



**HMDRRI**

Hurricane Matthew  
Disaster Recovery and  
Resilience Initiative

# 2018 RECOVERY PLAN

## PRINCEVILLE RECOVERY PLAN

November 2018

Prepared by:  
Hurricane Matthew Disaster Recovery and Resilience Initiative  
Coastal Resilience Center  
The University of North Carolina at Chapel Hill



# Princeville, North Carolina Hurricane Matthew Recovery Plan

November 2018

Prepared by:

The Hurricane Matthew Disaster Recovery and Resilience Initiative, a collaborative program involving the  
University of North Carolina at Chapel Hill and North Carolina State University



**CAROLINA  
PLANNING**



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### **Hurricane Matthew Disaster Recovery and Resilience Initiative Team**

The Hurricane Matthew Disaster Recovery and Resilience team led the development of the Princeville Recovery Plan. Team members include faculty, staff and students from the University of North Carolina at Chapel Hill and North Carolina State University, in addition to a group of consultants.

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In August 2017, a five-day design workshop was conducted to inform recovery strategies on a 53-acre parcel of land, to include the relocation of select public facilities and the development of replacement housing. NOTE: Some Princeville design workshop participants are listed as members of the Hurricane Matthew Disaster Recovery and Resilience team and their affiliations are not relisted here.

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## ACRONYMS

ABFE	Advisory Base Flood Elevation
ACS	American Community Survey, US Census Bureau
AFH	Assessment of Fair Housing
AMI	Area Median Income
ASFPM	American Society of Floodplain Managers
BFE	Base Flood Elevation
CDBG	Community Development Block Grant, US Department of Housing and Urban Development
CDBG-DR	Community Development Block Grant – Disaster Recovery
CFR	Code of Federal Regulations
COG	Council of Government
CPCB	Community Planning and Capacity Building, FEMA
CRS	Community Rating System, FEMA
CWMTF	Clean Water Management Trust Fund
DBE	Disadvantage Business Enterprise
DHHS	U.S. Department of Health and Human Services
DEQ	North Carolina Department of Environmental Quality
DNCR	North Carolina Department of Natural and Cultural Resources
DOC	North Carolina Department of Commerce
DOT	North Carolina Department of Transportation
EA	Environmental Assessment
ECU	East Carolina University



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EDA	US Economic Development Administration
EIDL	Economic Injury Disaster Loans
EMPG	Emergency Management Performance Grants
EMS	Emergency Medical Services
EPA	US Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FFE	Finished Floor Elevation
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FWS	Fish and Wildlife Service
HMDRRI	Hurricane Matthew Disaster Recovery and Resilience Initiative
HMGP	Hazard Mitigation Grant Program
HUD	Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
IA	Individual Assistance
IBHS	Institute for Business and Home Safety
LMI	Low and Moderate Income
LSA	Land Suitability Analysis
NC	North Carolina
NCAC	North Carolina Administrative Code
NCEM	North Carolina Division of Emergency Management
NCHC	North Carolina Historical Commission
NCHFA	North Carolina Housing Finance Agency
NCOBM	North Carolina Office of Budget and Management

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NCSBTDC	North Carolina Small Business Technology Development Center
NCSU	North Carolina State University
NCWRP	North Carolina Wetlands Restoration Program
NFIP	National Flood Insurance Program
NFIRA	National Flood Insurance Reform Act
NHMA	Natural Hazard Mitigation Association
ONA	Other Needs Assistance
PA	Public Assistance
PHA	Public Housing Authority
PNC	Preservation North Carolina
SAA	Southern Annexation Area (53-acre site)
SBA	Small Business Administration, US Department of Commerce
SFHA	Special Flood Hazard Area
SHPO	North Carolina State Historic Preservation Office
SNAP	Supplemental Nutrition Assistance Program
SWOT	Strengths, Weaknesses, Opportunities and Threats
UNCCH	University of North Carolina at Chapel Hill
URA	Uniform Relocation Act
U.S.	United States
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
WRC	North Carolina Wildlife Resources Commission

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# CHAPTER 1

## PURPOSE OF A RECOVERY PLAN

### *Purpose of Disaster Recovery Plan*

The intent of this plan is to assist the Town of Princeville in its recovery from Hurricane Matthew. While this plan is focused on the steps needed to facilitate the recovery from this storm, it can and should be updated as needed to serve as the town's plan for recovery following future events.

The plan focuses on the following key objectives:

- Identify and address local disaster recovery needs,
- Increase resilience,
- Facilitate collaboration,
- Improve local capacity,
- Facilitate implementation, and
- Draw on projects undertaken by the Hurricane Matthew Disaster Recovery and Resilience Initiative (HMDRRI); see description of this UNC-led initiative on the next page.

### **Identify and Address Local Needs**

This plan focuses on local needs that are often unaddressed through traditional federal post-disaster recovery programs. Many of these needs were identified by HMDRRI teams as part of an ongoing dialogue with local government officials and incorporated into the plan as goals, issues, policies, and projects.

### **Increase Resilience**

Resilience is a broad concept to which communities may aspire, yet often fail to develop a clear path to get there. The general definition of resilience is the ability of a community to withstand a severe shock and quickly rebound to a post-disaster condition that represents a "new normal" based on lessons and improvements that make a community less vulnerable and more adaptable to future events (Paton and Johnston, 2006). A key part of a community's capacity for

### *What is ...*

#### DISASTER RECOVERY?

DISASTER RECOVERY can be defined as: "The differential process of restoring, rebuilding, and reshaping the physical, social, economic, and natural environment through pre-event planning and post-event actions that enhance the resilience and adaptive capacity of assistance networks to effectively address recovery needs that span rapid and slow onset hazards and disasters" (Smith, Martin, and Wenger, 2017).

achieving disaster resilience is the widespread incorporation of hazard mitigation policies and projects into post-disaster recovery efforts. Creating resilient communities also involves learning from disasters and taking action to address identified challenges and opportunities uncovered in the aftermath of extreme events.

### **Improve Local Capacity**

Good plans enhance local capacity by building on inherent strengths and addressing identified gaps. As noted above, this requires partnering with other communities, groups, and government agencies.

### **Facilitate Implementation**

The plan identifies the resources needed to help achieve the goals, objectives, policies, and projects found within this document. "Resources" include funding as well as technical assistance and supporting policies required to implement the plan. This may include fostering new relationships or expanding existing ones. The plan also provides a rationale to help potential funders identify areas where they can assist.

### **Drawing Upon Other Related Studies**

Related program information and studies include county Resilient Redevelopment Plans; FEMA Public Assistance worksheets and Individual Assistance information; Nash, Edgecombe, and Wilson Counties Hazard Mitigation Plans; and resource agencies such as the North Carolina Historical Commission, Preservation North Carolina, and the Edgecombe County Health Department.

### **Drawing on HMDRRI-sponsored Projects**

This plan draws on a number of projects undertaken by the HMDRRI team. These include projects focused on open-space management of parcels slated for acquisition and demolition, replacement housing designs, housing market analysis, and land suitability analyses targeting areas for new development outside the floodplain. In each case, this information is used to inform goals, policies, and projects throughout the recovery plan. Copies of each study are referenced in the Appendices of this plan.

## Reconfigure the town with a new layout? Improve the arrangement?

In August 2017, the Princeville Community Design Workshop brought together design experts from across the country to identify options for a 53-acre parcel of vacant land outside the 100-year floodplain. This effort, which is discussed in more detail later in this plan, represents one of several initiatives tied to confronting the challenges facing Princeville as it determines its future.

A community redesign strategy can help determine the best use of CDBG-DR and HMGP funds, as well as tax credits for mitigation activities (elevation, buyouts, and demolition-rebuild), housing repairs, community infrastructure, and public facilities. One such idea (see Chapter 8) is reflected in the first of four proposed “Design Principles” under the heading “Remember”. The recommended six actions of remembrance employ reconfiguration, relocation and mitigation measures.

Likewise, two open house events held prior to the workshop asked town residents to react to seven divergent options, some more bold than others. Written responses from attendees suggest an openness to change so long as history is emphasized and honored. Changes to the layout or configuration of neighborhoods, streets, and open space can be thoughtfully planned so that risks are reduced, new synergies are achieved, and economic sectors support one another. Safety and resiliency can be accomplished while community and neighborhood values are protected and enhanced. Public services, commerce, public safety, health, and other community needs can be optimized, too.

An improved physical arrangement should improve community functions, improve energy conservation, heighten governmental efficiency, and enhance environmental quality—all of which will boost the quality of life for all residents, allow business and industry to thrive, and assure a sustainable future.

## Hurricane Matthew

### DISASTER RECOVERY AND RESILIENCE INITIATIVE

The idea for the Hurricane Matthew Disaster Recovery and Resilience Initiative (HMDRRI) began as part of a conversation with Mike Sprayberry, Director of the North Carolina Division of Emergency Management. This led to the creation of a team comprised of faculty and students from the University of North Carolina at Chapel Hill and the North Carolina State University College of Design as well as consultants who have over 40 years of experience in disaster recovery and land use planning.

As part of a two-phased approach, emphasis has been placed on assisting six hard-hit communities, including Windsor, Princeville, Kinston, Seven Springs, Lumberton, and Fair Bluff. HMDRRI-based assistance has emphasized unmet needs identified by participating communities that go beyond the type of programs traditionally provided by federal and state recovery agencies. Initial meetings with HMDRRI communities asked them which issues and needs weren't being addressed by existing aid organizations. Based on these conversations, four communities, including Princeville, Seven Springs, Lumberton, and Fair Bluff, specifically noted the need to help them develop a disaster recovery plan.

For more information on HMDRRI, please see <http://coastalresiliencecenter.unc.edu/hurricane-matthew-recovery/>.

## Role of Planning

Disaster recovery planning provides a procedural and action-oriented vehicle to prepare communities in advance of a disaster for the multitude of complex challenges that follow extreme events. Planning also helps to marshal the varied resources needed to expedite post-disaster recovery and reconstruction activities in a thoughtful and coordinated manner. The plan also enables the use of agreed-upon local planning and regulatory powers in the aftermath of disasters.

More specifically, disaster recovery planning addresses several important objectives:

- Achieving greater disaster resilience,
- Improving the speed and quality of disaster recovery through the more effective use of available resources,
- Building the capacity of local governments in the recovery process,
- Maximizing the coordinated distribution of assistance both pre- and post-disaster,
- Providing a collaborative decision-making framework,
- Improving the efficient and equitable distribution of resources before and after disasters,
- Providing a process to inject hazard mitigation into the recovery process, and
- Establishing a means to monitor the implementation of recovery planning policies and projects over time, including the development of measurable benchmarks.

## Role of Inter- and Intra-Organizational Coordination

A better appreciation of collaboration in inter- and intra-organizational relationships will result in a more efficient, effective, and quicker recovery than working separately in “silos,” which is known to result in duplicative efforts, inefficient use of scarce resources, and a longer recovery period. This is particularly true in communities with relatively small populations and limited capacity where staff “wear many hats” and need to understand who their external partners are in order to seek outside support and access the resources needed to assist their town.

## Plan Integration

An important objective of the recovery plan is to guide the post-disaster redevelopment decision-making process in a manner consistent with local plans. Plans developed before the disaster struck may include a comprehensive land use plan, local hazard mitigation plan, comprehensive emergency management plan, long-range transportation plan, capital improvement plan, and economic development plan. Each plan includes policies or procedures that affect post-disaster

redevelopment. The disaster recovery planning process provides an opportunity to examine how local plans could help or hinder disaster recovery goals. Based on this assessment, existing plans (and their associated policies and projects) may be modified in order to complement desired outcomes stated in the recovery plan. This approach allows a community to draw from existing plans with regulatory standing and utilize data and policies already in use.

## Plan Content

The recovery plan is comprised of the following elements:

**VISION** | A vision statement defines the principal underlying themes and intent of the plan.

**GOALS** | Goals are statements of future desired conditions tied to the overall vision. Goals are instrumental in setting a direction to guide policies and actions described within the plan.

**POLICIES** | Policies are statements intended to guide public and private decisions and should achieve identified goals. Policies should also be specific and tied to definitive actions.

**COMMUNITY SETTING AND ASSETS** | Understanding a community's historic, cultural, economic, and political context provides important background information for all aspects of the plan.

**ISSUES** | Issues are identified problems that are addressed through specific policies and projects.

**PROJECTS** | Projects may include physical "bricks and mortar"-related efforts as well as activities or processes.

**RECOMMENDED ACTIONS AND IMPLEMENTATION** | Implementation is defined as the process used to carry out policy-driven actions through the identification of resources, responsible organizations, and the timing of assistance.

## Princeville Policy Context after Hurricane Matthew

Princeville is contending with major long-term effects of Hurricane Matthew, some of which are exacerbated by historical trends of unemployment and household incomes that are below the averages of Edgecombe County and the state of North Carolina. These patterns, have been influenced by the propensity to have periodic floods, some of which have been particularly devastating. A distinction can be made between tenacity and resiliency. Collectively, the town's population

has been tenacious, sticking with their community and rebuilding after each flood. Yet, if flood risks can be reduced, the town would incur fewer costly disruptions and alleviate human suffering, thereby enhancing resiliency. Furthermore, this would enable the town to shift its focus to education, prosperity, and workforce development. To do so will require:

- Sustained transformation, including financial support.
- Growth of internal capacity to adopt and implement complex strategies.
- Enhancement of community organizations and committee participation.
- Innovation to reverse socioeconomic decline.
- Investments to memorialize culture and history (including a living museum, trails, and other sites).

## CHAPTER 2

# EXECUTIVE SUMMARY: PRINCEVILLE RECOVERY SCENARIOS

### Scenario Planning

This plan includes three scenarios that are intended to inform options the town and its citizens may consider during the disaster recovery process and beyond.

This chapter is tailored to suit the uncertain nature of residents' preferences, to include whether to stay in place, elevate their property or accept a buyout that will allow them to relocate to a new site.

This plan addresses basic management choices that will help all participating agencies invest wisely and collaboratively so that workable programs and harmonious community investments function well together (see Figure 1, page 33).

Next, we describe scenario planning to include defining the process and outlining objectives and scenarios. Three options and their implications are shown in Table 1. Following a description of each scenario, a range of implications are discussed, including their advantages and disadvantages. Scenario planning is a process used to support decision-making that helps communities navigate uncertain futures and allocate available resources based on the range of possible outcomes<sup>1</sup>.

**OBJECTIVE:** The objective of this scenario planning process is to inform management decisions by developing a set of compatible policies, projects, and funding decisions to facilitate Princeville's recovery, recognizing significant flood risk, decertification of the levee, and diverse citizen preferences regarding their future housing choices.

#### The Future:

##### WORSE FLOODING AHEAD?

Three major engineering studies of flooding on the Tar River provide an important foundation for this recovery plan. The blunt message delivered at a town meeting in January 2018 was: "Prepare to flood again, perhaps worse" (USACE, NCDOT, Moffatt & Nichol). Because levee upgrades are complex and expensive, any system improvement will be implemented at least ten years in the future. In May 2018, the NC Division of Emergency Management released a study by ESP Associates of the larger Tar River basin. It verified the risk. Moffatt & Nichol analyzed the effects of five different weather events, including a larger storm, concluding the results would be catastrophic.

<sup>1</sup> See an expanded definition of scenario planning at <https://www.planning.org/knowledgebase/scenarioplanning/>

**SCENARIOS:** State and federal support to Princeville could be informed by one of the scenarios listed below, or include a hybrid of the three options. The three options can be compared to the seven options developed by FEMA for the Environmental Assessment (EA) (see Appendix L). Locally, two types of decisions will be made that ultimately drive the disaster recovery trajectory of the town: a) policy choices of the municipal government, and b) the location and investment choices of property owners and renters affected by Hurricane Matthew. Decisions by owners and renters are significantly affected by the program guidelines of disaster assistance, particularly HMGP (FEMA) and CDBG-DR (HUD). For instance, the HUD funds carry special planning requirements regarding the future shape of the community, population effects, resilience, and sustainability.

**Table 1: Three Scenarios for Princeville Recovery**

	<b>SCENARIO 1</b> Individual Actions	<b>SCENARIO 2</b> Internal Shift	<b>SCENARIO 3</b> Community-wide Relocation
<b>Emphasis</b>	Undirected movement driven by independent preferences.	Modest location shifts away from areas of deepest flooding.	“New town” location out of the floodplain.
<b>Description</b>	In this scenario, about 50% of the households will pursue the buyout and disperse to destinations of their choosing. For those that choose to stay in town there is no purposeful relocation to a new residential subdivision in Princeville. Some households may choose to elevate their home at its current location, purchase an existing home in Southern Terrace, or build a new home on a vacant lot in town.	In this scenario, structural elevations would allow for the placement of homes in areas of shallow flooding, generally in the southeast sector of town where Southern Terrace and the 53-acre Southern Annexation Area (SAA) are located. Additional amenities may include the relocation of critical facilities, including police and fire stations, as well as some public housing. This scenario is based on the assumption that a significant portion of the population wishes to stay in Princeville.	In this scenario, a combination of public, private, and nonprofit organizations would create a new residential subdivision with new homes, located at a safe location outside the 100-year floodplain. This option may include expanding the 53-acre site to include annexing land adjacent to Shiloh Farm Road, or other sites to be determined. Residents would help plan a new neighborhood with special amenities, accompanied by facilities such as an exhibition center and community center to honor and display Princeville’s cultural history. The plan would strive for a walkable



			commercial mix similar to that originally found in Princeville.
<b>Population Impact</b>	Medium population decline.	Low population decline.	Relocation of most residents to new planned neighborhood.
<b>Southern Annexation Area Policy</b>	Development of housing.	Development of housing and town facilities (see Community Design Workshop, Chapter 8).	Concept yet to be developed. Build on results of Community Design Workshop.
<b>Homes at Risk (rank)</b>	Medium	Medium/High	Low
<b>Impact Town Finances</b>	Negative	Maintain status quo.	Positive (requires new interagency arrangements, land purchase).
<b>Open Space Management Complexity</b>	High due to checkerboard effect.	Medium; depends on NW quadrant land strategy.	Medium; reuse of large land holdings.
<b>Advantages</b>	Greatest flexibility for individual households, lowest investment in advance planning, low involvement of private sector developer.	Retains most of the population within the town, to include new annexed areas outside the 100-year floodplain.	Benefits to individuals and families by being free of flood risk, including possible investments by nonprofits and private enterprise.
<b>Disadvantages</b>	Weakens the community core; keeps part of the population at risk in major floods; limits opportunities for major cultural, recreational and educational facilities; emergency evacuations and post-flood property cleanup (for households located on floodplain); expensive flood insurance costs.	Keeps much of the population at risk in major floods; limits opportunities for major cultural, recreational, and educational facility investments; imposes cost and inconvenience of emergency evacuations and post-flood property cleanup (for a large number of households); perpetuates expensive flood insurance costs.	Requires the greatest investment in advance planning, close working relationships with nonprofits and private sector, thoughtful design of new cultural facilities, adjustment to new surroundings, and development of new housing that is a greater distance from Freedom Hill and the proposed Memorial Village.

<b>Universal Improvements</b>	Special housing for elderly, assisted living, and independent living, although some may opt for locations near, but not within town boundaries (Housing for vulnerable populations are often deemed unsuitable in the floodplain).		
<b>Benefits to Low and Moderate Income Households</b>	Medium, due to potential relocation of Princeville residents to areas of higher wages and greater economic opportunity, but lower for those choosing to remain in the floodplain.	Medium, due to reconstruction in 100-year floodplain and modest shift of housing and public facilities to SAA (500-year floodplain).	High if partnerships are formed with nonprofits, pre-K education, public agencies, and private enterprise that endorse mitigation, community betterment and “collective impact” strategies, to include use of land on other sites to be determined.

- 1) **Individual Actions**      Incremental decisions are made spanning multiple options producing varied results, to include some residents staying, some moving within Princeville, and some leaving for Tarboro or elsewhere. Maximize flexibility by investing in the 53-acre site and a subdivision in the vicinity of Shiloh Farm Road. However, with the likely exodus of population, municipal services may be curtailed, and the need for a major service center is therefore reduced. This approach requires a detailed analysis of the upcoming CDBG-DR grant applications, which is not yet completed.
  
- 2) **Internal Shift**      Invest throughout Princeville with scattered elevations and building in new areas (53-acre site and along Shiloh Farm Road). Also invest in relocation by underwriting the subsidy to households needing gap financing to acquire an affordable dwelling outside of Princeville. Current program features will allow up to \$50,000 to offset this gap. This scenario will be greatly affected by state recovery interpretations of engineering analyses of flood risk on the Tar River. The abbreviated message from that study is: “Prepare to be flooded again, possibly worse.” Significant levee upgrades are not anticipated in the near future.
  
- 3) **Expanded New Site**      Invest in an expanded relocation site north of the currently proposed 53-acre site and incentivize a more comprehensive relocation with: A) a subsidy program of up to \$50,000 per unit, B) two memorial sites at Freedom Hill and the new residential relocation area, C) solicitation of national support for an education/exhibition/performance complex as well as an international competition to create innovative design options for the proposed expanded relocation site.

## Decision Factors

Below are a number of factors to be considered when contemplating alternative scenarios for Princeville's recovery.

<b>Resident Desires</b>	Consider expressed desires of town's residents and landlords. In areas subject to deepest flooding, residents strongly favor relocation, not elevation. Recognize 50% of the population are renters, and accounting for this condition requires the involvement of landlords in the planning process.
<b>Risk</b>	Consider engineering studies by the Corps of Engineers, Moffatt & Nichol, and ESP Associates. Consider burden of future extreme events requiring evacuation, rescue, debris management, and various forms of disaster assistance provided to the town and its citizens. Consider proposing new NCDOT and USACE initiatives to include alternate investments in a new, safer site (adjacent to the SAA), rather than modest improvements to the existing levee.
<b>External Support</b>	Consider the long-term availability of charitable donations and other forms of external aid. Princeville has been the recipient in the past of government grants and donor generosity due to the hardships endured after major floods and national cultural and historic significance. A large number of donors contribute their volunteer time to assist individuals, families, and organizations. In 2018, these donors have been alerted to an engineering forecast of future flooding, and a finding that the levee is deficient. If the Town of Princeville resist change or fail to heed the warning, the nation's generosity may wane.
<b>Hazard Mitigation</b>	Consider the long-term costs of flood insurance and maintaining infrastructure affected by future flood damage. Consider the comparative benefits of investing in a new site free of vulnerability to flooding. Costs may be unbearable by low-income households, which constitute the majority of Princeville. The benefits to households and family members of risk avoidance may be substantial and identifying the means by which they are funded is critically important, to include partners beyond federal and state agencies.
<b>Financial Realities</b>	The financial stability of Princeville is tied to a combination of revenues and expenses. Consider the combination of property taxes, sales taxes, and other revenue streams affected by population decline. Town is already at risk of insolvency. Solvency after buyouts using HMGP and CDBG-DR funding is uncertain. Consider the combination of near-term investments in the 53-acre site and nearby locations along Shiloh Farm Road. Consider the long-term recurring cost

of disaster management due to floods at the historic rate or an increased rate of frequency and/or intensity due to climate change.

### *Enhance the Historical-Cultural Influence of Princeville*

Consider a historic-cultural strategy that recognizes the likelihood of frequent and deep flooding of Princeville's special assets (based on new risk projections presented to the town on January 16, 2018). Emphasize the topography of Freedom Hill and elevate a portion of that site to relocate historic buildings. Seek a nearby location in Edgecombe County for a major multi-purpose center to host permanent exhibits, an inclusion of materials at the Smithsonian's National Museum of African American History and Culture, and traveling exhibits addressing civil rights and environmental "living with water" themes, giving testimony to Princeville's unique and creative way of handling challenges. Combine the newly relocated neighborhood with a nationally recognized visitor center and community center functioning as an events venue.

### *Study the Intersection of Public Policy and Individual Resources*

Princeville residents have a new understanding of flood risk based on a recent analyses of the levee's level of protection. This may be a time to reconsider their personal definition of resilience. For some time, Princeville has exhibited tenacity by staying in place and rebuilding after floods, a pattern that has been in place for at least 150 years. An expanded levee will be expensive. As population declines, the merits of a large investment in public infrastructure also declines. Looking forward, the people of Princeville have an opportunity to honor their past while embracing a new strategy of resilience.

### *Consolidated Analysis—Princeville Development Concepts*

Princeville must consider financial and other practical implications when assessing the town's future. The status of the levee is highly important. Presumably, disclosure of levee conditions has influenced public preferences about where the town's citizens wish to live in the future. With lower population totals, financial factors are altered, too. Princeville was near insolvency prior to Matthew. Tax rates are already high, leaving the town limited capacity to remedy its finances. Together, these factors should prompt consideration of new development concepts, including the pros and cons of a more aggressive relocation strategy. When disaster risks are removed from the list of challenges, the people of Princeville can invest such resources in community enhancement, not just community safety (Table 2 and 3).

**Table 2: Quantitative Data Supports Evaluation of Strategic Options.**

<b>Category</b>	<b>Task</b>	<b>Data Needed</b>
<b>Citizen Decisions</b>	Analyze and share information about citizens' current choices to stay in Princeville or relocate (Recent counts: CDBG-DR).	CDBG-DR applicant requests, numbers, and percentages across three housing options.
<b>Design and Construction Costs of the SAA site</b>	Discuss the most recent design work and preliminary cost estimates such as fill needed for 53-acre site, grading, vehicular access, connectivity to town, soil conditions and types and projected flood depths, plus site elevations of new subdivisions along Shiloh Farm Road.	AECOM analyses and reports, future site plans.
<b>Alternative Investments</b>	Determine how much a comprehensive hazard mitigation strategy would cost and the potential funding available from partner organizations (i.e., nonprofits, foundations, and corporations) and agencies.	Host a discussion session among key organizations and state and federal agencies to obtain support and outline collaborative funding options.
<b>Future Disaster Rescue Cost</b>	Tabulate emergency measures and other response costs from Hurricane Matthew. Extend those costs forward to future disaster events.	Approximate figure, per disaster event, that could be saved by varied strategies.
<b>Future Losses Avoided</b>	Evaluate the reduction in future losses due to mitigation investments.	See data requests used in previous losses avoided studies, to include North Carolina following Hurricanes Hurricanes Fran and Floyd.
<b>State Tax Distribution</b>	Work with the NC Department of State Treasurer and NC Revenue Department to develop a projection of future Princeville tax revenues.	2018 Population Estimate for Princeville, FY 2019 revenue estimates to include sales tax, other services.

**Table 3: Other Strategic Initiatives for a Low-Risk Development Site.**

Category	Task	Possible Action
<p><b>Economic Opportunity</b></p>	<p>Discuss low likelihood of business investment within or adjacent to a high-risk floodplain, contrasted with a low-risk site where private sector investments could be encouraged. Given these realities, Princeville has a very low assessed value per capita. Relocation to areas outside the floodplain is one possible solution.</p>	<p>Discuss options with Economic Development Administration, Edgecombe County Economic Development, NC Rural Center, and others, to create a consensus statement about workforce development and economic development goals to assist Princeville residents.</p>
<p><b>Social Reinvestment</b></p>	<p>Review public feedback favoring relocation away from the floodplain. Evaluate public information resources to help town leaders and its citizens understand available choices, especially relocation concepts and potential for neighborhood amenities along with major educational and memorial features supported by national organizations.</p>	<p>Utilize information from HMDRRI relocation surveys to understand the mix of clientele, preferences, and needs. Consult with NCEM and NC Department of Commerce to work with Princeville and Edgecombe County on outreach message. Prepare appropriate synopses to help inform leadership and citizens of key choices and their implications.</p>
<p><b>Historic and Cultural Venues</b></p>	<p>Present scenarios with investments of different kinds and in different locations for museum, exhibits, and large performance venue.</p>	<p>Consult with Edgecombe County Community College, NCSU College of Design, ECU Planning Program, NC Department of Cultural and Natural Resources, and others.</p>

<p><b>Citizen Services</b></p>	<p>Collaborate with others to define opportunities for additional neighborhood support such as branch library, fitness center, community hall, senior meals and youth programs, health clinic, and early childhood development program (pre-K). These facilities and programs are often referred to as “collective impact,” supported by many nonprofit organizations that act as community “quarterbacks” for revitalization, education, health, and housing-related efforts.</p>	<p>Engage with service providers such as Town of Tarboro, Edgecombe County, nonprofits, and philanthropic organizations to assess the framework of missions, responsibilities, and possible roles.</p>
<p><b>Philanthropic Support</b></p>	<p>Discuss forms of charitable public-private joint ventures that might support themes of history and social justice as education missions, and as an entity to advance knowledge and interactive learning, including placement on the Civil War Trail. Princeville and Tarboro share iconic pre- and post-Civil War history, including Shiloh Landing, Freedom Hill, and the Tarboro Commons.</p>	<p>Research alternative organizational arrangements and partnerships. Consider a distinction between stewardship of Princeville history versus contemporary social service and education functions.</p>
<p><b>National Interest</b></p>	<p>Initiate inquiries to museums and research institutions of public policy, history, equity, and environmental justice. Consider commissioning a researchers’ summary of findings so that basic choices are defined and well described for all parties.</p>	<p>Create a forum of agencies to give significant emphasis to Princeville’s opportunities. Work through iterations of organizational design and identify a steering committee that can generate support among national, state, regional and local organizations, including, for instance, the Smithsonian’s National Museum of African American History and Culture.</p>

## *Economic Context of Princeville's Recovery*

Due to the circumstances summarized above, Princeville faces complex economic issues. Nearly 40% of the households have annual incomes below the poverty line. This reality is an important factor to consider when developing options for disaster recovery. The following points highlight a number of influential forces:

- Incomes earned by Princeville residence are below the average for the state and region: Household incomes (median \$27,902) are in proportion to worker incomes (median \$27,014). The labor force participation rate, 56%, is equal to neighboring Tarboro and similar to metro Rocky Mount and the state of North Carolina, at 57% and 63% respectively.
- Many of the economic challenges in Princeville are tied to the need for better workforce development initiatives and a range of support services such as counseling, childcare, and transportation. The regional picture is one of job loss and economic upheaval due to the departure of textile and manufacturing industries over the past 25 years. New and existing business in Edgecombe County have resulted in significant job growth, however. The 800-employee Triangle Tyre manufacturing plant, which is scheduled to open in 2019, is about nine miles west of Princeville.
- Not all residents were educated at schools in the vicinity or in job training programs in Edgecombe County. Yet a significant part of the town's population is not in the workforce.
- Part-time work is a factor in poverty but Princeville's part-time employment rate is roughly similar to regional and state averages.
- Princeville residents commute varying distances to find higher paying employment opportunities. In the Rocky Mount metro area, including Wilson, for example, employees earn about 26% more than those working closer to Princeville.
- There are dramatic differences in earnings between the town's young adults and middle age residents. Those 25 to 44 years old earn an average of \$17,014 whereas those aged 45 to 64 earn \$37,222. Seniors over 65 of age, which include many on retirement incomes, earn a median income of \$25,500.
- Education attainment is highly correlated with career success. Elementary students from Princeville are testing well below county and state averages in reading and math. In a recent report, only 6.7% of 4<sup>th</sup> graders were reading at grade level, and the same rate was found for math performance. Comparative numbers for the county are 29.1% and 32.1% respectively, and for the state, 57.7% and 58.6%. Prior to Hurricane Matthew, Princeville Elementary School performance measures were in a period of unexplained decline between 2011 and 2016, when its ranking of 12.66% dropped to 1.48 % as indicated by student test scores.



- Forty-eight percent of Princeville households receives a form of public assistance, compared to the Rocky Mount metro area and state, at 25% and 15%, respectively.
- Health statistics for Princeville reveal a high incidence of hypertension, diabetes, obesity, sexually transmitted diseases, and teen pregnancies. Some of these conditions are double the state average (see Appendix H). Some of the disease effects interfere with personal goals for education, employment, economic advancement, and the pursuit of general well-being for oneself and one's family.

**Geographic Factors:** Due to continuing threats of serious flooding in Princeville, the land is not suitable for commercial or industrial development at any significant scale. Realistically, the nearly total exodus of commerce from Princeville after Hurricane Floyd in 1999 cannot be reversed unless the flood risk is significantly reduced. Federal agencies have advised the town's residents to prepare for more flooding. Viable land for employment growth is located nearby, both in Tarboro and other sites in Edgecombe County, all within short commuting distances of Princeville. One pending economic boost is Triangle Tyre. Phase one of this \$580 million investment is projected to create approximately 800 jobs, with proposed plant expansions increasing the total to about 1,100 jobs.

**Opportunities for Change:** Considering the economic circumstances affecting Princeville, attention must be paid to strategies that help residents embrace remedies to poverty and economic hardship. Education and workforce development are necessary long-term elements of change.

## *Infrastructure and Recovery*

There are complex interrelationships between infrastructure planning and recovery planning. Some of the options involve trade-offs and cost avoidance. Current momentum in Princeville is opening the door for increased mitigation initiatives, because property owners are choosing to exit vulnerable floodplain areas. This may prevent the need for expensive long-term flood remedies. Synergistic combinations may be possible, resulting in outcomes that enhance resiliency, including floodwater conveyance and/or storage. Examples include the purposeful use of NCDOT's wetland mitigation area near the interchange of US 64 and Shiloh Farm Road, the ensuing buyout of flood-prone property, and improving storm water management infrastructure

An overview is provided in Figure 1. It attempts to show how the levee, post-disaster housing grants, and this recovery plan inform key policy choices for the town and its residents. The red dots numbered ❶ through ❹ call attention to major events or decision points.

The following diagram looks at upcoming decisions regarding Princeville's future. Multi-agency coordination will be very important, as will public engagement. The top three boxes are decision oriented whereas the bottom two boxes describe policy considerations or system components. Timing of these steps is uncertain, because property-owner decisions are yet to be determined.

The interactive and iterative nature of these decisions is unavoidable. If more owners opt for buyout, the infrastructure agencies will need to reconsider the layout and scope of their mitigation investments. In other words, without residences and population to protect, there is far less need to keep floodwaters out of such areas. The geographic pattern of these choices is likewise unknown until the decisions of property owners are tabulated and mapped.

The lower two boxes of the diagram may represent a second phase or second round of interactions. If a significant proportion of Princeville's population engages in a purposeful relocation to a new vicinity, there could be focused attention placed on socioeconomic needs of the population. Alternatively, if no purposeful relocation is implemented, it is more likely the population will be served by a variety of provider organizations and community development agencies in scattered locations.

Figure 1. Integrated steps toward a Princeville recovery plan.

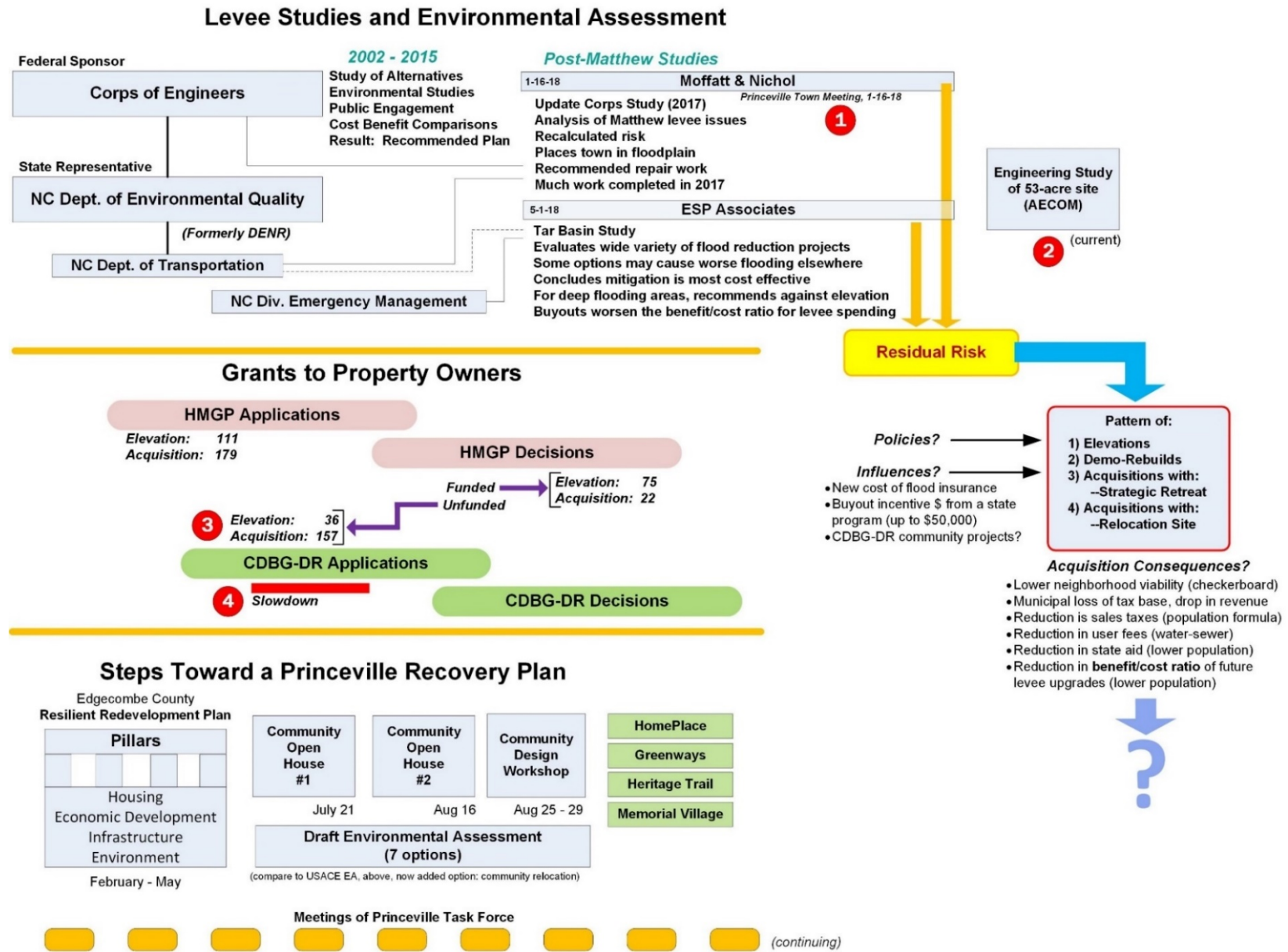
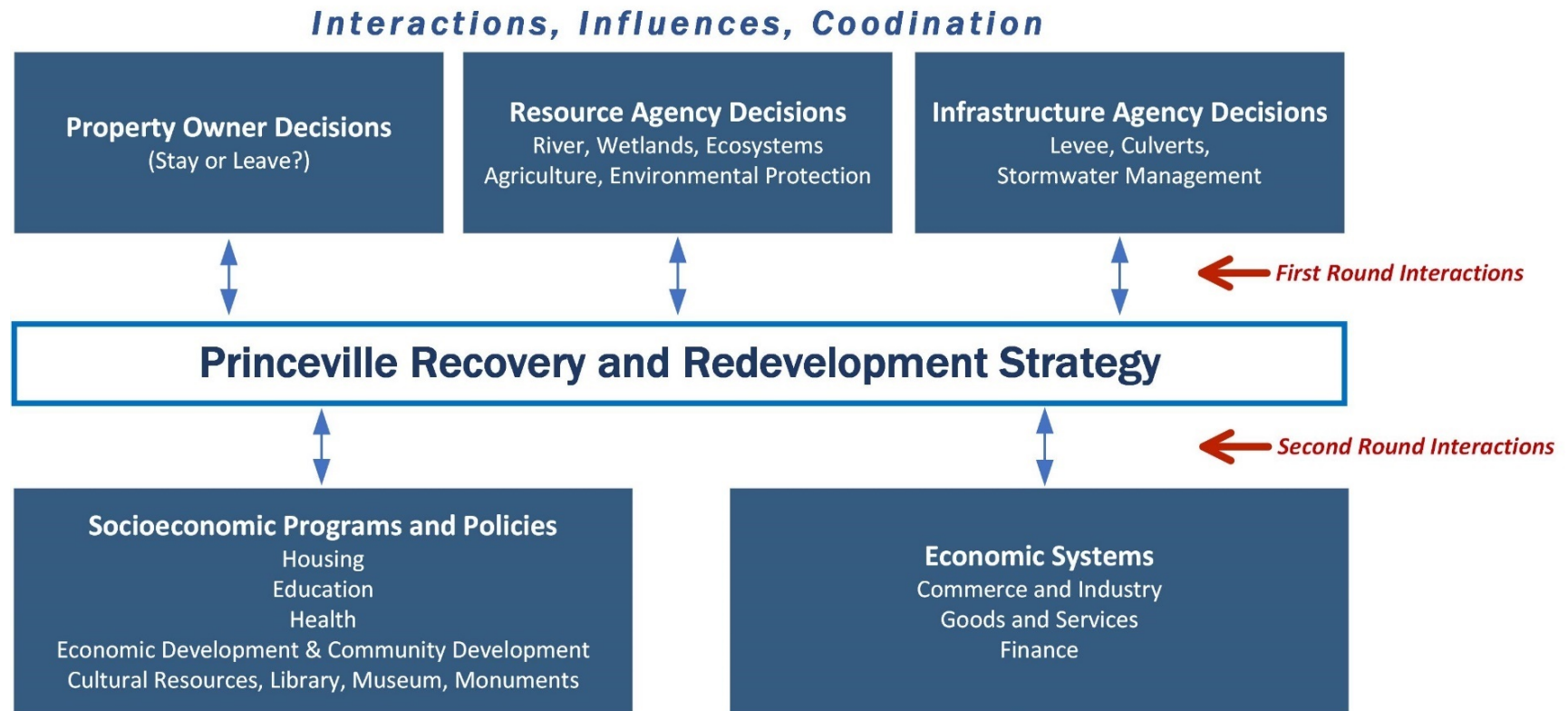


Figure 2. Recovery interactions.



