



POLLOCKSVILLE COMMUNITY FLOODPRINT: JULY 2021

POLLOCKSVILLE COMMUNITY FLOODPRINT

RESILIENCY STRATEGIES FOR A RURAL RECOVERY



www.coastaldynamicsdesignlab.com

CREDIT + THANKS

This report was completed by the NC State University Coastal Dynamics Design Lab (CDDL). Grant funding for this project was generously provided by the North Carolina Community Foundation (NCCF), who has continuously supported the critical role of planning and design in building more resilient communities across our state.

We would also like to thank our project partners, technical advisors, and participating community members who guided the development and implementation of the information presented herein. You invited us into your homes and businesses, donated your time, and offered invaluable expertise that helped to make this report locally relevant and broadly transferable. This document would not have been possible without your support.

We offer our sincere thanks and look forward to extending our engagement with the Town of Pollockville as we work together to implement the Floodprint over the coming years.

PROJECT TEAM

Members from the NC State University Coastal Dynamics Design Lab (CDDL) are the principal investigators of the Pollocksville Community Floodprint, and are responsible for the overall processes and products associated with this report. However, affiliated project partners and a diverse team of technical advisors have provided boundless sources of knowledge transfer, critical feedback, and optimism that has helped shape the information included in this report.

NC STATE UNIVERSITY COASTAL DYNAMICS DESIGN LAB (CDDL)

The mission of the CDDL is to lead trans-disciplinary research and design teams that address critical ecological and community development challenges facing vulnerable coastal regions and shoreline communities. The CDDL is a team of architects, landscape architects, and environmental planners who collaborate with communities that lack the local capacity and/or financial resources to secure long-term design services. Increasingly, the work of the CDDL has focused on providing technical assistance to North Carolina communities that are grappling with the impacts of severe flood events.

+ Andy Fox, FASLA, PLA: Professor, Department of Landscape Architecture and Environmental Planning + Co-Director, Coastal Dynamics Design Lab

As Co-Director of the CDDL and a licensed landscape architect, Andy specializes in the development and management of high-performing public landscapes, with expertise in natural infrastructure, resiliency planning, community design, and land/water conservation assessment.

+ David Hill, FAIA: Professor and Head, School of Architecture + Co-Director, Coastal Dynamics Design Lab

David is a Co-Director of the CDDL within the College of Design where he has taught full-time since 2007. While at NC State, David has led graduate and undergraduate design studios, digital representation courses, and seminars that focus on integrative digital simulation processes, architectural prototypes, and design strategies for coastal regions.

+ Travis Klondike, Assoc. ASLA: Assistant Research Professor, Coastal Dynamics Design Lab + Department of Landscape Architecture and Environmental Planning

Travis is an Assistant Research Professor in the CDDL, whose work blends hazard mitigation assistance and resiliency planning by leveraging contemporary methods of geospatial analysis, community engagement, visual narration, and grant-writing as catalysts for public good.

+ Madalyn Baldwin, Assoc. ASLA: Research Associate, Coastal Dynamics Design Lab + Department of Landscape Architecture and Environmental Planning

Madalyn specializes in the assessment of large-scale landscape systems, including geospatial analytics, planning for complex environmental networks, and ecological integration of native and threatened plant communities. Her current research interests include working lands, rural landscapes and economies, and high-performing landscapes.

Additional References:

Recently completed reports by the CDDL that are similar in scope to the Pollocksville Community Floodprint can be found by clicking on the following hyperlinks:

- + [Lumberton Community Floodprint: Phase I](#)
- + [Lumberton Community Floodprint: Phase II](#)
- + [Princeville Community Floodprint](#)
- + [Homeplace: Conversation Guides for Rebuilding After Hurricane Matthew](#)

Additional References:

More information about the type of work that Roberta Fox and Rodney Swink focus on can be found by clicking on the following hyperlinks:

- + [Catalyst Design Website](#)
- + [PlaceEconomics Website](#)

Additional References:

More information about the organizations included in the TAC can be found by clicking on the following hyperlinks:

- + [Town of Pollocksville Website](#)
- + [Lead for NC Fellowship Website](#)
- + [Jones County Website](#)
- + [NCORR Website](#)

+ Evie Dentinger: Graduate Student Research Assistant, Coastal Dynamics Design Lab

Evie comes from an interdisciplinary background in economics and applied geography, and specializes in using geospatial analytics to create new pathways for communities to address climate vulnerabilities and build resilient ecosystems.

PROJECT PARTNERS

In addition to CDDL staff, two project partners were specifically identified for their knowledge and expertise in topics relevant to the Pollocksville Community Floodprint and were intimately involved in advancing the project's impact and applicability.

+ Roberta Fox, AIA, ASLA: Principal, Catalyst Design

Roberta is an experienced urban designer and design executive with a demonstrated history of working in the architecture & planning industry. From her time as the Principal Urban Designer for the City of Raleigh, Roberta brings expertise in: transit architecture and transportation infrastructure, transit-oriented development (TOD) planning, site/master planning, economic development, mixed-use/infill development, and public engagement.

+ Rodney Swink, FASLA, PLA: Senior Associate for Planning + Development, PlaceEconomics

From 1984–2008, Rodney served as director of the North Carolina Main Street Program and Director of North Carolina Office of Urban Development. During his tenure he provided Main Street assistance via workshops, resource teams and training in fifteen states. He has won a variety of prestigious awards for his work in historic preservation, landscape architecture, and his humanitarian- and community-focused work.

TECHNICAL ADVISORY COMMITTEE (TAC)

Lastly, a group of town, county, and state representatives met on a monthly basis as part of this study's Technical Advisory Committee (TAC). In addition to their TAC roles, Jay Bender, Nancy Barbee, and Nate Polo collectively provided critical feedback between local residents and the CDDL via supplemental meetings, outreach efforts, and presentations in Pollocksville.

+ Jay Bender: Mayor for the Town of Pollocksville

+ Nancy Barbee: Board Member for the Town of Pollocksville + Trent Bridge Development

+ Nate Polo: Lead for NC Fellow for the Town of Pollocksville

+ Franky Howard: County Manager for Jones County

+ John Bender: Economic Development Director for Jones County

+ Paul Ingram: Floodplain Administrator and Buildings Inspector for Jones County

+ Maggie Battaglin: Buyout Manager for the NC Office of Recovery and Resiliency (NCORR)

EXECUTIVE SUMMARY

Purpose of the Project: The Town of Pollocksville is in the midst of a multi-year flood recovery process resulting from Hurricane Florence (2018). In Pollocksville, the impacts of riverine flooding from the storm far exceeded the 500-year floodplain, inundating dozens of homes and nearly two-thirds of the town’s commercial properties. As the community continues to recover and rebuild, the Pollocksville Community Floodprint aims to bolster these efforts through an **integrated portfolio of projects that were informed through community input and rigorous analysis to assist local leaders make Pollocksville a more resilient community.**

This study used an environmental and community planning approach referred to as “floodprinting,” which specifically highlights the use of place-based approaches to hazard mitigation and climate adaptation. This approach recognizes the financial realities, multi-generational social networks, and personal place attachments that must be considered in rural recovery processes. The resulting document illustrates planning and design recommendations that both respond to Pollocksville’s Hurricane Florence recovery efforts and serve as a transferable model to other under-resourced communities that are disproportionately impacted by environmental threats.

Local Context: The Town of Pollocksville is a small, rural community of about 300 residents. Prior to Hurricane Florence, the Town invested significant resources toward the creation of various studies and plans that were topically focused on **economic development** (through downtown revitalization) and **recreational tourism** (leveraging its proximity to the Trent River and Croatan National Forest). However, the impact of the floodwaters increased local awareness and understanding that economic development and recreational tourism must be linked with **environmental resiliency**. This post-Florence paradigm shift reprioritized needs in the community, which served as the basis for the Pollocksville Community Floodprint.

Role of the Project Team: As documented in Pollocksville and many other rural communities, the overlap of vulnerable populations and heightened environmental risks often imposes barriers to accessing the long-term technical support and financial resources needed to better prepare for future disasters. In response to these resource shortfalls, the CDDL secured external grant funding to develop the Pollocksville Community Floodprint at no cost to the community. The resulting plan responds to local challenges by: i) establishing community-identified needs and opportunities; ii) undertaking highly detailed analyses; iii) engaging stakeholders in the design process; iv) illustrating a phased, flexible plan; and v) committing to long-term assistance through grant-writing and management of identified projects.

Recommendations: The Pollocksville Community Floodprint includes the following portfolio of projects:

+ A Boardwalk and Constructed Wetlands at Riverfront Park: Using the recently relocated Town Hall as a catalyst, this project encourages public access to environmental enhancements at Riverfront Park. Located on Town-owned property, this shovel-ready project will both protect Pollocksville residents from upstream sources of agricultural contaminants that breach the river channel and simultaneously control and filter local sources of stormwater that may otherwise impact thousands of flood-prone buildings and threatened wildlife habitat in downstream areas of the Lower Neuse Subbasin. The lowest minimum cost of this project is estimated at \$169,000.

+ A “Complete Street” Approach to Main Street: This project proposes a series of walkability and place-making improvements primarily in the public right-of-way along Pollocksville’s Main Street. These recommendations: i) establish a multi-modal link between the 300+ mile “Ports of Call” bicycle route at Beaufort Road (NC Bike Route 3) and Pollocksville’s Riverfront Park that anchors the Main Street corridor; ii) leverage planned NCDOT improvements to Main Street (expected summer of 2021) and streetscape furnishing enhancements that were included as “incubator investments” within the Pollocksville Community Floodprint grant; and iii) support Pollocksville’s economic recovery by creating exterior “flex” spaces adjacent to businesses in the commercial district. The lowest minimum cost of this project is estimated at \$190,700.

+ FEMA-Allowable Land Uses of Potential Buyout Properties: There are two State-administered mitigation programs that will offer voluntary ‘buyouts’ to flood-impacted homeowners in Pollocksville. Qualifying homeowners in each program will be offered the pre-disaster fair market value of their homes in order to safely relocate out of flood-prone areas. If acquired, buildings on the buyout properties are demolished and the resulting vacant lot is deeded to the local jurisdiction (Town of Pollocksville) to maintain as open space for perpetuity. Using feedback from Pollocksville stakeholders, recommendations for re-programming these lots as publicly accessible open space include: an event lawn, constructed wetlands, reforested areas, trails, and a permeable parking area.

While the lowest minimum cost of this project is currently estimated at \$168,700, final project costs will be largely contingent on: i) the level of participation from qualifying homeowners in either of the buyout programs (which are both voluntary); and ii) monies that can count as matching funds at the time the acquisitions are finalized. While design alterations will likely be needed once the final configuration of buyout properties is realized, the findings from the community engagements, design refinement process, and cost-estimating exercises conducted as part of this study will greatly expedite this portion of Pollocksville’s recovery.

+ Opportunities for the Adaptive Re-Use of Flood-Damaged Commercial Properties: Lastly, recommendations for the demolition and/or redevelopment of the Trent Motel and Trent Restaurant sites are proposed. Both properties suffered significant damage as a direct

EXECUTIVE SUMMARY (cont'd)

result of Hurricane Florence floodwaters and, if redeveloped, the location of each property along Pollocksville's Main Street is primed to catalyze economic recovery activities locally and regionally. Different from the first three projects, which are suggested to be managed and maintained by the Town of Pollocksville, redevelopment of these properties can be led by either the Town, a local non-profit organization (such as Trent Bridge Development), or a private party.

The lowest minimum cost for acquisition, demolition, and asbestos abatement of the Trent Motel property is estimated at \$97,800, making the site shovel-ready for development. Because of its size, this parcel can be split into multiple lots supporting a combination of commercial, office, and/or residential land uses. For the Trent Restaurant property and/or the adjacent vacant lot, it is recommended that a Farmer's Market be considered for either or both parcels. This was the top resiliency-building project identified by the community. While an open-air structure with this function is allowable within a buyout area, it is specifically recommended along Main Street as an economic development priority due to fewer deed restrictions. The lowest minimum cost to establish a parcel for a Farmer's Market is through acquisition of the identified vacant lot, which has a minimum estimated cost of \$18,600 per present-day tax value (a professional appraiser must determine current fair market value). If acquired, this property (or others similar to it) can support temporary uses with initial investments in paving and an overhead structure, thereby enabling this location to serve as a regionally significant hub of retail activity.

These projects are collectively woven into the broader Pollocksville Community Floodprint Plan to reinforce the themes of environmental resilience, recreational enhancement, and economic recovery. The final report was presented in its entirety to the Pollocksville Town Board on July 27, 2021. At the conclusion of the presentation, the plan and subsequent recommendations were formally adopted by the Board. The adopted report, meeting minutes, and a recording of the presentation are available on the Town of Pollocksville website.

CONTENTS

01 BACKGROUND + APPROACH

page 10

02 INVENTORY + ANALYSIS

page 26

03 PLANNING ALTERNATIVES + THE FLOODPRINT PLAN

page 50

04 THEMATIC RECOMMENDATIONS + PROJECT PORTFOLIO

page 66

05 NEXT STEPS + RESOURCES

page 110

01: BACKGROUND + APPROACH

The Town of Pollocksville is in the midst of a **multi-year flood recovery process** resulting from Hurricane Florence, which made landfall in September 2018. The rainfall intensity and slow-moving track of the storm led to severe riverine flooding throughout much of eastern North Carolina. In Pollocksville, these impacts far exceeded the extent of the 500-year floodplain.

As the community continues to recover and rebuild, the Pollocksville Community Floodprint aims to bolster these efforts through an **integrated portfolio of projects that were informed through community input and rigorous analysis to assist local leaders make Pollocksville a more resilient community.**

TOWN CONTEXT

The Town of Pollocksville is a small, rural community of about 300 residents located on the banks of the Trent River in Jones County, North Carolina. Deeply rooted in an agrarian past, the community maintains a direct connection to many agricultural commodities, including corn, soybean, cotton, and timberlands that adjoin much of the town's periphery. However, Pollocksville is increasingly referred to as the "Gateway to Nature" due to its direct access to the **Trent River**, the **Croatan National Forest**, and classification as a **Bird Sanctuary**. In recent years, the Town has leveraged its location through Riverfront Park, which includes a recently updated boat ramp (constructed in partnership with the North Carolina Wildlife Resources Commission), fishing pier, and kayak launch. These amenities, in combination with the existing building stock located along the **Main Street commercial district** and the newly completed **Highway 17 Bypass exit** that borders Town Limits, afford Pollocksville the unique opportunity to contribute to regional economic development initiatives.

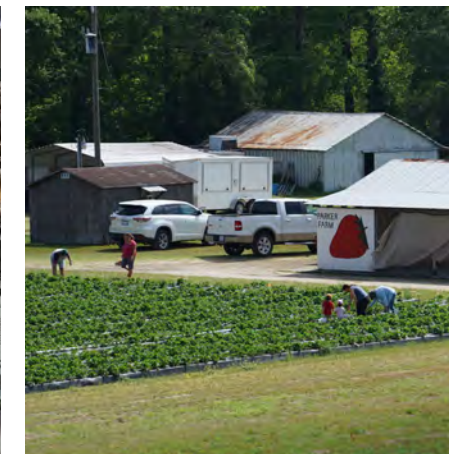
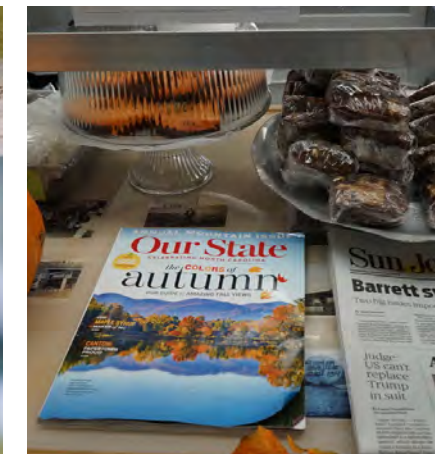
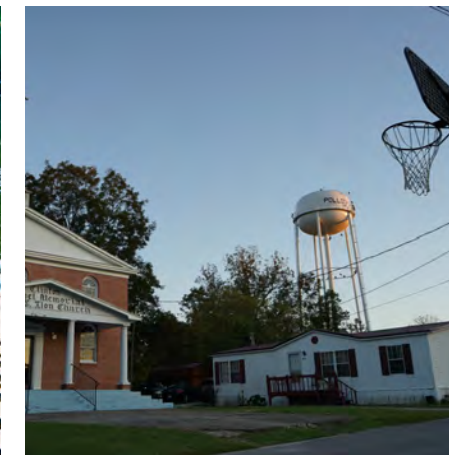
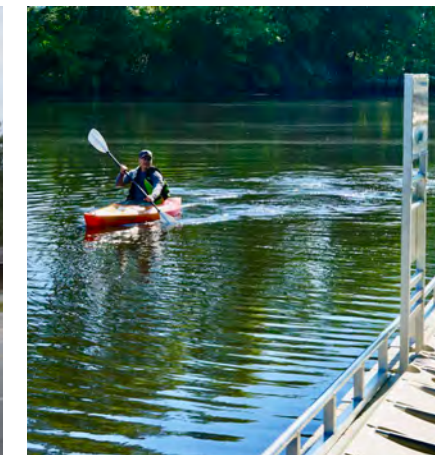
Recognizing these opportunities, the Town previously invested significant time and resources to create various plans, studies, and development schemes that intended to collectively advance Pollocksville toward a more prosperous future. As a component of the Pollocksville Community Floodprint process, the research team conducted a content analysis of these previous reports. Two overarching themes that emerged from this analysis include:

+ Economic Diversification through Downtown Revitalization. Numerous reports mentioned the need for Pollocksville to increase its supply of retail offerings through the establishment of new businesses and the physical improvement of public infrastructure along Main Street.

+ Recreational Tourism. Numerous reports found that Pollocksville is missing opportunities to monetize its proximity to natural surroundings through event programming and a broader retail market that supports and enhances outdoor recreation activities.

Prior to Hurricane Florence, the Town was beginning to make significant strides toward achieving various planning goals. However, the impact of the floodwaters in Pollocksville increased local awareness and understanding that **economic development and recreational enhancement must be inextricably linked with environmental resiliency**. This post-Florence paradigm shift led to a reprioritization of needs in the community that subsequently created a desire for a new approach to community planning. The new goal became the creation of a plan that simultaneously: i) blends past planning efforts with emerging needs as revealed by the flood and ii) communicates a unified vision for economic, recreational, and environmental advancement for the Town of Pollocksville.

In-Text Reference:
A list of precedent reports that were evaluated as part of the Pollocksville Community Floodprint can be found in "Chapter Five: Next Steps + Resources."



All Photos: Nate Polo (2020-2021)

HURRICANE FLORENCE

In order to plan for a more economically diverse, recreationally rich, and environmentally sensitive Pollocksville, it is important to understand the breadth of impacts caused by Hurricane Florence at a hyper-localized resolution. While a more in-depth analysis of flood vulnerability and mitigation alternatives is described later in this report, the following information provides a snapshot of the hurricane impacts specific to Pollocksville residents:

+ High Water Mark: 20.5-Feet. The highest recorded water level directly attributable to Hurricane Florence floodwaters at the nearest USGS stream gauge to Pollocksville (Monitoring Location #02092554, United States Geological Survey) was measured at 20.5-feet (September 18, 2018). For reference, the most commonly used benchmark for flood insurance and flood prevention ordinances in Pollocksville is the 100-year base flood elevation (BFE), which ranges from approximately 13.9-feet (in upstream locations) to 12.9-feet (in downstream locations). While Hurricane Florence is the most severe flood event to impact Pollocksville in recent history, two other flood events within the past century, Hurricane Hazel (1954) and Hurricane Floyd (1999), met or exceeded these 100-year flood indicators.

+ Ten Days Above Major Flood Stage. In addition to the severe height of floodwaters, the USGS stream gauge at the same location recorded that the Trent River remained above "major flood stage" (11.0-feet or greater) from September 14, 2018 until September 23, 2018. This indicates that floodwaters likely inundated buildings, infrastructure, and other property for more than a week.

+ Impact on Residences and Businesses. Within Pollocksville Town Limits, there are at least 88 properties with buildings containing a Finished Floor Elevation (FFE) that is lower than the High Water Mark of Hurricane Florence (20.5-feet or lower). Of these 88 properties, 69 are zoned as Residential, and 19 are zoned as Commercial (which represents 67% of Pollocksville's 28 Commercial properties).

+ Verification of Damages. These damages were verified using multiple analytical tools and techniques. Most specifically, the Floodprinting process analyzed: i) a block-by-block field assessment of vacancy and damages (August 2020); ii) a mailed paper survey to Pollocksville water and sewer utility customers (September 2020); and iii) a building-by-building field assessment of flood height and mitigation options along Main Street (October 2020). These efforts both confirmed and reinforced the presumed reach of Florence's impact across the community. While the two field assessments revealed physical traces of the flood event two years after Florence, the mailed paper survey indicated that 51% of survey respondents (25 out of 49 respondents) reported experiencing floodwaters at their homes.

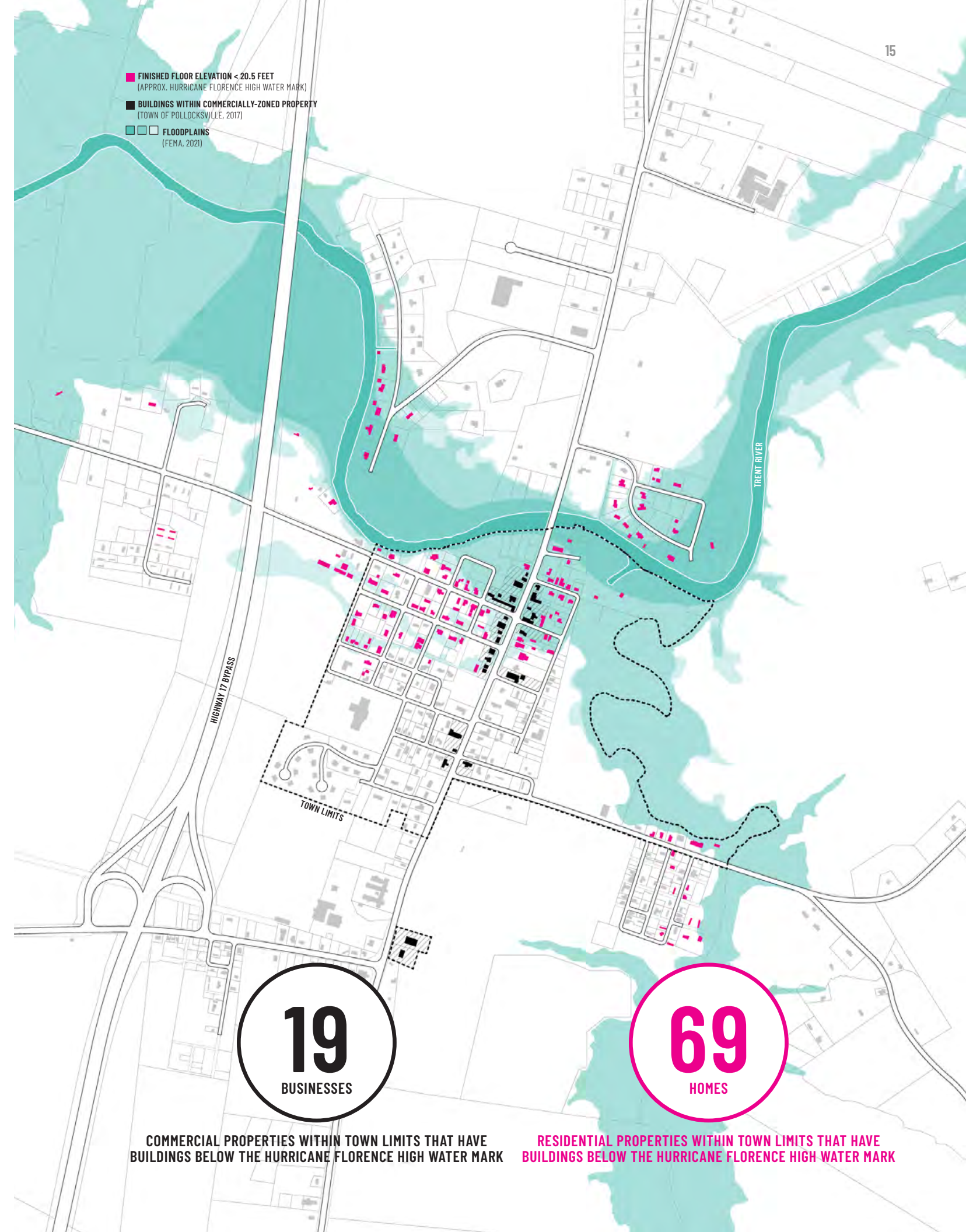
Additional References:

More information about the USGS stream gauge data and the 100-year base flood elevation in Pollocksville can be found by clicking on the following hyperlinks:

- + [USGS Stream Gauge Website](#)
- + [NC FRIS Website](#)

In-Text Reference:

More in-depth results and analyses from the field assessments and community surveys can be found in "Chapter Two: Inventory + Analysis."



