DCM ADOPTED: MAY 6, 2019



PUBLIC INVOLVEMENT & OUTREACH

Extensive public participation was a key focus and component of this LUP. For more on the structure of public engagement, see Appendix A. Overarching themes from each engagement and outreach effort are summarized below. This information was used to inform the update of the Plan.

STAKEHOLDERS

Residents, property owners, and business people shared their thoughts and perspectives related to past, present, and future issues, needs, and trends. Major themes and findings included:

- » **Charm, history, and community character:** People deeply treasure the charm of their historic coastal town. There is an acknowledgment of the importance of the history of the town and what people perceive distinguishes it from other towns and settlements in the area. The tightly-knit community also values its small-town friendliness and feel and wants to preserve that moving forward.



Steering Committee Meeting

- » **Downtown:** The historic downtown is treasured and its preservation is important. This theme was echoed throughout the planning process.
- » **Traffic Congestion and NC 24:** Although it is the primary means of transportation through and within the community, NC 24 known as Corbett Avenue locally, is perceived as unattractive. It also divides the community, primarily posing a barrier to non-motorized mobility.
- » **Environment and Wetlands:** Residents recognize that quality of the environment, especially wetlands, coastal marshes, and water quality in the White Oak River is the primary force behind the growth and economic success of the area. Preservation of wetlands and environmentally sensitive areas is important.
- » **Managing Growth:** The rate of growth in recent years is perceived as fast. Some residents would prefer to see a halt to all new development, although others recognize that the only feasible solution is to manage that growth effectively. The quality and attractiveness of recent development are perceived as substandard compared to previous development. Stakeholders want new development to be of high and lasting quality.
- » **Open Space and Agriculture:** The community wants to make sure that agriculture has a place and is not entirely consumed by development. There are still a few working farms, and owners have expressed a desire to continue them in agriculture. Open spaces and views are also important.
- » **Maintain Quality of Life:** The quality and pace of life in Swansboro is treasured by residents, and a desire to

preserve it as it is has led some residents to slow new development. Other residents believe that a balance is possible, if growth is managed appropriately.

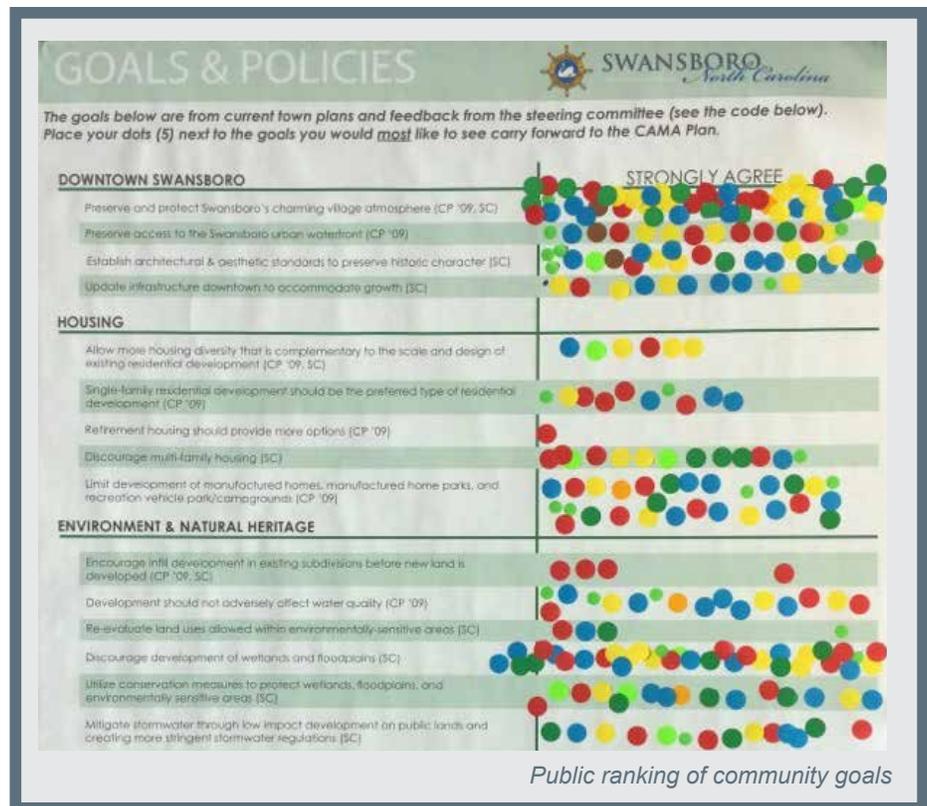
- » **Parks and Recreation:** Recent and significant gains in parks and recreational facilities are recognized as successes. Stakeholders would like to continue to see gains made in these areas.

STEERING COMMITTEE

Throughout the planning process the steering committee reviewed and evaluated the information that forms the basis for this update. Major themes and findings of their particular efforts are listed below.

SWOT ANALYSIS

A Strengths, Weaknesses, Opportunities, and Threats (SWOT) was undertaken with the Steering Committee to identify issues and opportunities impacting the community. The following themes stood out:





Screenshot of project website

continuing degradation of traffic congestion on NC 24; lack of sufficient building character regulation to ensure high quality development; threats to the natural environment, especially wetlands and the waterfront; signage regulation.

PUBLIC OPEN HOUSE & HEARING

Overall, major themes and findings from the well-attended public open house generally reinforced themes that were heard in previous outreach and knowledge-gathering efforts:

- » Preserve historic character and village charm
- » Clean up appearance of NC 24
- » Enhance non-motorized connectivity with sidewalks, bike paths, and access to the water.

» Protect wetlands and environmentally sensitive areas

- » Build and maintain infrastructure and services to keep pace with growth

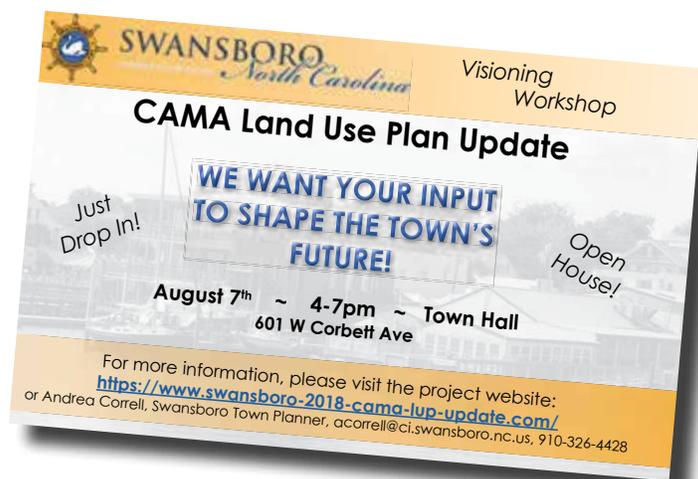
» **Strengths:** Tightly-knit and motivated community; the charm, heritage, and uniqueness of the historic downtown; waterfront and natural resources, including the state park; vibrant local business community.

» **Weaknesses:** NC 24 traffic, unsafe intersections, and concerns about congestion; limited tax base of the community; infrastructure concerns, especially related to water, wastewater, and stormwater; traditional zoning code not providing high quality development; a lack of diversity in the economy; and a lack of pedestrian and bicycle connectivity.

» **Opportunities:** Continue to capitalize on tourism, especially related to the waterfront, natural resources, and historic/cultural tourism; taking a new and focused approach to growth management through planning and coordination; enhance non-automobile connectivity; enhance the appearance of NC 24; and develop a charter fishing fleet.

» **Threats:** Growing too fast, especially without sufficient growth management provisions; limited tax base to pay for services; negative perception of growth;

More specific comments focused on increasing handicap access in the downtown, and generally making Swansboro more bike- and pedestrian-friendly, including connections for these user-types across NC 24. A connection from downtown, along major corridors, and to the state park was a common comment, as well as



Workshop invitation



DEMOGRAPHICS

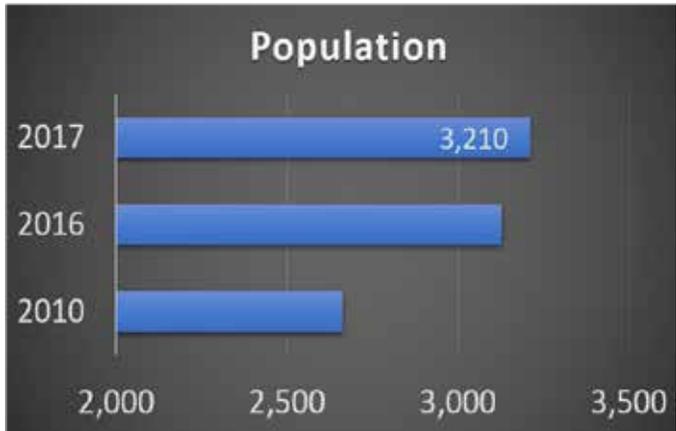
Because Swansboro is a fairly small town by most standards, it is often difficult to accurately estimate the demographic statistics. The information below primarily is drawn from the most recent American Community Survey which is produced by the U.S. Census Bureau. Some data is also taken from the ESRI OnTheMap, which estimates data of irregular geographies, but is also derived from the most current U.S. Census data available.

POPULATION & HOUSING

Population growth in the town limits has been substantial, increasing at approximately 2.9% annually since 2010 (compared to 1.1% growth in NC). The share of households with children has not changed significantly since 2010 and remains at 28.5%.

The median age is 37.9 years old, which is younger than it was in 2010. The median age in the state and the nation has increased over this same period.

Median home value in the town was \$188,800 in 2016, and has declined 8.9% since 2010, but is



Source: American Community Survey 2016 and US Census.

3

RESILIENCY AND CLIMATE ADAPTATION

Coastal communities are particularly vulnerable to storms, waves, and changing climatic conditions, including sea level rise. In parallel with the CAMA Land Use Plan update process, the town also underwent a Vulnerabilities, Consequences, & Adaptation Planning Strategies (VCAPS) process.

Developed by NOAA's Sea Grant program, this interactive planning process identifies areas that are prone to flooding and storm damage. With such knowledge, elected officials can then make policy decisions to lessen future damage. The Sea Grant program at N.C. State University, the state's Division of Coastal Management, the Nature Conservancy and the N.C. Coastal Federation helped the town perform the analysis as part of the LUP update. Swansboro is among a handful of towns along the N.C. coast that has taken this critical step.

The town experienced a hurricane in September 2018, that further crystallized the importance of climate resiliency and adaptation as crucial to the ongoing success and survival of the town.

CLIMATE VULNERABILITY AND SEA LEVEL RISE

Due to Swansboro's coastal legacy and unique relationship to the sea as a coastal fishing village, the changing climate and increasing storm intensity coupled with sea level rise will have a

greater impact than on other, more inland towns which are further removed from the coast. The town has identified conservation of coastal areas, wetlands, and floodplains as important not only for preserving quality of life, but also with respect to climate resiliency. By incorporating climate resiliency planning into their long-range planning efforts, the Town has taken concrete efforts to prepare for an uncertain climate future.

The resulting decision to cluster development away from environmentally sensitive and Conservation Priority Areas (CPAs), coupled with changing floodplains and rising sea levels, will have effects on the physical environment and land use within the town. The town should also consider these factors when making public investments and locating infrastructure, balancing risk against necessity.

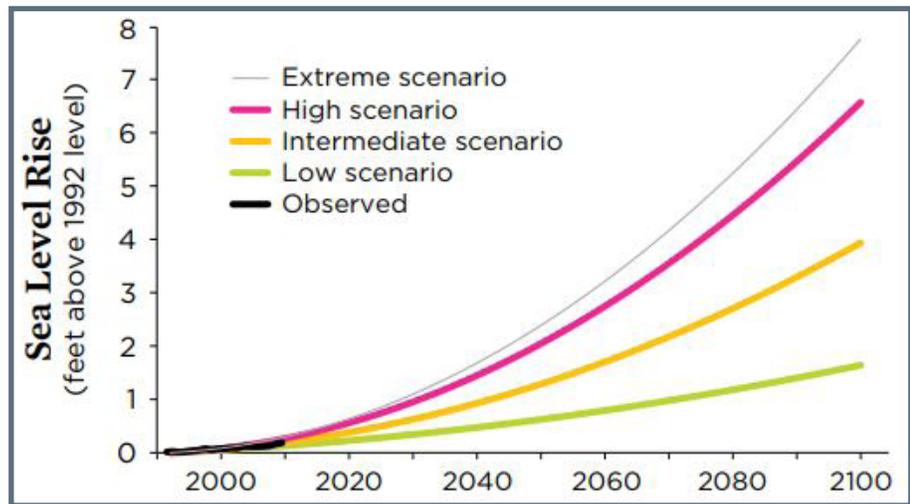
During the creation of this plan, the town weathered a significant hurricane (Florence) that caused tremendous amounts of damage across southeastern North Carolina. During the course of the LUP, projections for sea level rise were released that affirm that future flooding events will likely be more extensive and more damaging than in the past. In the Swansboro area, sea level has generally risen about 3 mm per year for decades according to NOAA tide gauge data.

NOAA estimates that global sea level will rise nine more inches by the end of the century if countries immediately begin reducing the amount of pollutants that are triggering the warming of the atmosphere.

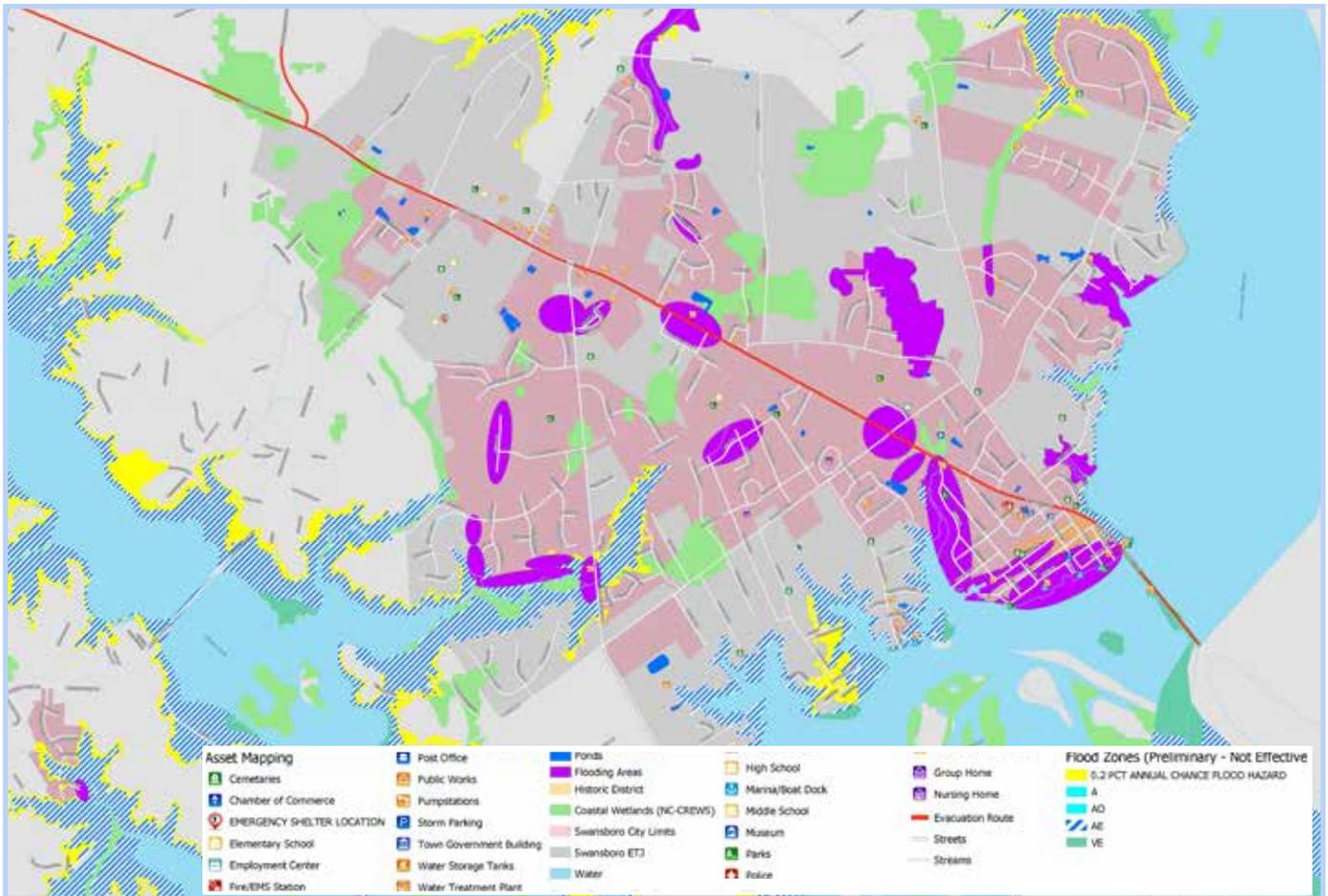
If nothing or little is done, NOAA scientists estimate that the sea could rise almost nine feet by 2100.

FLOODING

As sea levels rise, some seaside and lower-lying parcels will become inundated (either entirely or periodically and chronically) and floodplains will expand and push inland. Given that the lifespan of a typical "stick-built" structure (which includes most residential homes and smaller multi-family structures) is 60-100 years, and that sturdy commercial structures can last at



Sea Level Rise projections. (Source: Third and Fourth National Climate Assessment)



VCAPS Asset Mapping (Source: NC Sea Grant)

least the same amount of time, it is important to consider what the future environment will be for these structures when the next hurricane comes through the area. Some building code requirements (such as additional strapping or waterproofing) can be retrofitted more easily than others (such as raising the base floor elevation out of the floodplain).

HISTORIC STRUCTURES

During the hurricanes, the historic waterfront central business district was hit hard by storm surge and wave action. Many of the structures were damaged, nearly destroying the historic Ice House restaurant.

Recovery and rebuilding will be to more strict development standards, including higher base floor elevations to get above the floodplain. These upgrades will eventually change the appearance of the downtown area somewhat, but will help ensure that it can continue to flourish in the coming years.

Much of the low-lying area that comprises Swansboro’s ETJ is proposed for inclusion in the Conservation Priority Area (CPA) FLU overlay. The CPA is proposed for reduced density/intensity, in part to reduce the vulnerability of the town in future storm events. The historic downtown, in particular, is within an area that is in the 100-year floodplain and the identified storm surge areas for hurricanes. Even though the Traditional Town Center (TTC) FLU is proposed to continue in this area, it will be dependent, in part, on climate vulnerability mitigation actions by the town, and potentially also by a slow migration of the business district up main street and toward higher ground. This slow process will occur over decades, through individual decisions by business owners, property owners, and town leadership. Continuing to reduce density in the areas identified as floodplains and CPA will provide increased resiliency to storm events and flooding.



