

PRINCEVILLE COMMUNITY FLOODPRINT - SEPTEMBER 2020

# PRINCEVILLE COMMUNITY FLOODPRINT

RESILIENCY STRATEGIES FOR GREATER PRINCEVILLE



[www.coastaldynamicsdesignlab.com](http://www.coastaldynamicsdesignlab.com)

SEPTEMBER 2020

ON THE MAP!  
Share your ideas for the

## **CREDITS + THANKS**

This report was completed by the NC State University Coastal Dynamics Design Lab. Funding for this project was generously provided by Common Ground (Conservation Trust for North Carolina & The Conservation Fund) and by Z. Smith Reynolds Foundation (prime sponsor).

We would also like to thank our community partners that have been critical in the formation, development, and implementation of various aspects of the information presented herein. A special thanks to: Dr. Glenda Knight and Rydedrick "Dedrick" Porter (Town of Princeville), Kelsi Dew (AmeriCorps Service Member for the Town of Princeville), Chris Canfield (Conservation Trust for North Carolina), Andrew Delonno (Upper Coastal Plain Council of Governments), and Bill Holman and Erin Crouse (The Conservation Fund). This document would not have been possible without your support and input.

## EXECUTIVE SUMMARY

Since its founding as Freedom Hill in 1865, Princeville has survived the violence of Reconstruction, the institutionalized discrimination of Jim Crow, the destructive forces of urban renewal programs, and multiple devastating floods. Resilience has long characterized this community. Flooding after Hurricane Matthew in 2016 left an estimated 80% of the town underwater, and Hurricane Floyd eighteen years earlier was worse. Princeville's vulnerability to floodwaters, even with a three-mile earthen levee in place, has prompted recommendations that the community relocate to higher ground. However, its irreplaceable, place-based history makes this an impossible proposition.

In a continued effort to reimagine and rebuild a more flood-resilient Princeville, this study used an environmental and community planning approach referred to as "floodprinting." The process of developing a community floodprint is guided by land/water relationships, including the powerful forces associated with flooding.

The Princeville Community Floodprint is the result of interdisciplinary work completed by the NC State University Coastal Dynamics Design Lab alongside multiple project partners spanning local and regional governments, non-profit organizations, land trusts, community activists, and state recovery agencies. It reflects the combined expertise of landscape architects and environmental planners who have applied best practices in design and planning to develop landscape analysis, planning, and design strategies that respect and reflect Princeville's local character and history. The goal of this project is to help increase social and physical resilience in Princeville, specifically through recommending land-use strategies that reduce flood risk, recognize capacity gaps, and improve public safety, environmental awareness, and long-term ecological function within historically flood-prone areas.

This report does not offer solutions to keep floodwaters out of Princeville. Rather, it recognizes the cultural significance of the Tar River floodplain lands, and offers land planning approaches that enable the community to adapt in-place.

Recommendations included in the report are categorized around three primary themes: **conservation, cultivation, and wetland connections**. These categories strategically align with FEMA-

approved land uses that regulate how parcels can be used post-buyout. Nested within each of these thematic areas are specific projects that focus on the repurposing of vacant, vulnerable, and underutilized parcels that all fit within a unified plan. **The plan also organizes proposed projects and programs by immediate-, near-, and long-term initiatives.** This collective effort contributes to the growing body of post-Matthew recovery work that is both specific to Princeville and aspires to be a model for resiliency and recovery work across North Carolina and the Eastern seaboard.

# INTRODUCTION

## A LEGACY OF RESILIENCY



### PRINCEVILLE IS COMING BACK

The Town of Princeville is currently undergoing a multi-year, and what has become a multi-generational, post-flood recovery process overseen by state and federal agencies. These current rebuilding efforts are a result of Hurricane Matthew, which made landfall in the Carolinas on October 8, 2016. The Category 1 hurricane dropped 20+ inches of rain across much of eastern North Carolina, resulting in catastrophic flooding across the region. In Princeville, water from the Tar River breached its banks and bypassed the levee that surrounds the town. When the floodwaters finally receded nearly two weeks later, nearly 80% of Princeville had been flooded.

Including the destruction caused by Hurricane Matthew, the Town of Princeville has been devastated by floods eight times since it was chartered in 1885 (1887, 1919, 1924, 1923, 1940, 1958, 1999, and 2016). This history of flooding has left long-lasting imprints across Princeville's community landscape. Despite its flood-prone past, the citizens of Princeville have always come back to rebuild and

reclaim their rightful place in history as "the oldest town chartered by Blacks in America." In the words of Town Commissioner Linda Joyner, "I feel like it would be a slap in the face (to town founders) for us to up and run (WRAL interview, 2020)."

Each flood has resulted in dramatic changes to Princeville. Streets like Church and Main, which were historically dense with houses and businesses, now only show faint traces of the vibrant hub that once existed as lots sit vacant and homes unoccupied. After Hurricane Matthew, these impacts expanded to many of the town's core facilities, such as Town Hall, the Elementary School, and History Museum, which were flooded and are still in the process of fully re-opening.

While there are signs of progress throughout Princeville, this report aims to fill a critical technical gap in the recovery process, specifically addressing the issue of programming and caring for vacant and underutilized lots. Federal and state

mitigation programs that are offered to residents after floods are specifically designed to relocate people and their homes out of floodplains, oftentimes leaving vacant land holdings in their place. The lack of a plan for the active re-use of vacant parcels, whether they result from government-backed mitigation programs or through abandonment, has created a critical need to address vacancy in Princeville's historic core as a way of building toward a more resilient community.

Furthermore, the recent announcement of federal funds to finance a levee improvement project for Princeville does not address existing vacancy issues. As a legally binding component of the mitigation programs offered to residents through the years, many of the town's vacant parcels now have land-use restrictions attached to their deeds that never again allow for placement of built structures on the properties. The only option that remains for these properties is to be repurposed through contextually sensitive and community-responsive open space management techniques.

To achieve these outcomes, this report analyzes mitigation policies, legal and programmatic precedents, and the natural and built environments of Princeville. These analyses informed a set of recommendations for vacant, abandoned, and town- or county-owned properties that blend unique open space projects to create new, beneficial uses that serve the public good. In doing so, these projects will serve to promote a more flood-ready and attractive Town of Princeville.

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# VULNERABILITY ASSESSMENT

## FLOOD DEPTH + PROPERTY ELEVATION

Communities within mapped floodplains often correspond with a series of related environmental risks caused by extreme weather events. These events are now happening at an increasing frequency with devastating impacts occurring in the lowest, most vulnerable parts of floodplains.

Since the completion of the levee by the U.S. Army Corps of Engineers (USACE) in the 1960s, much of Princeville has been mapped in a special designation flood zone titled "Zone X: Protected by Levee." This misnomer has long stoked conflicting views within the community about which areas are susceptible to flooding and the overall efficacy of the existing levee. Unfortunately, this same flood zone designation has prevented more accurate representations of flood risk within the floodplain to be modeled and planned for as a pre-disaster mitigation measure.

This section of the report provides a more detailed view of existing flood risks by visualizing flood depths in comparison to

existing ground-floor elevations of buildings within the Town of Princeville municipal boundary. Having a more thorough analysis of each property's propensity to flood allows the town to more holistically plan for future flooding by taking proactive measures to mitigate risk at the scale of individual parcels.



# LIVING WITH FLOODS

## PREPARING FOR THE FUTURE

Princeville exists almost entirely within the Tar River floodplain. The systems and cycles that shape this landscape are dynamic, and are subject to innumerable natural and social forces that rarely conform to human desires for stability and control (Milligan, 2015). The levee that has separated Princeville from the Tar River since the 1960s attempted to “fix” a flood-prone condition that is beyond its reach, thus creating an illusion of safety that has put more people at risk when the levee fails.

### MULTIPLE APPROACHES TO IN-SITU FLOOD ADAPTATION

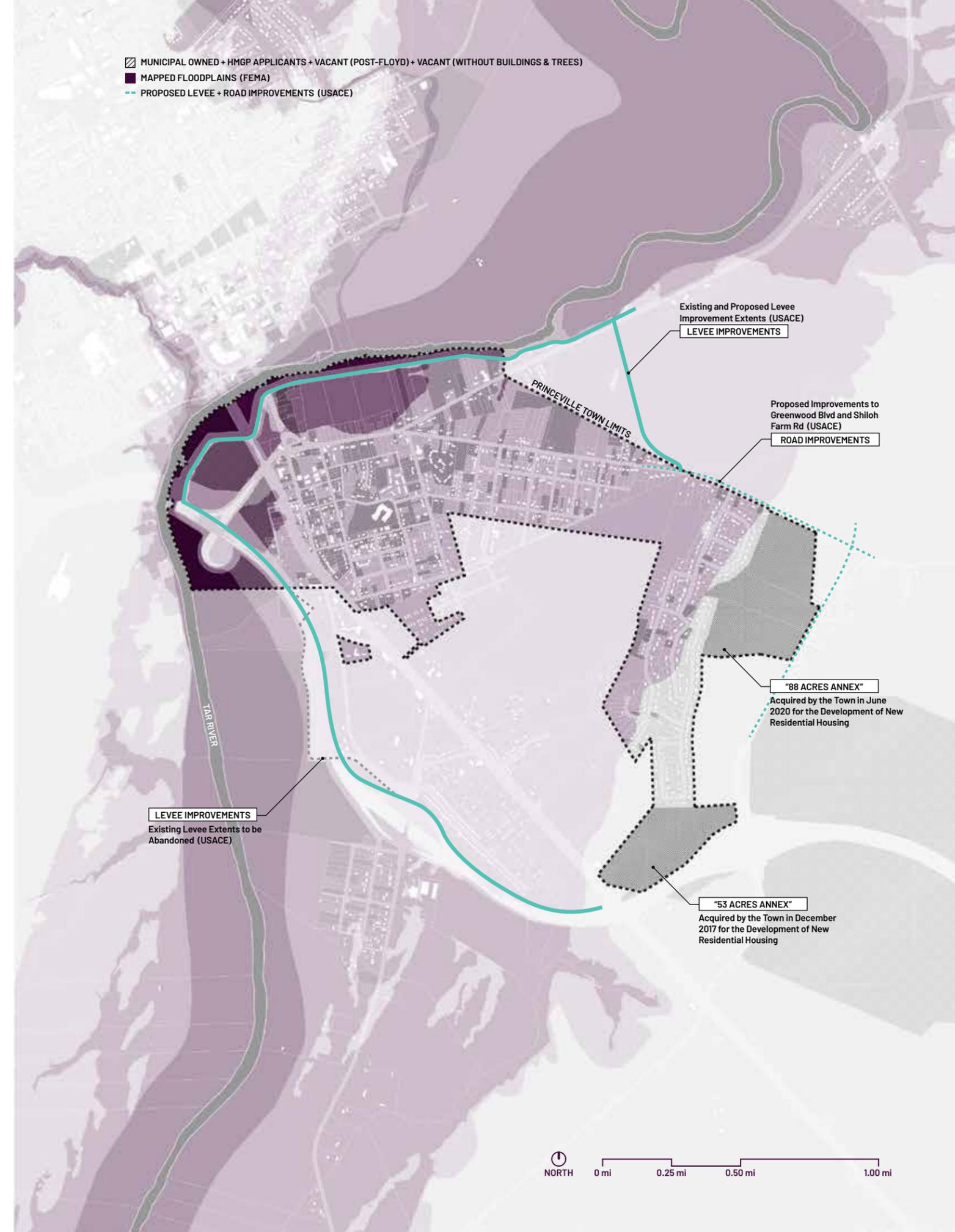
Nearly 87% of Princeville’s total land area is mapped within the 100-year floodplain of the Tar River, which means the vast majority of the town’s jurisdictional area is predicted by hydrologists to have at least a 1% annual chance of flooding. It is worth noting, however, that multiple 100-year flood events can happen within short spans of time, as has recently been the case in North Carolina (Matthew in 2016, Florence in 2018, Dorian in 2019). In Princeville, Hurricane Matthew’s floodwaters, because of their severity, matched or exceeded the mapped 100-year floodplain.

Instead of presuming that added infrastructure, such as an expanded levee, will universally solve Princeville’s propensity to flood, this report considers flooding to be a natural and oftentimes uncontrollable process that should be expected to occur on a cyclical basis. The report’s analyses and recommendations also carefully consider “everyday” nuisance flooding caused by smaller rain events. Acknowledging this wider range of flood impacts creates opportunities to proactively

implement new land-planning practices and techniques that will enable Princeville’s residents to more safely and symbiotically live with floodwaters, rather than reactively fighting against them.

As a starting point, this report identifies all parcels within Princeville’s jurisdiction that are: i) assumed vacant and ii) under public ownership (such as a park). While many of these currently underutilized properties are located in the lowest and most vulnerable areas of the Tar River floodplain, they also reside in areas of town where physical change can positively affect community morale, lifestyle, and identity.

This study values these properties as a means of opportunity and, as such, proposes significant new programs and uses that: i) celebrate Princeville’s cultural assets; ii) connect physically and visually to the new developments planned for the two large property annexes; and iii) promote a more flood-aware and flood-ready community.



# COMMUNITY CHALLENGE

## REBUILD, ELEVATE, OR VACATE?



### UNDERSTANDING THE OPTIONS

As a sign on Freedom Hill currently reads, "Princeville is coming back!" As the community reimagines itself through the process of rebuilding, the town must capitalize on this opportunity to build back better. It is not enough to simply replace what has been lost. As has occurred in the past, Princeville citizens must once again decide if they should rebuild, elevate, or vacate the houses they have called home.

**Rebuild.** For houses with damages assessed at less than 50% of the property's pre-disaster value, rebuilding in place may be a viable option through various methods of structural floodproofing. There are two categorizations of floodproofing: wet and dry. Wet floodproofing allows floodwaters to enter a building, whereas dry floodproofing attempts to prevent the entry of floodwaters altogether.

Wet floodproofing uses water-resistant construction materials and techniques (i.e., concrete, brick, cast masonry unit (CMU) block, etc.) that are capable of withstanding inundation. Allowing floodwater to enter and move through a building lessens the likelihood of structural

damage by equalizing the pressure (i.e., weight of water) on both sides of load-bearing structures (FEMA). Generally, wet floodproofing is best reserved for use in non-habitable spaces, such as garages and crawl spaces. Wet floodproofing can also expedite the cleaning and drying of structures following a flood. However, wet floodproofing neither guards buildings from the impacts and deposition of debris nor protects the contents of buildings from saturation, mold, and damage that result from exposure to water.

Dry floodproofing requires completely sealing the exterior of a building to prevent the entry of floodwaters (FEMA). This system relies on 1) fortified walls to resist the external forces exerted by floodwaters and 2) integrated backup drainage devices, like sump pumps, to minimize internal exposure to water intrusion. Because the pressure of water on structures is so great, this method is only suitable for structures where maximum flood depths are less than three feet (studies have shown that dry-floodproofed walls begin to fail once flood height exceeds three feet (FEMA, 2013)).

**Elevate.** A second option for houses with damages assessed at less than 50% of the property's pre-disaster value is to elevate the building above regulated flood levels. The most common methods of raising a building include: elevation using a concrete or masonry foundation, or elevation using concrete, masonry or treated-lumber piers.

Elevating a house with a foundation is considered a viable option for buildings with an adjusted FFE that does not exceed four feet (48") above the surrounding ground level. For the purposes of this report, a four-foot elevation datum is used as the maximum height benchmark for elevating with a foundation and/or dry floodproofing. (As previously mentioned, dry-floodproofed walls exceeding three feet (36") may be subjected to flood pressures that compromise their structural integrity.) Additionally, the space underneath a house is able to be better utilized by residents for parking, storage, and etcetera when elevated to a height closer to eight feet (as measured from the highest point on the ground to the bottom of the lowest weight-bearing structural member under the house).

The findings of this study suggest that elevating a structure to heights between four and ten feet is a viable option for homeowners. While elevating with piers can promote a safer home environment during flood events, the degree of elevation must be weighed against both lifestyle constraints that may make traversing staircases undesirable (such as an elderly or mobility-impaired resident) and construction/maintenance costs related to associated features such as ramps and lifts. Elevating a home with piers above ten feet is impractical for most residents.

**Vacate.** While vacating lots is not desirable from a municipal tax-base perspective, it is most often the safest and most permanent option for homeowners to move out of harm's way. If predicted flood heights or cost effectiveness of rebuilding or elevating a home make remaining in place a non-feasible option for residents, vacating their lot(s) may be the only remaining option. In these cases, being knowledgeable of all deed restrictions and ownership conditions tied to a vacated lot can make the difference between the lot becoming dormant and fallow or the lot finding new life via productive uses and adaptive management.

# ELEVATION ANALYSIS

## VULNERABILITY ASSESSMENT

A strong correlation is present between existing vacant lots, canals, and the degree of elevation required to raise homes above flood levels; therefore, mitigation recommendations must collectively assess and respond to all three of these features.



HIGHER RISK

### ELEVATE WITH PIERS OR CONVERT TO OPEN SPACE

Structures where the Finished Floor Elevation (FFE) is between four and ten-feet below the 100-year flood Water Surface Elevation (WSE) plus two-feet (Freeboard).

Many of these structures are located in the western portion of Princeville and represent locations that need to be elevated with piers in order to reduce their flood risk. Each building should be evaluated for its occupancy, livable condition, cost feasibility to elevate via piers, and accessibility once raised. Should any of these conditions not be met, conversion of the property to open space is recommended.



MODERATE RISK

### ELEVATE FOUNDATION / FLOOD-PROOF OR CONVERT TO OPEN SPACE

Structures where the Finished Floor Elevation (FFE) is up to four-feet below the 100-year flood Water Surface Elevation (WSE) plus two-feet (Freeboard).

These structures are located throughout Princeville and represent locations capable of reducing flood risk if slightly elevated or by retrofitting portions of homes with floodable materials. Each building should be evaluated for its occupancy, livable condition, and cost feasibility to flood-proof or elevate via foundation. Should any of these conditions not be met, conversion of the property to open space is recommended.



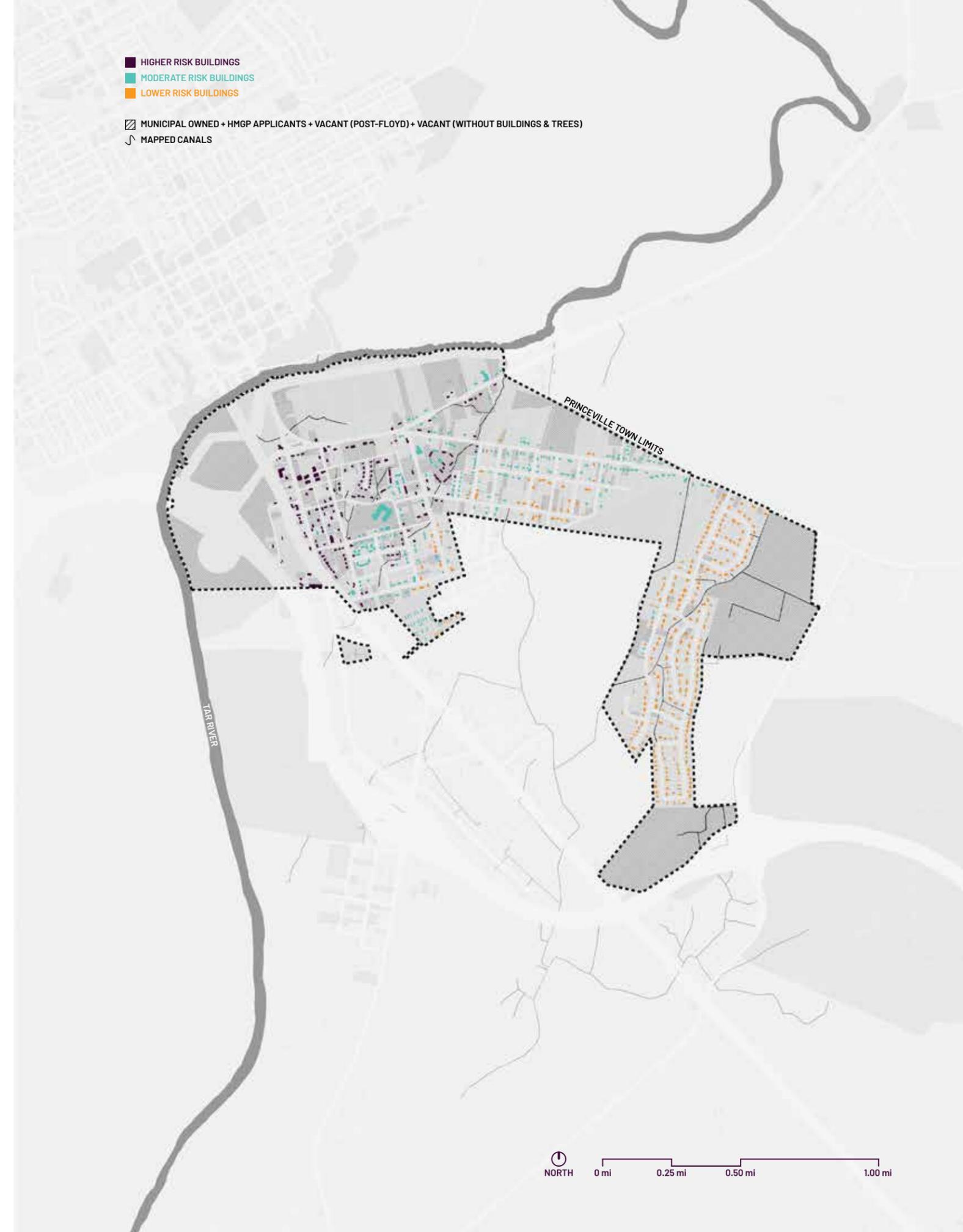
LOWER RISK

### EXISTING ELEVATION IS EXPECTED TO BE SUFFICIENT FOR 100-YEAR FLOOD

Structures where the Finished Floor Elevation (FFE) is equal to or greater than the 100-year flood Water Surface Elevation (WSE) plus two-feet (Freeboard).