## Key Factors Shaping the Recovery Plan

There are a number of factors that inform this Recovery Plan, including their interactive effects as shown in Figure 2. First and second round factors and their interactions are described next.

- A)** Residents of Princeville are currently filing their preferences in favor of buyout rather than elevation. This is as expected, based on data from last year’s applications for FEMA mitigation grants (HMGP) and citizen feedback during the planning workshops held in July and August of 2017. As this unfolds (see below), a cascading effect is possible, revealing a growing preference for buyout.
- B)** USACE and NCDOT are advising leaders and residents of the town to prepare for more flooding, because there is no near-term fix to the levee system, as summarized at the meeting with town residents on January 16, 2018. Other analyses determined that some of the proposed remedies studied would cause worse conditions in Tarboro, rendering those options very unlikely.

**Table 3: Summary of Princeville Hazard Mitigation Grant Applications.\***

TYPE	Applications	Funded	Unfunded
<b>Elevation</b>	111	75	36
<b>Demo-Rebuild</b>	3	3	0
<b>Acquisition</b>	179	22	157

*\*Based on HMGP applications processed September 2017*

- C)** As the levee is decertified by FEMA, virtually the whole town will be in a mapped 100-year floodplain. Given the provisions stipulated in the town’s local flood damage prevention ordinance, new or substantially improved structures must be elevated two feet above the Base Flood Elevation or the 1% annual chance flood elevation. In addition, flood insurance rates will rise significantly.
- D)** Dwindling population in Princeville is affecting the town’s formula-based revenues, including, in particular, sales tax distribution. Property tax revenues will drop precipitously. The results of the U.S. Census count for 2020, will likely have further revenue impacts.

- E)** The Town of Princeville is barely solvent. Revenue declines in Princeville will cause the NC Local Government Commission to monitor the financial status of Princeville.
- F)** NCEM's 2018 River Basin Study for the Tar River discourages home elevations in areas of deep, protracted flood events, which applies to much of Princeville. In addition, the effect of population decline on the results of any future benefit-cost analyses used to assess the cost-effectiveness of flood reduction measures, in particular the Princeville levee, will be significantly impacted.
- G)** In North Carolina, the buyout program includes a potential supplement to secure replacement housing outside the floodplain. The size of the bonus could be up to \$50,000 to "bridge the gap between sales price and new home price," as per NCEM's housing recovery program guide.
- H)** Princeville is hampered by significant socioeconomic challenges facing the population. Poverty, joblessness, poor health and low education attainment are very high, and is reflective of a long-term trend. Student performance reports are low and crime rates are high. As a result, the recovery plan and all scenarios should include an emphasis on community development giving attention not only to housing and other physical aspects of storm damage, but also economic, educational, and social investments. These investment scenarios should reinforce one another and undergird a synergistic recovery.
- I)** Given the evidence cited above, the recovery plan will include three scenarios. One scenario is derived from the FEMA draft Environmental Assessment, option G, called "Relocation." Another scenario of the plan will describe a general dispersion of the population driven by voluntary buyouts. Both scenarios will portray redevelopment or reconfiguration options for the original town.
- J)** Buyout and community relocation are distinct strategies. Buyouts can occur with no plan for relocation, resulting in a general dispersion of the population. Community-based relocation involves a broader approach that includes identifying resending areas and designing a new community in a manner that maintains community cohesion and addresses identified social, cultural, economic, health, and other needs. Princeville has special needs and unique reasons for emphasizing cohesion.
- K)** If citizens are moved via a relocation scenario, the people of Princeville will be able to focus on future-oriented investments in their homes and community, not the recurring cost of flood damage, disruption, and misery. On dry land, philanthropic organizations will be able to boost Princeville's exhibition of history and culture—including a

performance venue. Commercial development would be possible as well, which represents a major shift from the business exodus after Hurricane Floyd nearly twenty years ago.

- L)** Historically, Princeville leadership has preferred a "stay put" strategy. Resiliency in Princeville has tended to align with tenacity, which is a resolve to rebuild in place after repeated flooding. In 2018, the preference has shifted. This may be a time for the town and agencies to reevaluate the best way to serve the residents of Princeville, including memorializing the town's unique history.
- M)** Memorialization can accompany a purposeful relocation, as explained below. This option allows the town's residents to pursue a more notable civic investment bolstered by corporate donors and other benefactors. This concept would include two nodes and two companion sites, separate but linked by design. A small site on Freedom Hill could be augmented by a large site on dry land. Princeville's original floodplain areas may become a combination of natural areas and historic sites, including Memorial Village, Heritage Trail, Shiloh Landing, Cemetery, and Baptismal Site.

## Applying Best Practices

Purposeful relocation can include a memorialization component as exemplified by historic exhibits and monuments at Freedom Hill, the site of a new residential subdivision and park located out of the floodplain, Shiloh Landing, and other areas as identified. Given the national importance of the Princeville story, the historic and cultural preservation investment site should be located outside the 100-year floodplain.

Purposeful relocation is considered a best practice in floodplain management. A standout case is Valmeyer, Illinois, which was relocated to higher ground in the 1990s after major floods on the Mississippi River. That town is about the same size as Princeville and the relocation distance is approximately 2 miles. A wide variety of funding sources was applied, including FEMA and HUD.

The Smithsonian Institution touts the Valmeyer case, including a public exhibition about floodplain policy applied to that community (two-minute video at <https://vimeo.com/188205179>).

A partner affiliate of the Smithsonian is the NC Museum of History, a unit of the Department of Natural and Cultural Resources. The museum's Curator of African American History is featured in this video about Princeville's disaster recovery: [https://partners.skanska.com/Shared%20Documents/Princeville\\_Skanska/index.html#history](https://partners.skanska.com/Shared%20Documents/Princeville_Skanska/index.html#history).

NCDCR may offer advice on developing a strategic plan that would highlight elements of both natural and cultural resources pertinent to Princeville. Obviously, they are intertwined, holding the key to optimizing benefits for the town's residents. If a purposeful relocation is adopted, the Princeville story could be about dramatically combining a new flood management strategy with a plan for honoring cultural history via monuments, exhibits, and other educational methods.



## CHAPTER 3

# PRINCEVILLE'S DYNAMIC FLOOD RISK

### *Hazard History*

Princeville has a unique 150+ year history, including a troubled relationship with the Tar River. The town was chartered by freed slaves at the end of the Civil War, a heritage that is much treasured by residents. Given the town's geography and geology, Princeville has been subject to frequent flooding, resulting in significant human suffering and physical damages, as well as social, economic, and cultural loss.

### *Regional River System*

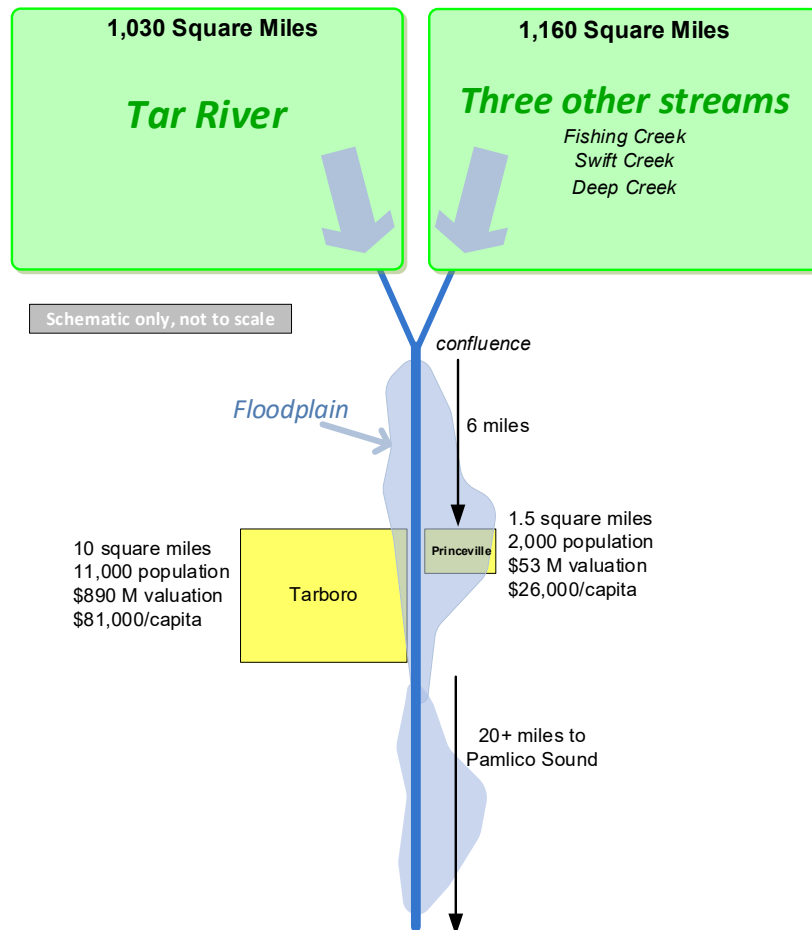
Princeville is situated below the confluence of three smaller streams and the Tar River (Figure 3). The town's history of frequent severe flooding, is influenced by its location in a large watershed extending about 90 miles to the west. A disproportionate share of Princeville is in the floodplain, compared to Tarboro. While the town has endured several major floods, the most damaging disaster was Hurricane Floyd, which struck in 1999. Repeated floods have destroyed both homes and businesses, and nearly all business activity has left Princeville for higher ground in adjacent Tarboro, including retail, service, and industrial employment. The commercial sector of the property tax base in Princeville is virtually nonexistent, leaving only residential properties, and an average valuation of about \$26,000 per capita versus \$81,000 in Tarboro. As a result, the town is unable to rely on property tax revenues to support infrastructure maintenance, public services, and repeated disaster costs.

Residential development and population have varied throughout Princeville's history. Following Hurricane Matthew, approximately 400 dwelling units were occupied, with an estimated population of about 900. This number is rising slowly as homes are repaired with the use of insurance proceeds, government programs, philanthropic actions, and homeowner reinvestment.

After a federally financed levee was built in the mid-1960s, it seemed the town was protected, but in 1999 Hurricane Floyd brought unprecedented precipitation to the Tar River watershed, and Princeville was devastated by floodwaters up to 20 feet deep, causing damages in excess of \$250,000,000. Major rebuilding occurred in the belief that the 1999 storm was

Figure 3. Drainage area upstream of Princeville.

## Drainage Area Upstream of Princeville



unlikely to be repeated. Seventeen years later, Hurricane Matthew surpassed the protection of the levee, damaging a high percentage of the structures rebuilt after Floyd.

Princeville is primarily a residential community, adjacent to Tarboro that is less subject to flooding and has a more diverse range of economic activities, including commercial and industrial businesses. Princeville's flood vulnerability was exposed by the extreme river flows during Hurricane Floyd. Very little commercial development returned to the town after that event.

Geographically, Princeville is near the retail core of Tarboro's downtown and the southwest commercial corridor along US 64, a divided four-lane highway. Distances are less than one mile to the downtown and about two miles to the commercial corridor, with driving times of four minutes and seven minutes, respectively, on arterial streets or roads.

Figure 4 provides a further depiction of Princeville's flood vulnerability, including not only the town's location at the base of several streams and the Tar River, it also shows the entire town is in either the 100- or 500-year floodplain.

Figure 4. Edgecombe County Floodplains.

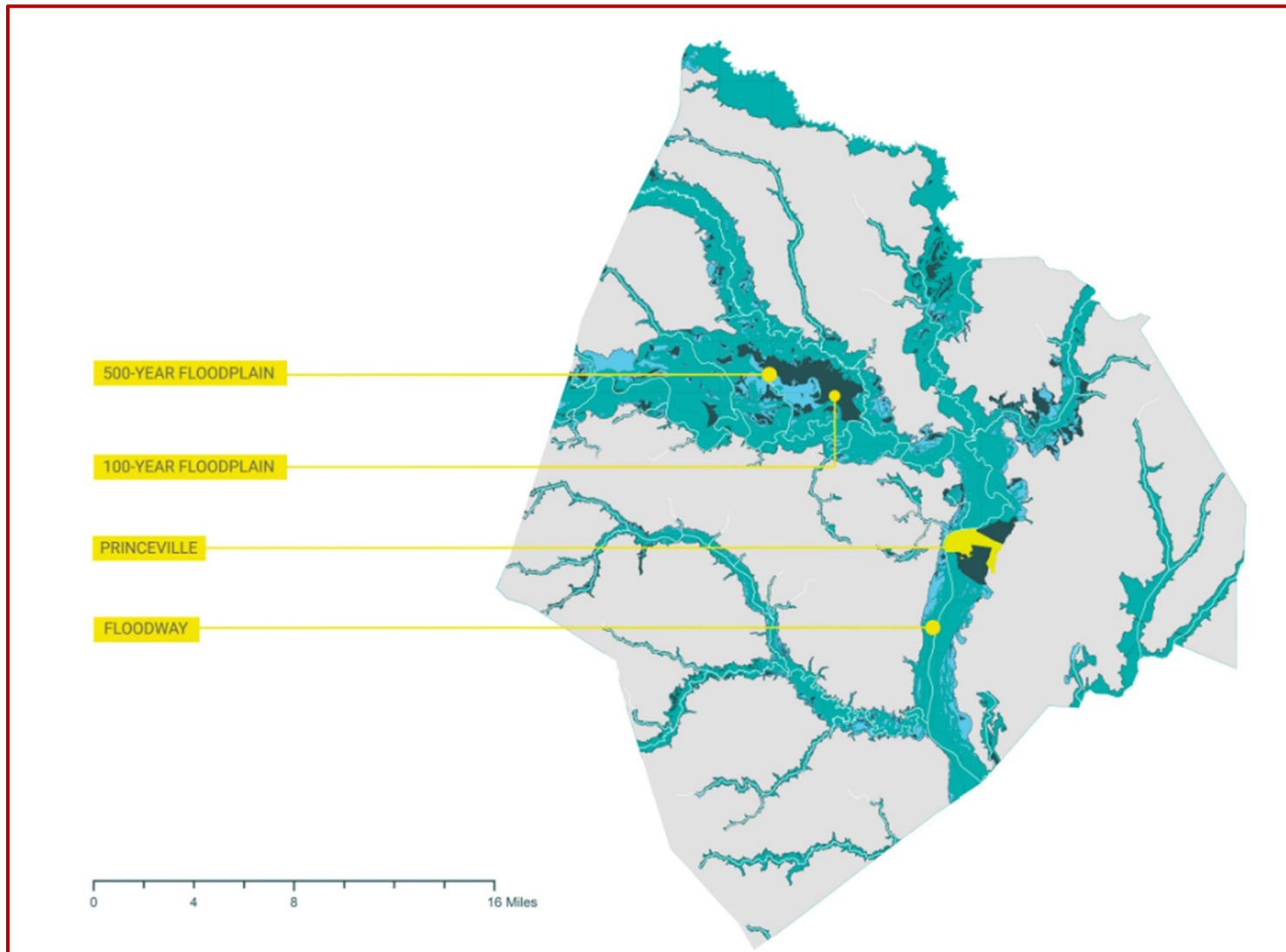
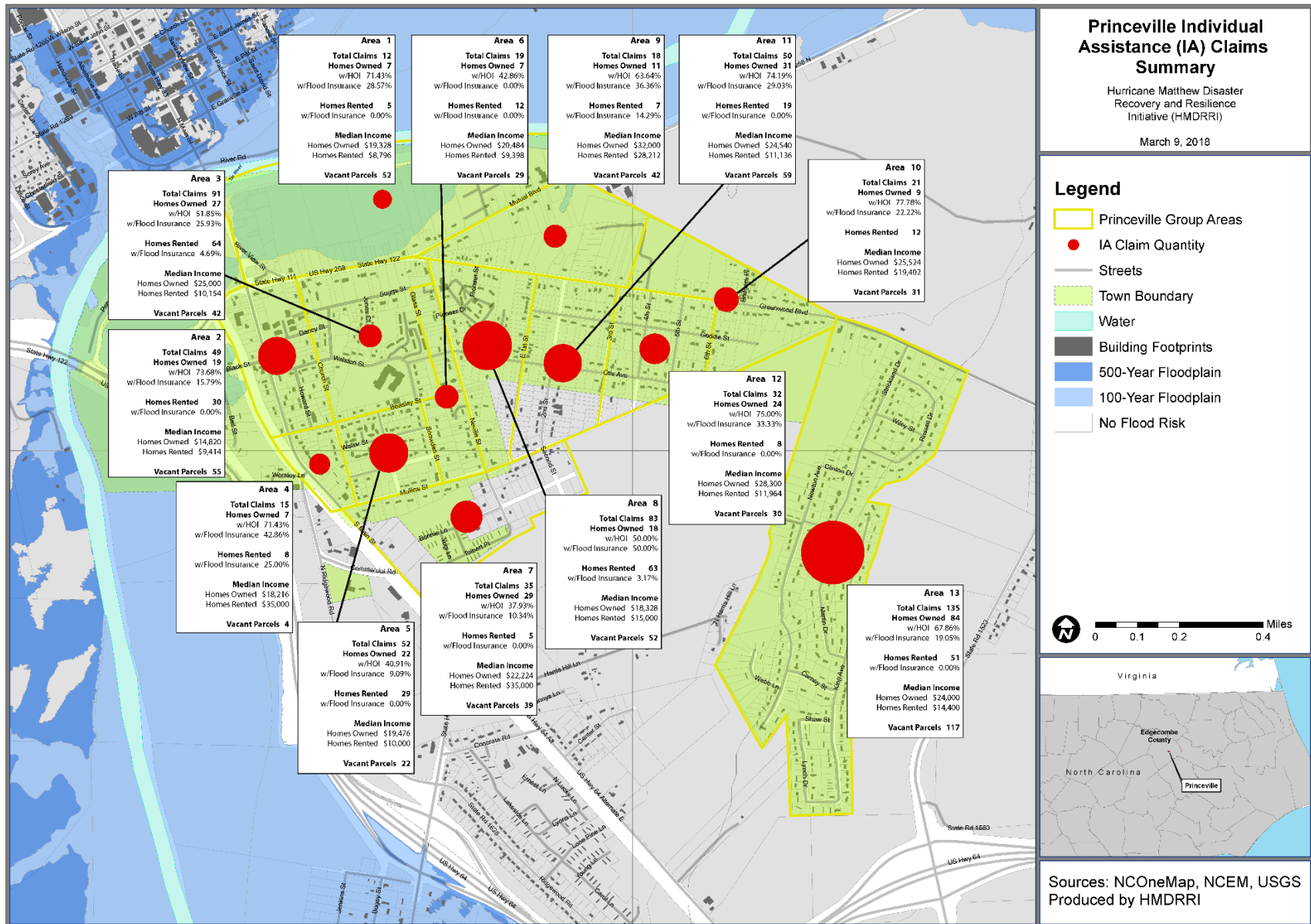


Figure 5. Summaries of conditions in Princeville after Hurricane Matthew.



As depicted in Figure 5, the specific pattern of flooding varies widely. The impacts in each area are reflected by the size of the corresponding red dot, which helps to show the geospatially distributed pattern of damage. Additional area-based data includes levels of home ownership and flood insurance participation, number of units, (including rental housing), median income, and vacant lots. Each data point helps to better understand the town's vulnerability. For instance, those who maintain flood insurance are better equipped to recover from floods than those who do not. In addition, fewer recovery programs are available for renters when compared to homeowners, and those with lower median incomes possess fewer assets to pay for the costs associated with the disruption and damages associated with a disaster.

**Figure 6: Flood depths inside dwellings located in Area 3, Princeville.**

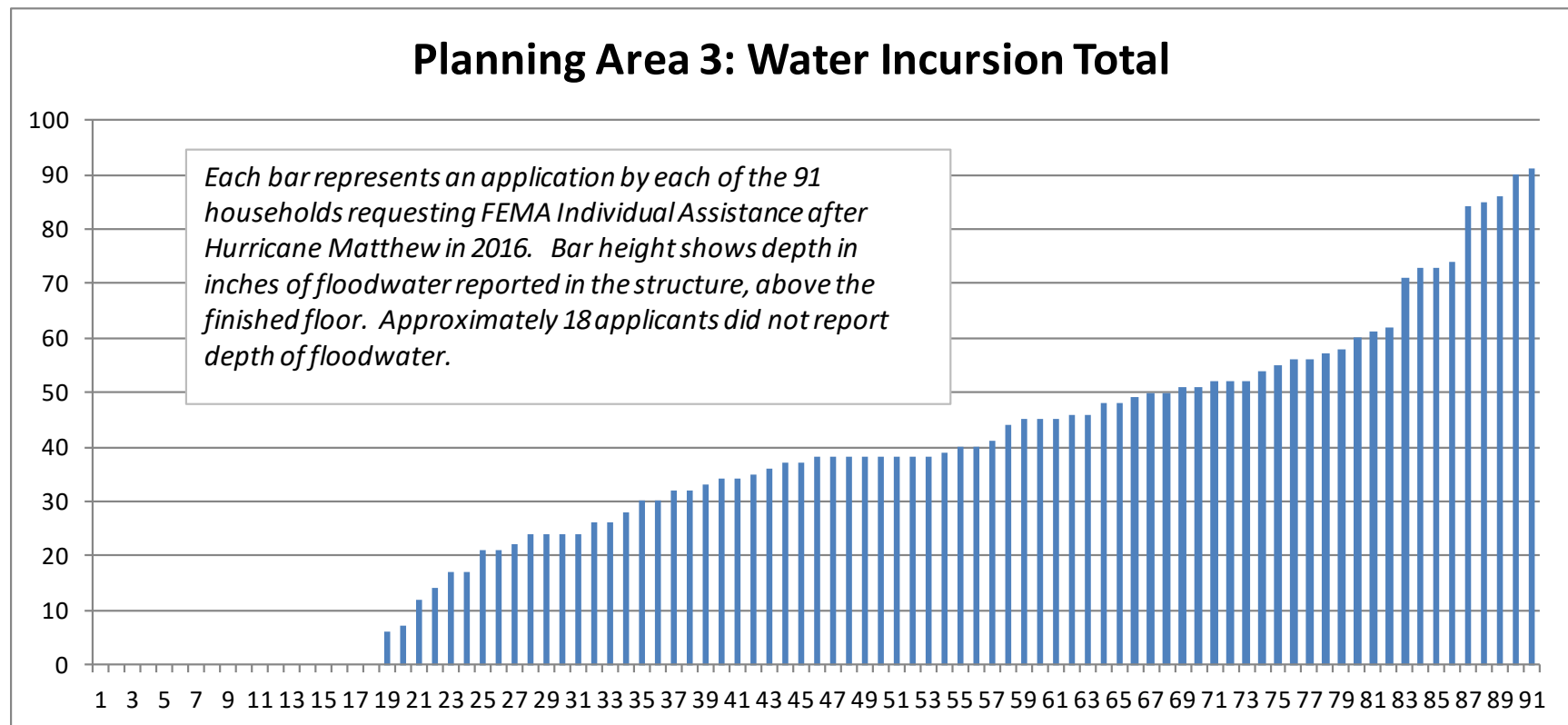


Figure 6 indicates the number of IA applicants in Area 3 which was chosen from 13 areas shown in Figure 5. It portrays 91 applications filed, with those at the right side of the chart having the deepest floodwater (inches) in their dwelling, up to

about 90 inches (7.5 feet) above the finished floor. The left side of the chart shows 18 applicants did not have floodwaters within the residence but may have had water damage to HVAC equipment or other components in the crawl space under the floor or outside the home.

**Figure 7: Close-up of Area 3 map and data.**

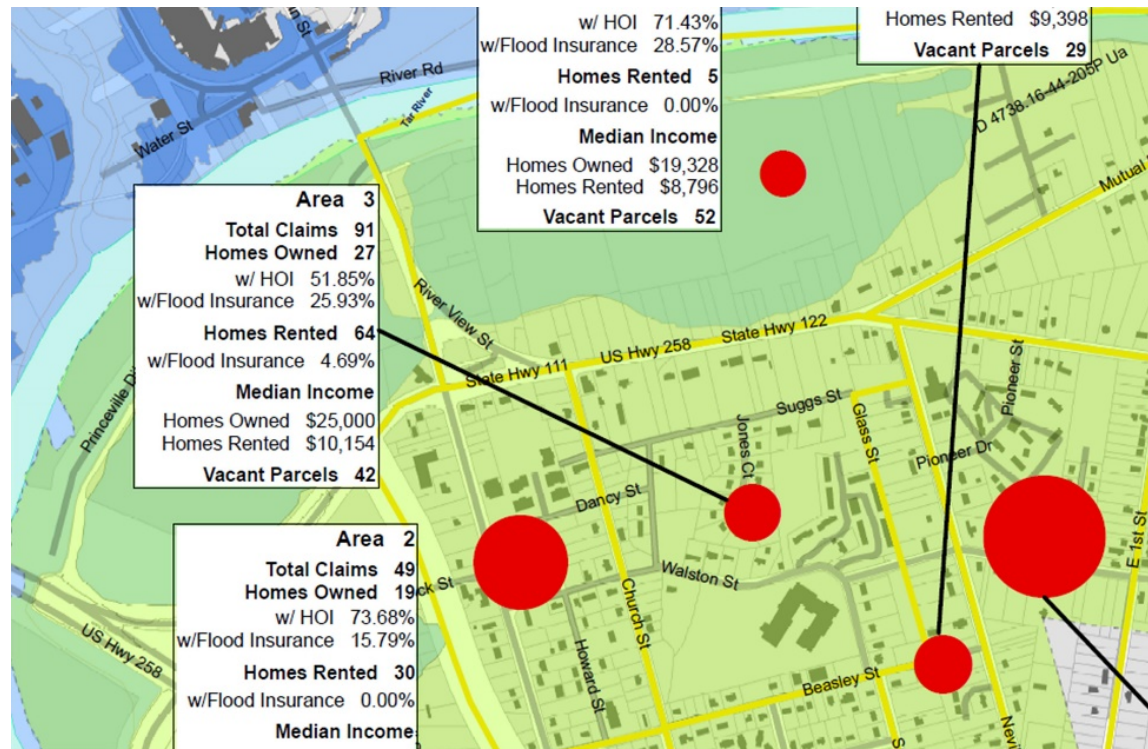


Figure 7 highlights the summary table for Area 3, including the following characteristics: Applications came from 27 homeowners and 64 renters. The area has 42 vacant lots (parcels). Median income for homeowners is \$24,000, and \$10,154 for renters. Total payments to IA applicants in Princeville exceeded \$2.7 million.

## CHAPTER 4

### VISION

An important foundation of any recovery plan is its vision, which is derived from the meaningful participation of those residing in the community. In the case of Princeville, their vision was created during a number of public events, including open houses, the Community Design Workshop, and meetings with town officials, including the Board of Commissioners. During two open houses, Princeville residents provided their comments, concerns, and ideas, and they participated in an active discussion of the Town's future. Soon after the open houses, the five-day Princeville Design Workshop was convened, leading to a further refining of the vision. A number of important themes emerged as reflected in a collection of statements and words in Figures 8 and 9.



Image from Princeville's Community Design Workshop, 8-29-17.





**Figure 9: Citizen visioning for Princeville.**

<p>“Princeville: We’re <b>resilient</b>, growing and proud”</p> <ul style="list-style-type: none"><li>- history</li><li>- economic development</li><li>- proud of living in Princeville</li></ul> <p>“The roots of Princeville are <b>still growing</b> ... Strong <b>roots</b> never die”</p> <ul style="list-style-type: none"><li>- Stand on the shoulders of ancestors</li></ul> <p>“Let’s just say this: The first town founded by free blacks is the most resilient in America”</p> <ul style="list-style-type: none"><li>- Need better flood control</li></ul> <p>“Throughout the struggle we made it”</p> <p>“This side of the river, Part 2”</p> <ul style="list-style-type: none"><li>- History of Princeville and attracting others</li><li>- Resilience and self-sufficiency</li></ul> <p>“Being able to show <b>future generations</b> the town and tell them about leadership”</p> <p>“Princeville is great again”</p> <p>“Hats off, Princeville is great again”</p> <p>“Princeville is thriving after many floods”</p> <p>“Back and stronger than ever”</p> <ul style="list-style-type: none"><li>- Seeing <b>previous generations</b> come back after floods has given hope</li><li>- Want to see town grow, it has strong leadership and proud <b>history</b></li></ul>
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The word cloud in Figure 8 represents a computer-generated cluster of the most frequently used words as written on comment cards and post-it notes during the open house events. Figure 9 represents key phrases that were assembled during two open houses and used to create elements of the vision statement. The two techniques resulted in the identification of five key words and five broader elements or statements.

## *Key words, expressed as feedback during full group discussion*

The following key words were identified during the full group discussion:

1. Strength
2. Roots
3. Growth
4. History
5. Public Safety

## *Five Elements of the Vision Statement*

Rather than a single statement of Princeville's vision, the group discussion led to the following five components, providing a basis for future consolidation and refinement. It was a consensus of the participants that this should be an ongoing process, building on these themes developed at the August 16, 2017 event.

1. Princeville moving forward with their history, looking back from which they came and making great steps in the future.
2. To be a strong, rooted town where growth, pride, and history abounds.
3. Princeville will remain steadfast in its resilience and will work to maintain its roots, history, and a sense of place as a thriving community.
4. Through established historic roots and resilience of our residents and leaders, Princeville provides a future for all.
5. Roots, history, strength, resilience and growth continues to prove our community can survive.

## CHAPTER 5

# GOALS AND POLICIES

Built upon stakeholder input, public interaction, and vetting, goals are intended to guide recovery from Hurricane Matthew, including future development scenarios. The goals also provide a means to ensure that every recommended policy and project in this Plan contributes to a resilient future for Princeville.

### Goals

Due to uncertainty about the performance of the Princeville levee system and the type of mitigation scenario (described in Chapter 2) to be used during redevelopment, the following goals are subject to refinement and greater specificity. As such, the Vision Statement (Chapter 4) also needs refinement to fit the Town's preferred post-Matthew opportunities. The hierarchy of vision, goals, policies, and projects will help structure the town's deliberation about its future.

#### **Goal 1 | INFRASTRUCTURE**

Enhance the resilience of public infrastructure, including its placement in order to reconfigure the community, thereby reducing flood vulnerability.

#### **Goal 2 | PUBLIC FACILITIES**

Enhance the resilience of public facilities in a way that supports community development objectives tailored to the needs of Princeville's population.

#### **Goal 3 | HOUSING**

Provide safe and affordable housing for all by creating a mix of housing types suited to population sectors such as the elderly, young families with children, low-income households, and others with special needs.

**Goal 4 | HEALTH**

Provide accessible, affordable, quality health care through community development, economic development, education, and workforce development programs that address the social determinants of health.

**Goal 5 | ENVIRONMENT**

Protect natural resources to enhance and mitigate future disasters while ensuring environmental justice by linking water quality and system maintenance with equitable policies and the thoughtful distribution of internal and external resources.

**Goal 6 | LAND USE**

Promote sound development practices that support long-term resilience from disasters to include development patterns that help foster viable neighborhoods and promote creative solutions for new public open spaces resulting from the buyout of flood-prone properties.

**Goal 7 | FINANCE**

Stabilize and grow the tax base while improving the efficiency of municipal operations and the effectiveness of public services.

**Goal 8 | ECONOMIC DEVELOPMENT**

Undertake initiatives and policies that promote economic opportunity for the residents of Princeville.

**Goal 9 | WORKFORCE DEVELOPMENT**

Develop workforce initiatives that help prepare Princeville residents for post-disaster opportunities through training and other education achievement, to include promoting public services that meet the needs of employers in the changing economy and address issues of poverty and unemployment.

## Policies

Due to uncertainty about the performance of the Princeville levee system, and the type of mitigation scenario to be used during redevelopment, the following policies are subject to refinement and additional specificity at such time as a recovery scenario is selected.

### Infrastructure

1. Locate severely damaged infrastructure outside the 100-year floodplain.
2. Repair existing infrastructure to include the use of materials, designs, codes, and standards that enhance durability and resilience.
3. Prioritize the expansion of new infrastructure outside of high-risk areas to increase the safety of the existing community from future flood disasters, and guide the layout and construction of new neighborhoods.
4. Collaborate with managers of Edgecombe County's water and sewer systems serving Princeville to promote resilient development patterns and reconfigurations required by mitigation buyouts.
5. Conduct Stormwater Inventory and Mapping Initiative as the first step toward system plan and capital improvement program.

### Public Facilities

1. Locate severely damaged or new critical facilities (i.e., fire station, town hall, public works, community center, and senior center) outside the 100-year floodplain.
2. Retrofit existing public facilities (i.e., school, public housing) using proven flood risk reduction techniques.
3. Configure public facilities to align with Princeville's revitalization and mitigation initiatives, incorporating preservation of historic and cultural assets such as the Princeville Museum, to include elevating Freedom Hill to serve as a "Memorial Village" above the floodplain, where various historic structures could be placed.
4. Develop trail, signage, parking, and related facilities to serve the needs of Princeville residents and tourists, to include consideration of hazard mitigation features and long-term maintenance costs.

5. Consider environmental education as a central theme in all public facilities in order to increase awareness by members of the public, including visitors, of Princeville's long-term relationship with the Tar River and the need for creative designs that integrate hazard mitigation and resilience.
6. Prepare a parks and open space strategy that will provide convenient and age-suitable recreation opportunities for Princeville residents, to include full consideration of flood risks and future costs of flood damage repair.

### Housing

1. Develop a community housing initiative tailored to Princeville's needs for affordable and safe housing, to include collaboration with regional housing organizations and the potential creation of a committee or task force to guide long-term housing efforts.
2. Maximize the incorporation of hazard mitigation into all housing efforts, including the buyout of flood-prone properties, repairs, and new housing construction.
3. Create a communication process or mechanism that is highly responsive to answering questions from property owners of disaster-damaged housing.
4. Make homes more resilient to flooding and extreme weather.
5. Create affordable housing opportunities—rental and single-family homes—within Princeville that are located in areas outside the 100-year floodplain to provide viable housing options for people, particularly those who participate in the buyout program.
6. Repair damaged structures in accordance with codes or replace, as necessary, to protect the health and safety of all residents.
7. Prioritize retrofitting and increasing the resiliency of affordable housing in flood hazard areas.
8. Develop a comprehensive buyout strategy addressing “checker boarded” properties, to include acquiring contiguous parcels and managing the land following purchase.
9. Encourage all homeowners within flood risk areas to purchase and maintain flood insurance.
10. Establish an annual event commemorating those who lived in the homes and larger neighborhoods acquired and turned into open space.

**Health**

1. Develop a collaboration with Edgecombe County Public Health and major healthcare providers to document and address health needs of Princeville residents, particularly related to the social determinants of health such as poverty, unemployment, and low educational attainment.
2. Based on guidance from researchers and public health professionals, establish priorities within town and county programs to overcome health disparities and documented patterns of illness and unhealthy living environments, to include special problems associated with infants, youth, and seniors.
3. Pursue a joint effort with regional entities and volunteer organizations to facilitate bicycle and pedestrian linkages, to include the creation of signage and marked bicycle lanes where appropriate.
4. Evaluate the capacity of the Princeville Senior Center and Edgecombe County to provide transit service for seniors, to include access to health care facilities and other services. If necessary, supplement this capacity in partnership with non-profit and faith-based groups in the area.
5. Develop a Princeville-specific health promotion strategy in coordination with Edgecombe County Health Department, and Vidant Health, including its resources affiliated with East Carolina University.
6. Study potential collaborations with county and state programs that encourage healthy lifestyles, recreation, and physical activity in the greenspaces along the Tar River corridor.
7. Improve the delivery of public information to residents that describes how to eliminate mold in homes to include posting information on the town's website, placing flyers in utility bills, and placing documents in the Town Hall, Visitor's Center, and Museum.

**Environment**

1. Protect the natural resources within and surrounding the Town by coordinating with regional and state agencies (assigned management agency for parks, open spaces, and recreational resources), as well as with Edgecombe County.
2. Respect the uniqueness of the Town's cultural history in a way that protects the area's unique historic, social, and archeological attributes.
3. Promote programs that generate an increased awareness and respect for the uniqueness of the environmental and socioeconomic setting of Princeville.

4. Adopt stormwater management practices that address routine precipitation as well as catastrophic flooding on the Tar River.
5. Consider the creation of a stormwater utility and allocate a portion of the annual revenues to purchase or elevate flood-prone properties beyond those acquired using federal and state funding.

### **Land Use**

1. Consider adopting modified arrangements with Edgecombe County for zoning and other code provisions, including the NFIP.
2. Minimize the intensity, density, and urban uses in high-risk flood hazard areas.
3. Adopt land use plans and development standards that achieve mutually compatible programs for community development, affordable housing, and workforce development.
4. Revert land acquired through the HMGP and CDBG-DR programs to its natural state in partnership with the Edgecombe County Extension Service, private-sector organizations, non-profits, and others as identified. Examples of land uses may include educational forests, wetland mitigation sites, and campgrounds.

### **Administration and Finance**

1. Work with the UNC School of Government, the North Carolina Department of State Treasurer, and the Local Government Commission to assess the town's financial and managerial condition and recommend changes to remedy identified deficiencies.
2. Seek funding for temporary staff to write and administer disaster recovery grants that address identified local needs, including those described in this plan.
3. Expand mutual aid agreements with Edgecombe County, nearby towns and cities, and Upper Coastal Plains Council of Governments to provide supplemental post-disaster long-term disaster recovery assistance including tasks such as conducting damage assessments, permitting, grant writing, post-disaster financial assistance, plan implementation, and general guidance as identified.
4. Create a strategy to establish a contingency fund to repair and mitigate public facilities, including the stormwater management system, streets, administrative buildings, and parks.