VISION

The town's vision comes from the recently adopted (June 2018) Economic Development Strategic Plan, and states:

Swansboro, the quaint and friendly city by the sea, is recognized by visitors and residents as a gem of North Carolina's coast. All who know and appreciate Swansboro celebrate the town's relaxed waterfront lifestyle, abundance of thriving, family-friendly, locally-owned businesses, recreational opportunities, and a broad range of historic, arts, dining, and shopping opportunities. The town remains committed to preserving its heritage, environment, and small-town appeal.

GOALS & OBJECTIVES

The goals and objectives were developed through extensive public outreach and input, and will be used to guide re-zonings and investment decisions. They will also be used to guide land use policy decisions in the town. Primary themes from all public outreach are summarized below.



1 PRESERVE AND ENHANCE SWANSBORO'S CHARMING COASTAL CHARACTER

- » Extend historic development aesthetic/elements of downtown
- » Establish architectural & aesthetic standards to preserve historic character
- » Foster and improve the town's sense of place through balanced growth that can attract residents, visitors and business investment

2 FOSTER GROWTH THAT SUSTAINS AND ENRICHES THE COMMUNITY

- » Encourage context sensitive residential development
- » Ensure infrastructure and public services keep pace with growth
- » Extend the coastal village design concept to key locations
- » Manage multifamily development in locations that create a walkable, mixed use village and promote social interaction

3 PRIORITIZE THE NATURAL ENVIRONMENT THAT IS KEY TO SWANSBORO'S QUALITY OF LIFE

- » Utilize conservation measures to protect wetlands, floodplains, environmentally sensitive areas and to enhance water quality
- » Utilize conservation-oriented measures
- » Encourage water-based recreation and tourism
- » Maximize and clarify access to the waterfront
- » Make a "place" for people that takes advantage of the unique location and natural assets
- » Improve and protect the town's natural environment in order to attract new residents and maximize the town's economic development potential

4 TRANSFORM NC 24 INTO A WELCOMING THOROUGHFARE TO SWANSBORO AND ITS HISTORIC DOWNTOWN

- » Encourage mixed use development at nodes/key intersections; discourage additional strip development
- » Promote placemaking and an attractive, cohesive development style along NC 24
- » The gateway corridor should be designed as a tree-lined boulevard, with trees and other landscaping along the median and both sides of the road

5 DEVELOP AS A CONNECTED COMMUNITY

- » Connect downtown to the north side on NC 24 and to the west
- » Connect major destinations including parks, commercial centers, schools with safe sidewalks and off-road paths

6 BUILD COMMUNITY RESILIENCE IN A CHANGING ENVIRONMENT

- » Direct growth and public infrastructure investment to locations that are least likely to be affected by inundation, and where necessary manage the abandonment of imperiled infrastructure
- » Accurately communicate risk and regulate high risk areas through enhanced development regulations
- » Pursue projects that will increase resiliency to storms, flooding, and sea level rise



FUTURE LAND USE DESIGNATIONS

The Future Land Use Map (FLUM) and associated future land use (FLU) designations will be used to guide rezoning, investment, and land use decisions in the town. Just as the goals and objectives have generated recommendations, the FLU designations are associated with specific character descriptions and criteria. These FLUs and the FLUM are a guideline and reference point for the community, and will inform, but not necessarily definitively predetermine, the outcome of land use decisions and policies by the town.

The mixing of non-residential and residential uses is viewed positively in Swansboro, because of mixed development in the downtown historic district that demonstrates different uses can coexist peacefully. As such, the mixed use FLU designations generally function as overlays that show where additional uses or density can be added to or mixed with the underlying residential uses. Where mixed use FLUs overlap other FLUs, the criteria associated with each must be considered.

Residential FLUs are the underlying character within which the mixed use and non-residential overlap at more intense nodes of activity. Appropriate density is determined in part by a property's position within or proximity to the activity nodes. This allows a stepping down of density and intensity with distance from mixed use activity centers. It also allows the positioning of people next to the goods and services that they need for daily life, and this increased connectivity was a common thread in the community conversation.

FUTURE LAND USE DESIGNATIONS



TRADITIONAL TOWN CENTER (TTC)

This designation is characterized by a mix of residential, commercial, and civic uses in the historic downtown central business district or TTC node. Redevelopment or new development should be compatible with and embody the desired heart of “Swansboro” character.



SUBURBAN TOWN CENTER (STC)

The highway commercial designation contains medium to high intensity uses on the NC 24 corridor. A mix of uses including multi-family with managed access is encouraged.



EMPLOYMENT / LIGHT INDUSTRIAL (ELI)

This designation includes office, light industrial or assembly, and flex-tenant spaces. Site layout should allow for truck circulation, buffers between dissimilar uses, and quality architecture adjacent to the highway.



GATEWAY CORRIDOR (GC)

State-owned NC 24 and the adjacent development make the first impression of the town. Signage, lighting, sidewalks, landscaping, architectural design along the roadway should reflect the unique features and values of Swansboro.



CONSERVATION PRIORITY AREA (CPA)

The CPA designation includes lands influenced by the natural environment containing features including but not limited to wetlands, woodland, shoreline, pocosins, open space, vistas that are worth conserving and that define Swansboro.



COASTAL TRADITIONAL NEIGHBORHOOD (CTN)

This is a walkable, compact, residential district laid out based on traditional neighborhood development patterns. It generally surrounds the TTC and contains single and two-family residential with small-scale multi-family and neighborhood commercial.



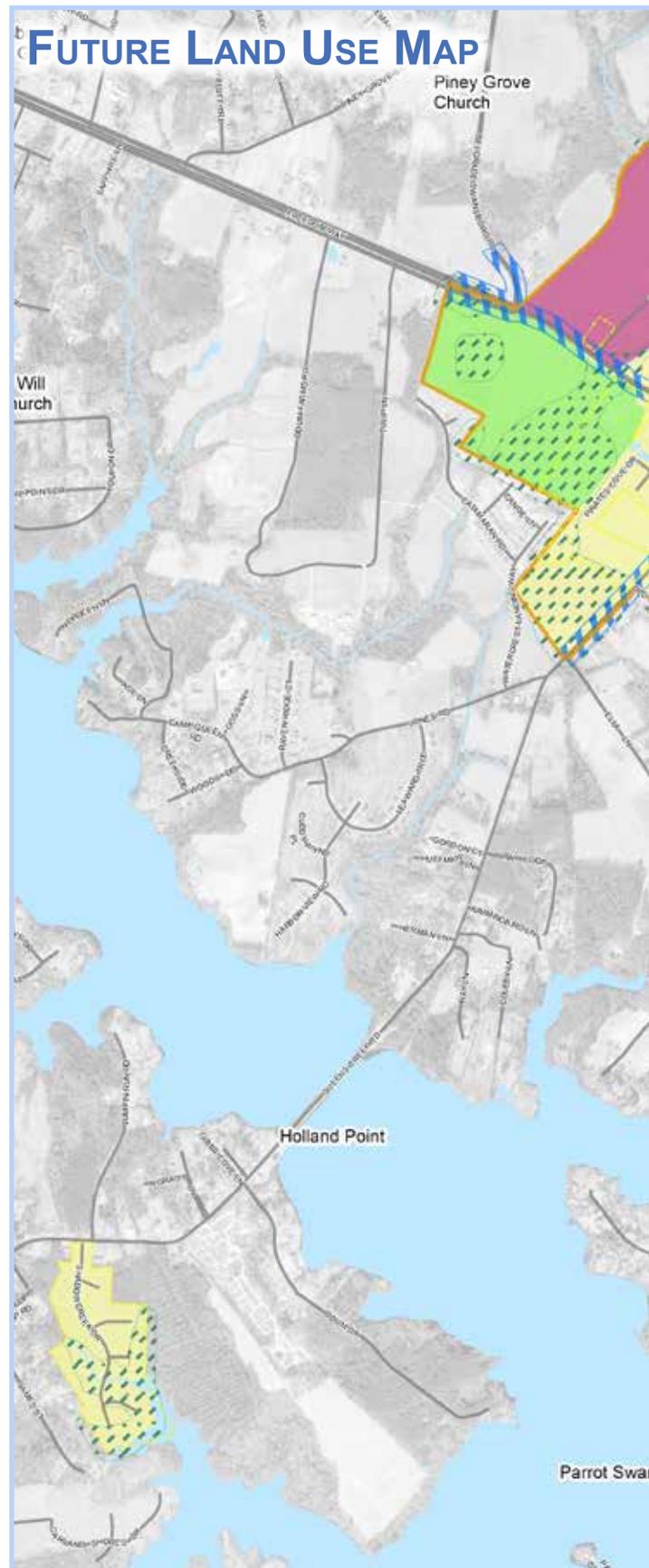
LOW DENSITY / SUBURBAN NEIGHBORHOOD (LDSN)

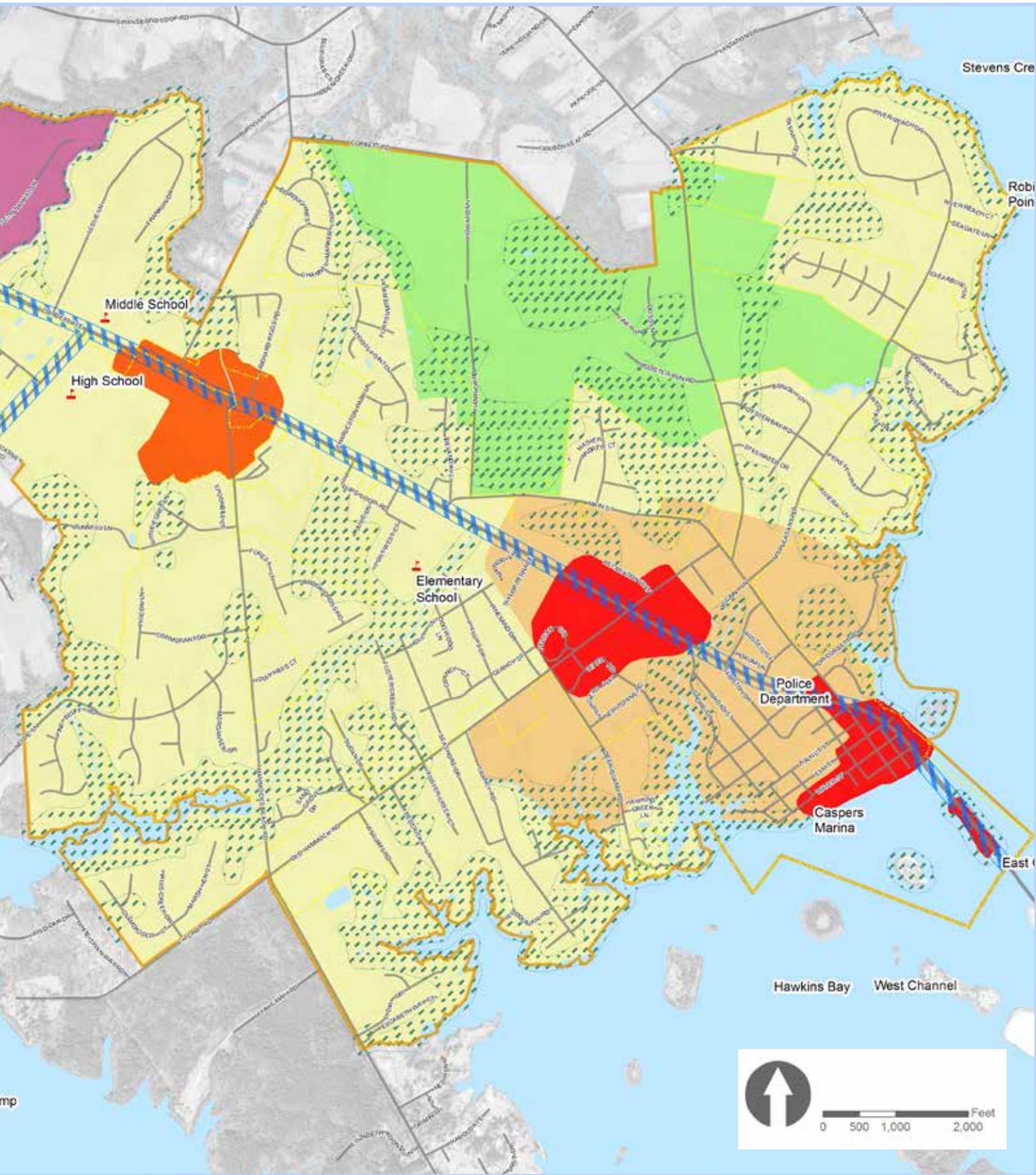
This designation characterizes the majority of new subdivision development. It is auto-oriented and should be connected to water and sewer infrastructure, and contain sidewalks and streets that connect to parks, educational, or religious uses.



RURAL / AGRICULTURAL (RA)

Agricultural land generally occurs outside the town limits but is within the town’s ETJ. Though there are working farms, rural residential and agritourism activities may occur here. Water and sewer infrastructure are typically not available.





CONSERVATION PRIORITY AREA (CPA)

Conservation Priority Areas (CPA) represent opportunities to allow lower density development clustered away from and respectful of environmentally sensitive areas, important natural views, and priority conservation preservation areas as identified by the community. Agricultural preservation was also identified as a community priority, but where Rural Agricultural (RA) areas overlap the CPA, the development character and density restrictions of the RA area shall prevail, and not be further restricted by the CPA.

CHARACTER

Generally speaking, flood-prone areas (including 100-yr and 500-yr floodplains), all wetlands (coastal and upland), streams (perennial or “blue line” and intermittent), riparian areas and mature forests are priority preservation areas. This is especially true of areas that have an impact on water quality and accommodation of storm surge.

Development within this overlay should respect the natural environment that creates the quality of life that defines Swansboro. Clustering development away from sensitive environmental features or assets (views, habitat, etc.) is required. Deviations from typical lot standards may be necessary to accommodate clustering.



Coastal wetland



Agricultural field

ACCESS AND CIRCULATION

Streets will respect the underlying FLU designation, but may be designed with additional criteria that respect and enhance the natural environment. In particular, additional or enhanced flood mitigation, low impact design, or stormwater treatment measures may be necessary.

SETBACKS

Setbacks should provide enhanced protection of environmental assets and provide additional buffering for structures or infrastructure that will be placed near CPAs. As such, setbacks will likely be determined by the underlying FLU(s) or zoning, but with additional setbacks from environmental features (stream, wetland, floodplain, open water body) that are within the CPA.

MASSING AND BUILDING HEIGHTS

Modifications to the massing standards of the underlying FLU may be necessary to protect environmental resources and additional attention may be necessary to accommodate views of CPAs, which in some cases are considered a community asset.

BLOCKS

- » Blocks are allowed as appropriate for the underlying FLU category, but larger blocks should be allowed if necessary to avoid environmentally sensitive areas.
- » Stub-out connections should be located logically to facilitate future connections to adjacent areas, if environmentally feasible.

PARKING

Parking areas should be designed to minimize stormwater generation or other negative externalities (i.e. - light pollution, runoff, etc.) that might impact CPAs.

APPROPRIATE DENSITY / INTENSITY

Low intensity development is allowed within this FLU designation at 50% of the gross density otherwise specified by the underlying FLU category. This means that less development will occur in or near the CPAs. All development that does occur must be clustered in the least



Example of Conservation Priority Area (CPA) with coastal wetlands.

environmentally sensitive part of the property and net density in that clustered, developed area may exceed the gross density for the total property, particularly if it is uplands.

REPRESENTATIVE AREAS

Currently, there are no representative areas in town that effectively demonstrate environmentally respectful cluster development.

OTHER CONCERNS

It is important to note maps within this plan depicting the CPA are for reference only, as these areas will naturally shift and realign, requiring field verification to determine exact location.

Lowering the intensity and density of development within this area in the town's jurisdiction may result in the demand for that development being displaced elsewhere, including to the area just outside the ETJ. If Onslow County has less restrictive regulations on development, it is likely this will result in additional higher intensity growth just outside of town, which could quickly consume farmland and land in environmentally-sensitive areas. This effect will likely be accelerated by availability of water and sewer services by the ONWASA. Consequently, the Town should coordinate with the County to implement a mutually-beneficial solution to this potential problem.



Example of Conservation or Cluster subdivision. (Source: Chatham County Comprehensive Plan)



RECOMMENDATIONS & STRATEGIES

Community plans are meant to be living documents. Priorities and directions are set in the plan, but implementation of the plan's recommendations and strategies will be carried out by Town leadership and staff. Swansboro embarked on the Land Use Plan update at the same time as other planning efforts, offering the opportunity for plans to be significantly aligned to each other, and enhancing the likelihood of successful implementation. The following recommendations and strategies are intended to provide additional guidance for implementing the goals and objectives of this plan.

PUBLIC ACCESS

PROVIDE, ENHANCE, AND ENFORCE PUBLIC WATER ACCESS.

Waterfront access points should be clearly designated and designed as public spaces, without encroachment from neighboring property owners attempting to exert private influence over the area. Enhanced facilities (kayak and canoe launches, public benches or tables, trash cans, docks, etc.) also increase the appeal and use of these areas. When providing public access to waterfront areas, natural shoreline and habitat should be preserved as much as possible to protect water quality.

PROTECT VIEWS OF THE WATER AND OF NATURAL AREAS AND WETLANDS.

Preserve signature views and create new visual and/or physical connections to the water when accommodating new growth. Partner with land owners in existing development to increase connections to the shoreline.

INCREASE ADA ACCESSIBILITY AND IMPLEMENT ADA TRANSITION PLAN.

The Americans with Disability Act (ADA) accessibility retrofits can be difficult to implement in older sections of town where space is limited. However, providing access, particularly to businesses and areas the general public is invited to visit, is important and should be the norm when evaluating upfits or redevelopment plans. The creation, adoption, and implementation of an ADA Transition Plan should also be a top priority.

LAND USE COMPATIBILITY

INCORPORATE DEVELOPMENT STANDARDS THAT IMPLEMENT THE CHARACTER DESCRIPTIONS PROPOSED IN THE FUTURE LAND USE CATEGORY DESCRIPTIONS.

The development character of certain parts of town are prized and must be measured and codified in the zoning code in order to see those changes occur in new development. A revision of the development standards and zoning regulations should be undertaken to see the character of the future land use designations carried forward into new development. For instance, parking minimums and maximums should be reviewed and revised to better implement the recommendations and goals of this plan.