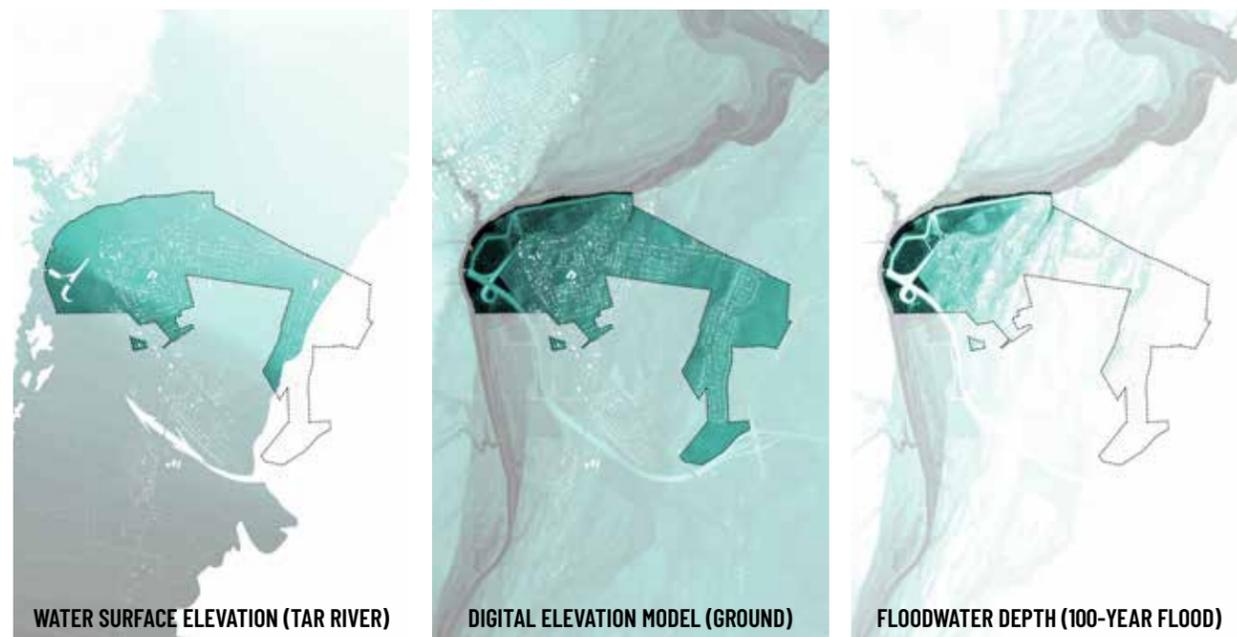
Many of these structures exist outside of the 100-year floodplain in the eastern portion of Princeville (but are still within the 500-year floodplain). Structures located closer to the Town core with this coding typically have slightly raised FFE's due to either higher ground elevations in specific locations around the home site, or have foundations that extend higher than standard slab-on-grade homes.

- HIGHER RISK BUILDINGS
- MODERATE RISK BUILDINGS
- LOWER RISK BUILDINGS
- MUNICIPAL OWNED + HMGP APPLICANTS + VACANT (POST-FLOYD) + VACANT (WITHOUT BUILDINGS & TREES)
- MAPPED CANALS



# FLOODWATER DEPTH

## VULNERABILITY ASSESSMENT

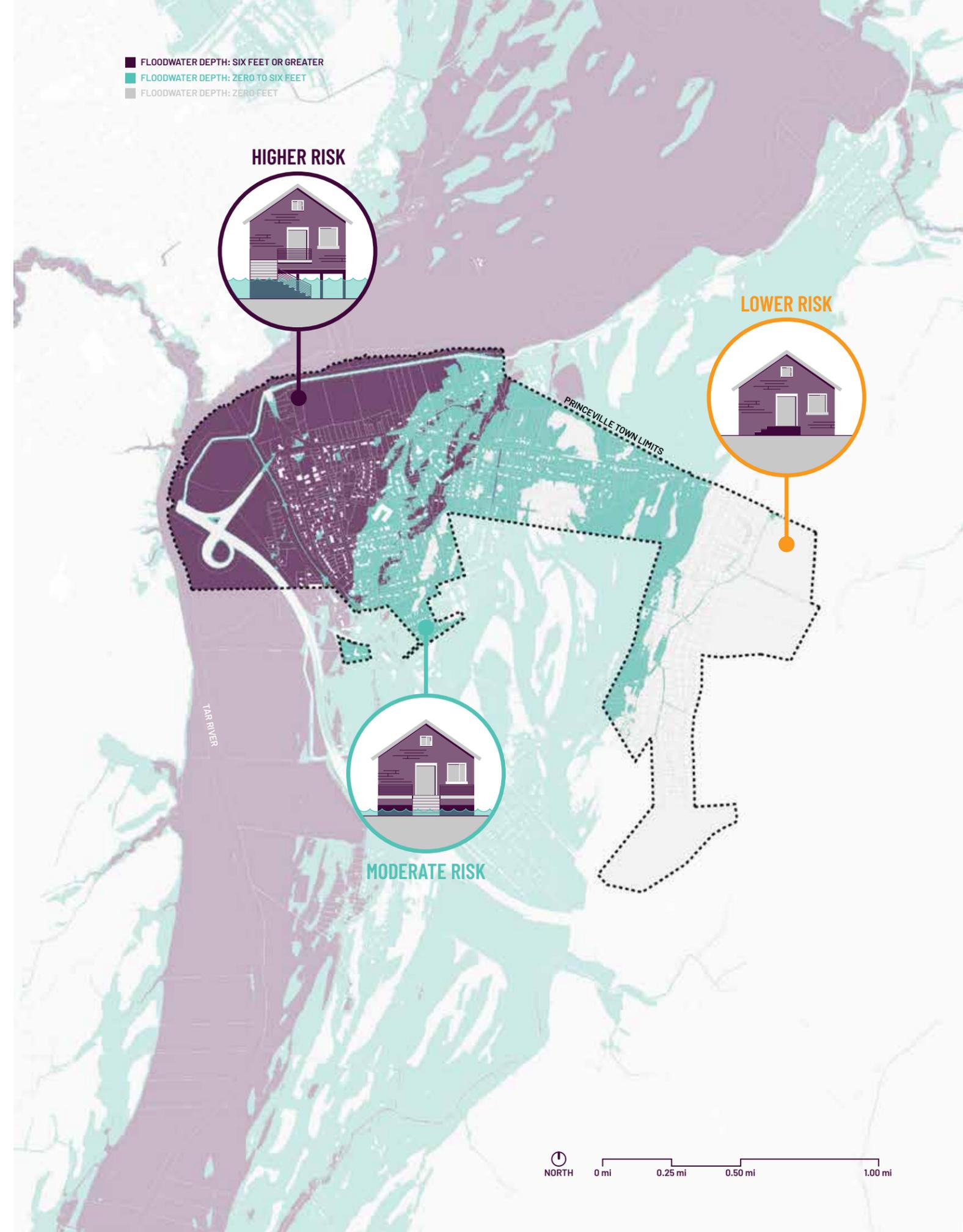


### VARYING RISKS WITHIN THE FLOODPLAIN

When assessing hazards in communities, land planners often treat the entirety of a floodplain as posing the same ubiquitous threat. In Princeville's case, the size of the floodplain relative to the size of the town requires a more nuanced assessment to best understand both risk and mitigation options.

As a means of determining the degrees of flood vulnerability that exist throughout Princeville, assessments of possible intervention needed to mitigate flood risk were organized into three categories: higher risk zone, moderate risk zone, and lower risk zone. These zones were generated by: i) mapping the Water Surface Elevation of the Tar River during a 100-year flood event (the standard benchmark for flood mitigation projects); and then ii) subtracting that height from the Digital Elevation Model (i.e., the height of the ground surface). Doing so generates a third map: Floodwater Depth of a 100-Year Flood depicting the height of floodwater relative to the ground surface. Areas of town with greater depths of floodwater appear darker, whereas parts of town with no anticipated flooding appear as white.

These results were then extrapolated into the three risk zones based on the minimum level of intervention needed in order to mitigate flood risk. The map on the right shows locations in Princeville where, in general, homes would need to be elevated with piers, elevated with foundations and/or floodproofed, or can likely remain as-is during a 100-year flood event. These findings are consistent with the results of the elevation analysis of individual homes on the previous page, suggesting that this type of analysis accurately illustrates flood risk and associated mitigation alternatives.



# MITIGATION PLANNING

## FLOOD ORDINANCE CONSIDERATIONS

Adopting a minimum set of design guidelines for single-family residential housing that accurately reflect varying degrees of flood risk is an important step to ensure the safety of citizens. These guidelines can also inform a pattern language and development standards that all rebuild or elevation projects must conform to as part of the flood mitigation process. Codifying the suggested flood risk zones represents a key initial step toward creating a unified set of design guidelines for residential structures in Princeville.

### THREE FLOOD RISK ZONES

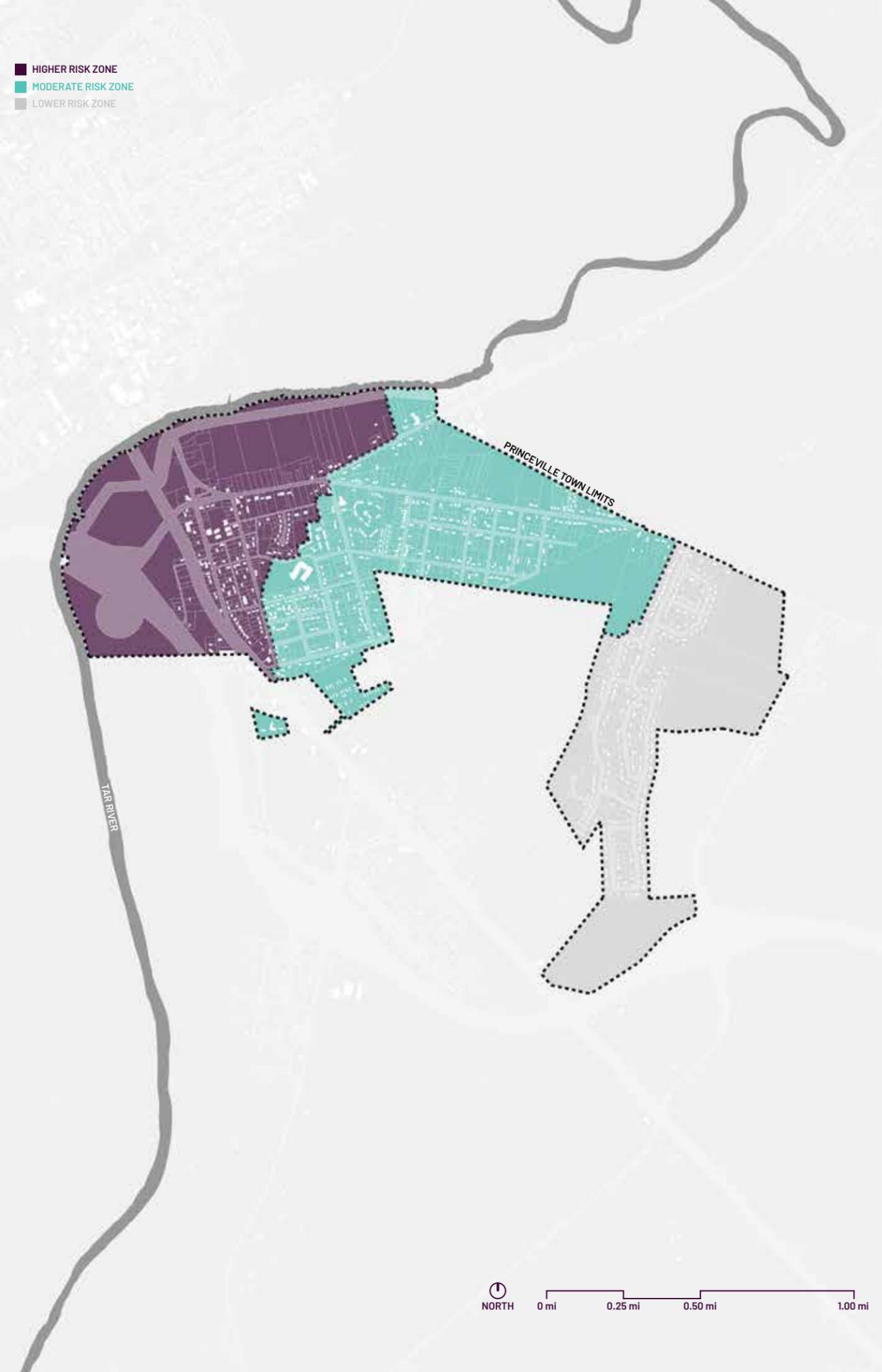
For homeowners who choose to remain in Princeville, a clearer understanding of flood-risk zones and associated safe housing options is needed. The map on the right consolidates the findings from the floodwater depth analysis and home elevation analysis to illustrate three flood risk zones (with minimum building code suggestions; i.e., piers, foundations, or as-is) that closely align to Princeville's street network.

While the ultimate decision to rebuild, elevate, or vacate must be made on a parcel-by-parcel basis, this map helps communicate the overall mitigation strategies needed across different parts of town. The goal of this analysis is to facilitate knowledge- and consensus-building among neighbors regarding the required level(s) of intervention needed on their respective properties and to visually illustrate what to expect from any construction that may take place.

It is also critical to communicate to residents that the anticipated levee improvement project: i) will not translate to a finished

product for many years; ii) is likely designed to mitigate only up to a 100-year flood (Hurricanes Matthew (2016) and Floyd (1999) both exceeded this threshold); and iii) does nothing to protect an individual property should the levee fail. Given these stark realities, it is recommended that as many homeowners as possible consider elevating their homes above the suggested heights while the option to use federal and/or state funds to do so still remains an option from Hurricane Matthew relief efforts. In the opinion of the project team, this is the safest option for residents to mitigate personal flood risk while remaining in Princeville's historic core. When paired with active reuse strategies for vacated lots, this collectively presents an opportunity for the town to hold on to a much-needed tax base while also ensuring a safer and more flood-ready condition within town limits.

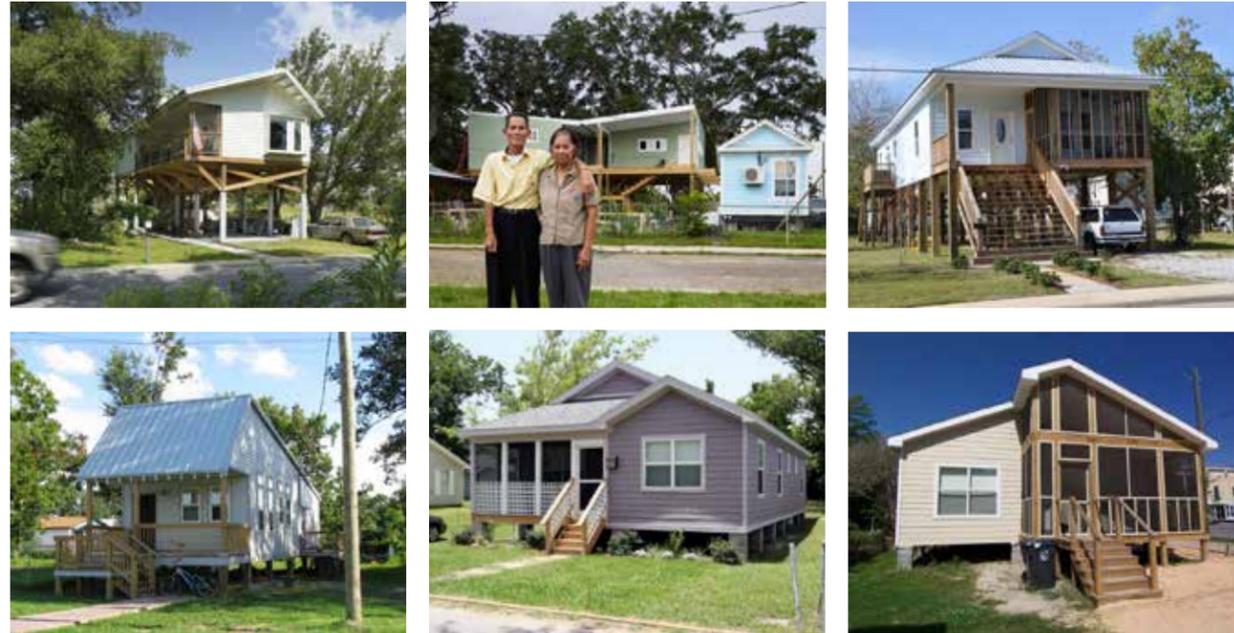
■ HIGHER RISK ZONE  
■ MODERATE RISK ZONE  
■ LOWER RISK ZONE



# CASE STUDIES

## PRECEDENT MITIGATION EXAMPLES

**Katrina Houses:** Gulf Coast Community Design Studio



**Weeks Bayou:** Gulf Coast Community Design Studio



### A DIFFERENT LOOK FOR BUILDING A RESILIENT COMMUNITY

#### **Elevation With Piers or Porches.**

Gulf Coast Community Design Studio  
Biloxi, Mississippi

"Hurricane Katrina resulted in overwhelming housing needs in cities all along the Mississippi Gulf Coast. The Gulf Coast Community Design Studio's (GCCDS) response was shaped by three realizations. First, design services on their own would not be effective and needed to be part of a comprehensive case management approach. Such case management is needed in order to help homeowners apply for funding and in order to make use of building resources. The second realization was that prospective homeowners should be included in the design process so that the houses produced are a good fit and end up being long-term housing. Third, because the construction labor force after a large disaster is often made up of inexperienced volunteers, changing site supervisors, and builders who might not have a knowledge of hurricane zone construction, the architect's role during construction is different than for a typical contractor project.

For eight years, with various funding sources, GCCDS has provided architectural services for over 230 new houses and over 100 rehabilitated houses. Each house was designed specifically for the family and site. Our architects and intern architects worked with seven primary partner organizations [each of which] provided case management leading up to design and construction management to get the houses built. In all cases, GCCDS provided architectural services for lower-income households that qualified for various government and philanthropic assistance. This collaboration enabled us to focus on the design and construction documentation of the houses." - gccds.org

#### **Conversion to Open Space.**

Gulf Coast Community Design Studio  
Biloxi, Mississippi

"A 250-acre watershed feeds into Weeks Bayou with nearly 40% remaining in its natural condition and 15% within the tidal marsh.

Following Hurricane Katrina in 2005, this property changed ownership multiple times and was eventually donated by the City of Ocean Springs to The Land Trust for the Mississippi Coastal Plain. Its restoration goals were aimed to not only improve water quality, but to remind the Ocean Springs community about the importance of caring for their diverse ecological watershed through education to youth and its neighbors.

To further the goal of educating students and community, this tidal marsh ecosystem was restored by excavating, removing and salvaging a concrete retaining wall and 20 dump truck loads of fill dirt. Marsh grasses were planted in the restored wetland and trees and shrubs were planted in the upland area. An outdoor classroom platform and water sampling dock were constructed using the salvaged concrete panels of the retaining wall and donated stainless steel bar grating. A boardwalk connecting the existing upland vegetation to the restored marsh was built out of salvaged timbers from the demolished retaining wall.