5. Minimize maintenance costs for land acquired through the Hazard Mitigation Grant Program (HMGP) and CDBG-DR by identifying private, non-profit, and quasi-governmental sponsors that agree to manage the land in perpetuity following the demolition of structures.
6. Study the feasibility of a stormwater utility fee to help manage streams and open space in the floodplain, including the future purchase of flood-prone properties that do not meet state and federal criteria. The adoption of this policy should be informed by the assessment of the town's financial condition and those of its residents.
7. Adopt a temporary building moratorium ordinance for use following a major disaster, if the level of damages (as determined by the Board of Commissioners) exceeds the capacity of contracted services to review and process building permits and conduct building inspections in a timely manner. In addition, the town may determine it needs to temporarily slow the rebuilding process in order to consider the adoption of more stringent codes and standards that serve to inject resilience into reconstruction.
8. Join the National Flood Insurance Program's Community Rating System, to include securing necessary technical and administrative assistance from Edgecombe County's Floodplain Administrator and the Upper Coastal Plain Council of Government.
9. Include Princeville-specific risk-reduction projects in the regional Hazard Mitigation Plan (HMP) when it is scheduled for update. Specific projects should address identified flood-prone structures, the acquisition of undeveloped flood-prone land, and the implementation of a stormwater management program.

### **Economic Development**

1. Create a Princeville Development Task Force in conjunction with other organizations to capitalize on the historic and cultural assets of the town, to include concepts such as the proposed "memorial village" on Freedom Hill, Shiloh Landing, and the 53-acre site.
2. Work with design professionals on a strategy to make optimum use of the 53-acre "Southern Annexation Area."
3. Partner with the Carolina Small Business Fund to promote the Economic Development Administration's (EDA) Revolving Loan Fund (RLF).
4. Encourage participation in federal grant programs that foster innovation and commercialization of technology, such as the Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) grant programs.
5. Pursue economic development measures to increase property tax revenues.

## Workforce Development

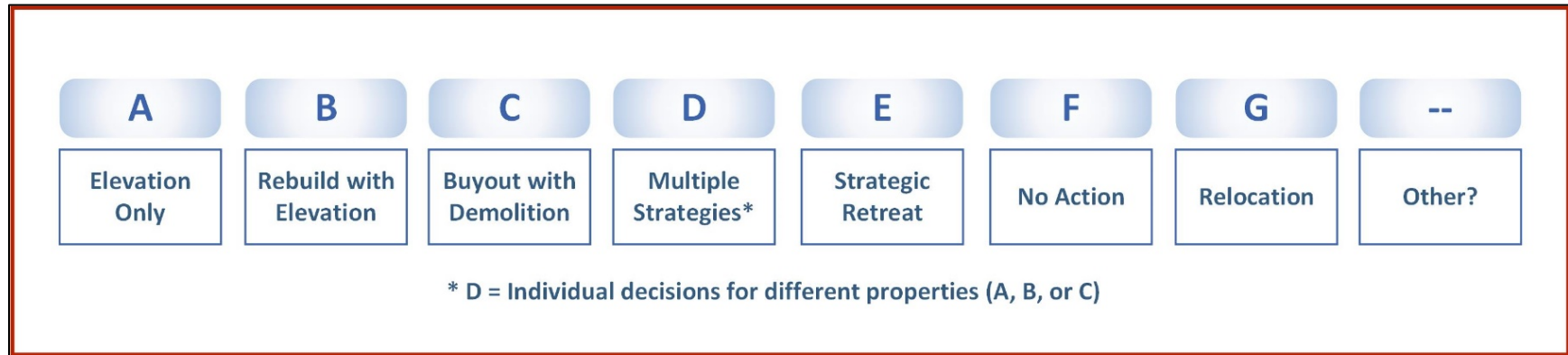
1. Create partnerships and collaborations with educational institutions and other entities to better prepare the Princeville labor force for careers in promising economic sectors, to include population research that will identify groups of unemployed or underemployed persons.
2. Create a workforce development agenda to include messaging for all age groups to become aware of job opportunities, education requirements, and labor market trends.
3. Work with Edgecombe County Community College to improve the capability of Princeville residents to perform jobs, to include a feedback mechanism representing local business executives and trainers.
4. Work with Edgecombe County Community College in partnership with identified non-profits skilled in post-disaster housing repair, to teach housing repair and reconstruction courses.
5. Work in partnership with the Turning Point Workforce Development Board to identify and deliver training programs throughout the five-county region, including those in Edgecombe County.
6. Collaborate with the Turning Point Workforce Development Board, Carolinas Gateway Partnership, the Small Business and Technology Development Center at East Carolina University, and other organizations to identify workforce development opportunities for residents of Princeville, including those jobs tied to reconstruction activities following disasters.

## Alternative Strategies

### Options Identified in Environmental Assessment Process

During the open houses held on July 21 and August 16, 2017, seven broad alternatives were offered for consideration (Figure 10). FEMA's Environmental – Historic Preservation section (EHP) prepared poster boards with descriptions of each option. Members of the public were invited to write on "sticky notes" to express their reactions, comments, questions or concerns. Concurrently, a number of recovery posters with maps and photos were on display, inviting similar forms of feedback from the public. Transcripts of those comments have been prepared, as shown in their entirety in Appendix J and Appendix K. Next, provisions of the National Environmental Policy Act, and their implications are discussed. This is followed by a brief description of each recovery option.

**Figure 10. Recovery options for the Town of Princeville.**



Below are descriptions of the seven options, labeled as “Possibilities A, B, C, D, E, F and G.”

**Provisions of the National Environmental Policy Act (NEPA)**

- As the lead federal agency for disaster recovery, FEMA is required by Congress to assess how proposed projects will impact the human environment and to use that information to inform community decision making.
- The human environment includes cultural, economic, social, physical (water, soil, air), and biological elements.
- In partnership with the citizens and leadership of Princeville, FEMA assessed a number of possibilities (see Figure 10).
- FEMA summarized the findings and sought community review and public comment, as part of an Environmental Assessment.
- The community, in partnership with the State and FEMA, will determine which strategy to pursue.

**POSSIBILITY (A): Elevation Only**

The mitigation strategy of ELEVATION would elevate some homes to the flood elevation as stipulated in their flood damage prevention ordinance.

**POSSIBILITY (B): Rebuild with Elevation**

The mitigation strategy of REBUILD WITH ELEVATION would demolish and rebuild some homes, to include elevating the new homes to the flood elevation as stipulated in their local flood damage prevention ordinance.

**POSSIBILITY (C): Buyouts with Demolition**

The mitigation strategy of BUYOUTS WITH DEMOLITION would acquire and demolish some homes within the community. The parcels would be maintained as open space in perpetuity.

**POSSIBILITY (D): Combined Mitigation Strategy of Elevations, Rebuild with Elevations, and Buyouts with Demolitions**

The mitigation strategy of COMBINING MULTIPLE MITIGATION STRATEGIES (ELEVATIONS, REBUILD WITH ELEVATIONS, and BUYOUTS WITH DEMOLITIONS) would mean that some houses would be elevated, some would be demolished, rebuilt and elevated, and others houses would be demolished and the property maintained as open space in perpetuity.

**POSSIBILITY (E): Strategic Retreat**

The mitigation strategy of STRATEGIC RETREAT would combine FEMA and state mitigation monies with other resources to do large scale buyouts throughout the town. Individuals or households would move to other communities. The North Carolina Division of Emergency Management would partner with federal, state, non-profit, and private entities to ensure that needs identified by individuals or household to reestablish themselves in another community were met.

**POSSIBILITY (F): No Action**

FEMA is required by Congress to also consider what would happen to Princeville and its citizens if FEMA monies were not used for mitigation projects in Princeville.

**POSSIBILITY (G): Relocation**

The mitigation strategy of RELOCATION would utilize FEMA mitigation funds in conjunction with other Federal, State, local, non-profit or private resources to identify locations outside of the floodplain where community members may rebuild residences, businesses, and essential community services, as part of a coordinated effort. This scenario implies the reconfiguration of Princeville, to include the 53-acre site as well as additional land as identified.

**OTHER POSSIBILITIES?**

An additional poster asked members of the public to offer other suggestions, beyond the seven options described by asking the following questions:

- What other POSSIBILITIES should FEMA consider to meet Princeville's needs as a community?

- Who should FEMA talk to or partner with to assist Princeville?

The range of strategies represents an ongoing question among Princeville residents and elected officials. The uncertainty is reflected in the content of this Recovery Plan. In Chapter 6, we describe the town's setting and assets, which provides additional information that should be used to inform the eventual adoption of one or a combination of strategies described in this chapter.



# CHAPTER 6

## COMMUNITY SETTING AND ASSETS

### History and Culture

Princeville is a unique community located along the eastern bank of the Tar River in Edgecombe County, North Carolina. The town was settled by formerly enslaved people immediately after emancipation. They gathered on low-lying land across from Tarboro and the town's history is closely associated with a long-standing struggle with floods (Figure 11).

#### Hurricane Matthew

Precipitation from Hurricane Matthew caused major riverine flooding of the Tar River. Floodwaters circumvented the levee and inundated almost all of Princeville, causing major damage to about 350 households, both owner and renter-occupied. Minor damages were felt by many more, as well as most of the town's commercial and institutional structures. Many residents have not been able to return since the initial call for evacuations.

#### History

Hurricane Matthew was not the first storm to devastate Princeville. The historic significance of the town, as well as its geographic location within the floodplain, requires special attention when deciding how the town will recover. This section of the plan serves to furnish a cursory historic understanding, as well as provide a summary of past flooding events and recovery processes that followed.

Initially named Freedom Hill, the town that would later become Princeville was settled by formerly enslaved people just after the Emancipation in 1865,

**Figure 11. Tar River historic flooding.**

Year	Date	River Stage	Elevation	Flow (cfs)
1910	4/23	27.30	36.62	23,100
1919	7/27	34.00	43.32	52,800
1922	3/9	26.40	35.72	21,400
1924	10/4	33.50	42.82	39,800
1928	9/24	30.20	39.52	29,200
1929	10/7	27.80	37.12	24,000
1934	12/6	27.38	36.70	23,500
1936	4/12	25.53	34.85	20,200
1937	2/2	26.18	35.50	21,500
1939	9/3	27.00	36.32	23,000
1940	8/20	31.77	41.09	37,200
1945	9/23	28.13	37.45	24,600
1954	1/27	27.43	36.75	23,600
1958	5/12	29.17	38.49	26,900
1964	10/9	25.61	34.93	20,000
1975	3/21	27.08	36.40	22,600
1978	5/3	26.40	35.72	21,200
1979	3/3	27.02	36.34	22,400
1984	6/4	26.44	35.76	21,300
1987	4/22	28.37	37.69	25,200
1988		---	42.00	45,000
1996	9/15	26.57	35.89	21,600
1998	3/26	27.64	36.96	23,700
1999	9/19	41.51	50.83	70,600
2003	4/15	26.27	35.59	21,000
2004		---	45.25	46,700
2006	6/19	28.03	37.35	24,500
2016		36.29	est 46.00	

*Tarboro flood study, 100-yr*

Floyd

*Edgecombe flood study, 100-yr*

Matthew

in an area of Edgecombe County occupied by Union troops. Because of this history, the community claims the title of the oldest town chartered by free African Americans. Even at the time of its founding, the land on which Princeville stands was widely known to be in a floodplain, an often-cited reason for why African Americans were permitted to lay claim to it in the first place. Of the county's original population of 10,000 formerly enslaved people, Turner Prince rose to prominence after successfully advocating for the town's founding when he accumulated capital to push for the construction of dwellings and other permanent structures. After the town's official incorporation in 1885, residents commemorated Prince by renaming the area "Princeville."

Princeville has maintained a complex relationship with its neighbor, the Tar River, as evidenced by floods impacting the Town in 1800, 1865, 1889, 1919, 1924, 1940, 1945, 1958, 1999, and most recently – 2016.

The town's first permanent defense against further flooding was constructed by the U.S. Army Corps of Engineers (USACE) in 1967, 102 years after the initial settlement of the town. The levee system was constructed between the town and the Tar River, reducing but not eliminating flood risk. This project was considered a success for three decades until Hurricane Floyd struck in 1999, followed by Hurricane Matthew in 2016, both of which caused major damage.

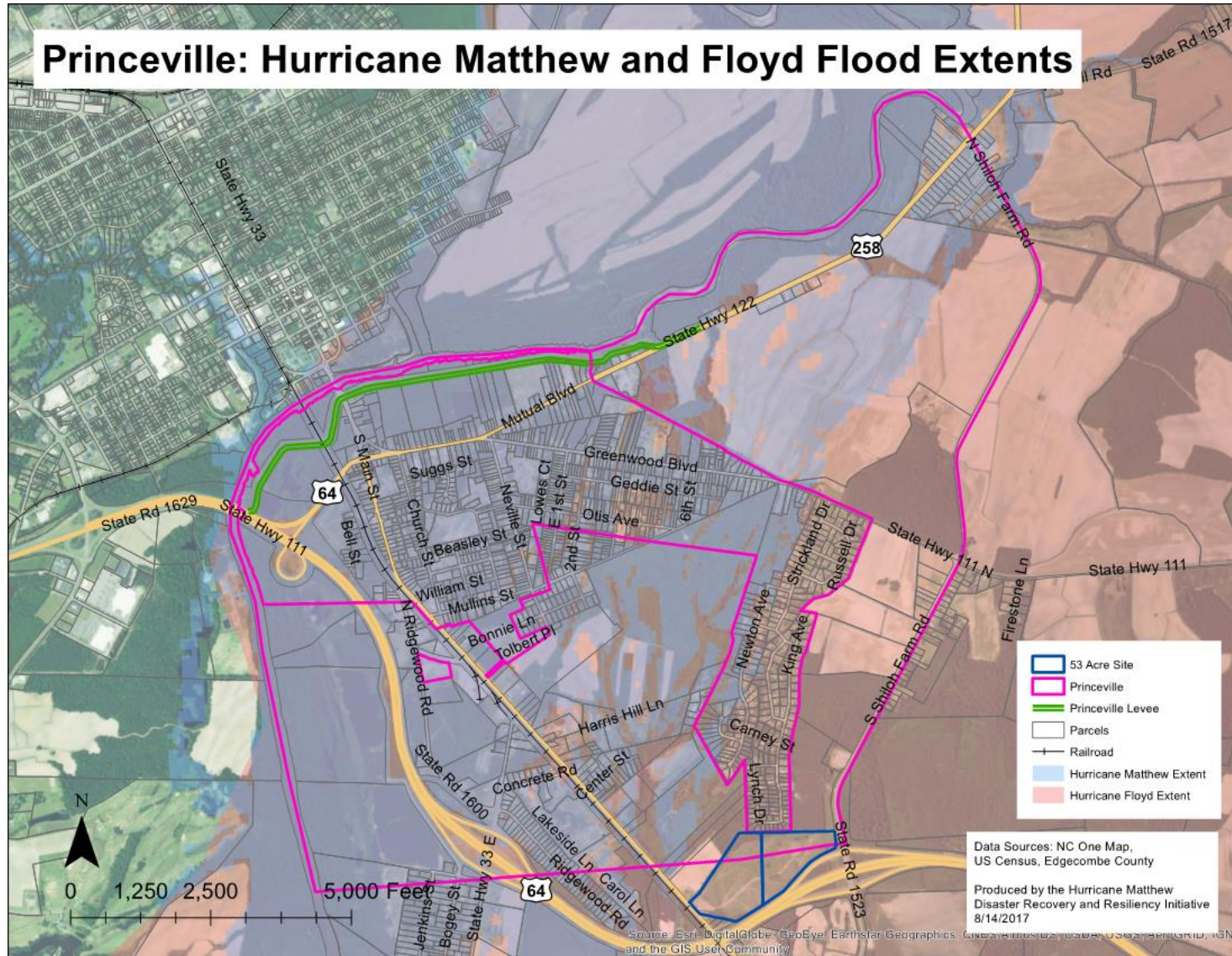
### *Impact of Hurricane Matthew*

Hurricane Matthew hit North Carolina on October 8, 2016. Days prior to the storm, rainfall in Edgecombe County saturated the ground, significantly exacerbating Matthew's impact on Princeville.

While the town's Flood Insurance Rate Maps portray the jurisdiction as being located outside the 100-year floodplain due to the protective nature of the levee, a more recent study by the Corps of Engineers has shown that the levee does not provide complete protection against the 1% annual chance event. According to resident reports, water made its way around the levee and into the town, effectively filling it like a bowl. Many residents also report that the levee also prevented water from easily draining back into the river. More recent analysis as depicted in Figure 12 shows the flood extent of Hurricanes Floyd and Matthew.



Figure 12: Princeville, NC Flood Extent, Hurricane Floyd and Matthew.

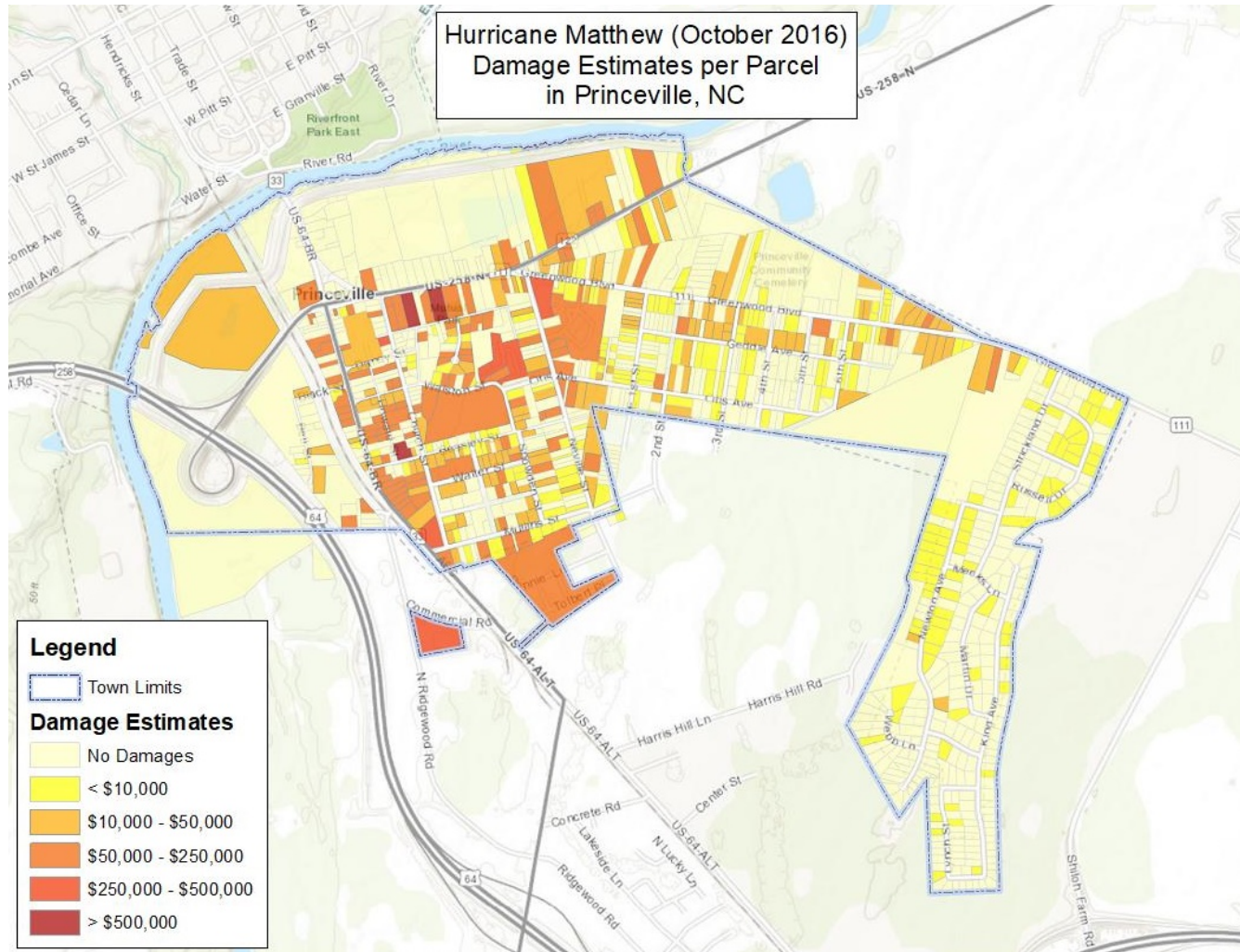


## Household Damage

According to the State of North Carolina Community Development Block Grant-Disaster Recovery (CDBG-DR) Action Plan, Princeville experienced severe damage from Matthew, with 156 homeowners and 211 renters experiencing major damage to their homes. A total of 309 homeowners and 342 renters applied for Federal Emergency Management Agency (FEMA) assistance. Two hundred and fifty-two households (81.6 percent) and of the 257 renters, 75.1 percent were approved for assistance. FEMA estimates that damages incurred to households totaled \$2,744,209, averaging \$11,065 per residence. FEMA approved a total of \$1,213,224 in assistance to renters under the Individuals and Households Program (IHP) while rental assistance totaled \$488,784 and Other Needs Assistance (ONA) totaled \$724,440. Due to the high number of displaced households, FEMA operated a system of temporary housing support for approximately 18 months after Hurricane Matthew.

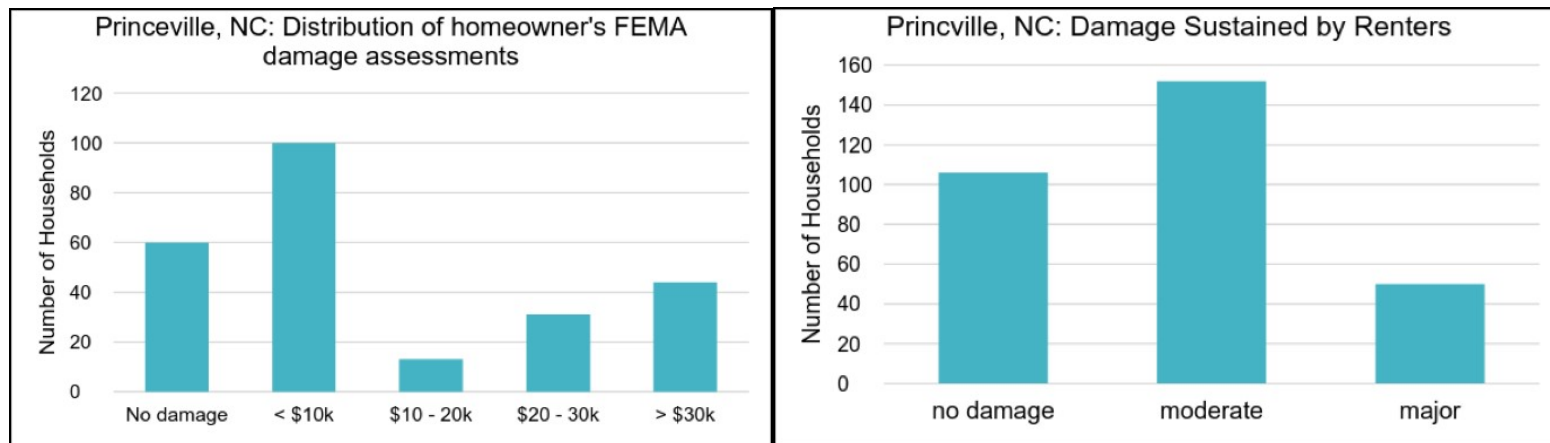
Figure 13 depicts the distribution of damages on a parcel basis, which highlights the lowest lying land and the area in which the town was originally settled. Growth, which has occurred over time to the east, includes Southern Terrace, which is adjacent to the 53-acre Southern Annexation Area.

Figure 13: Princeville, NC: Damage Distribution by Parcel.



In Princeville, 653 residents, including both renters and homeowners, registered with IHP for assistance, of which 510 were eligible and a cumulative \$3,175,135 was awarded by FEMA. For housing assistance, 418 of 604 applicants received assistance, with a cumulative amount totaling \$2,104,752. Of the 552 applicants of ONA in Princeville, 448 were accepted receiving a total of \$1,070,383. Most renters sustained moderate damage, with about 50 experiencing major damage. On hundred households sustained less than \$10,000 worth of damage, while 88 sustained greater than \$10,000 in damages and 44 of the 88 sustained greater than \$30,000 worth of damage (Figure 14).

**Figure 14: Princeville, NC: Distribution of Homeowner's FEMA Damage Assessments. FEMA Housing Assistance Data, Renters Hurricane Matthew, Dec. 29, 2016.**



## Community Profile

Princeville is characterized by a high degree of vulnerability across a broad spectrum of potential risk factors. Many Princeville residents are at risk to job loss, housing instability, poverty, and poor health, and are less likely to have the resources needed to cover expenses related to flood-related damages, compared to state and national averages.

## Demographics

Within each community are unique patterns of hardship, joblessness, and insufficient training or education to participate fully in the workforce. These are not the only causes of poverty, but they do contribute to vulnerability and low capacity to recover from a disaster. When a community is dominated by negative socioeconomic characteristics, the financial resources to provide basic public services are constrained. Limited financial resources also impact Princeville's ability to carry out community improvements of all kinds, including hazard mitigation, disaster preparedness, and infrastructure upgrades.

## Population

In 2010, the town of Princeville consisted of 2,085 residents. As of 2015, the population increased by about 100 people, reaching 2,188 (Table 4). The town is aging, majority-female, and historically-African American rendering it economically vulnerable to natural disasters. From 2010-2015, the average age in Princeville increased from 39.7 years to 41.1 years old. Since its founding in the 1800s, the population of Princeville has remained over 90 percent African American. While the impact of Hurricane Matthew on Princeville's population size has yet to be determined, it is known that the number of households paying for sewer and water services dropped from about 725 to 350 after the flood.

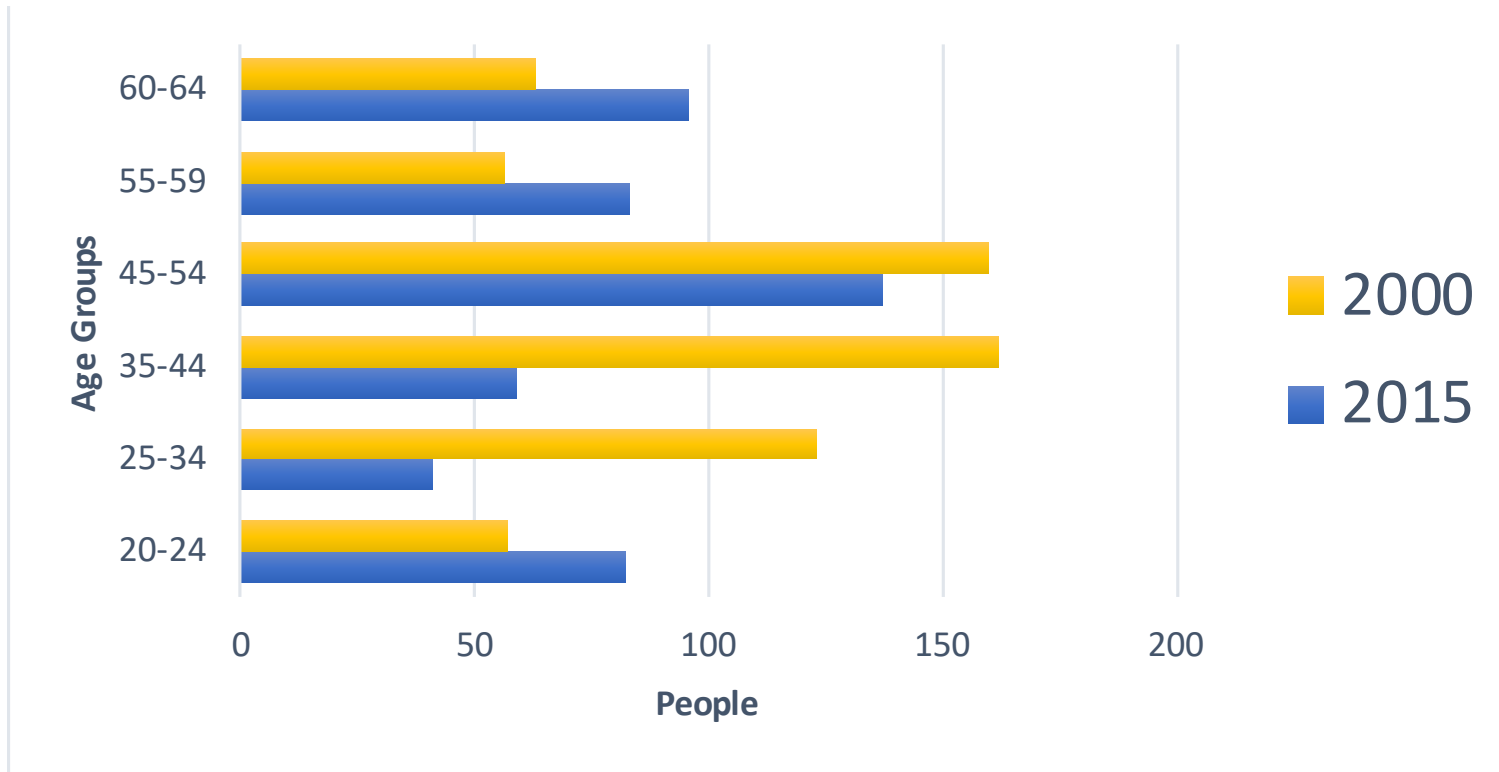
<b>Year</b>	<b>Princeville</b>	<b>Edgecombe County</b>	<b>North Carolina</b>
<b>1990</b>	2,497	56,608	6,628,637
<b>2000</b>	1,021	55,338	8,049,313
<b>2010</b>	2,085	56,607	9,535,483
<b>2015</b>	2,188	54,150	9,845,333

Source: 'Ten Year periods reported by the US Census; Mid-term estimates (2015) by American Community Survey.

## Age

As shown in Figure 15, Princeville's population is aging, which represents a key indicator of vulnerability.

**Figure 15: Princeville's population by age groups in 2000 and 2015.**



Princeville's aging population highlights vulnerability and associated needs in a variety of ways:

- Elderly populations are less likely to be able-bodied and therefore less able to navigate elevated housing should they choose to rebuild in the original part of town.
- Elderly populations are more likely to be living alone, especially the high proportion of female seniors in Princeville, and are more likely to need assistance during an evacuation.
- To make an elevated home accessible to a less able-bodied individual, or someone using a mobility-aid, extra cost would include building ramps or installing elevators (constructing ramps is an eligible cost under the HMGP and CDBG-DR programs). For retired seniors or those on fixed incomes, that do not receive these forms of federal assistance, this extra cost could significantly burden residents that wish to stay and rebuild.

## Housing

There are approximately 897 housing units in Princeville, 507 of which (renters and homeowners) were approved for housing assistance by FEMA. The North Carolina Housing Finance Agency reported 78 of its subsidized units in Princeville were damaged by Matthew. Table 5 shows a number of conditions that will impact the recovery process.

<b>Table 5: Housing Stock Data Comparisons (U.S. Census, American Community Survey 2015).</b>			
	<b>Town of Princeville</b>	<b>Edgecombe County</b>	<b>North Carolina</b>
<b>Housing Cost Burdened (&gt;1/3 of income)</b>	26%	31.6%	23.4%
<b>Percent Renters</b>	32.1%	30.2%	32.3%
<b>Rental Vacancy Rate</b>	1.5%	8.9%	7.6%
<b>Homeowners Vacancy Rate</b>	3.8%	1.6%	2.3%
<b>Vacant Housing Units</b>	12.3%	14.9%	14.5%
<b>Average Cost of Homes (2015)</b>	<b>\$73,300</b>	<b>\$82,200</b>	<b>\$154,900</b>

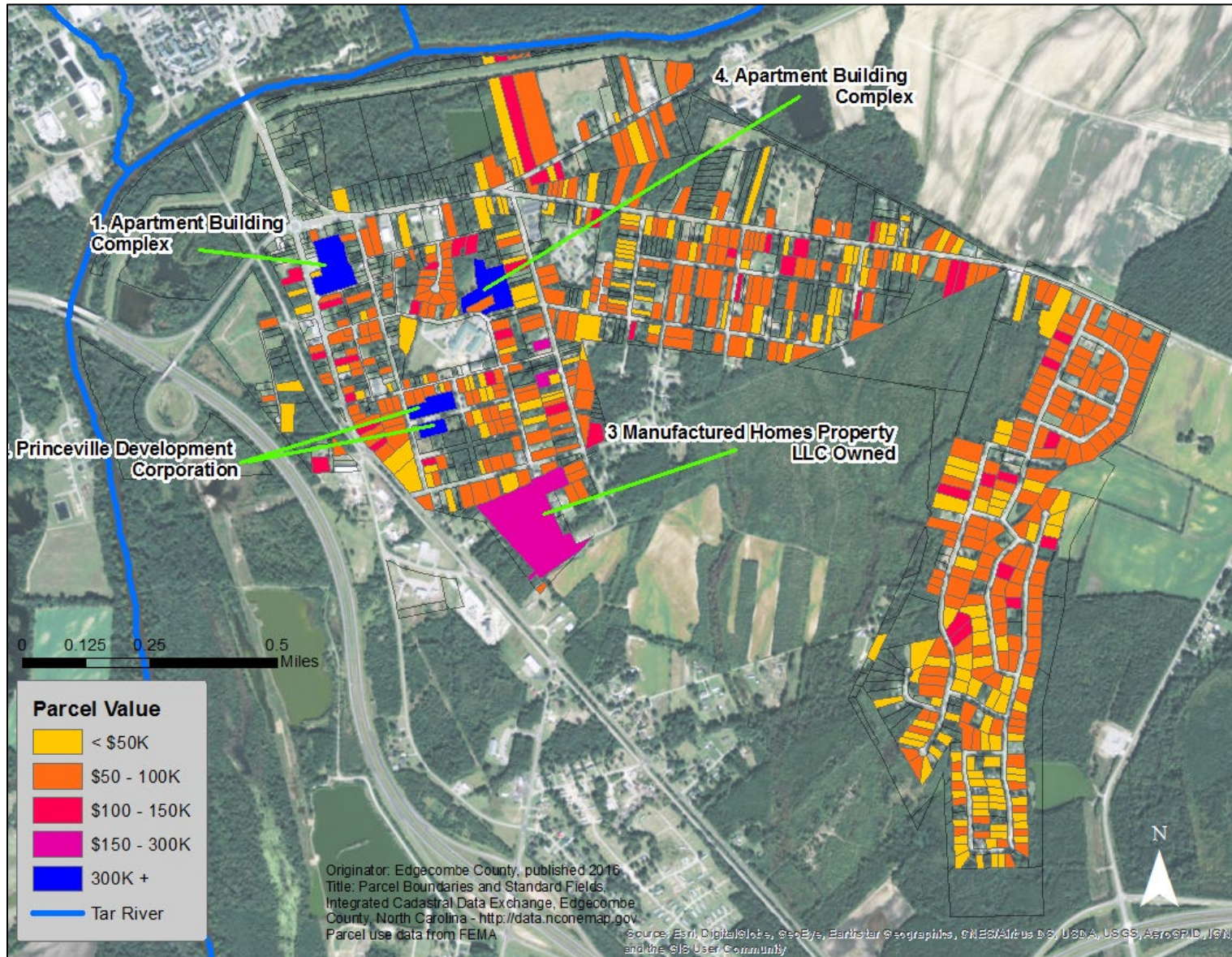
Before Hurricane Matthew, the Town of Princeville had a low rental vacancy rate, indicating a need for additional rental housing stock. The storm exacerbated this problem and two years after Hurricane Matthew, public housing units are still closed, forcing residents to find housing elsewhere.

Although Princeville's proportion of renters does not differ from Edgecombe County or the state of North Carolina, most people live in the northwest quadrant of the town, which represents an area severely impacted by flooding. The rental vacancy rate is much lower in Princeville, at 1.5% compared to Edgecombe, 8.9%, and North Carolina, 7.6%. This will hinder the recovery process when residents intend to move back to the town while extant housing stock is damaged and few alternatives are available.

The proportion of residents cost-burdened by housing in Princeville is quite low compared to reference regions, though much of this might be connected to the prevalence of heir property. As shown in Figure 16, many of the housing units are worth below \$50,000 and almost all are worth under \$100,000. Princeville's average housing unit value is approximately half that of the state's, and below that of Edgecombe County. Over half of the units were built between 1990 and 2009, with no new units thereafter, indicating a slowdown in new development.



Figure 16. Residential housing values, Princeville, NC.



## Workforce Development and Economic Development

Princeville's economic context is significantly impacted by high levels of poverty, exacerbated over time by the environmental consequences of flooding and industrial decline.

As shown in Table 6, Princeville is a low-income, (high-poverty) town, adding significant burden to its recovery. The town significantly surpasses both the County and State's unemployment rate and percent below poverty by significant portions. See also Appendix I for additional measures of joblessness, poverty, health, and family structure data.

**Table 6. Princeville, Edgecombe County, and North Carolina Economic Vulnerability Indicators.**

	Town of Princeville	Edgecombe County	North Carolina
<b>Unemployment Rate</b>	23.5%	15.4%	9.4%
<b>Median Household Income</b>	\$31,563	\$32,659	\$46,868
<b>Per Capita Income</b>	\$14,011	\$17,956	\$25,920
<b>Percent Below Poverty</b>	37.2%	26.3%	17.4%

While there are not many job opportunities in Princeville, the region has seen industrial development and job growth. Commuting distances are relatively short, but access to a car is generally needed, due to the low availability of public transit. Over 23% of Princeville's households lack access to a motor vehicle. Most town residents commute to locales such as Tarboro, Greenville, Rocky Mount, and Wilson, North Carolina (15 min – 1 hour). When considering recovery and options for housing reconstruction or purchase of property elsewhere in Princeville or further away, the workforce population's commuting distances might play a role in who is willing to relocate and who wants to stay. These economic characteristics combined with demographic trends such as an aging population indicate that new families are not moving to Princeville which has implications for economic stability, including the recruitment of local businesses.

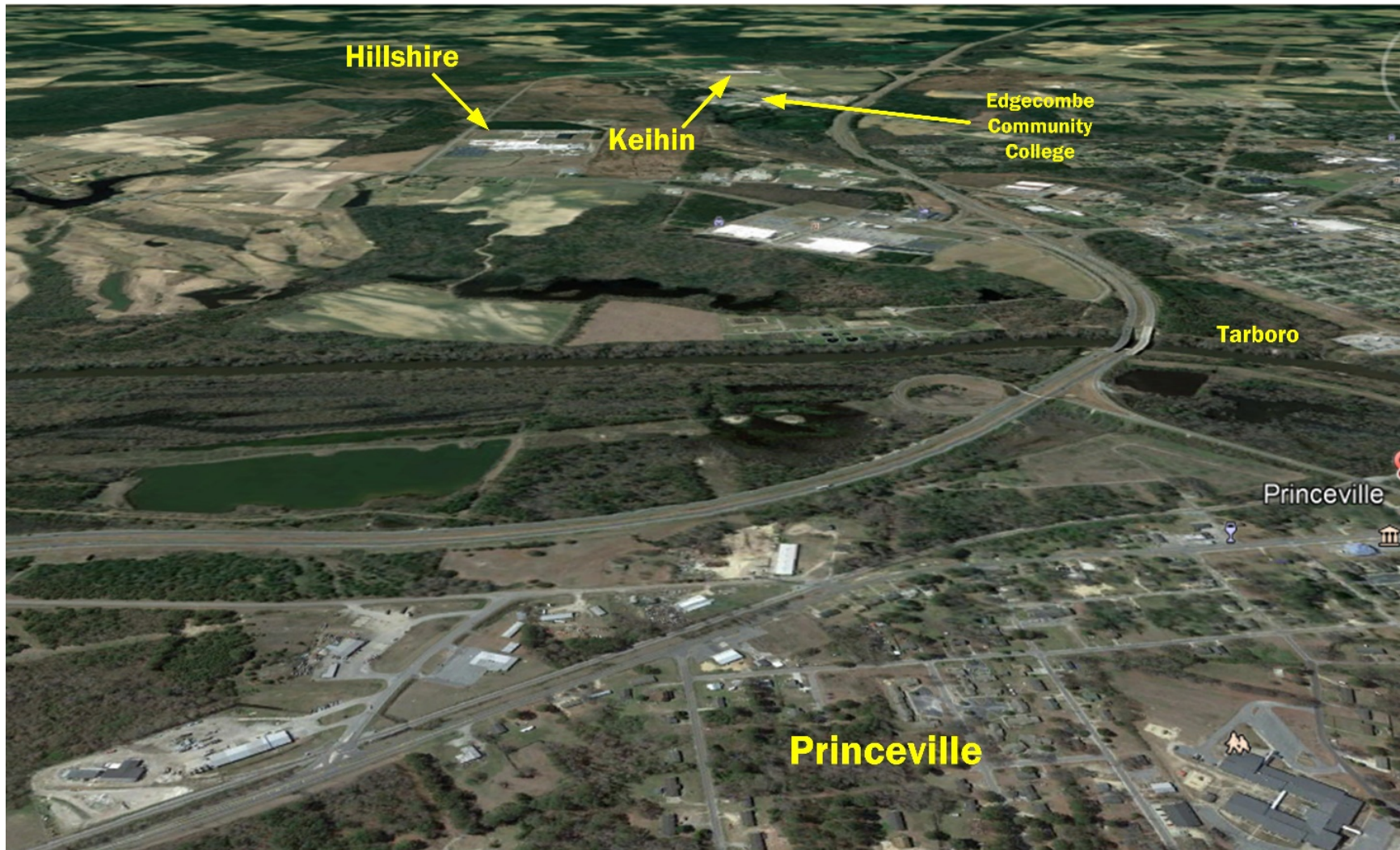
Business activity in Princeville declined significantly as a result of flooding due to Hurricane Floyd in 1999. The few remaining businesses were flooded again due to Hurricane Matthew in 2016. Princeville lacks high ground to foster business development, compared to adjacent land in Tarboro, and elsewhere in the county.