COMMERCIAL PROPERTIES WITHIN TOWN LIMITS THAT HAVE BUILDINGS BELOW THE HURRICANE FLORENCE HIGH WATER MARK

RESIDENTIAL PROPERTIES WITHIN TOWN LIMITS THAT HAVE BUILDINGS BELOW THE HURRICANE FLORENCE HIGH WATER MARK

POLLOCKSVILLE CAN BUILD BACK BETTER.

The primary objective of this report is to articulate and illustrate planning and design solutions that are both specific to Pollocksville's hurricane recovery efforts and transferable to other small, underserved communities that are disproportionately impacted by environmental threats.

The Pollocksville Community Floodprint effectively couples environmental resiliency, recreational enhancement, and economic recovery under a unified vision to support the Town's long-term viability and sustainability. Project outcomes were informed through an iterative process of: i) analyzing flood risks and communicating findings; ii) understanding community preferences and presenting redevelopment options; and

iii) working with a wide range of project partners to co-create an implementable plan.



2016

+ DR-4285-NC: HURRICANE MATTHEW



2016



2018

+ DR-4364-NC: TORNADO & SEVERE STORMS
+ DR-4393-NC: HURRICANE FLORENCE



2019

+ DR-4412-NC: TROPICAL STORM MICHAEL
+ DR-4465-NC: HURRICANE DORIAN



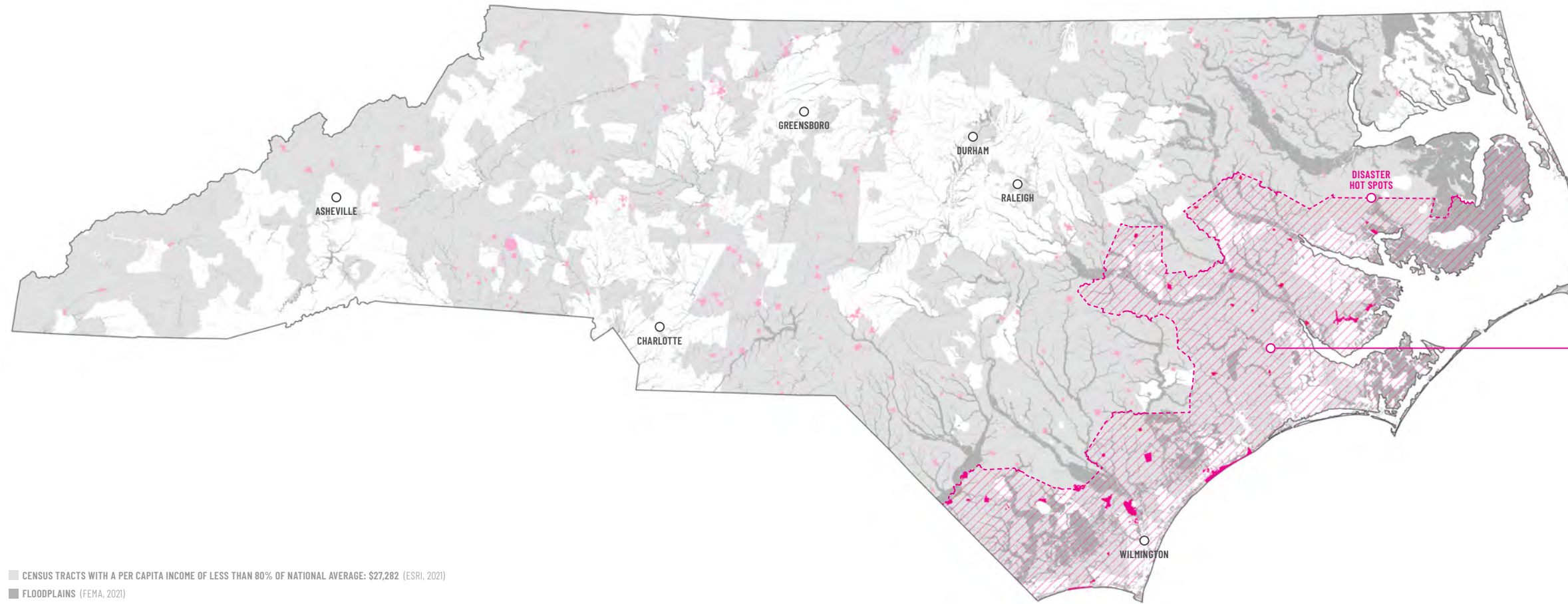
2020

+ DR-4543-NC: SEVERE STORMS & FLOODING
+ DR-4568-NC: HURRICANE ISAIAS



DISASTER HOT SPOTS

Including Jones County, indicated counties have had **at least four (4) federal disaster declarations in the past five (5) years** (FEMA).



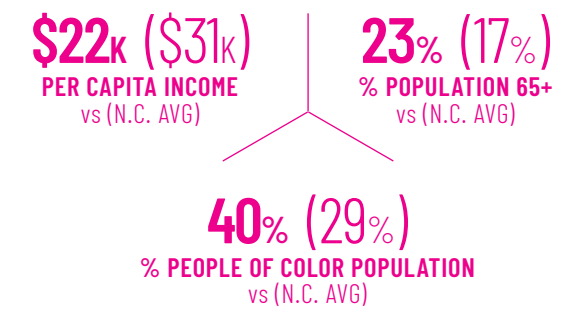
■ CENSUS TRACTS WITH A PER CAPITA INCOME OF LESS THAN 80% OF NATIONAL AVERAGE: \$27,282 (ESRI, 2021)
■ FLOODPLAINS (FEMA, 2021)
□ NORTH CAROLINA BOUNDARY (NC ONEMAP, 2020)
■ CITIES & TOWNS WITH LESS THAN 3,000 TOTAL POPULATION + INTERSECT A CENSUS TRACT WITH A PER CAPITA INCOME OF LESS THAN 80% OF THE NATIONAL AVERAGE + INTERSECT COUNTIES WITH A FEDERAL DISASTER DECLARATION SINCE 2016 (FEMA DEFINITION OF A "SMALL AND IMPOVERISHED COMMUNITY")



HURRICANE FLORENCE
OCTOBER 2018

POLLOCKSVILLE

DEMOGRAPHIC VULNERABILITIES IN POLLOCKSVILLE AFFECTING COMMUNITY RECOVERY FROM DISASTERS



"OVERBURDENED" COMMUNITIES

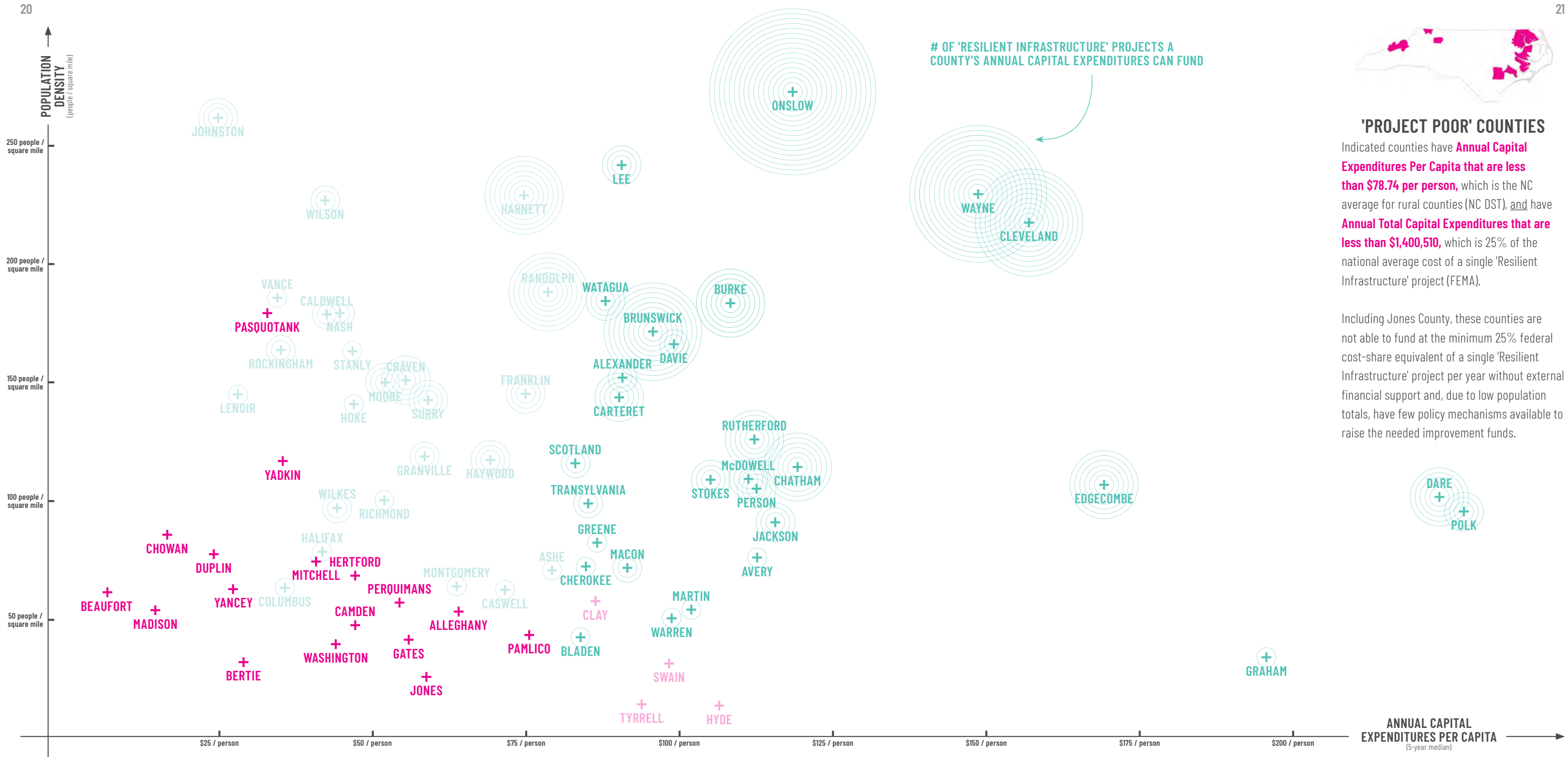
The long-term planning processes and infrastructure projects required for improved community resilience are seldom accessible to many residents of eastern North Carolina.



Grant Reference
Many state and federal grant programs have monies prioritized or set aside for "overburdened" or "underserved" communities.

For citizens of Pollocksville, and more generally Jones County, the community faces a combination of demographic and environmental vulnerabilities that meet the U.S. Environmental Protection Agency (EPA) criteria of both an "overburdened" and an "underserved" community. In the census tract that includes Pollocksville, the average per capita income is \$22,183 (NC average is \$30,783), the percent of the population older than sixty-five (65+) is 23.5% (NC average is 16.7%), and People

of Color comprise 40.5% of the total population (NC average is 29.4%). These figures: i) represent income, age, and race characteristics that are representative of a **community with elevated social vulnerability risk factors**; and ii) contribute to the inability of Pollocksville residents to attain the resources necessary to make the community more resilient to environmental stressors. As witnessed after Hurricane Florence, these vulnerabilities become active threats during and long after a natural disaster and, unfortunately, Jones County is included within the cluster of 15 state counties that have suffered **disproportionate levels of environmental harm** in recent years (counties where there have been at least four federal disaster declarations since 2016).



RURAL & "UNDERSERVED"

The documented overlap of vulnerable populations and heightened environmental risks in Pollockville imposes short-term barriers to community recovery and sustainability, as well as long-term concerns related to planning and preparing for future disasters.

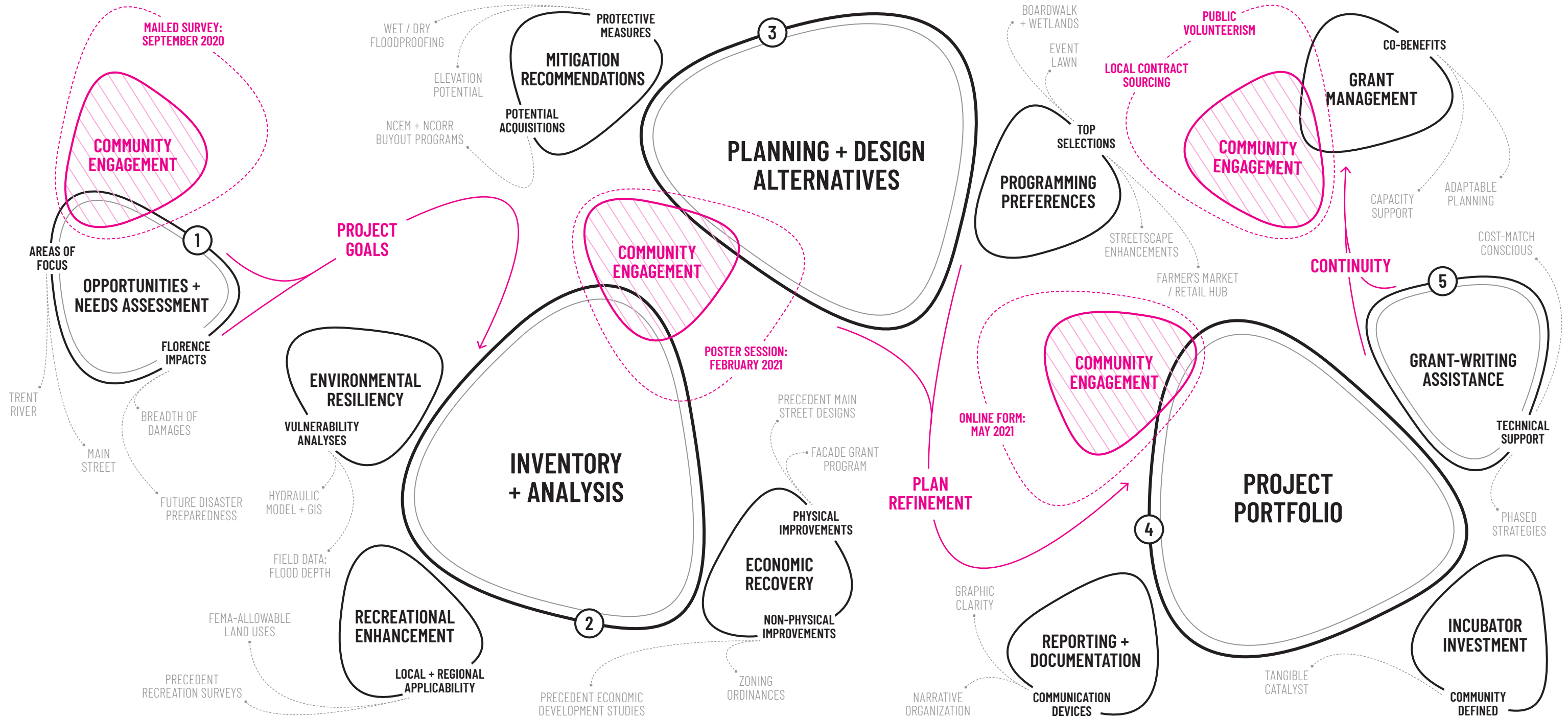
While the Town of Pollockville has made positive strides to address immediate post-Florence recovery needs, both the town and county face **significant obstacles to financing the large-scale infrastructure projects needed to better prepare for future disasters.** Of the 80 counties classified as having 'rural' population densities by the NC Rural Center, 17 of them

(including Jones County) share the dual characteristics of having: i) annual, per capita capital expenditure budgets that are less than the average for NC rural counties (\$78.74/person/year); and ii) total budgets for annual capital expenditures that are not able to finance the local cost-share requirement (25%) of a single 'resilient infrastructure' project based on 2020 national average costs (\$1,400,510.00, FEMA). Together, these data points suggest that **without external financial support, communities in Jones County are both under-resourced compared to other rural counties in the state and lack the ability to self-fund capital improvement projects that may be necessary for community sustainability and viability.**

A RURAL RECOVERY MUST LOOK DIFFERENT.

Often limited in the financial resources or technical capacity required to adequately recover from and plan for disasters, small towns across North Carolina and America are often left with few options for building back more resiliently.

The Pollocksville Community Floodprint responds to these financial and technical challenges by: i) **aligning community-identified values for resiliency with potential funding sources** that are external to local funding streams; and ii) **assisting in the creation of support materials** that will make Pollocksville more competitive to receive the external investments, grants, and resources it needs and deserves.



PROJECT APPROACH

In an effort to support Pollocksville's long-term recovery, this study used an environmental and community planning approach referred to as "floodprinting." This approach recognizes the financial realities, multi-generational social networks, and personal place attachments that must be considered in rural recovery processes.

While the goals of a floodprint study are uniquely defined by each community, the floodprint process has important methodological consistencies across communities that include: i) establishing community-identified needs and opportunities; ii) undertaking highly detailed

analyses; iii) engaging stakeholders in the design process; iv) illustrating a phased, flexible plan; and v) committing to long-term assistance through grant-writing and management of identified projects. For Pollocksville, the floodprint process was guided by specific project goals that emerged during the early phases of due diligence. Use of research methodologies, tools, and techniques were either reinforced or modified over the duration of the project to meet evolving needs. While the report provides an overall blueprint for recovery and redevelopment in Pollocksville, it is the expectation that recommendations will have to be adapted as local conditions change and priorities shift.

02: INVENTORY + ANALYSIS

The representation of data in this chapter highlights the various analytical strategies used in the Pollocksville Community Floodprint. In order to more holistically understand opportunities and needs in the community, this study blended geospatial analyses, hydraulic modeling, an assessment of field-collected data, and community responses to mailed surveys.

Collectively, the findings from these efforts were used to inform: i) determinations of focus areas for physical improvements; ii) recommended mitigation strategies; and iii) multiple schematic planning alternatives presented for community feedback.

- FLOODPLAINS (FEMA, 2021)
- CITY + TOWN BOUNDARIES (NCDOT, 2020)
- JONES COUNTY BOUNDARY (NCDOT, 2020)
- JONES COUNTY PARCELS WITH A VALUED STRUCTURE INTERSECTING 100-YEAR FLOODPLAIN

PARCELS WITH VALUED STRUCTURES IN THE 100-YEAR FLOODPLAIN

31 PARCELS

TRENTON: POP. 287

PARCELS WITH VALUED STRUCTURES IN THE 100-YEAR FLOODPLAIN (SFHA)

37 PARCELS

POLLOCKSVILLE: POP. 311

KINSTON POP. 21,677

NEW BERN POP. 29,524

JACKSONVILLE POP. 70,145

MAYSVILLE: POP. 1,019

PARCELS WITH VALUED STRUCTURES IN THE 100-YEAR FLOODPLAIN (SFHA)

13 PARCELS

PAMILCO SOUND



243 PARCELS

PARCELS IN JONES COUNTY WITH VALUED STRUCTURES IN THE SFHA

\$28.8M

2019 TAX VALUE OF STRUCTURES

22% INSURED

ONLY 53 OF THE 243 PARCELS HOLD FLOOD INSURANCE

CITIES + TOWNS (33%)

COUNTY (66%)

POLLOCKSVILLE (15%)

FLOOD VULNERABILITY: JONES COUNTY

The majority of flood-prone properties in Jones County exist within the floodplain of the Trent River, which flows from west to east across the entire county.

Geospatial analysis revealed that there are 243 properties throughout Jones County that have tax-valued structures inside the 100-year floodplain. While the flood extent of Hurricane Florence far exceeded the limits of the 100-year floodplain, this is the most commonly used benchmark for measuring flood vulnerability as it relates to building codes and property insurance. **The 243 parcels indicated represent a cumulative tax value**

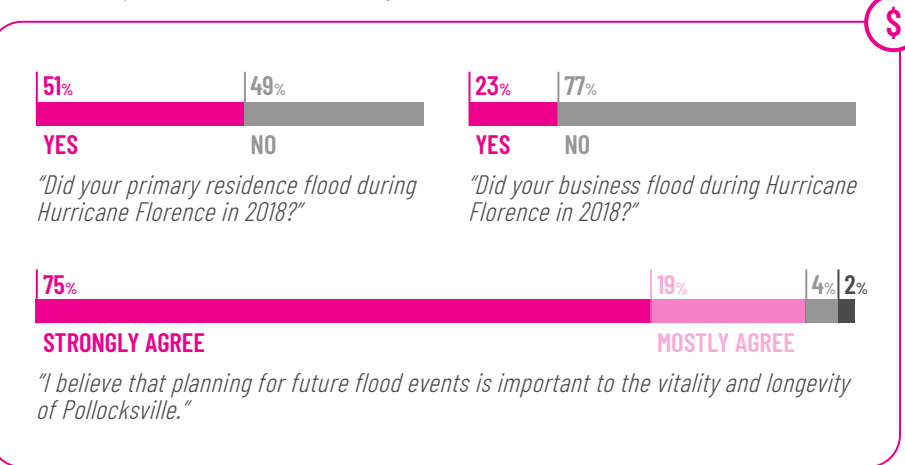
Additional Reference:

Town- and county-scale flood analyses are required for certain programs that can offer discounts on flood insurance premiums, such as the NFIP Community Rating System (CRS).

of over \$28.8M that are most vulnerable to flood damage within the 100-year floodplain. However, only 22% of these properties (53 of the 243 properties) are currently covered by flood insurance. This condition leaves many Jones County residents susceptible to extreme financial hardship when major flooding occurs. While the majority of these properties exist in unincorporated areas throughout the county, there are several grouped clusters of parcels within each of the county's incorporated towns and townships. The Town of Pollocksville contains thirty seven (37) parcels that meet this criteria, which represents the highest concentration of flood-prone properties in Jones County.

FLOOD VULNERABILITY: POLLOCKSVILLE

The percentage of Pollocksville residents within the 500-year floodplain matched the responses from mailed surveys (distributed September 2020) where 25 of the 49 respondents (51%) reported experiencing floodwaters at their homes during Hurricane Florence. However, the entire community (94%) was nearly unanimous in agreeing that planning for future flood events is important for Pollocksville's long-term interests.