Through a partnership with The University of Southern Mississippi's Gulf Coast Research Lab (GRCL), a program that educates students in the fields of science, the restored site will provide a learning environment for local schools and summer camps. Over 2,000 elementary through high school students will visit the site each year to learn about the restoration, water quality improvements and recycling through GRCL field trips and summer camps." - gccds.org

# ACTION ITEMS

RECOMMENDED NEXT STEPS TO SUSTAIN MOMENTUM

- 1 CONSIDER (A) **ADOPTION OF THE PROPOSED FLOOD RISK ZONES** (HIGHER RISK, MODERATE RISK, LOWER RISK) WITHIN TOWN ORDINANCES AND (B) **CREATE A MINIMUM SET OF DESIGN GUIDELINES** FOR REBUILT OR ELEVATED HOMES IN EACH ZONE.

THESE ACTIONS PROMOTE A UNIFIED COMMUNITY IDENTITY AND CREATE A LOCALIZED FRAMEWORK FOR RESIDENTIAL DEVELOPMENT THAT PROTECTS THE HEALTH, SAFETY, AND WELLBEING OF ALL CITIZENS.

- 2 PLACE PRIMARY **FOCUS ON ACQUISITIONS AND ELEVATIONS IN THE HIGHER AND MODERATE RISK FLOOD ZONES.**

CONTINUE WORKING WITH NCORR + NCEM TO ASSESS WHICH PROPERTY OWNERS ARE ELIGIBLE FOR BUYOUTS OR HOME IMPROVEMENTS AS A RESULT OF HURRICANE MATTHEW FLOOD DAMAGES.

## TOWN PROTOCOLS + PROCEDURES

All of the proposed action items from this section of the report require approval from the Town of Princeville Board of Commissioners (Board) prior to proceeding.

Formally adopting the proposed flood risk zones into town development ordinances is recommended as a critical first step because this delineation: i) will streamline the creation of design guidelines for rebuilt or elevated homes; and ii) prioritizes areas of most critical need for acquisitions and/or elevations (either as a result of Hurricane Matthew or as pre-disaster mitigation (PDM) measures).

While adopting the flood risk zones into ordinances is a step that the Board can take unilaterally, the other proposed action items require various degrees of partnership to complete. Creating a set of unified design guidelines will likely require funds to support an architectural consultant, and coordination of acquisitions and elevations will require continued discussions with state and federal agencies (such as NCORR, NCEM, or FEMA).

# LAND USE ANALYSIS

## ALIGNMENT WITH FEMA-APPROVED LAND USE STRATEGIES

Analysis of land use in Princeville must recognize the complex and historical narrative of land ownership for both current residents and their predecessors. As the oldest town chartered by formerly enslaved Africans in the United States, Princeville's location in the Tar River floodplain is rooted in the fact that the land was viewed as undesirable by White landowners. The courageous founders who settled and eventually chartered Princeville created the community from the promise of self-determination. These newfound opportunities were, however, pitted against great pressures and risks, including constantly living with the threat of flooding.

Fast forward to 2020 and Princeville has faced numerous flood events that have challenged the long-term viability and continued existence of the community. For many Black communities in the U.S., these environmental risks have coincided with a series of short-sighted and sometimes misguided land planning policies. Under the guise of "hazard mitigation," some of these policies have resulted in the governmental taking of privately-owned Black lands

and, tragically, the erasure of some Black communities (Agyeman and Boone, 2020). As a town, Princeville has fought to sustain itself and maintain its place in history. Therefore, all current and future land-use recommendations must simultaneously recognize both Princeville's singular community history and the numerous ways in which the town's individual properties have been affected by policies and regulations over time.

The checkerboard pattern of vacant lands in the most flood-prone areas of town is the greatest challenge to developing unified municipal management strategies. Most of these vacant parcels are the result of federally-backed property acquisitions that were successful in relocating flood survivors out of the areas of highest flood risk. However, the unintended consequence of these programs is the abandonment of properties throughout Princeville's historic core.



# PLANNING STRATEGY

## CONNECTING THE CHECKERBOARD

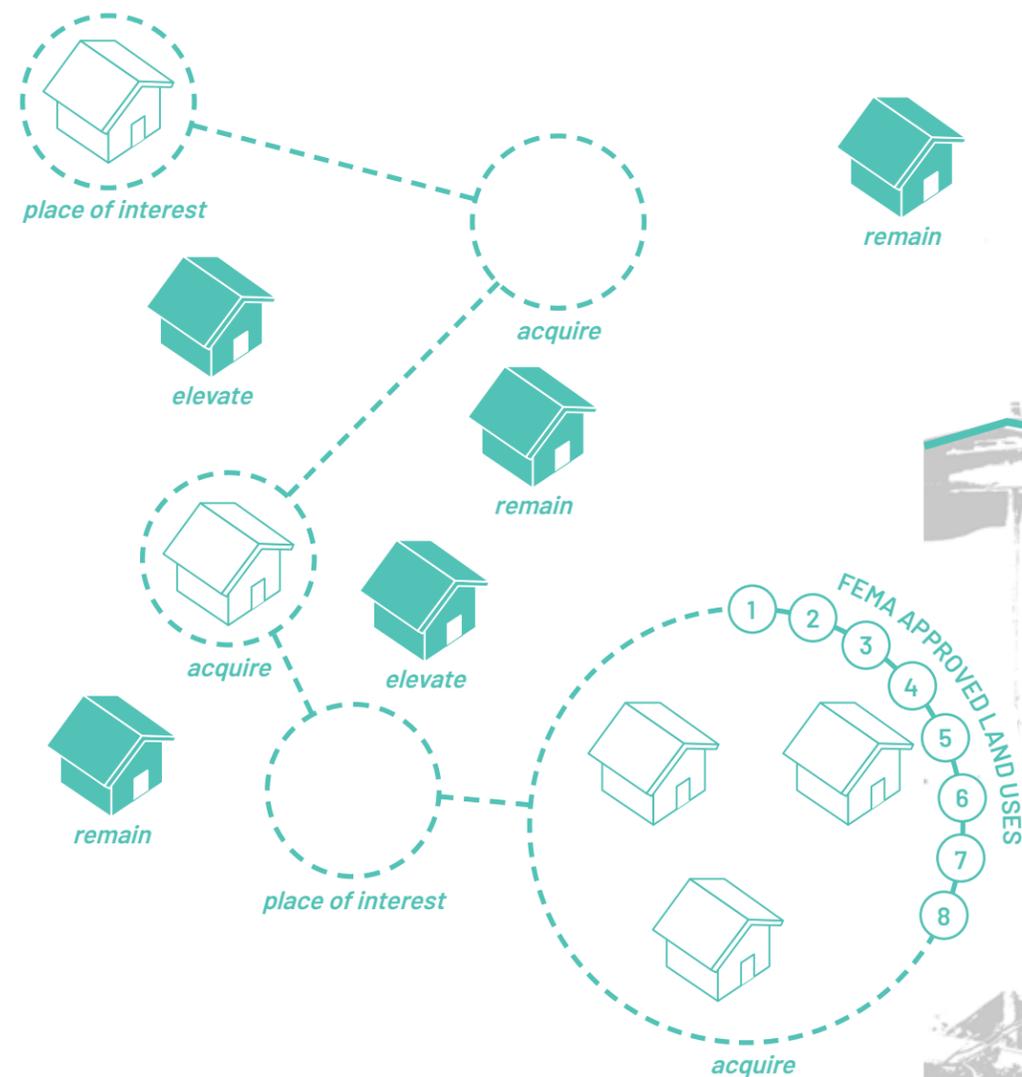
Vacancy is mandated by governmental acquisition programs (which are commonly referred to as “buy-outs”), and long-term, FEMA hazard mitigation policies. Upon acquisition, the deeds of buy-out properties are transferred to local jurisdictions (i.e., towns, cities, and counties) with the restriction that they forever remain as open space (without buildings or structures). In an effort to a (re) create a cohesive townscape, this study: i) analyzed all parcels in Princeville to assess their suitability with each of FEMA’s approved land-use strategies;

ii) identified vacant, municipally-owned, and publicly accessible properties that may be combined to enhance the function(s) of certain land use strategies; and iii) proposes a select series of incubator projects to incentivize new uses on and management activities for vacant properties. These ambitious concepts carefully consider ways in which existing land vacancy can be repurposed to create community benefits while eliminating Black land loss of properties that are currently occupied or are viable as future homesites.

On the ground, vulnerability in Eastern North Carolina communities often resembles the picture below. Properties are flooded, vacated, and attract illicit activities. Misinformation about federal and state financial aid programs is commonplace, and decisions about aid acceptance and denial are often made by spreadsheets rather than robust land planning analyses. A result of status-quo acquisition programs is a **discontinuous checkerboard pattern** that fragments much of these flood-prone landscapes. The underlying land-planning strategies of

the Princeville Community Floodprint are: i) **combine and consolidate** clusters of properties where they exist; and ii) **connect** them to existing, publicly accessible parks, conservation easements, and city/county/state-owned parcels.

The intent is to create a planning framework that comprehensively organizes cultural, recreational, and environmental assets within a series of park-like amenities.



# LAND USE OPTIONS

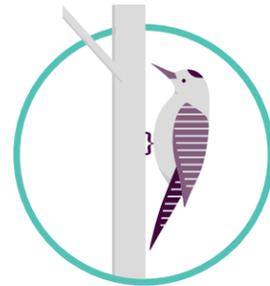
## COMPOSITE OVERLAY WITH EXISTING CONDITIONS



OUTDOOR RECREATION



CAMPGROUND



NATURE RESERVE



BUFFER ZONE



UNPAVED PARKING



WETLAND MANAGEMENT



GRAZING



CULTIVATION

### PARCELS IN NEED OF PROGRAMS

Properties acquired through federal disaster relief programs, such as FEMA, must adhere to specific uses after acquisition occurs. The following conditions and restrictions shall apply to all acquired properties:

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

b) Structures. No new structures or improvements shall be erected on the properties other than: i) a public facility that is open on

all sides and functionally related to a designated open space or recreational use; ii) a public restroom; or iii) a structure that is compatible with open space and conserves the natural function of the floodplain, including the uses described in paragraph A, and approved by the FEMA Administrator in writing before construction of the structure begins.

Any improvements of the properties shall be in accordance with proper floodplain management policies and practices, including flood-proofing or elevation to at least the Base Flood Elevation (BFE) plus freeboard (FEMA Model Deed Restriction, 2019).

☑ MUNICIPAL OWNED + HMGP APPLICANTS + VACANT (POST-FLOYD) + VACANT (WITHOUT BUILDINGS & TREES)



# LAND USE OPTIONS

## CRITERIA FOR SUITABILITY ASSESSMENT



**OUTDOOR RECREATION**

### RESTRICTIONS + IDEAL CONDITIONS

Parcels within and around the Princeville ETJ that meet the following criteria:

- + Adjacent to the Tar River, or
- + Adjacent to the Levee Trail, or
- + Intersect a Canal

These land holdings signify properties that can take advantage of Princeville's existing ecological and recreational assets, or potential trail systems via canals, that can connect to other points of interest.



**UNPAVED PARKING**

### RESTRICTIONS + IDEAL CONDITIONS

Parcels within and around the Princeville ETJ that meet the following criteria:

- + Adjacent to Places of Interest

While the need for additional parking in Princeville is not substantial, the most likely places that could currently benefit from extra parking, or may benefit from extra parking in the future, are those that are adjacent to points of interest in town that hold the potential for attracting outside visitors and/or supporting tourism activities.



**CAMPGROUND**

### RESTRICTIONS + IDEAL CONDITIONS

Parcels within and around the Princeville ETJ that meet the following criteria:

- + Adjacent to the Tar River, and
- + Non-Residential Land Use, and
- + Minimum Size of 1/2 Acre

There are limited parcels within Princeville that satisfy these criteria; however, this could serve as a supporting land use for existing and/or proposed recreational spaces in Town.



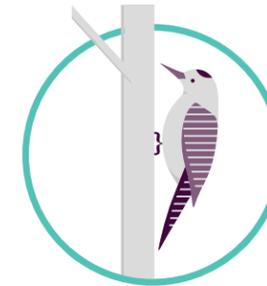
**WETLAND MANAGEMENT**

### RESTRICTIONS + IDEAL CONDITIONS

Parcels within and around the Princeville ETJ that meet the following criteria:

- + Adjacent to the Tar River, or
- + Intersect a Canal, or
- + Adjacent to Places of Interest

These land holdings highlight properties that can serve ecological, beautification, and/or stormwater management services in Town.



**NATURE RESERVE**

### RESTRICTIONS + IDEAL CONDITIONS

Parcels within and around the Princeville ETJ that meet the following criteria:

- + Adjacent to the Tar River or Adjacent to the Levee Trail, and
- + Minimum Size of 1 Acre, and
- + Vacant Land Use

These land holdings represent size and land use conditions suitable for flora/fauna preservation, conservation, and/or restoration.



**GRAZING**

### RESTRICTIONS + IDEAL CONDITIONS

Parcels within and around the Princeville ETJ that meet the following criteria:

- + Not Adjacent to Residential Land Use, and
- + Minimum Size of 2 Acres, and
- + Not Intersecting the Tar River or a Canal, and
- + Vacant Land Use

There are no parcels within Town limits that satisfy all of these criteria.



**BUFFER ZONE**

### RESTRICTIONS + IDEAL CONDITIONS

Parcels within and around the Princeville ETJ that meet the following criteria:

- + Adjacent to the Levee Trail, or
- + Adjacent to the Interstate

These land holdings highlight properties that can provide a screening and/or vegetative buffer between infrastructural features and a human-level line of sight. Certain types of Nature Reserves, and Managed Wetland areas can also provide similar buffering characteristics.



**CULTIVATION**

### RESTRICTIONS + IDEAL CONDITIONS

Parcels within the Princeville ETJ that meet the following criteria:

- + Vacant Land Use (including assumed vacancy; i.e. through buyout programs), and
- + Minimum 50% Land Cover without Tree Canopy

Cultivation offers the most flexible proposed land use option, as size requirements and existing parcel conditions can be highly variable to be suitable. This should be considered as a viable infill alternative for parcels that cannot be easily connected to other proposed uses.

# OUTDOOR RECREATION

## PARCELS MEETING CRITERIA

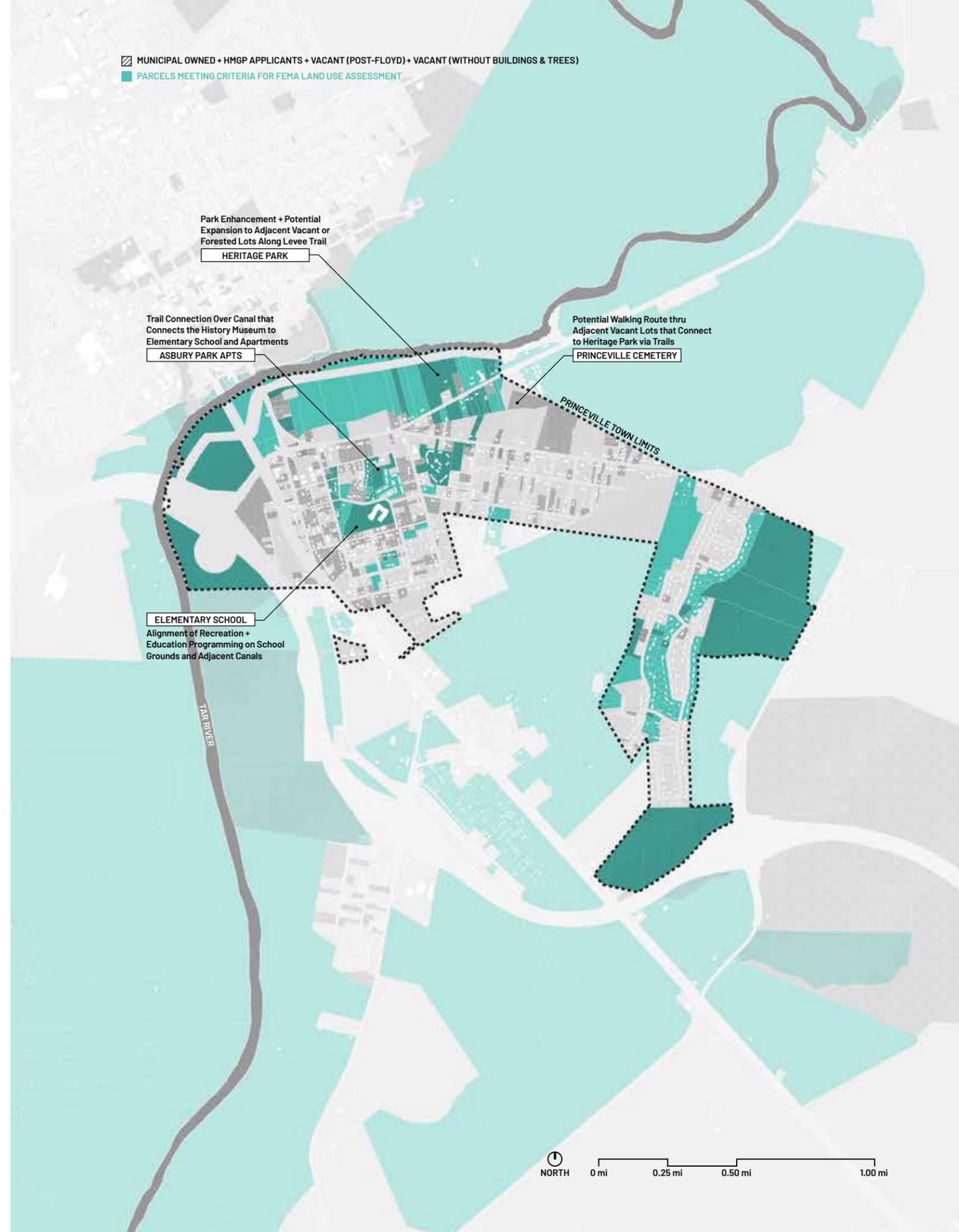
Princeville has great potential to support a wide range of outdoor recreational activities. Connecting existing environmental assets and opportunities (such as the Tar River, Levee Trail, and canals) to adjacent community points of interest (such as Princeville Elementary and Heritage Park) will enable the town to provide residents and visitors with an interconnected network of passive and active recreational features that contribute to community health.

### RECREATION AS A COMMUNITY CONNECTOR TO THE TAR RIVER

Outdoor recreation, for the purposes of this study, is defined as a programmatic use that addresses two primary criteria: i) highlight, celebrate, or restore existing environmental conditions; and ii) promote activities that most closely align with the stated values and goals of the Town of Princeville. Methods of assessing these criteria included: i) identifying and mapping the environmental conditions that make the town unique or hold promise to become a recreational asset; and ii) identifying and mapping adjacent points of interest that are capable of informing contextually sensitive and culturally appropriate design proposals.

**Mapped layers include: parcels that are adjacent to the Tar River; or parcels that are adjacent to the Levee Trail; or parcels that intersect a canal.** The location of these parcels is advantageous for connecting to existing assets that are either ecologically significant or could be repurposed as a part of a larger, interconnected recreational network. Analyses were conducted to filter out the parcels that meet these criteria and to identify

overlapping areas that contain municipally-owned, HMGP, or vacant properties. This assessment resulted in the following conclusions: i) the series of forested properties that border the Tar River and Levee Trail should be consolidated as part of a large, conservation-based recreational space; ii) the Princeville Cemetery should serve as a passive walking route that connects residential neighborhoods to Heritage Park and the Levee Trail; and iii) Princeville Elementary School should serve as a educational and recreational hub that connects existing canal systems (specifically two canals that converge along Church Street and one canal to the east of Jones Court) to other points of interest.



# UNPAVED PARKING

## PARCELS MEETING CRITERIA

There is currently not a significant need for unpaved parking in Princeville. However, unpaved parking areas are a more environmentally responsible alternative to paved parking for locations where future demand is anticipated because they allow for greater water absorption during rain events. Any proposed unpaved parking areas should be reserved for parcels that are adjacent to or include points of interest where parking is neither currently present nor clearly delineated, such as Powell Park, Mt. Zion Primitive Baptist Church, or Princeville Cemetery.

### PARKING TO SUPPORT SPECIFIC DEMANDS

Unpaved parking areas are useful alternatives to traditional, paved parking areas that adjoin points of interest. The unpaved (i.e., gravel or similar) parking areas are permeable, allowing for water to more readily infiltrate into the ground below. In Princeville, the implementation of unpaved parking areas as a programmatic use should be limited to specific areas that are adjacent to and directly serve points of interest. This option should only be pursued if supplemental parking is needed or anticipated.