Perhaps more important than in-town employment is the challenge of workforce development. Workforce development plays an important role in Princeville's economic future. As noted earlier, educational achievement in Princeville is below state averages for North Carolina. But more than just job training, workforce development includes the creation of sustainable employment (Schrock, 2014) as a feature of an economically viable region:

*"... Policies, programs, and institutions that assist workers and employers in connecting with one another, making future-oriented investments in labor force skills, and promoting career advancement and mobility toward goals of household, business and community, and regional economic prosperity. Employment and job training programs have a long history in social policy as part of antipoverty programs, and the educational policies have long focused on vocational and occupational skills training. Yet the emergence of the term "workforce development" in the 1990s was suggestive of new connections to planning and place prosperity."*

Local education trends have made workforce development goals harder to achieve. Elementary education student attainment scores in Princeville remains below state averages and these conditions have declined significantly from 2006 to 2016. Middle school and high school locations are located outside Princeville, and no data are available about student performance. It should be noted that some sectors of the population are quite mobile, so the unemployed population of Princeville may represent households that relocated from other areas, not those who were educated in Princeville or elsewhere in the Edgecombe County school district.

Figure 17: Aerial view of regional economic opportunities.



Source: Google Earth Pro, acquired January 15, 2018

Figure 17 provides a bird's eye view of key industries near Princeville and Tarboro. Figures 18 and 19 represent the Hillshire and Keihin plant sites. Both companies have developed and expanded over the past 10 to 15 years. Similar businesses are in Rocky Mount and Greenville, both within commuting distance of Princeville. The large Kingsboro CSX industrial park, located nine miles west of town, is preparing for a new 800-employee automotive tire manufacturing plant being built by a China-based firm, Triangle Tyre (Figure 20). It is also home to a large QVC Shopping Network distribution center. Edgecombe County Community College provides training under contract to local businesses, to include those highlighted in this section of the plan. Small Business Administration-funded programs in business management are also present on the ECCC campus and at East Carolina University in Greenville, about 25 miles southeast of Princeville.

**Figure 18: Aerial View of Hillshire (Tyson Foods) wholesale bakery and distribution center.**



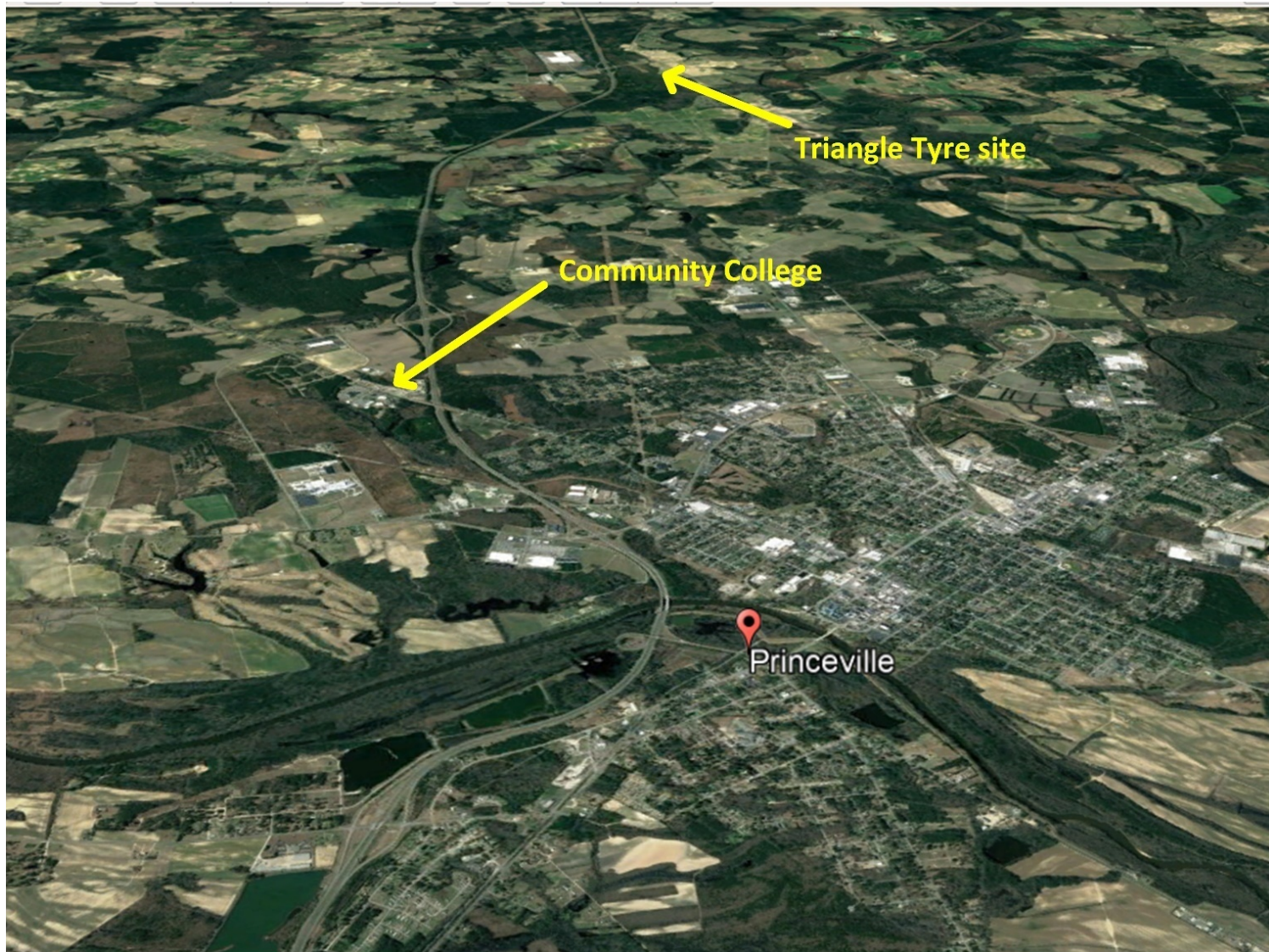
Source: Google Earth Pro, acquired January 15, 2018.

**Figure 19: Keihin Carolina System Technology, manufacturer, automotive emissions control modules.**



Source: Google Earth Pro; acquired January 15, 2018.

Figure 20: Aerial view – Location of Triangle Tyre plant construction site, about nine miles west of Princeville.



## *Occupation Type & Employment Location*

A high number of Princeville residents, particularly men, are employed in occupations that could be vulnerable to future economic shifts, including manufacturing, which is highly responsive to labor costs and firms could relocate seeking lower wages. Additional factors include trucking and transportation costs which are vulnerable to fluctuations in oil prices and emerging technology. Most of Princeville's working population is employed outside town limits, increasing pressure for residents to leave town and relocate closer to their jobs, a condition exacerbated by flood risk and repetitive losses.

## *Health and Social Services*

Edgecombe County ranked 98th of 100 North Carolina counties in terms of health outcomes and health factors, based on a study by the University of Wisconsin Population Health Institute (Table 7). Roughly 40 percent of households, which encompasses Princeville, receive Supplemental Nutrition Assistance (SNAP) benefits, and about 15 percent receive Supplemental Security Income. This underscores a population highly susceptible to food insecurity and precarious economic circumstances. Edgecombe County's residents are more vulnerable in most health-related indicators than North Carolina. Most notably, Edgecombe County adults are more obese, have less access to mental health and primary care services, have a higher percent of children in single-parent households, and a higher percent of teen birth rates.

Princeville has a health clinic; however, the Town lacks easy access to other necessities like groceries, pharmacies, hospital care, mental health care, and social services, meaning residents must have access to personal transportation for many regular needs. The absence of key assets within town limits also means that during flood events, residents are either cut off from necessary services or face lengthened travel time to access these needs.



**Table 7: Edgecombe County Health Vulnerability Indicators.**

	Edgecombe County	North Carolina
<b>Percent of residents who are uninsured</b>	15%	15%
<b>Percent of adults who are smokers</b>	23%	19%
<b>Percent of adults who are obese</b>	41%	30%
<b>Percent of population with adequate access to exercise opportunities</b>	35%	75%
<b>Teen birth rate (# of pregnancies per 1000 women aged 15-19)</b>	61	36
<b>Ratio of primary care physicians to residents</b>	1:3,230	1:1,410
<b>Ratio of mental health providers to residents</b>	1:2,010	1:490
<b>Preventable hospitalization rate (# of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees)</b>	56	49
<b>Graduation rate</b>	82%	86%
<b>Percent child poverty</b>	43%	23%
<b>Percent of children in single-parent households</b>	56%	36%
<b>Air pollution (Average daily density of fine particulate matter in micrograms per cubic meter)</b>	8.9	9.1
<b>Drinking water violations</b>	Yes	N/A
<b>SEVERE HOUSING PROBLEMS (% OF HOUSEHOLDS WITH OVERCROWDING, HIGH COSTS OR INCOMPLETE PLUMBING OR KITCHENS)</b>	21%	17%

Source: University of Wisconsin Population Health Institute, School of Medicine and Public Health. (2017) County Health Ranking and Road Maps - Edgecombe County, NC. <http://www.countyhealthrankings.org/app/north-carolina/2017/rankings/edgecombe/county/outcomes/overall/snapshot>

### Community Assets and Resources

As documented elsewhere in the plan, Princeville has key facilities and assets located in areas that flooded, including a health clinic, volunteer fire station, affordable housing, a convenience store, multiple small businesses, and several churches. Their locations impede residents' access during flooding events. As mentioned previously, Princeville also lacks many important community amenities and services such as public transportation.

### Community Economic Vulnerability

The town of Princeville is highly vulnerable for reasons detailed in its community characteristics, to include an aging population that is primarily female. The central census block is over 50% renters who are more likely to be permanently displaced post-disaster. Housing values are low which decreases the amount of compensation residents can receive if they pursue the acquisition of their home through the Hazard Mitigation Grant Program. The unemployment rate in Princeville is 23.5 percent and the poverty rate is 37.2 percent, both almost 10 percentage points above Edgecombe County. Because residential property values are low and there is little commercial and industrial business located within the town's boundary, revenues from property taxes are low, hindering Princeville's financial capacity to provide municipal services. This is not the case for sales tax revenue, which in Edgecombe County is distributed on the basis of population rather than point of sale. Annual payments to Princeville under this sales tax system were about \$450,000 per year pre-Matthew but could decline 50% or more due to population loss after Matthew.

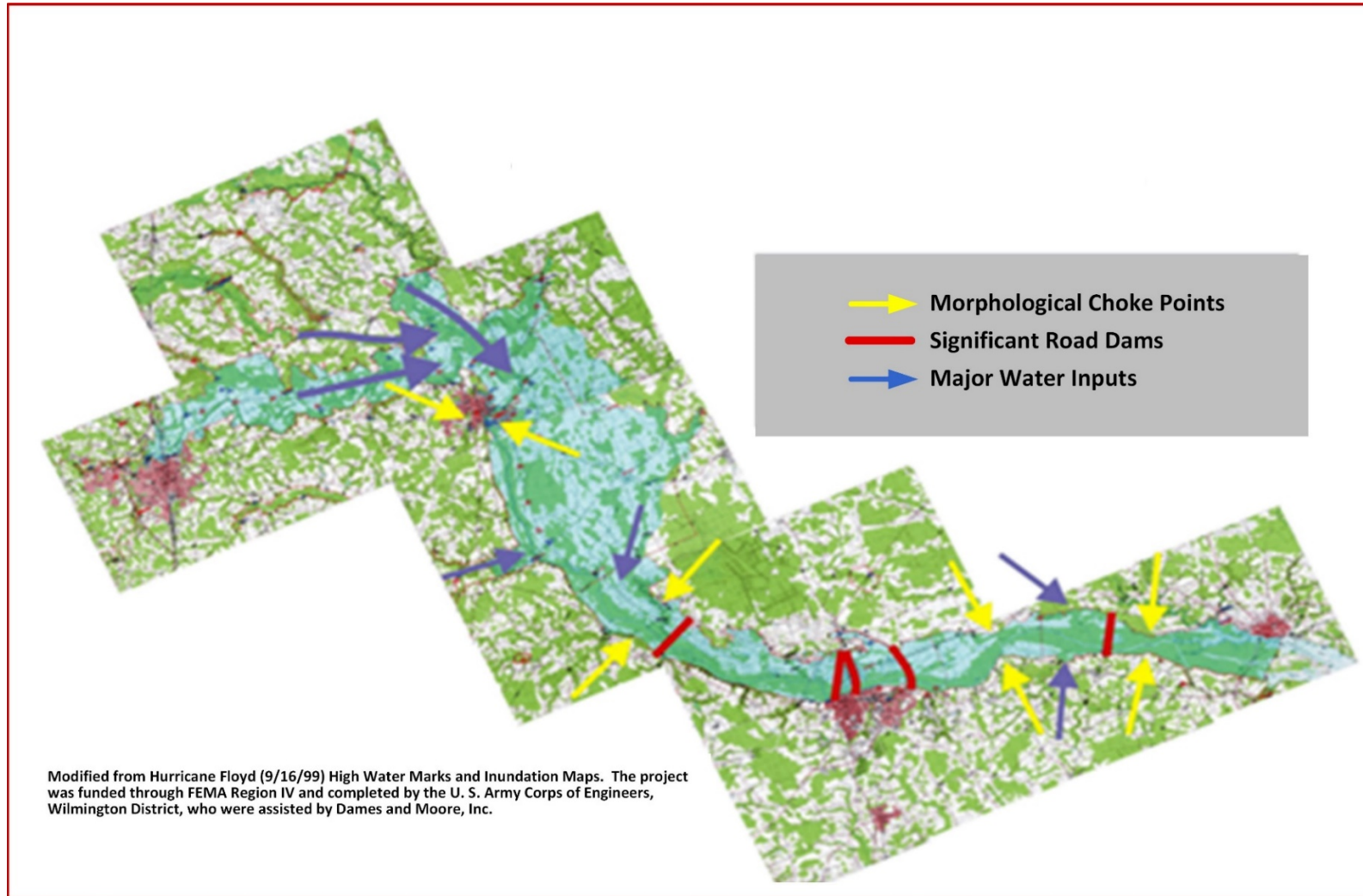
### Physical and Environmental Vulnerability

#### Hydrology and Geology

Princeville's disaster history is strongly influenced by its topography and physical location within the Tar-Pamlico River Basin Watershed. The historic context of why Princeville was founded in such a physically vulnerable location is indelibly tied to the current issues the town faces regarding disaster recovery. Princeville is located on the low-lying side of the Tar River, including a number of areas designated as wetlands. Princeville's development included the removal of native flora, reducing flood storage capacity and increasing river flow velocity.

The fluvial morphology and dominance of sand and gravel substrate enable the Tar River to naturally meander with increased volume from the Swift and Fishing Creeks tributaries. Most importantly, a major morphological choke point for the Tar River occurs between Princeville and Tarboro, as shown in Figures 3 and 21. The flood extent from Hurricane Floyd in Princeville and Tarboro also seem to correlate with major geomorphic zones. Princeville is in the low-lying Paleo-Braidplain, while Tarboro is mostly on the elevated Upper Terrace.

**Figure 21: Major river characteristics of the Tar River. Princeville lies between the left-most yellow arrows overlaid with September 1999 flood data from the USACE.**

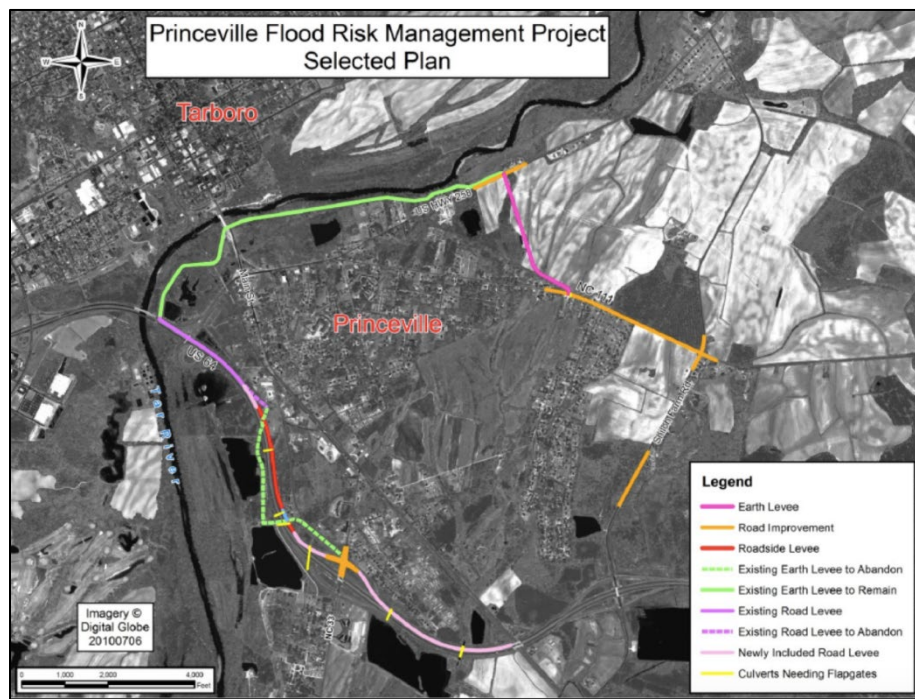


Source: NC DEQ.

### Infrastructure: Levees and Highways

Engineered measures intended to protect Princeville residents have produced mixed results. US Highway 64 and the levee surround much of the town. On the northern side of Princeville, the earthen levee redirects river flow away from the town, but once it curves southward and intersects with the highway, its protective capability decreases substantially, as is noted by the way in which inundation occurred in Princeville following Hurricane Matthew. The USACE April 2016 report notes many weaknesses and calls for a \$21 million investment in the levee system. Similarly, an engineering assessment conducted by MacConnell and Associates, PC (M&A) identifies areas of failure and raises questions about the integrity of the designs. A better understanding of the soil types used to elevate the highway system and the impact of this infrastructure on the ability of the Tar River to meander is also required. Figure 22 depicts the varied improvements explained in the USACE report including expansion and improvements to the existing levee, the installation of culvert flapgates, and the elevation of existing roads.

**Figure 22. Proposed USACE levee improvements, Princeville, NC.**



## Planning Challenges

As highlighted in Chapter 1, Princeville faces several disaster recovery challenges stemming from the town's long history of flooding and the lack of resources available to town officials and residents to address vulnerability in an integrated manner.

### Capacity

The town is governed by a mayor and a board of four town commissioners. Many services are provided by Edgecombe County, including building inspections department, fire services, emergency communication, public health and medical services, and solid waste collection. Special service districts operated by the county provide water and wastewater services.

Due to low property values, Princeville's budget is stretched thin, with little funding that can be used toward recovery expenses. The town's 2016-2017 budget was reduced seven percent from the previous year because of income lost from past due water and sewer bills. In the current budget, thirteen percent of expenditures is paid to the county for solid waste collection.

While Princeville is mentioned in many plans, only basic recommendations have been made for the town and many of the most useful plans are now over 15-years old and require comprehensive updates. The plans analyzed in this process include the following:

- 2004 Princeville Hazard Mitigation Plan (PHMP)
- Edgecombe County Agricultural Development Plan (ECADP)
- 2010 Tar-Pamlico River Basinwide Water Quality Plan (WQP)
- Edgecombe County Land Development Plan, 2008 (LDP)
- Rocky Mount Area HOME Consortium Consolidated Plan (HCCP)
- 2015 NEW Hazard Mitigation Plan (Nash, Edgecombe, and Wilson County) (NEWP)
- 2015 Princeville, North Carolina Flood Risk Management Integrated Feasibility Report and Environmental Assessment (PEAUSACE)

## Overview of Plans

Except for the USACE study, the plans listed above did little to address ongoing flood-related issues in Princeville. Furthermore, the plans tend to focus on Edgecombe County and it is difficult to find actions contextualized for Princeville. While these plans all mention the town by name, they usually underscore Princeville as a special case, which is in line with former President Bill Clinton's executive order in 1999 that highlights the Town and the imperative of supporting its residents following Hurricane Floyd.

Special attention is given to the 2004 PHMP because it identifies goals and objectives to improve the resiliency of Princeville. In reviewing this document, it seems that Princeville has fulfilled or is on its way to implementing the goals provided.

Overall, much of Princeville's plan-related vulnerability can be attributed to the town's nominal input in the creation of these various plans. The lack of plans that incorporate economic development, housing, environmental, and protective infrastructure issues impedes the capacity of Princeville to organize before and after extreme weather events.

## Prioritizing Historical Significance, Preservation, and Recovery

Because of Princeville's unique history, there is an ardent desire to preserve the history of the town. The broad decision of whether to rebuild or relocate some or all of the town is complicated. Because of this context, the notion of annexing new land has been met with a full spectrum of positive and negative feedback from residents. The future development of the site has been approached with close attention by local residents, town officials, state program sponsors, and federal agencies. The independence and self-determination of Princeville is a common theme important to residents who submitted comments and feedback to planners. Interactions with other governmental bodies are often tinged by mistrust based on historical interactions with outside institutions. This history is addressed in alternate ways by the three development scenarios presented in Chapter 2.

## *Strengths, Weaknesses, Opportunities, Threats*

After a major disaster strikes, a community is hampered in its ability to implement recovery. The impediments are financial and organizational, because the disaster deals a blow to systems, facilities, and personnel as exemplified in the form of shrinking revenue streams and increased costs, offset temporarily by grants and loans. By assessing Strengths, Weaknesses, Opportunities, and Threats, local government can make strategic decisions with reasoned priorities and workable schedules. The SWOT metrics are typically affected by both pre-disaster and post-disaster circumstances. This assessment is intended to help frame targeted policies described throughout this plan. In the case of Princeville, identified strengths

include its unparalleled cultural and historic significance, strong external support, and proximity to the Tar River, community college, and industry. Weaknesses include ongoing uncertainties about the ability to reduce flood risk and the vulnerability of Princeville’s citizens, the lack of affordable housing, a long history of unemployment, and the economic impact of large-scale mitigation buyouts. Opportunities include substantial financial assistance and a range of studies and technical assistance provided following Hurricane Matthew that can be used to create a resilient Princeville, while threats hinge on the way in which post-disaster programs are implemented.

**Figure 23: Princeville SWOT matrix: strengths, weakness, opportunities, threats.**

<h3>Strengths</h3> <ul style="list-style-type: none"> <li><input type="checkbox"/> Strong commitment to Princeville’s heritage</li> <li><input type="checkbox"/> Historic sites and facilities such as Freedom Hill</li> <li><input type="checkbox"/> Proximity to Community College training facilities</li> <li><input type="checkbox"/> River aesthetic, recreation, boating, fishing</li> <li><input type="checkbox"/> Natural resources of the Tar River biosystem</li> <li><input type="checkbox"/> River history sites: Shiloh Landing and Baptismal Site</li> <li><input type="checkbox"/> Proximity to both nearby and commutable industry locations</li> <li><input type="checkbox"/> Growing industrial employment, soon to include Triangle Tyre</li> <li><input type="checkbox"/> Exceptional transportation access, U.S. 64 (future I-87)</li> <li><input type="checkbox"/> Partnership with Edgecombe County for water-sewer services</li> <li><input type="checkbox"/> Strong faith-based help: Methodists, Samaritan’s Purse, etc.</li> <li><input type="checkbox"/> External planning assistance (UNC, NCSU, NCEM, FEMA, etc.)</li> </ul>	<h3>Weaknesses</h3> <ul style="list-style-type: none"> <li><input type="checkbox"/> Unresolved flood risk, uncertain levee status</li> <li><input type="checkbox"/> Potential for high costs of flood insurance premiums</li> <li><input type="checkbox"/> Low assessed valuation, high tax rate, and limited finance options</li> <li><input type="checkbox"/> Lack of high skill job training, dependence on low pay jobs</li> <li><input type="checkbox"/> High rates of poverty and single parent families</li> <li><input type="checkbox"/> Lack of sufficient job opportunities (regional decline)</li> <li><input type="checkbox"/> High rate of unemployment</li> <li><input type="checkbox"/> Lack of sufficient affordable housing; loss of public housing</li> <li><input type="checkbox"/> Tight housing market overall (low vacancy rate)</li> <li><input type="checkbox"/> Low statistics for health and early childhood development</li> <li><input type="checkbox"/> Hurricane Matthew buyouts/potential loss of revenues</li> <li><input type="checkbox"/> Life expectancy significantly lower than statewide average</li> </ul>
<h3>Opportunities</h3> <ul style="list-style-type: none"> <li><input type="checkbox"/> Community alternatives from Design Workshop (8/17)</li> <li><input type="checkbox"/> Greenway potential (HomePlace by NCSU)</li> <li><input type="checkbox"/> Heritage trail plans by NCSU</li> <li><input type="checkbox"/> Potential resilience solutions (FEMA &amp; NCEM)</li> <li><input type="checkbox"/> Flood risk reduction help from NCDOT along US-64.</li> <li><input type="checkbox"/> Technical support from US Army Corps of Engineers</li> <li><input type="checkbox"/> HMGP housing improvement projects</li> <li><input type="checkbox"/> Pre-K and elementary education upgrades: school district</li> </ul>	<h3>Threats</h3> <ul style="list-style-type: none"> <li><input type="checkbox"/> Checkerboard pattern of HMGP buyouts</li> <li><input type="checkbox"/> Loss of tax base and tax revenues</li> <li><input type="checkbox"/> Lack of levee improvements/upgrades</li> <li><input type="checkbox"/> Future costs of revitalization or redevelopment</li> <li><input type="checkbox"/> Future episodes of serious flooding</li> <li><input type="checkbox"/> Limited commercial/industrial base</li> </ul>



## Environment

### Greenspace

Setting aside land in the floodplain for greenways and greenspace has helped communities across the country protect themselves from flooding. It also provides a shared local amenity, and it has been shown to boost local economies. The Trust for Public Land and the Rails-to-Trails Conservancy have found that greenways have a positive impact on surrounding property values as homes next to greenways consistently sell faster and for more money than those that are not next to greenways. Parks, trails, and greenways also generate local revenue. The story of high economic return is common to greenway and greenspace developments across the country. The degree to which these benefits are accrued in Princeville remains less certain unless the greenspace is closely aligned with the town's cultural legacy and administrative vehicles to capture these potential revenues.

Due to buyouts and relocation following Hurricanes Floyd and Matthew, a sizeable amount of new greenspace is likely to be available. The exact distribution and configuration of buyout lands is yet to be determined, but it is envisioned that within this area, community outdoor space would be created to complement a potential "heritage" trail and greenway network, offering places to host festivals, events commemorating past disasters and relocated communities, and other community activities. The HomePlace report, which is found in Appendix A, provides an extensive assessment of open space options resulting from the buyout. Figure 24 provides a visual depiction of several ideas, including greenspace and greenways linking historic sites.

Figure 24: Greenspace concept.



Adapted from HOMEPLACE report (2017).

## Flood Hazard Identification and History

There are nine hazards that are of concern in Princeville and the other communities in Edgecombe County. Emphasis is placed on flooding, hurricanes, tornados, wildfire, and droughts/heat waves. This Recovery Plan focuses on hurricane and flooding hazards. From Hurricane Bertha in 1996 to Hurricane Matthew in 2016 there have been 10 hurricane events. The flood of record occurred during Hurricane Floyd in 1999. Rainfall in excess of 20 inches fell as a result of Floyd and the associated flooding was exacerbated as the ground was already saturated due to Tropical Storm Dennis, which made landfall a week earlier.

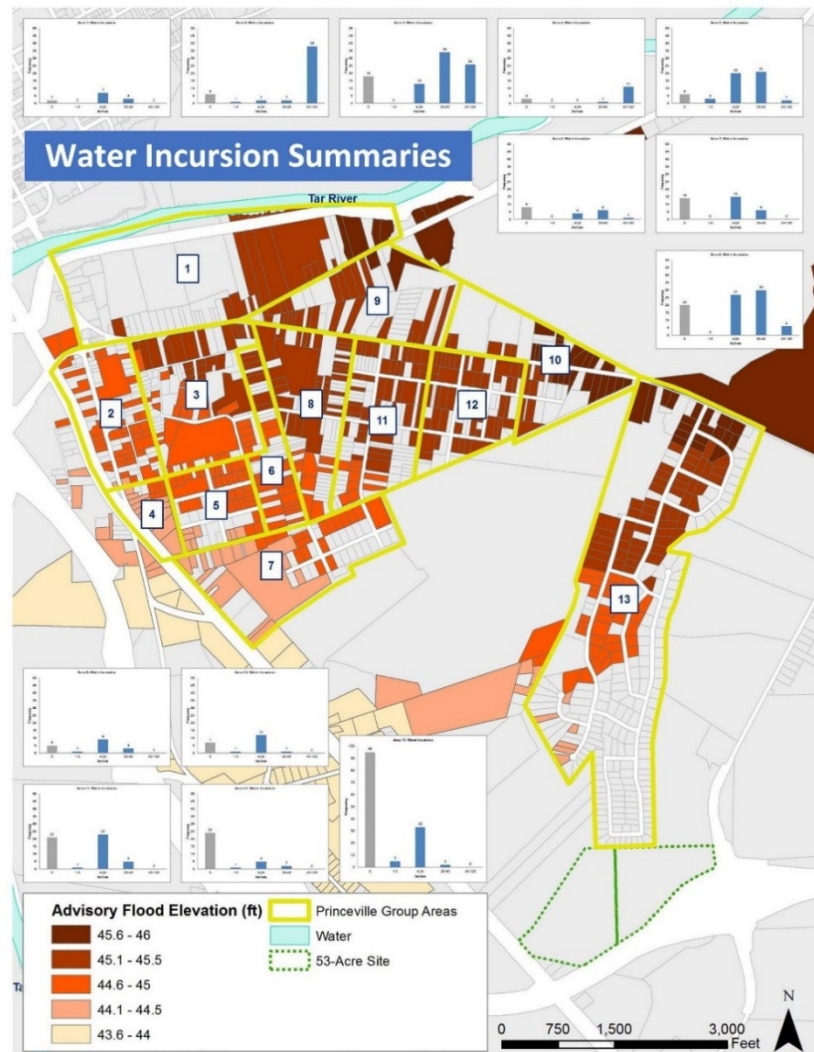
In a similar manner, Tropical Storm Hermine's rainfall set the stage for Hurricane Matthew. "On August 29, Hermine intensified to a Category 1 hurricane in the south-central Gulf of Mexico before making landfall in the northeast Florida Panhandle near Cedar Key on September 2. The storm weakened quickly and transitioned to a post-tropical cyclone before moving off the coast of the Outer Banks on September 3. The system produced very heavy rainfall, rip currents and three tornadoes in eastern North Carolina" (Newport/Morehead City, NC Weather Forecast Office). The rainfall resulting from the two storms created a situation where the Tar River rose above flood stage prior to the onset of Hurricane Matthew. According to unofficial reports, the Princeville area received over 20 inches of rain in two days.

## Vulnerability Assessment

Flooding caused by Hurricane Matthew in Princeville was extensive, especially in the northwest quadrant of the town, where flood waters in some places reached a depth of ten feet or more. In an effort to reduce future flood losses, the town is participating in the elevation and buyout of vulnerable homes. As a result, Princeville will most likely experience what is known as a "checker boarding" effect, in which individual bought out properties will be scattered and unconnected throughout the town. Once property owners are bought out, the town will be required to maintain the property as open space in perpetuity. The town will need to develop a plan to use and manage the properties. The town also has concerns regarding the impact on local tax revenues because once the town owns the properties the tax revenues will be lost. Princeville leaders prefer having the households that are bought out relocate within the town.

Vulnerability in Princeville is best portrayed by the flood levels experienced in Hurricane Floyd in 1999 and Hurricane Matthew in 2016. Engineering studies indicate the Tar River overflowed its banks in the vicinity of Shiloh Landing, after which the floodwater flowed in a southwest direction. Rather than a static flood level that was uniform across the town, water in the northeast quadrant was approximately two feet higher than in the southwest quadrant (Figure 25).

**Figure 25. Flood water incursion summaries in Princeville.**



Source: Water incursion data are derived from FEMA data files from the Individual Assistance process. Mathew Advisory Flood Elevations (AFE) are provided by the North Carolina Division of Emergency Management, Department of Public Safety."

Water incursion data for homes in Princeville portray a difficult mitigation challenge. Area charts embedded in Figure 25 show water heights above the finished floor elevation (FFE), to include some as high as 80 to 90 inches.

Mitigating flood risk for homeowners that are not participating in the buyout will require elevating these structures to heights that will necessitate the installation of elevators or the construction of complex and expensive stairways. In most cases, the height requirement also precludes the installation of wheelchair ramps. Further, flood depths rule out normal transportation until the water recedes. Evacuation is a virtual necessity even if the structure is elevated above the floodwater level. Additional illustrations of Princeville flood dynamics can be seen in Chapter 2.

### Land Suitability Analysis

Due to the effects of Hurricane Matthew, a number of households have chosen to pursue the buyout. In many cases, this will result in the loss of tax base for the Town of Princeville. The HMDRRI team conducted a Land Suitability Analysis methodology to help identify reasonably safe neighborhoods that have a reduced risk of flooding and are located within the Princeville town limits. The Land Suitability Analysis is a valuable planning tool for the following reasons. First, the town can identify areas that are suitable for development and have a low risk of flooding. Second, it can be used by residents who sustained considerable flood damage to their homes.

Third, it can help identify those higher risk areas where additional code or design standard might be needed to mitigate potential flood damage. Fourth, it can be used by residents debating whether to leave or stay in Princeville. Knowing there are safe areas and where they are located may result in Princeville residents staying in town instead of leaving. In the short term, this tool is intended to provide valuable information to assist in building back more resilient and safer neighborhoods. It can also serve as a tool for long-term community planning and investment of post-disaster housing resources, thereby not only reducing flood risk, but also maintaining or even enhancing the local tax base.

In developing the land suitability method, a multi-phased approach was conducted to narrow the number of variables and their associated thresholds to a reasonable number in order to identify land or parcels suitable for development or redevelopment (Figure 26, Table 8).

Once an extensive list of possible factors was identified as suitable for inclusion in the method (Step 1), the list was refined to include what the technical reviewers felt were the 8 to 10 most important criteria (Step 2). A list of suitability criteria unique to Princeville were created. Thresholds were then identified for the short list of variables, and a preliminary land suitability analysis was conducted and mapped (Steps 3 and 4). To gain another perspective, supplemental maps were created to show individual suitability factors as an additional overlay on top of overall land suitability scoring (i.e., areas within the 100-year floodplain).

Figure 26. Land suitability analysis process.

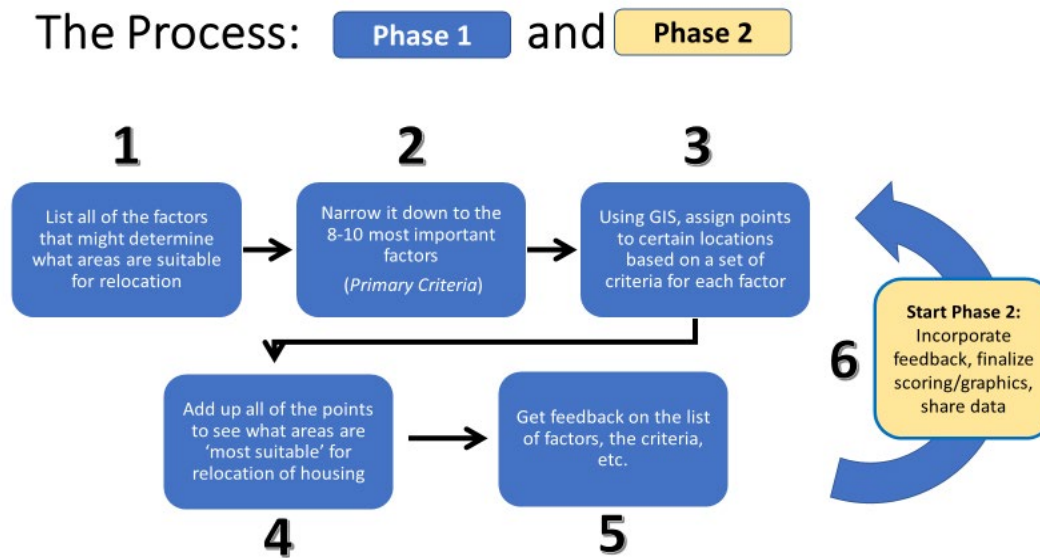


Table 8: Primary suitability criteria.

Factor of Interest:	Variable
Jurisdictional Boundaries	Municipal Limits
	Extraterritorial Jurisdiction (ETJ)
Proximity to Infrastructure	Water
	Sewer
Parcel Size	Infill Potential
	Multi-Structure Potential
Building/Land Vacancy	Vacant Land/Building
Vulnerability to Flooding	100-yr Floodplain (Zone AE)
	500-yr Floodplain (Zone X)
Areas of Future Development	Hurricane Matthew
	Zoning

Depending on the recovery scenario selected by Princeville, the analysis can be adjusted. In a scenario that includes only relocation, the boundaries of analysis should be expanded to include locations out of the floodplain including, for instance, the 53-acre site. At that point, community stakeholders should be consulted, including persons who have either an interest in the results, expertise in an area related to the analysis, or expertise in the variables and data being used (Step 5). Finally, a re-analysis would be conducted incorporating feedback, taking into account the methods, variables included (or missing), thresholds used, and possible secondary criteria to characterize other parcel attributes (i.e., proximity to various facilities) (Step 6). A detailed description of the process is included in Appendix C.

Figure 27 shows the effect of using a category such as “Parcel with Historical Flooding.” In this example, the flood boundaries of Hurricane Matthew are used. If Hurricane Floyd flood extent is used, an additional area would be affected, to include land along Shiloh Farm Road, the eastern side of the subdivision named “Southern Terrace,” and the 53-acre annexation area.

Figure 27: Princeville Land Suitability Analysis map.



## Capability Assessment

A capability assessment evaluates a jurisdiction's financial and administrative capacity to act as well as its existing programs and plans. Collectively, the assessment helps identify gaps that can be addressed through new or modified policies and projects. Plan evaluations help identify: 1) existing decision-making processes with regulatory standing to build upon in the recovery plan, and 2) existing programs that should be altered based on goals found in this recovery plan. Next, we describe Princeville's Financial and Administrative Capability, identify organizations participating in their recovery, and describe existing plans, policies, and ordinances.