REVIEW DEVELOPMENT STANDARDS OF THE DOWNTOWN AND THE HISTORIC NEIGHBORHOODS SURROUNDING DOWNTOWN, AND EXTEND THOSE STANDARDS TO AREAS IN THE TRADITIONAL TOWN CENTER (TTC) AND COASTAL TRADITIONAL NEIGHBORHOOD (CTN).

The people of Swansboro treasure the feel and character of the historic downtown and surrounding residential areas. This character should be quantified and codified so that future development and redevelopment can achieve a similar feel (setbacks, lot widths, parking location, materials, etc.), while also incorporating enhanced standards and performance (stormwater, pedestrian facilities, ADA access, etc.)

CONTINUE TO IMPLEMENT ADOPTED TOWN PLANS.

For plans to remain relevant and actionable, they must be acted upon, reviewed, and revised regularly, which may be as simple as a regular status update from staff on accomplishments and status of projects within each plan. Aging plans should be reviewed and revised to remain relevant, and a progress update schedule developed for each relevant plan with associated responsible town department.

Continue implementation of the adopted town plans, including but not limited to:

- » Economic Development Strategy (2018)
- » Parks & Recreation Master Plan (2019)
- » **Watershed Restoration Plan (2017)**

CREATE ZONING STANDARDS AND STRATEGIES TO ADDRESS DEVELOPMENT IN AND NEAR RURAL AGRICULTURAL (RA).

Farming is a largely industrial activity that can create significant nuisances for adjacent residential properties. However residential development will seek to locate on dry, flat areas, most of which have previously been or adjacent to farmland. Enhance zoning standards for rural development to buffer and compliment farmland in the RA.

CREATE ZONING STANDARDS TO ENHANCE THE FUNCTION AND APPEARANCE OF THE GATEWAY CORRIDOR (GC), PARTICULARLY THE NC 24 CORRIDOR.

The public open house workshop identified several areas where public support exists for strengthening

regulations along the NC 24 corridor. Implement the recommendations of the Gateway Corridor Plan, including but not limited to enhancement of the Gateway Corridor character area through development guidelines and ordinance standards that:

- » Preserve or create deep and enhanced, landscaping buffers between roadway and development site.
- » Encourage residential building setbacks and massing that blend in with the natural environment.
- » Significantly restrict individual access drives and require cross-access between adjacent parcels and sites unless absolutely unachievable.
- » Discourage frontage streets, or if allowed modify setbacks accordingly.
- » Create pedestrian-supportive infrastructure (sidewalks, crosswalks, signals, etc.) along the gateways.
- » Create parking location requirements, with strong preference for parking in the rear of buildings, and enhanced screening requirements that provide consistency and contribute to the appearance of the corridor.

INFRASTRUCTURE CARRYING CAPACITY

DIRECT DEVELOPMENT TO PLACES THAT CAN SUPPORT IT WHILE ALSO REINFORCING THE COMMUNITY CHARACTER AND SOCIAL FABRIC.

The best way to connect people to destinations is to place them in proximity to each other. Locate higher density residential development within walking distance of goods and services to strengthen businesses, reduce vehicular traffic, and encourage active transportation. Consider existing built form and community characteristics when reviewing new development.

Allow dense, context-sensitive development in areas that have adequate public service, proximity to goods and services, and resiliency to foreseeable environmental threats. Mixed use development, both horizontal and vertical, should be encouraged where appropriate.

Consider incentives for infill growth such as by-right approval processes, while also requiring development to connect to utilities and pay for needed system upgrades.

PRIORITIZE UTILITY SYSTEM UPGRADES.

Continue to work with ONWASA to prioritize water and sewer expansion and distribution to targeted areas in accordance with the Future Land Use Plan. Prioritize utility system upgrades for mixed use areas. Incorporate concepts and design that respect the current and future vulnerability of these facilities to a changing climate, storms, and sea level rise.

EVALUATE THE COST OF PROVIDING SERVICES TO NEW DEVELOPMENT AND USE THAT INFORMATION WHEN EVALUATING PROPOSED DEVELOPMENTS OR EXTENDING UTILITY SERVICES.

By using a measurable metric, such as cost per linear foot of street frontage, a community can quantify existing public services costs, and estimate the impact that future development will have if the town is required to take over infrastructure and provide services. A benchmark figure will assist decision makers in evaluating the long-term impact of service extension and growth. Ultimately, the cost of services and infrastructure provided by the town must be recouped, and a balanced approach can be best informed with knowledge of those costs.

IDENTIFY FUNDING SOURCES AND PARTNERSHIP OPPORTUNITIES.

Investigate potential funding sources for the water system and utilize inter-local agreements with either the County or ONWASA for annexation and utility service provision, as appropriate.

NATURAL HAZARD AREAS

CONTINUE TO PROVIDE INFORMATION TO RESIDENTS AND THE DEVELOPMENT COMMUNITY ON THE RISKS AND BEST AVAILABLE DATA RELATING TO ENVIRONMENTAL RESOURCES AND CONDITIONS.

Continue education efforts related to flooding, storm surge, sea level rise, stormwater, and governmental programs and processes related to each. This may include becoming involved in the Community Rating System (CRS) and potentially other programs related to flood protection and flood insurance.

PRIORITIZE CAPITAL IMPROVEMENT PROJECTS IN AREAS THAT WILL INCREASE OVERALL RESILIENCY TO STORMS AND FLOODING.

- » Identify priority areas and actions to make the town more resilient to storms and flood events using VCAPS process and knowledge of recent storms.
- » Evaluate public and private infrastructure for risk, especially critical infrastructure (operations center, police/fire/EMS stations, water and wastewater treatment plants, hospitals, assisted living facilities, etc.), and use this evaluation to guide future locations and expansions.
- » Consider locating highly critical infrastructure well outside of the 500-year floodplain, while less critical infrastructure may be in more flood prone areas with disruptions anticipated but minimal. The nature of each infrastructure component will determine how risk-adverse the public is to a lapse in service.
- » Map and identify stormwater infrastructure that needs upsizing or replacement, and incorporate into capital improvement planning.

USE CURRENT, BEST AVAILABLE SEA LEVEL RISE PROJECTIONS AND ENVIRONMENTAL VULNERABILITY KNOWLEDGE WHEN MAKING PUBLIC INFRASTRUCTURE INVESTMENT DECISIONS.

Public investments communicate to the public that an area is “safe”. They are also frequently lasting decisions that obligate funds for construction, operation, or maintenance for many years. A town that appropriately sites new infrastructure will be more likely to be prosperous and safe.

- » Consider retracting services or strategically abandoning infrastructure in areas that are likely to be risky or dangerous.
- » Major public facilities (hospitals and resident-occupied health facilities, operations centers, water/wastewater facilities, etc.) should be located in areas that will not flood during intense storm events (500-year or 1,000-year), and access to these facilities should also be hardened against storm impacts.
- » New roads should only be allowed if built to withstand a significant storm event without flooding, and even then should be located entirely outside of floodplains.
- » Utilize the information from the VCAPS process regarding projected future floodplains (see Appendix).

STRENGTHEN DEVELOPMENT STANDARDS TO ENHANCE RESILIENCY TO STORMS, FLOODING, AND AN UNCERTAIN CLIMATE FUTURE.

- » Require new construction be built to withstand lower probability / higher impact storms (500-year, 1,000-year, etc.) to reduce damage liability, economic losses, and speed recovery when these events occur. This will be especially important as future floodplain limits will expand as noted on new FIRMS which

are based on SLOSH storm surge modeling. Incentives to reduce insurance costs could also make this strategy more achievable.

- » Perform analyses to identify areas that will likely become the new 100-year floodplain as sea levels continue to rise and consider restricting development or enhancing development regulations in these areas. Look for future guidance from FEMA on this particular subject.
- » Encourage or incentivize low impact development techniques by updating stormwater ordinances and improving outreach efforts. Updates should include but not be limited to:
 - » Encourage reduction of impervious surface cover and increased use of permeable surfaces
 - » Allow naturalized detention areas, rain gardens, and bioswales to satisfy open space requirements
 - » Consider zoning overlays in areas of specific stormwater management concern that require certain types of stormwater or flooding management techniques
 - » Treatment and storage of stormwater on-site, where appropriate
 - » Implementation of Low Impact Development (LID) or green infrastructure stormwater and water quality measures, where appropriate; this may involve multi-property solutions
 - » Implementation of projects that enhance or restore shoreline or wetlands, or otherwise improve water quality and the natural environment
- » Consider requiring a higher freeboard requirement (2- or 3-foot) for new development and/or in places that are particularly susceptible to flooding or storm surge with or without wave action.
- » Develop unique solutions to mitigate future flooding in the historic waterfront district in order to preserve the town's heritage and history.

REVIEW AND REVISE THE WATERSHED RESTORATION PLAN TO ENSURE THAT IT ANTICIPATES AND ADDRESSES EXISTING AND FUTURE ISSUES.

- » Identify opportunities for retention and green stormwater infrastructure that can serve infill and redevelopment
- » Consider regional stormwater detention solutions for future employment sites or other large development sites; consider partnership with developers (or regional solutions)

SCRUTINIZE DEVELOPMENT IN ENVIRONMENTALLY-SENSITIVE AND FLOOD-SUSCEPTIBLE AREAS CONSERVATION PRIORITY AREAS (CPAs).

Consider requiring the mapping and quantification of the CPAs when reviewing new development applications in these areas. Note that these areas are comprehensively mapped herein, and local criteria should be created to assist developers in making on-the-ground inventories, similar to the mapping of stream buffer corridors. This information should then be used during preliminary and final development application decisions. It may also be beneficial to encourage or even incentivize the clustering of development outside of the CPAs.

WATER QUALITY

CREATE ZONING STANDARDS AND STRATEGIES TO ADDRESS DEVELOPMENT IN CONSERVATION PRIORITY AREAS (CPAs).

Restrict the development of natural areas, especially in floodplains, to preserve water quality. Clustering

and other density transfer strategies will help protect priority environmental areas, as well as keep new development further from harm's way, as in the case of king tides, and storm-related flooding.

CONTINUE TO IMPLEMENT THE TOWN'S WATERSHED RESTORATION PLAN.

The town has recently obtained funding to install retrofit stormwater solutions to improve water quality. Any historic downtown has challenges when dealing with stormwater, since regulations did not exist when the town developed. Continuing to implement stormwater solutions is important to water quality, especially since much of the development of the town predates current stormwater control regulations. The Town may also choose to increase regulation of stormwater or raise stormwater fees to pay for other mitigative measures.

COMBINE WATERFRONT ACCESS WITH HABITAT RESTORATION AND STORM RESILIENCY.

- » Enhance water quality and storm resiliency while also providing increased access to public trust waters.
- » Pursue funding from multiple sources to achieve complimentary outcomes.
- » Consider additional setbacks from salt marshes, per the recommendations from the VCAPS process.
- » Consider implementing the Living Shorelines recommendations from the VCAPS process.

INVEST IN WATER QUALITY PROJECTS THAT ENHANCE BOTH QUALITY OF LIFE AND NATURAL ENVIRONMENT.

One of Swansboro's primary assets is the waterfront and coastal character of the town. Water quality and the natural environment is a major reason that people continue to settle in the town. Protection of water quality is crucial to the town's long-term vitality. Zoning and development standards are the primary avenue to locally influence water quality, and protective standards should be incorporated into the ordinance, including but not limited to:

- » Reduction of site impervious surfaces
- » Treatment and storage of stormwater on-site, where appropriate
- » Implementation of Low Impact Development (LID) or green infrastructure stormwater and water quality measures
- » Implementation of projects that enhance or restore shoreline or wetlands, or otherwise improve water quality and the natural environment
- » Disconnected and/or enhanced Stormwater Control Measures (SCMs), possibly requiring measures in excess of state standards

OTHER COMMUNITY PRIORITIES

PRIORITIZE NEW PEDESTRIAN INFRASTRUCTURE.

Identify potential pedestrian connections (sidewalks and multi-use trails) between high residential density areas and popular destinations and include those projects in the Capital Improvement Plan.

Destinations identified at the public open house workshop include:

- » Areas north and south of NC 24
- » The historic downtown
- » Parks and recreation facilities
- » Waterfront access areas

- » Hammocks Beach State Park
- » The intersections of NC 24 with Hammocks Beach Road and Old Hammock Road
- » Queens Creek Road
- » Main Street Extension

FACILITATE CROSS-DEPARTMENTAL, INTER-AGENCY, AND INTER-JURISDICTIONAL COORDINATION.

Encourage collaboration to provide county services that support recommendations in this plan. Work with outside agencies (local, regional, state, federal) to implement land use decisions that reinforce and support the values of the town. Of particular importance are communication and coordination with the County and ONWASA on land use and service provision decisions and standards that occur just outside the town's ETJ, as these will have the greatest impact on the town.

CONNECT NEW AND EXISTING DEVELOPMENT TO THE BROADER COMMUNITY.

Institute requirements that connect development to nearby amenities, open spaces, residential and commercial areas, and road networks by implementing the following strategies:

- » Limit maximum cul-de-sac length, and then only allow if a future connection is not achievable. Developing secondary connections between destinations is crucial to creating community and reducing congestion on major roadways.
- » Establish maximum block lengths, and require achievable stub-outs. Where stub-outs would require a culvert or bridge, require the developer to pay fee-in-lieu for their portion of the future facility. Consider also adopting Appendix D of the NC Fire Code, which discusses access points, cul-de-sac length, and maximum number of units for safe provision of EMS/fire safety services.
- » Update pedestrian and bicycle plans to address acquisitions and requirements for easements for these facilities. Require new construction to connect to existing or planned facilities.
- » Strengthen connectivity policies to require interconnectivity and reduce traffic on main roads.

ENHANCE APPEARANCE AND MAINTAIN SMALL-TOWN, COASTAL CHARACTER.

The appearance and quality of appearance of structures, especially those with larger footprints (~40,000 sqft), should be balanced or mitigated by higher-quality materials and stormwater control measures, including but not limited to:

- » Use of high quality materials and prohibition or reduction in the use of low quality materials.
- » Breaking up the roofline or overall massing through architectural embellishments and fenestrations.
- » Balancing greater impervious surface areas with:
 - » Carefully considered setbacks that reduce visual impact - for instance, stepped setbacks.
 - » Additional stormwater control measures, particularly Low Impact Development (LID) design.
 - » Additional or enhanced landscape buffering, lighting, or pedestrian infrastructure and spaces.

IMPLEMENT THE ACTIONS IDENTIFIED IN THE VCAPS STUDY (SEE APPENDIX).

The community-identified actions and solutions identified in the VCAPS study are incorporated in this report as an appendix and include priority actions. Planning and implementation of this sort is a major step toward creating a more climate resilient future for Swansboro.



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PUBLIC ENGAGEMENT AND INVOLVEMENT

STEERING COMMITTEE

The Town appointed a steering committee composed of community members representing a variety of invested perspectives. This committee met monthly. Throughout the process, the steering committee reviewed, discussed, guided, and vetted the findings, public input, and proposed direction as presented by the consultant and staff. Through the information they gained from all of these exercises, the steering committee helped build a plan that represented the views and perspectives of the wider community, with an eye toward the detailed inner workings, opportunities, and constraints of each component of the plan. Members of the steering committee are listed in the Acknowledgments section of this plan.

EXISTING PROTECTIONS OF ISOLATED WETLANDS REPORT

Existing Protections of Isolated Wetlands

Key Points:

- Swansboro supports the policies and permitting processes under CAMA and Section 404 of the Clean Water Act.
- Due to changes in interpretation/legislation in the past few years, gaps have been created in the protection of coastal NC's small, isolated wetlands by federal and state programs.
- Swansboro does not have policies or ordinances specifically targeting and protecting isolated, non-coastal wetlands not protected under federal or state law.

Findings:

In the existing Land Use Plan (LUP), Swansboro complies with all state and federal laws regarding wetlands and environmentally sensitive areas, including section 404 of the Clean Water Act and all CAMA regulations. However, in 2008, a statement by the EPA asserted that wetlands not adjacent to traditional navigable waters are not under 404 jurisdiction. In 2015, changes were made to 15A NCAC 2H .1300 to regulate only 2 types of the 16 formerly identified isolated wetlands in NC, and to allow discharges that impact one acre or less of isolated wetlands in the coastal region without a permit (15A NCAC 02H .1305(3)). Combined, these changes create a gap in protection for small, non-adjacent/isolated wetlands and make it increasingly important that local municipalities adopt more stringent protections.

Currently, the town does not have many policies that go beyond protections under section 404 of the CWA. Most policies in regards to wetlands are statements of support for federal/state regulations. For example, policy 37 states that the town "supports coordinated efforts to preserve and protect the ecological and flood hazard benefits of freshwater wetlands, *as protected under Section 404 of the Clean Water act.*" Swansboro also has a CAMA-required Environmental Composite Map that incorporates areas of environmental concern into their land suitability analysis. In addition to this, there are a few policies could have indirect benefits to isolated wetlands. Policy 93 mentions a commitment to Low Impact Development (LID), which the UDO is required in Flexible Lot Developments. In implementing action 21 and policy 65, the town supports the education of the public about "environmentally sensitive areas" and the dangers of location development in natural hazard areas, which could be used to support an education campaign about isolated wetlands.