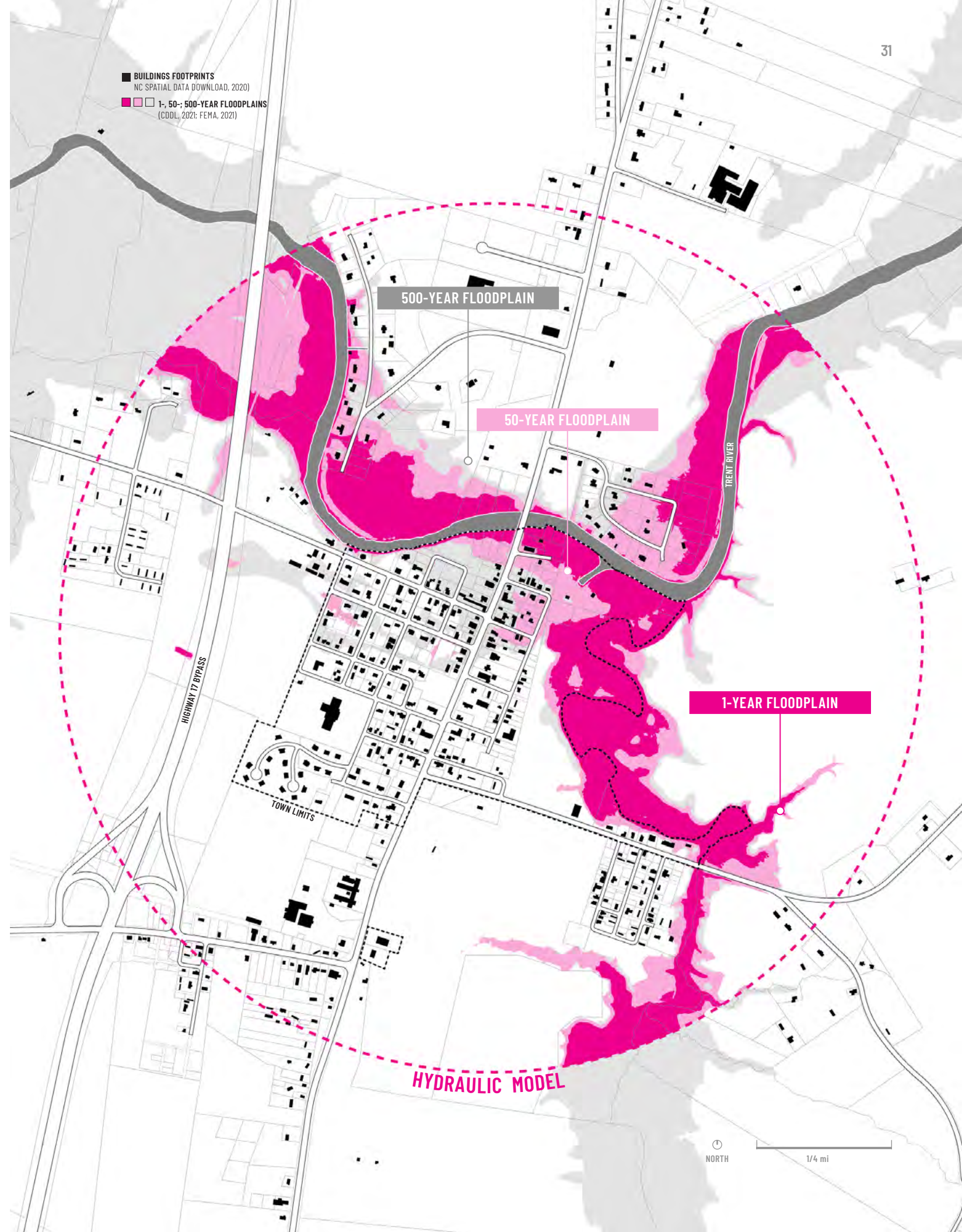


Grant Reference
Many grant programs will score proposals with a higher ranking if there is evidence of community input.

In order to more precisely understand flood risks in Pollocksville, a detailed hydraulic model was generated to supplement both the survey results and the traditionally used FEMA floodplain data. While FEMA floodplain maps illustrate the boundaries of 100-year and 500-year floodplains, information about the varying levels of flood exposure and vulnerability for more regularly occurring storm events is typically limited. The goal of producing a detailed hydraulic model was to identify the locations in and around Pollocksville that are most susceptible to flood events at more frequent intervals. The hydraulic model produced for this study includes the projected extents of floodwaters during: 1-, 2-, 5-, 10-, 25-, 50-, 100-, and 500-year flood events. While each of these layers contains valuable information, the modeled 1-year and 50-year floodplains are highlighted in the map provided for two reasons:

- + 1-Year Floodplain.** These areas indicate locations that are expected to receive floodwaters every year. Within Pollocksville Town Limits, there are several locations where buildings are either within or very near the 1-year floodplain. These most noticeably include: i) areas along the Trent River near Riverfront Park; and ii) areas near the intersection of Mill Creek and Beaufort Road.
- + 50-Year Floodplain.** These areas indicate locations that have an approximately 2% probability of receiving floodwaters on an annual basis; however, over the duration of a typical 30-year mortgage, there is more than a 50% likelihood that these properties will flood. Within Pollocksville Town Limits, the most prominent concentration of properties within the 50-year floodplain exists between Bell Street and Riverfront Park.

Grant Reference
Various grant programs ask for evidence of proposal efficacy and/or hydraulic studies that were performed.



VACANCY + OPEN SPACE ASSESSMENT

According to the last American Community Survey completed pre-Florence (2017), the percentage of vacant housing units in Pollocksville was approximately 14.3% of the total housing stock at the time of data collection. However, Hurricane Florence (2018) exposed many low-lying areas to unprecedented levels of flooding and has created significant pockets of vacancy in some of the most flood-prone areas.

As part of this study, data collection included a walking assessment to record each home's vacancy status (as of August 2020). The project team used clear visual indicators of vacancy, such as significant damage to roofs or windows, to determine occupancy status for the purposes of this study. Results were then aggregated to roughly conform with each street block to more easily communicate the recorded vacancy patterns across the community.



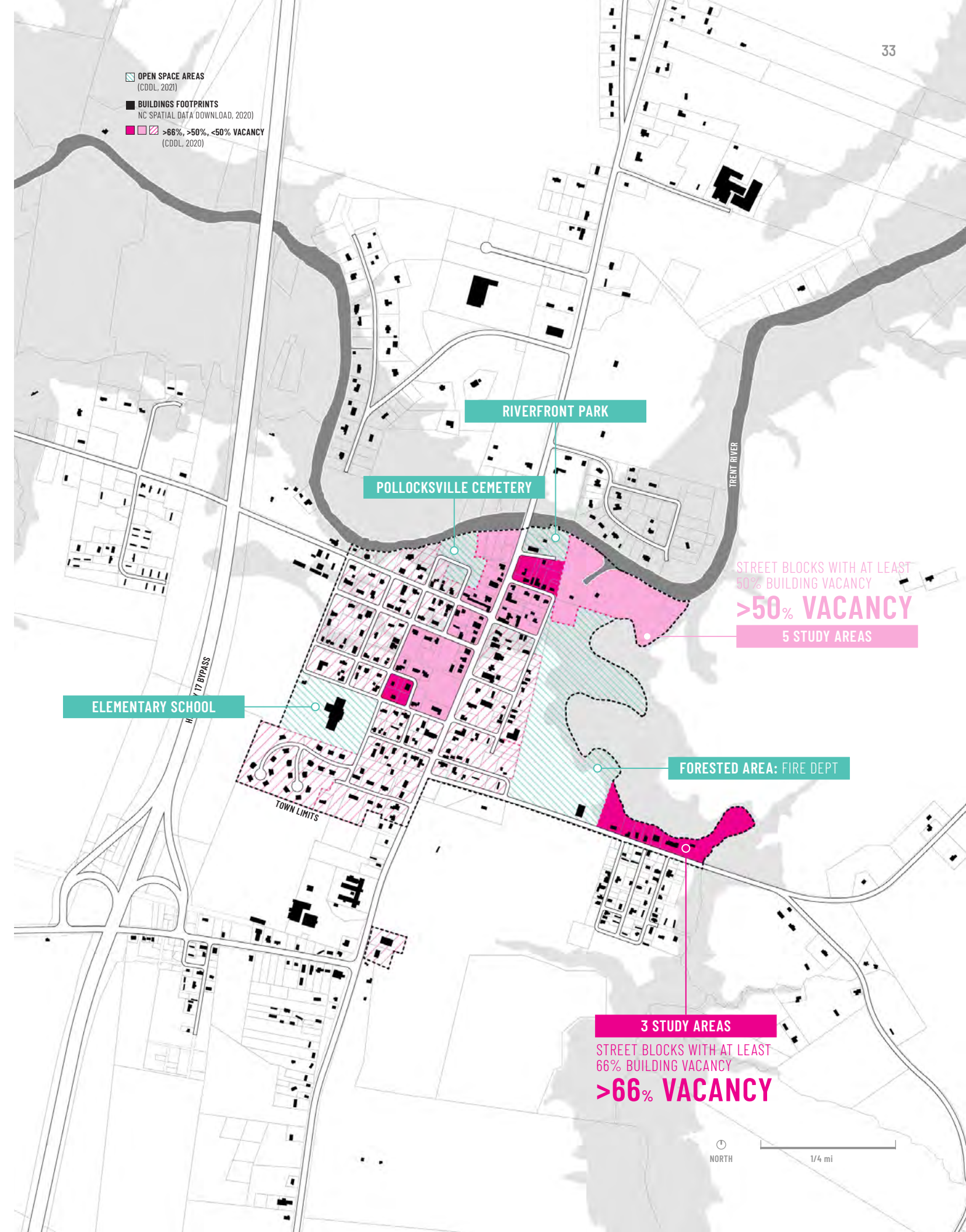
Within Pollocksville Town Limits, there were five (5) sets of street blocks / study areas where at least 50% of the dwelling units were noted as vacant, and there were an additional three (3) more street blocks / study areas where at least 66% of the dwelling units were noted as vacant. Most significantly, of the eight (8) street blocks / study areas with the highest levels of vacancy in Pollocksville, seven (7) intersect the 500-year floodplain. This correlation, and the lack of widespread vacancy pre-Florence, shows that much of the vacancy in Pollocksville is a direct result of the recent flooding events from Hurricane Florence.

Grant Reference

Various grant programs ask for evidence of suitability of the proposed new land uses.

“Of the 8 street blocks with the highest levels of vacancy, 7 of them intersect the 500-year floodplain.”

While flood events of this magnitude can have a devastating effect on the community, connecting vacated areas into existing open space networks (e.g., Riverfront Park) or other identified places of meaning allows for a community to better program vacant lots to fit into larger, even regionally significant, amenities for public use. This is critical to combating vacancy that becomes a visual and/or maintenance nuisance for the local government to manage.



COMMUNITY-DEFINED AREAS OF MEANING

Understanding the areas in a community that represent catalytic opportunities for rebuilding, redevelopment, or cultural celebration is imperative to resiliency planning. The Pollocksville Community Floodprint pairs areas of community-identified significance with places that are most vulnerable to flood or are most in need of a mitigation response.

As part of the mailed, anonymous surveys that were distributed in September of 2020, a provided map and questionnaire asked residents to demarcate areas that are either "significant to the community" or are "important to the future" of Pollocksville. Results were aggregated and grouped to highlight areas of congruence across the community.

The three areas most commonly identified by survey respondents were: i) Riverfront Park; ii) Main Street commercial district; and iii) Pollocksville Elementary School.



Grant Reference

Many grant programs will score proposals with a higher ranking if there is evidence of community input.

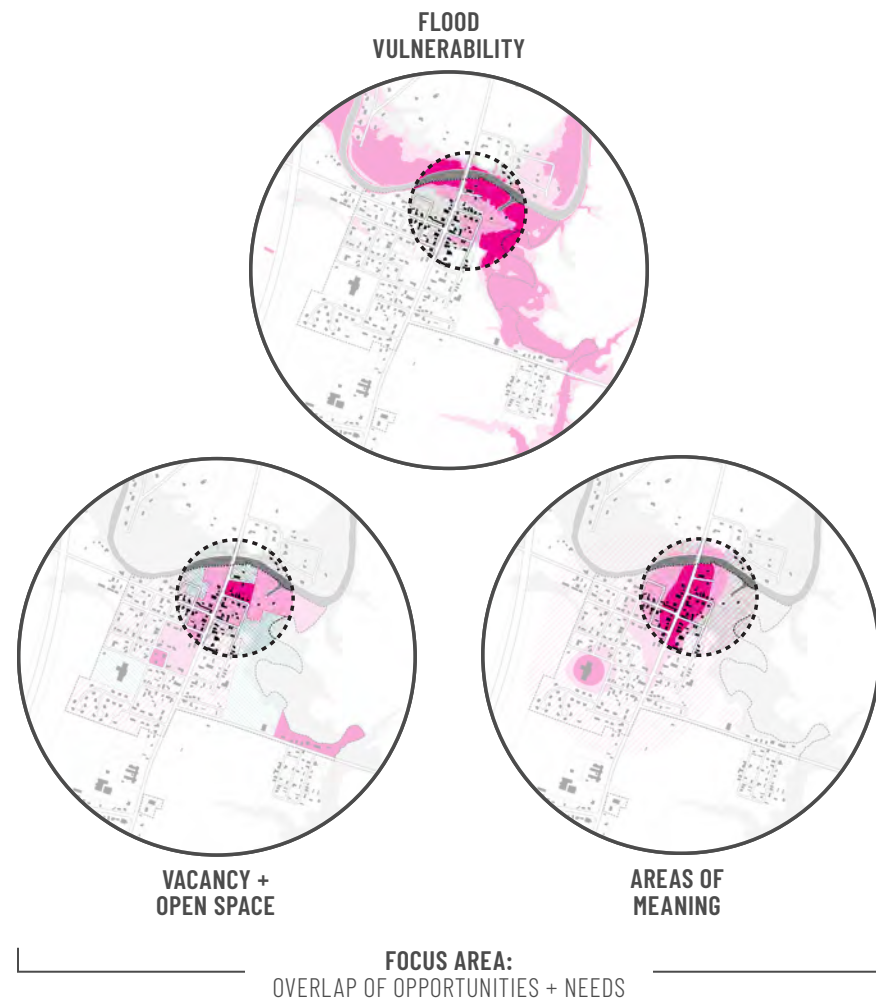
"Areas in a community that represent catalytic opportunities for rebuilding, redevelopment, or cultural celebration [can be paired with places] most in need of a mitigation response."

Public participation in identifying these areas of meaning was critical in the formation of planning focus areas and a proposed community project portfolio, as well as generating a high level of participation during this first outreach effort. In total, community input established a strong statistical foundation for using the data with a high-level of confidence. Collectively, the findings from the first survey were combined with various spatial analyses and findings from precedent reports to provide a clear prospectus of opportunities and constraints in the community.

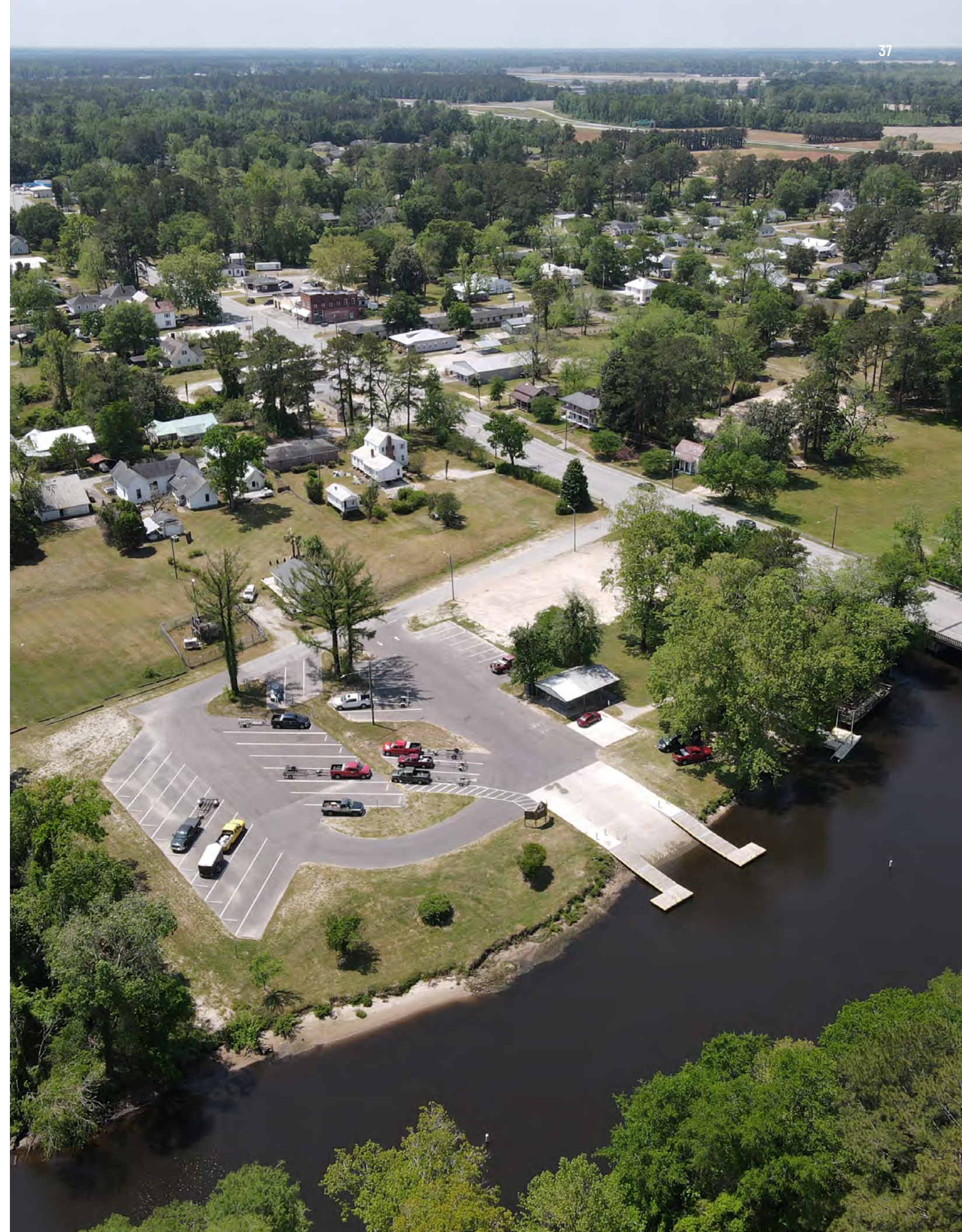


FOCUS AREA IDENTIFICATION

As a result of the overall due diligence process, the project team identified a specific area in Pollocksville to provide more precise levels of mitigation recommendations and redevelopment considerations. This specific area includes the Main Street commercial district, Riverfront Park, and several blocks of properties between these two that currently have high percentages of dwelling units identified as vacant.



By focusing resilience-building efforts within areas that are: i) the most **vulnerable to future flood damages**; ii) currently experiencing **elevated levels of vacancy** due to Hurricane Florence; and iii) able to **connect into existing open space networks and/or community-identified places of meaning**, the Town of Pollocksville can become a more resilient community.



FLOOD MITIGATION NEEDS TO RESPOND TO RISKS, LEVERAGE OPPORTUNITIES, AND BE PRECISELY DEFINED ALONGSIDE THE COMMUNITY.

The project team shared the results of this analysis with the Technical Advisory Committee to co-create a public process for sharing information and presenting mitigation recommendations based on the findings.

These recommendations were presented on large-format posters and distributed via handheld pamphlets during a community engagement session in February 2021, where Pollocksville residents were asked to comment on the various mitigation proposals.

TYPES OF MITIGATION TECHNIQUES

+ Floodproof. For houses with less severe flood damage, fortifying in place may be a viable option through various methods of floodproofing. There are two categories of floodproofing: wet and dry. Wet floodproofing allows floodwaters to enter a building as a means of lessening structural damage and expediting cleanup efforts, whereas dry floodproofing attempts to prevent the entry of floodwaters altogether.

Wet floodproofing uses water-resistant construction materials and techniques that are capable of withstanding inundation. Allowing floodwaters to enter and move through a building lessens the likelihood of structural damage by equalizing the pressure (i.e., weight of water) on both sides of load-bearing structures (FEMA, 2014). Generally, wet floodproofing is best reserved for use in non-habitable spaces, such as garages and crawl spaces. However, wet floodproofing can also expedite the cleaning and drying of habitable spaces following a flood. Wet floodproofing neither guards buildings from the impacts and deposition of debris nor protects the contents of buildings from saturation, mold, and damage that result from exposure to water.

Dry floodproofing requires completely sealing the exterior of a building to prevent the entry of floodwaters (FEMA). This system relies on: i) fortified walls to resist the external forces exerted by floodwaters; and ii) integrated backup drainage devices, like sump pumps, to minimize internal exposure to water intrusion. Because the pressure of water on structures is so great, this method is only suitable for structures where maximum flood depths are less than three feet (FEMA, 2014).

+ Elevate. A second option for houses with less severe flood damage is to elevate the building above regulated flood levels. The most common methods for raising a building include: elevation using a concrete or masonry **foundation**, or elevation using concrete, masonry or treated-lumber **piers**. Elevating a house with a **foundation** is considered a viable option for buildings if the new finished floor elevation (FFE) does not exceed four feet (48") above the surrounding ground level. Once elevation needs exceed four feet, it is recommended to elevate a house with **piers**.

+ Convert to Open Space. While vacating lots is not desirable from a municipal tax-base perspective, it is most often the safest and most permanent option for homeowners to move out of harm's way. If predicted flood heights or cost effectiveness of floodproofing or elevating a home make remaining in-place a non-feasible option for residents, vacating their property may be the only remaining option. In these cases, understanding all applicable deed restrictions and existing ownership conditions tied to a vacated lot can make the difference between the property becoming dormant and remaining as an environmental hazard, or the lot finding a new and productive life via adaptive management techniques.

Additional Reference:

Studies have shown that dry-floodproofed walls begin to fail once flood height exceeds three feet. More information can be found by clicking on the provided hyperlink:

+ [FEMA: Flood Retrofitting Guide](#)

Additional Reference:

Conversion of properties to open space most commonly happens through one of various 'buyout' programs. More information about current buyout programs can be found by clicking on the provided hyperlink:

+ [NC Strategic Acquisition Programs](#)



PUBLIC FEEDBACK + MITIGATION SPECIFICS

During the community engagement session held in February 2021, Pollocksville residents exhibited much interest in learning more about mitigation options available for their own properties and for the community more broadly. Specifically, written comments and verbal conversations about mitigation techniques carried three themes: i) requests for specific floodproofing and elevation examples; ii) requests for information about potential funding sources to assist private property owners in making these types of improvements; and iii) requests for information about outreach processes and timelines for State-administered buyout programs, which is the most commonly used method for converting flood-prone properties to open space. This page and the ones that follow in this chapter provide additional information about each of these mitigation options. This information was used in the creation of refined mitigation recommendations for Pollocksville and, hopefully, is of use to the community members that raised important questions about flood mitigation alternatives.

Floodproof. While an effectively dry-floodproofed building can keep water from entering a property, it is generally not recommended for broad use in Pollocksville. These systems tend to fail if flood heights exceed three feet, which was the case for many of the affected homes. Additionally, as property owners continue to make repairs from Florence, this provides an opportunity to make wet-floodproofing modifications that can better withstand future flood events. Wet-floodproofing improvements include:

+ Elevating Electrical Outlets. Raising electrical outlets above expected flood heights (e.g. above the chair rail) prevents widespread damage to outlets and wiring systems that would otherwise need to be replaced after a flood.

+ Paneling Beneath the Chair-Rail. Rather than using drywall all the way to the baseboard, using an easily removable paneling material underneath the chair rail expedites time spent on repairing interior walls after a flood (without damaging the drywall above the chair rail).

+ Easily Removable Insulation. Inside the walls, using batted or board-form insulation also reduces the amount of time spent on repairing interior walls after a flood (as opposed to using blown-in insulation).

+ Extra-Wide Baseboards. Leaving a larger than typical gap between the bottom of the wall paneling and the floor, which is covered by a baseboard, prevents excessive wall damage during minor flood events.

+ Water-Resistant Flooring Material. Using certain types of flooring materials that resist damage if exposed to water prevents the need to remove and replace flooring after a flood. Flooring types for these purposes most commonly include: concrete / concrete tile, ceramic tile, and pressure-treated lumber for all subfloor materials, when needed.