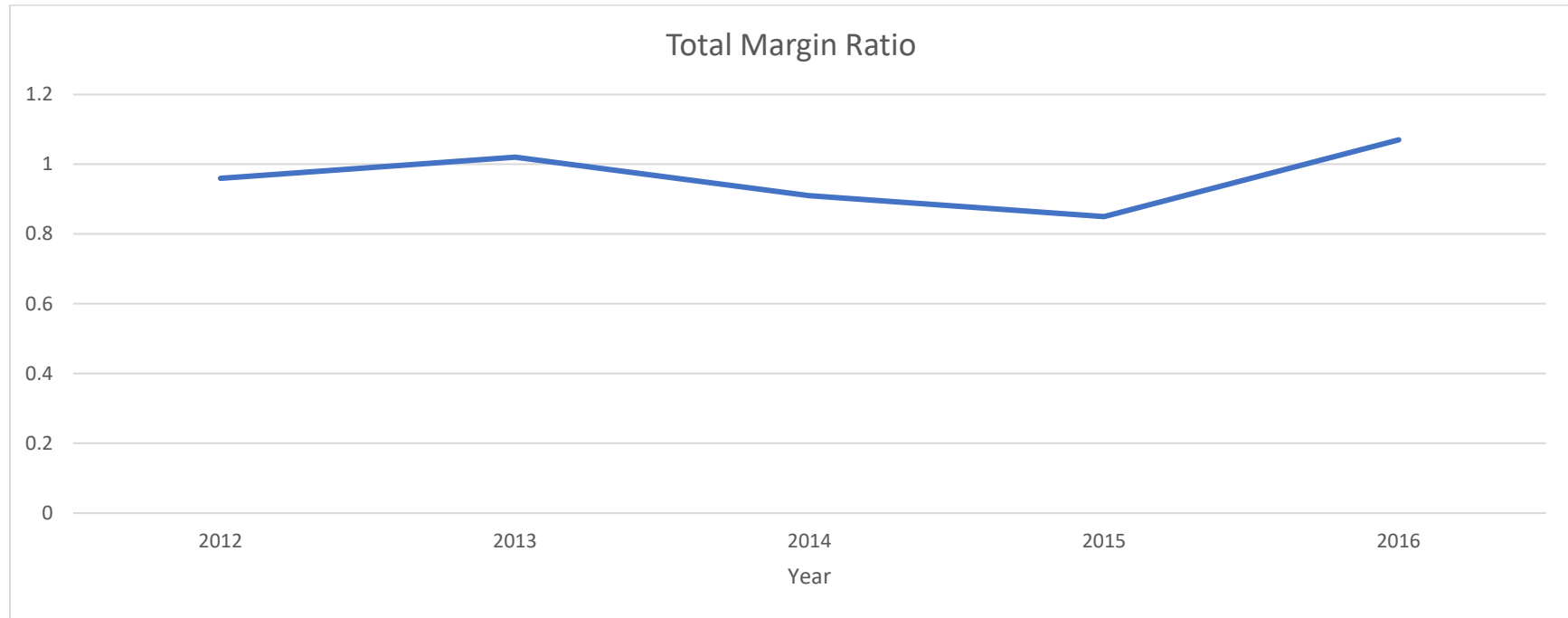
### Financial Capability

Disasters can have immediate and long-term effects on local government budgets. In the short-term, money may be spent on repairing damaged infrastructure and public facilities, removing debris, and assisting community members in recovery. If homeowners and businesses struggle to recover in the months or years following a disaster, tax and revenues may fall far enough to affect the level of services provided to the community. Unfortunately, the fiscal impact of Hurricane Matthew on Princeville's budget cannot be measured until early 2018 when financial information from the 2017 fiscal year is published. Even then, a picture of the long-term impact of the storm will not be clear until the 2018 or 2019 fiscal year data is analyzed.

Two important indicators of fiscal health are the governmental activities fund's total margin ratio and solvency of the town's general fund. The total margin ratio is calculated by dividing a municipality's total financial resources by total financial obligations. A ratio above 1 indicates a local government has lived within its financial means. As shown in Figure 28, Princeville has fairly low numbers due to low assessed values and limited commercial or industrial properties.



**Figure 28: Princeville's total margin ratio over time.**



The other indicator of fiscal health is solvency of the town's general fund. Solvency measures a government's ability to meet long-term obligations, and is calculated by dividing the available fund balance by expenditures plus transfers out. Maintaining an adequate percentage is important to Princeville's resiliency because a high or rising number implies being better positioned to meet the demands of unexpected emergencies.

The state's financial agencies recognize the significant impacts from Hurricane Matthew on the economic health of Princeville. As a result, the Department of State Treasurer's Local Government Commission and the University of North Carolina's School of Government have committed to assist Princeville assess its financial condition over time and offer guidance as warranted.

### **Administrative Capability**

The town is governed by a Mayor-Commissioner form of government. As Princeville's population base has declined, the town's reduced revenues have made it more difficult to operate town government. While the town has operated without a deficit, it has not had sufficient funds to add additional staff needed to address a range of needs, including the management of repair and reconstruction projects spanning housing, critical facilities, and infrastructure. Presently the town's staff positions include a Town Manager, Finance/Clerk, Assistant Town Clerk, and Public Works Director. Law enforcement is contracted with the Edgecombe County Sheriff's Department. The town is served by a regional district for fire service from the Princeville Fire Rescue, Inc. Water and sewer services were transferred to Edgecombe County in 2015, and user fees generate funds to operate these systems in conjunction with the town of Tarboro. The town contracts for planning, building, and inspection services from Edgecombe County and with private firms for engineering and audit services.

### *Participating Organizations*

During the recovery phase of Hurricane Matthew there have been a number of organizations that have been involved in providing technical services or coordination. They include non-profits and faith-based groups, federal and state agencies, regional and local planning organizations, and businesses as noted below.

#### **Nonprofits and Faith-Based Groups**

- Edgecombe County Long Term Recovery Committee
- Lutheran Services Carolinas
- Senior Center
- Princeville Housing Authority
- Low-Income Housing Developments (Asbury Court, Glen Bridge)
- Habitat for Humanity
- Princeville churches
- Salvation Army
- Red Cross
- North Carolina Preservation
- Nash Edgecombe Economic Development (NEED)

### Federal Agencies

- Federal Emergency Management Agency
- Economic Development Administration
- Small Business Administration
- Department of Housing and Urban Development
- Department of Agriculture (Rural Development)
- US Army Corps of Engineers
- United States Geological Survey
- Department of Health and Human Services

### State Agencies

- Emergency Management
- Department of Environmental Quality
- Department of Revenue
- Department of State Treasurer
- Office of Historic Preservation
- Department of Commerce
- Rural Economic Development Commission
- Housing Finance Agency
- Department of Transportation
- Division of Parks and Recreation
- Department of Health & Human Services

### Universities

- UNC Coastal Resilience Center (HMDRRI)
- UNC School of Government
- UNC Kenan Flagler School of Business (NC Growth, Kenan Institute)
- NCSU College of Design
- East Carolina University

**Regional/Local Planning and Development Organizations**

- Edgecombe County Planning and Inspections Department
- Edgecombe County Economic Development Commission
- Edgecombe County Emergency Services
- Edgecombe County Community College (Small Business Center)
- Upper Coastal Plain Council of Governments
- NC Rural Center
- NC Community Development Initiative
- NC Chapter, American Planning Association
- NC Chapter, Association of State Floodplain Managers
- NC Chapter, American Institute of Architects

**Businesses**

- Edgecombe County Chamber of Commerce
- Skanska Corporation

## Existing Plans, Policies, and Ordinances

The recovery plan should be consistent with existing plans, policies, and ordinances to effectively guide redevelopment decision-making following a disaster. This is critically important as existing plans, policies, and ordinances have been adopted by the Board of Commissioners and they have regulatory standing. As a result, an assessment of these documents is needed to ensure they help support the stated goals, policies, and projects found in this recovery plan. If they contradict one another, then existing plans, policies, and ordinances should be modified based on new information and positions assumed by the town as reflected in the recovery plan. Next, we describe several ordinances, plans, and policies that are relevant to disaster recovery efforts and briefly suggest improvements that will be described more specifically in Chapter 8.

### Local Flood Damage Prevention Ordinance

In general, the Flood Damage Prevention Ordinance requires the following provisions in all special flood hazard areas (100-year floodplain).

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
2. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damages.
3. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damages.
4. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
5. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
6. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
7. On-site waste disposal systems shall be located/construction to avoid impairment to them or contamination during flooding.

Princeville participates in the National Flood Insurance Program. In accordance with the program it has adopted the minimum standards required by FEMA, including a local Flood Damage Prevention Ordinance. Following Hurricane Matthew, Princeville adopted new standards tied to an Advisory Base Flood Elevation map created to better depict flood hazards.

### **Community Rating System**

Princeville does not currently participate in the Community Rating System (CRS). The CRS is designed to encourage community-based floodplain management activities that exceed minimum NFIP standards. As varied activities are undertaken by the participating jurisdiction, points are accrued for these activities, and as identified thresholds are met, insurance rates are reduced accordingly for all policyholders (premium discounts can reach 45%). Given the benefits accrue to residents in terms of flood insurance premium reductions as well as providing a menu of risk reduction options for town officials to consider, it is recommended that the town participate in the CRS, subject to appropriate levels of assistance as provided by Edgecombe County.

### **North Carolina State Building Code**

Princeville has adopted the North Carolina State Building Code, which is administered by Edgecombe County. The town's jurisdictional limits relative to building permits and inspections extends one mile outside the town's boundaries, the area known as Princeville's Extra-Territorial Jurisdiction (ETJ).

### **Zoning Ordinance**

Zoning is used by local governments to control the use of land. Broad enabling authority for municipalities in North Carolina to engage in zoning is granted in NCGS 160A-381 and for counties in 153A-340. Land "uses" controlled by zoning include the type of use (e.g., residential, commercial, industrial) as well as minimum specifications for use such as lot size, building height, setbacks, and density of population. The local government is authorized to divide its territorial jurisdiction into districts, and to regulate and restrict the erection, construction, reconstruction, alteration, repair, or use of buildings, structures, or land within those districts. Districts may include general use districts, overlay districts, and special use districts. Zoning ordinances consist of maps and written text.

Princeville, through its contract with Edgecombe County's planning and inspection department, has adopted a zoning ordinance and zoning map.

## Regional Hazard Mitigation Plan

North Carolina Emergency Management summarizes hazard mitigation as follows:

“Hazard mitigation involves the use of specific measures to reduce the impact of hazards on people and the built environment. Measures may include both structural and non-structural techniques, such as protecting buildings and infrastructure from the forces of nature or wise floodplain management practices. Actions may be taken to protect both existing and/or future development. It is widely accepted that the most effective mitigation measures are implemented before an event at the local government level, where decisions on the regulation and control of development are ultimately made.”

The Nash/Edgecombe/Wilson Regional Hazard Mitigation Plan (HMP) goals are:

- Promote the public health, safety, and general welfare of residents and minimize public and private losses due to natural hazards.
- Reduce the risk and impact of future natural disasters by regulating development in known high hazard areas.
- Pursue funds to reduce the risk of natural hazards to existing developments where such hazards are clearly identified and the mitigation efforts are cost-effective.
- Effectively expedite post-disaster reconstruction.
- Provide education to citizens to empower them to protect themselves and their families from natural hazards.
- Protect fragile natural and scenic areas within the planning jurisdiction.
- Improve upon regional emergency service provision and response.

The hazard mitigation plan is composed of seven sections:

1. Introduction and Planning Process
2. Community Profiles
3. Hazard Identification
4. Capability Assessment
5. Vulnerability Assessment
6. Mitigation Strategies
7. Plan Monitoring and Implementation Procedures

Mitigation strategies specifically recommended for Princeville are shown in Table 9.

Future updates to the hazard mitigation plan should include specific risk reduction projects noted in this recovery plan or identified by community officials to include the acquisition and elevation of flood-prone housing and the retrofitting or relocation of vulnerable infrastructure and critical facilities. Ideally, identified projects will lead to the writing of specific hazard mitigation grants targeting identified structures. Project-specific actions should be guided by a more preemptive mitigation strategy to include the application of land use techniques to inform future growth or relocation efforts to less hazardous locations.

### **Hurricane Matthew Resilient Redevelopment Plan – Edgecombe County**

The State Legislature created the North Carolina Resilient Redevelopment Planning (RRP) program to provide a roadmap for communities in eastern North Carolina to rebuild and revitalize their damaged communities. The program empowered communities to prepare locally driven, resilient redevelopment plans to identify strategies, innovative reconstruction projects, and other actions to allow each community not only to survive but also to thrive in an era when natural hazards are increasing in severity and frequency. The planning objectives of the RRP were to (1) develop strategic, resilient redevelopment plans and actions, and (2) to define any unmet funding needed to implement such actions after taking into account other funding sources. Recommendations of the Edgecombe County RRP for Princeville recovery are summarized in Appendix H. While the Princeville Recovery Plan drew from the Edgecombe County RRP, this plan represents a more detailed assessment of needs as identified during discussions between Princeville officials, citizens, HMDRRI staff, and those participating in the Princeville Design Workshop.



**Table 9: Princeville mitigation actions, as specified in the three-county hazard mitigation plan.**

<b>Princeville Mitigation Actions</b> as per regional Hazard Mitigation Plan (2015)								
Action #	Princeville Actions	Hazard(s) Addressed	Goal(s) and/or Objective(s) Addressed	Relative Priority	Funding Source(s) Responsible Party	Responsible Party	Target Completion Date	Status Update
P-1	Emergency Animal Shelter	All	Goal 3	Moderate	Local	Coop Extension	2007	Complete
PP-1	Obtain a generator(s) to provide emergency power for critical town facilities (if known specify which facility)	All	Goal 4.0	High	State/federal grant funds, local	Town Manager	2012	Complete
ES-1	Code Red System (phone notification system in times of potential disasters)	All	All Goals	High	Local	EM, E-911	2015	Complete, just completed
ES-2	Improve County bridges and roads drainage	All	Goals 1 & 2	High	State, local	NC DOT	2016	Continuing -TA to monitor progress by 2016 and report to Town Board
ES-3	Encourage or assist residents through information to sign up for "Code Red" and/or the County's emergency warning notification system	All	Goals 1.1 & 1.3	Moderate	Local, state, federal	TA or Mayor	2019	New Action
PE-1	Obtain FEMA handouts & make available for residents at Town Hall	All	Goal 1.0	Moderate	FEMA, local	TC	2018	New Action
P-2	Establish a three or more member local Hazard Mitigation Committee	All	Goal 1.1	Moderate	Local	Town Manager	2016	New Action
PP-2	Conduct an internal review and prepare a report regarding critical facilities that:	All	Goal 4	High	State/federal grant funds, local	TA/TC/TM	2018	New Action
	1) Evaluates all critical facilities for possible improvements to reduce their exposure to natural hazards							
	2) Includes findings that will be presented to the elected governing Board							

**Abbreviations:** PB - Planning Board, TB or TC -Town Commissioners (Board), TM -Town Manager, TA -Town Administration, ZA -Zoning Administrator, and EM - Emergency Management, Coop Extension - County Cooperative Extension Service, NC DOT - NC Department of Transportation, E-911 - Emergency Phone System

Table is an excerpt from regional hazard mitigation plan for 2015 - 2020; Nash, Edgecombe and Wilson counties, page 311, Table 6-7.

[https://www.rockymountnc.gov/UserFiles/Servers/Server\\_230888/File/Departments%20%20Services/Planning%20%20Development/Documents%20and%20Forms/Hazard%20Mitigation%20Plan.pdf](https://www.rockymountnc.gov/UserFiles/Servers/Server_230888/File/Departments%20%20Services/Planning%20%20Development/Documents%20and%20Forms/Hazard%20Mitigation%20Plan.pdf)



## CHAPTER 7

### ISSUES

The following issues describe key challenges and opportunities spanning each of the goals and associated policies found in this plan. Issues span infrastructure, public facilities, housing, health, environment, land use, finance, economic development, and workforce development.

#### Infrastructure

##### Challenges

- Current levee does not adequately protect the town against riverine flooding.
- Achieving fiscally stable method of managing water and sewer system.
- Incorporating hazard mitigation measures into the repair of damaged infrastructure, including the levee and stormwater systems.
- No infrastructure exists on the 53-acre annexation area site, which will require engineering, design, and construction-related actions.
- Administering infrastructure grants and projects.

##### Outcomes and Opportunities

- Develop a comprehensive stormwater management program that includes regular maintenance and upgrades, to include incorporating hazard mitigation measures into repair and general construction projects.
- Utilize findings and recommendations from the five-day Community Design Workshop to inform engineering, geotech surveys, and specifications for infrastructure, to include a layout of roadways, utilities, and site drainage for new development areas.
- Identify state or federal funding to perform site planning and design, purchase, installation, and maintenance of infrastructure on 53-acre site, including its connectivity to existing town.
- Utilize engineering and hydrology analyses produced by state and federal agencies plus the work of consulting engineers, to inform Princeville's mitigation actions.

- Prepare new infrastructure plans based on recent community preferences indicated by property owner applications for HMGP and CDBG-DR funding to elevate, rebuild or relocate homes, to include buyout properties that may be repurposed as open space, water retention areas, and wetlands to better manage future flood events.
- Seek synergistic solutions that will blend trails, open space, greenways, recreation areas, and stormwater management in locations acquired via the expected mitigation buyouts.

## Public Facilities

### Challenges

- Town Hall was flooded during Hurricane Matthew.
- Museum and historic structures were flooded during Hurricane Matthew
- Fire Station was flooded during Hurricane Matthew.
- Public Works building was flooded during Hurricane Matthew.
- Senior Center was flooded during Hurricane Matthew.
- Princeville Elementary School was flooded during Hurricane Matthew.

### Outcomes and Opportunities

- Elevate Senior Center to include adequate accessibility.
- Repair Town Hall.
- Implement grants from state government to acquire land and build new public facilities outside the 100-year floodplain.
- Work with Golden LEAF Foundation who provided Princeville with funds to construct a new administrative complex to house functions such as fire station, and a new community center.
- Consider health clinic uses and counseling services that may share space with school and community center facilities, as suggested by the Edgecombe County Public School district.
- Design facilities to meet the needs of Princeville residents, including health, nutrition, education, and workforce development.
- Encourage designs that place facilities in proximity to special housing developments focused on seniors, including those in assisted living or independent living quarters, to include intergenerational activities.

- Integrate the historic and cultural assets of Princeville, including the cemetery, Freedom Hill, Shiloh Landing, and Memorial Village with the rest of the town through improved signage, monuments, and wayfinding activities.

## Housing

### Challenges

- Coordinating HMGP and CDBG-DR programs.
- Creating a coordinated strategy to maximize volunteers and contractors repairing housing.
- Coordinating with non-profits to incorporate hazard mitigation measures into home repairs and new construction.
- Coordinating with non-profits to ensure housing repairs address mold remediation.
- Elevating homes to heights that may hinder access for elderly individuals.
- Deciding whether to repair, reconstruct, or relocate public housing.
- Use of vacant land following housing buyouts, including how to effectively address checker-boarding.
- Improving the flow of information about housing assistance programs.
- Constructing replacement housing outside the floodplains and within town limits.
- Repairing and replacing single-family homes and rental housing.
- Increase supply of varied housing options, to include affordable single-family housing and rental housing.

### Outcomes and Opportunities

- Draw from HMGP and CDBG-DR funds, which are being used for buyout, elevation, and demo-rebuild of vulnerable housing.
- Coordinate with NC Housing Finance Agency, which is assisting with project financing.
- Coordinate with volunteer groups that have been helping repair and rebuild damaged housing.
- Use HMDRRI land suitability analysis to assist in locating new housing stock outside of flood hazard area.
- Use HMDRRI HomePlace, North Carolina Chapter of AIA, and NC Housing Finance Agency designs for affordable housing.
- Develop clear protocols to share information with non-profits and residents about mold remediation techniques.
- Develop clear messaging and materials for non-profits and homeowners to incorporate hazard mitigation measures into the repair or construction of housing.

## Health

### Challenges

- Princeville is particularly vulnerable to the social determinants of health due to high levels of poverty and low educational attainment.
- Homes and businesses still have mold and remediation measures are inconsistently applied during the repair of damaged structures.
- Access to healthy, affordable food is limited.
- Special needs among a growing aging population include age-appropriate, safe, and affordable housing. Many seniors can no longer drive an automobile and therefore depend on family and friends for transportation, to include trips to obtain basic needs.

### Outcomes and Opportunities

- Encourage implementation of an open space/greenspace/cultural trail program that creates bike paths and trails to promote exercise.
- Coordinate with Lutheran Services of the Carolinas which has resources for mold remediation.
- Support organizations that promote healthy lifestyles and fitness.
- Assist individuals and families just above the poverty level who are ineligible for many services offered to low-income populations (e.g., health services, healthy food, and exercise).
- Work with the UNC School of Public Health to improve food access.

## Environment

### Challenges

- Maintaining buyout properties.
- Fostering a community-based relationship with the Tar River that recognizes its value as a natural, cultural, and recreational asset.
- Land development pattern that does not account for flood hazards.
- Negative public perception of the Tar River.
- Managing buyout properties to include their use as a means to improve water storage and water quality.

### Outcomes and Opportunities

- Build a cultural/historic/tourism economy based on the presence of the Tar River and historic resources, including Freedom Hill, Memorial Village, Shiloh Landing, and other sites.
- Utilize NC State College of Design's work depicting how acquired parcels can be integrated into a broader greenspace program through HomePlace and the cultural trail.
- Draw from open space planning activities to help address business/economic development, transportation, and public health goals.

## Land use

### Challenges

- Limited options to develop outside the floodplain that remain within the town's boundaries.
- Limited land use planning experience such as applying development standards and subdivision procedures.
- Limited investors willing to fund new construction due to loss of population and unresolved flood risks.
- Management of current and future greenspace.
- Reduction of developable land/loss of tax base following buyouts.

### Outcomes and Opportunities

- Build on the Princeville Community Design Workshop to create and implement a site plan for the 53-acre site, including its connectivity to the existing town.
- Determine if options exist within city limits to build affordable housing.
- Update land use plan to include hazard mitigation and disaster recovery elements.
- Acquire/annex additional land north of 53-acre site for future development/relocation of town.
- Initiate an open space management plan that addresses use of land acquired through federal post-disaster hazard mitigation grants.
- Adopt policies and plans that address the loss of developable land and tax base associated with the buyout of flood-prone properties, drawing on the Land Suitability Analysis found in Appendix C.

## Administration and Finance

### Challenges

- Inadequate fund reserves to cover additional outlays related to the disaster.
- Loss of tax base resulting from buyout of flood-damaged housing.
- Limited staff capacity to administer post-disaster recovery and reconstruction efforts.
- Low levels of flood insurance coverage by town, business owners, and individuals.
- Potential loss of revenues tied to population-based formulas used to distribute state and federal resources.
- Inadequate funding to adequately repair levee, including enhancing its current design standard.

### Outcomes and Opportunities

- Draw upon Local Government Commission of the State Treasurer's office and the UNC School of Government to assess local government finances and offer potential solutions to post-disaster financial challenges.
- Expand staff capacity to administer post-disaster assistance by coordinating with external aid providers, including Upper Coastal Plain COG, Edgecombe County, Golden LEAF, and others.
- Establish pre-event contracts (e.g., debris management, grants management, planning) in advance of the next disaster.
- Establish ongoing assistance program as provided by University of North Carolina and North Carolina State University through mutually agreed upon courses and workshops focused on defined problems like land use planning, greenway design, and other issues as identified.
- Explore expansion or improvement of mutual aid agreements with nearby cities and counties to provide supplemental disaster recovery assistance including damage assessments, permitting, grant writing, post-disaster financial assistance, and general guidance as needed.

## Economic Development

### Challenges

- Small commercial businesses possess few financial resources to sustain themselves following a major disaster.
- Businesses have left Princeville because of flood risks and nearby opportunities.
- Few economic development options are feasible in floodplain areas.



- High unemployment.
- Difficulty attracting new industry due to the lack of developable land and workforce with limited education.

### Outcomes and Opportunities

- Conduct a thorough analysis of economic needs, especially workforce development and training for Princeville residents.
- Develop a strategy to encourage businesses to invest in Princeville and Edgecombe County.
- Develop a strategy to capitalize on history and culture-based tourism, to include the implementation of the proposed historic trail and the construction of a tourist center on the 53-acre site.

## Workforce Development

### Challenges

- Low educational attainment among working residents.
- High rates of poor health, unemployment, and poverty.
- Low levels of homeownership.

### Outcomes and Opportunities

- Execute workforce training programs to focus the skills needed by workers.
- Coordinate training programs with new and existing employees in the area.
- Reach out to residents who may be unaware of workforce development programs.
- Develop apprenticeship programs with new and existing employers in the area.
- Assist business owners and individuals take advantage of workforce development programs at Edgecombe County Community College.



## CHAPTER 8

# RECOMMENDED ACTION ITEMS, FUNDING, AND IMPLEMENTATION

This chapter describes the overall implementation framework for the Princeville Recovery Plan. The structure and organization presented here will guide the implementation of topic-specific action item, responsibilities, and funding. Major topics include Infrastructure, Public Facilities, Housing, Health, Environment, Land Use, Administration and Finance, Economic Development, and Workforce Development.

### Infrastructure

#### **Conduct Stormwater Inventory and Mapping Initiative.**

Inventory and map stormwater system and assess deficiencies to handle stormwater runoff, suggest improvements, and seek funding needed to implement proposed actions.

#### **Establish program to incorporate resilient features in existing and new infrastructure.**

Identify priority infrastructure investments that will help the town be more resilient. Addressing this need will require establishing a local revenue source, recognizing that this is a long-term, gradual process tied to the economic viability of the town.

#### **Collaborate with Edgecombe County departments and Upper Coastal Plains COG to initiate a reuse strategy of vacant lands, to include addressing stormwater management goals.**

Evaluate choices offered by the three development scenarios to identify reuse patterns that will enable flood protection strategies. Possible layouts could feature vacant land that can be converted to stormwater conveyance, retention basins, wetlands expansion or other flood risk reduction techniques. In some circumstances, water storage ponds can become neighborhood assets.

## Public Facilities

**Retrofit or relocate existing public facilities (e.g., fire station, school, public housing) using proven flood resilience techniques.**

Continue engineering, architectural, and other technical studies of alternate techniques to be applied to public facilities so as to be more resilient to flood hazards that threaten both structures and their contents. Princeville is in the process of relocating the Fire Station on the 53-acre site, and will elevate the structure or grade the site as appropriate.

**Configure public facilities in tandem with a selected development scenario for Princeville, to include preserving unique historic, cultural, and natural assets.**

Seek resilient solutions that represent safe investments in public facilities by the community and its residents while respecting the town's unique cultural history and evolving settlement pattern.

## Housing

**Implement a resilient housing strategy in support of Princeville's selected development scenario.**

Build upon the preferred solution for hazard mitigation and flood loss reduction by establishing workable housing arrangements such as elevations, reconstruction with elevations, or buyouts. As the pattern of choices become more evident, local officials should use this information to inform associated recovery strategies spanning infrastructure, public facilities, environment, land use, health, administration and finance, economic development, and workforce development.

**Develop Community Housing Initiative.**

Work with resource agencies to create an overall housing initiative that will generate affordable housing opportunities, attract development, and plan for integration with floodplain management and stormwater system improvements.

**Address housing needs of special populations, especially the needs of elderly and disabled residents.**

Recognize the full continuum of housing needs such as senior housing, assisted living, and independent living services. Work with local and regional organizations specializing in these housing needs to create supporting policies, projects, and the means to implement them.

**Create a comprehensive open space strategy tailored to Princeville's pattern of buyout properties and structural elevations.**

Consider neighborhood functionality and revitalization needs by designing land management solutions for property that is required to remain undeveloped, to include land leases, community gardens, and parks or playgrounds.

**Relocate historic structures to higher ground.**

Relocate historic structures as appropriate, to include the clustering of buildings on Freedom Hill, especially if augmented with additional fill material. Other options include the relocation of structures to the 53-acre site, in conjunction with the construction of a historic / cultural museum.

**Enhance dissemination of flood mitigation information.**

Disseminate information on flooding and the importance of purchasing and maintaining flood insurance among residents and institutions using a multi-media approach.

## Health

**Address underlying causes of health disparities and the long-term costs of low health status within Princeville, to include implementing parallel programs addressing poverty, unemployment, and workforce development.**

Build public awareness of socioeconomic effects on the rates of stress, poor health, family violence, addictive behaviors, and crime. Seek mechanisms for interagency collaborations involving Pre-K/12 education and career education to help prepare future generations to take advantage of changing job opportunities such as high-tech manufacturing and knowledge-based businesses.

**Create a health committee and conduct annual health workshop.**

Organize and Implement annual health workshop in partnership with Edgecombe County and surrounding areas to identify strategies and incentives that will improve population health. The research could inform health-related policy options and the search for additional resources to implement them.

**Create youth-oriented health initiative for Princeville Elementary School.**

Engage school officials and teachers to develop health and nutrition awareness campaign in order to improve the health status of students and their families.

**Enhance healthy community initiatives.**

Augment existing health initiatives through investments to support active living, to include sidewalks, trails, play fields, and recreation programs in collaboration with the school district and nonprofit organizations. Promote the involvement of healthcare institutions such as universities, medical clinics, and Vidant Hospital.

**Collaborate with health research organizations to study the social determinants of health.**

Work with university programs and health organizations to assist Edgecombe County evaluate options and pursue remedies addressing the social determinants of health. Community development initiatives are frequently included in socioeconomic strategies. In recent years many communities have embarked on “collective impact” endeavors in collaboration with nonprofit organizations. Two such networks have impressive track records: Purpose Built Communities and NeighborWorks, the latter being a congressionally chartered entity headed by select departments of the federal government whereas the former is led by philanthropists from the private sector.

## Environment

**Integrate broad environmental concerns with Princeville’s chosen development scenario for hazard mitigation that includes structure elevations, reconstruction, and buyouts.**

Utilize Princeville's selected development scenario to enhance the town's natural, cultural, and historic heritage. Seek partnerships with public and private entities to optimize natural environments like wetlands and strive to expand benefits to the population, to include educational venues and facilities such as exhibition space and museums.

**Develop an improved stormwater management program, to include measures that will generate environmental benefits and enhance the quality of life for all residents.**

Embrace scientific and engineering approaches to surface water hydrology, especially the challenges posed by flooding of the Tar River, including remedial actions involving wetlands and streams in a manner that protects biological resources while enhancing stormwater system performance.

**Create and implement Heritage Trail & Open Space Plan.**

Design and build the Heritage Trail project, as recommended by the Community Design Workshop and the HomePlace greenspace concept. Assign an existing committee or new advisory group to assist with planning. Partner with regional, state, and national organizations that support environmental and cultural stewardship.

**Develop open space reuse options for buyout and abandoned properties.**

Identify ways to reuse vacant land (e.g., community gardens, longleaf pine and other indigenous species woodlots, habitat restoration and wetland corridors, campgrounds, historic trails, and leases to neighboring homeowners).

**Establish self-guided environmental and historical tours.**

Establish a self-guided exploration of the proposed Heritage Trail to feature natural features and cultural landmarks.

**Initiate signage program to highlight points of interest in Princeville.**

Develop signage program that emphasizes points-of-interest in Princeville to include: 1) progress with post-disaster recovery, 2) historic and cultural assets (Shiloh Landing, Freedom Hill, Memorial Village, cemetery), and 3) exhibits, commemorative landmarks, and museums. Arrangements may include “gateway” concepts, road signs, and interpretive exhibits. A Princeville design theme should serve as a wayfinding aid, to include recognizable colors, sign types, and sign mounting.

## Land Use

**Incorporate Princeville flood recovery element into Edgecombe County’s Comprehensive Development Plan.**

Identify synergies or relationships between county and town plans and programs aimed at community betterment, resilience, and revitalization. Incorporate relevant recovery policies and projects into the update of the county’s Comprehensive Development Plan.

**Apply land development techniques found in comprehensive plan to advance resilience goals.**

Apply land development techniques like cluster development, subdividing land, rezoning, and minimizing intensity and density of land uses in flood-prone areas. Incorporate these elements into town and county comprehensive plans.

**Formulate special strategies for the management of buyout properties that will become the responsibility of town officials.**

Establish methods through zoning and other land use regulations to address buyout properties that will be an important part of Princeville's future configuration, to include the interface between public and private properties, maintenance costs, public access, and compatibility with adjacent housing, infrastructure, and public facilities.

**Adopt land use plans and development standards that achieve mutually compatible goals spanning community development, affordable housing, and workforce development.**

Integrate land use decisions with local and regional entities to invest in programs suited to the unique needs of Princeville, to include redevelopment, revitalization, job training, and housing development. Give special attention to setting appropriate uses and densities in flood-prone areas.

## *Administration and Finance*

**Build local capacity to administer plans, programs, and projects.**

Build a network of technical assistance providers to include County and state agencies, Upper Coastal Plan COG, non-profits and foundations, private sector partners, and others to support activities the town has limited or no capacity to perform. Activities may include, but are not limited to the implementation of this recovery plan.

**Hire Recovery Plan Implementation Coordinator.**

Hire contractor or individual with community planning experience to coordinate implementation of the Princeville Recovery Plan. Establish a work program and appropriate methods of public engagement and interagency coordination related to recovery investments and strategies.

**Develop fiscal sustainability initiative.**

Work with the North Carolina Department of State Treasurer and the Local Government Commission to develop feasible solution to address fiscal sustainability.



**Adopt enhanced planning and development regulations.**

Work with the Edgecombe County Department of Planning and Inspections on proposed housing development policies, incorporate disaster recovery elements into the County's Comprehensive Development Plan, join the CRS program, and enhance Princeville's Flood Damage Prevention Ordinance.

**Adopt proactive risk management and pre-disaster planning culture.**

Build a long-term commitment to incorporate a proactive planning process into the administrative culture of town government. Periodic updates to the plan are essential. Guidance to the process can be drawn from FEMA's publication "Pre-Disaster Planning Guide for Local Governments," available as a free Internet resource, cited in the References section of this plan.

## *Economic Development*

**Revitalize low-hazard areas, especially those in proximity to Freedom Hill or other sites suited to historic exhibitions, public events, and educational opportunities, all of which could enhance tourism opportunities in Princeville and nearby locations.**

Implement an education and tourism program customized for Princeville's unique history, to include exploring regional alliances that can appeal to larger audiences.

**Pursue a Princeville-appropriate economic development strategy that recognizes the commercial/industrial limitations of the area due high levels of flood risk.**

Develop an economic development strategy that acknowledges small businesses have a low probability of long-term success in town due to the residual risk identified by the US Army Corps of Engineers regarding the Princeville levee. Fostering new business opportunities nearby, to include the 53-acre site or other locations outside the 100-year floodplain offer promise as major employment activities are located in close proximity (commuting distances ranging from about two miles to 15 miles).

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**Research tourism opportunities that capitalize on the environmental and cultural history of Princeville, to include a juxtaposition of flood risk in a nationally significant historic context dating back to the U.S. Civil War.**

Identify workable projects to increase public awareness of Princeville's past, to include an organized tourism component. Outreach should be compatible with Civil War educational efforts, thereby attracting national attention, to include persons pursuing historic travel in a region with significant historic assets.

**Develop historic signage in support of Memorial Village, the proposed heritage trail, and other Princeville sites.**

Promote the Heritage Trail, Memorial Village, Shiloh Landing, and Baptismal site through improved signage. Signage should explain the town's historic, cultural, and natural elements, to include Princeville's economic struggle due to discriminatory practices and frequent flooding of the Tar River.

## Workforce Development

**Create partnerships & collaborations with established workforce development organizations.**

Seek assistance from educational and research institutions to improve economic opportunities through PK-12, community college and university programs, and state/federal initiatives.

**Document and analyze needs associated with improved educational attainment and workforce development.**

Partner with organizations capable of studying educational performance and dropout rates that impede economic development as young persons enter the labor force, to include state education agencies and socioeconomic researchers. Historically, Princeville statistics show poor school performance evaluations, high unemployment, high poverty, and a high proportion of households receiving public aid. Due to expected job growth (e.g., Triangle Tyre), there could be a major return on investment in an improved primary and secondary education.

**Highlight special needs in Princeville by engaging community organizations, teachers, and career counselors.**

Seek broad awareness and feedback from Princeville residents to include identifying roles for volunteers in education, youth programs, and resource organizations such as NCSU Extension and county experts in health, social services, and career-based strategies.

**Increase matriculation and graduation rates for youth, to include adult education and retraining.**

Establish programs and collaborations that will assist Princeville's residents attain greater access to well-paid employment by encouraging life-long learning, skill development, and the creation of diverse job opportunities in the region in order to boost the economic resilience of individuals and families.

### *Implementation Matrix*

The Implementation Matrix describes each section of the Princeville Recovery Plan as organized under goals identified in Chapter 5. For each section there is a brief description and list of interdependent policies, denoted by abbreviations for each goal: IN = Infrastructure, PF = Public Facilities, HO = Housing, HE = Health, EN = Environment, LU = Land Use, AF = Administration and Finance, ED = Economic Development, WD = Workforce Development. This is followed by a list of resources needed to implement the action, to include Technical Assistance (TA), Funding (F), and Policy Adoption (P). The matrix is concluded by a list of potential funding sources, the agency or group assigned the primary or shared responsibility for implementation, and when the action is to be completed.

IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
<b>INFRASTRUCTURE</b>							
1	Conduct Stormwater Inventory and Mapping Initiative.	Inventory and map stormwater system and assess deficiencies in the system to handle runoff, suggest improvements, and seek funding needed to implement proposed actions.	(I)1 (I)2 (EN)8 (EN)9	TA: Upper Coastal Plain COG; F: Conduct and implement study; P: Adopt rainy day fund or other source of revenue.	NC DEQ: Clean Water Management Trust Fund (CWMTF)-Innovative Stormwater Projects; State Wastewater & Drinking Water Reserve Programs (Asset Inventory and Assessment Grant Program); 205(j) Water Quality Management Planning Grant.	UCPCOG, Town Board, Town Manager.	2018-2020
2	Establish program to incorporate resilient features in existing and new infrastructure.	Identify priority infrastructure investments that will help the town be more resilient to the impacts of flood hazards. Addressing this need will require establishing a local revenue source, recognizing that this is a long-term, gradual process tied to the economic viability of the town.	(I)2 (I)3 (I)4	TA: Assess condition of infrastructure and conduct financial study; F: Local fund balance; P: Create revenue generating vehicle.	Local revenue (e.g., stormwater utility fee); FEMA 406 Mitigation; State Legislature; Golden LEAF.	Mayor, Town Board, Town Manager.	2018-2020

IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
3	Collaborate with Edgecombe County and Upper Coastal Plains COG to initiate a reuse strategy of vacant lands, to include addressing stormwater management goals.	Evaluate the three development scenarios to identify reuse patterns that will enable flood protection strategies. Possible layouts could feature vacant land that can be converted to stormwater conveyance, retention basins, wetlands expansion or other flood risk reduction techniques. In some circumstances, water storage ponds can become neighborhood assets.	(I)3 (I)4	TA: Assess condition of infrastructure and conduct financial study; F: Local fund balance; P: Create revenue generating fees.	NCEM; State Legislature; CDBG-DR, HMGP; Golden LEAF; USDA Rural Development; FEMA Pre-Disaster Mitigation (PDM).	Mayor, Board, Town Manager, County Manager and Planning Director, UCPCOG.	2019-2020
<b>PUBLIC FACILITIES</b>							
4	Retrofit or relocate existing public facilities (e.g., fire station, school, public housing) using proven flood resilience techniques.	Continue engineering, architectural, and other technical studies of alternate treatments so as to be more resilient to flood hazards that threaten both structures and their contents. Princeville is in the process of relocating the fire station to the 53-acre site, and will elevate the structure or grade the site as deemed appropriate.	(PF)2 (PF)3 (PF)4	TA: Conduct studies and policy research via entities such as UNC School of Government and State Treasurer, Identify site, develop cost estimate, create site and building plan. F: Construct building. P: Amend town and county plans.	Golden LEAF Foundation (construction grant); CDBG-DR; Public Assistance.	UCPCOG, Town Manager, Mayor, Board, and agencies owning the facilities (e.g., school district, fire district).	2020-2021

### IMPLEMENTATION MATRIX

Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
5	Configure public facilities in tandem with a selected development scenario for Princeville, to include preserving unique historic, cultural, and natural aspects.	Seek resilient solutions that represent safe investments in public facilities that respect the town's unique cultural history and evolving settlement pattern.	(PF)1 (PF)2 (PF)3	TA: Historic inventory; Identify site, develop cost estimate, conduct site and building plan, construct structure; F: Construct building; P: Town council approval.	Golden LEAF; FEMA PA.	Mayor, Board, Town Manager, Edgecombe County Manager.	2020-2022

IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
<b>HOUSING</b>							
6	Implement a resilient housing strategy in support of Princeville's selected development scenario.	Build upon the preferred solution for hazard mitigation and flood loss reduction by establishing workable housing arrangements such as elevations, reconstruction with elevations, or buyouts of vulnerable properties.	(H)5 (H)7 (ER)4 (ER)7	TA: Select housing arrangements. F: Implement housing options. P: Coordinate resulting housing pattern with other policies identified in this plan.	FEMA HMGP; HUD HOME & CDBG-DR; NCHFA; State Legislature; Golden LEAF.	Town Manager, UCPCOG, Edgecombe County Planning Director, NCEM and NC Department of Commerce.	2018-2021
7	Develop Community Housing Initiative.	Work with resource agencies to create an overall housing initiative that will generate affordable housing opportunities, attract development, and integrate with floodplain management and stormwater system improvements.	(H)5 (H)7 (ER)4 (ER)7	TA: Assist in the development of housing initiative. F: Plan development, housing and infrastructure construction.. P: Develop program guidelines and strategy.	FEMA HMGP; CDBG-DR; USDA Rural Development; NCEM, NC Department of Commerce; NCHFA.	Princeville Public Housing Authority, UCPCOG, Edgecombe County Planning Director.	2019-2022
8	Address housing needs of special populations, especially the needs of elderly and disabled residents.	Recognize the full continuum of housing options such as senior housing, assisted living, and independent living. Work with local and regional organizations specializing in these diverse housing solutions to create supporting policies and projects and to identify resources required to implement them.	(H)4 (H)5 (H)6	TA: Conduct inventory, surveys, public meetings, needs assessment. F: Conduct feasibility study. P: Prioritize funds for vulnerable populations.	NCEM; NC Department of Commerce; HMGP; CDBG-DR; State Legislature; Golden LEAF.	Area Agency on Aging, Edgecombe County Social Services, Edgecombe County Planning Director, NCEM, NC Department of Commerce.	2019-2022

### IMPLEMENTATION MATRIX

Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
9	Create a comprehensive open space strategy tailored to Princeville's pattern of buyout properties and structural elevations.	Consider neighborhood functionality and revitalization needs by designing land management solutions for land that is required to remain undeveloped, to include land leases, community gardens, and parks or playgrounds.	(H)5 (H)7 (ER)4 (ER)7	TA: Initiate community development programming and planning with nonprofit partners. F: Financial tools, including tax credits. P: Adopt strategy for overall revitalization.	NCHFA; HMGP; CDBG-DR; HUD/HOME; SBA; USDA Rural Development; nonprofits; corporate donors.	UCPCOG collaborating with nonprofits and public agencies, public meetings, Mayor, Board, Town Manager, Edgecombe County Planning Director.	2019-2022
10	Relocate historic structures to higher ground.	Relocate historic structures as appropriate, to include the potential clustering of structures on Freedom Hill, especially if augmented with additional fill. Other options include the relocation of structures to the 53-acre site, in conjunction with the construction of a historic/cultural museum.	(H)5 (H)7 (ER)4 (ER)7	TA: Identify structures that can be relocated, to include assessing their technical feasibility to be moved. F: Site prep and, relocation. P: Develop agreement with NCEM to allow relocation after home acquired through buyout, but prior to demolition. Adopt home selection criteria, determine eligible home requirements.	CDBG-DR; North Carolina Disaster Relief Fund; Golden Leaf; National Endowment for the Arts Our Town grant.	Town Official, NCEM; Preservation North Carolina, State Historic Preservation Office.	2018-2020



IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
11	Enhance dissemination of flood mitigation Information.	Disseminate information on flooding and the importance of purchasing and maintaining flood insurance among residents and institutions using a multi-media approach to include placing information in water bills, radio, town website, flyers in public buildings, and other means as identified.	(H)4 (H)9	TA: Collect relevant information and disseminate it. F: Print materials, purchase radio air time. P: Adopt information dissemination strategy and update it over time as programs and associated local codes change.	Emergency Management Performance Grant (EMPG).	Mayor, Board, Manager, Edgecombe County NFIP Coordinator.	2019
<b>HEALTH</b>							
12	Address underlying causes of health disparities and the long-term costs of low health status within Princeville, to include implementing parallel programs addressing poverty, unemployment, and workforce development.	Build public awareness of socioeconomic effects on the rates of stress, poor health, family violence, addictive behaviors, and crime. Seek mechanisms for interagency collaborations involving Pre-K/12 education and career education to help prepare future generations to take advantage of changing job opportunities such as high-tech manufacturing and knowledge-based businesses.	(HE)1 (HE)2 (HE)3 (HE)4 (HE)5 (HE)8	TA: Address socioeconomic status of Princeville that influences the social determinants of health, especially when stressed by a major natural disaster. F: Nonprofits and public agencies. P: Adopt strategies to build social and economic resilience.	Kresge Foundation and RW Johnson Foundation; NC Department of Public Health; U.S. Center for Disease Control and Prevention.	UCPCOG, Edgecombe County Officials (directors of Public Health, Social Services, and Planning), Mayor, Board, Town Manager.	2019-2021

### IMPLEMENTATION MATRIX

Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
13	Create a Health Committee and Conduct Annual Health Workshop.	Organize and Implement Health Workshop in partnership with Edgemcombe County and surrounding communities to identify strategies and incentives that will improve population health.	(HE)1 (HE)2 (HE)3 (HE)4 (HE)5 (HE)8 (HE)11 (HE)13	TA: Organize and host workshop with the assistance of Edgemcombe County Public Health and Vidant Health. F: Organize and host conference. P: Write conference proceedings, adopt and implement recommendations.	Healthcare providers; County Extension Service; Center for Disease Control.	Edgemcombe County Health Department & Vidant Health.	2019; annually
14	Create youth-oriented health initiative for Princeville Elementary School.	Engage school officials and teachers to develop health and nutrition awareness campaign, in order to improve the health status of students and their families.	(HE)1 (HE)3 (HE)4 (HE)5 (HE)11 (HE)15	TA: Evaluate teaching methods, materials and field experiences related to health themes. F: Instructional material, garden exhibits. P: Collaboration between school and health service providers.	Rotary; Campbell Soup Foundation; Private Donations; Home improvement retailers.	County Extension Director, local churches, prospective non-profit (e.g., Carrboro and Maxon Community Gardens).	2019-2020

IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
15	Enhance Healthy Community Initiatives.	Augment existing health initiatives through investments to support active living, to include sidewalks, trails, play fields, and recreation programs in collaboration with the school district and nonprofit organizations. Promote the involvement of healthcare institutions such as universities, medical clinics, and Vidant Hospital.	(HE)1 (HE)3 (HE)4 (HE)5 (HE)7 (HE)11 (HE)12 (HE)15 (HE)16	TA: Create program guidelines, implement program. F: Program maintenance. P: Integrate initiative with ongoing greenspace, ecotourism, and economic development efforts.	County Health Department; Vidant Health; NC health agencies.	County and regional groups supportive of open space, outdoor recreation and related endeavors.	2019 & Ongoing
<b>ENVIRONMENT</b>							
16	Integrate broad environmental concerns with Princeville's chosen development scenario for hazard mitigation that includes structure elevations, reconstruction, and property buyouts with relocation.	Utilize Princeville's selected development scenario to enhance the town's natural, cultural, and historic heritage. Seek partnerships with public and private entities to optimize natural environments like wetlands and strive to expand diverse benefits to the population, to include educational venues and facilities such as exhibition space and a museum.	(EN)1 (EN)2 (EN)3	TA: Seek development patterns and investments that support resilience along with environmental protection, to include public education and citizen engagement. F: Implement strategy. P: Adopt forward looking strategies for revitalization.	NCDEQ; NCEM; FEMA HMGP; HUD CDBG-DR; EPA; USDA; USACE; State Legislature; Golden LEAF.	Mayor, Board, Manager, Edgecombe County Manager and department heads, UCPCOG.	2019-2020

### IMPLEMENTATION MATRIX

Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
17	Develop an improved stormwater management program that will generate environmental benefits and enhance the quality of life for all residents.	Embrace scientific and engineering approaches to surface water hydrology, especially the challenges posed by flooding of the Tar River, including remedial actions involving wetlands and streams in a manner that protects biological resources while enhancing stormwater system performance.	(EN)1 (EN)2 (EN)3 (EN)4 (EN)7 (EN)11 (RO)2 (RO)3 (RO)5	TA: Engineering analysis, basin studies, geospatial modeling, and benefit-cost comparisons. F: Monitor flood protection strategies that enhance environmental diversity and quality of life in the region. P: Adopt a resilience strategy that is environmentally sound.	NCEM; USACE; FEMA HMGP, USGS; HUD CDBG-DR.	Mayor, Board, Town Manager, UCPCOG, NCEM, NCDEQ, USDA Rural Development, USDA NRCS.	2019-2021
18	Create and Implement Heritage Trail & Open Space Plan.	Design and build the Heritage Trail project, as recommended by the Community Design Workshop and the HomePlace Greenspace Concept. Assign an existing committee or new advisory group to assist with planning and implementation. Partner with regional, state, and national organizations that support environmental and cultural stewardship.	(EN)1 (EN)2 (EN)3 (EN)4 (EN)7 (EN)11 (RO)2 (RO)3 (RO)5	TA: Refine Greenspace and trail concepts to include plan of action, identify land, conduct cost estimation, and identify partners. F: Implement plans. P: Adopt and/or modify policies as needed to support plan.	DEQ; Division of Parks and Recreation – State Trails Program; CDBG-DR; HMGP; Disaster Recovery Act funding.	Mayor, Board, Town Manager Trails Committee, state parks staff, conservation/recreation organizations.	2019-2021

IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
19	Develop open space reuse options to address buyout and abandoned properties.	Identify ways to reuse vacant land (e.g., community gardens, greenspace, longleaf pine and other indigenous species woodlots, habitat restoration and wetland corridors, campgrounds, historic trails, leases to neighboring homeowners).	(EN)10 (EN)12 (RO)1 (RO)4	TA: Inventory existing vacant land and new buyout properties; formulate policy. F: legal arrangements and ongoing maintenance costs. P: Create supporting open space policies including land reuse criteria and open space maintenance agreements.	DEQ Division of Parks and Recreation – State Trails Program; CDBG-DR; Donated resources from interested citizens/ groups.	Mayor, Board, Town Manager, County Planning Director, historic and cultural non-profits, conservation organizations.	2018-2020
<b>LAND USE</b>							
20	Incorporate Princeville flood recovery element into Edgecombe County's Comprehensive Development Plan.	Identify synergies or relationships between county and town plans and programs aimed at community betterment, resilience, and revitalization. Incorporate relevant recovery policies and projects into the update of the plan.	(LU)4 (LU)6 (FA)5	TA: Write plan. F: Implement plan. P: Adopt flood recovery element.	CDBG-DR (planning); North Carolina Disaster Recovery Act funding.	Mayor and Town Council.	2019

IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
21	Apply land development techniques to advance resilience goals.	Apply land use techniques like cluster development, subdividing land, rezoning, and minimizing the intensity and density of land uses in flood-prone areas. Incorporate these elements into town and county comprehensive plans.	(LU)1 (LU)2 (LU)3 (LU)5 (FA)5 (FA)6 (FA)7	TA: Coordinate with open space initiatives, write housing element for inclusion into comprehensive plans, write and implement housing policies. P: Adopt revised land use policies.	CDBG-DR; North Carolina Disaster Recovery Act funding.	Mayor and Town Council; County Planning Director.	2018-2020
22	Formulate special strategies for the management of buyout properties that will become the responsibility of town government.	Apply techniques, such as zoning and other land use regulations to address buyout properties that will be an important part of Princeville's future configuration, recognizing the interface between public and private properties, maintenance costs, public access, and compatibility with adjacent housing, infrastructure, and public facilities.	(LU)1 (LU)2 (LU)3 (LU)5 (FA)5 (FA)6 (FA)7	TA: Study evolving patterns of buyouts and elevations. Evaluate impacts on neighborhood cohesion and functionality. Recommend strategy interventions. F: Land management. P: Adopt neighborhood plans.	HMGP; CDBG-DR; State Legislature; Golden LEAF.	UCPCOG, Edgecombe County Planning Director, Mayor, Board, Town Manager.	2019-2020

IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
23	Adopt land use plans and development standards that achieve mutually compatible goals spanning community development, affordable housing, and workforce development.	Integrate land use decisions with local and regional entities to invest in programs suited to the unique needs of Princeville, to include redevelopment, revitalization, job training, and housing development. Give special attention to setting appropriate densities in flood-prone areas.	(LU)1 (LU)2 (LU)3 (LU)5 (FA)5 (FA)6 (FA)7	TA: Update inventory of buyout properties. Study flood overlays and development patterns. Seek workable solutions to minimize development in hazard areas. F: Write new development standards. P: Adopt zoning maps and standards to foster safe development.	HMGP; CDBG-DR; State Legislature; Golden LEAF; nonprofit community development initiatives.	UCPCOG, Edgecombe County Planning Director, Mayor, Board, Town Manager.	2019-2020
<b>ADMINISTRATION AND FINANCE</b>							
24	Build local capacity to administer plans, programs, and projects.	Build a network of technical assistance providers to include County and state agencies, Upper Coastal Plan COG, private sector partners, and others to support activities the town has limited or no capacity to perform. Activities may include but are not limited to the implementation of this recovery plan.	(FA)3	TA: Convene meetings with agencies and organizations to discuss how each group can assist with the implementation of the recovery plan. F: Hire staff. P: Expand response-focused inter-local agreements (including mutual aid) to address long-term recovery needs.	CDBG-DR; North Carolina Disaster Recovery Act funding; Emergency Management Performance Grants (EMPG).	Mayor, Board, Town Manager.	2018-2020

IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
25	Hire Recovery Plan Implementation Coordinator.	Hire contractor or individual with community planning experience to coordinate implementation of the Princeville Recovery Plan. Establish a work program and appropriate methods of public engagement and interagency coordination related to recovery investments and strategies.	(FA)7	TA: Identify qualifications for position and reporting structure (i.e., identification of supervisor); F: Hire staff position, provide laptop and other needed equipment.	North Carolina Disaster Recovery Act funding; CDBG-DR.	Town Manager.	2018-2021
26	Develop fiscal sustainability initiative.	Work with the North Carolina Department of State Treasurer and the Local Government Commission to develop feasible solution to address fiscal sustainability.	(FA)1 (I) 2	TA: Conduct study. F: Implement study findings. P: Incorporate findings into town plans and policies, including the possible creation of revenue-generating programs.	North Carolina Disaster Recovery Act funding; CDBG-DR.	Town Administrator, Treasurer's Office of Local Government Commission, UNCCH School of Government's Environmental Finance Center, State Legislature.	2018-2019



IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
27	Adopt enhanced planning and development regulations.	Work with the Edgecombe County Department of Planning and Inspections on proposed housing development policies, incorporate disaster recovery elements into the County's Comprehensive Development Plan, join the CRS program, and enhance Princeville's Flood Damage Prevention Ordinance.	(FA)6 (FA)7	TA: Write amendments to ordinances, write land use element and disaster recovery element. F: Write and implement ordinances and elements. P: Adopt changes in plans and programs.	North Carolina Disaster Recovery Act funding; CDBG-DR.	Mayor, Board, and Town Manager, Edgecombe County Planning Office, County Floodplain Administrator, Upper Coastal Plain COG.	2018-2020
<b>ECONOMIC DEVELOPMENT</b>							
28	Revitalize low-hazard areas, especially those in proximity to Freedom Hill or other sites suited to historic exhibitions, public events, and educational opportunities, all of which could enhance tourism opportunities in Princeville and nearby locations.	Implement an education and tourism program customized for Princeville's unique history, to include exploring regional and national alliances that can expand the appeal to larger audiences.	(I)2 (LU)5	TA: Conduct preliminary assessment of potential historic programs, study links to tourism initiatives, to include educational components. F: Develop and implement economic development plan. P: Coordinate economic development strategy with other policies and projects identified in this plan.	North Carolina Disaster Recovery funds; USACE-Planning; CDBG-DR; EDA; SBA; business owners, National Endowment for the Arts Our Town grant.	Mayor, Board Town Manager, in collaboration with business associations in the region, development organizations, and major museums.	2018-2020

### IMPLEMENTATION MATRIX

Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
29	Pursue a Princeville-appropriate economic development strategy that recognizes the commercial and industrial limitations of the area due to high levels of flood risk.	Develop economic development strategy that acknowledges small businesses have a low probability of success in much of the town due to residual risk identified by the US Army Corps of Engineers regarding the status of the Princeville Levee. The strategy should also recognize the potential of major employment activities that are located in close proximity to the town. Related options include fostering new business opportunities on the 53-acre site or other locations as identified.	(ED)1 (ED)2 (ED)4 (ED)5	TA: Explore a pro bono request to the Urban Land Institute or similar organization to study non-residential development options. F: Plan development and implementation. P: Incorporate strategy into other elements of this recovery plan and other plans.	US EDA; CDBG-DR; in-kind services of UNC School of Government, NCSU Extension.	UCPCOG, ECU College of Geography and Planning, SBDTC, Edgecombe County Planning Director, Mayor, Board, Manager, potential NC Chapter of American Planning Association.	2019

IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
30	Research tourism opportunities that capitalize on the environmental and cultural history of Princeville, to include a juxtaposition of flood risk in a nationally significant historic context dating back to the U.S. Civil War.	Identify workable projects to increase public awareness of Princeville's past, to include an organized tourism component. Outreach should be compatible with Civil War educational efforts, thereby attracting national attention, to include persons pursuing historic travel in a region with significant historic assets.	(ED)1 (ED)2	TA: Conduct research on history-based tourism. F: Site plans and implementation programming. P: Policy Facility management, revenues, and long-term sponsorships.	DEQ: Clean Water Management Trust Fund; Division of Parks and Recreation – State Trails Program; CDBG-DR; Nonprofit sponsors.	Town Officials, Edgecombe County Planning Director, City of Tarboro Recreation and Parks Department.	Secure Sites – 2019 Site Design & Funding – 2020 Construction – 2020-21
31	Develop historic signage in support of Memorial Village, the proposed heritage trail, and other Princeville sites.	Promote the Heritage Trail, Memorial Village, Shiloh Landing, and Baptismal site through improved signage. Signage will also explain the town's historic, cultural, and natural elements, to include Princeville's economic struggle due to discriminatory practices and frequent flooding of the Tar River.	(ED)1 (ED)3 (ED)4 (ED)5	TA: Develop signage program. F: Purchase, install and maintain signage. P: Connect signage messaging to community goals such as economic development, environmental stewardship, and others as identified.	NC Division of Parks & Recreation – Land & Water Conservation Program; NC Tobacco Trust Commission; NC Main Street Program; National Endowment for the Arts Our Town grant.	Mayor, Board, Town Manager.	Organize and Design – 2018 Seek Funding; Build and Install Signs – 2019.

## IMPLEMENTATION MATRIX

Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
<b>WORKFORCE DEVELOPMENT</b>							
32	Create partnerships & collaborations with established workforce development organizations.	Seek assistance from educational and research institutions to improve economic opportunities through PK-12, community college and university programs, and state/federal initiatives.	(WD)1 (WD)2 (WD)3 (WD)4	TA: Solicit research support that will help define and measure factors contributing to insufficient workforce readiness. F: Encourage grants for local and regional initiatives. P: Establish agreements with school district and business groups.	North Carolina Department of Commerce; US Economic Development Administration; Coop programs with commercial and industrial enterprises, to include apprenticeships.	Turning Point WDB, UCPCOG, nonprofits, Edgecombe County Planning Director, Edgecombe County Public Schools, Edgecombe County Community College, SBDTC, Mayor, Board, and Town Manager.	2019-2020

### IMPLEMENTATION MATRIX

Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
33	Document and analyze needs associated with improved educational attainment and workforce development.	Partner with organizations that study educational performance and dropout rates that impede economic development as young persons enter the labor force, to include state education agencies and socioeconomic researchers. Historically, Princeville statistics show poor school performance evaluations, high unemployment, high poverty, and a high proportion of households receiving public aid. Due to expected job growth nearby (e.g., Triangle Tyre), there could be a major return on investment in primary and secondary education initiatives.	(WD)1 (WD)2 (WD)3 (WD)4 (WD)5 (WD)6	TA: Solicit research support that will help define and measure factors contributing to insufficient workforce readiness. F: Local and regional educational initiatives; P: Establish agreements with school district and business groups.	North Carolina Department of Commerce; US Economic Development Administration; Coop programs with commercial and industrial enterprises, to include apprenticeships.	Turning Point WDB, UCPCOG, nonprofits, Edgecombe County Planning Director, Edgecombe County Public Schools, Edgecombe County Community College, SBDTC, Mayor, Board, and Town Manager.	2019-2020

IMPLEMENTATION MATRIX							
Project No.	Recovery Action	Description of Action	Policies	Required Resources	Potential Funding	Responsible Party	Timeline
34	Highlight special needs in Princeville by engaging community organizations, teachers, and career counselors.	Seek broad awareness and feedback from Princeville residents, to include identifying roles for volunteers in education, youth programs, and resource organizations such as NCSU Extension and county experts in health, social services, and career-based strategies.	(WD)1 (WD)2	TA: Select leadership candidates to help organize efforts, identify existing programs within which Princeville could fit, to include consideration of senior volunteers from the region. F: Host listening sessions. P: Incorporate findings into policies and plans.	Turning Point Workforce Development Board; Carolina Gateway Partnership; Local businesses supportive of an expanded labor force and economic growth.	Mayor, Board, Town Manager in collaboration with Edgecombe County Schools, major regional employers, and volunteers.	2019
35	Increase matriculation and graduation rates for youth, to include adult education and retraining.	Establish programs and collaborations that will assist Princeville's residents attain greater access to well-paid employment by encouraging life-long learning, skill development, and creation of diverse job opportunities in the region in order to boost the economic resilience of individuals and families.	(WD)1 (WD)2 (WD)3 (WD)4 (ED)4 (H)4 (HE)1	TA: Identify a host organization to create policies that can lead to a more resilient workforce. F: Job training. P: Incorporate findings into policies and plans.	Turning Point Workforce Development Board; Carolina Gateway Partnership.	Mayor, Board, Town Manager in collaboration with Edgecombe County Schools and major regional employers.	2019

(I) Infrastructure; (PF) Public Facilities; (H) Housing; (HE) Health; (EN) Environment; (LU) Land Use; (AF) Administration and Finance; (ED) Economic Development; (WD) Workforce Development

## CHAPTER 9 PLANNING PROCESS

A good planning process provides a proven problem-solving approach guided by a set of agreed-upon goals, policies, and projects created to address issues in this plan. Figure 29 provides a general overview of the process.

Figure 29: Planning Process



## Summary of the Planning Process

Figure 29 presents a logical sequence by which a community periodically takes stock, assesses future conditions and scenarios, and updates its long-range plan over time. Ideally, the planning process is closely aligned with management, public administration, and governance. For instance, annual budgets and capital programs are relied upon to implement long-range plans. Communities like Princeville also engage on a regional basis with a number of stakeholders, such as county and multi-county planning organizations to address land use, transportation, community development, economic development, and hazard mitigation-related activities.

Regional and county-level entities also coordinate systems such as public health, public safety, transportation, education, and workforce development. Edgecombe County operates development and inspection services, for example. Separate entities operate housing subsidies and public housing, some of which address elderly housing. Water and sewer services were transferred to Edgecombe County in 2015. Many of these actions are represented by public-private partnerships or nonprofit organizations. Some federally funded programs are operated by Nash Edgecombe County Economic Development.

Following Hurricane Matthew, these service arrangements should be integrated with recovery actions through the modification of long-standing planning, engineering, budgeting, and management programs, plans, and policies. A primary goal during this period of increased financial assistance is to invest disaster funds in ways that are guided by a long-range vision and the collection of existing planning arrangements. Further, the implementation steps of this recovery plan are meant to mirror the town's traditional management practices, interagency arrangements, and other factors such as:

- Capacity of infrastructure;
- Conditions of systems and needs for repair;
- Operational reliability and efficiency;
- Suitable public services and public safety;
- Risk management and hazard awareness;
- Orderly growth and adaptation to change;
- Attention to issues of obsolescence, vacant buildings, and deterioration;
- Promotion of harmonious activity patterns versus conflicting land uses; and
- Pursuit of upgrades and amenities that seek to create a safer, more livable, and attractive community.



Princeville's recovery is complicated by uncertain population shifts. The question about whether to rebuild or relocate is prompted by new engineering studies of the Princeville Levee. After the redevelopment scenario is clearer, the recovery plan can support a variety of community policies and practices outlined in the Implementation Matrix (Chapter 8) and the general planning methods portrayed in Figure 29. Unique conditions exist as a result of the disaster. Consequently, extra attention is paid to the ensuing damage pattern, disruption of the economy, and other changes brought about by the flood, to include incorporating resiliency throughout the process. It is important for community leaders and citizens to keep in mind that disaster recovery efforts work best when undertaken as part of a long-term planning and management process.

### *The Disaster Recovery Planning Process Following Hurricane Matthew in Princeville*

The steps described below illustrate how the elements are interconnected and build on one another as part of a larger whole.

#### **Organizing for Recovery Planning**

When a community is hit by a disaster, it goes through phases of immediate response, clean up, repairs, and long-term recovery. Throughout this process, the governing body is responsible for decisions and oversight. In Princeville, the structure of government includes the mayor, board of commissioners, and town manager. County government is actively involved, particularly with emergency management. Citizens, businesses, and various organizations are also involved in recovery efforts. A significant part of post-disaster funding comes via state and federal agencies. Committees comprised of technical specialists and laypersons assist the governing body by focusing on special needs and tasks. Involvement should include the business community, non-profits, and faith-based organizations, as well as the governing body. As Princeville enters the long-term recovery phase, a structured approach is needed to coordinate the many issues and stakeholders described throughout this plan.

#### **Document Community Setting and Assets**

It is vital to understand the conditions found in the community, including existing assets unique to the planning area. Much of the information comes from within the community, to include information that documents flood damage to housing, commercial centers, environmental resources, infrastructure (e.g., roads, sewer, water), and public facilities (e.g., town hall, medical facilities, public safety buildings). Reports and plans developed by the community, county, state, and federal agencies, and regional organizations are also relied upon to document community assets.

The results of this effort provided part of the basis for the analysis that followed, resulting in unique insights into the historic, cultural, economic, and environmental conditions in the area. While the HMDRRI team has undertaken much of the data gathering, the community helped to validate the findings and provide additional indigenous knowledge. These steps are described in the diagram, first by determining key issues and opportunities, then depicting a better future, or vision to which the community aspires. Many of these steps have already occurred via the town's Community Design Workshop, public open houses, and background analysis undertaken by the HMDRRI team and other organizations.

### **Set up Organization and Procedures to Foster Participation**

The mayor and members of the Princeville Board of Commissioners have been functioning as a recovery committee. In the future, the Board may amend the makeup of the committee as the pace and complexity of recovery increases. Having an advisory committee provides a recognized team focused on administering the plan over time. Creating clear procedures to implement that plan includes ensuring the participation of those the plan will affect. Specific examples of community engagement include public meetings, open houses, special events, and one-on-one discussions.

### **Collect and Analyze Data**

Collecting and analyzing data provides the fact base on which the direction-setting elements (goals, policies, and projects) are developed. The plan's assemblage of data can also be extracted by town staff and others as evidence to be included in grant applications, and project proposals.

### **Identify Issues and Opportunities**

The identification of issues represents the "problems" or challenges facing the community as it seeks to recover from Hurricane Matthew. Public discussions generate alternative approaches. These ideas provide options, namely possible solutions to problems. Examples in Princeville include the use of the 53-acre site and the implementation of elevations or buyouts. The issues and alternatives identified should strike an appropriate balance between those that can be addressed by local entities and those that require external assistance by organizations within the larger disaster recovery assistance network. External help comes from groups that include county, state, and federal agencies, as well as nonprofits and public-private partnerships such as economic development organizations. The selection of issues reflected meaningful public involvement and the involvement of those who are tasked with addressing community needs.

## Identify Goals, Policies, and Projects

The development of goals, policies, and projects are the heart of a plan, providing a clear direction-setting process. This phase is iterative and requires close coordination and communication with the Town Manager, Mayor, Board of Commissioners, and the community as a whole.

### *Detailed Description of Planning Steps*

Next, the traditional steps involved in the planning process are described, to include how they are applied in this plan.

#### Prepare the Plan

Preparing the plan involves assembling the materials gathered in the steps noted above and writing the plan as a coherent document that is useful for decision-making. The basic elements of the plan are described in Chapter 1.

#### Develop Implementation Strategy

The plan implementation strategy is found in Chapter 8, Recommended Action Items, Funding, and Implementation. In this chapter, recommended actions are identified, and the means by which they are implemented are described, including the responsible and supporting parties, a defined timeline for completion, and the resources needed (i.e., funding, policy, and technical assistance) to implement them. The list of recommended actions include items that have a realistic chance of being implemented, rather than a “wish list” of projects with little support. Similarly, the identified funding sources are screened to represent those that are active and available.

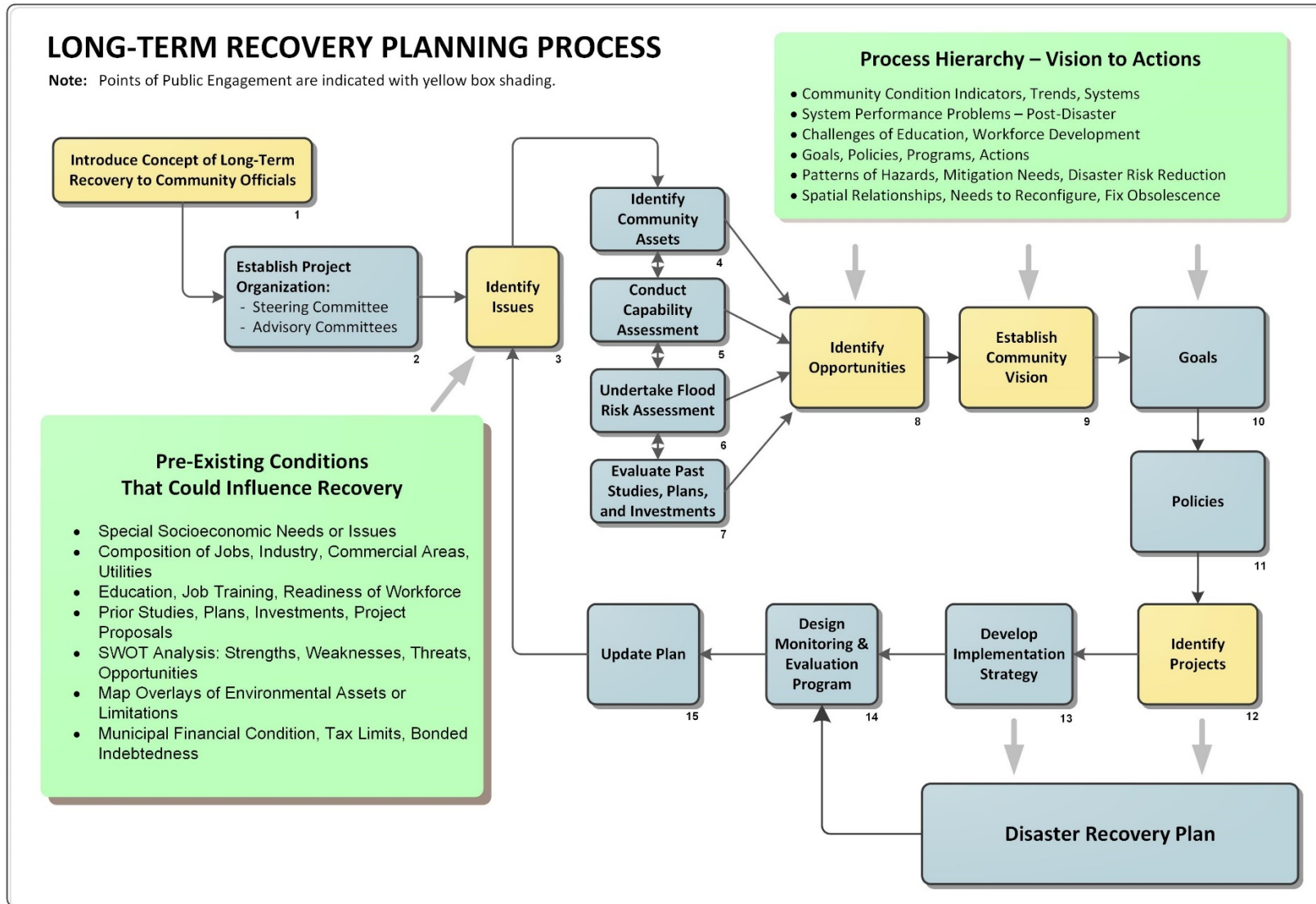
#### Review and Adopt the Plan

In order for the plan to have legal standing and administrative legitimacy, it should be reviewed and adopted by the town's governing body.

#### Administer Plan through Monitoring and Update Schedule

Good plans have clear implementation mechanisms in place, with defined monitoring and update schedules. This provides a process that can be agreed to and followed over time by those responsible for carrying out identified tasks, policies, and projects. It is imperative that the community leadership evaluates the plan on a regular basis so that progress is accurately monitored by those responsible for implementing the recovery plan.

Figure 30: Long-term recovery planning process.



Steps shown on Figure 30 describe the detailed process followed during the development of the Princeville Recovery Plan.

**1 Introduce Concept of Long-Term Recovery to Community Officials**

Prepare and make a presentation to the Governing Body about the history of recovery planning, connections to emergency management, and show examples of successful community recovery plans.

**2 Establish Project Organization, including and Advisory Committees**

Explore with the Governing Body and appointed officials different types of organizational arrangements suited to the community and the nature of the disaster, extent of damage, socioeconomic conditions, and institutions active in community affairs. Discuss preferences for naming individuals to serve in various capacities. Consider optimum size of committees and methods of involvement for individuals and organizations, including the private sector.

**3 Identify Issues**

Using community engagement techniques such as open houses, surveys, and social media, prepare a list of key issues. The list should reflect perceptions of elected officials, appointed officials, community groups, and the general citizenry.

**4 Identify Community Assets**

Draw upon prior studies and reports to develop a list of community assets, including socioeconomic factors, facilities, programs, and cultural resources. Identify connections to regional and state entities, because they play a large role in supplementing local capacity, including the documentation of local resources.

**5 Conduct Capability Assessment**

Collect and analyze data related to financial resources, administrative arrangements and staffing, and plans, policies, and ordinances. Assess overall capacity in relation to the scale of the disaster, patterns of damage, and resources needed to support community recovery. For unmet needs or deficient resources, identify alternative options like surge staffing, contracted expertise or interagency resource sharing.

**6 Undertake Flood Risk Assessment**

Collect and interpret post-disaster analyses from FEMA, NCEM, USGS and others to inform disaster recovery programs, including those that mitigate future risk. Use GIS technology to overlay geospatially defined hazards with disaster damages, parcels, structure data, land uses, socially vulnerable populations, and other information. Integrate risk factors into recovery policies and strategies to be implemented through redevelopment programs, construction standards, zoning and other tools and techniques.

**7 Evaluate Past Studies, Plans, and Investments**

Collect and interpret past studies, plans, and capital improvement programs to include their relevance to recovery. Seek synergies between existing community goals and current post-disaster needs. Link recovery issues with previously identified needs such as blight, substandard housing, economic disparity, unemployment, and obsolescent infrastructure.

**8 Identify Opportunities**

Through interactive public engagement and collaboration with public and private sector organizations, solicit ideas that address pre- and post-disaster problems through programs, policies, and projects.

**9 Establish Community Vision**

As part of a consolidated review of all needs and opportunities, facilitate public participation to generate themes about collective aspirations for the future. Facilitation efforts should strive to keep a wide range of ideas open for consideration. Community officials should urge broad participation from all socioeconomic sectors, thus attempting to tabulate the interests of the "Whole Community." Attempt to gain consensus around a set of phrases or a paragraph that constitutes the community's vision statement. The statement should be altered as necessary to gain formal approval by the Governing Body for ultimate inclusion in the adopted Recovery Plan. Content of the vision statement may evolve during the recovery planning process as the original ideas prove to be more or less feasible, or new synergistic projects emerge.

**10 Develop Goals**

Derived from the community's collective vision statement, goals should be established that span categories such as housing, infrastructure, public facilities, land use, health, economy, education, and environment. Goals build a foundation for more detailed policies and recommendations in the plan. The community may wish to delegate goal writing to a steering committee or an advisory group, subject to review and comment by a larger representative cross-section of the population.

**11 Establish Policies**

Goals should inform policies. Local government relies on policies to administer regulations, set standards, and invest in community programs and facilities. The job of writing policies typically falls to an advisory group selected by the Governing Body, sometimes supported by a technical committee of urban planners, administrators, engineers, financial experts, and others, either from within the community or aided by regional organizations actively involved with the community.

**12 Identify Projects**

Projects comprise investments and other actions to address post-disaster needs and opportunities. These may include the construction and reconstruction of facilities, infrastructure, or housing, and the provision of services. Project examples include the reconstruction of a damaged school or community center. Service changes may be illustrated by a new initiative for senior services or improvements to emergency operations and improved resiliency. A steering committee or advisory group can help the community assemble a descriptive project list, assisted by technical and professional experts.

**13 Develop Implementation Strategy**

To implement the recovery plan, the community needs to specify steps to be followed, accompanied by a designation of responsible entities. The plan's Implementation Matrix provides a composite view of projects and policies, including the means needed to implement them. After the plan is adopted, the Matrix can be used as a tracking device to aid in project management.

**14 Design Monitoring & Evaluation Program**

Depending on the scale of the disaster and the size of the community, protocols for monitoring recovery and evaluating progress should be established to include workable steps tailored to the availability of staff or volunteers. A timetable should be established in keeping with other management protocols. The frequency of performance review and level of detail should be established by the Governing Body, mirroring other municipal performance measurements such as annual financial audits.

**15 Update Plan**

A recovery plan must be periodically updated to account for progress made as well as the identification of new information. The frequency and scope of plan updates are important policy considerations of the Governing Body and should be done in concert with state and federal funding agencies administering disaster recovery grants. Alterations should occur whenever a disaster strikes or when other plan updates are scheduled, such as a revised hazard mitigation plan.

## Community Engagement

The development of the plan involved significant community engagement. Specific techniques included public meetings, community open houses and visioning meetings, one-on-one discussions and interviews with elected officials, presentations to the Board, participating in community events, and conducting the community design workshop.