Recommendations

- **Educate residents** about the benefits (ecological, economic, public health/safety) of protecting wetlands. Incorporate wetland education efforts into Implementing Action 21 of the LUP.
- **Define wetlands** in the LUP and Unified Development Ordinance to include not only 404-regulated wetlands, but also isolated, freshwater wetlands.
- **Update policies** 25 (define environmentally sensitive areas to include isolated wetlands), 37, and 89 in the Land Use Ordinance to include wetlands not protected under CWA(404), according to the previously mentioned definition.
 - Also include a discussion of town protections/definitions in the Wetlands Section of Existing/Emerging Conditions: Fragile Areas.
 - In policy 63, amend to include more specific requirements for development susceptible to wetlands loss (instead of “consideration” in project development).
- **Change zoning** to either include isolated wetlands as a new, separate zone (overlay map of isolated wetlands), or incorporate isolated wetlands into the existing conservation zone.
 - Could commission maps of Swansboro wetlands, or use existing maps (FWS, NCRS, NOAA)
 - Allow appeals process for landowners to challenge delineations they feel are inaccurate
 - If not included in conservation zone, which is included in policy 27 of the LUP (about using increased lot sizes, decreased impervious surfaces, and cluster development), could include in large lot residential zoning to encourage building on uplands and not disturbing wetlands on lot.
- **Create a wetlands protection ordinance** specific to the needs of Swansboro:
 - Include: definition of a wetland, fact finding, intent/goals, definition of regulated activities, standards for issuance of permits (general: e.g. no net loss of wetlands, and specific: e.g. mitigation ratios), and conditions which may be attached to permits
 - Model ordinance from the Association of State Wetland Managers
 - Wisconsin Model Ordinance
 - Study on Local Ordinance Effectiveness in NYS
- **Create a Wetland Review Board** to help review permit applications under ordinance
- **Institute subdivision regulations** requiring wetlands protection, encourage use of wetlands as open space/stormwater management
- **Institute incentives** to encourage wetlands protection, such as:
 - Reduce local real estate taxes for preserved wetlands
 - Density bonuses or development right schemes
 - Work with local land trusts to provide wetland owners who donate wetlands or conservation easements with tax benefits

NORTH CAROLINA RESILIENT COASTAL COMMUNITIES PROGRAM SWANSBORO

Final Deliverable - Resilience Strategy

MAY 2022



SUBMITTED BY

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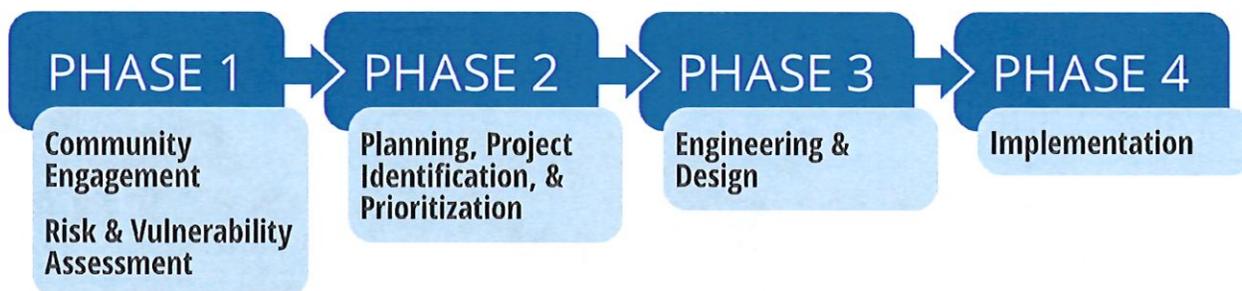
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SUMMARY

The Resilient Coastal Communities Program (RCCP) is a grant program administered by the North Carolina Division of Coastal Management (NCDCM). The program objectives are to address barriers to coastal resilience in North Carolina, to assist communities in the preparation of risk and vulnerability assessments and the development of projects to address community risks, to advance coastal resilience projects to construction, and to link communities to funding streams for project implementation. The RCCP emphasizes the identification of, and outreach to, traditionally underserved communities. It also emphasizes the incorporation of natural or nature-based solutions (NNBS) to address community vulnerabilities. As of May 2022, the first two phases of the RCCP are underway, with two additional phases scheduled to begin later in 2022 and subsequent years. The phases of the RCCP are illustrated below.



The Town of Swansboro, North Carolina was selected for Phase 2 of the RCCP in 2021. The Town previously completed a Vulnerability, Consequences, and Adaptation Planning Scenarios (VCAPS) analysis in 2018 that identified critical infrastructure and assessed the Town's risk and vulnerability to coastal hazards. During Phase 2 of the RCCP process, using information from the VCAPS, the recent CAMA Land Use Plan Update, other regional planning efforts, and input from a Community Action Team (CAT), the Town identified and prioritized a series of projects to address coastal hazards.

Project Portfolio Focus

- Stormwater Mapping
- Halls Creek Stream Restoration
- Hawkins Creek Stream Restoration
- Water Street Rehabilitation
- Public Engagement and Education Campaign

Community input and the CAT identified flooding damage, especially along the waterfront areas, from various storm events as a primary concern. The same input identified a series of roadways and several stream and wetland systems as critical assets of concern. To address the vulnerabilities to these assets, the resulting project portfolio emphasizes stormwater asset mapping and condition assessment as well as targeted stream restoration to improve ecosystem health and water quality. The CAT identified seven projects for the RCCP project portfolio, which may be implemented under later phases of the RCCP or under other federal, state, or local resilience programs. The enclosed report provides a more in-depth look at the RCCP process and the major outcomes of the effort.



I. Vision and Goals

Swansboro is surrounded on three sides by water, bounded by the White Oak River, Queens Creek, Hawkins Bay, and the Intracoastal Waterway. As a result, the Town experiences flooding from coastal storm surge, tidal and riverine flooding, and heavy rainfall events. Based on input from the Community Action Team (CAT), Swansboro’s desire is to be prepared for the future – specifically the challenges of rising water levels and climate change – in order to preserve the Town’s character and critical assets, including historic downtown Swansboro. To meet this vision, the Town is focused on implementing the 2019 CAMA Land Use Plan, reassessing and updating the results from the VCAPS analysis, addressing stormwater infrastructure needs, and restoring streams and wetlands.

Community Vision

Be prepared for the future - specifically for rising water levels and climate change – in order to preserve the Town’s character and critical assets, such as historic downtown Swansboro.



II. Community Action Team (CAT)

The Resilient Coastal Communities Program (RCCP) process requires each community to establish a multi-disciplinary CAT composed of diverse stakeholders to provide input throughout the process and to engage the community. Under-represented communities should be reflected in the CAT and in community engagement efforts. Swansboro’s CAT was established through input from Town staff and is listed in **Table 1**.

CAT meetings were held in November 2021 and March 2022; a summary of each meeting is included in **Appendix A**. The CAT membership included Town staff and officials with a range of experience and provided insight on historic hazard planning efforts and infrastructure needs. The CAT noted general community support for resilience efforts and for options that included natural or nature-based solutions (NNBS) where feasible. While the Town had recently completed the Vulnerability, Consequences, and Adaptation Planning Scenarios (VCAPS) process and the 2019 CAMA Land Use Plan, the CAT noted that there were some concerns with the findings in the VCAPS (as it was completed on a limited timeframe) and that further vulnerability analysis was warranted.

| TABLE 1: COMMUNITY ACTION TEAM | |
|--------------------------------|--|
| NAME | POSITION |
| Frank Tursi | Mayor Pro Tem / Board of Commissioners |
| Scott Chadwick | Planning Board Chairperson |
| Christina Ramsey | Planning Board Vice-Chairperson |
| John Freshwater | Engineer, Flood Management Appeals Board Chairperson |
| Paula Webb | Town Manager |
| Alissa Fender | Town Clerk/Admin Services Director |
| Jennifer Ansell | Planner |

In the initial discussion of potential project opportunities, the CAT cited disaster recovery, stormwater management, and hurricane response as primary needs to be addressed. The initial projects recommended for consideration included stormwater system mapping, establishing a pump system similar to other area communities, and relocating utility lines underground.

The CAT recommended a two-pronged approach for public involvement in order to provide multiple participation opportunities during the COVID-19 pandemic. In-person meetings that utilized an open house/drop-in approach were preferred, but an online component was recommended for those who could not attend. A public meeting and corresponding online survey were developed in response to these recommendations; the public engagement effort is detailed in **Section III**.



Following the public meeting, the CAT reviewed the public feedback and refined the proposed project portfolio. As discussed in **Section VI**, community-wide stormwater infrastructure mapping as well as stream restoration along Halls Creek and Hawkins Creek were cited as top community priorities. However, the CAT expressed disappointment over the relatively low participation in the public meeting and corresponding online survey; in response, a recommendation for an ongoing public engagement and education program focused on sea level rise impacts and resilience improvement was included in the project portfolio. In order to address current stormwater management challenges in the historic downtown area, the CAT also recommended the inclusion of the proposed Water Street Rehabilitation project in the portfolio.

III. Stakeholder Engagement Strategy

Public engagement efforts used a combination of an online survey and in-person meeting to reach as much of the community as possible while adhering to safety guidelines due to the COVID-19 pandemic.

The purpose of the public engagement was to capture feedback on the types of hazards that impact the Town of Swansboro and the locations that have experienced impacts. The engagement effort also sought feedback on proposed options to address these hazards and the types of projects that should be implemented.

An online survey was created and vetted with the CAT before being posted on the Town of Swansboro's website. The survey was available from February 8 through March 21, 2022. Additionally, a drop-in meeting was held on February 23, 2022 from 4:00 p.m. – 6:00 p.m. at Town Hall and provided the community an opportunity to learn more about the RCCP, ask questions, and provide input. The public meeting was advertised through the Town's existing constant contact mailing list and official social media sites. A copy of the survey and other public engagement materials is included in **Appendix B**.

During the public engagement period, 96 responses to the survey were received, including 89 online responses and 7 responses at the public meeting. The major findings from the survey, and the input provided at the public meeting, include:

- Flooding is the most prevalent coastal hazard that concerns residents, with storm surge and heavy rainfall events named as the main sources.
- Roadways, utilities, the shoreline, wetlands, and streams were noted as the critical assets most affected by flooding.
- To address concerns to critical assets, the community indicated that upgrading the stormwater facilities (pipes, drainage ditches, culverts), strengthening the power grid, addressing shoreline erosion, and restoring wetlands and streams were areas for the Town to focus potential projects.
- While all of the projects listed in the survey received support, mapping and improving existing stormwater control devices received the most support by a small margin.

Survey participants were also given an opportunity to identify specific locations where improvements are needed and the solution that would best address the problem. Write-in suggestions included stricter zoning requirements to limit impervious surface area, reforestation to address trees lost due to storms, and extending the sewer system to all residents still using a septic system. Full details of the survey results can be found in the **Appendix B**.





IV. Review of Existing Local and Regional Plans

Swansboro has participated in several local and regional planning efforts that were aimed at increasing resiliency for North Carolina’s coastal communities. Specifically, the 2019 CAMA Land Use Plan Update, along with the 2018 Vulnerability, Consequences, and Adaptation Planning Scenarios (VCAPS) effort identified Swansboro’s critical assets and summarized a risk and vulnerability assessment. **Section V** of this report summarizes these two efforts, and **Table 2** lists previous efforts to identify Swansboro’s critical assets and potential options to address coastal hazards.

| TABLE 2: EXISTING LOCAL AND REGIONAL PLANS | | |
|--|--|---|
| YEAR | TITLE | DESCRIPTION |
| 2006 | Hawkins Creek Watershed Protection and Restoration Planning Study | Facilitate future planning for the Hawkins Creek Drainage Basin to restore the ecosystem. |
| 2015 | Hazard Mitigation Plan (Annex 5 to Onslow County Hazard Mitigation Plan) | Document includes hazard identification, vulnerability assessment, and mitigation strategies. |
| 2017 | Hurricane Matthew Resilient Redevelopment Plan – Onslow County | Identifies county-wide needs for recovery and redevelopment from Hurricane Matthew. |
| 2017 | Swansboro Watershed Restoration Plan | Framework for addressing water quality issues and restoring the watershed to its pre-development hydrology. |
| 2017 | Swansboro Watershed Restoration Plan | Plan addresses goals and methods to reduce overall stormwater runoff to improve water quality. |
| 2018 | Strategic Economic Development Plan | A 20-year vision to mitigate the effects of growth, while preserving the town’s character. |
| 2018 | Vulnerability, Consequences, and Adaptation Planning Scenarios (VCAPS) | Outlines potential vulnerabilities and outcomes that could be anticipated from climate related incidents. |
| 2019 | CAMA Land Use Plan Update | The document serves as a comprehensive land use plan for the Town and includes plans for preserving historic downtown, addressing traffic congestion, restoring wetlands, and managing growth. It recommends that sea level rise be considered during any new building and that updated building codes be followed. |

V. Previous Risk and Vulnerability Assessment Efforts

Swansboro previously participated in the Vulnerability, Consequences, and Adaptation Planning Scenarios (VCAPS) process, an interactive planning process facilitated by the NC Sea Grant. This process aims to identify areas prone to flooding and storm damage.¹ Swansboro completed the VCAPS process between 2018 and 2019 in support of its 2019 CAMA Land Use Plan, which summarizes the Town's resource inventory, discusses resiliency and climate adaptation strategies, and defines planning goals and objectives. As part of the VCAPS process, Swansboro also identified critical assets and analyzed the impact to these assets from multiple hazards to support the plan update. VCAPS represented an important step for Swansboro to begin to assess its resilience; however, the RCCP CAT expressed concerns with the findings of the VCAPS and identified the need for a deeper dive into the Town's vulnerable and at-risk assets.

Through the VCAPS, Swansboro mapped identified assets and overlaid them with available flood datasets to identify the assets most exposed to flooding under specific events and those that may be exposed in the future due to sea level rise. These assets were categorized into built infrastructure (historic downtown, emergency and Town government facilities, utilities, pump stations and schools) and natural infrastructure (wetlands, streams, marshes, pocosins, and estuary habitat).² As expected, low-lying areas with wetlands and sensitive habitat, built infrastructure close to the waterfront, and the historic downtown are especially vulnerable to flooding hazards. One of the goals set by the CAMA Land Use Plan Update for Swansboro was to build community resilience in a changing environment.³



- 1 Stewart, Inc. (2019). CAMA Land Use Plan Update; Pg. 27
- 2 Stewart, Inc. (2019). CAMA Land Use Plan Update; Pg. 27
- 3 Stewart, Inc. (2019). CAMA Land Use Plan Update; Pg. 35



VI. Project Portfolio

Utilizing feedback from the public and input from the CAT, a list of projects to address specific coastal hazards and recommended locations was developed. The Project Portfolio, summarized in **Appendix C**, lists the following information on each project:

- Project title and description
- Anticipated cost and needs addressed
- Funding status
- Natural or Nature-Based Solution (NNBS) Opportunity
- Project timeline and priority

Factors considered in the development of the Project Portfolio include:

- Inclusion of natural or nature-based solutions (included in the RCCP criteria)
- The need(s) addressed and the scope of the project’s benefit
- Project implementation timeline (i.e. an emphasis on shovel-ready projects)
- Other potential funding sources for the project
- Community input and support

Table 3 highlights the top three project priorities included in the Portfolio; the remaining projects are detailed in **Appendix C**.

| TABLE 3: PROJECT SUMMARY | |
|-----------------------------------|---|
| PROJECT | DESCRIPTION |
| Stormwater Infrastructure Mapping | Map stormwater management and treatment facilities, analyze system needs, incorporating data on sea level rise and future floodplain locations. |
| Halls Creek Stream Restoration | Implement restoration projects to improve water quality and related ecosystem services along Halls Creek. |
| Hawkins Creek Stream Restoration | Implement restoration projects to improve water quality and related ecosystem services along Hawkins Creek. |





VII. Conclusions and Future Opportunities

Phase 2 of the RCCP provided Swansboro with an opportunity to build upon previous planning efforts and establish a solid Project Portfolio to guide the Town in applying for project funding. Potential funding sources include Phases 3 and 4 of the RCCP, which funds the engineering and construction, respectively, for projects that meet specific identified needs in the community. As not all of the projects identified in this process will be eligible for funding under the RCCP, other potential funding opportunities at the federal, state, and local level have been identified to the extent possible.

Based on the feedback from the public and the CAT, Swansboro's leadership and staff recognize the impacts that coastal hazards, particularly storms, have on Town facilities and residents, and they understand that these impacts are expected to continue and even worsen in the future due to sea level rise and related climate changes. The projects included in the Project Portfolio, including infrastructure mapping, wetland and stream restoration, infrastructure improvements, and community outreach, represent opportunities to identify and address infrastructure needs to meet current and future flooding challenges and to improve ecosystem and water quality throughout the community.

In addition to infrastructure improvements, public education and community outreach was cited as a critical need. The CAT noted the importance of educating community residents and business owners on the challenges to be faced in the future from sea level rise and likely increases in storm-generated flooding. The Town can use the outreach process conducted under the RCCP to develop and implement a broader engagement and education program, focusing on the impacts of climate change and the role resilience planning plays in infrastructure development.

While it provided important background for the development of the Project Portfolio and the overall RCCP effort, Town staff and the CAT noted concerns with the findings of the 2018 VCAPS analysis. A new risk and vulnerability assessment, one that re-examines the potential impacts and vulnerabilities of key community assets, may be valuable in order to sharpen the focus of future resilience projects and identify more detailed infrastructure improvements that can address community needs.

Acknowledgments

We would like to thank the Town of Swansboro for its efforts associated with the development of this report and the Project Portfolio. In particular, we would like to thank Paula Webb, Alissa Fender, Jennifer Ansell, and the rest of the Community Action Team for their honest feedback on the community's needs and the challenges that have been faced historically in addressing these needs. We also thank Mackenzie Todd of the N.C. Division of Coastal Management for the guidance and insight she provided throughout this process.

APPENDIX A COMMUNITY ACTION TEAM MEETINGS

MAY 2022



SWANSBORO CAT MEETING #1 DISCUSSION

DATE: November 17, 2021

TIME: 1:00 p.m.

LOCATION: Swansboro Town Hall

PURPOSE: Swansboro Community Action Team Meeting Discussion Notes

SUMMARY DATE: November 22, 2021

Discussion

1. Resilience Needs/ Projects to Address Needs:

Based on events to date, what do you see as the community's biggest needs? (What keeps you up at night?)

- Disaster recovery: Generator needed at Swansboro High School (local shelter), and concerns about several nursing homes located in community.
 - o May have funds allocated in the new state budget to construct EOC/police/fire department facility; however, construction could still be a few years out.
 - o Special concern for nursing homes within town. Many people were without power after the last storm and had to utilize the local shelter.
 - o Hazard mitigation funding available annually that may cover generator or other needs (have \$19 million annually for next two years). High school is primary shelter, Methodist Church is second shelter.
- Stormwater management: The Town currently charges residents a fee to fund stormwater improvements. The Town is currently reactive as it pertains to stormwater improvements; it needs a plan in place to get ahead of issues. All creeks in Town are impaired. A plan to move stormwater quickly may address local flooding, but doesn't address water quality. Look at creek heads and the stream restoration process. Handle in a way that coincides with the regional watershed management plan; it includes a figure of how much stormwater must be reduced.
 - o Issue with having no say with other permits being issued, or NCDOT projects.
 - o ONWASA has challenges with some of the pump stations, especially when the highway is damaged.
 - o Existing stormwater facilities need to be mapped in order to know what needs to be addressed; this should be a top priority.
- Climate change may not be a "need", as the community's focus is on addressing the consequences of climate change. It impacts everything else on the proposed needs list.
- Change "Hurricane Evacuation" need to "Hurricane Response" to account for those who remain in place, or stay in the area.
- The nearest NOAA tide gauge is at Beaufort Inlet, with data extrapolated. Going to have one at the harbor in town so that community has real-time tide data (local vs. extrapolated).

What projects do you think should be implemented to address the community's needs?

- Need a map of the entire stormwater system, including the underground drains. Don't know how old they are, where they start. This is a primary project need.
- Emerald Isle has an emergency management plan that allows for pumping once water is above 6" is on road; water quality drops out at that water level.