**Mapped layers include: parcels that are adjacent to Places of Interest.** While the current need for additional parking in Princeville is low, the locations that may benefit from the addition of future parking areas are those that are adjacent to community gathering spaces or hold the potential to attract outside visitors.

Analyses were conducted to filter out the parcels that meet these criteria and to identify overlapping areas that contain

municipally-owned, HMGP, or vacant properties. This assessment resulted in the following conclusions: i) some of the parcels adjoining and including Powell Park can support vehicular parking, where neither parking spaces nor points of vehicular access are currently provided from Main Street; ii) some of the parcels bordering Princeville Elementary could service visitor and/or recreational parking to the school grounds if they remain available as a park-like amenity after normal operating hours; and iii) if a need for more parking is deemed appropriate, lots adjoining and including Mt. Zion Primitive Baptist Church and Princeville Cemetery can support clearly delineated areas for unpaved parking.

▨ MUNICIPAL OWNED + HMGP APPLICANTS + VACANT (POST-FLOYD) + VACANT (WITHOUT BUILDINGS & TREES)  
■ PARCELS MEETING CRITERIA FOR FEMA LAND USE ASSESSMENT



# WETLAND MANAGEMENT

## PARCELS MEETING CRITERIA

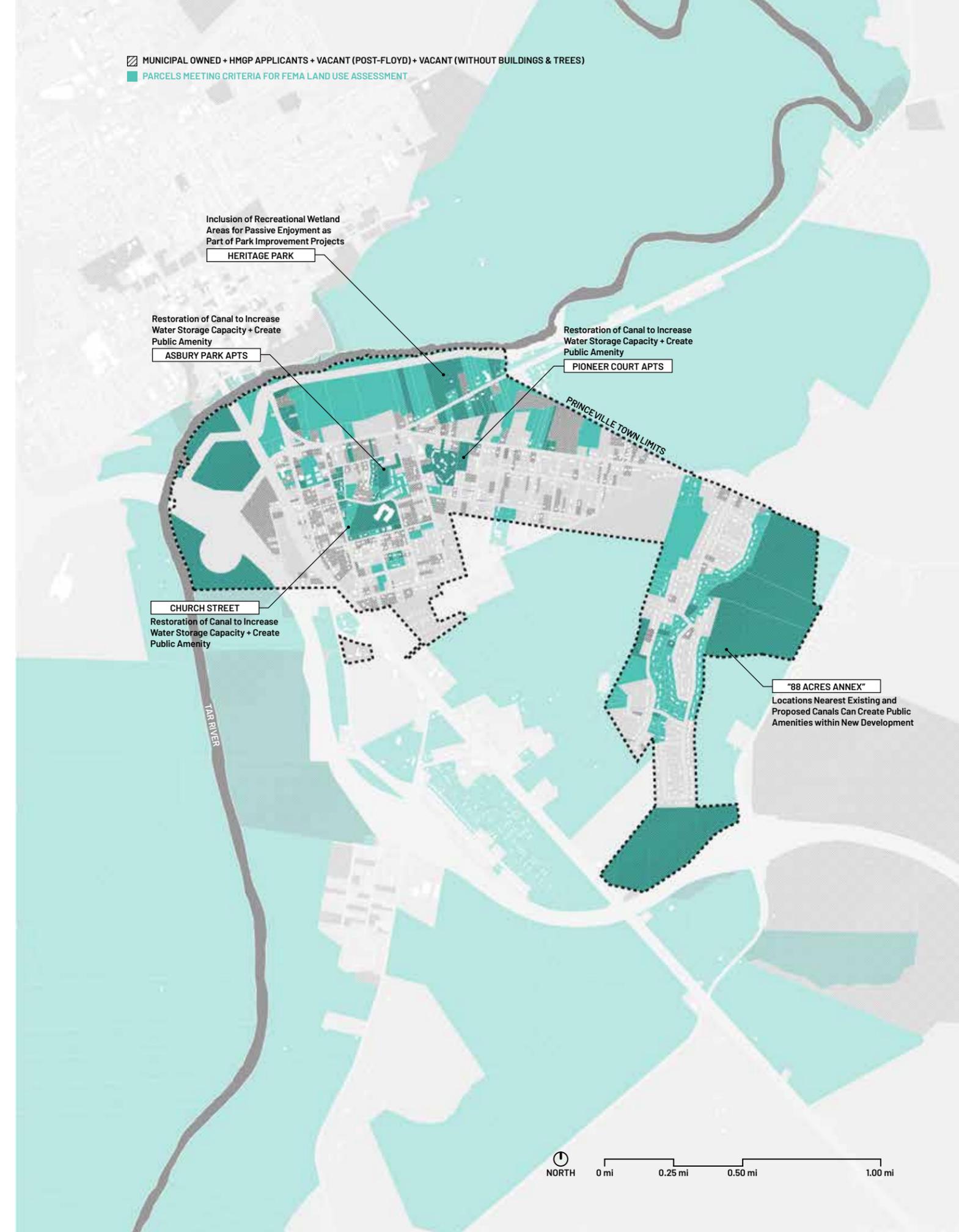
Many vacant or underutilized parcels in Princeville will benefit from conversion to a managed wetland. Most notably, many of the same parcels that satisfy the criteria for Outdoor Recreation also meet the suitability assessment for managed wetlands. Therefore, it is recommended that managed wetlands be used as a tool to both beautify and increase the water-storage capacity of the landscape, while also blending with outdoor recreational programs appropriate to each location.

### WETLANDS TO BEAUTIFY WATER STORAGE & CONNECT POINTS OF INTEREST

Managed wetlands can improve both the function(s) and appearance of vacant and underutilized lots. These stormwater retrofits flip lots that currently require mowing and generate run-off into high-storage stormwater devices. Additionally, converting mown parcels into shallow, vegetated stormwater features helps to conserve existing forested lots to ensure that their naturally occurring water filtration and storage functions are maintained. Although managed wetlands are an appropriate land use throughout much of Princeville, this strategy is recommended for larger areas created through the strategic consolidation of smaller parcels. Managing fewer, larger wetland areas reduces financial and maintenance loads.

**Mapped layers include: parcels that are adjacent to the Tar River; or parcels that intersect a Canal; or parcels that are adjacent to Places of Interest.** Collectively, these land holdings are well-suited to take advantage of Princeville's historic wetland context (i.e., low elevations, mapped soils, native plant communities, etc.) to better serve ecological, beautification, and/or stormwater management functions.

Analyses were conducted to filter out the parcels that meet these criteria and to identify overlapping areas that contain municipally-owned, HMGP, or vacant properties. This assessment resulted in the following conclusions: i) similar to the Outdoor Recreation analysis, many of the same parcels adjacent to the Tar River and surrounding Princeville Elementary meet these criteria. While the types of managed wetlands and outdoor recreation will differ in these locations, the spaces should be programmed to blend together managed wetlands with trail systems near the river and educational resources near the school; additionally ii) clearing the vacant parcels located between Town Hall and Mt. Zion Church will unify Princeville's civic core around spaces designed for community gathering, recreation, and sustainable stormwater management; and iii) the restoration of canals and replacement of impervious paving with permeable surfaces at Asbury Park Apartments and Pioneer Court Apartments will increase the water storage capacity of adjacent canals while also slowing the rate of stormwater runoff entering the drainage network.



# BUFFER ZONE

## PARCELS MEETING CRITERIA

Many of the parcels that satisfy the Buffer Zone criteria are located along the interstate and the levee. These parcels are currently forested and do not require significant intervention to satisfy this criteria. The use of smaller buffer areas to separate current or future visual and/or spatial conflicts between private and public spaces are recommended. Determining the locations of small-scale buffers should occur after land planning and design alternatives for specific parcels are agreed upon by stakeholders.

### BUFFERS TO SEPARATE CONFLICTING USES

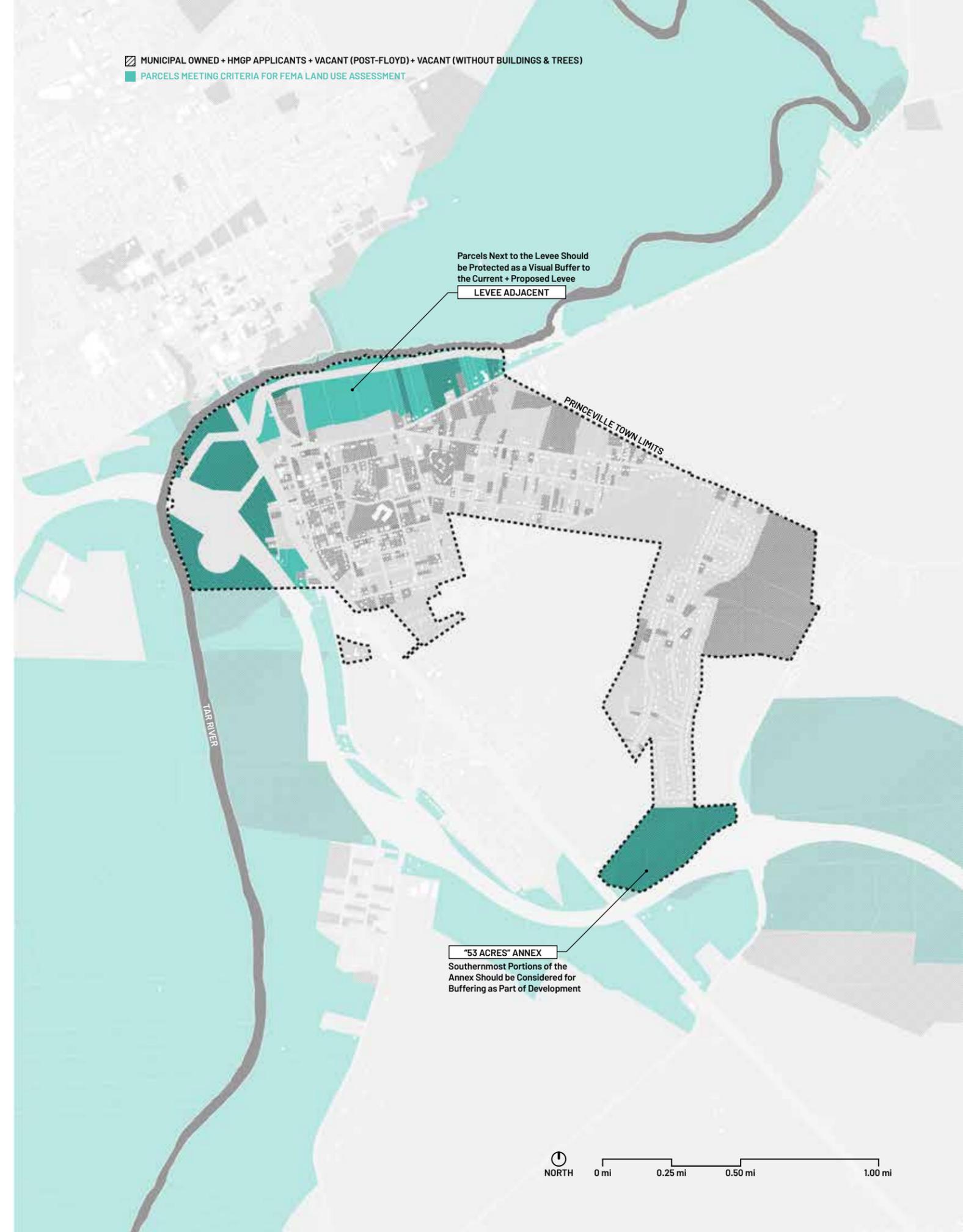
Vegetated buffer zones provide visual screening and/or physical separation between different land uses. Buffers are particularly effective in areas where residential housing is located adjacent to conflicting uses, such as parking, commercial and municipal facilities, or transportation and utility infrastructure. In Princeville, the primary areas where managing existing and creating new buffers are needed is along I-87/HWY 64 and the Levee Trail (which may become more important if future levee construction takes place). At smaller scales of intervention, buffering is useful between public spaces and private properties. It is best to determine the locations of buffers after other land uses and design strategies for specific parcels are agreed upon.

**Mapped layers include: parcels that are adjacent to the Levee Trail; or parcels that are adjacent to the Interstate.**

These land holdings provide screening and/or vegetative buffering between residential parcels and infrastructural

features at human-level lines-of-sight. Certain types of Nature Reserves and Managed Wetland areas can also provide buffering characteristics.

Analyses were conducted to filter out the parcels that meet these criteria and to identify overlapping areas that contain municipally-owned, HMGP, or vacant properties. This assessment resulted in the following conclusions: i) many of the parcels highlighted as suitable for buffer zones already exist in a forested condition, therefore limited intervention is needed; and ii) portions of the annexed 53-acre parcel nearest to the interstate should be considered for use as a buffer, as needed.



# CAMPGROUND

## PARCELS MEETING CRITERIA

There are a limited number of locations within the town limits identified as suitable for supporting this land use strategy. A more detailed regional analysis is recommended to assess the appropriateness of potential campgrounds in and around Princeville. If future assessments determine that campgrounds are a viable and appropriate land use strategy, they could bolster a variety of future recreational and tourism activities to support Princeville's economy.

### CAMPGROUNDS AS A RECREATIONAL AUXILIARY

Parcels for campgrounds show limited suitability within Princeville. Careful examination of supply versus demand of available campgrounds should be evaluated at a regional level to determine appropriateness. Both mapped locations in Princeville that are scored as suitable for campgrounds are adjacent to the Tar River. In order for these locations to function as campgrounds, additional improvements, such as vehicular access, raised platforms, bathrooms, and electricity, are required.

**Mapped layers include: parcels that are adjacent to the Tar River; and parcels with a Non-Residential land use; and parcels that are a minimum size of 1/2 acre.** There are limited parcels within Princeville that satisfy all three of these criteria, however, campgrounds could serve as a supporting land use for existing and/or proposed recreational amenities.

Analyses were conducted to filter out the parcels that meet these criteria and to identify overlapping areas that contain

municipally-owned, HMGP, or vacant properties. This assessment resulted in the following conclusions: i) some of the forested parcels near the Levee Trail and Tar River are suitable for a campground if proper site improvements are made; and ii) select parcels along the Tar River, near or included within the Fish and Wildlife properties in the westernmost area of Princeville, are suitable for a campground as an auxiliary use.



# NATURE RESERVE

## PARCELS MEETING CRITERIA

The riverine habitats along the Tar River and the early successional habitats within the agricultural fields that surround Princeville are well-suited to a nature reserve land-use strategy. However, the benefits that habitat protection and eco-tourism provide must be weighed against the potential trade-offs of restricted human access and/or pulling crop or timber lands out of production. Nature reserves should only be considered for ecosystems in need of protection or fallow farmlands.

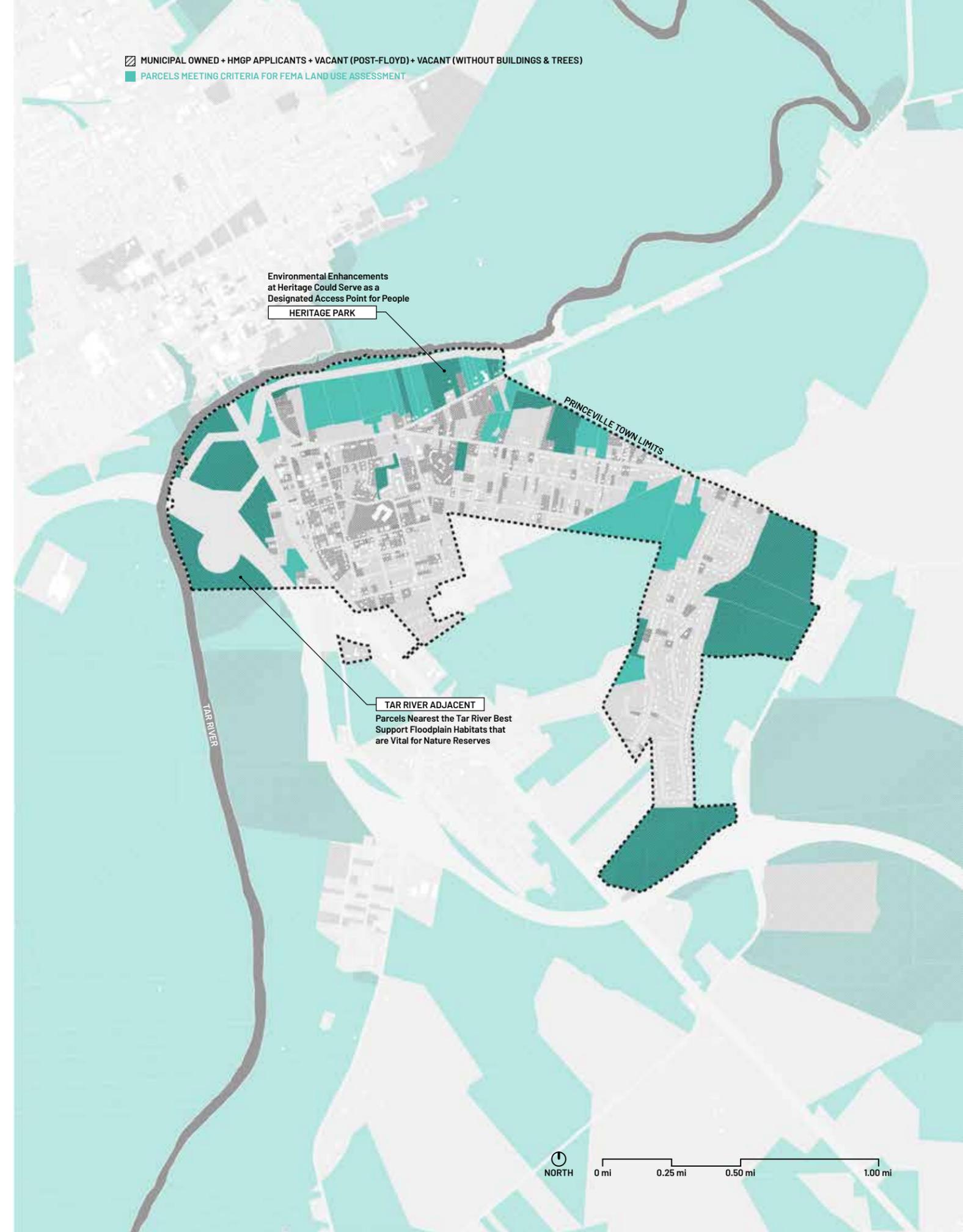
### NATURE RESERVE TO PROTECT AN ECOLOGICAL ASSET

While Princeville's core is not suitable for a nature reserve, this land use is appropriate for many of the areas that border the town. In general terms, there are two types of nature reserves to consider: i) consolidation of property adjacent to the Tar River to support riverine habitats; and ii) conversion of farm fields east of Princeville's civic core into managed, early successional habitats.

**Mapped layers include: parcels that are adjacent to the Tar River; or parcels that are adjacent to the Levee Trail; and parcels that are a minimum size of 1 acre; and parcels with a Vacant land use.** These land holdings represent size and land use conditions suitable for flora/fauna preservation, conservation, and/or restoration.

Analyses were conducted to filter out the parcels that meet these criteria and to identify overlapping areas that contain municipally-owned, HMGP, or vacant properties. This assessment resulted in the following conclusions: i) many of the forested

parcels near the Levee Trail and Tar River are suitable as nature reserves, but will likely include restrictions to human use; and ii) some of the larger agricultural tracts are also suitable as (restored) nature reserves, but this option should be reserved for fallow fields or abandoned farms.



# GRAZING

## PARCELS MEETING CRITERIA

There are no properties within Princeville's town limits that satisfy the criteria for grazing of large-scale livestock operations. This land use strategy is best used in more rural settings, as the associated land resource and buffering requirements oftentimes conflict with the norms of town life and community expectations. This analysis does not consider small-scale livestock operations, such as free-range chickens, which may be more appropriate.