### **Meetings with Mayor and Board of Commissioners**

It was determined that the Mayor and Board should serve as the Recovery Committee. To accomplish this, a number of meetings were held with the Mayor and Board of Commissioners. Following an introductory meeting, other sessions were held at key points in the planning process. The HMDRRI team also met with the Town Manager regularly to seek feedback and to coordinate events such as the Open House & Visioning Meetings, the Community Design Workshop, and other public meetings.

### **General Meetings**

A series of meetings was conducted with local officials, including the Mayor, Commissioners, and the Town Manager. Federal, state, and regional officials were also included throughout the planning process to identify issues and opportunities, as well as potential projects.

### **Open House and Visioning Meeting**

Two open houses were held for residents of Princeville in order to provide them with the time and space needed to talk in depth with HMDRRI Team members about greenspace, affordable housing, infrastructure, mitigation, health issues, and other recovery topics important to them. The meetings also served to create the town's vision for the recovery plan and to identify associated goals. Members of the community also participated in discussions with the design team throughout the five-day workshop and associated field visits.

### **Community Design**

The North Carolina State University's College of Design is a member of the HMDRRI team, and one of its design classes worked with Princeville to develop a number of innovative redevelopment strategies. Specific actions included developing a historic trail plan and greenspace concept and playing a leadership role in the 5-day Community Design Workshop.

### **Interviews and Meetings**

In order to gain an understanding of Hurricane Matthew and the impacts of the storm on the community, the HMDRRI team met with local officials, residents, as well as agencies and organizations that have played a role in assisting the town recover. These occurred under auspices of the town's Advisory Group that met monthly and the Princeville Task Force organized by FEMA and North Carolina Division of Emergency Management.



## CHAPTER 10

# MONITORING, EVALUATION, AND UPDATING

A recovery plan should serve as a living document, and it should be regularly monitored, evaluated, and updated to address changing conditions in the community, county, region, and state. The plan should also serve as a means to incorporate new analytic techniques and information, including that created before and after disasters. The following section described important elements of this process, how and when the recovery plan should be monitored, evaluated, and updated, and who should assume these tasks over time.

### *Plan Monitoring and Evaluation*

#### **Changes in Land Use, Population, and the Economy**

Understood in the context of disaster recovery, these conditions include changes in growth and land use (i.e., increase or decrease in housing, businesses, public facilities, etc.), population changes (i.e., increases or decreases in population size and makeup to include, in particular, socially vulnerable populations like the elderly, poor, single mothers, and non-English speaking residents), and changes in the local economy (i.e., loss or gain in new businesses or investments, changes in the regional economy, etc.).

#### **Changes in Hazard Risk**

Other reasons for keeping the plan updated include new information about a community's hazard risk gained through new analyses and mapping techniques. In many cases this information will be found in a hazard mitigation plan or a more accurate assessment of risk may be undertaken after a disaster occurs. Evaluating this information and incorporating it into the recovery plan is critically important.

Following disasters also provides a good time to update the recovery plan as the most recent disaster may test and expose areas of the recovery plan that need to be improved. In addition, the impacts of other disaster are likely to be different than those sustained following Hurricane Matthew. This requires the modification of the recovery plan to account for differing issues, needs, and resources available from aid providers like state and federal agencies.

### Changes in Local Policies and Plans

The community may adopt new policies or plans that should be reflected in updates to the disaster recovery plan. For instance, if a new comprehensive land use plan is adopted, their goals, policies, and projected actions should be accounted for and compliment those actions found in the recovery plan. Or if a downtown redevelopment strategy is adopted, it should recognize the actions in the recovery plan.

### Changes in Technology and Data

An important reason to update plans is the creation of new technology and analytical tools. An example that has been included in most plans for some time includes the use of Geographic Information Systems (GIS). New advances in other technology and analytical tools should be considered when applicable. In the case of North Carolina communities, the state is fortunate to have access to cutting-edge floodplain mapping and risk assessment tools provided by the North Carolina Division of Emergency Management. The Flood Risk Information System should be used as appropriate to help assess flood hazard risk. New data, drawn from Hurricane Matthew and future floods should also be incorporated into future recovery plan updates. This data may be drawn from other sources, such as new or updated plans or information collected by the County, Regional Councils of Government, universities or other organizations.

### *Tracking Plan Monitoring, Evaluating, and updating*

This section of the plan will address the process by which the plan is monitored and evaluated. Important questions include:

- Who will monitor and evaluate the recovery plan?
- When will the recovery plan be updated (pre- and post-event)?
- How will the recovery plan be updated?

### Plan Monitoring and Evaluation Process

It is the responsibility of the Town Council, in coordination with the Recovery Committee and Town Manager or their designee to monitor and evaluate the recovery plan over time. It is recommended that the Town assign an individual and an alternate to commit to this process. Changes to the recovery plan should be documented, incorporated into the revised plan, and these changes should be voted on by Town Council. The Town Council and Recovery Committee may also propose changes to the plan should other changes occur in the Town such as the adoption of new policies, plans, public

investments, and growth. A broader description of the overall planning process is found in Chapter 7, including a discussion of the recovery committee.

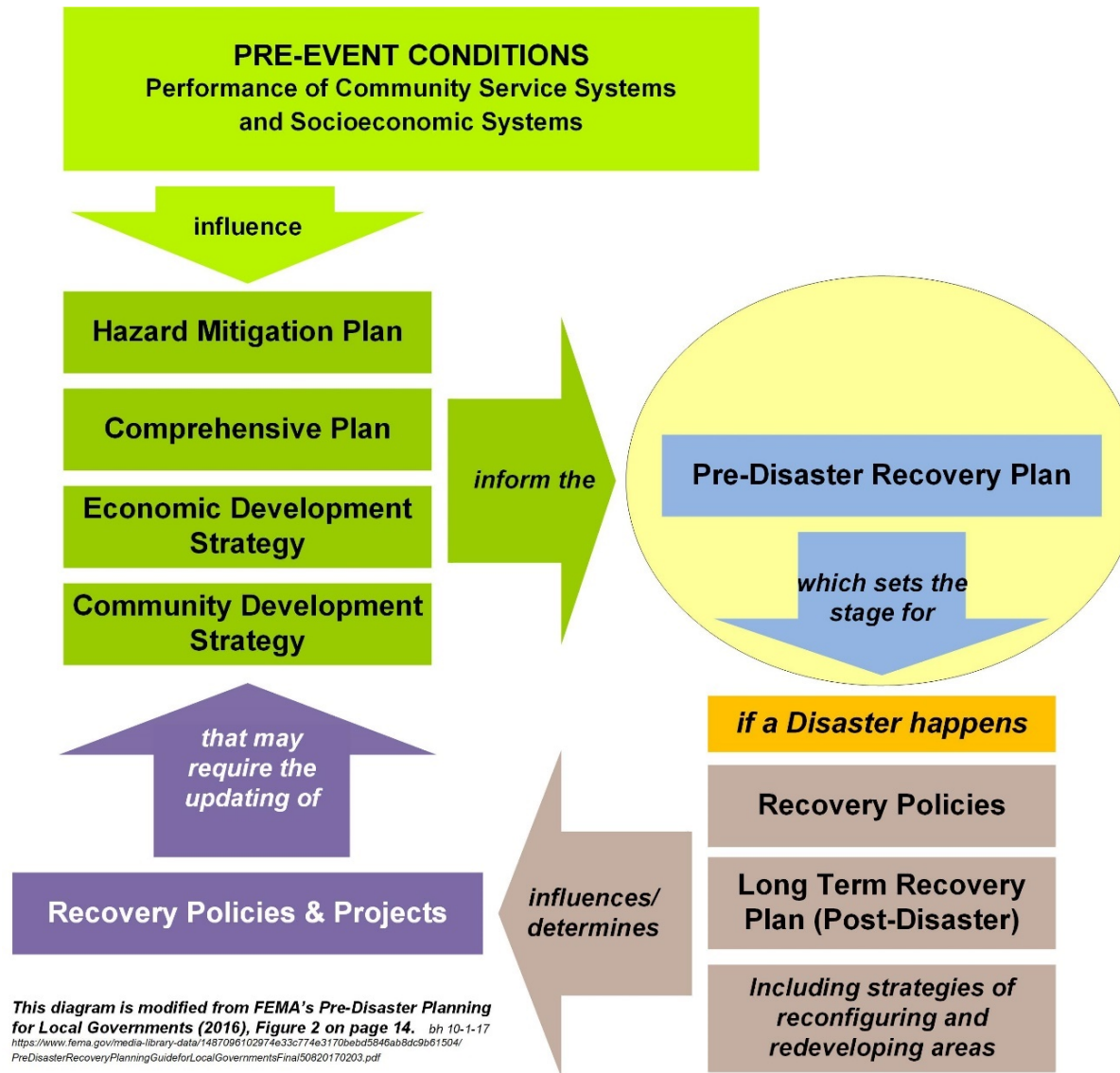
### **Plan Monitoring and Evaluation Schedule**

Given this plan is focused on the recovery from Hurricane Matthew, the description of the monitoring of the recovery plan will focus on this disaster. The monitoring of the plan will rely on the use of the action item matrix found in Chapter 6, Action Items (policies and projects), and Implementation Strategy.

### **Updating the Disaster Recovery Plan**

The recovery plan should be updated every five years, unless a federal disaster declaration occurs in your county or a non-declared disaster occurs that the Board of Commissioners and Recovery Committee believed merits changes to the plan. If a future disaster occurs, the Town should update the plan no later than 6 months after the event. It will be up to the Recovery Committee to assess and suggest needed changes and it is up to the Board to approve these changes, subject to its input and deliberation. At a minimum, actions should include reviewing the vision, evaluating current goals as well as existing policies and projects, assessing community setting and assets, and evaluating recommended action items and associated funding. Figure 31 illustrates a cyclical review process, especially for instances in which a new disaster occurs, leading to a update of the recovery plan due to changing conditions that likely include a number of mitigation upgrades because special mitigation funding typically accompanies a disaster, due to provisions of FEMA's Hazard Mitigation Grant Program (HMGP).

Figure 31: Community planning for disaster preparedness and recovery



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## APPENDICES

Next, a series of appendices provide descriptions and weblinks to HMDRRI studies and resources used in the development of this plan. Appendices A-F represent HMDRRI-led studies. Appendices G-I represent additional plans and studies conducted by other organizations. Appendix K and L contain lengthier material documenting public feedback during community engagement activities.

## APPENDIX A: HOMEPLACE

The HomePlace document's primary focus is on community-specific designs to include open space management and residential construction. The greenspace concept emphasizes an expanded trails network that takes advantage of the community's location on the Tar River, and additional greenspace of the northwest quadrant of the town resulting from voluntary relocation and residential buyouts. In addition, several housing designs were developed to offer possible options for those choosing to build replacement housing. The Princeville HomePlace document can be accessed at:

<http://coastalresiliencecenter.unc.edu/wp-content/uploads/2017/10/HomePlace-Princeville.pdf>.

## APPENDIX B: ENGINEERING STUDIES AND RECOMMENDATIONS

Three major studies of Tar River flooding are directly relevant to Princeville. They include:

- 1) US Army Corps of Engineers: [http://hdsc.nws.noaa.gov/hdsc/pfds/pfds\\_map\\_cont.html?bkmrk=nc](http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=nc)
- 2) Moffatt & Nichol: Extensive research about flood dynamics in different parts of the town.
- 3) NC Emergency Management: Tar River Basin Study:  
[https://files.nc.gov/rebuildnc/documents/files/tar\\_mitigation\\_report.pdf](https://files.nc.gov/rebuildnc/documents/files/tar_mitigation_report.pdf)

## APPENDIX C: LAND SUITABILITY ANALYSIS

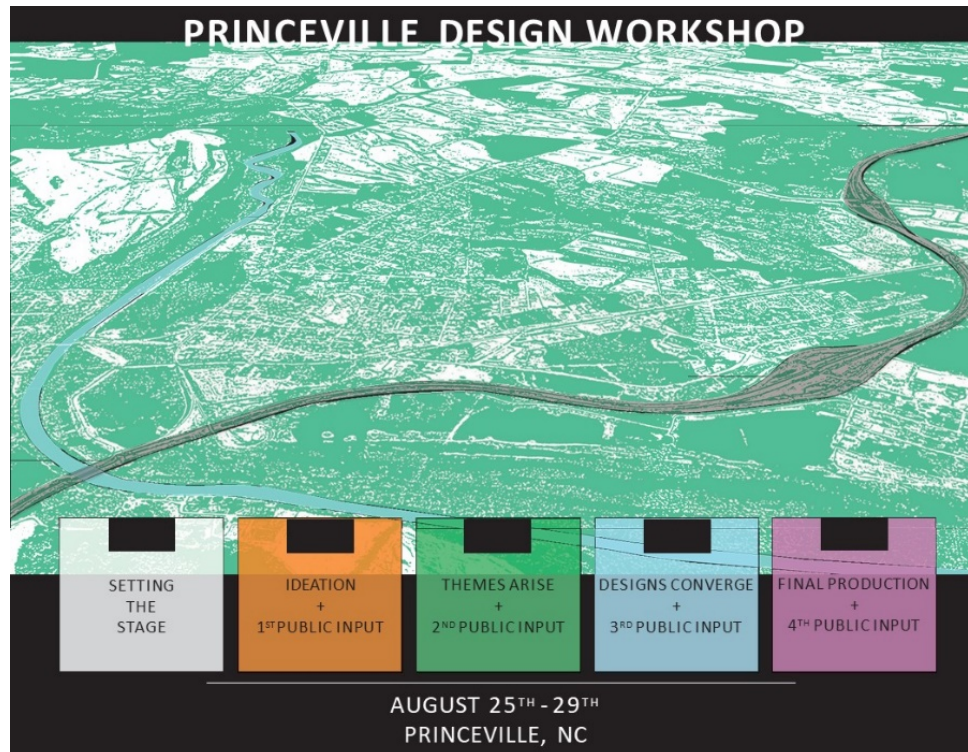
Land suitability analysis (LSA) techniques were used to identify and prioritize the most appropriate areas for development or redevelopment outside of hazardous areas that are also within the community and close to existing infrastructure. This type of analysis is intended to inform communities as they try to develop relocation strategies for those who are displaced or are considering permanent moves while alleviating the potential loss of local tax revenues. The Princeville Land Suitability Analysis report can be accessed at: <http://coastalresiliencecenter.unc.edu/princeville-lsa-briefing/>

## APPENDIX D: TECHNICAL MEMO: LAND SUITABILITY ANALYSIS

Land suitability analysis (LSA) typically uses a computer-based geographic information system as a primary tool, however many steps calculating land suitability are performed with a spreadsheet computer program such as Excel. This appendix provides a detailed description of steps involved, reports generated, and maps produced. Because this is a community-oriented decision support technique, engagement with the community was used when calibrating the weights or rankings of many factors. Participants included municipal staff, advisory groups, and elected officials. The appendix includes a flowchart of the process and sample tables and maps. The Technical Memo can be accessed at: <http://coastalresiliencecenter.unc.edu/wp-content/uploads/2018/11/LSA-Technical-Memo-1.pdf>

## APPENDIX E: PRINCEVILLE COMMUNITY DESIGN WORKSHOP

The Princeville Community Design Workshop, a 5-day intensive design-based event, brought together land use planners, landscape architects, architects, engineers, disaster recovery and hazard mitigation experts, and others to assist the Town of Princeville and its residents visualize varied community development options for a 53-acre parcel of land. This appendix provides a visual synopsis of the 5-day event, drawing from presentation slides and photos followed by a more detailed description emphasizing four guiding principles that emerged from the event. Each design principle is discussed in a design framework that is intended to help Princeville become more resilient.



# DAY ONE - FRAMING THE ISSUE

INTRODUCTION  
TECHNICAL PRESENTATIONS TO HELP BRING THE DESIGN AND RESOURCE TEAMS UP-TO-SPEED SITE TOUR OF EXISTING TOWN, SHILOH LANDING, AND 52-ACRE SITE



**HISTORIC PRINCEVILLE**  
From Slavery to Freedom Hill

During the Civil War, thousands of men escaped to U.S. Army bases, and some became Union soldiers. American-born Regulators fought in the 1850s, 1860s, and 1870s. U.S. Freedmen Troops, 36th U.S. Colored Infantry, and U.S. Army Corps of Engineers were also present at U.S. Army bases. Many were killed in the process of the Civil War and Reconstruction. The historical site was established as a National Historic Landmark in the 1990s.

Princeton, North Carolina was established in 1865. The town was founded by freed slaves and Union soldiers. The town was named in honor of the late General George Washington Meade. The town was founded on the site of a former plantation. The town was founded on the site of a former plantation. The town was founded on the site of a former plantation.

**PRINCEVILLE DESIGN WORKSHOP**

Edgecombe County  
Planning & Inspections  
Local Codes & Standards

**Town of Princeville**  
Past and Present Flooding

**Princeville Design Workshop**  
Hurricane Matthew: HMGP Update

**PRINCEVILLE AND THE NATIONAL FLOOD INSURANCE PROGRAM**

Dan Brubaker, PE, CFM  
NC NFIP Coordinator

**Flood Countermeasures Update**

August 25, 2017

**PRINCEVILLE, NC**  
FLOOD RISK MANAGEMENT  
FEASIBILITY STUDY

Presentation at the Princeville Community Design Workshop

**OUR DREAMS FOR THE FUTURE**

Community Dreams  
VISION GOALS OBJECTIVES POLICIES PLAN

# DAY TWO - IDEATION

DEVELOP DIAGRAMS AND SKETCHES ILLUSTRATING IMPORTANT CONNECTIONS, RELATIONSHIPS AND ASSETS WORK THROUGH MANY IDEAS AND WAYS OF RESPONDING TO MAJOR ISSUES  
FIRST PUBLIC ENGAGEMENT TO START DEVELOPING IMPORTANT THEMES, PLACES AND CONNECTIONS



# DAY THREE - THEMES ARISE

DESIGN TEAMS BEGIN TO CREATE PLACES, SPACES AND PROGRAMMING IN SUPPORT OF THEMES THAT REFLECT INPUT FROM PUBLIC ENGAGEMENT

SITE-SCALE DETAILS EMERGE AND ARE PRESENTED TO COMMUNITY IN EVENING OPEN HOUSE



# DAY FOUR - DESIGNS CONVERGE

DESIGNS FROM EACH OF THE THREE TEAMS BEGIN TO CONNECT AND BUILD OFF OF EACH OTHER PUBLIC COMMENTS DURING OPEN HOUSE SUPPORT FOCUS AREAS, CONNECTIONS, AND THEMES






# DAY FIVE - FINAL PRODUCTION


PRODUCTION OF FINAL DESIGN PRODUCTS, AND PRESENTATION GRAPHICS. FINAL SUMMARY PRESENTATION TO COMMUNITY  
OPEN HOUSE STYLE PRESENTATION OF WORK IN DETAIL




# CAPACITY BUILDING




## INFRASTRUCTURE



- Coordinate infrastructure investments/placement with Eric Evans, Edgecombe County Manager.
- Develop infrastructure plan for the 52-acre site, including its connectivity to existing Town and larger tract of land to the North of the 52-acre site. Assess federal and state programs that fund infrastructure investments.
- Assess the incorporation of PA 404 mitigation into infrastructure repair post- Matthew
- Assess additional repairs to the levee relative to meet 100-year level of flood protection




## EMERGENCY SERVICES




- Assess the degree to which PA and other funding sources can assist in the relocation of the fire station to the 52-acre site.
- Explore the use of PA 406 funding to incorporate additional flood risk reduction measures into the construction of a new fire station.
- Explore the use of the potentially relocated school as a hurricane shelter
- The fire chief estimated future needs of about 45,000 square feet for emergency facilities (about 1 acre). When we include parking and space for trucks to maneuver, this increases to 2-acres total.

## GOVERNANCE



- Work with County and Town to explore the development of a Community Development Corporation or other quasi-governmental agency able to assist the Town with a range of community development issues.
- Schedule meeting with federal, state, regional agencies, foundations, corporations and others to assess their resources (funding, policies, technical assistance) relative to needs identified in Community Design Workshop and Long- Term Recovery Plan.
- Explore the use of funding options to hire additional staff to assist the Town with disaster recovery efforts and community development.

## EDUCATION



- The current school takes up a 10.6-acre parcel so we are assuming the new school will take up about 11 acres including parking and fields.
- There is also the potential to include a public library branch connected to or next to the public school. A public library requires one parking space per 450 square feet and 2 per every 3 employees.
- Explore the use of the potentially relocated school to serve as a hurricane evacuation shelter

# 'SOUTHPOINT' HOUSING

## ZONING

For any development to occur on the 52-acre site, the site will need to be rezoned to R-10 (medium density residential) and B-2 (commercial).

Rezoning to R-10 - Single-Family and Multi-Family

Traditionally, R-10 requires 10,000 square feet minimum lot sizes for single family units.

## DEVELOPMENT

Using cluster development (already allowed in the zoning ordinance for the county) and a PUD, the lot size can be reduced to 7,500 square feet. The PUD requires the lot to be at least 25 acres.

If we want to develop affordable housing, to get 4% tax credits through LIHTC, a development needs to include at least 180 units. With minimum lot sizes at 7,500 square feet, this requires 25.25 acres to be dedicated to residential development in the 52-acre site, which would be just over the minimum acreage to be qualified as a PUD.

Using the "Bogue" rendering from the HOME PLACE document, the dimension of an average house are 45 x 45 feet. Including the set-backs, the home would take up a 5,500-square foot parcel which leaves about 2,000 square feet in the back of each lot to be a part of the public space required in a cluster development.



## DISPOSITION AND RECOMMENDATION

Recommended disposition options

1. Sealed Bid for a sale to a private developer - award to highest bid or reject all offers. Upset Bid for a sale to a private developer - award to the highest bid or reject the offer. This process can go on until the bids stop.
2. Direct sale for affordable housing (appraised value) - "community development" statute

Create an RFP to solicit developers separately (i.e. Affordable housing developer and a market rate developer)

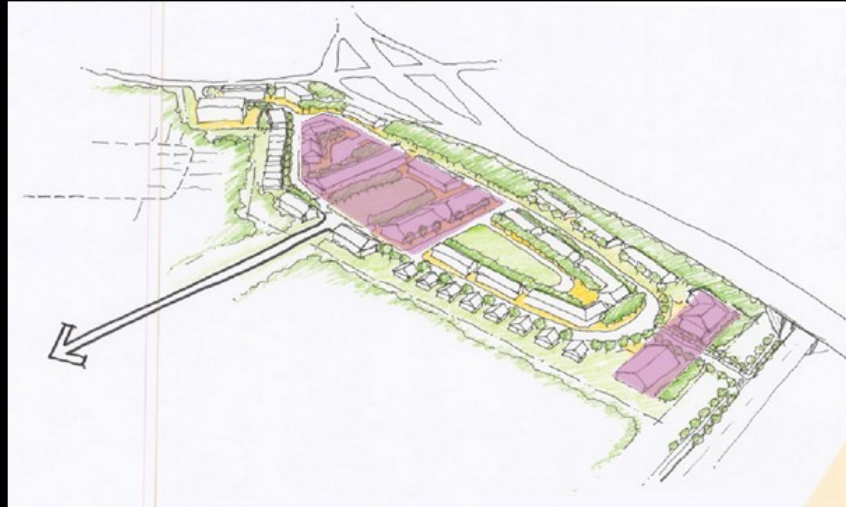
# 'SOUTHPOINT' COMMERCIAL DEVELOPMENT

## CONSIDERATIONS

Assume a ~13 acres dedicated to commercial

Establish B-2 zoning district

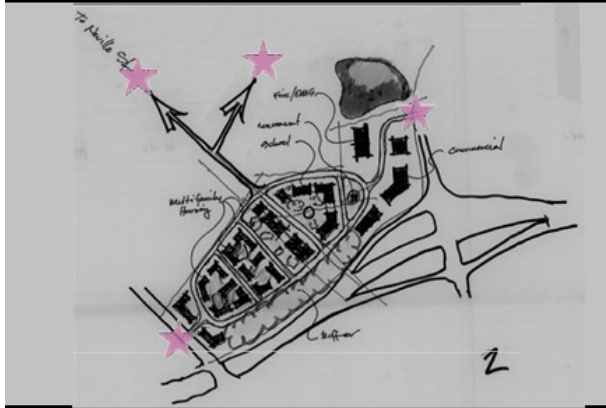
Goal of attracting highway traffic while being a center for retail/commerce and employment for the residents as well.



## CONNECTIONS

Four connections to 'Southpoint' site should be considered

- 1) Neville rd. Extension - could be a boardwalk or greenway
- 2) Southern terrace entry/exit at property boundary
- 3) Northern entrance to 'Southpoint' requires land acquisition up to existing lake.
- 4) Existing @ althwy 64






## DISPOSITION AND RECOMMENDATION

Recommended disposition

1. Direct sale for economic development (fair market value) - hourly wages of project should be considered

Recommendation - Determine whether or not to parcel out commercial space to sell.

## CASE STUDY COMPARISON

POPULATION (2010)	2082	2035	8461
REVENUE (16'-17')	\$975,000	\$2.7 MIL	\$10 MIL
EXPENDITURES (16'-17')	\$975,000	\$2.7 MIL	\$10 MIL
MEDIAN AGE	41	35	44
MEDIAN INCOME	\$31,500	\$22,000	\$33,800
MEDIAN HOME VALUE	\$75,700	\$78,700	\$137,600
PROPERTY TAX (2015)	\$800-1500 /HH	<\$800 /HH	\$800-1500 /HH
LAND AREA	1.5	1.3	6.1
SALES TAXREVENUE	\$349,000	\$500,000	\$1.3 MIL
TOWN STAFF	7	5	31
PERCENT BLACK POP.	96%	19%	56%
POP. W/INCOME <10K	27%	10%	16%
POP. EMPLOYED	38%	37%	36%

## NEXT STEPS

- Work with Town to agree on design concepts
- Annex land
- Land purchase
- Coordinate actions with County infrastructure investments
- Assist in the development of an RFP to operationalize design concepts
- Identify resource providers (federal, state, regional, foundations, non-profits, corporations) and convene to assess how their resources (funding, policies and technical assistance) can meet Princeville's needs.
- Identify quick wins/low hanging fruit (e.g., signage)
- Based on development of matrix identifying needs and resources, develop and carry out implementation strategy

**EXECUTIVE SUMMARY OF PRINCEVILLE'S COMMUNITY DESIGN WORKSHOP****Recommendations and Resources**

The Community Design Workshop involved creating visual representations of community development options spanning infrastructure, housing, public facilities, businesses, and community open space on a 53-acre parcel of land slated to be annexed by the Town of Princeville, and sought to depict how this parcel can be physically, socially, environmentally, and economically connected to the existing Town of Princeville and adjacent parcels of land. The workshop emphasized an iterative, five-day design process involving a team of architects, land use planners, landscape architects, civil engineers, historians, disaster recovery and hazard mitigation experts, and others. The work of the design team was informed by Town of Princeville officials and residents as well as a resource team comprised of state and federal agencies, university experts, regional planning organizations, and others. The citizens and Town officials were closely involved in the drafting of the design and community development options during the week-long process. This was accomplished through regular feedback sessions held throughout the workshop. Emphasis was placed on flood resilience, social and community cohesion, equity, history and culture, quality of life, and other key aims identified by the community.

**GREATER PRINCEVILLE**

The design team framed the 53-acre site in the context of a "Greater Princeville." This allowed the conversation to shift from a competition between investing in the historic town center versus moving the town center, to reinvesting and protecting a greater community that links old and new. A vision of a larger and more sustainable community will take time to achieve. However, with a focus on key design principles expressed in the following actionable steps, the vision can be realized over time.

**DESIGN PRINCIPLES**

The design team proposed four guiding principles that capture 1) the comments made by Princeville residents, 2) the information shared by experts, and 3) best professional practices for resilient design and planning. The principles are REMEMBER, NURTURE, PROTECT, and CONNECT.



*The images on the following pages are intended as a mock-up for the above-titled “Hurricane Matthew Disaster Recovery and Resilience Initiative (HMDRRI) Recommendations, and Resources” report which documents the Princeville Design Workshop. Four such reports are presented here. The current report was formatted as PowerPoint slides, however the “text version” is repeated here, as well.*





### THANK YOU

The Design Team would like to thank the many collaborators, partners, and supporters of the Princeville Workshop.

**Design Team**

Austin Allen	Chastain Karmath
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Yveson Frazier	Jackie Turner
Stephanie Hesterfield	Alan Wilkins
Dawn Johnson	Richard Whitley
Carline Johnson	Brian Williams
Kiki Lewis	Debra Williams
	Sam Young

**Resource Team**

The team greatly appreciated the technical assistance and presentations of knowledge experts during the event.

### THANK YOU

Dyrlife Jenkins, Edgecombe County Planning Director  
 Dan Stokelder, York County, NC2019  
 Eric Evans, Edgecombe County manager  
 Elise Sargent, USACE  
 Joe Wright, NCDM Deputy Director  
 John Turner, NCDM  
 Johnny Martin, Moffat & Nichol  
 Lily Turner, FEMA, Federal Coordinating Officer  
 Malvika Lavin, NCDM  
 Renee Kester, NCDM

In particular, the team would like to acknowledge the extraordinary efforts of the NC Department of Public Safety and Emergency Management to organize and run the event. Let Mike Sorensen and his team. Let Derangy Sorenson and his team.

Finally, The Design Team would like to offer its sincere gratitude for the welcome, hospitality, and timely spirit of the people of Princeville, North Carolina. We recognize your strength and resilience, and we hope that this document supports your continued pursuit of a Greater Princeville.

The team greatly appreciated the technical assistance and presentations of knowledge experts during the event.

### EXECUTIVE SUMMARY

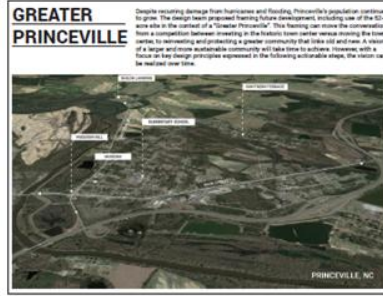
The purpose of the Princeville Workshop was to develop landscape scenarios regarding a 62-acre site and its connections to the existing Town of Princeville that will inform a scope of work used to develop the site. The Workshop involved creating visual representations of community development options spanning infrastructure, housing, public facilities, businesses, and community open space on a 62-acre parcel of land slated to be purchased by the Town of Princeville. Including how this parcel can be physically, socially, environmentally, and economically connected to the existing Town of Princeville and other parcels of land adjacent to the Town that have yet to be acquired.

This process followed accepted practices associated with intensive community development initiatives, including an iterative, five-step design process involving a team of architects, land use planners, landscape architects, civil engineers, historians, economic development experts, and others.

The work of the design team was informed by Town of Princeville officials and residents as well as a resource team comprised of state and federal agencies, university experts, regional planning organizations, and others.

The citizens and Town officials were closely involved in the drafting of the design and community development options during the week-long process. This was accomplished through regular feedback sessions held throughout the workshop.

Emphasis was placed on food resilience, social and community cohesion, equity, history and cultural quality of life, and other less often identified by the community. The resulting design scenarios were presented to the Town of Princeville and state officials. This information serves to inform the development of the 62-acre site.



### PRINCIPLE: REMEMBER

This 'remember' principle notes development design decisions in the need to commemorate and extend the rich historical heritage of the community.

Many workshop attendees used Princeville's history as invaluable and should be recalled. They expressed concern with the lack of sufficient documentation, integration, and communication of Princeville's history. Currently, there are only two remaining structures that qualify for the National Register of Historic Places. However, there are other places including the existing cemetery and Shiloh Landing cemetery outside of the town limits, including those, and other nearby, unincorporated places can create a critical mass of historic places around which strategic strategies can emerge.

**Action:**

- Develop a heritage trail if Design team suggested both a walking and a boating experience. As well as signage, interpretation, and interpretive site design elements throughout the community.
- Calculate a Heritage ROI of Design team suggested: historic, rehabilitation/creation of interpretive elements, programming as for events and daily activities like a market.
- Document the Cemetery if complete documentation (partnering with USACE) needed from the town's history.
- Include Shiloh Landing if expand town boundaries to Princeville Shiloh Landing.
- Develop and showcase the Museum if ongoing restoration, potential for expansion into a "heritage" environment with historic and outdoor events.
- Develop a Welcome Center if adaptive reuse of the existing gas station (to undergo final feasibility study) as a gathering and welcome center for visitors and local residents' activities.



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Next, each guiding principle is discussed, followed by a proposed framework for a resilient Princeville.

## 1. REMEMBER

**The ‘remember’ principle roots design decisions in the need to communicate and extend the rich historical narrative of the community.**

Many workshop attendees said Princeville's history is invisible and should be revealed. They expressed concern with the lack of sufficient documentation, interpretation, and communication of Princeville's history. Currently, there are only two remaining structures that qualify for the National Register of Historic Places. However, there are other places that merit attention including the existing cemetery and Shiloh Landing (currently outside of the town limits). These and other currently undocumented places can create a critical mass of historic places around which interpretive strategies can emerge.

**Actions:**

**Create a heritage trail** — Create a walking and a boating experience, to include signage, interpretation, and visitor-ready site design elements throughout the corridor, drawing on the work of the NCSU College of Design's Heritage Trail project.

**Celebrate Freedom Hill** — Increase the height of Freedom Hill, create interpretive elements, and program for events and daily activities like a market.

**Document the Cemetery** — Complete documentation, including the steps required for inclusion of the cemetery as a historic landmark.

**Include Shiloh Landing** — Expand town boundary to include Shiloh Landing and link the site to Freedom Hill and the 53-acre site through the implementation of the Heritage Trail project.

**Restore and Reuse the Museum** — Continue restoration, including the potential for expansion of Freedom Hill into a "campus" environment with indoor and outdoor events.

**Develop a Welcome Center** — Explore the adaptive reuse of the existing gas station (no underground tanks present) as a welcome center for visitors.

## 2. NURTURE

**The principle behind 'Nurture' acknowledges that some parts of Princeville can adapt to become more resilient and respond to current community needs.**

Accomplishing this aim requires transforming housing and buildings in flood-prone areas. Additional actions include developing innovative approaches for reusing vacant land following the buyout of flood-prone housing. The success of these strategies necessitates identifying community leaders that can help guide this multi-faceted effort, drawing on the Greenspace concept found in Appendix A.

**Actions:**

**Elevate homes** — The elevation of homes, which must comply with the Advisory Base Flood Elevation maps, will result in many homes elevated to significant heights. This will require developing guidelines to respond to local housing character and elderly access-related issues.

**Create demonstration projects** — Rebuild new multifamily structures that comply with ABFE standards and create design approaches to make elevated structures accessible.

**Reuse vacant land** — Partner with organizations like Conetoe Family Center to create value in vacant land through community gardens, art, and greenspace, drawing on the HomePlace document found in Appendix A.

**Plan for transit** — Plan for important connections to future transit including streetscapes, gateways, and other pedestrian improvements.

**Plan for Neville St. extension** — Support community design that fosters connections to other neighborhoods in Greater Princeville.

### 3. PROTECT

**This design principle focuses on the need to make essential community services safe from flooding, to include moving critical facilities to high ground as part of a greater Princeville strategy.**

#### Actions:

**Annex high ground** — Work with the State of North Carolina to acquire and annex a 53-acre parcel with Highway 64 access. The parcel is outside of the 100-year floodplain and suitable for mixed use development.

**Relocate essential services** — Build a fire station and other essential services on the 53-acre site. Criteria for these services include uses that can serve the community during a hurricane or flood. Structures include the school, fire station, town hall, and other multi-purpose buildings.

**Create a mixed-use center** — Add other uses over time to activate the 53-acre site. Uses could include multifamily and senior housing, visitor center, public space, and commercial uses that leverage Highway 64 frontage and generate town revenue in the short term.

**Create Neville Street Extension** — Design the 53-acre site to enable connections into the town via Neville Street.

**Foster governance** — Build Princeville's governance capacity through the town's involvement in the planning, construction, and management of the 53-acre site.

### 4. CONNECT

**This design principle focuses on the potential to leverage all area development to activate a triangle (defined by Mutual Boulevard, Main Street, and Shiloh Farm Road) referred to as Greater Princeville. With the potential inclusion of Shiloh Landing as well as over 150 acres of developable land contiguous to Princeville (located outside of the 100-year floodplain), Greater Princeville, could grow enough to invest in more robust flood protection and transit options. Significant investments nearby, including CSX in Battelboro, could position Princeville to benefit from regional reinvestment.**

**Actions:**

**Annex additional land on high ground** — Acquire and redevelop adjacent land to generate a sufficient tax base to improve local revenue, services, and offset additional flood protection costs.

**Extend flood protection** — Leverage improved flood protection, particularly along the northern edge of Greater Princeville.

**Innovative flood protection** — Protect Greater Princeville through the creation of constructed lakes, ponds, and wetlands. These systems offer ecosystem and recreation value in dry times and can augment other flood protection measures.

**Create transit and walking improvements** — Maximize the use of the adjacent rail corridor including a trolley, stops in strategic locations, and walkable streets connecting neighborhoods from Freedom Hill to the 53-acre site.

## Greater Princeville: A conceptual framework for building a resilient community

**Vision**

With an emphasis on flood resilience, social and community cohesion, equity, history and culture, quality of life, and other key aims identified by the community, pursue community development options spanning infrastructure, housing, public facilities, businesses, and community open space throughout the Town of Princeville.

The long-term vision includes annexing a 53-acre parcel of land and physically, socially, environmentally, and economically connecting this parcel to existing and planned community assets.

## Framework for a Resilient Princeville

### 1 | Secure 52-acre Parcel

Develop funding, management, and phasing plans related to the acquisition and development of the 52-acre parcel.

### 2 | Build Social Capacity

Invest in people and programs that build knowledge and confidence between local, county, regional, and state agencies and organizations.

### 3 | Leverage History

Invest in people and programs that seek to make both tangible and explicit the powerful story of Princeville and its people across local, state, regional, and national histories.

## Focus Area 1: Secure 53-acre Parcel

### Infrastructure

design and construct sewer, water, streets, utilities, and greenspace.

### Emergency Services

Relocate fire, emergency medical services (EMS), police, and search and rescue to 53-acre site.

Establish land management and contracting structure (financing, developer RFP, governance, etc.).

**Commercial**

Explore construction of varied commercial uses adjacent to highway.

## Focus Area 2: Build Social Capacity

**Princeville Fire Department**

Leverage the knowledge, political goodwill, and “Get it done” spirit of the Fire Chief.

**Fighters for Freedom Hill**

Leverage the ambitions of the group to pursue “maker space” and grants.

**Housing**

Develop housing strategies to bring back residents.

**53-acre Build-out**

Establish development initiative as training program for local staff/officials.

## Focus Area 3: Leverage History

**Reinstate Historic Designation**

Work with State Historic Preservation Office (SHPO) to achieve historic designation.

**Freedom Hill Memorial**

Seek funding (i.e., National Endowment for the Arts Our Town Grant) to construct memorial to celebrate this national historic site.

**Shiloh Landing**

Work with the state to incorporate interpretive elements into the existing site and Heritage Trail Project.

**Princeville Heritage Trail**

Work with state, regional, and academic partners to further develop this concept.



## APPENDIX F: PUBLIC ENGAGEMENT

The following weblinks highlight news stories and examples of public engagement activities organized by HMDRRI as part of the Princeville recovery planning process. The Princeville Design Workshop archives, reports, materials, and summary (item 5 on the list) contain a wide range of files containing presentations, reports, sketches, photos, and related material.