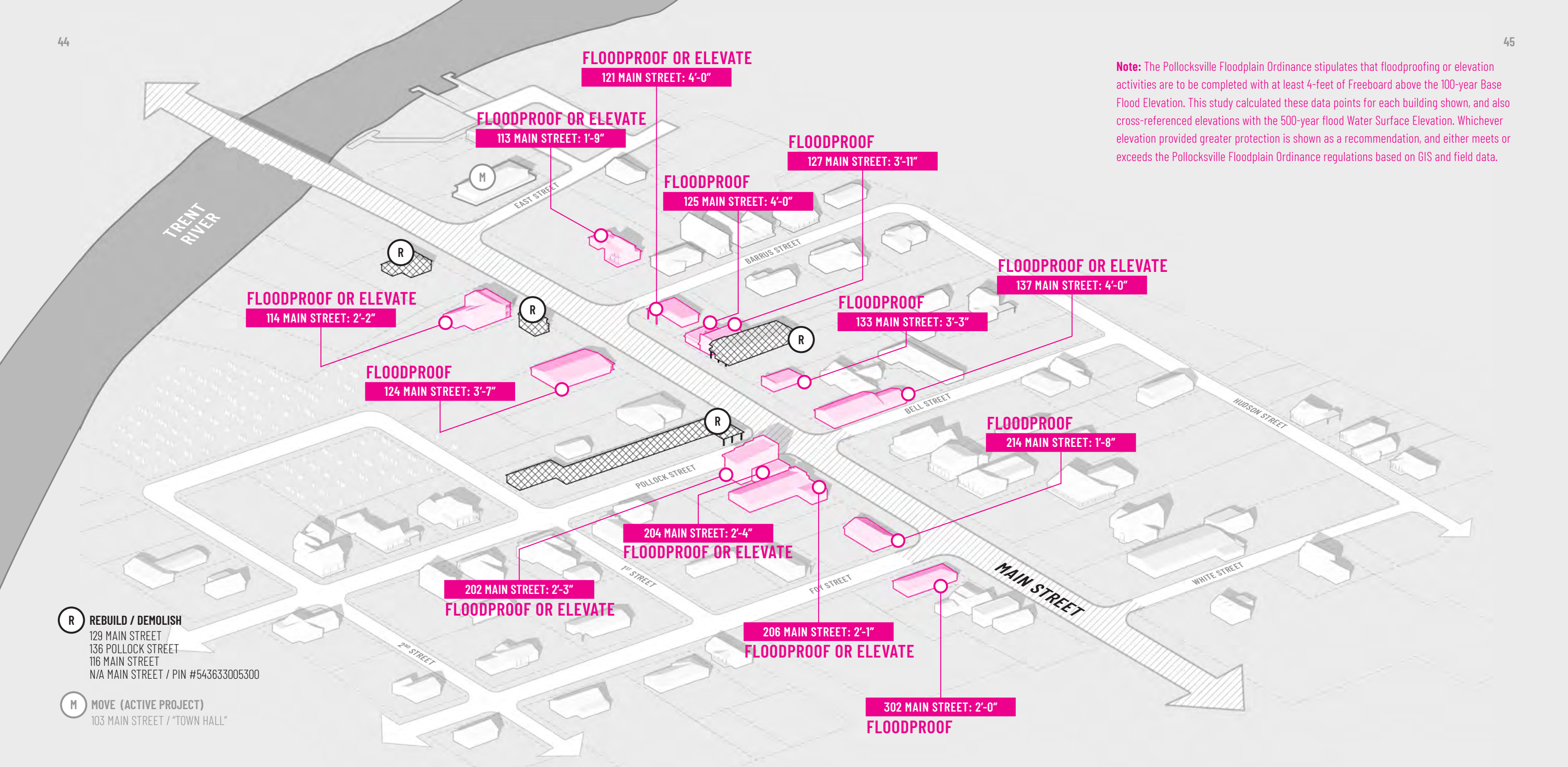
+ Crawl Space Vents. Making sure that crawl spaces beneath the first floor have plenty of openings for water passage equalizes pressure during a flood event, and lessens the damage to the home's foundation during a flood. Specific products are available for these uses (e.g. flood flaps), but the more typically used grated vents also provide this function.

+ Elevating Utilities. When possible, raising exterior heating / cooling units and ductwork significantly reduces property damage and expedites time spent on repairs after a flood. As part of this project's engagement with Town leadership, elevating exterior heating / cooling units above base flood elevation is now an allowable expenditure for recipients of funds from the Town's facade grant improvement program.

Elevate. The price associated with elevating a home via heightened foundations or piers can often be cost-prohibitive for many homeowners without financial assistance. Most commonly, federally funded and state-administered hazard mitigation programs (e.g. HMGP) can help with many of these costs for homeowners that are: i) in a county where a federally declared disaster recently occurred (e.g. Hurricane Florence); or ii) are within a delineated and active 'hazard mitigation zone' (commonly referred to as a 'buyout zone'). While buyouts (converting a property to open space) is generally the advised mitigation option for homeowners within a buyout zone, some programs allow for a home to be rebuilt in place or elevated above flood heights, if damage estimates and the cost of improvements meet certain criteria.

In addition to elevating with foundations or piers, "floating floors" is another option that is recommended for commercial properties along Main Street. For buildings where the floor-to-ceiling height allows for the ground-level floor to be elevated, floors can be raised (using a water-resistant flooring material) internal to the building without impeding code minimum head-clearance heights. The difference in height also has to be reconciled with staircases, as needed.

Convert to Open Space. Homeowners within buyout zones will be given the option to sell their homes for pre-disaster fair market value and to relocate to safer areas. Once a transaction is complete, properties are remediated for hazardous materials, demolished, and are typically seeded with grass. More information about these programs is provided in the "Voluntary Buyout Programs" section of this report.



Note: The Pollocksville Floodplain Ordinance stipulates that floodproofing or elevation activities are to be completed with at least 4-feet of Freeboard above the 100-year Base Flood Elevation. This study calculated these data points for each building shown, and also cross-referenced elevations with the 500-year flood Water Surface Elevation. Whichever elevation provided greater protection is shown as a recommendation, and either meets or exceeds the Pollocksville Floodplain Ordinance regulations based on GIS and field data.

FLOODPROOFING + ELEVATING MAIN STREET

Geospatial data containing: finished floor elevations (FFE), point elevations of the ground surface from a digital elevation model (DEM), and interior measurements of commercially zoned and accessible buildings along Main Street collectively informed the floodproofing and elevation recommendations.

For buildings carrying an “elevate” recommendation, this means that either: i) the entire building can potentially be elevated using a foundation or pier technique; or ii) the floor-to-ceiling ratio within the first floor of the building is high enough to allow for the ground floor



Grant Reference
This specificity is critical for requesting financial assistance for implementation.

to “float” at a higher elevation above existing floor heights. For buildings carrying a “floodproof” recommendation, this means that elevation of the entire building is not feasible and the floor-to-ceiling ratio within the first floor of the building will not allow for an elevated “floating” floor. In this case, floodproofing recommendations have been provided at elevations noted above the existing FFE of each building.



NCORR-led outreach efforts to homeowners within the Community Development Block Grant - Mitigation (CDBG-MIT) Voluntary Buyout Area are expected to begin in fall 2021.

CDBG-MIT VOLUNTARY BUYOUT ZONE

ADMINISTERED BY NCORR

50-YEAR FLOODPLAIN
HYDRAULIC MODEL

100-YEAR FLOODPLAIN
SOURCE: FEMA

500-YEAR FLOODPLAIN
SOURCE: FEMA

**ADMINISTERED BY NCEM
HMGP MITIGATION ACTIVITIES**

The NCEM-led Hazard Mitigation Grant Program (HMGP) issued a final public notice for potential acquisitions through their program on May 3, 2021. Mitigation activities are stated to be occurring in the following locations: the 100 block of East Street, the 100 block of Hudson Street, the 200 block of Main Street, the 100 block of Barrus Street, and the 100 and 200 blocks of Hughes Plantation Road.

VOLUNTARY BUYOUT PROGRAMS

There are two State-administered mitigation programs that either currently or eventually will offer voluntary 'buyouts' to flood-impacted homeowners in Pollocksville. As previously noted, qualifying homeowners in each program will be offered the pre-disaster fair market value of their homes in order to safely relocate residents out of flood-prone areas. Once acquired, all buildings are demolished and the vacant lot is deeded to the local jurisdiction (Town of Pollocksville) to maintain as open space for perpetuity.

First, the Hurricane Florence Hazard Mitigation Grant Program (HMGP) is currently underway and

Additional Reference:
+ [Standard HMGP Timeline](#)

is being administered by North Carolina Emergency Management (NCEM). As part of this program, flood-impacted homeowners in Jones County can request that their properties be considered for acquisition, elevation or rebuilding in place. Second, the Hurricane Florence Community Development Block Grant-Mitigation (CDBG-MIT) program is expected to launch in fall 2021 and is being administered by the North Carolina Office of Recovery and Resiliency (NCORR). This program targets the most flood-vulnerable properties in Pollocksville and will offer a second opportunity for homeowners in the highlighted area to consider a buyout of their property. Draft forms of this delineation were included as part of the Pollocksville Community Floodprint public outreach materials.

ALLOWABLE USES OF BUYOUT PROPERTIES

Properties acquired with monies provided by federal disaster relief programs must adhere to specific uses after acquisition occurs. The following conditions and restrictions apply to all properties acquired through the HMGP program (and similar conditions apply to CDBG-MIT):

+ Compatible Uses. The properties shall be dedicated and maintained in perpetuity as open space for the conservation of natural floodplain functions. Such uses may include: parks for outdoor recreational activities; wetland management; nature reserves; cultivation; grazing; camping (except where adequate warning time is not available to allow evacuation); unimproved, unpaved parking lots; buffer zones; and other uses consistent with FEMA guidance for open space acquisitions, Hazard Mitigation Assistance, Requirements for Property Acquisition and Relocation for Open Space.

+ Structures. No new structures or improvements shall be erected on the properties other than: i) a public facility that is open on all sides and functionally related to a designated open space or recreational use; ii) a public restroom; or iii) a structure that is compatible with open space and conserves the natural function of the floodplain, including the uses described above, and approved by the FEMA Administrator in writing before construction of the structure begins.

Any improvements of the properties shall be in accordance with proper floodplain management policies and practices, including flood-proofing or elevation to at least the Base Flood Elevation (BFE) plus freeboard (44 CFR Part 80).

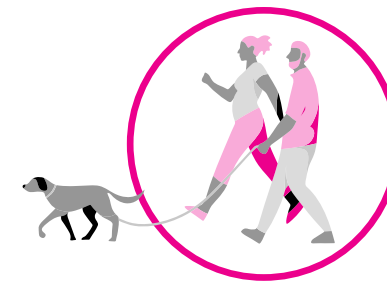
A staple of the Floodprint process is assessing the suitability of these eight (8) listed compatible uses within areas that have a high likelihood of acquisition through various buyout programs. For Pollocksville, suitability criteria suggest that four (4) of the eight (8) land uses are most suitable for potential buyout properties: outdoor recreation, buffer zone, managed wetlands, and unpaved parking areas.

In addition to a land-based suitability assessment, additional considerations were given to the capacity realities of managing any of these practices by the local government, county departments, or potential programmatic partners. After a buyout occurs, the land is deeded to the local government and must be maintained by the local government or by approved second parties (e.g., Jones County, U.S. Forest Service, etc.) that are able to maintain the lands in accordance with FEMA stipulations. Some of the allowable land uses, such as grazing or cultivation, require significant investments of time and/or resources by the local government in order to properly manage and maintain. While some maintenance is required with each of the four recommended land uses, these are typically lower investments of time and resources than other allowable options and are most compatible with existing conditions in Pollocksville.

Additional Reference:

More information about FEMA Model Deed Restrictions can be found by clicking on the following hyperlink:

[+ 44 CFR Part 80](#)



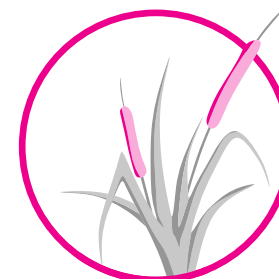
OUTDOOR RECREATION

- + Adjacent to the Trent River or Protected Lands, or
- + Adjacent to Main Street Commercial District, or
- + Near Points of Access (e.g. boat, vehicular, biking, walking)



BUFFER ZONE

- + Adjacent to the Trent River or Protected Lands, or
- + Between Potential Conflicts (e.g. busy roads and Residential)



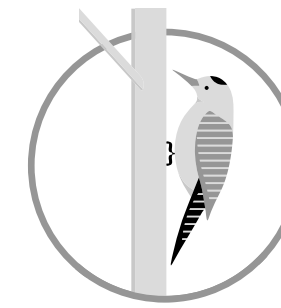
MANAGED WETLANDS

- + Adjacent to the Trent River or Protected Lands, or
- + Adjacent to Main Street Commercial District, or
- + Within a High-Frequency Flood Area (e.g. 1-Year Floodplain)



UNPAVED PARKING

- + Adjacent to Main Street Commercial District, or
- + Near Points of Access (e.g. boat, vehicular, biking, walking)



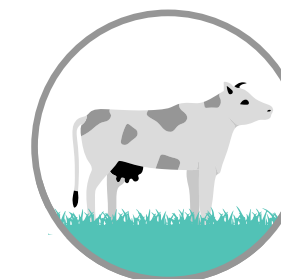
NATURE RESERVE

- + Adjacent to the Trent River or Protected Lands, and
- + Minimum Size of 1 Acre, and
- + Not Adjacent to Potential Conflicts (e.g. busy roads)



CAMPGROUND

- + Adjacent to the Trent River or Protected Lands, and
- + Minimum Size of 1/2 Acre, and
- + Not Adjacent to Residential Land Use



GRAZING

- + Not Adjacent to the Trent River or Protected Lands, and
- + Minimum Size of 2 Acres, and
- + Not Adjacent to Residential Land Use



CULTIVATION

- + Minimum 50% Land Cover without Tree Canopy, and
- + Low Probability of Soil Contamination, and
- + Disconnected Parcels (e.g. small-scale operations)

MOST SUITABLE
 LEAST SUITABLE

03: PLANNING ALTERNATIVES + THE FLOODPRINT PLAN

This section of the report: i) includes the multiple planning alternatives that were publicly presented via large-format posters and handheld pamphlets; ii) summarizes feedback received about the two presented planning alternatives; and iii) includes the final Pollocksville Community Floodprint Plan that was revised after receiving public feedback.

COMMUNITY INPUT GUIDED THE PROCESS.

At the same community engagement session where mitigation recommendations were presented, two different planning alternatives were shown to illustrate various options for building back more resiliently in Pollocksville.

Both proposals combined economic development opportunities along Main Street with environmentally sensitive improvements for Riverfront Park, and FEMA-allowable land uses within potential buyout properties. Public feedback was provided via push-pin votes and sticky-note comments. The results were then consolidated and used as a guide for refining the Pollocksville Community Floodprint plan into its final version.



Original Photo: Nate Polo (2021)

MITIGATION + PLANNING ALTERNATIVES: PUBLIC PROCESS

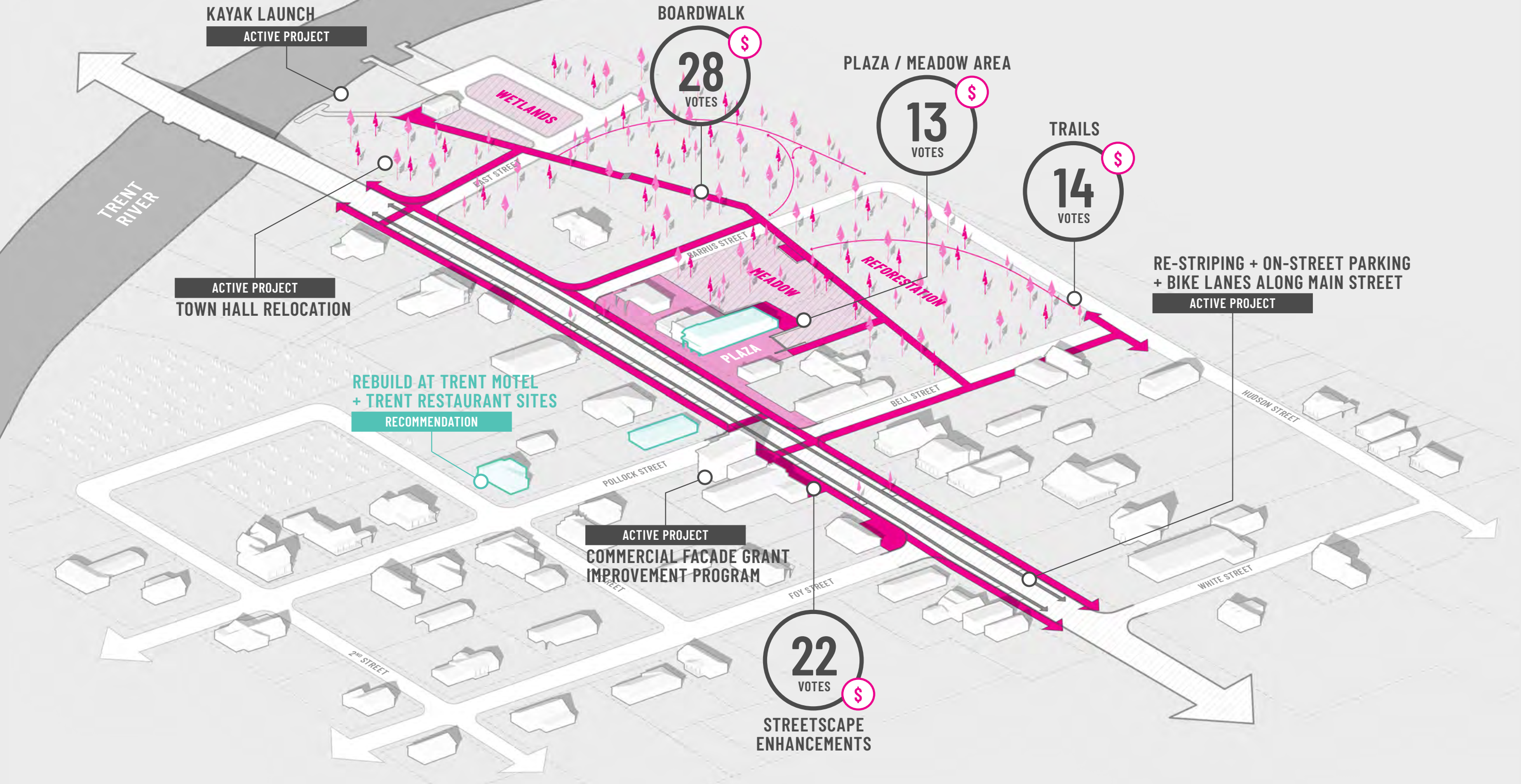
This community engagement session was specifically designed with COVID-era practices in mind. The outdoor event was advertised via web (Town of Pollocksville website) and print media (mailed flyers, posted signs in Town, and an article in the New Bern Sun-Journal newspaper) leading up to the engagement day. Sixty (60) stakeholders participated in the event. Upon arrival, participants were each given a bag containing four (4) push-pins, several sticky-notes, a pen, and an informational pamphlet. The pamphlet contained a summary of information presented on the large-format posters, as well as instructions for how to interact with the boards via push-pin votes and sticky-note comments.



Grant Reference

Many grant programs will score proposals with a higher ranking if there is evidence of community input.

Across the two planning alternatives that were presented, there were a total of eight (8) land-use / programmatic options displayed. Instructions asked participants, using their push-pins as a voting device, to pick their top four (4) preferred land-use / programmatic options of the eight presented. Participants were also able to write any additional comments using the provided sticky notes and pens. These eight options were specifically selected because of their ability to: i) conform with FEMA-allowable land uses within properties acquired via buyout programs; ii) abide by FEMA deed restrictions for structures; or iii) align with suitability findings from the inventory and analyses phases of the study.



ALTERNATIVE A: "FRONT PORCH / BACK DECK"

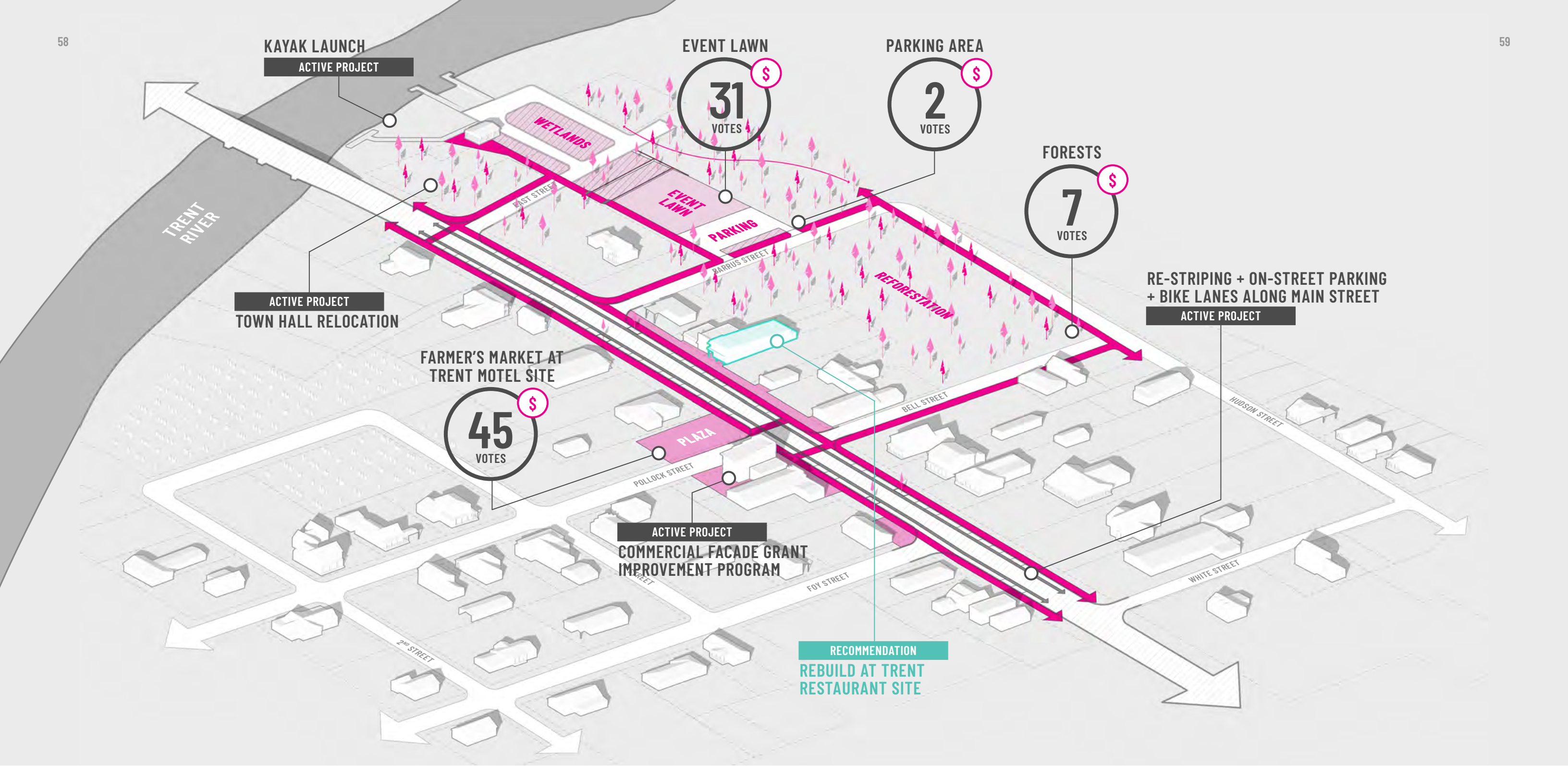
Planning alternative 'A' proposed the concept of "front porch / back deck." This concept couples improvements along the east side of Main Street with FEMA-allowable land uses of properties within potential buyout properties.