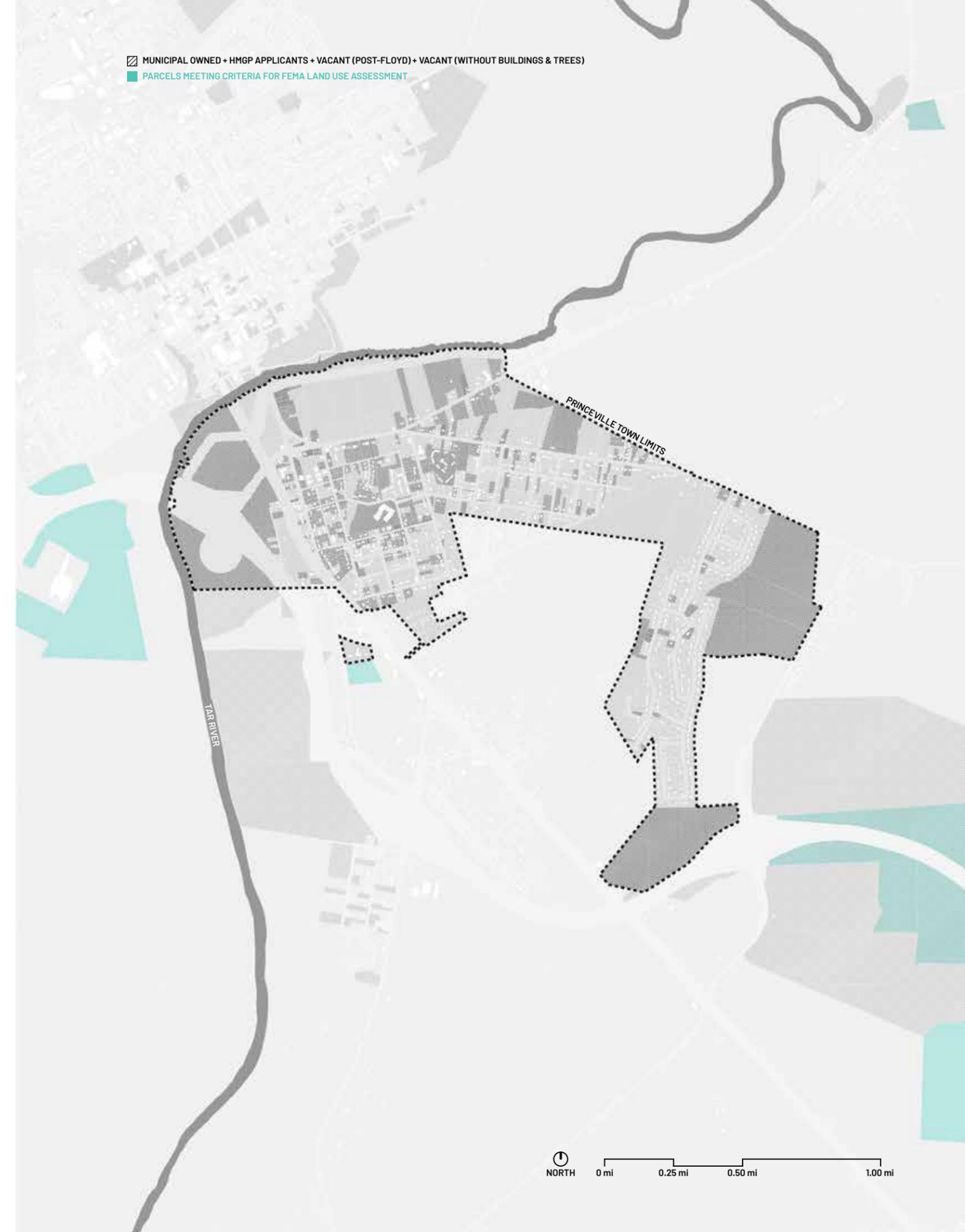
### GRAZING IS NOT SUITABLE

There are not any parcels in Princeville that satisfy all of the criteria for grazing, as the land size and buffering standards do not coincide with the parcel characteristics inside the town's ETJ. Landscapes reserved for grazing are often used for large-scale livestock operations, such as cattle, horses, and sheep, and are better suited for agrarian land uses outside of municipal limits.

**Mapped layers include: parcels that are not adjacent to a Residential land use; and parcels that are a minimum size of 2 acres; and parcels that are not intersecting the Tar River; and parcels that are not intersecting a Canal; and parcels with a Vacant land use.**

Analyses were conducted to filter out the parcels that meet these criteria and to identify overlapping areas that contain municipally-owned, HMGP, or vacant properties. This assessment resulted in the following conclusions: i) no parcels inside of the Princeville ETJ satisfy all of these criteria; and ii) this analysis

does not include filtering for areas that may be suitable for small-scale livestock endeavors, such as free-range chickens, which require far fewer land resources than typical grazing-related operations.



# CULTIVATION

## PARCELS MEETING CRITERIA

Cultivation offers the most flexible land-use strategy throughout Princeville. Cultivation techniques can be used on a wide variety of lot configurations that respond to numerous site conditions. Cultivation also represents a low-cost way for actively and productively managing underutilized properties. Princeville has several local organizations that include cultivation practices as part of their mission, and it is recommended that the town form partnerships with these as a means of lessening the burden of land management while stimulating local economies.

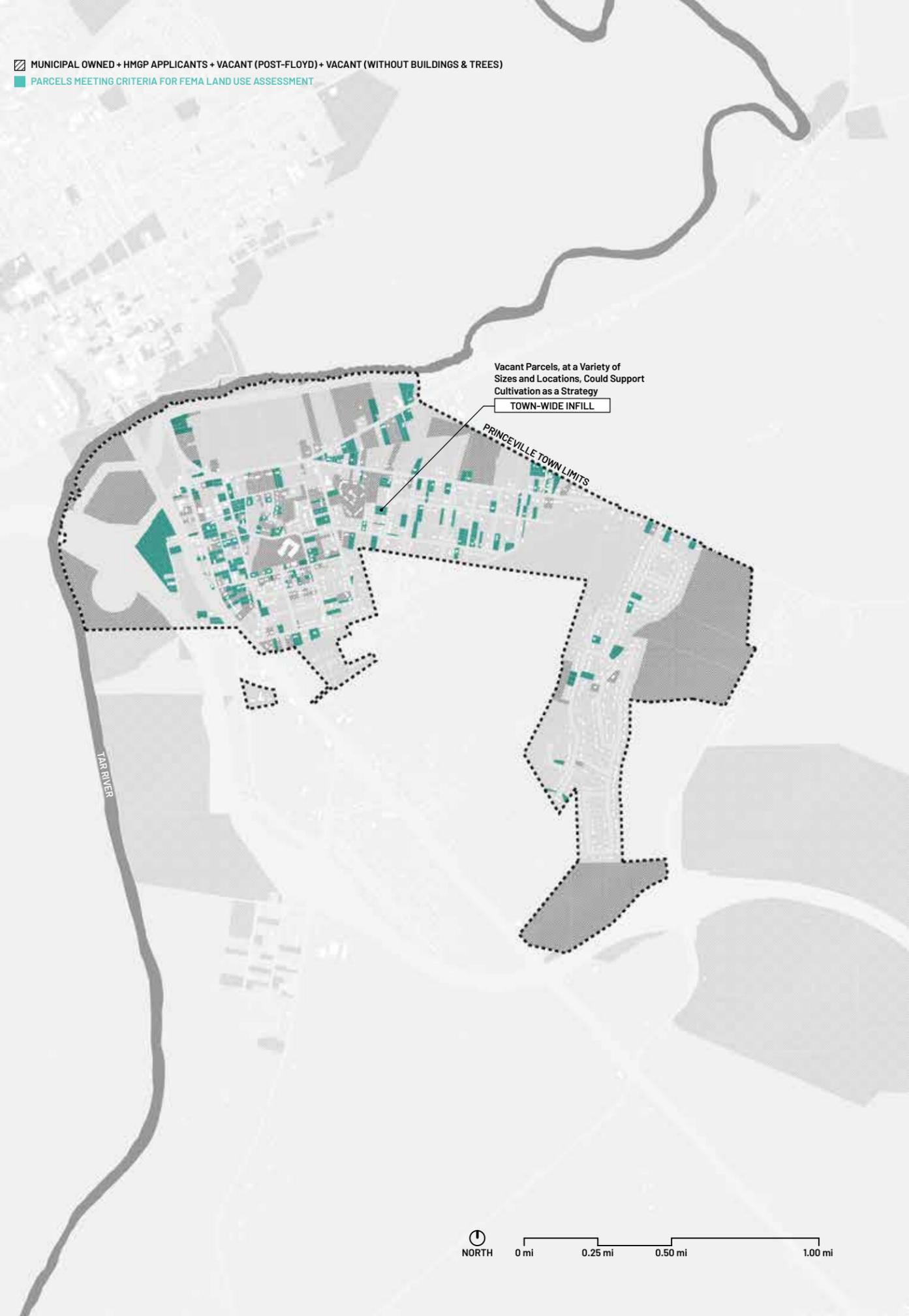
### CULTIVATION TO FILL IN THE GAPS

Cultivation of vacant or underutilized lots provides an active, flexible, and potentially profitable land use for properties that are otherwise visually dormant and financially unsustainable for the town to maintain on a recurring basis. Cultivation is more adaptable to the town's physical landscape than any other allowable land use strategy. A wide range of agricultural practices and crop types enable in-town cultivation to accommodate varying parcel sizes, adjacent land uses, and environmental conditions.

**Mapped layers include: parcels with a Vacant land use (including HMGP applicants); and minimum 50% land cover Without Tree Canopy.** Cultivation is the most flexible of the proposed land-use strategies due to its ability to conform to highly variable size requirements and existing parcel conditions. Most strategic to addressing the challenges of checkerboarding, cultivation is a viable option for infilling parcels that cannot be easily connected to other proposed or existing uses.

Analyses were conducted to filter out the parcels that meet these criteria and to identify overlapping areas that contain municipally-owned, HMGP, or vacant properties. This assessment resulted in the following conclusions: i) it is recommended to use local organizations to operate and manage small-scale farmettes on lots that are consolidated to support cultivation; ii) when local organizations are used for operations and management, it is also recommended that the town consider low-to-no-cost land leases or deed transfers of the parcels to said organizations; iii) in situations where citizens wish to cultivate single, vacant lots immediately adjacent to their homesites, it is recommended that the town institute a low-cost lot-leasing program (i.e., \$1.00 annually renewable land lease) to incentivize residents to use and care for these parcels in ways that are beneficial to both the individual resident (i.e., grow vegetables, fruit trees, flowers, etc.) and greater community (i.e., provide ongoing landscape maintenance).


 MUNICIPAL OWNED + HMGP APPLICANTS + VACANT (POST-FLOYD) + VACANT (WITHOUT BUILDINGS & TREES)  
 PARCELS MEETING CRITERIA FOR FEMA LAND USE ASSESSMENT



# LAND USE COMPOSITE

## PROGRAMMING RECOMMENDATIONS



OUTDOOR RECREATION



CAMPGROUND



NATURE RESERVE



BUFFER ZONE



UNPAVED PARKING



WETLAND MANAGEMENT



GRAZING



CULTIVATION

### FIVE FOUNDATIONAL PROJECTS

Parcel-level analysis of the eight FEMA-approved land-use options show that four of the open space strategies best align with Princeville's existing ownership and environmental conditions. These are: outdoor recreation, wetland management, nature reserve, and cultivation. Isolating and coding these uses into one map presents a clear delineation of recommended land use strategies that best respond to the analyzed geospatial conditions throughout Princeville.

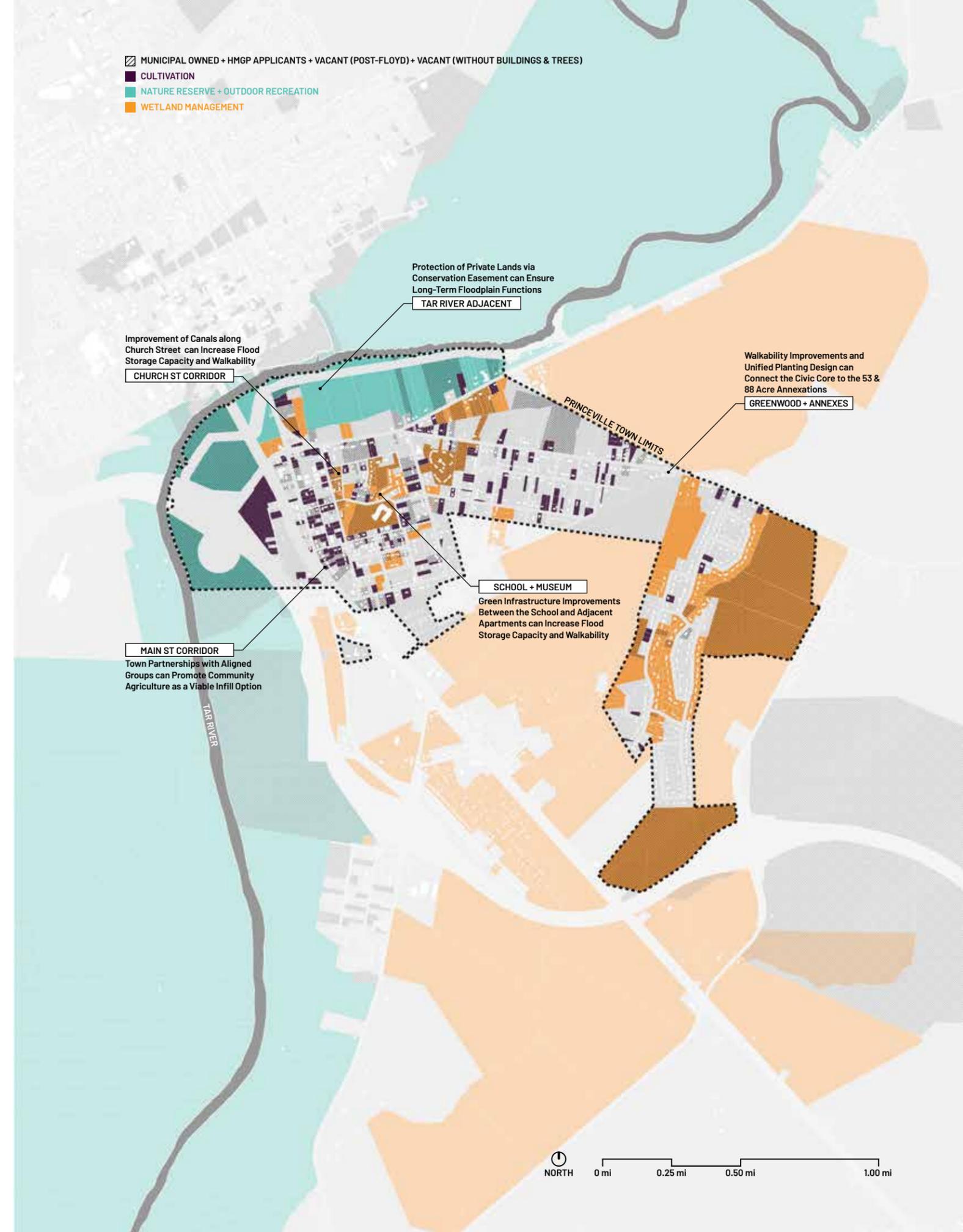
Related to parcels that are either municipally owned or are currently undergoing acquisition from HMGP (or similar state-funded programs), these land-use strategies can be implemented immediately or in the near future. These properties are of primary importance as proof-of-concept lots.

Related to adjacent and/or other vacant lots that satisfy the FEMA-approved land-use criteria but that are not currently municipally owned, this map illustrates patterns of programming strategies

that the town can use to guide decisions if/when more properties become available (i.e., cultivation between Main Street and Church Street; wetland management along drainage canals; outdoor recreation adjacent to the Tar River, and etcetera).

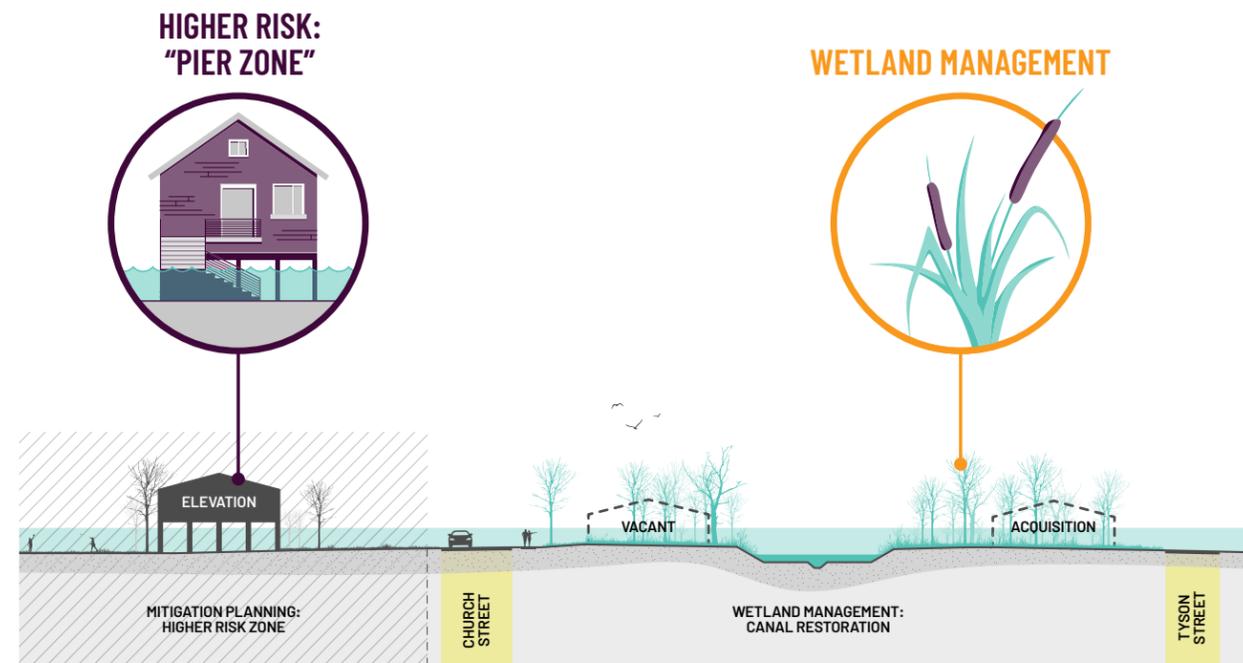
Suggested on the map to the right are **five foundational projects that respond to the findings of this study and, if implemented, represent fulfillment of the Floodprint goals.** Each of these projects are described in greater detail later in this report and are categorically organized under the broader concepts of: conservation, cultivation, and wetland connections.

- MUNICIPAL OWNED + HMGP APPLICANTS + VACANT (POST-FLOYD) + VACANT (WITHOUT BUILDINGS & TREES)
- CULTIVATION
- NATURE RESERVE + OUTDOOR RECREATION
- WETLAND MANAGEMENT



# ZONING + PROGRAMMING

BRINGING IT ALL TOGETHER



Section View. Church Street Corridor Proposal.

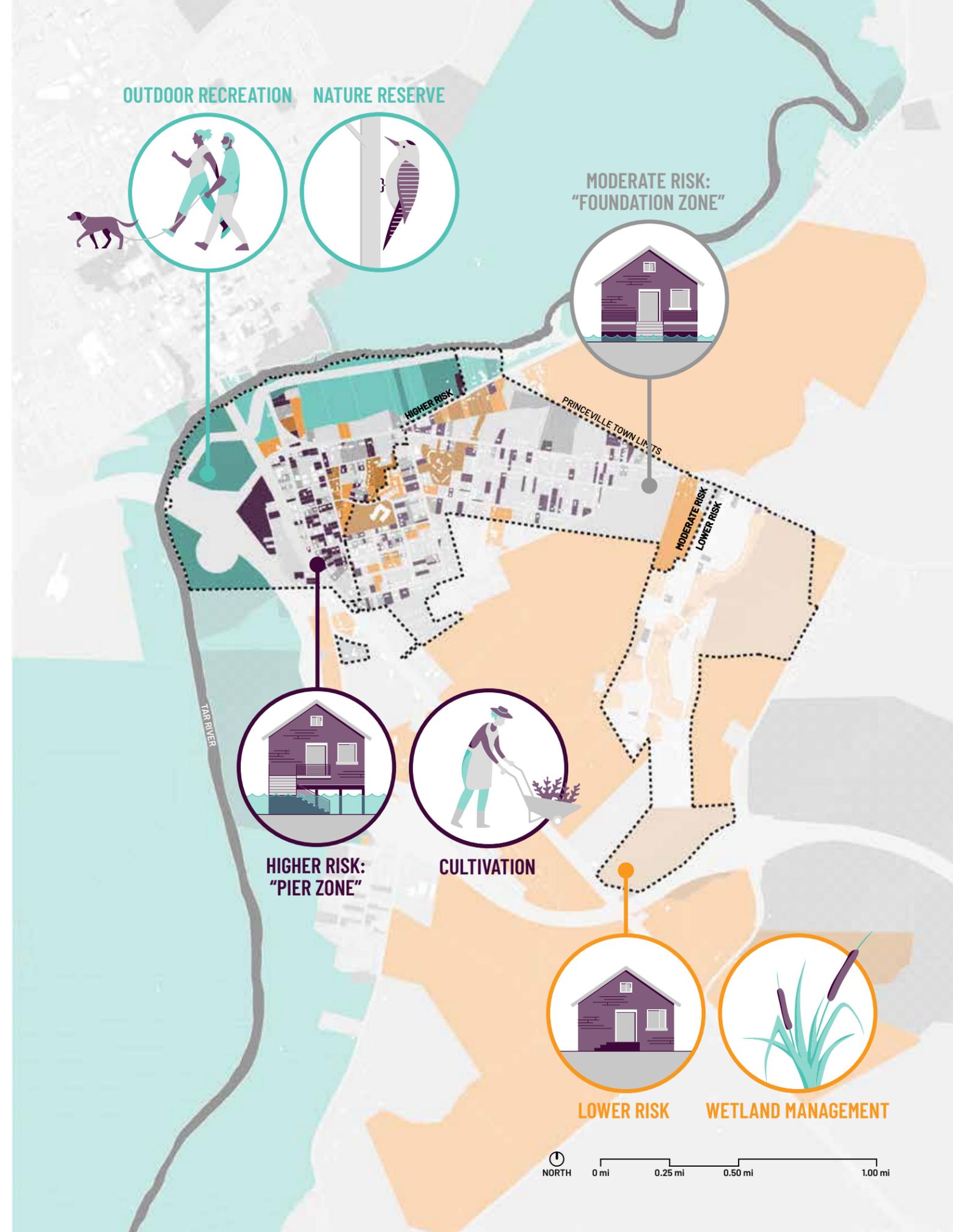
## ONE NARRATIVE: CONSERVATION + CULTIVATION + WETLAND CONNECTIONS

Combining analyses from the vulnerability assessment of existing housing and the FEMA-modeled land-use findings illustrates the land-use types that best align with various housing typologies. This process also highlights the areas of town that are at the highest risk of flooding and require immediate action.