- Referenced Dr. Hunt's presentation based on working with multiple DOT's- trying to come up with more realistic model of what facilities are most vulnerable.
- Power lines need to be relocated underground.
- NC 24, Hammocks Beach Road has washed out several times. NC 24, US 70, US 17 are the typical problem points, especially getting people back in after a storm.
- Last week's king tides had highest water on Cedar Point than previously seen.
- Town is split between Duke Energy Progress and Jones-Onslow power (split down NC 24). Duke services most of the commercial area.
- With final ruling, may be able to use ARP funds for stormwater projects.

Of these projects, which are the most important (or have the most impact) to the overall community?

- Mapping stormwater needs the main priority. (Referenced Hawkins Creek study- could be a project from this.)
- Schools, nursing homes.

Other feedback:

- Definition of resilience: resilience is ensuring that the Town is prepared to meet its future in terms of rising water levels and climate change, preventing storm damage, stormwater issues. No pushback during Land Use Plan development on climate change. However, many developers may not be concerned about climate change, even if they haven't said anything directly.
- Previous VCAPS assessment was an add-on to the Land Use Plan that was done rather quickly, meant to meet the LUP deadline. Not completely satisfied with final product.
- For next CAT meeting, can the stormwater system stakeholder join the group? NCDOT should be on the steering committee.

2. Community Engagement Strategy:

What techniques (in-person meetings, virtual options) have been the most effective at getting feedback?

- Recommend an online survey for those who aren't able to attend.
- The Board of Commissioners is returning to in-person meetings.
- There are almost 600 people on the Town's constant contact mailing list.
- Land Use Plan public engagement was very successful. Participants moved from table to table, and the meeting was held over an afternoon.
- Refine the list of projects based on public input, other community stakeholder input.
- Can we engage those who manage the stormwater system, even NCDOT? Invite NCDOT to participate.

If in-person, are drop-in events or formal presentations preferred?

- Drop in events preferred, allow for more social distancing.

What strategy do you recommend for this effort? Are there upcoming efforts/events that we can partner with on community outreach?

- Most likely, week after New Year's/second week of January will be the best time for a meeting; don't recommend holding events right before Christmas.

Other feedback:

Action Items

| ACTION ITEM | ASSIGNED TO | DATE DUE | STATUS |
|---|-------------|----------|--------|
| Schedule Public Engagement event/prepare online survey #1 | Dewberry | 12/3/21 | |
| Provide feedback on Meeting #1 discussion | CAT | 12/3/21 | |
| | | | |
| | | | |

Attendees

| Name | ✓ | Organization | Email |
|------------------|---|--|--|
| Beth Smyre | ✓ | Dewberry | esmyre@dewberry.com |
| Mackenzie Todd | ✓ | NC Division of Coastal Management | Mackenzie.Todd@ncdenr.gov |
| Alissa Fender | ✓ | Town Clerk, Town of Swansboro | afender@ci.swansboro.nc.us |
| Jennifer Ansell | ✓ | Planner, Town of Swansboro | jansell@ci.swansboro.nc.us |
| Paula Webb | ✓ | Town Manager, Town of Swansboro | pwebb@ci.swansboro.nc.us |
| Frank Tursi | ✓ | Mayor Pro Tem, Board of Commissioners | ftursi@ci.swansboro.nc.us |
| Scott Chadwick | ✓ | Planning Board Chairperson | mayorsea@gmail.com |
| Christina Ramsey | ✓ | Planning Board Vice-chairperson | cr93847@aol.com |
| John Freshwater | ✓ | Engineer, Flood Management Appeals Board Chair | johnfh2o@gmail.com |
| Sarah Spiegler | ✓ | NC Sea Grant | sespiegl@ncsu.edu |



Resilient Coastal Communities Program

Swansboro- Community Action Team Meeting #1

November 17, 2021

1

Agenda

- Welcome and Introductions
- Resilient Coastal Communities Program Overview
- Discussion
- Wrap-up: Action Items, Next Steps

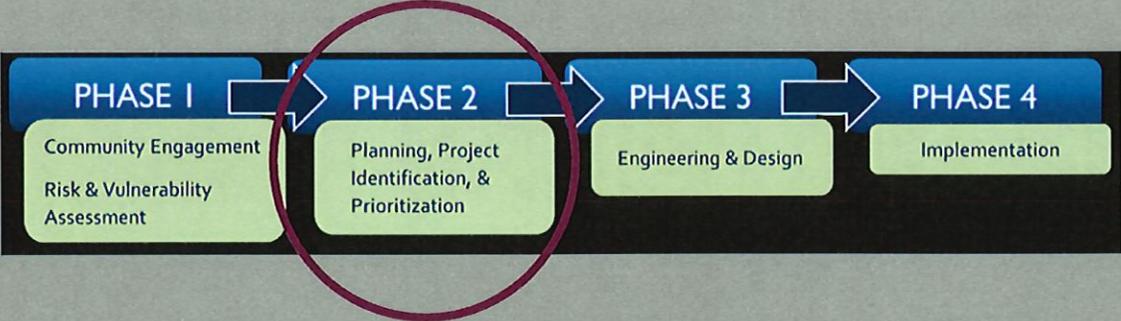
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Program Objectives

- Address barriers to coastal resilience in North Carolina at the local level, such as limited capacity, economic constraints, and social inequities;
- Assist communities with risk and vulnerability assessments and developing a portfolio of planned and prioritized projects;
- Advance coastal resilience projects to **shovel-readiness**, or ready for implementation; and
- Link communities to funding streams for project implementation

3

Program Overview



4

Deliverables

- Project Portfolio

5 Swansboro CAT Meeting #1 November 17, 2021 Dewberry

5

Schedule

```
graph LR; A["CAT Meeting #1 (Today)  
• Community Needs  
• Project Recommendations  
• Community Engagement Plan"] --> B["Public Engagement (December/January)  
• Proposed projects"]; B --> C["CAT Meeting #2 (January)  
• Draft project portfolio  
• Select priority actions"]; C --> D["Final Deliverables (February 2022)"]
```

6 Swansboro CAT Meeting #1 November 17, 2021 Dewberry

6

Discussion

- Community Resilience Needs
- Projects to Address Community Resilience
- Community Engagement Strategy

7

Swansboro CAT Meeting #1 November 17, 2021

 Dewberry

7

Community Needs

- Stormwater Management/Flooding
- Disaster Recovery
- Infrastructure Deficiency/Capacity
- Hurricane Evacuation
- Climate Change

8

Swansboro CAT Meeting #1 November 17, 2021

 Dewberry

8

Next Steps

- Action Items
 - Dewberry/Swansboro: Schedule Public Engagement event/survey
 - CAT: Provide feedback on today's discussion/proposed projects

9

Thank you!

Beth Smyre, PE 919-424-3771
esmyre@dewberry.com

10



SWANSBORO CAT MEETING #2 DISCUSSION

Date: March 21, 2022

Time: 2:30 p.m. – 4:00 p.m.

Location: Swansboro Town Hall

Purpose: Swansboro Community Action Team Meeting – Discuss Project Portfolio for the Resilient Coastal Communities Program

Discussion Topics

1. Public Engagement Summary - Feedback and Conclusions from February 23 Public Meeting, Online Survey

- The online survey was available on the town's website from February 8 – March 21, 2022. Received 89 online responses and 6 written responses from in-person, public involvement meeting.
- The main concern expressed was flooding hazards with areas of concern centered on the waterfront downtown. (Water Street, Front Street, Main Street, NC 24 as examples)
- The most popular solutions for addressing flooding were nature-based solutions such as restoring wetlands and streams, and infrastructure solutions, such as upgrading the NC 24 culvert and developing greens streets.
- Each project on the survey list received some level of support, with stormwater mapping and resizing the NC 24 culvert getting the strongest support.
- Write-in project suggestions included restoring Hawkins Creek, limiting impervious cover, warning system notifications, and providing sewer system access for residents still on private septic systems that get flooded.

2. Draft Project Portfolio Review

- The CAT discussed and refined the project portfolio list for inclusion in the final report and to guide Phase 3 of the program. Beth reminded the CAT the list of projects could be used to apply for other funding opportunities beyond the RCCP. The discussion centered around the following initiatives:

Stormwater Mapping

- Stormwater mapping would be one of the better projects due to ease of implementation and relatively inexpensive costs.
- Hawkins Creek had been studied previously but could not recall the date. Based on previous experience, the yards in this area flood but not the houses. Some work to improve the drainage was recently completed, but do not believe it was enough to alleviate the issues. This is an example of why stormwater mapping is needed.
- Halls Creek was also mentioned as a trouble area for flooding.
- Could different sea level rise scenarios be mapped to show future flooding for Swansboro? The State Floodplain Mapping Program has completed mapping for future scenarios. However, the suggestion was made to produce more precise local mapping to study flooding on a micro scale instead of a macro scale. This effort would require more detailed surveying of the Town to be completed for use in modeling.



SWANSBORO CAT MEETING #2 DISCUSSION

Culvert Upgrades

- The culverts under Bonita Lane and Oyster Bay Road need to be improved as well as the culvert under NC 24. The drainage system in that area is undersized.
- The CAT noted several areas where culverts and drainage systems were undersized.
- The Town would have to partner with NCDOT to replace the NC 24 culvert.

Wetland and Stream Restoration

- The CAT felt wetland and stream restoration projects were very important but questioned if there was enough information available to determine what areas were most suitable for wetland creation or restoration.
- Currently, the Town does not have a policy or procedure for wetland and stream restoration.
- Wetland and stream restoration could occur on town or county owned land with leadership coordination. Restoration on private property would require purchasing easements or asking for donations of land from property owners. The Town has a policy to preserve wetlands but does not have a mechanism for implementing preservation.
- The CAT requested to add creating a Wetland Restoration Plan to the project list. The plan would guide implementation for wetland and stream restoration and preservation. The plan could include tax incentives for property owners.

Public Education

- The mayor feels that the main goal of this RCCP effort is to educate the public. He was disappointed with the lack of participation at the public involvement meeting and in the online survey. The survey responses submitted represent about a ten percent response rate. Suggested the CAT continue to look for opportunities to engage and educate the public. Previous studies have indicated that this area could experience a one foot sea level rise by the end of the century.
- Based on the above, the CAT added a public education campaign to the projects list.

Shelters

- The locations of emergency shelters are controlled by Onslow County and the evacuation routes are defined by NCDOT. Therefore, Projects #2 (emergency generators for shelters) and #3 (re-evaluate sheltering and evacuation plans, coordinate extra care for nursing homes) are less desirable to move forward. It was also noted that nursing homes are required to provide their own backup generators.
- Onslow County has received \$19 million to upgrade shelters with better generators. Is Swansboro being adequately represented in the decisions on which shelters to upgrade?
- The CAT also discussed the location of the Town's secondary shelter. Currently, the Methodist Church is designated as the secondary shelter. However, the CAT felt that the middle school annex would make a better shelter and that the shelters should be further apart to better serve the Town. Sheltering concerns need to be explored further.

Stream Gauges

- A tidal gauge has recently been installed on public property by a private company. Although the company is gathering information and providing it for a fee, Swansboro has free access to the data. It was noted that the information composed of multiple graphs and is not user friendly.
- Since there is a gauge in place, would adding additional gauges provide additional benefit?



SWANSBORO CAT MEETING #2 DISCUSSION

Warning System Notifications

- Eliminated pursuing warning system notifications since there are several notification systems readily available to all residents.

Other Projects Mentioned

- The CAT eliminated Project #8, construction of a new emergency operations center to house police and fire departments, as it would be expensive. Also eliminated Project #9, establish an Emergency Management Plan to include a system of pumps to remove water once a specified water level above the roads was reached. Given that Swansboro is surrounded on three sides by water, there is no feasible place to pump water and the system would require permanent generators with a reliable power source.

Draft Refined Projects List

1. Stormwater mapping with fine-tuned floodplain mapping
 - a. Halls Creek
 - b. Hawkins Creek
2. Wetland restoration plan
3. Public Engagement Plan
4. NC 24 Culvert – will need to be in coordination with NCDOT.

3. Wrap Up

Final Deliverable Outline

- The overall report will highlight Swansboro’s vision and goals, based on CAT meeting discussions, and stakeholder engagement, and the Project Portfolio. It will summarize previous plan efforts and recommendations as needed.
- The CAT was encouraged to continue to review the final list of projects and provide additional input to Beth.
- The goal is for the report to be completed by mid to late April.
- Phase 3 will begin in late March and will accept applications until late May.

Action Items and Next Steps

- Reorder project list and send back for final comment.
- Finalize the report.

Attendees

| Name | ✓ | Organization | Email |
|-----------------|---|-----------------------------------|--|
| Beth Smyre | ✓ | Dewberry | esmyre@dewberry.com |
| Mackenzie Todd | | NC Division of Coastal Management | Mackenzie.Todd@ncdenr.gov |
| Alissa Fender | ✓ | Town Clerk, Town of Swansboro | afender@ci.swansboro.nc.us |
| Jennifer Ansell | ✓ | Planner, Town of Swansboro | jansell@ci.swansboro.nc.us |



SWANSBORO CAT MEETING #2 DISCUSSION

| | | | |
|------------------|---|--|--|
| Paula Webb | | Town Manager, Town of Swansboro | pwebb@ci.swansboro.nc.us |
| Frank Tursi | ✓ | Mayor Pro Tem, Board of Commissioners | ftursi@ci.swansboro.nc.us |
| Scott Chadwick | | Planning Board Chairperson | mayorsea@gmail.com |
| Christina Ramsey | ✓ | Planning Board Vice-chairperson | cr93847@aol.com |
| John Freshwater | ✓ | Engineer, Flood Management Appeals Board Chair | johnfh2o@gmail.com |



Resilient Coastal Communities Program

Swansboro- Community Action Team Meeting #2

March 21, 2022

1

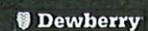
Agenda

- Welcome and Meeting Objectives
- Public Engagement Summary
- Draft Project Portfolio
- Wrap-up: Final Deliverable Outline, Action Items, Next Steps



2

Swansboro CAT Meeting #2 March 21, 2022



2

Public Engagement Summary

- 89 online survey responses (6 hard copy surveys)
- Flooding listed as main concern



3

Public Engagement Summary

- Project preferences: (all projects received support)
 - stormwater mapping, NC 24 culvert re-sizing
- Write-in project suggestions:
 - Hawkins Creek restoration
 - stream/creek/drainage clean-up (volunteers)
 - limiting impervious cover
 - warning system notifications
 - wetland preservation/restoration
 - sewer system access

4

Project Portfolio

- Projects listed that should be removed?
- Projects that should be added?
- Project priorities? Candidate for RCCP Phase 3?
- Details on project scope, estimated cost, completion timeline?

5

Swansboro CAT Meeting #2 March 21, 2022



5

Final Deliverable Outline

- Vision and Goals
- Community Action Team
- Stakeholder Engagement Strategy/Summary
- Existing Local/Regional Plans
- Risk and Vulnerability Assessment
- Project Portfolio
- Conclusions/Lessons Learned

6

Swansboro CAT Meeting #2 March 21, 2022

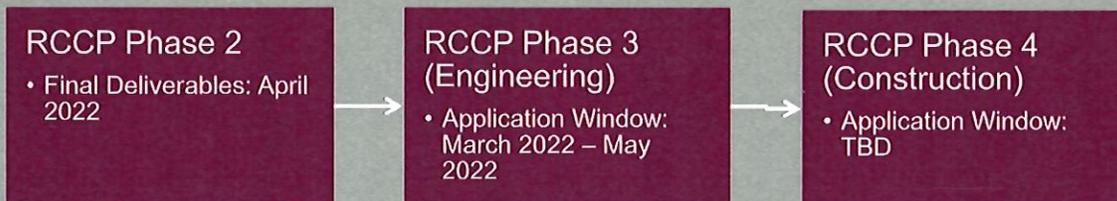


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Next Steps

- Action Items

- CAT: Provide feedback on today's discussion/proposed projects
- Dewberry: Develop final project portfolio and report for CAT review



7

Thank you!

Beth Smyre, PE 919-424-3771
esmyre@dewberry.com

8

APPENDIX B

PUBLIC ENGAGEMENT MATERIALS AND SUMMARY RESULTS

MAY 2022



SWANSBORO PUBLIC MEETING DISCUSSION

DATE: February 23, 2022

TIME: 4:00 p.m.-6:00 p.m.

LOCATION: Swansboro Town Hall

PURPOSE: Swansboro Public Meeting Summary

SUMMARY DATE: March 22, 2022

A Public Meeting for the Resilient Coastal Communities Program (RCCP) was held on February 23, 2022. The purpose of the meeting was to get the community's feedback on the Town's perceived vulnerabilities and the proposed projects to address these concerns.

The meeting had five stations. The first was a sign-in station with a welcome poster that described the purpose of the meeting. The second station used two posters: the first listed project recommendations from previous planning efforts to address coastal hazards, and the second asked for opinions on those recommendations or for additional recommendations.

The third station had a map of the Town and instructions for respondents to use stickers to indicate areas where they have witnessed or knew of flooding or other coastal hazards (wind damage, erosion, etc.). The fourth station had three elements: two posters with eight images (four typical nature-based solutions and four built infrastructure solutions) of potential mitigation measures along with a map of Swansboro. The two posters asked respondents to indicate with a sticker their top four solution preferences for addressing flooding and other coastal hazards. On the map, respondents would use sticky notes to indicate recommended locations for future projects, the need the project would address, and the preferred type of project (nature-based or built infrastructure). Finally, the fifth station had surveys for the respondents to complete or a QR Code they could scan to take the survey online.

Attendance

A total of six people signed into the in-person public meeting and seven hard copy responses were received.

A total of 89 completed online surveys were received. In all, there were 96 responses to the survey.