The goal of this alternative is to increase the amount of amenity space currently servicing Main Street businesses by: i) proposing investments in streetscape enhancements, such as benches, trash bins, banners, bike racks, etc; ii) expanding plaza areas for public use throughout the commercial district; and iii) offering a combination of meadows, wetlands,

boardwalks, and trails behind the commercial buildings, all of which ultimately connect to Riverfront Park.

\$ From the options presented on this board, "boardwalk" (28 votes) and "streetscape enhancements" (22 votes) received the most votes from the participating stakeholders.

Grant Reference
Many grant programs will score proposals with a higher ranking if there is evidence of community input.



ALTERNATIVE B: "RIVER & REVITALIZATION"

Planning alternative 'B' proposed the concept of "river and revitalization." This concept couples improvements along both sides of Main Street with FEMA-allowable land uses within and immediately adjacent to Riverfront Park.

The goal of this alternative is to establish a local, walkable network that connects two regionally significant economic development opportunities: i) a farmer's market and ii) an event lawn (with parking). The farmer's market and event lawn were specifically selected as programmatic alternatives for this plan because both are allowable uses within buyout

zone properties (e.g., an open air retail hub would not obstruct floodplain functions per FEMA requirements), and both can be adapted to either fit within or in proximity to the Main Street commercial district.

\$ Grant Reference From these presented options, "farmer's market" (45 votes) and "event lawn" (31 votes) received the most votes from the participating stakeholders.

Many grant programs will score proposals with a higher ranking if there is evidence of community input.

TAKEAWAYS FROM PUBLIC FEEDBACK

Inclusive of all the community feedback on the two programming alternatives presentation boards, a farmer’s market (45 votes), event lawn (31 votes), boardwalk (28 votes), and streetscape enhancements (22 votes) were selected as the top resiliency-building priorities by the community (trails; plaza / meadow area; forests; and parking area each received 14, 13, 7, and 2 votes, respectively). The top tier of selections were then prioritized during the plan refinement process, and specific locations in Town were identified to fit each of these programmatic opportunities.

In addition to the push-pin selections, there were a number of write-in comments that were considered during the plan refinement process. Compilation of written feedback from the poster engagement (February 2021) and the public comment period for the revised Floodprint plan (May 2021), included the following comments:

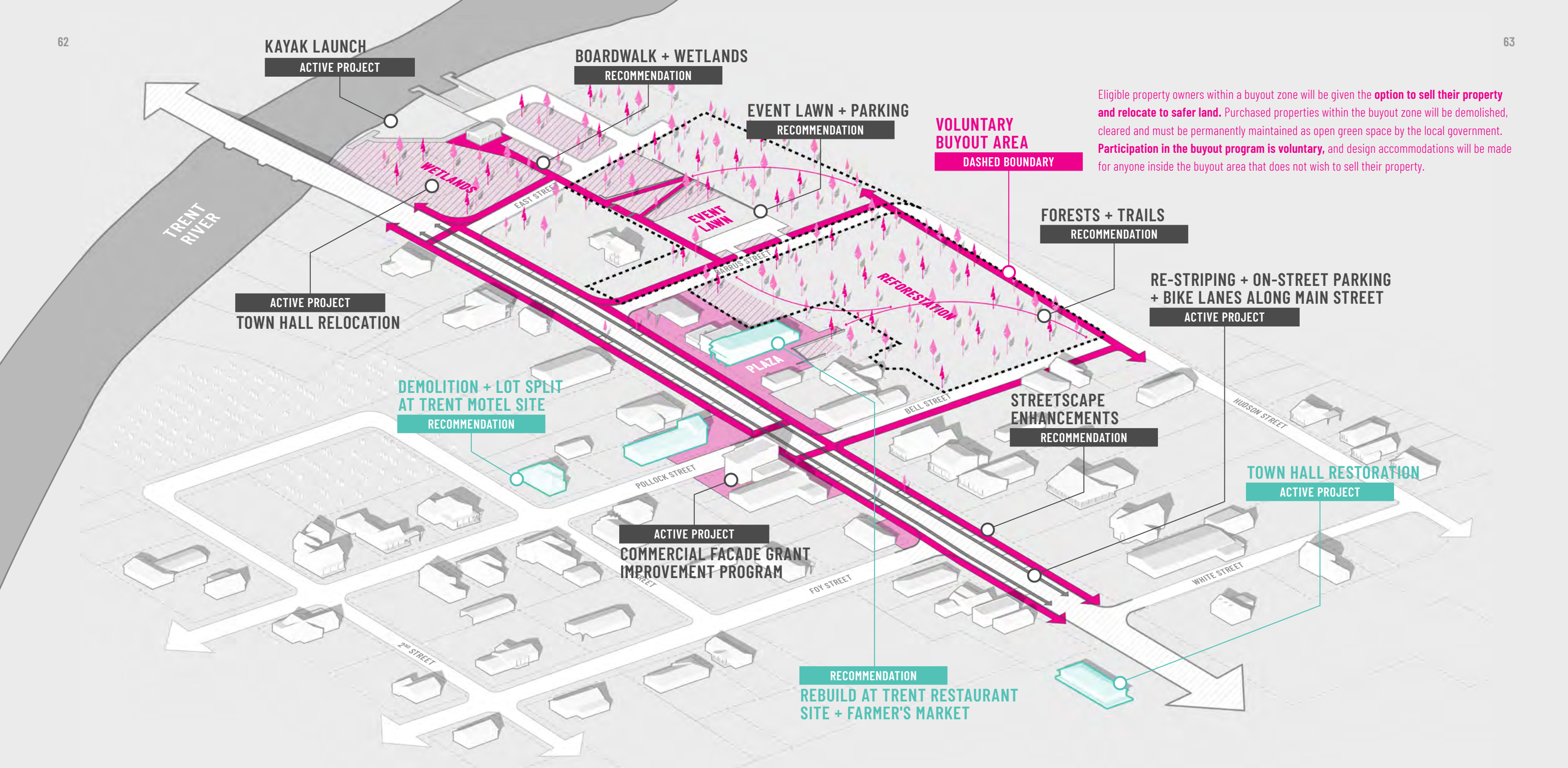
+ Dog park; trees; all inclusive; skatepark; basketball courts; event lawns; boardwalk; pavilion / outdoor venue; public electric vehicle charging; fun, safe and scenic places to run; well lit; bike trails; hiking trails.

“A farmer's market, event lawn, boardwalk, and streetscape enhancements were selected as the top resiliency-building priorities by the community.”

Additionally, recently completed parks and recreation-focused surveys in Pollocksville (WithersRavenel, 2020; and Town of Pollocksville, 2020) show that several of these comments have been repeatedly stated as desires by community stakeholders. These most notably include: a skatepark, basketball courts, and a pavilion. While there was clear public consensus around the top four vote-getting priorities, it is also evident that there may be other forms of active recreation (e.g. skating, basketball) that are of local or regional

interest and may represent a lack of supply to meet demand. Because these specific uses are not suitable, and in some cases not legally allowed, in the study focus area (e.g., floodplains), it is recommended that the Town of Pollocksville and/or Jones County consider alternative locations and funding opportunities to meet these stated desires.

However, the robust stakeholder turnout during the February engagement and the overwhelming preference for the top four priorities provided a high-level of confidence in the appropriateness of certain programs to provide environmental, economic, and recreational benefits for Pollocksville residents. Collectively, the programmatic preferences for a farmer’s market, event lawn, boardwalk, and streetscape enhancements were used as the primary drivers to create the revised and final version of the Pollocksville Community Floodprint Plan.



Eligible property owners within a buyout zone will be given the **option to sell their property and relocate to safer land**. Purchased properties within the buyout zone will be demolished, cleared and must be permanently maintained as open green space by the local government. **Participation in the buyout program is voluntary**, and design accommodations will be made for anyone inside the buyout area that does not wish to sell their property.

REVISED POLLOCKSVILLE FLOODPRINT PLAN

The revised Floodprint plan combines the top preferences as stated by the community into a single, unified plan.

Key features include: i) a series of constructed wetlands and a boardwalk at Riverfront Park (most of which is within the 1-year floodplain); ii) a "Complete Street" approach to Main Street, including a variety of streetscape furnishings to strengthen place-making; iii) an event lawn, including reforested areas, trails, a parking area, and constructed wetlands, as an adaptive re-use strategy for potential buyout properties; and iv) recommendations for

demolition and/or redevelopment of the Trent Motel and Trent Restaurant sites, which could include a phased approach to developing an open-air retail structure such as a farmer's market.

THIS PLAN IS NOT STATIC. IT IS EXPECTED TO CHANGE AS CONDITIONS AND OPPORTUNITIES SHIFT, EVOLVE, AND TAKE SHAPE OVER TIME.

However, the community-defined priorities and resulting planning framework allow for the creation of an interconnected, phased project portfolio that are both locally meaningful and regionally impactful for building a more resilient community.

04: THEMATIC RECOMMENDATIONS + PROJECT PORTFOLIO

This chapter illustrates how the community's top voting priorities align with regional (e.g., county, watershed) opportunities as a means of determining specific locations within Town Limits that offer the best potential to create synergies through connections into larger-scale systems.

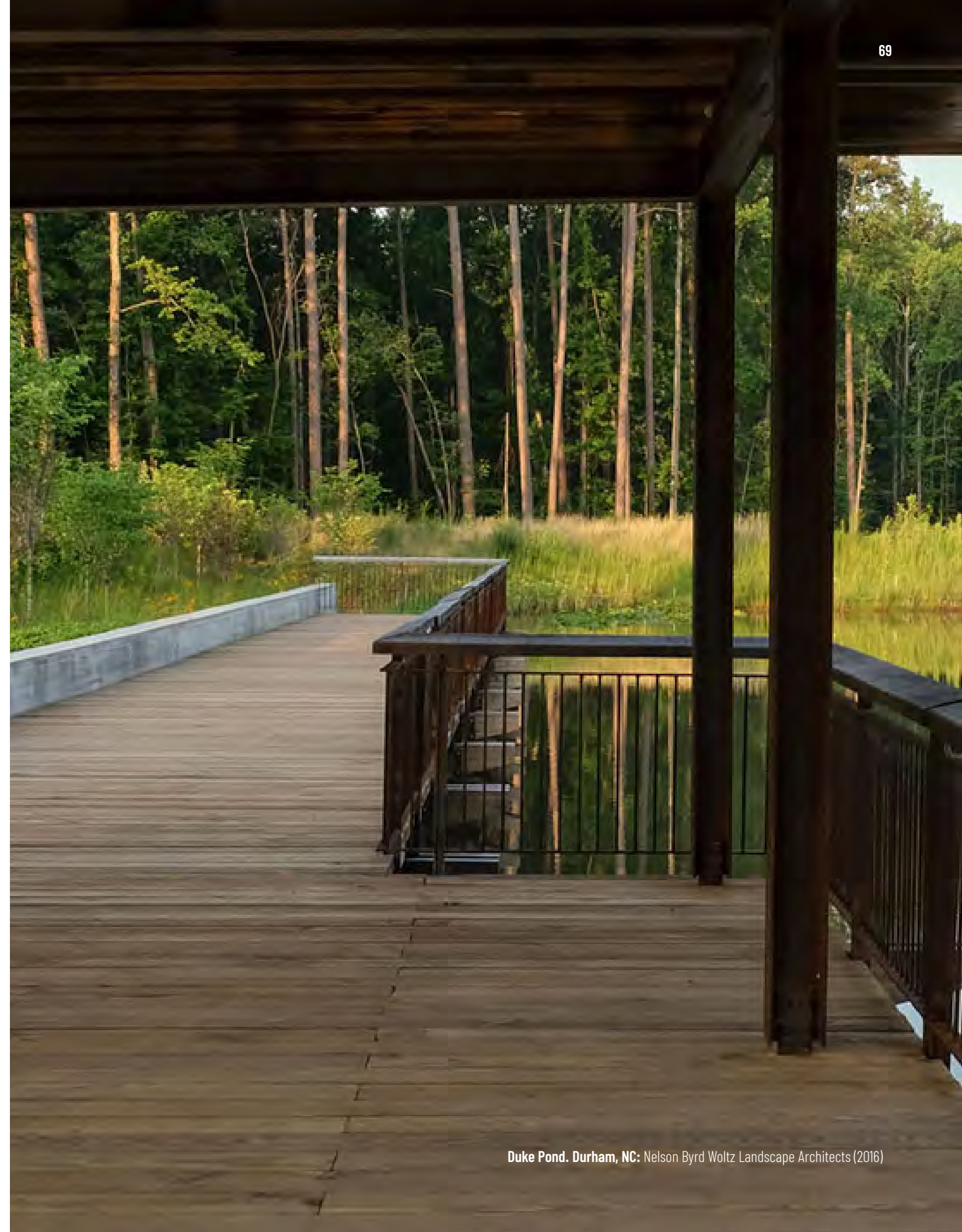
These regional-to-local findings are organized to align with the primary thematic recommendations of the Pollocksville Community Floodprint: environmental resiliency, recreational enhancement, and economic recovery. Furthermore, the individual projects presented within this portfolio include materials generated for the explicit use of making each project competitive for potential external sources of funding (e.g., grants). These materials include:

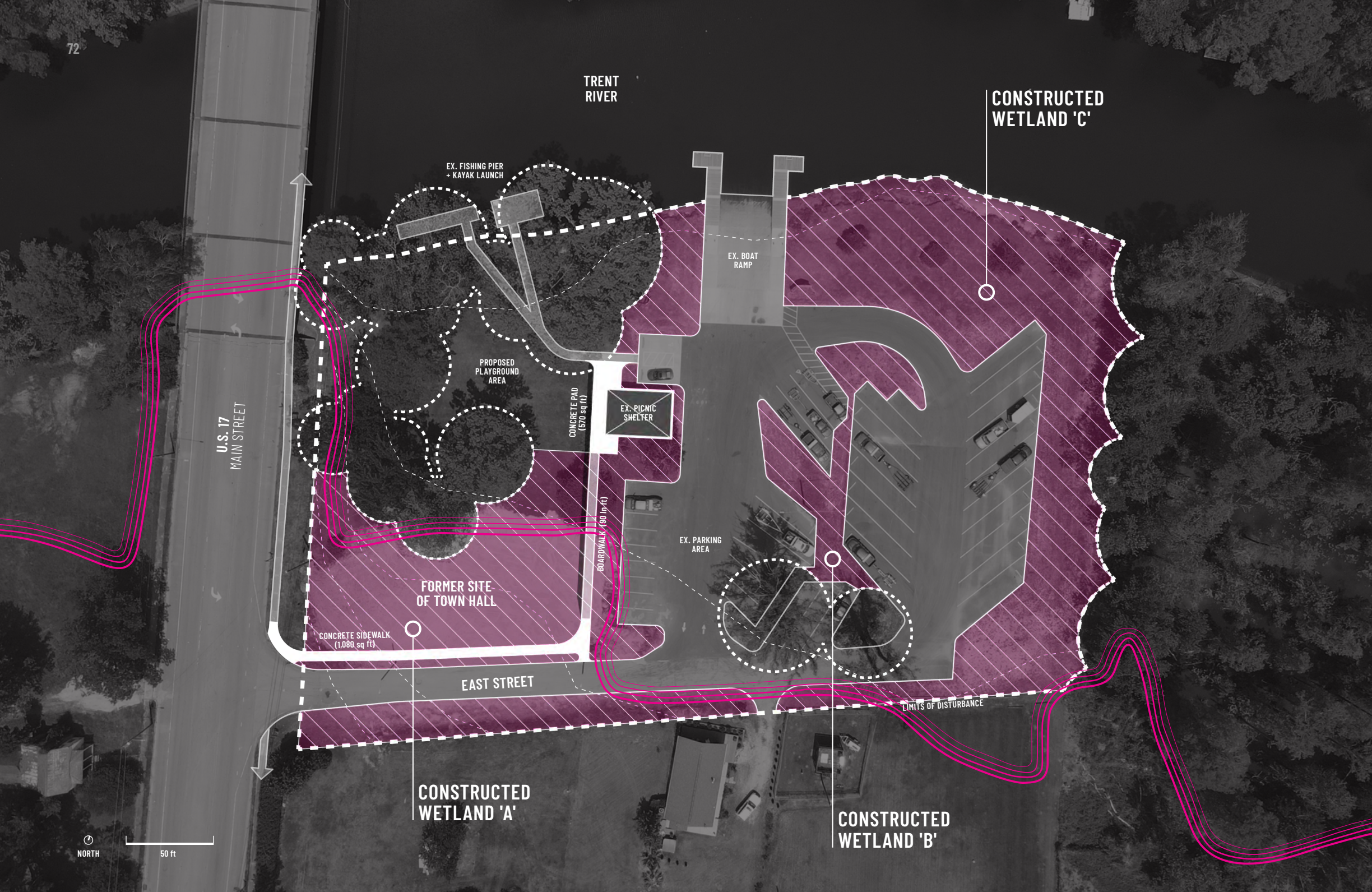
descriptions of project suitability, measurements of project impact, determinations of project costs, definitions of project goals, and articulations of project scope.

Environmental Resiliency

Recommendation: Increase public access to managed wetlands throughout the townscape to communicate that Pollocksville is the "Gateway to Nature" for eastern NC.

Because of the expected prevalence of flooding within Riverfront Park and the lack of established vegetation throughout much of the site, it is recommended that near-term **boardwalk and wetland construction** efforts focus on this area. Secondary phases of wetlands, tree canopy, and multi-modal paths can be expanded within Main Street enhancements and eventually within buyout properties.





89% of Riverfront Park, including 71% of the proposed wetlands, is inside the modeled 1-year floodplain. This means it can be expected that these areas **will receive floodwaters from the Trent River every year.**

ENVIRONMENTAL RESILIENCY: LOCAL ACTION

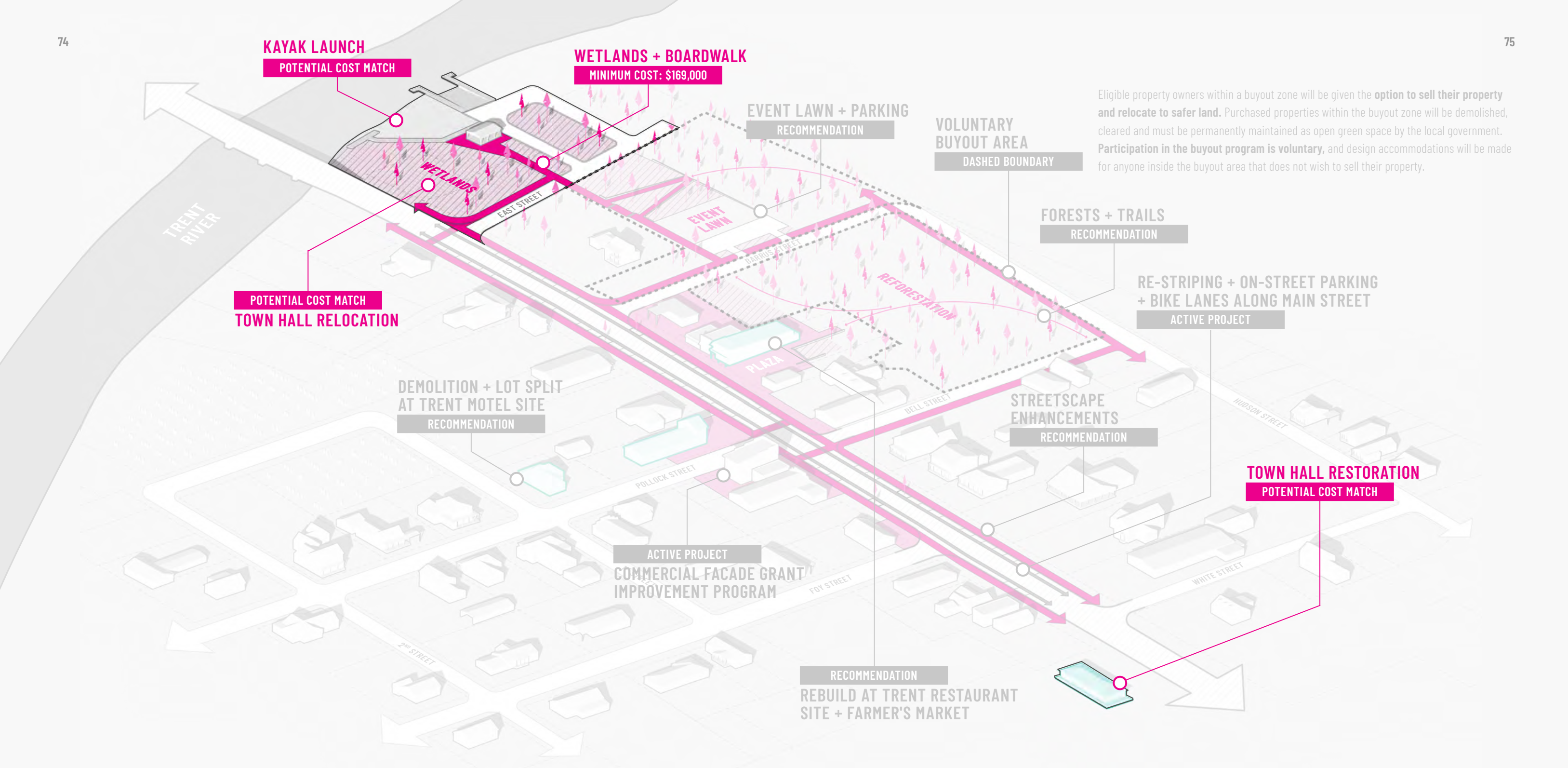
The benefits of constructing managed wetlands within Riverfront Park are significant at both local and regional scales because 89% of the project site is within the modeled 1-year floodplain of the Trent River, and are therefore expected to receive floodwaters on an annual basis.

The environmental impacts of doing so are further validated using FEMA's Benefit-Cost Analysis (BCA) Toolkit. This calculator estimates the dollar equivalent of mitigation benefits provided by projects in comparison to the cost of implementation. Specific to the proposed



Grant Reference: Measuring Impact

managed wetlands, the BCA suggests this project will be cost effective in only 4.8 years (when the cost savings from mitigation services outweigh the project's implementation costs), and will yield the equivalent of \$2.58 in mitigation benefits for every \$1.00 of allocated construction funding.



Eligible property owners within a buyout zone will be given the **option to sell their property and relocate to safer land**. Purchased properties within the buyout zone will be demolished, cleared and must be permanently maintained as open green space by the local government. **Participation in the buyout program is voluntary**, and design accommodations will be made for anyone inside the buyout area that does not wish to sell their property.

ENVIRONMENTAL RESILIENCY: FLOODPRINT PLAN

Constructing wetlands at the former Pollocksville Town Hall site and throughout Riverfront Park is a critical within the Floodprint plan because the project: i) is located on existing Town-owned property and is therefore shovel-ready and can be acted upon immediately; ii) can leverage expenditures associated with the relocation and restoration of Town Hall as potential sources of cost-match for grants; and iii) if awarded external grant funds, will allow for even more cost-match opportunities into physically and programmatically connected areas such as new sidewalks along Main Street and/or additional recreational offerings within properties that are eventually acquired through a buyout program.

Grant Reference: Project Costs

\$ The expected minimum cost of this project is \$169,000. This figure includes: i) the construction of planted wetland areas at Riverfront Park (except for areas that are underneath existing tree canopies, reserved for a playground area, or are currently used for parking); ii) the construction of a boardwalk and concrete sidewalk that connects the existing picnic shelter and proposed wetlands to Main Street; and iii) estimated, standard costs for permitting, design, engineering, project management, and construction contingencies.