New York Times video report (3 min)

<https://nyti.ms/2pgUyNF>

Princeville open house (1 min)

<https://youtu.be/KJvy7jm3MTU>

Princeville open house, TV news story 7/21/17 (2 min)

<http://wnct.com/2017/07/21/princeville-town-leaders-seek-input-on-long-term-hurricane-relief/>

Princeville Design Workshop, kickoff 8/25/17 (2 min)

<http://wncn.com/2017/08/25/princeville-partners-with-design-teams-to-limit-flooding-in-the-future/>

Princeville Design Workshop archives, reports, materials, summary

<http://bit.ly/2AMO4Zi>

Princeville video: Community Design Workshop, source Rural Center and Longleaf Productions (2 min)

<https://www.youtube.com/watch?v=mYA2EkigScE>

NC State University video about Princeville workshop, August 25-29, 2017 (2-min)

<https://youtu.be/PCiE77jCxEU>

NCSU synopsis, including the 2-minute video about the Princeville Workshop

<https://news.ncsu.edu/2017/09/saving-princeville/>

TV news story: Workshop Wrap-up

<http://wnct.com/2017/08/29/princeville-wraps-up-final-revitalization-workshop/>

Guidebook for Princeville Design Workshop

<http://coastalresiliencecenter.unc.edu/wp-content/uploads/2017/11/Design-Workshop-Guidebook.pdf>

Skanska website and Princeville video

[https://partners.skanska.com/Shared%20Documents/Princeville\\_Skanska/index.html#video](https://partners.skanska.com/Shared%20Documents/Princeville_Skanska/index.html#video)

TV news coverage of reopening of Princeville museum, post-Floyd, 2011

<https://www.wral.com/news/local/video/6038273/>

## APPENDIX G: CRC HMDRRI POSTER

This graphic provides an overview and synopsis of the HMDRRI program including how the individual initiatives tie together and culminate in disaster recovery plans for Fair Bluff, Lumberton, Princeville, and Seven Springs. The poster can be accessed at <http://coastalresiliencecenter.unc.edu/wp-content/uploads/2018/04/HMDRRI-Poster.pdf>.

## APPENDIX H: EDGECOMBE COUNTY LAND DEVELOPMENT PLAN

In 2008, Edgecombe County adopted its Land Development Plan with the purpose of fostering development in compact, sustainable growth patterns that protect the agricultural economy and maintain the “rural vistas that make Edgecombe County such a beautiful place to live and work.” However, “one key concern was always of primary importance – how does Edgecombe County stop the current declining population trend and become a growing county?” The plan includes general provisions regarding flood risk, compliance with the National Flood Insurance Program, and use of information from the state's floodplain management program. The county plan designates growth areas near established towns and considers natural resources such as wetlands when proposing new development. The plan can be accessed at: <https://bit.ly/2wwAOaL>

## APPENDIX I: COMMUNITY HEALTH ASSESSMENT FOR EDGECOMBE COUNTY

The Community Health Assessment for Edgecombe County examines the social determinants of health and the patterns of disease in the county. It assigns roles and responsibilities among a number of institutions such as hospitals, clinics, and the county health department. The document can be accessed at <https://bit.ly/2PLA7TI>

## APPENDIX J: RESILIENT REDEVELOPMENT PLAN – EDGECOMBE COUNTY

Following Hurricane Matthew, the State Legislature created the North Carolina Resilient Redevelopment Planning (RRP) program in order to provide a roadmap for counties, cities, and towns in eastern North Carolina to rebuild and revitalize their damaged communities. The program empowered communities to prepare locally driven, resilient redevelopment plans to identify redevelopment strategies, innovative reconstruction projects, and other actions that seek to help communities thrive in an era when natural hazard events are increasing in severity and frequency. The report for Edgecombe County can be accessed at [https://files.nc.gov/rebuildnc/documents/matthew/rebuildnc\\_edgecombe\\_plan\\_combined.pdf](https://files.nc.gov/rebuildnc/documents/matthew/rebuildnc_edgecombe_plan_combined.pdf)

## APPENDIX K: RESPONSES FROM PUBLIC AT PRINCEVILLE OPEN HOUSES

Open house events were held July 21, July 29, and August 16, 2017. Attendees were urged to write on sticky-notes and place them on themed posters, maps, and photos on display boards. Responses have been transcribed from those notes, arranged by topic, question or image, with Event 1 representing the gathering on 7/21 and Event 1.5 indicating the gathering on 7/29. Because of a pending "environmental assessment" (EA) for recovery planning and alternate uses of funds from FEMA's Hazard Mitigation Grant Program, a separate set of posters focused on the EA questions, inviting responses to seven alternative futures. These are

highlighted in yellow, and are also depicted in a separate accompanying report (Appendix L). **TOPIC:**

### Transportation

Event	Response
1	Would be nice to have a bus/transit system
1	Provide drainage system for the Town of Princeville
1	Do not know what these maps are saying
1	What will be done with the 53 acres?
1	What is the possibility of new small businesses springing up all around the new land?
1	How would the move along 64 attract new companies for employment?

### TOPIC: Property Values (Structures)

Event	Response
1	How will this affect the Lone Pine Area?

1	How will southern terrace be incorporated into the new extension?
1	People friendly maps
1	If this is all my property is worth, please reflect it in the new tax assessment.
1	Ditches in the RR right of way
1	Build public housing on 53 acres

**TOPIC: Property Values**

Event	Response
1	Is it possible for Princeville to have its own police department?
1	Is it possible for the Town Hall to remain in its present location?
1	People friendly maps are needed
1	We need a new fire station location to help with fire safety in the surrounding areas
1	Public housing in the 53 acres
1	This area flooded in 1999. I would not like to see the Town Hall move.

**QUESTION: "Build Princeville back better." What does this mean to you?**

Event	Response
1	Valley Forge style destination
1	Princeville needs to be self-supporting + self-sustaining

1	Residential areas, commercial areas, businesses, recreational areas, gated community, park and historical veteran memorial, grocery store - Walmart, fast food restaurant, civic center, home depot, bulk buying, kids - Toys-R-U's, TEEN CENTER
1.5	Collaboration with all stakeholders
1.5	Princeville is going to be a blessing in this community. Thanks for the invite - Reginald Clark
1.5	Find a way to get along better. Take care of family
1.5	Better jobs
1.5	Fix the water problem. Make it so: businesses, police dept, etc. can come back to town - so people don't have to leave to get things done.
1.5	God will have his way in the rebuilding of Princeville. Amen.

**QUESTION: How should historic parts of town connect with newer parts of town?**

Event	Response
1	more historical artifacts
1	more history needed to be captured in the museum
1	walking trail
1	Put historic things in it and add on
1	I can't see a connection other than through land. However, I think the newer part of Princeville should bare some resemblance to the old part of Princeville
1	Historic should connect with T-shirts, slogans, Historic Princeville/Tarboro - sample - Bring revenue income

1	Why should they?
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### QUESTION: What questions do you have?

Event	Response
1	What is this?
1	Extend the dike.
1	Why would you move Town Hall and the Senior Center and expect people to return to that area?
1	Are you going to move Town Hall?
1	How does the town exist with less taxes?
1	Seniors are not able to walk a lot of stairs to get inside of their homes. What would a 95-year-old do?
1	What about the senior citizens that do have a problem walking up stairs?
1	Extend the dike.
1	When will all this have to take place by?
1	If you elevate my house, do I need flood insurance?
1	What are the steps to pursue help in getting a rebuild or repair?
1	If given a buyout, where do they go?
1	Can I purchase a buyout home and move to my lot?
1	What can we do to prevent some of the buyouts?
1	Some of these homes will be too high for seniors and disabled people. Do the homes come with elevators?
1	How do we find out who is on the list?

1	What is planned for someone who has land only in a flood zone? Nothing can be built on it. Is there a buyout plan?
1	What funds are available for landlords to renovate houses?
1	If you are not included in the buyout and have rental property, will HUD or NEED vouchers be issued to that piece of property?
1	Can you do a paper survey with the residents on what they desire?
1	If you aren't going to fix the dike, why would you want people to live there?
1	If a person is not getting assistance because of insurance, how long do they wait for elevation work? Can they repair if mitigation or recovery learned?
1	Who would take care of these open spaces and if allowed grow up, then it would be like growing up in the woods?
1	How will the other HMGP applications (other than the first 49) be chosen for the remainder of the HMGP monies?
1	Will the whole town be elevated?
1	What about the flooding on Beasley St by the church when it rains hard?
1	Please build public housing on 53 acres?

## TOPIC: Land Use

Event	Response
1	Invest \$ into dike improvements vs. buy-out "revitalization plans"
1	What are the facts not the maybes
1	Some citizens need financial foreclosure assistance
1	How will this plan change the valuation of single family homes?



1	Concerned citizen want to know what happens if they decide to stay - will they have any assistance with elevations?
1	Let the citizens make the final decision with FEMA's help.
1	Princeville is historical because of its sacred grounds. Please do not move
1	BS hasn't seen this. FEMA's only job was to rust away
1	Some \$ to tear down vacant houses
1	Concerned citizen want to know will everyone have a choice to move or buyout
1	Concerned citizen want to know the advantages of each decision of buying out or moving to higher ground.
1	Why not fix the vacant houses?
1.5	Prince Court behind Town Hall purchased and reconstructed for Low Income Housing... Hazard Mitigation on both Town Hall and Prince Ct.
1.5	Rebuild School System
1.5	Build more shopping centers to create jobs
1.5	Focus / Synergy
1.5	Rebuild a health service
1.5	Let the town hall and senior buildings remain in Princeville but add on to the town (extend it) Thanks!
1.5	More Retail
1.5	Create a town Support Committee
1	A rebuild with elevation only would not meet the needs of our community. There are people with health issues and elderly, elevation would not good for them
1.5	Put different offices in the town hall building

1.5	Cut these lots and add it to the water and sewage bills.o(?) pay everything get cut off
1	It will be bad if buyout with demolition for the town to lose its historical value
1	Elevation for all of our homes are too much money for some of the elderly
1.5	Make the Dam longer than it is.

**IMAGE: Princeville Flood Hazard**

Event	Response
1	It's not Princeville
1	This is a wonderful idea.
1	It flooded in 1999
1	Want to ??? The dike
1	Is it out of the flood zone
1	Retain the tax base
1	How will Southern Terrance be incorporated into the new ????

**QUESTION: What makes you proud of Princeville?**

Event	Response
1	My heritage!
1	History of starting a great community
1	OHH Housing on 53 acres

1	It's the oldest Black Charter Town
1	Rich history and culture
1	Historical town remains. Do not destroy.
1	The many problems that the town faced and it was able to bounce back. Resilient.
1	Bring people back home
1	The people who never give up

**QUESTION: How should the new land be used?**

Event	Response
1	Public Housing. PHA in 53 acres
1	Affordable housing for seniors
1	How will this new development area be connected to historical Princeville?
1	Will there be new roads to connect the old to the new Princeville?
1	Affordable Housing
1	Housing
1	Recreation place for children
1	Kids need a place to play, grow, and develop. Recreation
1	Housing
1	Will this project INCREASE city taxes?
1	Affordable Housing
1	Affordable housing. Business district. Community building.

1	Been left out
1	What happens to the current housing of Princeville ?
1	Housing -- low, moderate + market rate
1	Princeville will have shops, businesses, historical sites and educational opportunities for our future generations.
1	You should invite the youth to help with decisions about their future in past NC
1	Princeville would not be Princeville
1	Don't like moving Town Hall
1	I believe that our town should welcome other avenues of funding to help the citizens who are interested in hazard mitigation options

**QUESTION: What makes Princeville special?**

Event	Response
1	The memories. History of black owned business and independence.
1	Core for community
1	The heritage. Being the 1st town in America chartered by blacks
1	It would look like a striving community for our future generation
1	The 1st town chartered by blacks in America

**QUESTION: If you could improve one thing about Princeville, what would it be?**

Event	Response
1	To fix all the flood area where the water is coming around the gates
1	more ???
1	Need Recreation Center. Trash trucks, gutter cleaning
1	I want to see more sheriffs out in the area so that is no guns, people only in my area.
1	Dig out the river/clear debris
1	Rebuild Pioneer Court PHA
1	Fix flood gate
1	Fix flood gate
1	To build a dam foreign contractor
1	Extend the dike
1	Repair dike
1	Aishia Jones - youth IS. Would like to see more recreation for the youth, pool, basketball court, bowling alley
1	Fix flood gate
1	Clean the ditches out in the neighborhood
1	More businesses for economic development
1	Get a bill to Congress to dig the river 10 ft deeper from Rocky Mount to Greenville
1	Stop the water
1	Change the culture. From hopelessness and anger to a thriving community generating income and national recognition.

1	The Education level of the citizens
1	Dredge river out
1	Beautification. Exits to the town
1	Connectiveness - walking trails
1.5	Change the culture, from hopelessness and anger to a thriving community generating income and national recognition
1.5	Dredge River
1.5	Dig River Deeper - please make the dike safe like it should have been in the beginning.
1	Help all of the citizens that were affected by the disaster, insurance or not!
1.5	Build a dam and make the river deeper
1.5	Education + Job creation
1.5	Repair + improve dike
1.5	Library built
1.5	Build center, playground for kids
1.5	Fix all the problems that cause water to flood
1.5	STOP COMPLAINING
1.5	Unity in the community
1.5	Rebuild better homes
1.5	Give the senior citizens somewhere to live. Rebuild Jones Court.
1.5	Love each other - then we can fix the problem
1.5	Dredge the Tar River - make it wider so it will hold more water.

1	Life Centers
1	No relocation! Princeville is Princeville because of the sacred grounds
1	Do not move Princeville
1.5	Put another stop light leading to Walston Street to the school.

**QUESTION: Where do you spend most of your time?**

Event	Response
1	Home
1	Connect the two land areas by road and walking trails
1	Bring back our Princeville School
1	We need our school back. In order to do so, we need our citizens
1	Need to keep our school in Princeville
1	Children need a recreation center
1	Substitute teacher - continue to help the children
1	Work, church, town of Princeville,
1	Aftercare monitor insure career educational development
1	Volunteer for the Princeville / School Now Home

**IMAGE: Regional Map**

Event	Response
1	We all need to work together to create a vibrant Eastern NC

1	Economic Development on 53 Acres
1	53 acres is not enough to make a big difference
1	Need a Water Tower
1	Need to fix the dam
1	Need money to repair home
1	Food store
1	Bring in jobs
1	How is the 53 acres going to be used?
1	Include public housing?
1	Help get Princeville out of the flood zone and make it [not] flood anymore

**QUESTION: What are Princeville's main challenges?**

Event	Response
1	Dike. River needs to be dredged. Lack of businesses & industries
1	It would be bad if buyout with demolitioon for the town to lose its historic value
1	The buyout with demolition only would give any homeowner who would like to relocate to a non-flood zone area
1	Buyout with demolition only strategy will not meet the community desire but it may be best for the overall general welfare of the citizens
1	Families must have an option. For some, the buyout is the best option
1	For those who want a buyout grant buyout with demolition is fine, if not, stay



	1	Buyout with demolition should only be used if that's what the homeowner wants
	1	Economic development
	1	Prices. Water Issues, growth of industries, flooding, bringing merchants to location
	1	Building our dams, rock elevations are low/our low-lying areas
	1	Economic development. Lack of education, threat of floods
	1	Helping senior citizens
	1	All of the options should be explored to see what would be the best solution for the town's citizenry; the dike needs to be extended
	1	We didn't cause the flood. Help is needed now!!
	1	Fixing flood gate and digging + cleaning ditches out
	1	Control the water
	1	Yes, relocation would meet the needs to bring back possible new jobs and improve income.
	1	High elevation of the senior center building in case of fire
	1	Princeville would flood again
	1	Princeville would look like a ghost town with no action
	1	If no action were taken by FEMA, there would be a repeat of the previous flooding
	1	Public housing - 53 acres
	1	FEMA should talk to all of the citizens of Edgecombe County so that it would attract jobs to the area

1	Help with rebuilding houses
1	Repeat of history and destruction of a town
1	Shouldn't the State be required to completed the work on the levee that was left undone?
1	Control water!
1	Flood gate
1	Water bills. Economics. Dike - floods. Jobs. Police break-ins
1	Elevation elevates the damage of water with the higher building per feet
1	"Beachfront Property" elevation and rebuild
1	Princeville would look like a beach town if only rebuild with elevation was pursued
1	Rebuild with elevation would meet the town's needs but leave an unattractive town
1	Elevation isn't the only answer, a way for the water to get out of Princeville
1	Flooding

### IMAGE: Tar River Flood History

Event	Response
1	Fix Dike - dredge river
1	How can the water be controlled

1	What are futuristic projections? Are we prepared?
1	If the town moves, will flood prevention still be a priority?
1	We live here - understand this, when can we work on our current situation
1	Dredge and more pumps
1	Dike and dredging would prevent need for buyouts
1	Repair or replace dike and give additional funds to those who want to rebuild
1	Don't forget about the flood threat to Southern Terrace

### IMAGE: Matthew and Floyd Flood Extents

Event	Response
1	Public Housing 53 acres
1	I will love to see my home back to ????
1	Why [are] we still talking? People still out of a home
1	How is the acres going to be used?
1	Public Housing 53 acres
1	How does what happens upstream impact what happens (flooding, etc.) in Princeville? And how does Princeville affect downstream?
1	Make sure to consider residents adjacent to town limits in planning. Ridgewood Road not in Princeville, always first to flood.

1	Dredge river
1	Replace/improve floodgates + culverts along 33 outside town. Incorporate strong mitigation, build new smaller dikes
1	If water gets re-routed around Princeville by a dike or levee, where does it go? Who else gets affected?
1	Find a way to make the dike better
1	Make the dike longer please
1	Move to higher ground with life centers
1	Why did Floyd flood more? Was it just a bigger storm, or did some kind of hazard mitigation after Floyd make Matthew not as bad?
1	What happens if (when) we have another storm like Floyd?
1	Many of these houses don't flood, but the yards turn to rivers + they become islands every time it rains. Yards are eroding + water gets closer. How to ???
1	What's the bigger picture? Relationship between Princeville + neighbors
1	Missing facts from Matthew flow (cfs)?
1	They need to fix the drainage problem
1	Provide a drainage system for Princeville
1	Fix the dike.

### IMAGE: Princeville: Floodplain and Floodway in Princeville

Event	Response
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1	Develop Business Corridor
1	Clean the river. Dig it out.
1	Don't move Princeville, it is historic and has values in peoples' lives
1	How can you protect us? Levee
1	Let people move to a higher place if they want
1	Public Housing 53 acres
1	What is the likelihood of a dam in Princeville?
1	If you relocate Princeville, it would not be Princeville
1	The buyouts with demolition is not a viable plan
1	Dredge river



## APPENDIX L:

# PUBLIC COMMENTS ON FEMA ENVIRONMENTAL ASSESSMENT OPTIONS

### *Environmental Assessment Posters*

The following represents an Environmental Assessment conducted by FEMA to evaluate the range of HMGP options undertaken in Princeville. First, a list of FEMA requirements used to guide the assessment is provided. This is followed by a list of general public comments. Then a series of hazard mitigation options including elevation only, rebuilding, elevating the structures, buyouts, demolition of some structures, a combination of all three options, strategic retreat (i.e., large scale community relocation), and no action are provided. Public comments were prompted by a series of questions accompanying each displayed option.

### *FEMA Requirements*

- FEMA is required by Congress to look at how proposed projects will impact the human environment and to provide that information to help community decision making.
- The human environment includes cultural, economic, social, physical (water, soil, air, and biological elements).
- In partnership with the citizens and leadership of Princeville, FEMA looks at multiple possibilities.
- FEMA summarizes the findings for community review and public comment in a document called an Environmental Assessment.
- The purpose of an Environmental Assessment is to provide information that aids the community with decision making.
- The community, in partnership with the State and FEMA, makes the final decision on which possibility to pursue.

## POSSIBILITY (A): ELEVATION ONLY

The mitigation strategy, ELEVATION, would involve elevating some homes to the 1% chance flood elevation, also known as the 100-year floodplain or Special Flood Hazard Area.

### Questions

- What would Princeville look like if only an ELEVATION strategy was pursued?
- Would an ELEVATION only strategy meet community (your) needs?
- What would be good about using an ELEVATION only strategy?
- What would be bad about using an ELEVATION only strategy?

### Public Comments

- Will the whole town be elevated?
- If you elevate my house, do I need flood insurance?
- High elevation of senior citizen building in case of a fire.
- It is not the only answer. A way for the water to flow out of Princeville. "Beachfront property" elevation and rebuild.
- When will you all be honest and answer questions?
- How high will my house have to be?
- When?
- What about senior citizens that have a problem climbing or walking up the stair?
- Elevation elevates the damage of water with higher building per feet.



## POSSIBILITY (B): REBUILD WITH ELEVATION

The mitigation strategy REBUILD WITH ELEVATION would include demolishing and rebuilding some homes elevated to the 1% chance flood elevation, also known as the 100-year floodplain or Special Flood Hazard Area.

### Questions

- What would Princeville look like if only a REBUILD WITH ELEVATION strategy was pursued?
- Would a REBUILD WITH ELEVATION only strategy meet community (your) needs?
- What would be good about using a REBUILD WITH ELEVATION only strategy?
- What would be bad about using a REBUILD WITH ELEVATION only strategy?

### Public Comments

- What are the steps to pursue help in getting a rebuild or repair?
- Some of these homes will be too high for seniors or disabled people. Do the homes come with elevators?
- Elevation for all (many) homes are too much for some older people.
- Elevation -- seniors are not able to walk a lot of steps to get inside their homes. So what would a 95-year-old do?
- Princeville would look like a beach town if only rebuild with elevation is pursued.
- Retain tax base.
- A rebuild with elevation only would not meet the needs of our community. There are people with health issues and elderly and elevation would not be good for them.
- Rebuild with elevation would meet the community need but would leave an unattractive town.

## POSSIBILITY (C): BUYOUTS WITH DEMOLITION

The mitigation strategy, BUYOUTS WITH DEMOLITION, would involve the buyout and demolition of some homes within the community. The parcels would be maintained as open as open space in perpetuity.

### Questions

- What would Princeville look like if only a BUYOUT WITH DEMOLITION strategy was pursued?
- Would a BUYOUT WITH DEMOLITION only strategy meet community (your) needs?
- What would be good about using a BUYOUT WITH DEMOLITION only strategy?
- What would be bad about using a BUYOUT WITH DEMOLITION only strategy?

### Public Comments

- Dike and dredging would prevent need for buyouts.
- I want to hear from the buyout. Please write me or call thank you.
- Not a viable option.
- My family does not want to come back so buyout is best.
- Can I purchase a buyout home and move to my lot?
- Why?
- The buyout is the best option for “me.” It doesn't make financial sense for me to continue investing in my current location. I have been through this twice. It's not worth the stress.
- For those who want to.
- For those who want buyout, grant. If not stay!!!
- What can be done to prevent some of the buyouts?
- Princeville will become a ghost town if a buyout with demolition is pursued.
- If you are not going to fix the dike why would you want people to live there?
- Buyout with demo-only strategy will not meet the community desire but it may be the best for the overall general welfare of the citizens.
- What is plan for someone who has land only in a flood zone? Nothing can be built on it. Is there a buyout plan?
- How will other HMGP applications (other than the first 49) be chosen for the remainder of the HMGP monies?
- Families must have choice. For some, buyout is the best option.
- It will be bad if buyout with demolition for the town to lose its historic value.
- If given a buyout where do they go?
- If you are not included in the buyout and have rental property, after fixing house back, will HUD vouchers or vouchers from Nash-Edgcombe Economic Development be issued to that piece of property?
- The buyout with demolition only would give any homeowner who would like to relocate to a non-flood area.
- This should be used only if that's what homeowners want.
- My family and I are very interested in the buyout program. Please get this program started and on the way. Thank you.

## **POSSIBILITY (D): COMBINED MITIGATION STRATEGY OF ELEVATIONS, REBUILD WITH ELEVATIONS, AND BUYOUTS WITH DEMOLITIONS**

The mitigation strategy of COMBINING MULTIPLE MITIGATION STRATEGIES (ELEVATIONS, REBUILD WITH ELEVATIONS, and BUYOUTS WITH DEMOLITIONS) would see different strategies used throughout the community. Some houses would be elevated, some would be demolished, rebuilt and elevated, and others houses would be demolished and the property maintained as open space in perpetuity.

- What would Princeville look like if a COMBINED MITIGATION strategy was pursued?
- Would a COMBINED MITIGATION strategy meet community (your) needs?
- What would be good about using a COMBINED MITIGATION strategy?
- What would be bad about using a COMBINED MITIGATION strategy?

### **Public Comments**

- That would be wise, in that the flooding has been something at some timeframe.
- Who would take care of these open spaces? And if allowed to grow up then it will be like living in the woods.
- How does the town exist with less taxes?

## POSSIBILITY (E): STRATEGIC RETREAT

The mitigation strategy, STRATEGIC RETREAT, would involve combining FEMA mitigation funds with other resources to do large scale buyouts throughout the community. Individuals or households would move to other communities. FEMA would partner with other federal, state, non-profit, and private entities to ensure that needs identified by individuals or households would be used to successfully reestablish residents in another community.

### Question

- What would Princeville look like if a STRATEGIC RETREAT strategy was pursued?
- Would a STRATEGIC RETREAT strategy meet community (your) needs?
- What would be good about using a STRATEGIC RETREAT strategy?
- What would be bad about using a STRATEGIC RETREAT strategy?

### Public Comments

- Princeville will have local shops, businesses, historical sites, educational opportunities for our future generations.
- I believe that our town should welcome other avenues of funds to help citizens who are interested in hazard mitigation options.
- You should invite the youth to help with decision about their future in past North Carolina(??).
- Princeville would not be Princeville.

## POSSIBILITY (F): NO ACTION

FEMA is required by Congress to consider what would happen to Princeville and its citizens if FEMA mitigation funding was not used.

### Questions

- What would Princeville look like if NO ACTION was pursued?
- Would NO ACTION meet community (your) needs?
- What would be good about FEMA taking NO ACTION?
- What would be bad about FEMA taking NO ACTION?

### Public Comments

- Repeat of history and destruction of a town.
- We didn't cause the flood. Help is needed now!!!
- Repeat of History.
- Princeville will look like a ghost town with no action.
- Princeville would flood again.
- If no action were taken by FEMA, there would be a repeat of the previous flooding.

## Possibility (G): Relocation

The mitigation strategy, RELOCATION, would utilize FEMA mitigation funds in conjunction with other Federal, State, local, non-profit or private resources to identify locations outside of the floodplain where community members may rebuild residences, businesses, and essential community services as part of a new community.

### Questions

- What would Princeville look like if a RELOCATION strategy was pursued?
- Would a RELOCATION strategy meet community (your) needs?
- What would be good about using a RELOCATION strategy?
- What would be bad about using a RELOCATION strategy?

### Public Comments

- Don't like moving Town Hall.
- No relocation! Princeville is Princeville because of sacred grounds.
- Why would you move Town Hall and Senior Center but expect people to return to that area?
- Let people move to higher if they want.
- Do not move Princeville.
- Are you going to move Town Hall?
- Don't move Princeville, it is historic and it has values in people's lives.
- I think all options should be explored to see what would be best solution for the town's citizens. The dike needs to be extended.
- Public housing 53 Acres
- If you relocate Princeville it will not be Princeville.
- Yes, it would meet the needs to bring back possible new jobs and improve income.
- We need a new fire station location to help with fire safety in the surrounding areas.
- It would look like a striving community for our future generation.

## OTHER POSSIBILITIES?

FEMA also sought to identify other options not described in the previous set of hazard mitigation actions.

### Questions

- What other POSSIBILITIES should FEMA consider to meet Princeville's needs as a community?
- Who should FEMA talk to or partner with to assist Princeville?

### Public Comments

- Do a paper survey with the residents on what they desire.
  - Repair or replace dike and give additional funds to those who want to rebuild. Dredge and more pumps.
  - FEMA should provide additional funds to help homeowners complete repairs on their homes.
  - FEMA needs to talk to all the citizens of Edgecombe County so that it would attract jobs to the area.
  - What about the flooding on Beasley Street by the church when it rains hard?
  - Provide a drainage system for Princeville.
  - Repair the dike. Dredge the river.
  - Life centers.
  - How do we find out who is on the list?
  - Should the state be required to complete the work on the levee that was left undone?
  - Help all the citizens that were affected by the disaster, insurance or not!
  - They need to fix the drainage problem.
  - Help with rebuilding houses.
  - If person is not getting assistance because of insurance, how long do they wait for elevation work? Can they repair if they are getting mitigation / reconstruction?
- 
-

## APPENDIX M: US ARMY CORPS OF ENGINEERS, EXCERPT OF STUDY REPORT

**Note:** The following is an excerpt from the Corps of Engineers study report circulated in draft form in 2014 and then issued as a final report in February, 2016. It represents a comprehensive analysis of Princeville's history as affected by floods and provides a set of flood mitigation options that they may consider in the future. It also contains an extensive overview of Princeville's cultural history.

### **Excerpt: EXECUTIVE SUMMARY (only)**

PRINCEVILLE, NORTH CAROLINA

### **FLOOD RISK MANAGEMENT**

### **INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL ASSESSMENT**

US Army Corps of Engineers  
Wilmington District, NC

March 2014

DRAFT REPORT

Princeville, North Carolina is the first municipality in America incorporated by former slaves (1885). At the end of the Civil War freed slaves occupied low-lying land in the Tar River floodplain, purchased plots from local landowners, and eventually incorporated the town as the "Town of Princeville." While Princeville was built on low-lying ground in a bend in the Tar River, the Town of Tarboro is sited on the opposite side of the Tar River on mostly higher ground. Because of its low-lying location, Princeville has been repeatedly flooded many times since its founding.

Princeville remains over 96% African-American. Approximately 2,000 residents are currently exposed to public/life safety issues and inundation damage associated with the existing threat from flooding. Nearly half the population is elderly. Per capita income for Princeville is approximately



\$12,024, which is approximately 43.9% of the national average of \$27,334. The average structure value is \$77,300 in 2010, which is approximately 41% of the national average of \$188,400. The town is governed by a part-time mayor and council.

In 1967, the Corps of Engineers built a levee along the Tar River to address the frequent and severe flooding. Once this levee was constructed, the Town did not experience severe flooding again until Hurricane Floyd in 1999 (a greater than 0.2% event), when the Town suffered catastrophic flooding and the damage or destruction of nearly all 1,000 residential structures. Floodwaters initially entered the Town through a number of un-gated culverts located under a section of U.S. Highway 64. This flood of record then overtopped the levee in one location and ultimately circumvented the levee at its north end, inundating the Town with floodwaters. Up to twenty feet of water stood in Princeville for nearly 10 days until river levels subsided enough that the floodwaters drained or could be pumped from the town.

As a result of the catastrophic flooding and historical significance of the town, then-President Clinton issued Executive Order 13146, which established a “President’s Council on the Future of Princeville, North Carolina.” The executive order directed the President’s Interagency Council to consider, among other things:

“...the unique historic and cultural importance of Princeville in American history; the views and recommendations of the relevant State and local governments, the private sector, citizens, community groups and non-profit organizations, on actions that they could take to enhance the future of Princeville and its citizens; and, agency assessments and recommendations to repair and rebuild Princeville, and to the extent practicable, protect Princeville from future floods.”

The Council was chaired by the Office of Management and Budget (OMB), with twelve participating agencies. Participation was delegated to staff level, including members of the existing Federal Interagency Working Group on Environmental Justice, which was established in 1994 under Executive Order (E.O.) 12898. The Council’s report was submitted in August 2000, and recommended quickly bringing the citizens of Princeville home while rebuilding toward a more disaster-resistant community.

In consideration of E.O. 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations”, Federal agencies are also required to consider potential disproportional adverse effects or denial of potential benefits of Federal policies and programs to communities such as Princeville. This study gave consideration of Environmental Justice in its deliberations, and while considering this issue during the study process, did not base plan selection on those factors.

Numerous heavily-damaged structures of historical value were demolished because they were not restored within 12 months following the flood. The National Park Service (NPS), Federal Emergency Management Agency (FEMA), and the State Historic Preservation Officer (SHPO) worked out a strategy for evaluating the historic town. FEMA led standard recordation measure efforts for structures condemned by the Town and subsequently demolished. Only four structures remain eligible for the National Register of Historic Places and one baptismal site is considered eligible as a Traditional Cultural Property. The Town turned down an “all or nothing” buyout offer from FEMA due to the resulting likelihood for adverse social, economic, and cultural impacts.

Numerous Federal agencies including FEMA, Housing and Urban Development (HUD), Small Business Administration (SBA), United States Department of Agriculture (USDA), and the Department of Labor provided millions of dollars for recovery and reconstruction of the town. Several Federal agencies invested millions of dollars in not only clean-up immediately after Hurricane Floyd, but also in redevelopment. FEMA, HUD, SBA, USDA, Department of Labor, and the Environmental Protection Agency (EPA) provided funds for clean-up, temporary housing,

technical assistance, and home repairs in immediate response. State agencies and numerous non-profits also provided funding and volunteer labor. After the clean-up mission was complete, Federal agencies including FEMA, HUD, SBA, Health and Human Services, Federal Highway Administration, and the NPS provided technical assistance, grants, and loans to:

- Design and construct a 64-unit mobile home park within the Town of Princeville;
- Construct public housing, a multi-family housing complex, reconstruct the Town Hall, and a senior community center;
- Repair a Head Start Center;
- Assist in developing community programs that would provide coordinated health care to uninsured, low-income residents in Princeville and other affected areas.;
- Restore the old town hall into an African-American “Firsts” museum; and;
- Develop the Princeville Heritage Trail Concept Plan (the trail was selected by the Save America’s Treasures program in 2001 because of its importance of linking historical and cultural sites in the oldest incorporated African-American town in the Nation).

The Corps was authorized to prepare a feasibility study to address flood risk management issues and funds were provided in 2001. The Corps and the State of North Carolina signed a Feasibility Cost Sharing Agreement in July 2002.

Multiple structural and non-structural measures and alternatives were examined during the course of the feasibility study. The Feasibility Scoping Meeting, held in 2006, discussed the likelihood that many of the most responsive plans might lack economically-justified alternatives that would meet the current guidance requiring National Economic Development (NED) justification. At that time, the entire vertical team agreed to pursue alternatives that addressed all areas of flood risk, including extending the existing levee.

The Final Array of Alternatives consisted of a No-Action Plan and an array of structural and non-structural alternatives. Each alternative was formulated to provide an incremental solution to flood risk at the least cost for a given increment of flooding, as well as a suite of non-structural measures considered to be critical to the success of each alternative. These non-structural measures included a flood warning and evacuation plan, continued floodplain management and updating of local building and zoning codes, and a flood risk management education and communication plan (for both the community and local schools). All of these non-structural components were ultimately deemed essential for an adequate flood risk management strategy for the Town, and would substantially reduce remaining levels of flood risk after construction or implementation of any structural plan elements.

Final alternatives were assessed by comparison of plan attributes, benefits, costs, and positive and negative impacts and outcomes; this summarization is presented in the “System of Accounts” format. These alternatives were composed of a combination of structural and non-structural measures. Plan selection took into consideration potential contributions to National Economic Development (NED), Environmental Quality (EQ), Other Social Effects (OSE), and Regional Economic Development (RED). Key amongst these, because of the benefit-cost analysis on each alternative, was the consideration of Life and Safety Risk, and Other Social Effects, including consideration of impacts to community cohesion, cultural and historical values, local per capita and household incomes in comparison to national averages and other factors not captured in an NED analysis alone. The process used to select a plan gave consideration to both Congressional directive and to the Presidential Executive Order.

Consideration of all factors evaluated resulted in a plan that is the most responsive to flood risk of all those evaluated, in terms of flood risk reduction, and is discussed herein as Alternative 4. While only Increments 1 through 3 of that alternative are economically justified, an additional 4th increment was added, in consideration of the remaining (residual) risks to life and safety left unaddressed by Increments/Alternatives 1 through 3 alone, specifically, due to the lack of any measure that would prevent (upstream) circumvention of the existing levee at its northern terminus. These risks would be substantially reduced by implementation and will be referred to hereafter in the report, as the “Selected Plan” (Alternative 4). This term was developed to characterize the plan that best balances Life and Safety risks, economics, consideration of Social Effects, Environmental Quality and National and Regional Economic effects, while also being technically and environmentally sound.

Specifically, in the instance of the plan developed for the Town of Princeville, while the benefit-cost ratio of that plan, currently at 0.95, is not within current policy as to NED Plan justification, it was felt that the addition of the final, economically unjustified increment, should be considered in determining a successful plan, particularly in consideration of life and safety, but also in recognition of extremely low individual and household income, community cohesion, protection of Federal, State and Local investments, and other OSE considerations. Further details on factors considered in the analysis of Other Social Effects (OSE) are contained in both the Main Report and Appendix F. It was also considered that no other plan, either structural or non-structural, or combination thereof, would provide a solution adequate to the mandate provided in Executive Order 13146. Ultimately, the identified plan provides, to the extent practicable, maximization of risk reduction, in light of cost-effectiveness, environmental feasibility, technical soundness and numerous social and cultural considerations.

The Selected Plan would provide greater than 95% assurance that the 1% chance event would not inundate the Town of Princeville. The plan would have minimal impacts to the environment and would be expected to result in a “Finding of No Significant Impact” (FONSI).

The Selected Plan would have an important beneficial effect on cultural resources, since it would better protect the remaining historic buildings and have a positive effect on the historic setting. The aesthetics of flood-prone neighborhoods would improve, since the threat of damages and cleanup that accompany the flooding of building and property would be considerably reduced. Implementing the Selected Plan would decrease flood-related interruptions in commercial and social community activities, thus stabilizing the family unit by minimizing the migration of Princeville residents out of the community.

Further restoration of structures and infrastructure within the Town of Princeville in the absence of the Selected Plan would fail to protect Federal and non-Federal investments to-date. While the Selected Plan benefits do not exceed monetary costs, the overwhelming benefit to this historic, low-income community, as reflected in the Other Social Effects account, justifies consideration of a more robust approach to Flood Risk Management than that provided by an NED Plan alone. Based on the evaluation of Federal policies and guidance, including Executive Orders, and while also taking into consideration all project objectives and constraints, the Selected Plan is identified as the best alternative available to provide substantive flood risk management for the Town of Princeville.

The Selected Plan does provide a substantial reduction in flood risk; however, it does not eliminate all remaining risk, as the unique physical situation of the Town would prevent any complete reduction of flood risk, short of relocation (and removal from the floodplain) of the entire community. The community strongly opposes relocation efforts, due to perceived impacts to social cohesion and an inability of many residents to afford living elsewhere. The report also discusses actions taken, to date, by those participating agencies whose investment in the Town also remains at risk from the continued flood threat.

The Selected Plan (Alternative Four, which includes Levee Alignment I) is illustrated in Figure XS-1 below and consists of:

- Constructing flap gates on seven ungated culverts, and construction of several new culverts to address floodflow penetration and interior drainage issues, respectively;
- Modifying the intersection of N.C. Highway 33 and U.S. Interstate 64, increasing elevations of the interchange of N.C. Hwy 33 and U.S. I-64, by up to 4.5 feet;
- Installation of a “Shoulder Levee” parallel and adjacent to a low spot on I-64;
- Extension of the existing levee at the point of its current northern-most terminus along Highway 258, to the east, and then south, to its juncture with the approximate southern terminus of the project.
- Non-structural measures that consist of: Flood Warning and Evacuation Plan updates, Flood Risk Management Education and Communication Plans, and updating of Floodplain Management plans.

The current estimated first cost of the Selected Plan is \$18,608,000 (Fully-funded = \$21,096,000). Cost-sharing for the Selected Plan would be 65% Federal / 35% non-Federal, based on current guidance on Flood Risk Management projects (cost-shared first cost = \$12,095,200 Federal/\$6,512,800 Non-Federal). The benefit to cost ratio is currently 0.95 to 1.

The Selected Plan is not the National Economic Development (NED) plan and has a benefit cost ratio of less than one. The NED plan, however, would not provide significant flood risk reduction to the Town of Princeville and as a result, an exception to NED policy was granted by the Assistant Secretary of the Army (Civil Works), Jo-Ellen Darcy, on July 19, 2012, allowing the Corps to move forward with the plan recommended in this report (Attachment E).