Interactive Station Results

Locations of concern:

- Flooding at Water and Front Streets
- Flooding at Bicentennial Park
- Flooding at the end of Drudy Lane
- Sewer pump station off Front Street
- Sewer pump station off Shore Drive
- West Shore Drive off Spring Street
- Flooding at Bonita Lane
- Flooding due to runoff at the stream crossing under NC 24 near Hokum Lane
- Stormwater flooding at the corner of the Main Street Extension and Mt Pleasant Road
- Stormwater flooding on Dr. Corbett Road in multiple places
- Flooding on Old Hammocks Road near NC 24
- Flooding at multiple points on Main Street Extension, especially in the neighborhood with Ryan Glenn Drive
- Flooding on Main Street Extension between Swansboro Loop Road and Mt Pleasant Road

- Flooding on Swansboro Loop Road at the intersection with Moss Lane
- Wetland complex to protect near the corner of Hamrick Road and Main Street Extension
- Stormwater flooding at the end of Patriot's Point Lane
- Flooding at the end of Low County Lane
- Flooding from runoff at the end of Fort Sumner Way
- Flooding on Spoonbill Court
- Flooding at the end of Little Egret Lane
- Flooding from Queen's Creek in the area between Pine Bluff Road and Bluff View Lane
- Flooding near the intersection of Old Hammocks Road and Westwood Court
- Flooding on Hammock's Beach Road near Sand Grove Drive

Preferred Project Types:

| | |
|--|------|
| Emergency Sheltering Improvements | I |
| Installation of Green Street Designs | IIII |
| Resizing of Culverts to prevent roadway flooding | III |
| Raising or Acquiring Homes | |
| Upgrade to the Power Grid | II |
| Stream Restoration | II |
| Shellfish Reefs/Oyster Restoration | |
| Living Shoreline | IIII |
| Forest Restoration, Enhancement or Creation | |
| Wetland Restoration, Enhancement, or Creation | IIII |

Locations and ideas for projects:

- Road/stream improvements where NC 24 goes over the creek near Lisk Drive
- Living shoreline along causeway
- Green Street Designs in the downtown area near the water
- Larger culvert under Hammocks Beach Road near Sand Grove Drive
- Protect what is left of the wetlands off of Main Street Extension, behind the neighborhood on Ryan Glenn Drive
- Limit land disturbance in the ETJ area between Swansboro Loop Road and Mt. Pleasant Road
- General incorporation of LID into land development ordinances to reduce stormwater volume

Write-in project ideas:

- Maintain retention ponds
- Stricter zoning requirements
- Clean-out and maintenance of ditches
- Stormwater mapping
- Mapping of flooding under different sea level rise conditions
- Upgrade facilities
- Restore streams and wetlands

Survey Results

1. Coastal hazards of concern

What type of coastal or climate hazards concern you the most in your community?

- Flooding, shoreline/beach erosion, extreme heat, hurricanes and tropical storms, wildfires, and severe weather were all noted as concerns.

- Of the hazards listed, hurricanes and tropical storms and flooding are the largest concerns, with 84% and 72% of responses, respectively.
- Responses also included write-in answers such as unchecked development, sunny day flooding, and water pollution from septic tank effluent.

What kind of flooding concerns you most?

- Of the flooding types listed on the survey, respondents were mostly concerned about flooding from storm surge (48%) and stormwater/rainfall (32%).
- All types of flooding were chosen, which indicates that all types of flooding are a concern to the respondents.

2. Property damage

Have you ever witnessed property or infrastructure damage due to coastal or climate hazards in your community?

- Over 90% of respondents answered yes.

What type of damage did you witness?

- The respondents who answered this question indicated that they had seen property damage, utility disruption, injury and/or concern for personal health, damage to transportation systems, and limited access to services.
- The most common responses were property damage (90%), utility disruption (77%), and damage to transportation systems (60%).
- One write-in response indicated that they have witnessed damage to water quality from runoff.

3. Resilience projects to be implemented

Where do you think the Town of Swansboro should implement resilience projects?

- Respondents indicated a desire for stricter guidelines on development within the Town
- Reengineering of Front and Water Streets.
- Town wide electric grid.
- Ditches on Deer Run.
- Two projects for Hawkins Creek were mentioned, one for stream restoration and another to address Highway 24 at the origin of the Creek where erosion of the roadway has polluted it.
- The back of Kelly Circle near the reservoir pond has stormwater drainage issues.
- Erosion in the ditch at the intersection of Hammocks Beach Road and Schooner Drive.
- Larger culvert under Hammocks Beach Road.
- Sinkholes on private property.
- More natural barriers around the Town of Swansboro shoreline
- Restoration of Ward Shore Park
- Halls Creek improvement to not affect property owner rights for those adjacent to the creek.

What are the top five project types that would make your community more resilient to storms?

- Only 15 of the 96 respondents answered this question.
- All of the options listed received the same level of support from the people who responded to the question.
- 14 of 15 respondents indicated that nature-based solutions would make the community more resilient to storms.

The Town of Swansboro is considering several projects to increase resilience. Please rank the top three projects that would generate the greatest benefit to the community.

- All of the listed projects received some level of support.
- Power line upgrades (78%), stormwater mapping (60%), and resizing the culvert under NC 24 (57%) were the most popular projects. A number of write in responses indicated a support for restoration of Hawkins Creek.
- Other write in responses mentioned:
 - o Stream, creek, and drainage cleanups by volunteers.
 - o Limited impervious cover in the Town's watersheds.
 - o Use of early warning system notifications to ensure that the public is aware of upcoming possibly dangerous events.
 - o Plant palm trees.
 - o Wetland preservation and restoration.
 - o Provide sewer to all homes in the Town boundaries to limit septic system overflow during flood events.
 - o Historic preservation
 - o Clean out clogged storm drains
 - o Move powerlines underground

What options would you support for paying for these projects?

- All options were indicated by respondents.
- Nearly 95% of respondents preferred state or federal funding.

The Town of Swansboro is gathering public feedback on proposed options to improve the Town's resilience to coastal hazards. Swansboro received a grant under North Carolina's [Resilient Coastal Communities Program](#) to develop a list of projects to address critical Town infrastructure needs, and public input is a key part of the process to determine what improvements are most important to the community.

Thank you for your feedback!

1. What type of coastal or climate hazards concern you the most in your community? (Select all that apply.)

| | | | |
|--------------------------|--------------------------------|--------------------------|--|
| <input type="checkbox"/> | Flooding | <input type="checkbox"/> | Severe Weather (Thunderstorm Winds, Lightning, & Hail) |
| <input type="checkbox"/> | Shoreline/Beach Erosion | <input type="checkbox"/> | Wildfires |
| <input type="checkbox"/> | Extreme Heat | <input type="checkbox"/> | Other: |
| <input type="checkbox"/> | Hurricanes and Tropical Storms | <input type="checkbox"/> | |

2. If you selected flooding, what kind of flooding concerns you the most? Rank these options from **least (1)** to **most (4)** concerning.

| | | | |
|--------------------------|--|--------------------------|--|
| <input type="checkbox"/> | Tidal (from king tides, nor'easters, etc.) | <input type="checkbox"/> | Stormwater/Rainfall |
| <input type="checkbox"/> | Storm surge (from hurricanes, tropical storms, etc.) | <input type="checkbox"/> | Riverine (rising river water levels, etc.) |

3. Have you ever witnessed property or infrastructure damage due to coastal or climate hazards in your community? (Circle one: **YES/NO**) If **Yes**, what type of damage did you witness?

| | | | |
|--------------------------|--|--------------------------|--|
| <input type="checkbox"/> | Property damage, including homes, businesses, or personal possessions (including vehicles) | <input type="checkbox"/> | Damage or disruption to transportation systems (e.g., flooded roadways, transportation delays) |
| <input type="checkbox"/> | Utility disruption, including power loss or lack of access to clean drinking water | <input type="checkbox"/> | Limited access to services, such as healthcare, education, or government offices |
| <input type="checkbox"/> | Injury, illness, and/or concerns for personal health and safety | <input type="checkbox"/> | Other: |

4. Where do you think the Town of Swansboro should implement resilience projects to minimize future damage from storms, floods, and other coastal hazards? What type of projects should the Town consider?

Please send your comments to:

Beth Smyre, Dewberry, 2610 Wycliff Road, Suite 410, Raleigh NC 27607
 or esmyre@dewberry.com

5. Please select the **top five project types** that you think would make your community more resilient to storms, floods, and other coastal hazards. (Check up to **5** options.)

| | | | |
|--|--|--|---|
| | Nature-based solutions, such as living shorelines or habitat restoration | | Elevations of homes, businesses, and public infrastructure, including roads |
| | Acquisition and conservation of flood-prone land | | Utility upgrades for community facilities, such as increased generator capacity for hospitals |
| | Increased stormwater drainage capacity | | Resilience planning, policies, and development standards |
| | Structural protection, such as floodwalls or tide gates | | Public education and outreach |
| | Other: | | |

6. The Town of Swansboro is considering several projects to increase its resilience to coastal and climate hazards. Based on this list, please rank the three projects you think would generate the greatest benefit to the community (1 = greatest benefit).

| | | | |
|--|--|--|--|
| | Stormwater Mapping: Map all Town stormwater drainage and treatment facilities to determine system improvement needs. | | Power Line Upgrades: Work with electric providers to reinforce or upgrade electric lines to mitigate potential damage during storms or other hazard events. |
| | Emergency Facility Generators: Work with Onslow County to provide additional generators at shelters and emergency facilities. | | Halls Creek Stream Restoration: Implement restoration projects to improve water quality and related ecosystem services along Halls Creek. |
| | Sheltering Needs: Re-evaluate sheltering and evacuation plans to improve hurricane response, and coordinate extra care for nursing homes. | | Resize NC 24 Culvert: Work with NCDOT to increase the capacity of the culvert underneath NC 24 and improve roadway drainage facilities. |
| | NOAA Tidal Gauge: Install a tidal gauge at the local harbor to provide the community with real-time water level data. | | |

7. What options would you support for paying for these projects? (Select all that apply.)

| | | | |
|--|--|--|-----------------------------|
| | Local taxes or levies | | Loans |
| | State or federal funding (grant funds, budget allocations, etc.) | | Public-private partnerships |
| | Local bonds | | Other: |

Please send your comments to:

Beth Smyre, Dewberry, 2610 Wycliff Road, Suite 410, Raleigh NC 27607
 or esmyre@dewberry.com

ONLINE PUBLIC ENGAGEMENT SURVEY SCREENSHOTS



SWANSBORO
FRIENDLY CITY BY THE SEA *North Carolina*

The Town of Swansboro is gathering public feedback on proposed options to improve the Town's resilience to coastal hazards.

Swansboro received a grant under North Carolina's [Resilient Coastal Communities Program](#) to develop a list of projects to address critical Town infrastructure needs. Public input is a key part of the process to determine what improvements are most important to the community.

This survey should take roughly 10 minutes to complete. Thank you for your feedback!

Page 1 of 4

Hazard Perceptions and Experiences
The following section includes questions about which hazards you believe most affect your community and your experiences with hazards in the past.

What type of coastal or climate hazards concern you the most in your community?*
Select all that apply.

- Flooding
- Shoreline or Beach Erosion
- Extreme Heat
- Hurricanes and Tropical Storms
- Severe Weather (including thunderstorm winds, lightning, & hail)
- Wildfires
- Other

What kind of flooding concerns you the most?*
Please rank these options from least (1) to most (4) concerning by dragging the boxes in order.

- Tidal (from king tides, neap tides, etc.)
- Riverine
- Storm Surge (from hurricanes, tropical storms, etc.)
- Stormwater or Rainfall

Have you ever witnessed property or infrastructure damage due to coastal or climate hazards in your community?*

- Yes
- No

Page 2 of 4

ONLINE PUBLIC ENGAGEMENT SURVEY SCREENSHOTS

Resilience Project Identification
The following section aims to understand which types of projects you believe would benefit the Town of Swansboro the most.

Optional: Identify a location where you believe the Town of Swansboro should implement a resilience project to minimize future damage from storms, floods, and other coastal hazards.

Place a point on the map by zooming and clicking on the map, or entering an address into the search bar.



Optional: What hazard affects this location?

| | | |
|--|---|------------------------------------|
| <input type="radio"/> Flooding | <input type="radio"/> Shoreline or Beach Erosion | <input type="radio"/> Extreme Heat |
| <input type="radio"/> Hurricanes and Tropical Storms | <input type="radio"/> Severe Weather (including thunderstorm winds, lightning & hail) | <input type="radio"/> Wildfires |
| <input type="radio"/> Other | | |

Optional: Please provide a description of the project you think this location would benefit from.

The Town of Swansboro is considering several projects to increase its resilience to coastal and climate hazards. Based on this list, please select the three projects you think would generate the greatest benefits to the community.¹

- Stormwater Mapping: Map all Town stormwater drainage and treatment facilities to determine system improvement needs.
- Emergency Facility Generators: Work with Onslow County to provide additional generators at shelters and emergency facilities.
- Sheltering Needs: Re-evaluate sheltering and evacuation plans to improve hurricane response, and coordinate extra care for nursing homes.
- NOAA Tidal Gauge: Install a tidal gauge at the local harbor to provide the community with real-time water level data.
- Power Line Upgrades: Work with electric providers to reinforce or upgrade electric lines to mitigate potential damage during storms or other hazard events.
- Halls Creek Stream Restoration: Implement restoration projects to improve water quality and related ecosystem services along Halls Creek.
- NC 24 Culvert: Work with NCDOT to increase the capacity of culverts underneath NC 24 and improve roadway drainage facilities.

Optional: Do you have concerns with any of the projects previously listed, or other resilience strategies that may be implemented?

Optional: Besides the projects previously listed, are there other resilience strategies the Town of Swansboro should consider?

ONLINE PUBLIC ENGAGEMENT SURVEY SCREENSHOTS

What options would you support for paying for these projects?*
Select all that apply.

- Local taxes or levies
- State or federal funding (grant funds, budget allocations, etc.)
- Local bonds
- Loans
- Public-private partnerships
- Other

Page 3 of 4

Residency & Demographics
The following section includes questions about your relationship to the Town of Swansboro, as well as optional demographic questions.

Which best describes you?*

Full-time resident

Part-time resident

Work or own business in the Town of Swansboro

Represent a jurisdiction, agency, or organization with vested interest in the Town of Swansboro

Other

What is your zip code?*

Optional: Select your race or ethnicity.
Select all that apply.