SITE DISTURBANCE

THE RECENT RELOCATION OF THE TOWN HALL BUILDING HAS CREATED A 'SHOVEL-READY' CONDITION ON THE PROJECT SITE

LOW ECOSYSTEM VALUE

MUCH OF THE PROJECT SITE IS A COMBINATION OF ASPHALT PAVING, MOWED GRASS, OR BARE EARTH - MISSING AN OPPORTUNITY FOR INCREASING RIVERINE BIODIVERSITY

VEHICULAR-ONLY ACCESS

THE EXISTING SIDEWALK ON MAIN STREET DOES NOT CONNECT DOWN TO RIVERFRONT PARK, HINDERING ANY POTENTIAL PEDESTRIAN CONNECTIVITY TO THE SITE

ENVIRONMENTAL RESILIENCY: EXISTING

Implementation of constructed wetlands and a publicly accessible boardwalk at this location will fulfill all project recommendations for this site as identified in the Pollocksville Community Floodprint Plan.

Plan goals include: i) relocating the Pollocksville Town Hall outside of the floodplain; ii) installing stormwater best management practices at the former Pollocksville Town Hall site and adjacent grounds; iii) advancing local and regional interests in the enhancement of recreational assets; and iv) more meaningfully connecting Pollocksville's Riverfront Park



Grant Reference: Defining Goals

into the broader network of riverine habitats and ecosystems that weave together the Trent and Neuse River watersheds.

As part of this project, the Town of Pollocksville recently completed installation of a ADA-compliant kayak launch to complement the park's existing boat ramp and fishing pier. The Town has also recently finished relocating the Town Hall building to higher ground. Much of the site, now recently disturbed from the Town Hall relocation project, is ready to serve the community through new uses focused on the benefits of nature-based infrastructure.

2.58 BENEFIT-COST RATIO

EVERY \$1 OF PROJECT COSTS (\$169,000) WILL YIELD \$2.58 IN ESTIMATED MITIGATION BENEFITS (\$436,642) OVER THE ANTICIPATED USEFUL LIFE OF THE PROJECT (FEMA BCA, 2021)

56,600 SQ FT

AREA OF IMPERVIOUS SURFACE TREATED BY CONSTRUCTED WETLANDS

4.8 YEARS

ESTIMATED TIME FOR THE PROJECT TO BECOME COST-EFFECTIVE (WHEN MITIGATION BENEFITS OUTWEIGH THE PROJECT COSTS)

ENVIRONMENTAL RESILIENCY: PROPOSED

Once funding is secured, it is recommended to use a 24-month timeline to complete the project from start to finish. Completing the work will include the following scopes of work:

- i) Issuance of a RFQ/RFP for the design-build of constructed wetlands at the proposed site; ii) completion of all design, engineering, and related permitting services; iii) finished construction of a publicly accessible wetland area, including the installation of over 5,000 individual plants; iv) the addition of approximately 350 linear feet of walking paths to encourage greater connectivity and accessibility to the wetlands; v) completion of a



Grant Reference: Project Scope

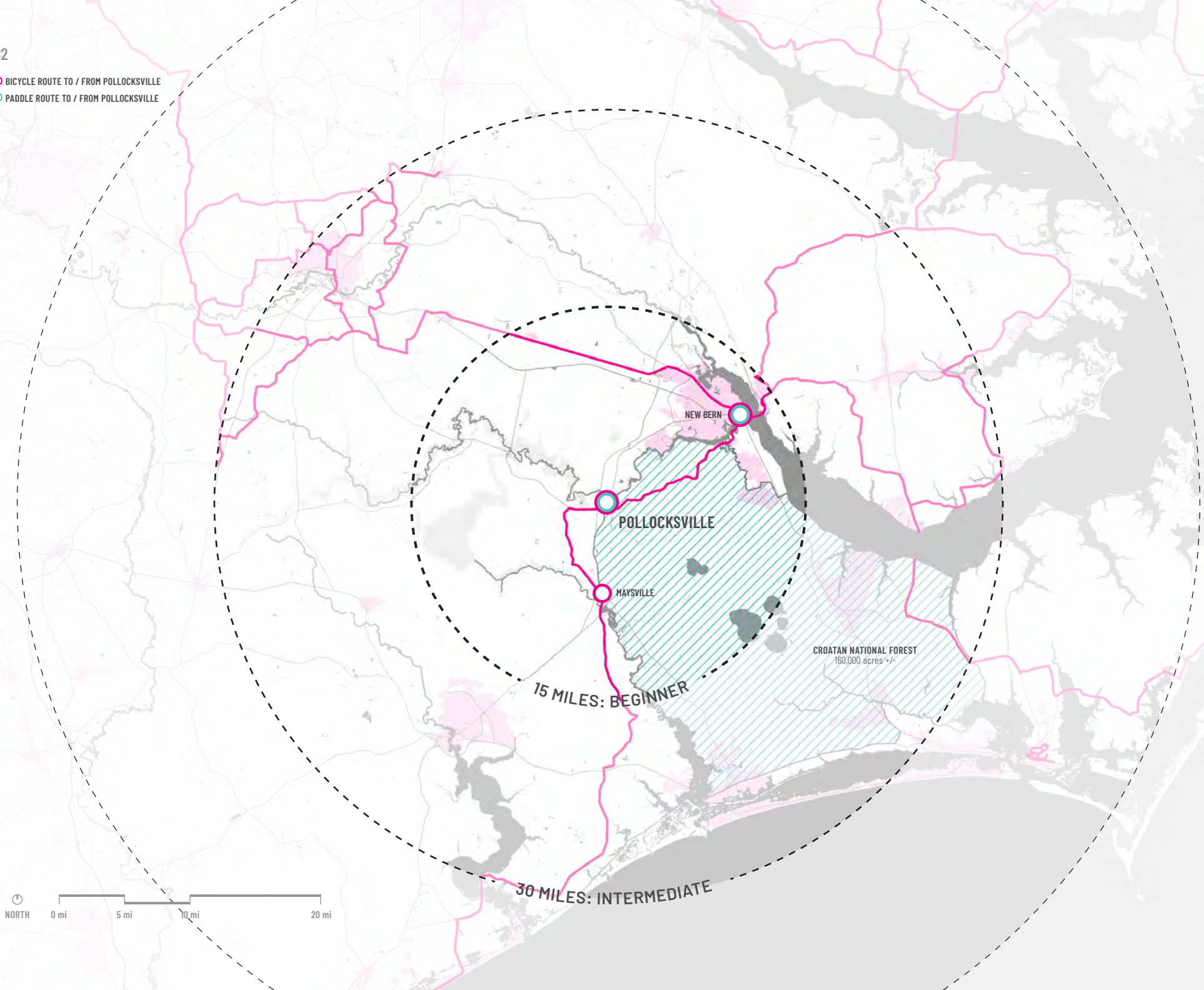
- vi) management and maintenance plan; vi) sustained monitoring of construction activities; vii) public participation in a community planting day; and viii) submission of all quarterly reports and final documentation per grantor guidelines, as needed.

Recreational Enhancement Recommendation: Leverage a "Complete Street" approach to Main Street for attracting recreational tourism.

Adapting the "front porch / back deck" concept as a recreational approach for Pollocksville will enrich existing and proposed outdoor offerings by encouraging public use and visibility.

Extending **streetscape furnishings** from Main Street into the **event lawn** and other recreational areas will enable Pollocksville to create a symbiotic relationship between its commercial district and newly created outdoor gathering places.





PAMLCO SOUND



11mi
BIKE: MAYSVILLE
45 MINUTES

15mi
BIKE: NEW BERN
1 HOUR

16mi
PADDLE: NEW BERN
5 HOURS

CONNECTED THROUGH RECREATION

Pollocksville can leverage its access to nearby natural resources and multi-modal recreational networks by leveraging these assets through in-town investments in public infrastructure.

While the boat ramp, kayak launch, and fishing pier at Riverfront Park create a welcoming environment for water enthusiasts, creating a more bicycle-friendly environment along Main Street between Beaufort Road and the park will allow bicyclists traveling along NC Route 3: "Ports of Call" to stop and rest in Pollocksville. This is an important bicycle route that connects Pollocksville to both New Bern and Maysville and, more broadly, represents a 300+ mile state-maintained bicycle route from Calabash, NC to the Great Dismal Swamp outside Elizabeth City, NC.

RECREATIONAL ENHANCEMENT: REGIONAL SIGNIFICANCE

Capitalizing on Main Street's regional connectivity is critical for promoting an active and beneficial series of recreational facilities. The NCDOT resurfacing project that is expected to be completed at the end of summer 2021 is ideally timed for the Town to leverage with additional investments in streetscape furnishings, plantings, and other physical improvements that more clearly connect the Main Street commercial district to Riverfront Park, and eventually to properties acquired through voluntary buyout programs.

\$ Grant Reference: Project Suitability

Because NCDOT is also establishing bike lanes as a component of its resurfacing project,

Riverfront Park will soon connect to hundreds of miles of state-maintained bike routes across the NC coastal plain. In addition to the boating, fishing, and paddling enthusiasts that utilize Riverfront Park, this value-added portion of the NCDOT project positions Pollocksville to receive additional recreational visitors as cyclists use the "Ports of Call" route (which connects at the intersection of Main Street and Beaufort Road) between New Bern to Maysville.

RECREATIONAL ENHANCEMENT: LOCAL ACTION

The benefits of establishing a "Complete Street" from Beaufort Road to Riverfront Park via walkability and place-making improvements will fully leverage the planned NCDOT bike lane, parallel parking, and planted bulb-out enhancements along Main Street. It will do so by formally connecting existing and proposed recreational opportunities through the heart of Pollocksville's commercial district.

The public health and safety benefits of Complete Streets have been well-documented, including the following statement by the U.S. Department of Transportation:

"Complete Streets reduce motor vehicle-related crashes and pedestrian risk, as well as bicyclist risk when well-designed bicycle-specific infrastructure is included (Reynolds, 2009) [...] They can promote walking and bicycling by providing safer places to achieve physical activity through transportation [and one] study found that 43% of people reporting a place to walk were significantly more likely to meet current recommendations for regular physical activity than were those reporting no place to walk (Powell, Martin, Chowdhury, 2003)."

\$ Grant Reference: Measuring Impact

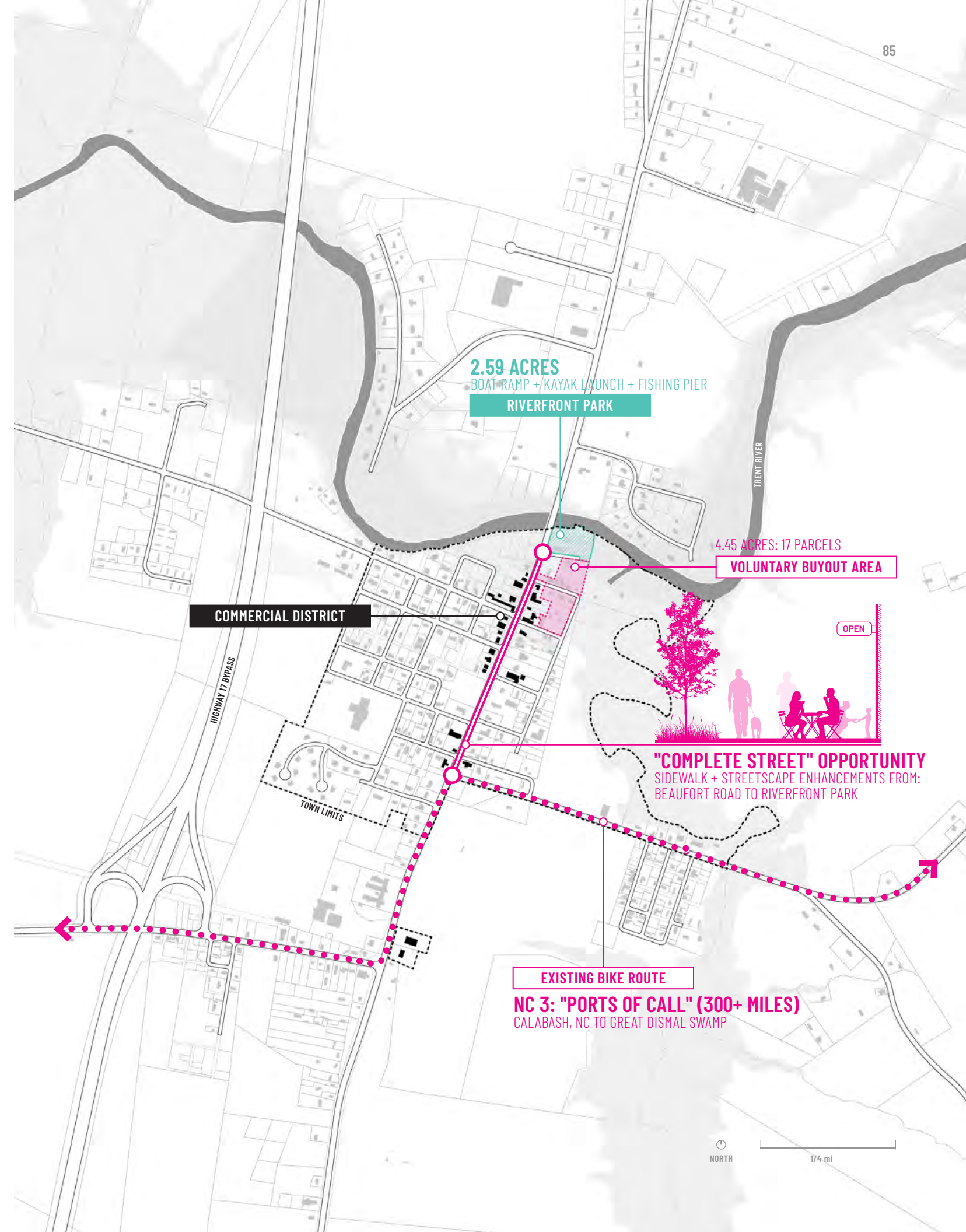
"A Complete Street effectively serves as the glue for the Pollocksville Floodprint plan."

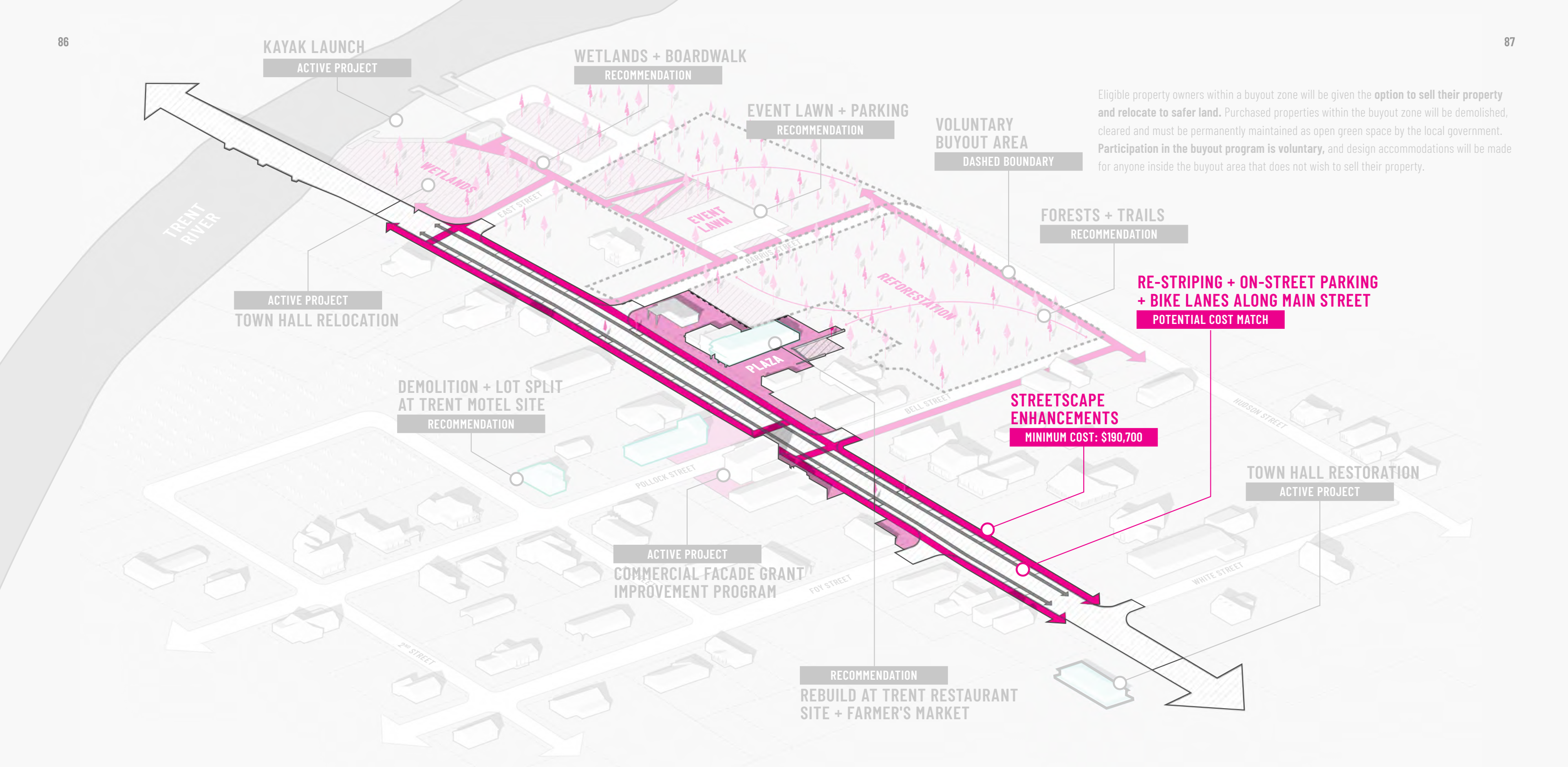
Pollocksville also has the opportunity to realize a "complete" Main Street that supports and enhances local businesses along the corridor that are currently in the process of reopening post-Florence. WalkBoston (2012) writes:

"[Making] an investment in improving the walking conditions around your place of business will pay off with more customers, healthier employees, and a stronger bottom line [...] Patrons of retail businesses who arrive by foot and bicycle in a neighborhood shopping area visit the most often and spend the most money per month (Toronto Clean Air Partnership, 2009)."

\$ Grant Reference: Measuring Impact

An investment in a "Complete Street" effectively serves as the glue for the Pollocksville Community Floodprint plan. From an economic and cultural perspective, it establishes Pollocksville's Main Street as a regional destination for commerce and physically connects regional biking networks to local businesses, existing park spaces, and proposed park enhancements (such as the event lawn) within potential buyout properties.





RECREATIONAL ENHANCEMENT PHASE ONE: FLOODPRINT PLAN

The estimated minimum cost of this project is: \$190,700. This cost includes:

- i) New and/or repaired concrete sidewalks and small street trees from Beaufort Road to Riverfront Park; ii) decorative paving (e.g., brick) and a series of planting areas to formalize a plaza area near the intersection of Pollock Street and Main Street; iii) painted crosswalks; and iv) typical cost ranges estimated for permitting, design, engineering, project management, and construction contingencies. Not included in this cost are streetscape furnishings, which are included as an "incubator investment" expenditure of the current

\$ Grant Reference: Project Costs

Pollocksville Community Floodprint grant funding. Streetscape amenities purchased as components of the current grant include: 6 benches (to match the two existing benches purchased by Trent Bridge Development), 3 trash bins, 3 bike racks, and 10 pole / banner / banner mounting kit combination sets (located in the bulb-outs constructed by NCDOT).

It must be noted that this larger cost can be phased into smaller projects if desired by the Town. For instance, implementing only the sidewalks between Beaufort Road and Riverfront Park as a single phase is estimated to cost between \$50,000 - \$60,000.



DAMAGED INFRASTRUCTURE

HURRICANE FLORENCE FLOODWATERS FURTHER PRONOUNCED DAMAGES TO PUBLIC INFRASTRUCTURE, INCLUDING THE SIDEWALKS ALONG MAIN STREET

WALKABILITY GAPS

THE PRESENCE OF SIDEWALKS UP AND DOWN MAIN STREET IS NOT CONSISTENT, CREATING UNSAFE CONDITIONS FOR PEDESTRIANS TRAVELING ON FOOT

VEHICULAR-FOCUSED

THE ROAD WIDTH, LACK OF ON-STREET PARKING, AND MISSING OPPORTUNITIES FOR BIKE LANES, PLANTING AREAS, AND PEDESTRIAN PAVING ENHANCEMENTS PRESENT PLACE-MAKING CHALLENGES

RECREATIONAL ENHANCEMENT PHASE ONE: EXISTING

Gaps in walkability and damaged public infrastructure from Hurricane Florence along Main Street have reinforced autocratic modes of travel throughout Pollocksville's commercial corridor while limiting pedestrian movement.

Implementing a "Complete Street" will fulfill the following goals: i) formalize a bikeable and walkable route along Main Street to Riverfront Park (connecting the "Ports of Call" bike route to the Town's primary park space); ii) strengthen the civic image and establish place-making cues throughout the commercial zone; and iii) provide the public infrastructure necessary for



Grant Reference: Defining Goals

Main Street businesses to flourish. By realizing the regional recreational benefits of an established connection between Beaufort Road and Riverfront Park, Pollocksville will enrich already meaningful places and expand its distinct townscape to support existing businesses and invite new commercial establishments.