Focusing initial phases of implementation in the areas of town that are most susceptible to flooding ("higher risk zone") will have the greatest spatial and visual impact on: i) Princeville's vacancy conditions, and ii) the overall appearance of the town's civic core. Additionally, consolidating vacant and underutilized lots together under a shared set of land-use designations and recommendations will enable projects to be organized into separate but mutually supportive initiatives that work in unison to achieve the goals of the broader plan.

The most notable patterns within this proposed housing and land-use framework are: i) implementing conservation principles,

practices, and policies along the Tar River are key to supporting outdoor recreation and ecosystem preservation; ii) cultivation practices are highly suitable land uses within the higher risk "pier zone" of town; and iii) wetland management and planting design are the best practices for visually connecting and physically connecting places of interest in Princeville's historic civic core to the proposed developments at the 53- and 88-acre annexes.



# ACTION ITEMS

RECOMMENDED NEXT STEPS TO SUSTAIN MOMENTUM

**1 IDENTIFY PROJECT PARTNERS** WITH EXPERTISE IN: CONSERVATION EASEMENTS, URBAN OR COMMUNITY AGRICULTURE, AND CONSTRUCTED WETLAND AND STREETScape DESIGN.

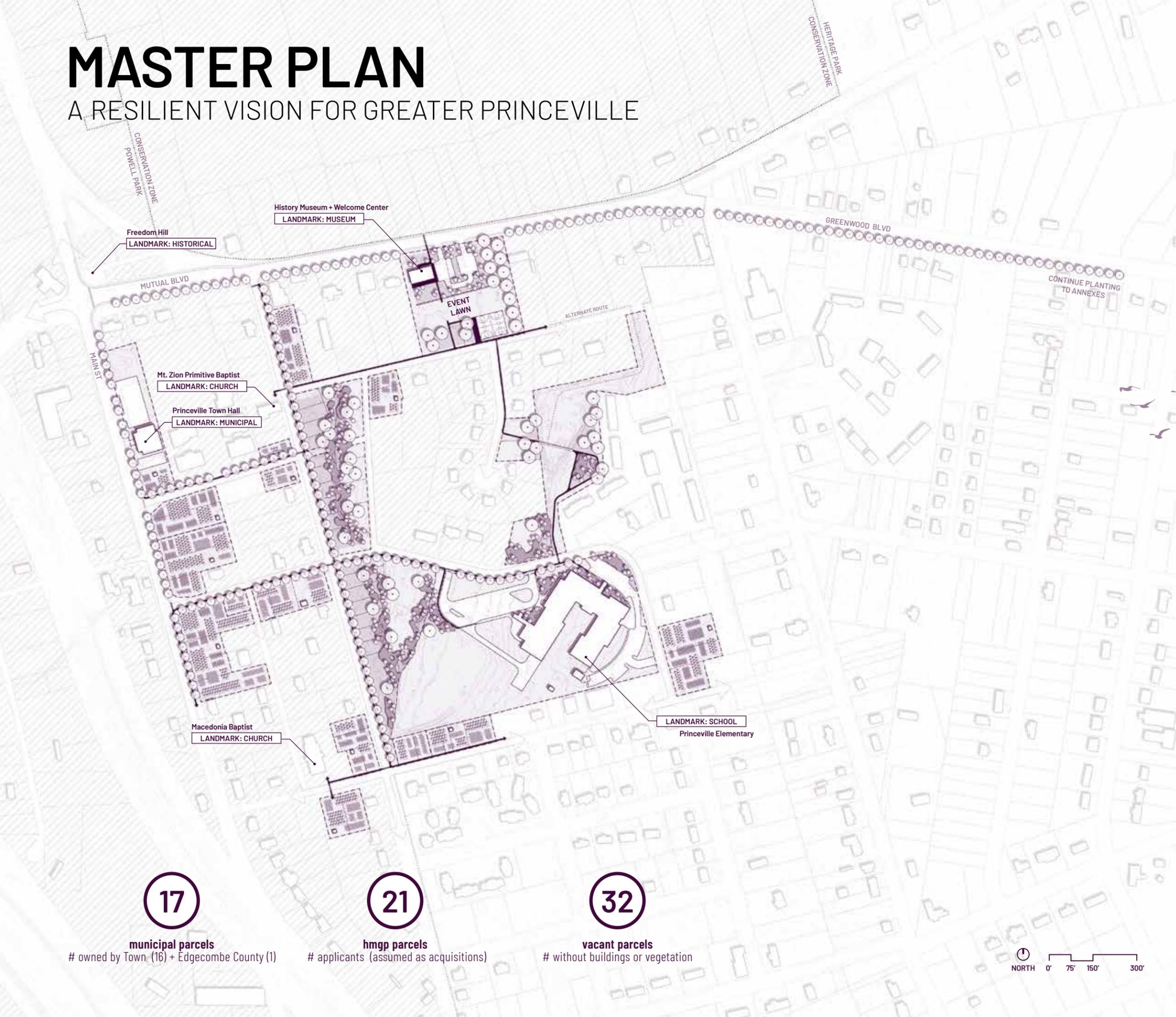
**2 DEVELOP A FRAMEWORK TO ALLOCATE RESOURCES FOR THE FIVE FOUNDATIONAL PROJECTS.** THE RESOURCES NEEDED WILL VARY BY PROJECT, BUT CAN BE ACHIEVED EITHER THROUGH TIME SPENT ON APPLICATIONS FOR EXTERNAL FUNDING (GRANTS) OR USING INTERNAL RESOURCES ALREADY IN-HAND (TOWN BUDGET) TO SUPPORT IMPLEMENTATION OF THE PROPOSED PROJECTS

## TOWN PROTOCOLS + PROCEDURES

Realizing the action items set forth in this plan requires the involvement of town staff, elected officials, and allied agencies and organizations. Due to planning, coordination, and budgetary requirements, town leaders are strongly encouraged to maintain existing and actively seek out new project partners. Strategic partnerships are critical to building capacity, reducing knowledge gaps, and expediting project implementation. These collaborations will take many forms. Some projects will require funding for professional services, while proposals related to lot-leasing or donation can be led by local entrepreneurs and/or community organizations (nonprofits and faith-based groups) interested in cultivation. The next section of the report proposes “five foundational projects” that combine analysis with community planning at scales appropriate for the town leaders to oversee. While the level of funding needed to implement each project varies significantly (including projects that do not need budgetary inputs from the town), it is recommended that the town create a process for prioritizing and allocating funds for implementing these projects as budgets, staff resources, and partnership opportunities allow.

# MASTER PLAN

A RESILIENT VISION FOR GREATER PRINCEVILLE



## PRINCEVILLE FLOODPRINT: PLAN GOALS

The primary benefits of focusing land-planning strategies around a succinct set of policies and analyses are: i) individual plans and projects can be developed under a unified and consistent vision, and ii) clearly defined community goals help to build knowledge and consensus across individuals and groups. Here, the Princeville Floodprint Master Plan creates a narrative of long-term community resilience centered on the concepts of conservation, cultivation, and wetland connections. Together, this approach seeks to provide town officials and aligned project partners with a **framework capable of navigating the fluid, ever-changing conditions of recovery**. More than a static plan, the Princeville Community Floodprint establishes customizable, **highly adaptive strategies for repurposing vacant and/or buyout properties into natural infrastructure assets**. The goals of the plan are to inform, organize, and facilitate the ongoing planning, design, and implementation of: communal greenspaces that mitigate localized flood risks; sustainably managed stormwater; and active and passive recreational uses, including physical activity, community events, environmental education, habitat restoration, and heritage-based tourism.

17

municipal parcels

# owned by Town, (16) + Edgecombe County (1)

21

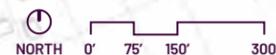
hmgp parcels

# applicants (assumed as acquisitions)

32

vacant parcels

# without buildings or vegetation



# PROJECT TYPE: CONSERVATION

## INCREASING PUBLIC ACCESS TO THE TAR RIVER

Visual and physical connectedness to the Tar River are critical methods of increasing the community's overall environmental awareness. The levee that protects the town from smaller flood events also separates residents from experiencing the river in a meaningful way. From within the town limits, recent generations of Princeville residents have not been afforded an opportunity to see and touch the Tar on a regular basis despite residing in its floodplain.

Furthermore, the large tracts of forested wetlands located between Mutual Boulevard and the Tar River, while serving a range of ecosystem services, are not accessible to the general public due to private land ownership. A critical first step is to proactively work toward implementing direct public access to the river and its forested wetlands from within town limits. Completing this step involves certain challenges, greatest of which involves outreach to and engagement with numerous property owners, some of whom reside out of state. Developing a communication plan is therefore

required to gauge landowner interest in possible land transfers, donations, or any existing or proposed deed restrictions.

Because the Town of Princeville has limited capacity to engage with each of these individual landowners, it is recommended that the town consult with conservation specialists to collectively: i) address landowner questions and concerns, including associated financial implications for either potential donors or donees; and ii) assess opportunities for and impacts from ecosystem protection and enhancements, outdoor recreation, and heritage tourism enabled through the certification of conservation easements on some or all of the parcels adjacent to the Tar River.

While this report places specific focus on parcels located between Powell Park and Heritage Park, any combination of these land holdings (or others along the Tar River) would benefit the community through placement into a conservation easement with granted public access.



# TAR RIVER ADJACENT CONSERVATION

Princeville's history is inextricably linked to the Tar River; however, the existing levee and private ownership of parcels adjacent to the Tar River make it difficult, if not impossible, for residents to physically access the water. Strategically selecting properties for placement into certified conservation easements will ensure the protection of ecosystem functions along the Tar while also providing public access between Powell Park and Heritage Park.

## EXISTING CONDITION: LACK OF ACCESS AND CONNECTIVITY

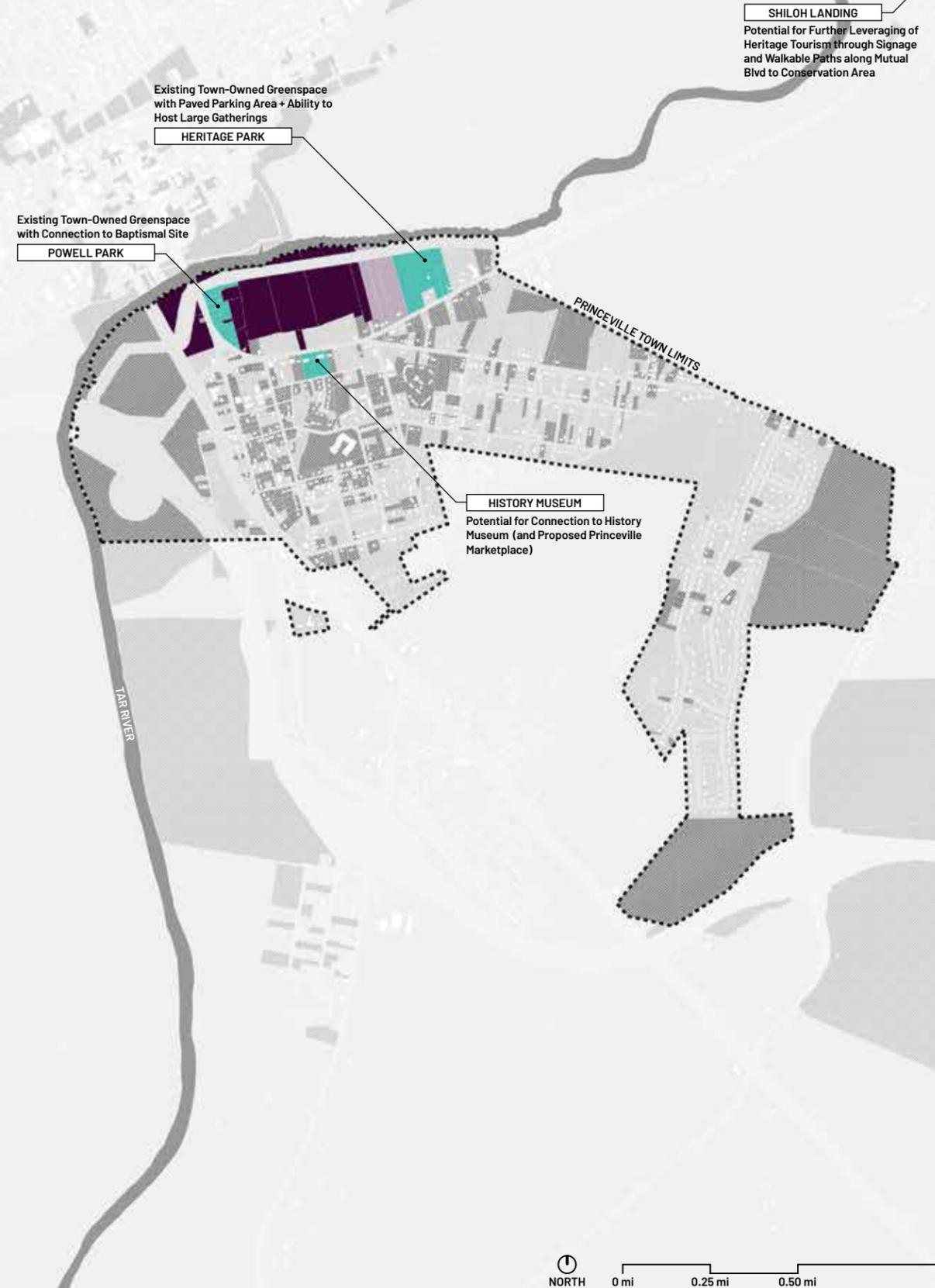
Although easements restrict development activities, certified conservation easements along the Tar River offer a new type of economic development to the Town of Princeville: heritage-based ecotourism. These opportunities currently do not exist; river access is only possible at Shiloh Landing, which is located outside of Princeville's jurisdiction.

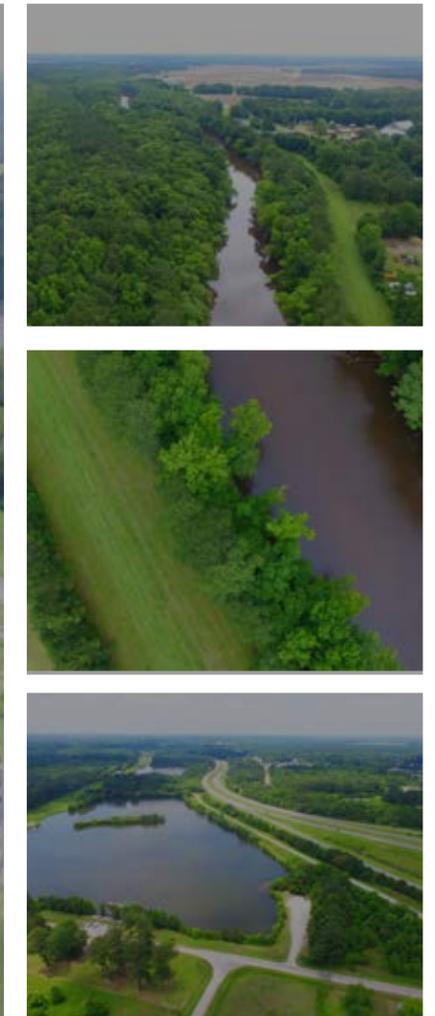
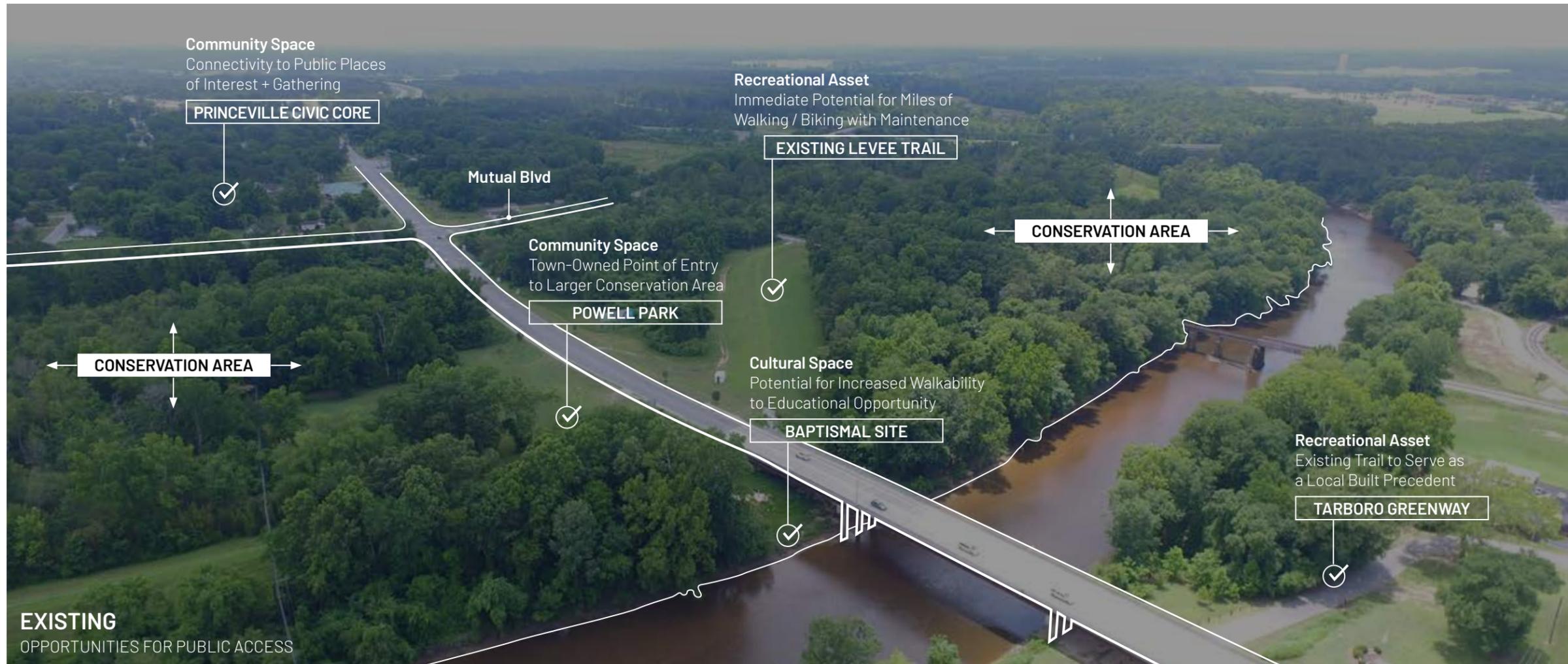
A more focused effort is needed to connect some or all of the forested tracts along the Tar River, most importantly between Powell Park and Heritage Park. This will result in a large, contiguous land holding that can be curated to offer residents and visitors a unique blend of walking trails, cultural and educational opportunities, and visual sight lines to the Tar River.

Properties immediately adjacent to the Tar River and the existing levee are most critical to achieving this outcome. Therefore, it is important that project partners engaging with the property owners successfully communicate the various forms

of conservation easements and the potential benefits to the landowners. Additionally, in cases where home sites exist within a relatively small portion of a larger parcel, deed restrictions and/or reserved rights should be considered to maintain mutually agreeable buffer zones between publicly-accessible and privately-occupied portions of the property.