American Indian or Alaska Native Asian

Black or African American Native Hawaiian or Pacific Islander

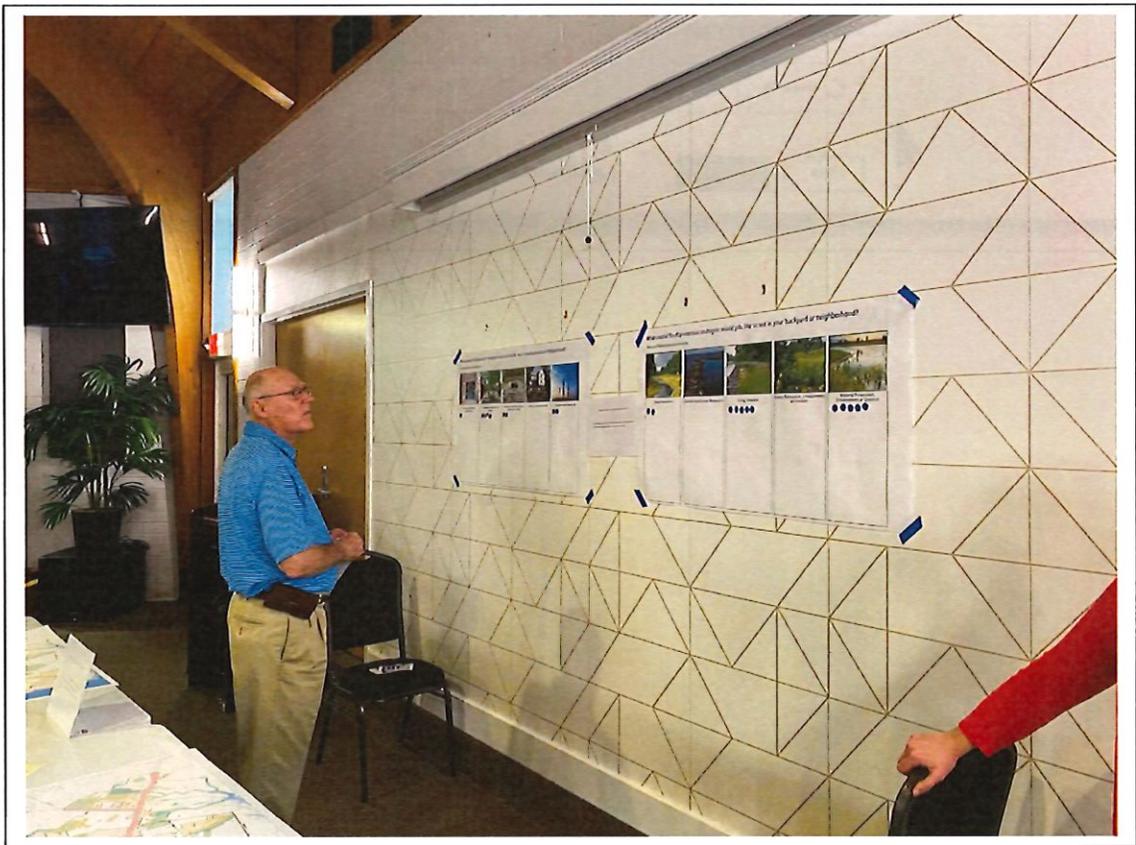
White Hispanic/Latino

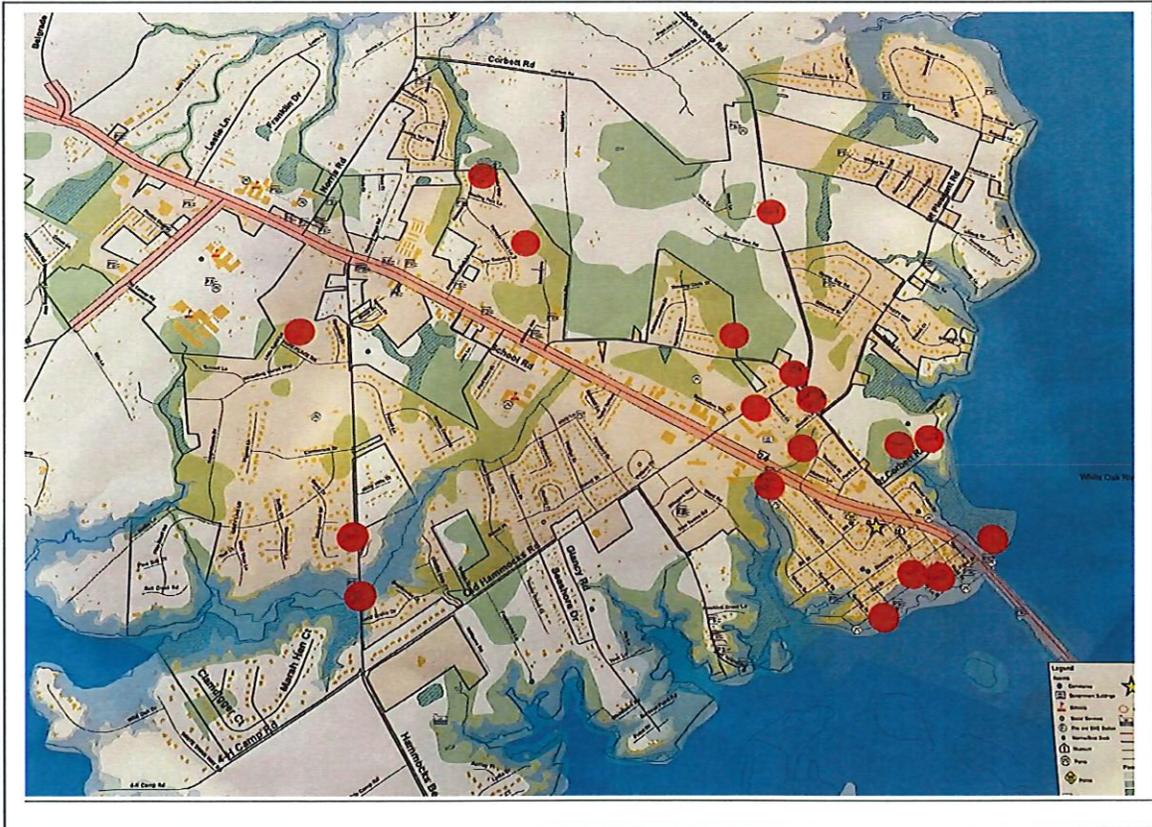
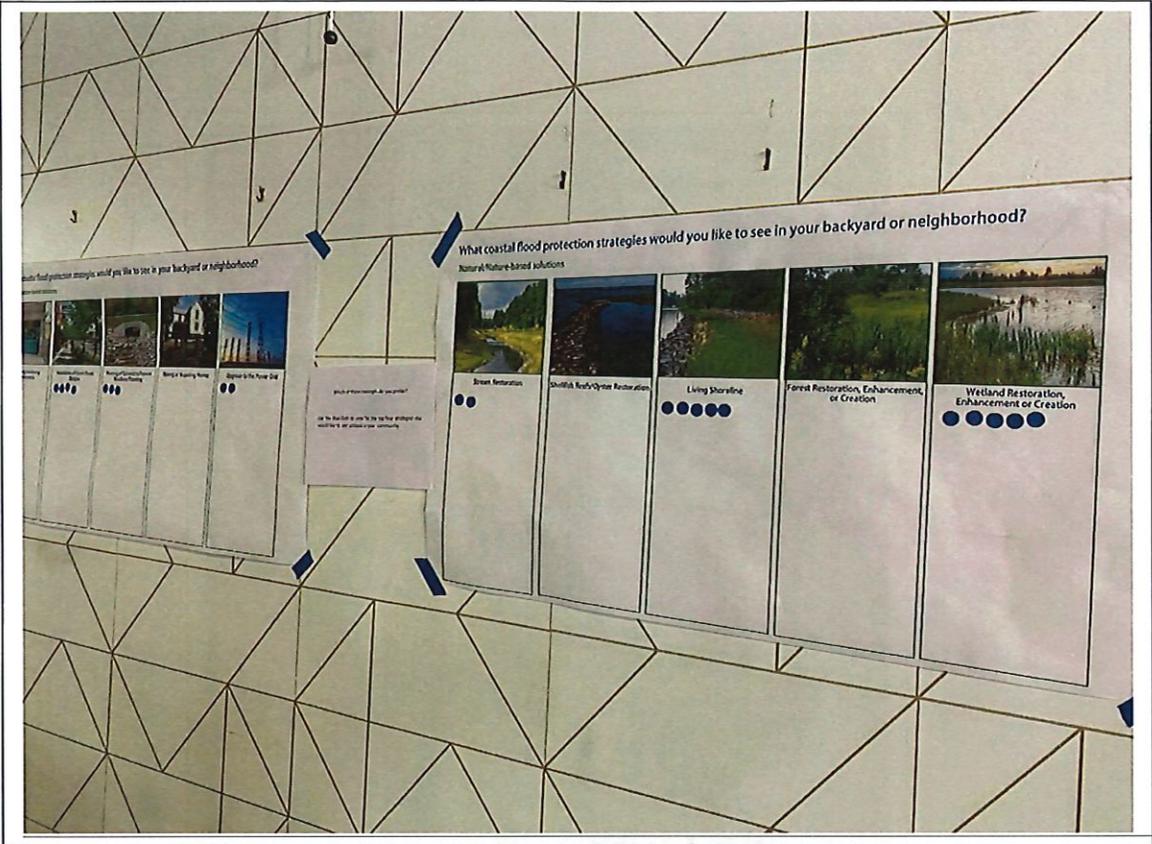
Other

Optional: Select your age bracket.

Under 18 18 to 39 40 to 65 Over 65

Page 4 of 4









Legend

- Points of Flooding Concern
- Major Highways
- Major Roads
- Minor Roads
- Streams
- ▨ NWI Wetlands
- ▨ Gateway Corridor
- ▨ Conservation Priority Areas
- ▨ Vulnerable Areas from Meeting



Swansboro - Resilient Coastal Communities Program



APPENDIX C

COMMUNITY PROJECT PORTFOLIO

MAY 2022



COMMUNITY PROJECT PORTFOLIO

A critical component of the Resilient Coastal Communities Program is the identification and prioritization of a series of projects that are intended to address community vulnerabilities to coastal hazards. The enclosed list of projects, which includes infrastructure improvements (structural, non-structural, natural or nature-based solutions, or hybrid options), policy and planning efforts, and asset management actions, has been synthesized from previous local and regional planning efforts, input from the Community Action Team, and feedback from the public.

Included in this Appendix is a summary list of the proposed projects, followed by an individual sheet for each project. Each project sheet summarizes the factors that were considered in the project identification and prioritization process, including:

| | |
|--|---|
|  <p>LOCATION</p> | <p>The geographic location and scope of the project.</p> |
|  <p>HAZARD(S) ADDRESSED</p> | <p>A summary of the community-specific coastal hazards that impact the project location. This can include flooding, storm surge, wind damage, or other coastal hazards.</p> |
|  <p>TYPE OF SOLUTION</p> | <p>A description of whether the project represents infrastructure improvements, policy and planning effort, or an asset management/mapping program.</p> <p> A symbol is used to denote whether the project includes a natural or nature-based solution (NNBS) component.</p> |
|  <p>PROJECT ESTIMATED COST</p> | <p>A qualitative analysis of the total project cost, including initial engineering and construction as well as future maintenance (as available). Project cost is shown symbolically.</p> |
|  <p>POTENTIAL FUNDING SOURCES</p> | <p>Recommendations on potential sources to construct or otherwise implement the project, including the Resilient Coastal Communities Program and other federal and state funding sources.</p> |
|  <p>ESTIMATED PROJECT TIMELINE</p> | <p>An estimated timeline to complete the project, including notes on any expected delays in the timeline.</p> |
|  <p>PRIORITY RATING</p> | <p>A qualitative ranking of the project's priority in the context of the entire Project Portfolio. Rankings of High, Medium, or Low are provided for each project.</p> |

Each project sheet includes a proposed map of the project area and photos of potential sites to be addressed, where available.

Proposed Project Summary

| TOWN OF SWANSBORO | | | | | | | RESILIENT COASTAL COMMUNITIES PROGRAM PROJECT PORTFOLIO | | | | UPDATED MAY 2022 |
|----------------------|--|---|--|--|-----------------------------------|--|---|--|---|--|------------------|
| Project (Priority #) | Project Title | Description | Location | Anticipated Cost | Funding Status | Needs Addressed | NNBS Opportunity | Source Document | Timeline | Notes/Project Status | |
| 1 (Priority 1) | Stormwater Mapping | Map all Town stormwater drainage and treatment facilities, including underground drains. Use this mapping to determine system improvement needs. Mapping effort should incorporate available data on sea level rise scenarios and floodplain locations. | Townwide | Expected to be low cost, depending upon level of survey effort. | Not currently funded | Stormwater Management, Flooding | | Swansboro CAT; Included in public survey | No proposed timeframe; may take between six months to a year to complete. | Identified as top priority in CAT Meetings. Received most votes in the online public survey. | |
| 2 (Priority 1A) | Halls Creek Stream Restoration | Implement restoration projects to improve water quality and related ecosystem services along Halls Creek. | Halls Creek | Dependent upon extent of stream restoration needed. | Not currently funded | Stormwater Management, Flooding | Yes | Swansboro CAT; Included in public survey | Dependent upon the extent and scope of restoration efforts. | Mapping developed in Project #1 needed for this project. | |
| 3 (Priority 1B) | Hawkins Creek Stream Restoration | Implement restoration projects to improve water quality and related ecosystem services along Hawkins Creek. | Hawkins Creek | Dependent upon extent of stream restoration needed. | Not currently funded | Stormwater Management, Flooding | Yes | Swansboro CAT; Public input | Dependent upon the extent and scope of restoration efforts. | Included as write-in response to online survey. Mapping developed in Project #1 needed for this project. | |
| 4 | Water Street Rehabilitation | Repair and replace stormwater infrastructure prior to resurfacing Water Street in downtown Swansboro. Project includes use of permeable pavers to facilitate stormwater runoff. | Water Street from West Broad Street to Church Street | Estimated cost of \$215,000 (2018 estimate). | Planned, but not currently funded | Stormwater Management, flooding | Yes | Swansboro staff input | Intended for implementation as soon as funding available; estimated completion within 1 year. | Engineering plans have been prepared for the project. | |
| 5 | Townwide Wetland Restoration Plan | Develop a town-wide wetland restoration plan, including the identification of critical wetland systems and recommendations on restoration and preservation actions to protect these systems. Include discussion about working with private property owners on wetland restoration projects. | Townwide | Expected to be low-medium cost, dependent upon level of detail to be provided in restoration plan. | Not currently funded | Stormwater Management, Flooding | Yes | Swansboro CAT | No proposed timeframe. | Build upon the 2006 Hawkins Creek Watershed Protection and Restoration Planning Study. | |
| 6 | Public Engagement and Education Campaign | Engage and educate Town of Swansboro residents and business owners on the impacts of sea level rise and other climate hazards. This would be a continuous program to involve Town residents in the decision-making process for determining future resilience actions. | Townwide | Limited cost, primarily staff time and publication/ distribution of materials. | Not currently funded | Stormwater Management, Flooding, Infrastructure Deficiency or Capacity, Climate Change | | Swansboro CAT | Intended as an ongoing program as funding is available. | | |
| 7 | Resize NC 24 Culvert | Work with NCDOT to increase the capacity of the culvert underneath NC 24 and improve roadway drainage facilities. | NC 24 | Higher cost expected, dependent upon culvert sizing and extent of roadway repair required. | Not currently funded | Stormwater Management, Flooding | | Included in public survey | No proposed timeframe. | Over half of the respondents to online survey listed this option. Requires NCDOT (owner) participation. | |

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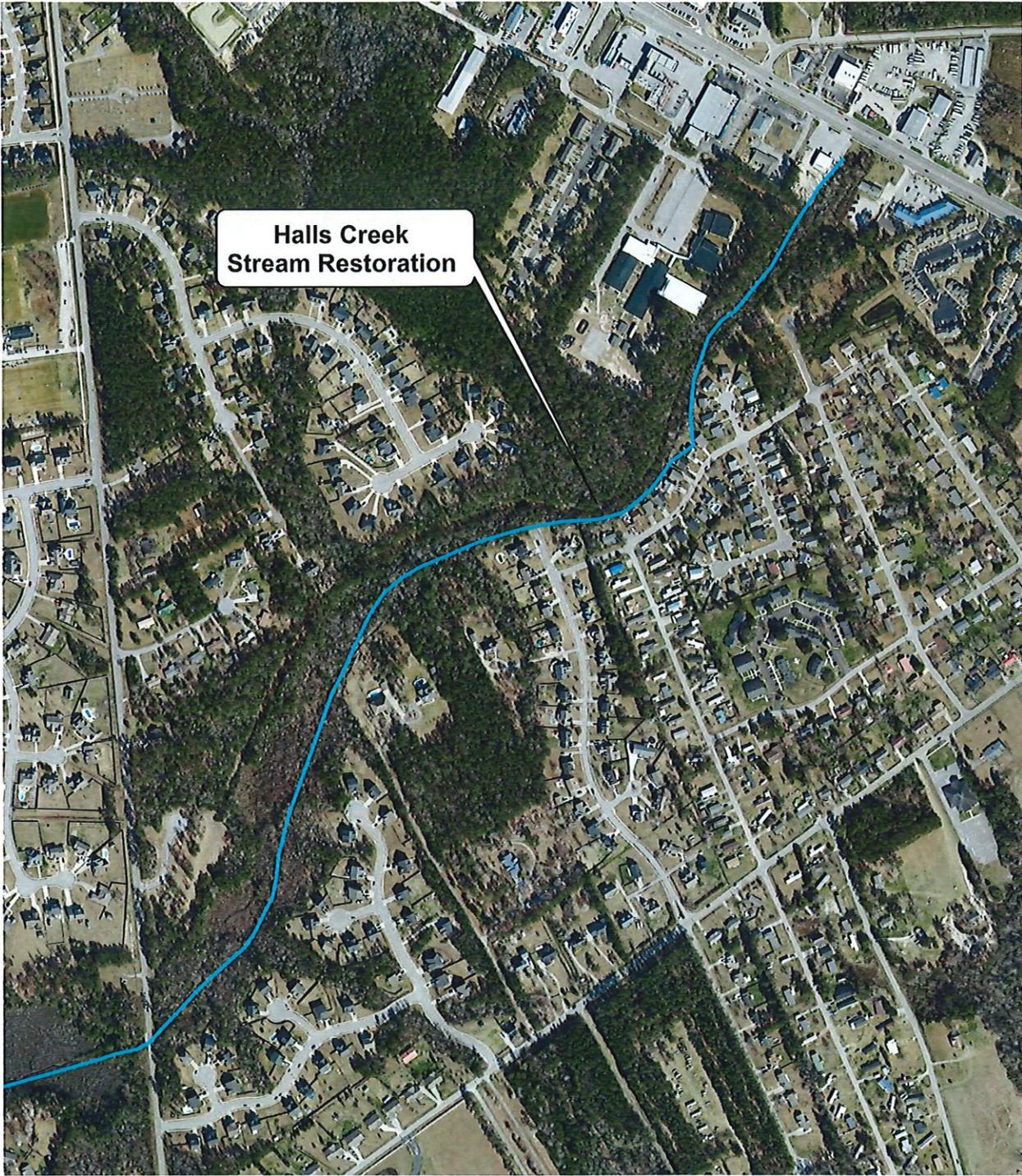
| 1 STORMWATER MAPPING | |
|---|--|
| PROJECT DESCRIPTION | Map all Town stormwater drainage and treatment facilities, including underground drains. Use this mapping to determine system improvement needs. Mapping effort should incorporate available data on sea level rise scenarios and floodplain locations. |
| LOCATION | Townwide |
| HAZARD(S) ADDRESSED BY PROJECT | Stormwater Management/Flooding, Infrastructure Deficiency/Capacity. The project is intended to identify and address infrastructure deficiency issues and to enable the Town to recover as efficiently as possible from storms and other disasters. |
| TYPE OF SOLUTION | Mapping effort that is intended to lead to future infrastructure improvements. |
| PROJECT ESTIMATED COST | Mapping effort is expected to be low cost, depending upon the level of survey effort. Cost Level: \$ |
| POTENTIAL IMPLEMENTATION FUNDING SOURCES | This effort is not currently funded or listed on the Town CIP. Potential funding sources: Federal sources may include FEMA – BRIC, EDA - Investment for Public Works, National Wildlife Federation, and Economic Development Facilities. State sources may include the Rural Grant Programs, NCDEQ Clean Water State Revolving Fund, NCDEQ American Rescue Plan Act (ARPA), NCDEQ Asset Inventory and Assessment Grant Program, and Golden Leaf Foundation Flood Mitigation Program . |
| PROJECT ESTIMATED TIMELINE | There is currently no proposed timeframe for this plan, but it has been identified as the Town’s top priority, as it will aid in the identification of future infrastructure improvements. This effort is anticipated to take between 3 and 9 months to complete upon receipt of project funding. |
| PRIORITY RATING | High. Project has been identified as the top priority under the Resilient Coastal Communities Program Phase 2. |

1 STORMWATER MAPPING



| 2 HALLS CREEK STREAM RESTORATION | |
|--|--|
| PROJECT DESCRIPTION | Implement restoration projects to improve water quality and related ecosystem services along Halls Creek. |
| LOCATION | Halls Creek: the specific section of Halls Creek to be determined through further analysis. |
| HAZARD(S) ADDRESSED BY PROJECT | Stormwater Management/ Flooding. The project is intended to address regional flooding impacts and water quality concerns by restoring sections of Halls Creek. |
| TYPE OF SOLUTION  | Waters of the U.S. restoration project/ecosystem renewal. |
| PROJECT ESTIMATED COST | Cost dependent upon the stream length to be restored and the scope of the restoration. Cost Level: \$\$ |
| POTENTIAL IMPLEMENTATION FUNDING SOURCES | The project is not currently funded or listed on the County CIP. Project is eligible for funding under Phases 3 and 4 of the Resilient Coastal Communities Program. Potential funding sources: Federal sources may include NOAA - National Coastal Resilience Fund (NCRF), USFWS – National Coastal Resilience Fund, National Wildlife Federation, and DOI National Coastal Wetlands Conservation. State sources may include NCDEQ Clean Water State Revolving Fund, NCDEQ Drinking Water State Revolving Fund, and NCDWR – Water Resources Development Project Grants. |
| PROJECT ESTIMATED TIMELINE | Overall timeline dependent upon the stream length to be restored and the scope of effort. Design and construction timeline expected to vary between 6 months and 2 years upon receipt of project funding. Further engineering analysis and design is needed to identify the appropriate sections for restoration. Future monitoring may be required. |
| PRIORITY RATING | High |

2 HALLS CREEK STREAM RESTORATION



| 3 HAWKINS CREEK STREAM RESTORATION | |
|--|--|
| PROJECT DESCRIPTION | Implement restoration projects to improve water quality and related ecosystem services along Hawkins Creek. |
| LOCATION | Hawkins Creek; the specific section of Hawkins Creeks to be determined through further analysis. |
| HAZARD(S) ADDRESSED BY PROJECT | Stormwater Management/ Flooding. The project is intended to address regional flooding impacts and water quality concerns by restoring sections of Hawkins Creek. |
| TYPE OF SOLUTION  | Waters of the U.S. restoration project/ecosystem renewal. |
| PROJECT ESTIMATED COST | Cost dependent upon the stream length to be restored and the scope of the restoration. Cost Level: \$\$ |
| POTENTIAL IMPLEMENTATION FUNDING SOURCES | The project is not currently funded or listed on the County CIP. Project is eligible for funding under Phases 3 and 4 of the Resilient Coastal Communities Program. Potential funding sources: Federal sources may include NOAA - National Coastal Resilience Fund (NCRF), USFWS – National Coastal Resilience Fund, National Wildlife Federation, and DOI National Coastal Wetlands Conservation. State sources may include NCDEQ Clean Water State Revolving Fund, NCDEQ Drinking Water State Revolving Fund, and NCDWR – Water Resources Development Project Grants. |
| PROJECT ESTIMATED TIMELINE | Overall timeline dependent upon the stream length to be restored and the scope of effort. Design and construction timeline expected to vary between 6 months and 2 years upon receipt of project funding. Further engineering analysis and design is needed to identify the appropriate sections for restoration. Future monitoring may be required. |
| PRIORITY RATING | High |