PEDESTRIAN-FOCUSED

CONNECTED SIDEWALKS, PLANTED BUFFERS, AND CLEARLY MARKED CROSSWALKS ALL SUPPORT SAFER AND MORE WELCOMING WALKING ENVIRONMENTS

DEMOLITION + REDEVELOPMENT OPPORTUNITY:
TRENT MOTEL

REDEVELOPMENT OPPORTUNITY:
TRENT RESTAURANT AND/OR VACANT LOT

PRIORITIZING PLACE-MAKING

PERMEABLE PAVING IN SELECT LOCATIONS CAN DRAW PEOPLE TO GATHER AND SPEND TIME + FURNISHINGS SUCH AS: BENCHES, BIKE RACKS, TRASH BINS, AND BANNERS CAN ALSO HELP CREATE AN IDENTITY THAT IS SPECIFIC TO POLLOCKSVILLE



BENCHES



BIKE RACKS



TRASH BINS



BANNERS + POLES

RECREATIONAL ENHANCEMENT PHASE ONE: PROPOSED

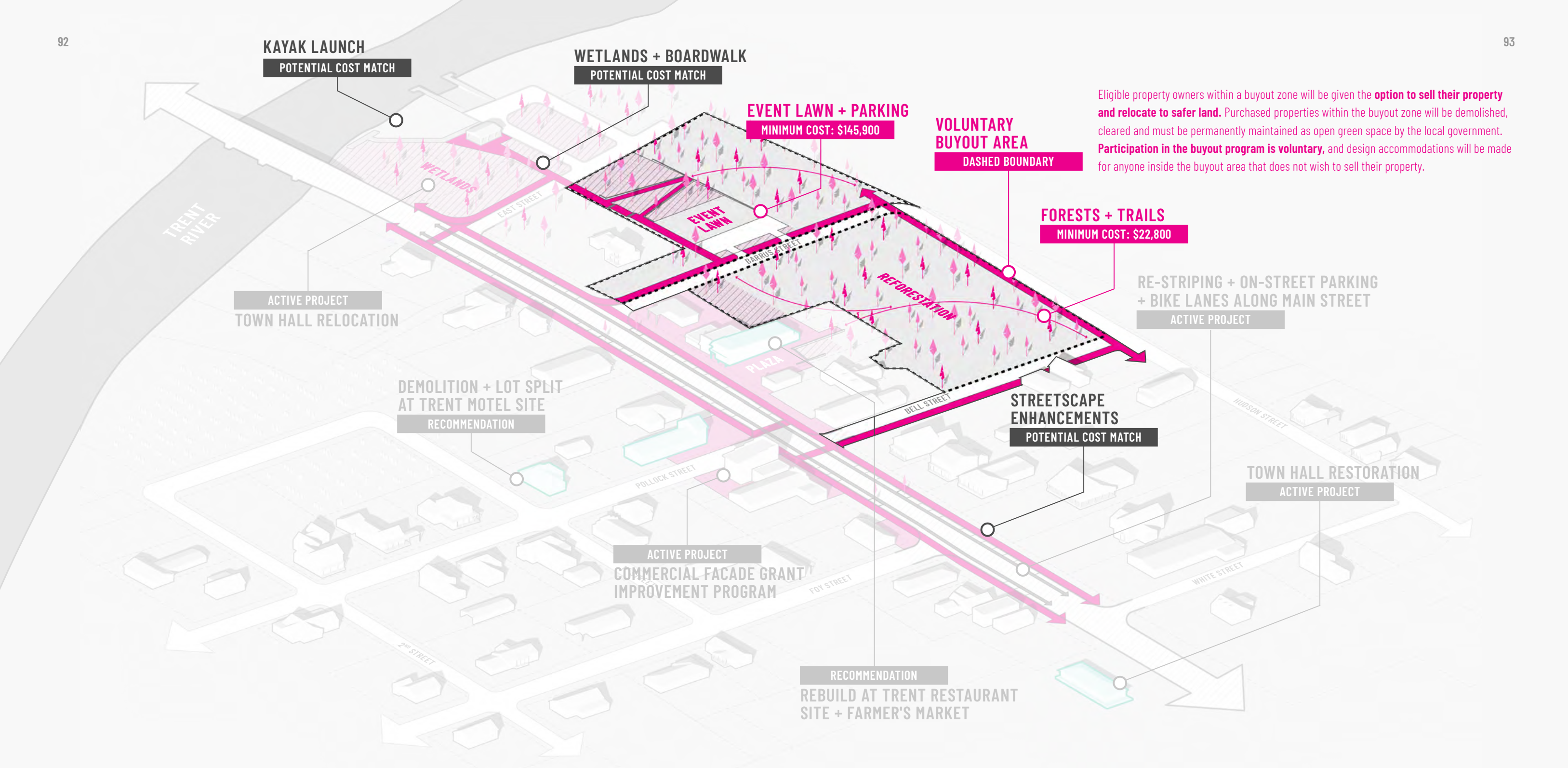
Once funding is secured, it is recommended to use an 18-month project timeline to complete all proposed scopes of work. Completion of this project will include, at minimum, the following activities:

- i) issuance of a RFQ/RFP for the design-build of concrete sidewalks, decorative paving areas, and planting installations, as indicated in plans; ii) completion of all design, engineering, and permitting services; iii) finished construction of all sidewalks, paving areas, and planting zones; iv) completion of a management and maintenance plan;



Grant Reference: Project Scope

- v) sustained monitoring of construction activities; and vi) submission of all quarterly reports and final documentation per grantor guidelines, as needed.



Eligible property owners within a buyout zone will be given the **option to sell their property and relocate to safer land**. Purchased properties within the buyout zone will be demolished, cleared and must be permanently maintained as open green space by the local government. **Participation in the buyout program is voluntary**, and design accommodations will be made for anyone inside the buyout area that does not wish to sell their property.

RECREATIONAL ENHANCEMENT PHASE TWO: FLOODPRINT PLAN

This project proposes re-purposing properties acquired through buyout programs. The estimated minimum cost of this project is: \$168,700. This cost includes:

- i) Construction of an event lawn area; ii) additional constructed wetlands; iii) reforested areas; iv) a permeable parking area; v) sidewalks, including an ADA-compliant ramp; vi) gravel paths and natural surface trails; vii) educational signage; and three (3) sets of table-chair combination furnishings. Please note that the main driver behind these quantity and cost estimates is an assumed 1:1 cost match requirement for this future parkspace. This

\$ Grant Reference: Project Costs

example cost estimate leverages assumed grant funds from the constructed wetland and boardwalk project at Riverfront Park, and arrives at a project cost at or below the expected cost of the project while still satisfying the community's stated programmatic desires.

RIVERFRONT PARK

THE PROXIMITY OF POLLOCKSVILLE'S RIVERFRONT PARK TO POTENTIAL BUYOUT PROPERTIES PRESENTS AN OPPORTUNITY TO EXPAND RECREATIONAL PROGRAMS

EXPOSED PUMP STATION

VISUAL DETERRENTS TO PUBLIC USE OF OPEN SPACE CAN BE BUFFERED AS PART OF A BROADER RE-PLANTING SCHEME

POTENTIAL BUYOUT

HOMES THAT HAVE EITHER BEEN APPROVED FOR BUYOUT THROUGH THE HMGP PROGRAM, OR COULD BE ACQUIRED THROUGH THE CDBG-MIT PROGRAM CAN BE RE-PURPOSED AS A FEMA-ALLOWABLE LAND USE

RECREATIONAL ENHANCEMENT PHASE TWO: EXISTING

All of the properties included in this scope of work are located within areas defined by active buyout initiatives led by NCEM or NCORR. The cost and scope of work provided in this report assume 100% participation in buyouts within the CDBB-MIT voluntary buyout zone (NCORR). However, it should be reiterated that buyouts are voluntary and final design determinations will need to be adjusted once the final status of buyouts is finalized.

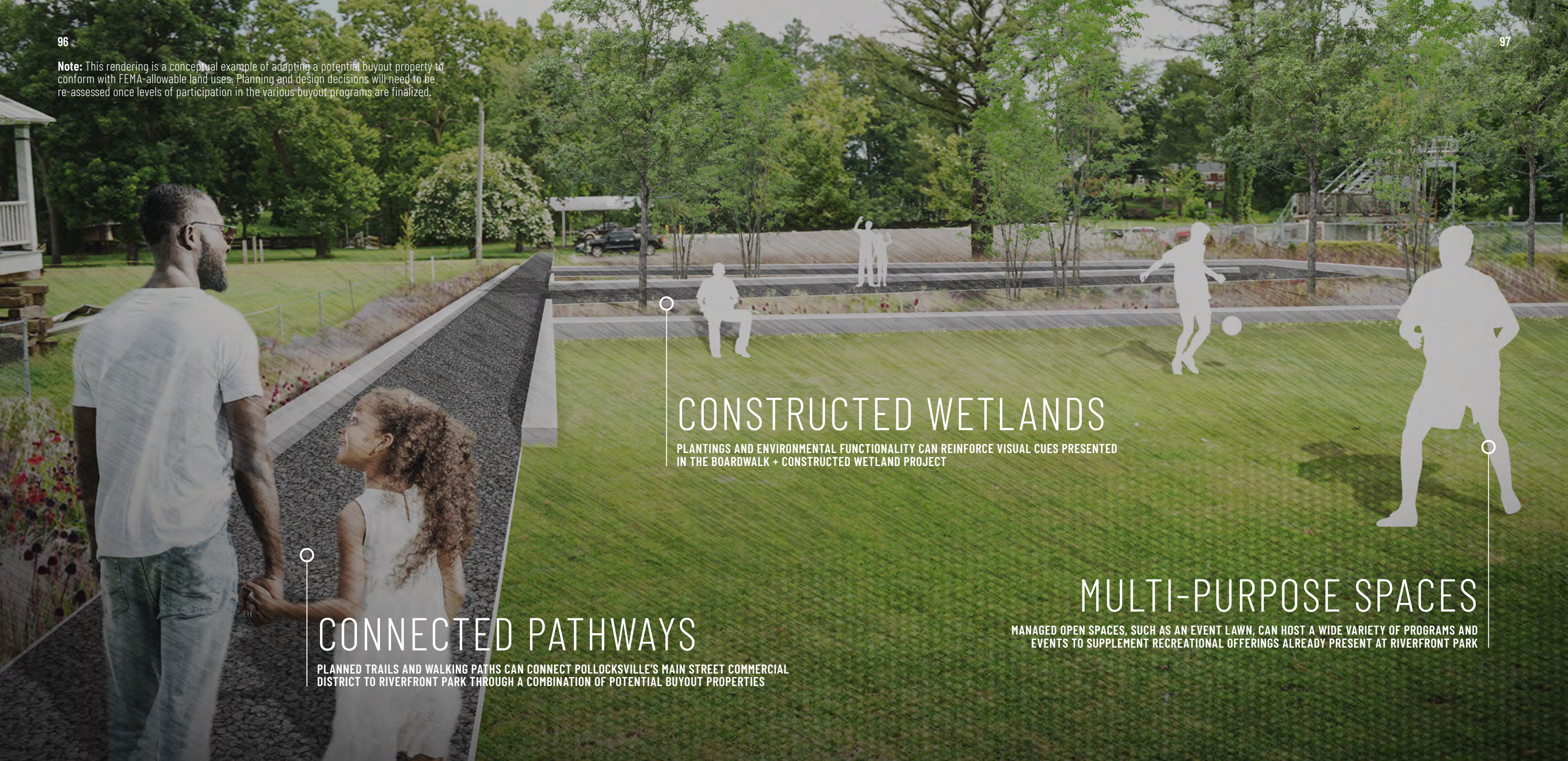
A goal of this project was to enable the Town of Pollocksville to more rapidly revitalize buyout parcels upon acquisition through a proactive process of garnering community input



Grant Reference: Defining Goals

on programmatic preferences, drafting methods of actively (re)using vacated / vulnerable properties, and providing the support material necessary to fund and construct this project.

Note: This rendering is a conceptual example of adapting a potential buyout property to conform with FEMA-allowable land uses. Planning and design decisions will need to be re-assessed once levels of participation in the various buyout programs are finalized.



CONNECTED PATHWAYS

PLANNED TRAILS AND WALKING PATHS CAN CONNECT POLLOCKSVILLE'S MAIN STREET COMMERCIAL DISTRICT TO RIVERFRONT PARK THROUGH A COMBINATION OF POTENTIAL BUYOUT PROPERTIES

CONSTRUCTED WETLANDS

PLANTINGS AND ENVIRONMENTAL FUNCTIONALITY CAN REINFORCE VISUAL CUES PRESENTED IN THE BOARDWALK + CONSTRUCTED WETLAND PROJECT

MULTI-PURPOSE SPACES

MANAGED OPEN SPACES, SUCH AS AN EVENT LAWN, CAN HOST A WIDE VARIETY OF PROGRAMS AND EVENTS TO SUPPLEMENT RECREATIONAL OFFERINGS ALREADY PRESENT AT RIVERFRONT PARK

RECREATIONAL ENHANCEMENT PHASE TWO: PROPOSED

Once funding is secured, it is recommended to use an 24-month project timeline to complete all proposed scopes of work. Completion of this project will include, at minimum, the following activities:

- i) issuance of separate RFQ/RFP's for the design and construction of the event lawn, constructed wetlands, parking areas, sidewalks, trails, and signage, as indicated in plans;
- ii) completion of all design, engineering, and permitting scopes of work;
- iii) finished construction of all recommended park areas and programmatic functions;
- iv) completion



Grant Reference: Project Scope

of a management and maintenance plan; v) sustained monitoring of construction activities; and vi) submission of all quarterly reports and final documentation per grantor guidelines, as needed.

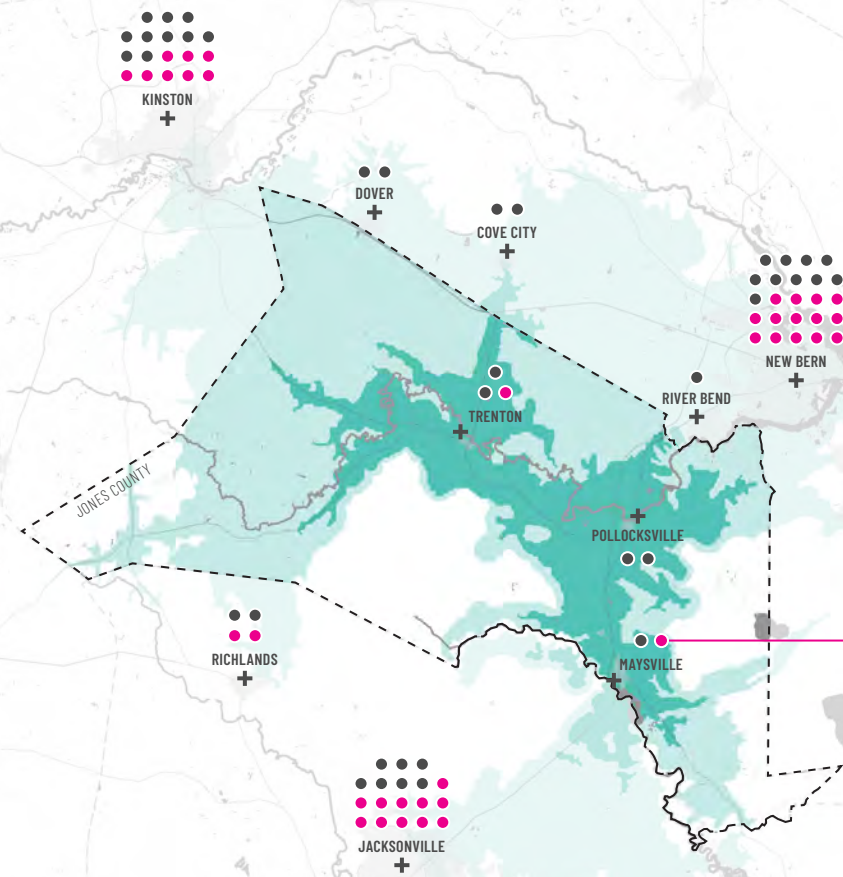
Economic Recovery

Recommendation: Kickstart a local retail culture by creating new, flexible spaces that cultivate a wider diversity of commerce offerings.

Pollocksville's Main Street can support more businesses to match the local and regional demand for goods. An open air retail hub, such as a **Farmer's Market**, immediately helps fill the supply gap and addresses the lack of healthy food options available to Jones County residents.



- 15-MINUTE DRIVE (TravelTime, 2021)
- 30-MINUTE DRIVE (TravelTime, 2021)
- CONVENIENCE STORES (Not Including Gas Stations)
- GROCERY STORES



Many residents in Jones County must drive **30+ minutes** in order to access fresh produce.

2
GROCERIES

DEDICATED GROCERY STORES WITHIN A 15-MINUTE DRIVE SERVING TRENTON, POLLOCKSVILLE & MAYSVILLE

PUBLIC HEALTH VULNERABILITIES IN JONES COUNTY

13.4% (9.8%)
ADULT DIABETES RATE
vs (N.C. AVG)

31.8% (28.3%)
ADULT OBESITY RATE
vs (N.C. AVG)

17.0% (15.6%)
LOW-INCOME PRE-K OBESITY RATE
vs (N.C. AVG)



ECONOMIC RECOVERY: REGIONAL SIGNIFICANCE

Many Jones County residents live in a food desert. Collectively among residents from Trenton, Maysville, and Pollocksville (the three incorporated areas in the county), there are only two (2) dedicated grocery stores within a 15-minute drive. This forces residents to make difficult decisions about selecting lower-quality but convenient sources of food versus electing to drive 30-minutes or greater to places like New Bern, Kinston, or Jacksonville.

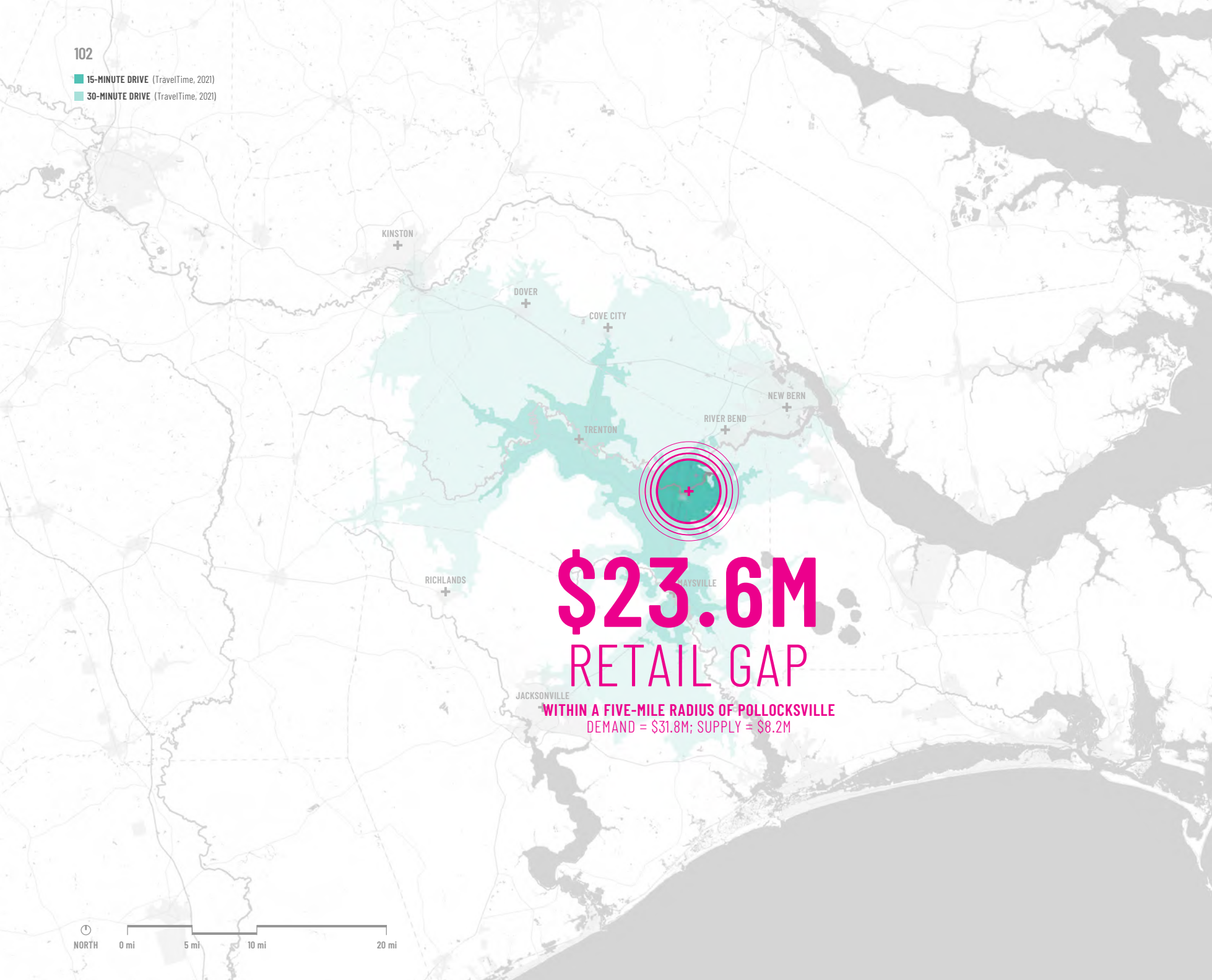


Grant Reference: Project Suitability

This lack of access is reflected in public health statistics for Jones County residents, where the adult diabetes rate, adult obesity rate, and low-income pre-K obesity rate are all higher

than the North Carolina average. The establishment of a farmer's market in Pollocksville will enable farmers and growers to sell their products directly to consumers and establish a centralized location that better serves the nutritional needs of Jones County residents.

15-MINUTE DRIVE (TravelTime, 2021)
 30-MINUTE DRIVE (TravelTime, 2021)



RETAIL POTENTIAL

WITHIN A FIVE-MILE RADIUS OF POLLOCKSVILLE (NC MAIN STREET + RURAL PLANNING CENTER, 2016)

BUSINESS TYPE	TOTAL LEAKAGE	DEMAND	SUPPLY
Motor Vehicles & Parts	\$6,608,841	\$6,608,841	\$0
General Merchandise	\$5,156,117	\$5,156,117	\$0
Food & Beverage Stores	\$5,097,069	\$6,016,608	\$919,539
Food Services & Drinking	\$1,674,277	\$2,850,936	\$1,176,659
Clothing & Accessories	\$1,267,214	\$1,267,214	\$0
Building Materials, Garden Equipment and Supplies	\$1,262,892	\$1,471,514	\$208,622
Electronics & Appliances	\$1,232,044	\$1,232,044	\$0
Gasoline	\$1,138,290	\$2,085,880	\$947,590
Furniture & Home Furnishings	\$843,669	\$843,669	\$0
Sporting Goods, Hobby, Books & Music	\$723,566	\$723,566	\$0

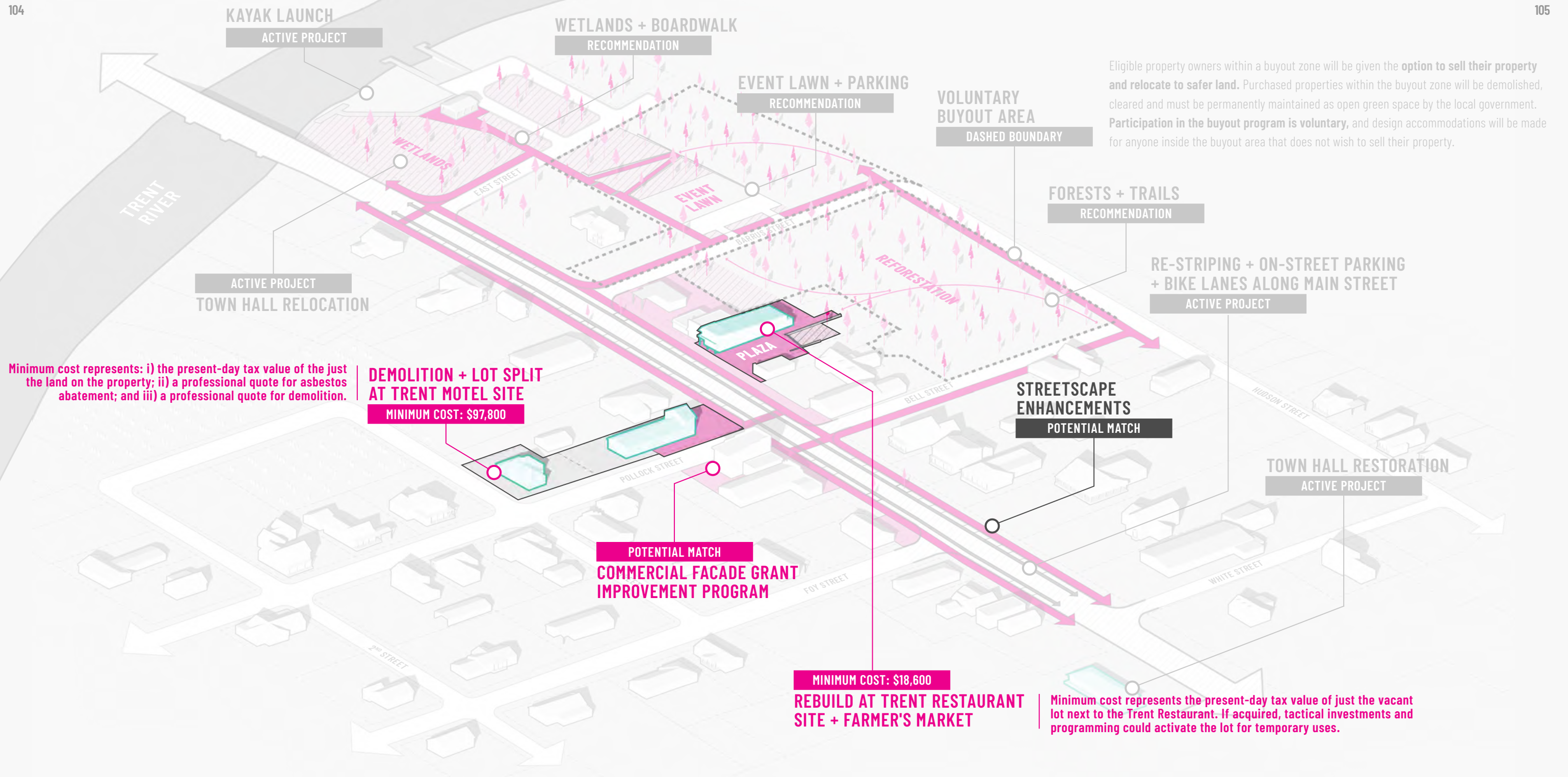
ECONOMIC RECOVERY: LOCAL ACTION

Within a 5-mile radius of Pollocksville, there is a \$23.6M retail gap where there are not enough businesses to keep up with the demand. The most recent market assessment (NC Main Street and Rural Planning Center, 2016) identifies: general merchandise, food & beverage stores, and food services & drinking as being three of the top four market gaps for Pollocksville.