-  MUNICIPAL OWNED + HMGP APPLICANTS + VACANT (POST-FLOYD) + VACANT (WITHOUT BUILDINGS & TREES)
-  PROPOSED CONSERVATION EASEMENT
-  PROPOSED CONSERVATION EASEMENT WITH DEED RESTRICTIONS





## STEP-BY-STEP FOR IMPLEMENTATION

**1. Contact Landowners and Gauge Interest.** Conservation easements can be structured in numerous ways to both: i) ensure the long-term, perpetual protection of certain properties; and ii) accommodate varying degrees of landowner involvement and potential financial benefit. A certified land trust should lead these discussions to assess what possibilities for easements, and public access within them, may exist.

### 2. Perform Property Appraisal to Assess Fair Market Value.

In circumstances where a property owner may be willing to sell their property as part of a conservation initiative, an appraisal is needed to determine the fair market value of the property. An independent appraiser can be recommended by either the landowner or the land trust; however, payment for appraisal service may be expedited if the land trust takes the lead role in pursuing appraisal services. In this event, the cost of the appraisal can be negotiated as part of the overall property transaction if good faith exists on both sides.

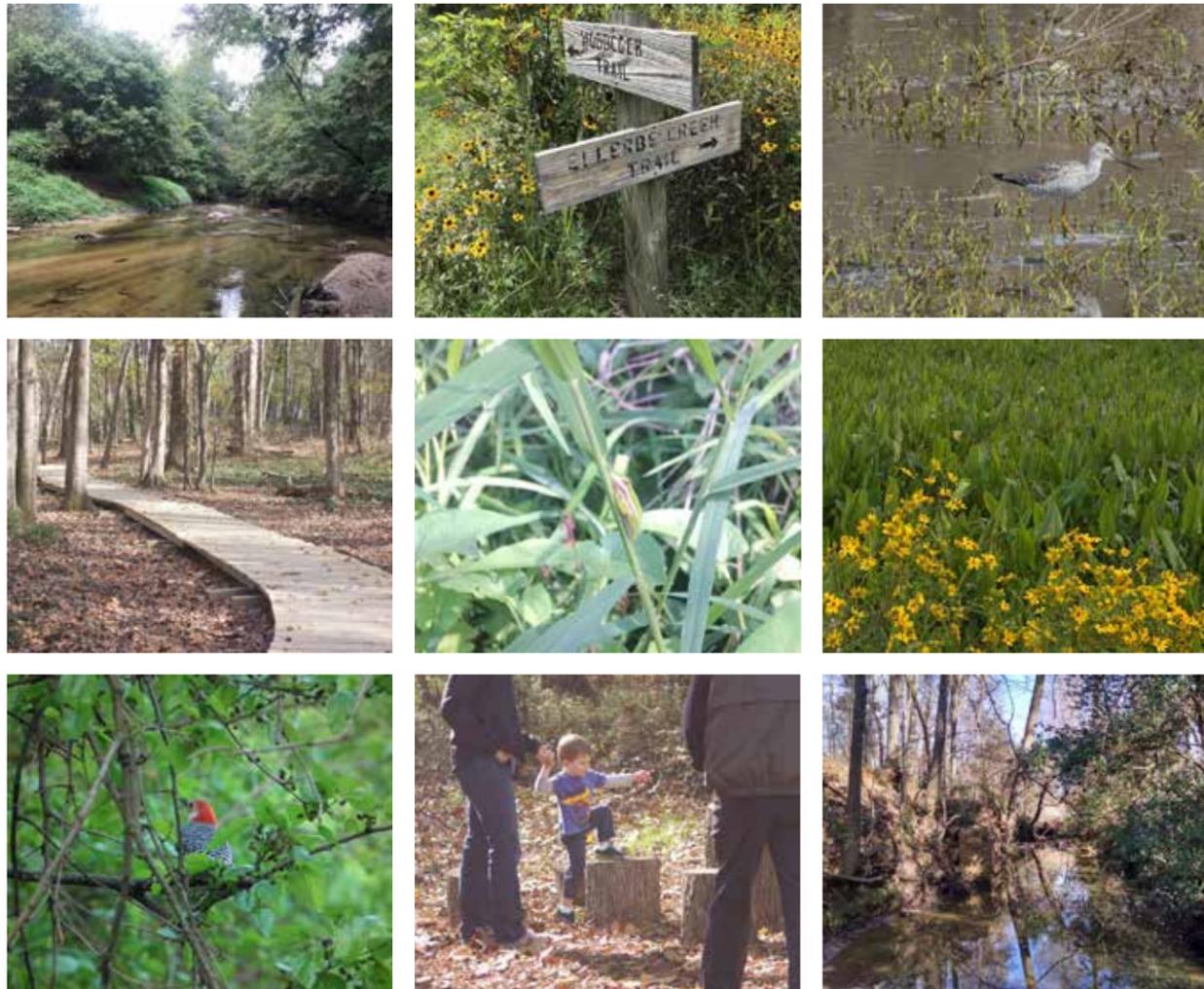
**3. Identify and Apply for Grants to Purchase Property and Install Desired Features.** Should significant funds be required to purchase any properties, numerous state and federal grant programs exist to support these initiatives. The land trust, town officials, and/or associated project partners may all need to contribute time to grant writing to accumulate enough funding to either purchase subject properties or support the construction of desired amenities, such as trails, boardwalks, or signage.

**4. Commence Baseline Documentation Reporting.** In most cases, if steps 1-3 are met the land trust will be required to complete a baseline documentation report ("BDR") as part of standard procedures. The BDR certifies (under Treas. Reg. § 1.170A-14) that subject properties meet federal and/or state guidelines for qualified conservation contributions in their current condition. Any deed restrictions from the current landowner and any anticipated rights to be reserved (i.e. clearing of understory for a permeable trail) need to be defined at this time.

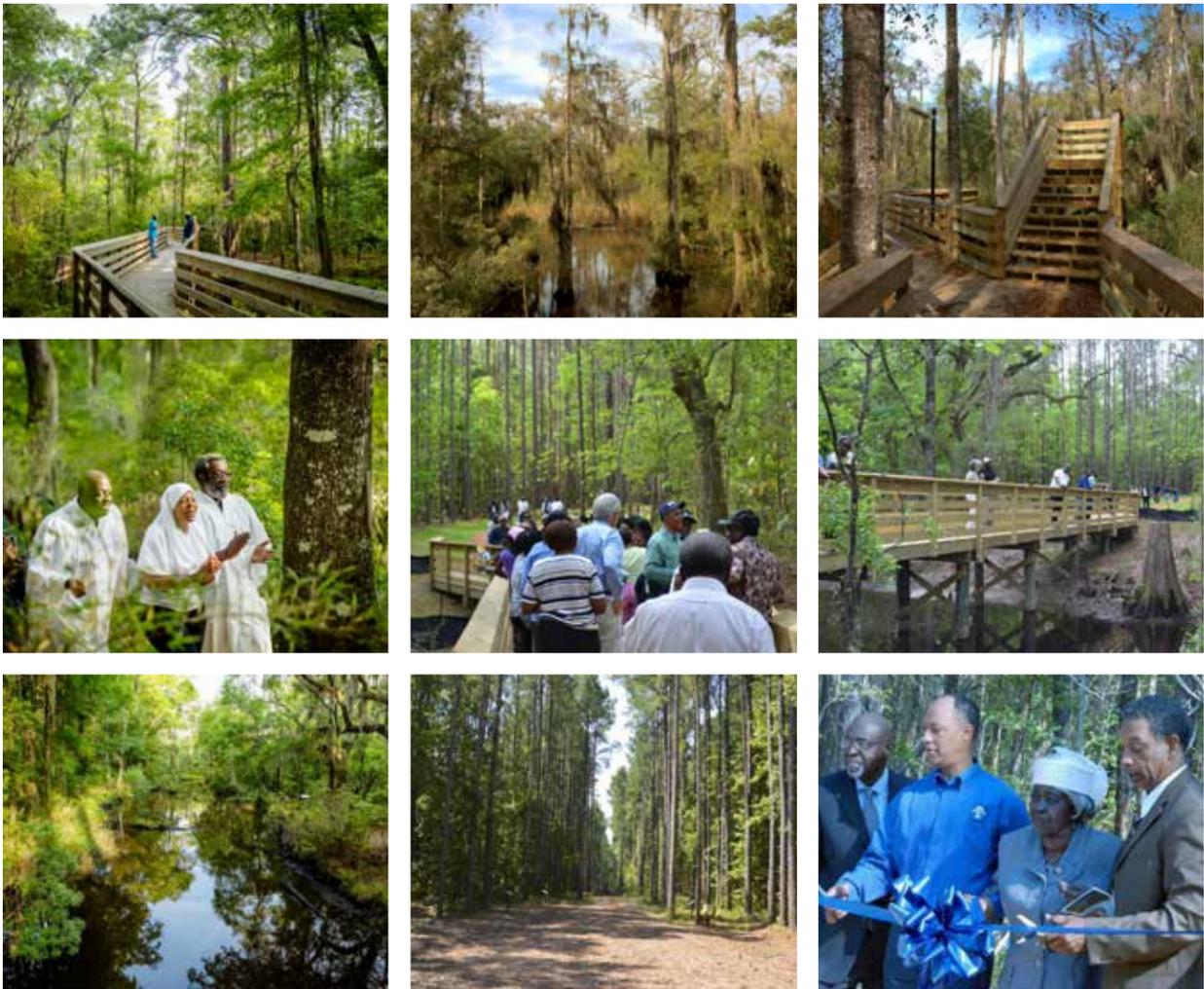
**5. Make Formal Offer and Close on Property.** As needed, this is a transactional matter between the current landowner and the land trust. If using grant funds, all monies should be in-hand or guaranteed as reimbursable prior to closing.

### 6. Construct Desired Features and Share Management Plan.

Additional internal funds should be earmarked and external grants should be pursued to support the creation of a management plan and the construction of desired physical improvements. Potential grants for these purposes should be identified and applications submitted once engagements and/or negotiations with the landowner(s) from previous steps seem promising.



Various ECWA Preserves: Durham, North Carolina



Historic Baptismal Trail: Riceboro, Georgia

**CASE STUDIES + PRECEDENT**

**Ellerbe Creek Watershed Association  
Durham, North Carolina**

“In April of 1999, with the help of concerned citizens throughout the community, [Ellerbe Cree Watershed Association] ECWA was officially born. Since then, the organization has gone from 6 acres to 450, including five public preserves, and has developed powerful initiatives aimed at restoring the creek, engaging the community in its well being, and advocating for the future health of the watershed.

Beginning with the “Parks with Purpose Project,” ECWA is taking a deeper look at environmental injustice. We’re committed to representing our entire watershed, including Goose Creek and the neighborhoods of Old North Durham, Albright, East Durham, and Wellons Village. It is our goal to support community members in the Goose Creek areas in their community engagement efforts, acknowledging that flooding and pollution are not simply

environmental issues, but often the result of unjust systems of land ownership.

From our humble beginnings two decades ago at Indian Trail Park, we’ve grown into an organization of hundreds of people working together to heal and protect both our urban streams and the communities around them.” - ellerbecreek.org

**Historic Baptismal Trail  
Riceboro, Georgia**

“For almost 100 years this site was an active holy place where the ancestors of the local Geechee communities baptized new members into their faith. Oral and written church history from the surviving descendants of the First African Baptist Church indicate that as early as the 1840s this site was used as a place where the ritual Christian baptism was performed by leaders of a congregation of enslaved people. These early baptisms were carried out in affiliation

with the White North Newport Church. After the white congregation moved to Walthourville in 1854, the enslaved Africans renamed the church the First African Baptist Church and continued the practice of the ritual baptisms at the site until the early 1940s.”  
- libertycounty.org

# ACTION ITEMS

RECOMMENDED NEXT STEPS TO SUSTAIN MOMENTUM

1

**INITIATE AND MAINTAIN DIALOGUE WITH A KNOWLEDGEABLE LAND TRUST TO PURSUE CONTACT WITH SELECT PROPERTY OWNERS AND MAKE KNOWN THE TOWN'S DESIRE FOR WALKABLE PATH NETWORKS WITHIN ANY PROTECTED AREAS.**

THE DEEDING OF ONLY A FEW PARCELS TO A LAND TRUST IS NEEDED TO CREATE WALKWAYS AND EDUCATIONAL OPPORTUNITIES THAT CONNECT POWELL PARK, FREEDOM HILL, THE BAPTISMAL SITE, HERITAGE PARK, AND THE HISTORY MUSEUM, WHILE ALSO OFFERING GREATER PUBLIC ACCESS TO THE TAR RIVER.

## **TOWN PROTOCOLS + PROCEDURES**

To ensure the highest chances for success, it is recommended that town leadership agree to work with an established, locally operated land trust. This partnership will help to streamline the technical complexities of conservation easements, including assistance with: engaging property owners, conducting environmental assessments, navigating financial incentives and tax benefits, and managing legal processes. Additionally, conservation-based organizations can contribute expertise to grant writing, long-term planning that supports ongoing management and operations activities, and financing for publicly accessible amenities included within planned easements.

Lastly, any future levee improvements may threaten proposed buffer areas and preferred access locations (for both recreation and maintenance). Working with a land trust will allow for a single, unified vision for non-levee portions of these properties to be defined and communicated to the U.S. Army Corps of Engineers as they enter the planning, engineering, and, ultimately, construction phases of their work.

# PROJECT TYPE: CULTIVATION

## REDUCING THE BURDEN OF ACQUIRED PROPERTIES WITH COMMUNITY AGRICULTURE

Cultivation of vacant lots should be given preference as a method of actively reusing properties acquired through buyout processes because it provides the most flexible and diverse options.

Critical to ensuring the long-term viability of cultivated lots is the successful selection of a qualified recipient and/or manager of each property. FEMA Model Deed Restrictions allow for acquisition properties to be leased or donated to groups or organizations that can effectively manage the land in accordance with all rules and restrictions in place. By doing so, town staff can reduce the time and cost inputs associated with maintaining vacant lots and, in return, the new land manager(s) can take responsibility for the necessary upkeep while also using the land to start and/or grow an agriculture-based micro-enterprise.

There are precedent examples in North Carolina that Princeville can look to in order to: i) craft lot lease and/or parcel donation language to ensure new land manager(s) satisfy desired

maintenance, upkeep, and code compliance measures; and ii) determine ways to leverage new community gardens and micro-farming operations through larger initiatives, such as a Princeville Farmers Market.

Ultimately, the quantity of vacant lots and availability of natural conditions that support small-scale, community agriculture will enable Princeville to stand out as a regional and national leader in local, sustainable food systems. Successfully realizing these aspirations is reliant upon the willingness and ability of all project partners and local champions to manage the land in accordance with specific guidelines and with certain restrictions.



# MAIN ST CORRIDOR

## CULTIVATION

There are costs associated with doing nothing to vacant lots. The transfer of properties acquired through FEMA-funded programs to local governments exerts a heavy toll on the receiving communities, including incurring the costs of ongoing maintenance and, conversely, significant reductions to municipal property tax revenues. Two approaches to reducing recurring maintenance costs are to lease or donate the vacant lots to others for specifically approved uses, such as community gardens and farming.

### EXISTING CONDITION: THE COST OF DOING NOTHING

The cost of mowing vacant lots is more expensive than most realize. Each acre of vacant land that the Town of Princeville manages is estimated to cost a minimum of \$192 per acre per year (BenDor, 2018). This cost increases when additional services are needed. Services that often coincide with vacant lots include but are not limited to public safety patrols and debris removal resulting from illegal dumping.

While addressing privately owned vacant properties has a unique set of challenges, vacant properties that are town-owned via buyout programs have fewer barriers to implementing new policies and procedures. As long as the uses on buyout properties are in compliance with FEMA Model Deed Restrictions, these parcels can be leased or donated to others for specific land uses that are deemed beneficial to the town. Land-use analysis conducted as part of this research suggests that cultivation is well-suited to fill this administrative and operations void. As one example, this study estimates the town will reduce annual maintenance costs by an estimated \$1,052.00 if the 11 lots shown to the right are leased or donated.

**3.27 acres**  
total size of proposed project (11 parcels)

**\$0 revenue**  
assuming Town ownership post acquisition

**\$1,052 costs**  
estimated cost of maintenance at \$192/acre/year

**-\$1,052 net income**  
estimated annual profit from selected parcels



# MAIN ST CORRIDOR

## CULTIVATION

Once leased or donated for community agriculture with land-use restrictions legally recorded, individuals will manage the properties as a means of growing food and localized entrepreneurship. Initiating this process with FEMA-acquired properties is a critical first step toward creating a broader vision of food sustainability and economic independence. The resulting outcomes will, in turn, help to establish and refine the procedural, financial, and legal mechanisms needed to expand programs onto adjoining vacant lots.

### PROPOSED: VALUE ADDED

Installing a consistent set of landscape improvements along adjacent street rights-of-way (commonly referred to as “streetscapes”) is an additional method of increasing the public benefits associated with converting vacant parcels into small-scale agricultural uses. These improvements accomplish the following goals: i) create safe and comfortable pedestrian environments; ii) organize a legible network of streets and paths that connect places of significance and enhance opportunities for informal social interactions; iii) establish a uniform edge between areas of cultivation and vehicular and pedestrian corridors that are reserved for the general public (especially in locations where there are not clear boundaries between road(s), sidewalk(s), and/or lot(s)); and iii) promote a civic image that aligns the adaptive regeneration of these lots with a desired community identity.

As an example of how to meet these goals, the conceptual design for the 11 parcels shown to the right calls for the installation of 21 street trees and a quarter-mile of sidewalk.

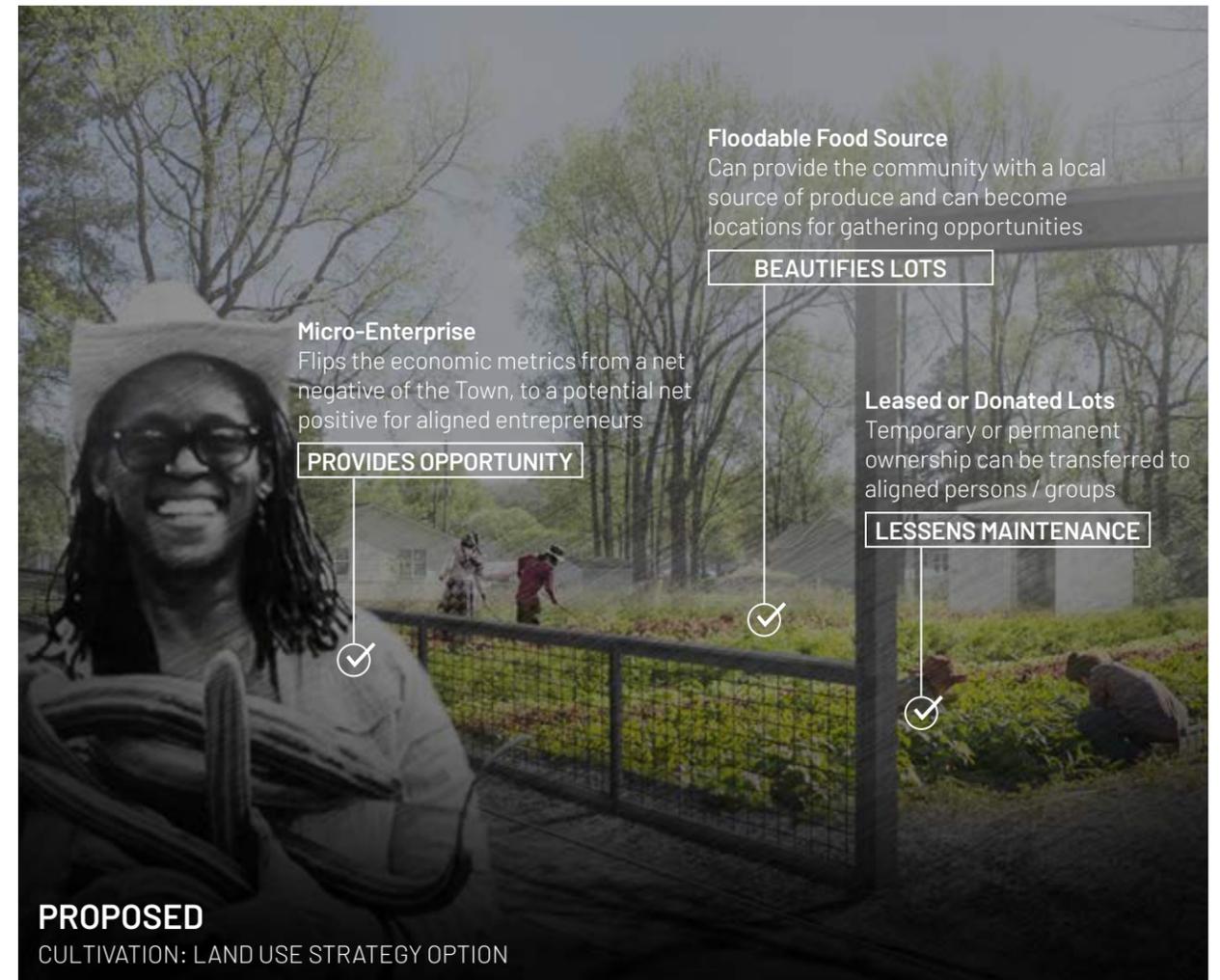
**3.27 acres**  
total size of proposed community agriculture micro-farms

**1,403 linear feet**  
total length of proposed sidewalks (0.26 miles)

**21 street trees**  
proposed along Main Street, Church Street and Walston Street

**19,073 square feet**  
total impervious surfaces removed (buildings)





## STEP-BY-STEP FOR IMPLEMENTATION

**1. Identify HMGP Applicant Properties.** In the past there have been three categories under which a homeowner can apply for FEMA assistance: acquisition, elevation, or reconstruction. Unfortunately, the funds currently available to program administrators for the reconstruction option are significantly limited, and many communities are still awaiting the completion of the first elevation projects nearly three years after Hurricane Matthew.