3 HAWKINS CREEK STREAM RESTORATION



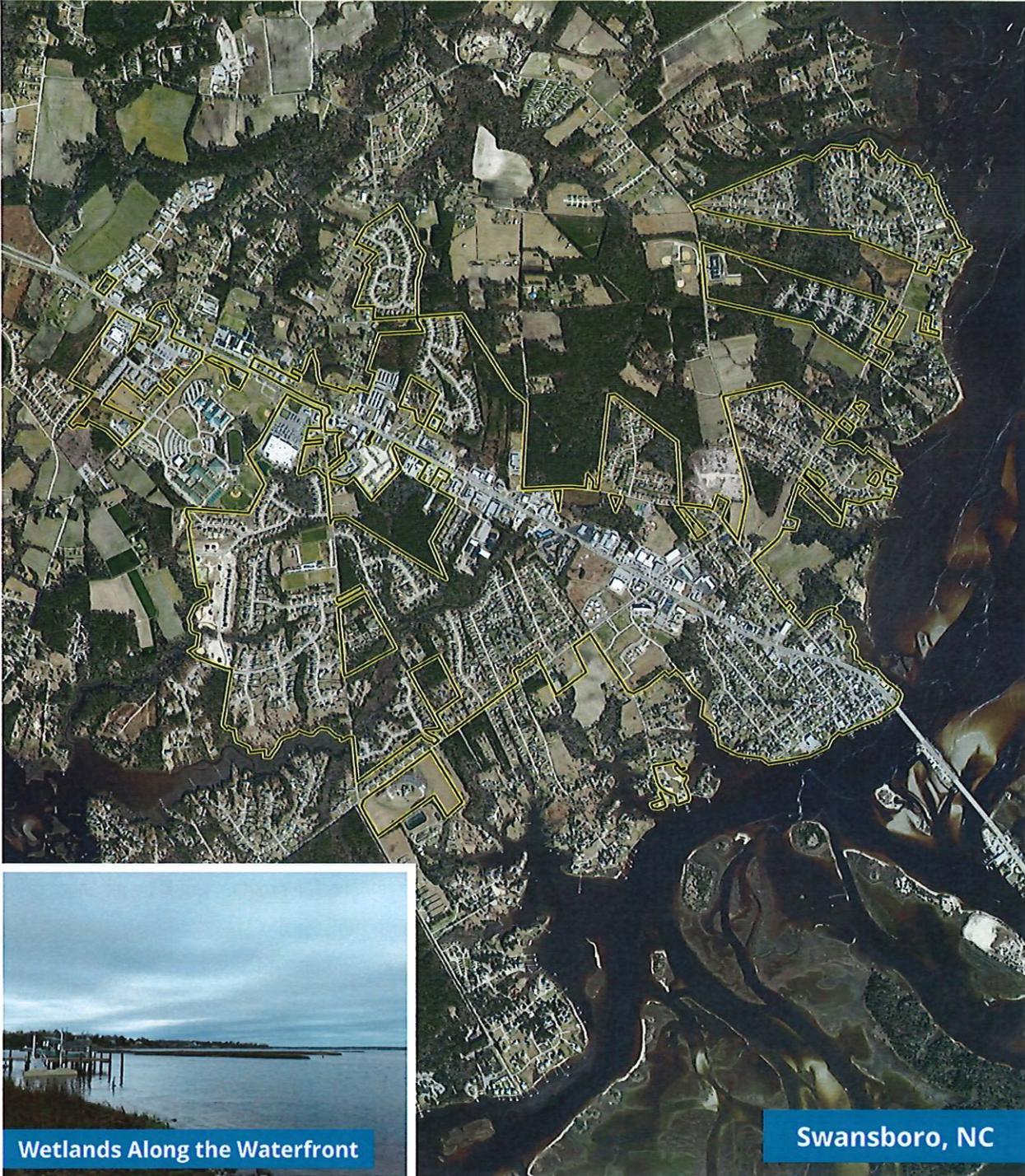
| 4 WATER STREET REHABILITATION | |
|---|--|
| PROJECT DESCRIPTION | Repair and replace stormwater infrastructure prior to resurfacing Water Street in downtown Swansboro. Project includes use of permeable pavers to facilitate stormwater runoff. |
| LOCATION | Water Street from West Broad Street to Church Street |
| HAZARD(S) ADDRESSED BY PROJECT | Stormwater Management/Flooding, Infrastructure Deficiency/ Capacity. Water Street is subject to frequent flooding from heavy rainfall and stormwater infrastructure deficiencies. |
| TYPE OF SOLUTION |  <p>Infrastructure Improvements – Construction/replacement of stormwater infrastructure along Water Street as part of the proposed removal/replacement of the asphalt paving. NNBS solutions, such as gravel parking, gravel driveway connections, and permeable pavers, will be used where feasible.</p> |
| PROJECT ESTIMATED COST | <p>Construction plans have been completed. In 2018, final construction costs were estimated to be \$215,000.</p> <p>Cost Level: \$\$</p> |
| POTENTIAL IMPLEMENTATION FUNDING SOURCES | <p>The project is eligible for funding under Phases 3 and 4 of the Resilient Coastal Communities Program.</p> <p>Potential funding sources: Federal sources may include EDA - Investment for Public Works and Economic Development Facilities, FEMA – BRIC, and the National Wildlife Federation. State sources may include the Rural Grant Programs, NCDEQ Clean Water State Revolving Fund, NCDEQ American Rescue Plan Act (ARPA) Funding, NCDEQ Asset and Inventory Assessment Grants, and Golden Leaf Foundation Flood Mitigation Program.</p> |
| PROJECT ESTIMATED TIMELINE | Construction timeline will be developed by the contractor but is expected to require no more than 1 year to complete. |
| PRIORITY RATING | High |

4 WATER STREET REHABILITATION



| 5 TOWNWIDE WETLAND RESTORATION PLAN | |
|--|---|
| PROJECT DESCRIPTION | Develop a town-wide wetland restoration plan, including the identification of critical wetland systems and recommendations on restoration and preservation actions to protect these systems. Include discussion about working with private property owners on wetland restoration projects. This effort can build upon the 2006 Hawkins Creek Watershed Protection and Restoration Planning Study. |
| LOCATION | Townwide |
| HAZARD(S) ADDRESSED BY PROJECT | Stormwater Management/Flooding. The effort is intended to address regional flooding by identifying the appropriate ecosystem restoration projects that would facilitate more effective stormwater management. |
| TYPE OF SOLUTION  | Wetland, Waters of the U.S. restoration |
| PROJECT ESTIMATED COST | Expected to be low-medium cost, dependent upon level of detail to be provided in restoration plan. Cost Level: \$ |
| POTENTIAL IMPLEMENTATION FUNDING SOURCES | The development of a Town-wide Wetland Restoration Plan is not currently funded or listed on the County CIP. Individual restoration efforts are eligible for funding under Phases 3 and 4 of the Resilient Coastal Communities Program; however, the initial comprehensive plan would require other funding sources. Potential funding sources: Federal sources may include NOAA - National Coastal Resilience Fund (NCRF), USFWS – National Coastal Resilience Fund, National Wildlife Federation, and DOI – National Coastal Wetlands Conservation. State sources may include NCDEQ American Rescue Plan Act (ARPA), NCDEQ Clean Water State Revolving Fund, NCDEQ – Water Resources Development Project Grants, and NC Division of Mitigation Services. |
| PROJECT ESTIMATED TIMELINE | There is currently no timeframe for this effort. |
| PRIORITY RATING | Medium |

5 TOWNWIDE WETLAND RESTORATION PLAN

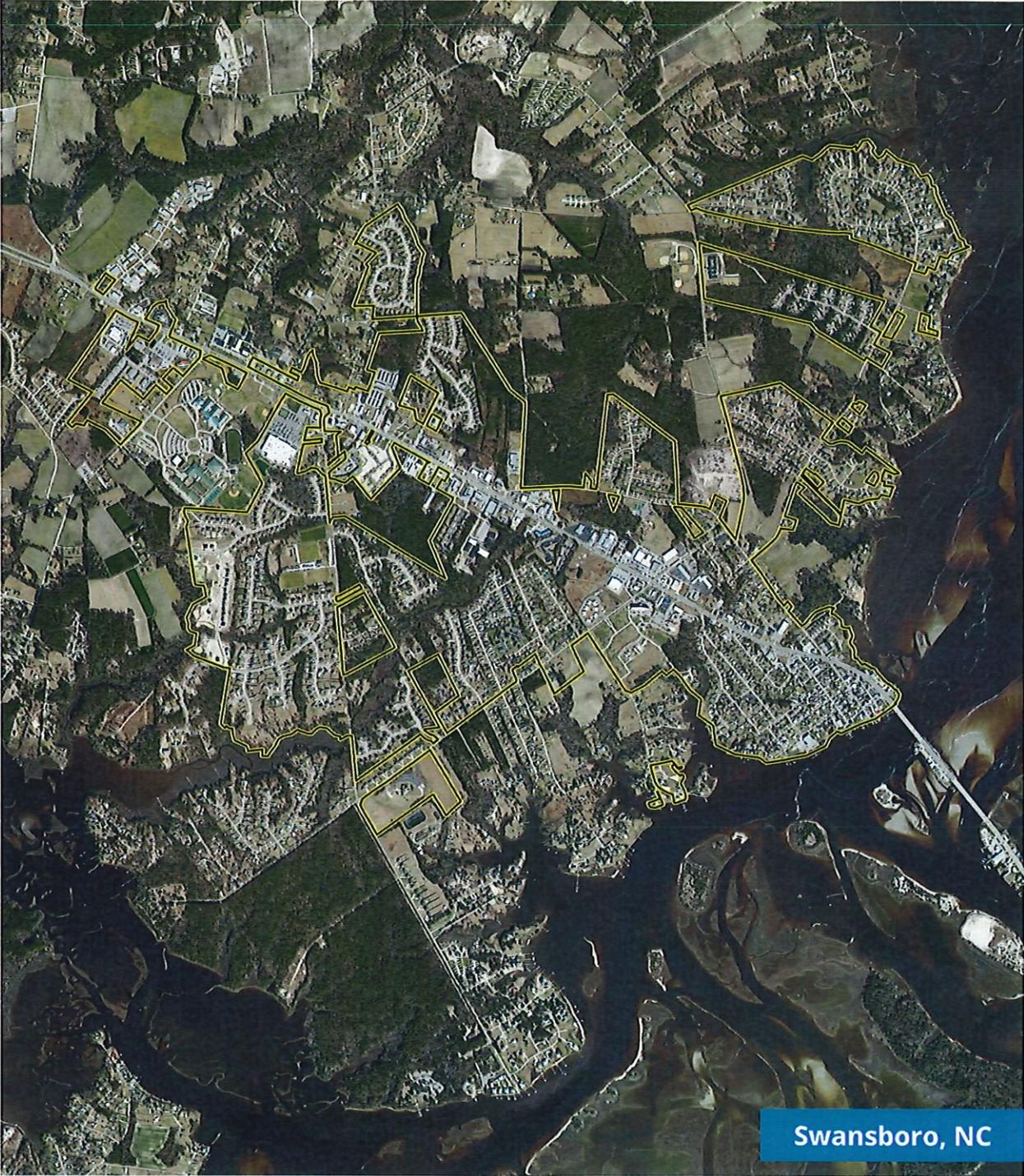


Wetlands Along the Waterfront

Swansboro, NC

| 6 PUBLIC ENGAGEMENT AND EDUCATION CAMPAIGN | |
|---|--|
| PROJECT DESCRIPTION | Engage and educate Town of Swansboro residents and business owners on the impacts of sea level rise and other climate hazards. This would be a continuous program to involve Town residents in the decision-making process for determining future resilience actions. |
| LOCATION | Townwide |
| HAZARD(S) ADDRESSED BY PROJECT | Stormwater Management/Flooding, Infrastructure Deficiency/Capacity, Climate Change. Project is to educate the community on the impacts of current and future anticipated flooding and the Town’s stormwater management needs as well as the impacts of climate change on the community. |
| TYPE OF SOLUTION | Non-regulatory program, specifically an ongoing public engagement and education program for community residents and business owners. |
| PROJECT ESTIMATED COST | Primary costs are expected to include staff time for public engagement and events and for the publication/distribution of online and printed education materials. Cost Level: \$ |
| POTENTIAL IMPLEMENTATION FUNDING SOURCES | This effort is not currently funded or listed on the County CIP. Potential funding sources: Partnerships with non-governmental organizations may provide opportunities to fund the public engagement and education effort. The N.C. Office of Environmental Education website provides information on potential education grants. |
| PROJECT ESTIMATED TIMELINE | There is currently no proposed timeframe for this effort but is recommended to begin in the next year to encourage continued engagement. The program would be an ongoing effort. |
| PRIORITY RATING | Medium |

6 PUBLIC ENGAGEMENT AND EDUCATION CAMPAIGN



| 7 RESIZE NC 24 CULVERT | |
|---|--|
| PROJECT DESCRIPTION | Work with NCDOT to increase the capacity of the culvert underneath N.C. 24 and improve roadway drainage facilities. |
| LOCATION | NC 24 |
| HAZARD(S) ADDRESSED BY PROJECT | Stormwater Management/Flooding. The project addresses flooding impacts to transportation infrastructure and surrounding properties during storm events. |
| TYPE OF SOLUTION | Infrastructure improvements |
| PROJECT ESTIMATED COST | <p>Project cost will be dependent on associated roadway design and implementation. No detailed project cost has been estimated.</p> <p>Cost Level: \$\$\$\$</p> |
| POTENTIAL IMPLEMENTATION FUNDING SOURCES | <p>Infrastructure is under the jurisdiction of NCDOT. Potential funding will likely include funds assigned through the department’s prioritization process.</p> <p>Potential funding sources: Federal sources may include FEMA – BRIC and the National Wildlife Federation. State sources may include the Rural Grant Programs, NCDEQ Clean Water State Revolving Fund, NCDEQ American Rescue Plan Act (ARPA) Funding, NCDEQ Asset and Inventory Assessment Grants, and Golden Leaf Foundation Flood Mitigation Program.</p> |
| PROJECT ESTIMATED TIMELINE | Project improvements are expected to require an estimated 1-3 years following receipt of project funding. |
| PRIORITY RATING | Low. This project was cited as a priority of over half of the respondents to the survey conducted under the Resilient Coastal Communities Program Phase 2. |

7 RESIZE NC 24 CULVERT



The Supreme Court has narrowed the scope of the Clean Water Act

Updated May 25, 2023 4:25 PM ET

Heard on [All Things Considered](#)



[Nina Totenberg](#)

The U.S. Supreme Court on Thursday significantly curtailed the power of the Environmental Protection Agency to regulate the nation's wetlands and waterways. It was the court's second decision in a year limiting the ability of the agency to enact anti-pollution regulations and combat climate change.

The challenge to the regulations was brought by Michael and Chantell Sackett, who bought property to build their dream house about 500 feet away from Idaho's Scenic Priest Lake, a 19-mile stretch of clear water that is fed by mountain streams and bordered by state and national parkland. Three days after the Sacketts started excavating their property, the EPA stopped work on the project because the couple had failed to get a permit for disturbing the wetlands on their land.

Now a conservative Supreme Court majority has used the Sacketts' case to roll back longstanding rules adopted to carry out the 51-year-old Clean Water Act.

While the nine justices agreed that the Sacketts should prevail, they divided 5-to-4 as to how far to go in limiting the EPA's authority.

Narrowing the scope of the law

Writing for the court majority, Justice Samuel Alito said that the navigable waters of the United States regulated by the EPA under the statute do not include many previously regulated wetlands. Rather, he said, the CWA extends to only streams, oceans, rivers and lakes, and those wetlands with a "continuous surface connection to those bodies."

Justice Brett Kavanaugh, joined by the court's three liberal members, disputed Alito's reading of the statute, noting that since 1977 when the CWA was amended to include adjacent wetlands, eight consecutive presidential administrations, Republican and Democratic, have interpreted the law to cover wetlands that the court has now excluded. Kavanaugh said that by narrowing the act to cover only adjoining wetlands, the court's new test will have quote "significant repercussions for water quality and flood control throughout the United States."

In addition to joining Kavanaugh's opinion, the court's liberals signed on to a separate opinion by Justice Elena Kagan. Pointing to the air and water pollution cases, she accused the majority of appointing itself instead of Congress as the national policymaker on the environment.

Reaction to the opinion

President Biden, in a statement, called the decision "disappointing."

It "upends the legal framework that has protected America's waters for decades," he said. "It also defies the science that confirms the critical role of wetlands in safeguarding our nation's streams, rivers, and lakes from chemicals and pollutants that harm the health and wellbeing of children, families, and communities."

Two former EPA chiefs saw Thursday's decision as a major setback for the nation's environment, and its future in combating the effects of climate change. William K. Reilly, who served as EPA administrator in the George H.W. Bush administration, said that while he understands the economic objections of farmers and builders to many wetland regulations, the Supreme Court's decision is "too broad" and will only limit further the already disappearing wetlands that protect many parts of the country from flooding and drought.

Carol Browner, who served as EPA administrator in the Obama administration, echoed those sentiments, calling the decision "a major blow to the landmark Clean Water Act and the federal government's ability to protect our people from pollution and its negative health side effects."

The decision also dismayed environmental groups.

"I don't think it's an overstatement to say it's catastrophic for the Clean Water act," said Jim Murphy of the National Wildlife Federation. Wetlands play an "enormous role in protecting the nation's water," he said. "They're really the kidneys of water systems and they're also the sponges. They absorb a lot of water on the landscape. So they're very important water features and they're very important to the quality of the water that we drink, swim, fish, boat and recreate in."

As in last year's case limiting the EPA's ability to regulate air pollution from power plants, the decision was a major victory for the groups that supported the Sacketts — mining, oil, utilities and, in today's case, agricultural and real estate interests as well.