\$ Grant Reference: Measuring Impact

In addition to providing Jones County residents with better access to higher-quality sources of food, an open air retail hub (e.g., a farmer's market) will also fill a widening market

gap for Pollocksville residents in the food services sector. In order to capitalize on this market leakage, this report: i) proposes demolishing, rebuilding, or rehabilitating buildings damaged by Hurricane Florence for conversion into commercial space and; and ii) proposes locations that are currently vacant, but capable of providing additional commercial opportunities along Main Street.



ECONOMIC RECOVERY: FLOODPRINT PLAN

There are two projects identified within this phase of work: i) demolition and lot-split / redevelopment at the Trent Motel site; and ii) redevelopment of the Trent Restaurant and/or the adjacent vacant lot for use as a farmer's market. First, the estimated minimum cost of acquiring and demolishing the Trent Motel site is \$97,800. This cost includes: i) the present-day, land-only tax value of the parcel; ii) a professional quote for asbestos abatement; and iii) a professional quote for demolition. Please note that a professional appraisal is required to more accurately determine the fair market value of any potential acquisition of the property (by either public or private interests). Additionally, this opinion of cost does not include any speculative costs for the price of constructing



Grant Reference: Project Costs

one or multiple buildings on the site. However, this price figure provides a rough estimate for clearing the site and removing environmental hazards that may exist. Second, redevelopment at the Trent Restaurant can either be separate from or in conjunction with redevelopment of the adjacent vacant lot. In order to determine the minimum estimated cost of establishing a farmer's market in either or both of these locations, the present-day tax value has been indicated for the vacant lot only: \$18,600. Similar to the motel, a professional appraisal is required to accurately determine the potential cost to purchase the vacant lot property. If acquired, strategic investments and pop-up programming can immediately activate the lot for temporary uses.

FLOOD DAMAGES

THE SEVERITY OF DAMAGES AT THE TRENT RESTAURANT HAS CAUSED STRUCTURAL AND HUMAN HEALTH CONCERNS TO REMAIN UNATTENDED TO SINCE THE FLOOD

UNDERUTILIZED LOT

THE VACANT LOT NEXT TO THE TRENT RESTAURANT IS CURRENTLY BEING USED AS A TEMPORARY PARKING SPACE AND CUT-THRU AISLE

COMMERCIAL POTENTIAL

IF REVITALIZED AND RE-PROGRAMMED, THE VACANT LOT AND TRENT RESTAURANT COULD TOGETHER BECOME A BEACON OF COMMERCIAL ACTIVITY IN JONES COUNTY

ECONOMIC RECOVERY: EXISTING

Long-term ownership of the Trent Motel property by the Town is not recommended. If the Town is interested in purchasing and controlling this property in the short term, it can apply for various state-level grant programs to assist with the demolition costs should interest from and/or partnerships with private investors prove difficult. Although many of these state-level programs are competitive or come with stipulations for uses of the property after demolition, utilizing these programs will fulfill the goals to: i) remove an economic deterrent and public health hazard from Pollocksville's commercial corridor; and ii) create suitable conditions for a lot-split to attract private investments into a more flood-resilient commercial, office, and/or residential development.



Grant Reference: Defining Goals

Conversely, it is recommended that the Town (or an affiliated, local non-profit) be the property owner of the parcel(s) that house the farmer's market. Public or non-profit ownership provides more opportunities for acquiring the grant monies needed to support implementation. Additionally, either the Town or the affiliated non-profit can generate revenue from use of the retail space (e.g., rented market stalls, public concerts, private venues, etc). If a farmer's market is implemented at either the Trent Restaurant property and/or the adjacent vacant lot, it would fulfill the goals to: i) activate vacated property along Main Street; ii) create new opportunities for economic diversification at local and regional scales; and iii) establish a centralized place for community gathering.



TRENT MARKET

DIRECT-TO-CONSUMER

NEW RETAIL OPPORTUNITIES TO SUPPORT LOCAL PRODUCERS OF GOODS WITHOUT CONSUMERS NEEDING TO DRIVE FAR DISTANCES

CONTINUATION OF CONSTRUCTED WETLAND THEMES / PLANTINGS

COMMUNITY GATHERING

THE OPEN AIR STRUCTURE CAN PROVIDE A SHADED PLACE FOR POLLOCKSVILLE AND JONES COUNTY RESIDENTS TO GATHER AND RECREATE

ECONOMIC RECOVERY: PROPOSED

If the Town chooses to play an active role in the demolition of the Trent Motel, it is suggested to use a 12-month timeline for project completion once funds become available. Within this timeline, the recommended scope includes: i) property purchase agreement and closing; ii) issuance of a RFQ/RFP for demolition and asbestos abatement; and iii) surveying / re-platting the property into separate lots, as allowable under local development ordinances. Separately, the farmer's market project can be broken up into smaller implementation phases that are collectively capable of achieving the intended programmatic function. To address a multi-phased approach (and assuming compliance with one or both of the current property owners), various



Grant Reference: Project Scope

timelines and separate scopes of work are provided. **Phase One: Acquisition or Land-Use Agreement + Installation of Permeable Paving at the Vacant Lot Site.** Completion of this initial scope of work is estimated to take approximately 6-12 months. **Phase Two: Construction of an Overhead Structure.** This portion of the project is highly variable in both time and costs. If the scope of work for an overhead structure only includes the area of the existing vacant lot, a minimum of 18-months is suggested for the design, engineering, permitting, and construction of the structure (longer timelines should be anticipated if coupled with redevelopment of the existing Trent Restaurant building).

05: NEXT STEPS + REFERENCES

The final section of the report summarizes findings and recommendations, and provides an itemized list of next steps that can be used by the Town, the Coastal Dynamics Design Lab, and/or affiliated project partners to pursue the resilience-building projects identified in the Pollocksville Community Floodprint. Also included are citations and additional references that were used in the creation of this report.

NEXT STEPS

This report does not represent the end of this collaboration, but rather a transitional point from planning to implementation. The following are specific recommendations that the Town and the CDDL can take in the near-term to advance the Pollocksville Community Floodprint recommendations:

+ Grant-Writing Assistance and Project Management. In recognition of the fact that financing resilience-building projects is often not monetarily feasible for many small and/or rural communities, much of the analyses, graphic communication material, and technical language included in this report has been specifically tailored for grant application purposes.

The project team assessed various state and federal grant programs that align with the proposed portfolio of projects. Additionally, the CDDL project team has already begun grant-writing efforts for constructing various phases of the proposed work. While all grant programs are competitive in nature, the CDDL is committed to assisting the Town of Pollocksville in attracting external sources of funding until tangible results are achieved.

+ Codes and Ordinances. The various environmental, recreational, and economic priorities set forth in this report must align with local codes and development ordinances to be successful. Of greatest importance at the time of this reporting is the recently adopted Pollocksville Development Ordinance and Subdivision Regulations in compliance with Chapter 160D updates of the North Carolina General Statutes. Specifically, the following Text Change Amendments are recommended for consideration by the Town Board to incentivize a “Main Street Character” as described in the current ordinance:

i) Design Controls. Currently, State of North Carolina guidelines only allow these types of controls in very narrow instances. It is recommended that a more thorough review of Design Controls be considered so as to confirm compliance with State standards.

ii) Rezoning Process. Recent changes in State law have shifted the onus and financial responsibility to municipalities. It is recommended that the Town review and clarify language about rezoning processes in order to reduce any potential future legal exposures.

iii) Urban Design. In general, it is recommended that the Town consider adopted standards such as zero/lot line side yards, no parking in front yards, sidewalk improvements, and active ground floor uses for commercially zoned properties.

+ Community Rating System (CRS) Certification. Lastly, it is recommended that the Town of Pollocksville and Jones County continue to work together in pursuit of CRS certification. As part of CRS, communities can be rewarded for doing more than

regulating construction of new buildings to the minimum national standards. The flood insurance premiums of a CRS-certified community’s residents and businesses are discounted by taking additional resilience-building steps, such as: i) managing development in areas not mapped by the National Flood Insurance Program (NFIP); ii) protecting new buildings beyond the minimum NFIP protection level; iii) preserving and/or restoring natural functions of floodplains; iv) helping insurance agents obtain flood data; and v) helping more residents obtain flood insurance.

Many of the resources, materials, and recommendations provided in the Pollocksville Community Floodprint can assist the Town and County work toward the “creditable activities” needed to qualify for CRS certification. For communities that attain CRS certification, residential flood insurance premiums can be discounted anywhere from 5% - 45% depending on the “class” of certification achieved by the community and the location of an insured property inside or outside of the Special Flood Hazard Area (i.e., the 100-year floodplain). If Pollocksville and/or Jones County were to achieve CRS certification, it is presumed that the average flood insurance premium for a property owner would likely be discounted between 5% - 15%.

REFERENCES

Streetscape Products + Standards:

'Streetscape enhancements' was voted as one of the top resilience-building priorities by community stakeholders, and was selected as the "incubator investment" to be made as part of the Pollockville Community Floodprint project. Using a portion of grant funds provided by the North Carolina Community Foundation (NCCF), the following items were purchased:

+ Benches (6 units):

Benches were sourced to match (2) existing benches that were previously purchased by Trent Bridge Redevelopment. This product is the 'Belson Outdoors CBPB-6CB-BKB' bench. Each bench is 6-feet long with a curved back and is made of stainless steel material with a black powder coat finish.

+ Trash Bins (3 units):

The 'Anova L1397 Streetside 40-Gallon Receptacle' was sourced as the trash bin product. Each trash bin includes a contoured lid, and is made of steel material with a black powder coat finish.

+ Bike Racks (3 units):

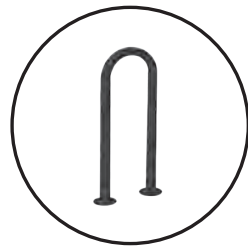
The 'Anova LBR3PVCSURF Streetside Surface Mount Bike Rack' was sourced as the bike rack product. Each bike rack can park up to three bikes, and is made of a steel material with a black powder coat finish.



Benches



Trash Bins



Bike Racks

+ Light Poles (10 units):

The 'LightMart 12S03RS125' product was sourced as the pole to be placed in the planted bulb-outs to be constructed by NCDOT. Each pole is 12-feet tall with a 3-inch diameter and is made of stainless steel material with a black powder coat finish. A removable pole cap is included with each pole, and can be replaced with a light fixture if electrical wiring is run to the poles at a later date (concrete footing details include capped PVC conduit to allow for electrical wiring to run up the interior of each pole).

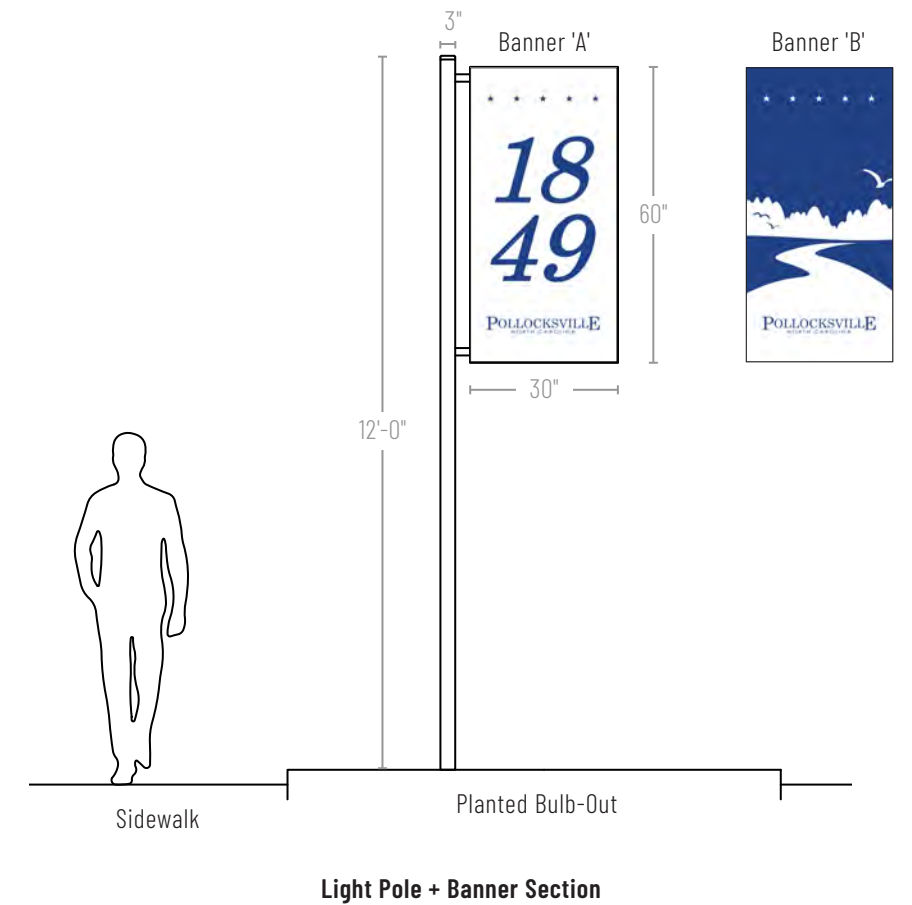
Additional Reference

Full-size PDF's of each of the two banners can be downloaded by clicking on the link provided below:

+ [Pollockville Banner Artwork](#)

+ Banners (10 units):

30" x 60" vinyl banners were printed by AlphaGraphics, located in Raleigh, North Carolina. The artwork for the banners was designed by the Coastal Dynamics Design Lab and approved by the Pollockville Town Board on May 11, 2021. Inspirational material for the artwork on the two banner designs included the following: i) the Town logo (color scheme, fonts, and star geometries); ii) Town designations (Bird Sanctuary); and iii) results from an online survey sent to the Town Board members prior to an approval vote (artwork subjects: Trent River and founding date; visual preferences: most votes from list of precedent banner images).



+ Banner Mounts (10 units):

The 'Grimco SKU BKS30 Mounting Bracket Kit' was sourced to mount each banner to a light pole. Each mounting bracket kit includes: (2) cast aluminum pole brackets, (4) stainless steel straps, (2) fiberglass crossbar, (2) vinyl end cap, (2) nylon zip ties, (2) steel clevis pins, and (2) split key rings.

REFERENCES (cont'd)

Town-Provided Reference Documents / Studies:

The following documents were provided by the Town of Pollocksville to the Project Team as part of this study:

Business Flare (2019). "Town of Pollocksville Disaster Recovery Economic Development Assessment."

Cole, Jenest & Stone (2018). "Streetscape Plan & Precedents."

Girl on the Roof (2018). "Heritage, Outdoor Recreation, and Arts Tourism Feasibility and Programming Plan for Jones County."

NC Main Street & Rural Planning Center (2019). "Downtown Strong Implementation Plan: Pollocksville, NC."

NC Main Street & Rural Planning Center (2019). "Pollocksville Downtown Inventory."

NC Main Street & Rural Planning Center (2016). "Pollocksville Economic Strategy."

Town of Pollocksville (2020). "Pollocksville 2020 PARTF Grant Application."

WithersRavenel (2020). "Town of Pollocksville Parks & Recreation Master Plan."

Citations + GIS Sources:

The following citations and GIS sources are included in this report:

ArchDaily (2011). "Covington Farmers Market: design/buildLAB."
Retrieved from: https://www.archdaily.com/177512/update-covington-farmers-market-designbuildlab?ad_medium=gallery

Civitas (2016). "North Carolina Museum of Art."
Retrieved from: <http://civitasinc.com/project/ann-and-jim-goodnight-museum-park/north-carolina-museum-of-art/>

ESRI (2021). "US Census Tract Boundaries."
Retrieved from: <https://www.arcgis.com/home/item.html?id=ca1316dba1b442d99cb76bc2436b9fdb>

Gulf Coast Community Design Studio (2020). "Katrina Houses."
Retrieved from: <http://gccds.org/new-index-1#/biloxi/>

Gulf Coast Community Design Studio (2020). "Weeks Bayou."
Retrieved from: <http://gccds.org/current-work#/weeks-bayou/>

MM Engineering (2019). "Case Studies."
Retrieved from: <https://www.mmengineering.co.uk/case-studies/>

National Fish and Wildlife Foundation (2021). "Coastal Resilience Evaluation and Siting Tool."
Retrieved from: <https://resilientcoasts.org/#Home>

NC OneMap (2021). "NCDEQ Animal Feed Operation Permits."
Retrieved from: <https://www.nconemap.gov/datasets/ncdenr::animal-feed-operation-permits-view/explore?location=35.262133%2C-80.192250%2C7.76>

NC OneMap (2021). "NCDOT City Boundaries."
Retrieved from: <https://www.nconemap.gov/datasets/NCDOT::ncdot-city-boundaries/explore>

NC OneMap (2020). "NCEM North Carolina State and County Boundaries."
Retrieved from: <https://www.nconemap.gov/datasets/NCEM-GIS::north-carolina-state-and-county-boundary-polygons/explore>

NC OneMap (2020). "Parcels: Jones County."
Retrieved from: <https://www.nconemap.gov/pages/parcels>

NC Rural Center (2014). "North Carolina Counties Map."
Retrieved from: <https://www.ncruralcenter.org/about-us/>

Nelson Byrd Woltz Landscape Architects (2016). "Duke University Water Reclamation Pond."
Retrieved from: <https://www.nbwla.com/projects/community/duke-university-water-reclamation-pond>

New Jersey Department of Environmental Protection (2015). "Time to Update Your Ordinances: A Call to Adopt Higher Standards." Retrieved from: <https://www.nj.gov/drbc/library/documents/FAC/CGould-NJDEP-011316.pdf>

North Carolina Association of Floodplain Managers (2013). "Reducing Flood Risks and Insurance Premiums with Venting." Retrieved from: http://www.ncafpm.org/flashflood/FlashFlood_2013-Issue2.pdf

REFERENCES (cont'd)

North Carolina Department of Environmental Quality (2018). "NC Department of Environmental Quality Online GIS: 8-Digit HUC Subbasins." Retrieved from: <https://data-ncdenr.opendata.arcgis.com/datasets/8-digit-huc-subbasins/explore>

North Carolina Department of Public Safety: North Carolina Office of Recovery and Resiliency (2020). "Strategic Buyout Program Manual." Retrieved from: https://files.nc.gov/rebuildnc/documents/Buyout_Program/SBP_Manual_v.2.1_11-25-20_draft_final_v4_508.pdf

North Carolina Department of Transportation (2021). "Bicycle Maps & Route Information." Retrieved from: <https://connect.ncdot.gov/resources/gis/pages/bike.aspx>

North Carolina Department of State Treasurer (2021). "State and Local Government Finance Division: Financial Reports and Analysis Tools." Retrieved from: <https://logos.nctreasurer.com/Reporting/Report/External?applicationCode=AFIR>

North Carolina Emergency Management (2021). "Spatial Data Download." Retrieved from: <https://sdd.nc.gov/>

North Carolina Flood Risk Information System (2021). "Jones County." Retrieved from: <https://fris.nc.gov/fris/Index.aspx?FIPS=103&ST=NC&user=General%20Public>

Northern Municipal Services (2018). "FAQ: Flood Zone Building." Retrieved from: <https://www.planningforgrowthnorthsk.com/faq-flood-zone-building.html>

Polo, Nate. (2020-2021). Various photos.

Town of Pollocksville (2017). "Flood Damage Prevention Ordinance." Retrieved from: [https://www.jonescountync.gov/vertical/sites/%7B9E2432B0-642B-4C2F-A31B-CDE7082E88E9%7D/uploads/Town_Of_Pollocksville_Flood_Damage_Prevention_Ord.\(1\).pdf](https://www.jonescountync.gov/vertical/sites/%7B9E2432B0-642B-4C2F-A31B-CDE7082E88E9%7D/uploads/Town_Of_Pollocksville_Flood_Damage_Prevention_Ord.(1).pdf)

Town of Pollocksville (2017). "Official Zoning Map." Retrieved from: <https://www.townofpollocksville.com/media/Planning%20and%20Zoning/Pollocksville%20Zoning%20Map.pdf>

TravelTime (2021). "The TravelTime ArcGIS Pro Add-In." Downloaded from: <https://traveltime.com/analytics/arcgis>

United States Census Bureau (2017). "2017 American Community Survey for Pollocksville, North Carolina: Selected Housing Characteristics." Retrieved from: https://data.census.gov/cedsci/table?q=0400000US37_1600000US3753200&d=ACS%205-Year%20Estimates%20Data%20Profiles&tid=ACSDP5Y2017.DP04

United States Census Bureau (2021). "QuickFacts: North Carolina." Retrieved from: <https://www.census.gov/quickfacts/fact/table/NC,US/SEX255219>

United States Department of Homeland Security: Federal Emergency Management Agency (2007). "44 CFR Part 80: Property Acquisition and Relocation for Open Space." Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2007-10-31/pdf/E7-21265.pdf>

United States Department of Homeland Security: Federal Emergency Management Agency (2021). "Benefit-Cost Analysis." Retrieved from: <https://www.fema.gov/grants/guidance-tools/benefit-cost-analysis>

United States Department of Homeland Security: Federal Emergency Management Agency (2021). "Building Resilient Infrastructure and Communities FY 2020 Subapplication Status." Retrieved from: <https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities/fy2020-subapplication-status>

United States Department of Homeland Security: Federal Emergency Management Agency (2020). "Declared Disasters." Retrieved from: <https://www.fema.gov/disaster/declarations>

United States Department of Homeland Security: Federal Emergency Management Agency (2017). "Hazard Mitigation Grant Program: Grant Award Timelines." Retrieved from: <https://tdem.texas.gov/wp-content/uploads/2019/08/03-HMGP-Grant-Award-Timelines-FINAL-July-24-2017.pdf>

United States Department of Homeland Security: Federal Emergency Management Agency (2014). "Homeowner's Guide to Retrofitting: Six Ways to Protect Your Home From Flooding." Retrieved from: https://www.fema.gov/sites/default/files/2020-08/FEMA_P-312.pdf

United States Department of Homeland Security: Federal Emergency Management Agency (2021). "Jones County Acquisition and Demolition Project: HMGP-4412-0003." Retrieved from: https://www.jonescountync.gov/vertical/sites/%7B9E2432B0-642B-4C2F-A31B-CDE7082E88E9%7D/uploads/Final_Public_Notice_-_4412-HMGP.pdf

REFERENCES (cont'd)

United States Department of Homeland Security: Federal Emergency Management Agency

(2021). "National Flood Hazard Layer." Retrieved from: <https://msc.fema.gov/portal/advanceSearch>

United States Department of Transportation (2015). "Complete Streets."

Retrieved from: <https://www.transportation.gov/mission/health/complete-streets>

United States Environmental Protection Agency (2013). "EPA Region 4: Environmental

Justice Permitting Implementation Plan." Retrieved from:
<https://19january2017snapshot.epa.gov/sites/production/files/2015-02/documents/2013-05-region-04-plan.pdf>

United States Geological Survey (2021). "National Water Information System: USGS

02092554 Trent River at Pollockville, NC." Retrieved from: https://waterdata.usgs.gov/nwis/inventory/?site_no=02092554

WalkBoston (2012). "Good Walking is Good Business." Retrieved from:

<https://walkboston.org/wp-content/uploads/2018/03/WalkBostonGoodWalkingIsGoodBusiness.pdf?8621dc&8621dc>