In North Carolina and across the country, acquisitions are often the fastest financial incentive to permanently move residents out of known risk areas. Once acquisitions and deed transfers are complete, the town is required to maintain and monitor the land as an approved-use open space.

**2. Lease or Donate Select Properties to Aligned Groups.** FEMA allows for the deeds of properties acquired through HMA programs to be transferred to groups that are able to effectively manage the properties per FEMA guidance. The recommendations in this report

enable the town to more readily match an approved land use of a buyout property (such as cultivation) with groups that have the ability to manage the property for that use (like a community farm) within the legal framework of a shared-use, public-private contract agreement.

These agreements can be executed via either: i) a lease program (similar to renting the property from the town at little- or no-cost, with the option to renew the lease); or ii) donation of the property to the aligned group. In the event of a donation, ownership of the property is conveyed to the group with all the initial FEMA land-use restrictions. Both lease agreements and donations will significantly reduce, and in certain instances eliminate, portions of the town's operations and management expenditures.

**3. Adjoin Vacant Lots When Possible.** Once properties are acquired and the lots cleared, they are essentially "shovel-ready" for an approved land use. Throughout much of Princeville's civic

core, HMGP applicant properties are often next to or near properties mapped as vacant. Even though negotiating an agreement (lease, donation, or sale) with a private landowner may take longer to execute, implementing an approved land use on a buyout property can serve as a meaningful, incremental step toward activating larger plots of land and building momentum around consolidated patches of vacated properties.



**Green Rural Redevelopment Organization:** Henderson, North Carolina



**Ohio City Farm:** Cleveland, Ohio

## CASE STUDIES + PRECEDENT

### GRRO: Green Rural Redevelopment Organization Henderson, North Carolina

“The City of Henderson donated a number of vacant lots to GRRO, which has engaged community members of all ages in cleaning up the lots, tilling and planting the land, and creating micro-farms. Participating growers get training on how to grow the best produce, and they are on their way to getting organic certification. Recently, two of the lots were GAP (Good Agricultural Practices)-certified for 23 different crops, which can now be sold to schools, hospitals and other institutional markets.

In addition, GRRO recently launched a Produce Prescription Program in partnership with the Vance-Granville and Warren County Health Departments to provide over 75 “patients” with prescriptions for their healthy, local produce boxes. The success of this pilot and ongoing partnerships led to an invitation from the local hospital to launch an on-site farm and the Apple-A-Day-CSA for hospital

employees, which will include double up food bucks for employees on SNAP/EBT benefits. A new farm-to-childcare effort will further supply over 500 Head Start students with lunch and two healthy snacks weekly. GRRO’s programs are keeping Henderson’s people and its environment healthy – and helping small farmers start and stay in business.

Through our Resourceful Communities program, we provided small grant support for a range of GRRO’s programming, including demonstration “micro-market urban farms” and the Produce Prescription Program. We’ve also provided technical assistance through workshops and one-on-one consultations, supporting stronger project planning/evaluation, marketing, crop planning and consumer/customer outreach. To support Produce Prescriptions, we worked with GRRO to develop new agency partnerships and implement a framework to support healthy eating incentives. Our partnership with GRRO advances Resourceful Communities’ efforts to target the “food deserts” of North Carolina. Food deserts are

areas where people do not have easy access to markets or stores that sell fresh fruits and vegetables. Henderson’s micro-farms increase the region’s food security – a stable and sustainable source of food. Our Resourceful Communities program works with grassroots organizations to strengthen locally-driven programming in economically- and socially-distressed rural communities. In Henderson, our partnership with GRRO is creating job opportunities, training small-scale farmers to be profitable, and increasing access to fresh, healthy fruits and vegetables for low-income consumers.”  
- conservationfund.org

### Ohio City Farm Cleveland, Ohio

“The Ohio City Farm, one of the largest contiguous urban farms in the United States at nearly six acres, exists to provide fresh, local and healthy food to Cleveland’s underserved residents, boost the local food economy, and educate the community about the

importance of a complete food system. The farm boasts stunning views of the Cleveland skyline and provides a welcome break in the typical urban landscape.

The farm is jointly administered by Ohio City Incorporated, the Cuyahoga Metropolitan Housing Authority, and operated by the tenants who work the land. Current tenants include the Refugee Response, the CMHA Green Team, and the Great Lakes Brewing Company. Providing the needed resources, land and support to sustain successful ventures for urban farmers, the partnership further positions Ohio City as a key component in Cleveland’s regional food system.

Between the months of June and November, we encourage you to visit to take a stroll on the grassy pathway that runs the length of the farm and take in the stunning view of Downtown Cleveland.”  
- ohiocityfarm.com

# ACTION ITEMS

RECOMMENDED NEXT STEPS TO SUSTAIN MOMENTUM

## 1 DEVELOP (A) A LEGAL TEMPLATE FOR LEASE AGREEMENTS AND/OR (B) DONATE LAND CONSISTENT WITH FEMA DEED RESTRICTIONS.

EACH OF THESE ACTIONS ENABLE THE TOWN TO DEFINE AND CONTROL SITE CONDITIONS TO ENSURE COMPLIANCE WITH ALL REGULATIONS WHILE PROMOTING BENEFICIAL USES FOR THE COMMUNITY (AN EXAMPLE IS PROVIDED IN THE APPENDIX).

## 2 IDENTIFY PARTNER ORGANIZATIONS THAT ARE INTERESTED IN BECOMING A LESSEE OR DONEE OF SUBJECT PROPERTIES WITH A COMMITMENT OF PURSUING SMALL-SCALE, AGRICULTURAL PRODUCTION.

## 3 ALLOCATE FUNDS FOR STREET TREE AND SIDEWALKS IMPROVEMENTS IN THE PUBLIC RIGHT-OF-WAY ALONG THE PROPERTIES.

### TOWN PROTOCOLS + PROCEDURES

Coordination between the town's Board of Commissioners, staff, and attorney are required to develop and authorize land donation and lot-leasing agreements that incentivize and regulate cultivation and land management on town-owned acquisition properties. Once these legal instruments are set up, transferring the ownership or management of lots to qualified individuals or organizations can be executed with relative ease and without much, if any, municipal inputs of time and/or financial resources.

Additionally, it is recommended that town leadership consider the proposed locations identified for streetscape improvements in the Princeville Community Floodprint Master Plan. Typically located along the edges of proposed cultivation areas, landscape enhancements that include plantings and sidewalks will beautify and improve connectivity to these parcels. Implementation of this action will likely require the use of town finances. Lastly, it is recommended that, at a minimum, language be included in the town-approved lease and donation agreements that stipulate visual access into each site from the public right-of-way.

# PROJECT TYPE: WETLAND CONNECTIONS

## STORMWATER MANAGEMENT THAT CONNECTS PEOPLE TO PLACES OF INTEREST

In Princeville, the FEMA-approved, “wetland management” land use should serve multiple functions. Wetland management, as it relates to Princeville’s geographic location in an historic wetland, should be designed as a tightly integrated system that solves hydrologic issues while creating the value-added benefits of recreation, environmental education, and habitat for native flora and fauna. Furthermore, when designed as a system (versus a series of individual, unrelated interventions), the resulting network will create visual and physical linkages to cultural points of interest that will enrich the experience of Princeville. Additionally, using a unified plant palette consisting of native, flood-adapted plant species within select properties or along proposed walking routes will augment localized stormwater and flood mitigation, beautify and visually unify the landscape of Greater Princeville, and provide ecosystem services that enhance new cultivation activities throughout town. **Three unique projects are shown in this section of the report.**

The **first project** proposes trails and landscape improvements, such as rain gardens and other sustainable stormwater management devices, beginning at Princeville Elementary, traveling along the canal behind the

Asbury Apartments, and ending at the Princeville History Museum. All of the properties associated with these projects are town- or county-owned. The design of these high-performing landscape features serves to: i) collect and manage stormwater run-off in environmentally beneficial ways; ii) educate local youth, residents, and visitors about natural systems and water quality; and iii) establish a walking route between the school and museum. The **second project** proposes implementing wetland management features along the Church Street corridor. The vision for this project is to design, construct, and maintain this corridor as a stream restoration project. This natural systems-driven concept mitigates flooding caused by lower-intensity storm events and beautifies this existing row of vacant properties. The **third project** proposes plantings along the Greenwood Boulevard public right-of-way. This right-of-way improvement project creates a walkable, landscaped travelway that serves as a vital link between Princeville’s historic, civic core and the newly acquired land annexes. Making physical connections that maintain a uniform landscape appearance and include other streetscape elements, such as signage, is key to weaving together “old” and “new” Princeville.

PHOTO: Mount Tabor Middle School (asla.org/awards, 2007).



# SCHOOL + MUSEUM

## WETLAND CONNECTIONS

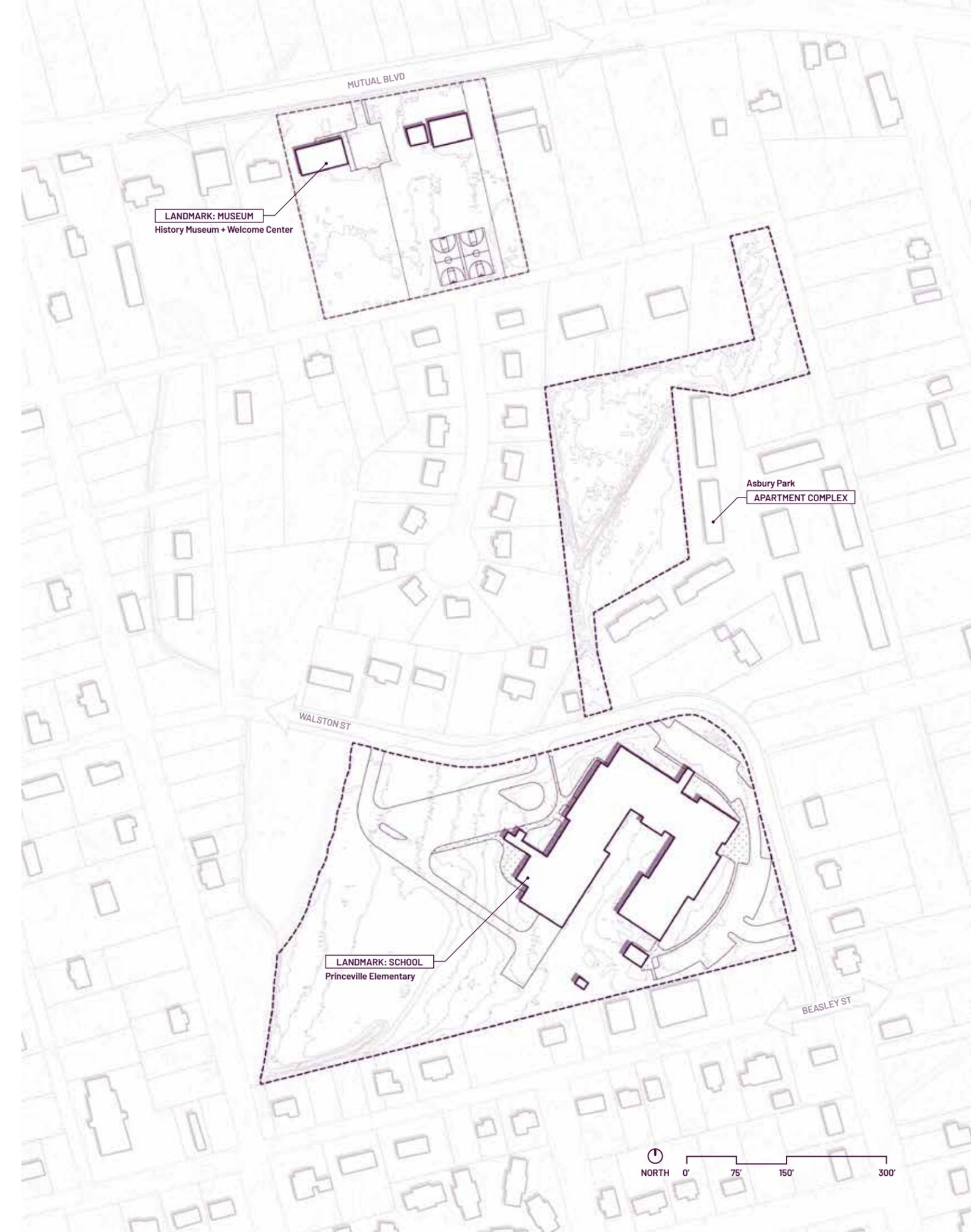
Identifying opportunities for programmatic alignment between properties that are already owned by the Town of Princeville, Edgecombe County, and/or the State of North Carolina will establish new social and cultural networks between existing assets. As Princeville Elementary and the Princeville History Museum enter various stages of reopening, investing in walkable and visually consistent connections, such as new trails and installing street trees, is recommended to strengthen educational opportunities between the two institutions.

### EXISTING CONDITION: MISSING EDUCATIONAL OPPORTUNITIES

Construction of stormwater management features, like rain gardens, around both the school and museum, will: i) use designed planting areas to beautify the street presence and public-facing facade(s) of each building; ii) create educational opportunities related to the sustainable management of stormwater; and iii) establish a visually consistent, pedestrian-friendly experience between these two points of interest. The Town of Princeville and Edgecombe County currently own the parcels and adjacent rights-of-ways needed to implement this project. Using the contents within this document as a resource, The Conservation Trust for North Carolina (CTNC) and project partners have recently submitted and been awarded a National Fish and Wildlife Fund (NFWF) grant proposal that will implement this project. Along with other local matching grants, this project is expected to be completed by September 2021.

to create new and/or enhance existing environmental education and stewardship opportunities for Princeville Elementary School students, teachers, and parents. Therefore, successful implementation of this project using the awarded NFWF funds and grant-required matching funds from local contributors, will increase environmental educational opportunities for Princeville's youth, while also improving local waterways, reducing nuisance flooding, and strengthening the walkability between the school and museum.

In addition to water-quality benefits and other criteria aligned with the NFWF grant, a primary goal of the proposed project is



# SCHOOL + MUSEUM

## WETLAND CONNECTIONS

A variety of rain gardens, walking paths, and streetscape improvements that link together points of interest are proposed for these properties. Stormwater management devices are integrated into existing green spaces at Princeville Elementary School to more sustainably capture and treat stormwater run-off from roofs and paved areas. At the History Museum, similar plantings are used to frame a new Event Lawn near the existing basketball courts and proposed museum parking area.

### PROPOSED: VALUE ADDED

There are ecological and economic benefits associated with implementing the proposed project. At the Princeville Elementary School alone, the proposed rain gardens and stormwater management devices will treat approximately 75,684 square feet of impervious surfaces, such as the building roof and parking lots. This amount of impervious surface generates over 1.9 millions gallons of stormwater run-off per year. Implementation of the proposed low-impact stormwater strategies will allow this volume to slowly infiltrate into the ground, as opposed to the current condition that pipes all of this run-off directly into the storm-sewer system. When converted into an Edgecombe County stormwater utility fee, on-site management of this amount of stormwater equals an annual savings of \$1,362.00. While the financial savings at the Princeville History Museum are less significant, the ecological value is still present, and serves as a method to create gathering areas. If rain gardens similar to the proposed plan are installed, it is recommended that the Town of Princeville discuss with Edgecombe County the lowering of stormwater utility fees, in accordance with similar financial incentive programs that are offered in the Town of Tarboro.

**16,057 square feet**

total area of stormwater devices

**75,684 square feet**

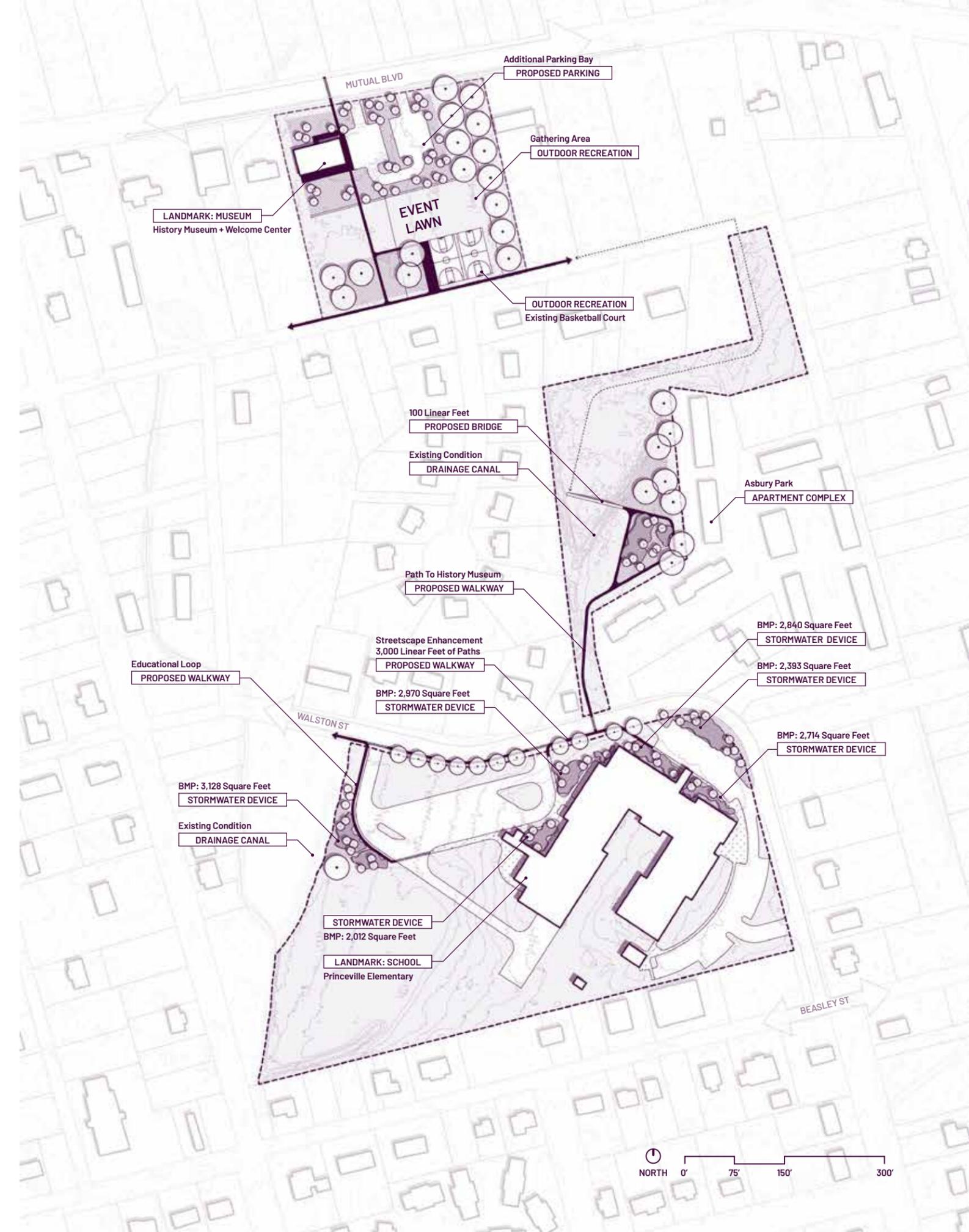
total area of impervious surfaces treated

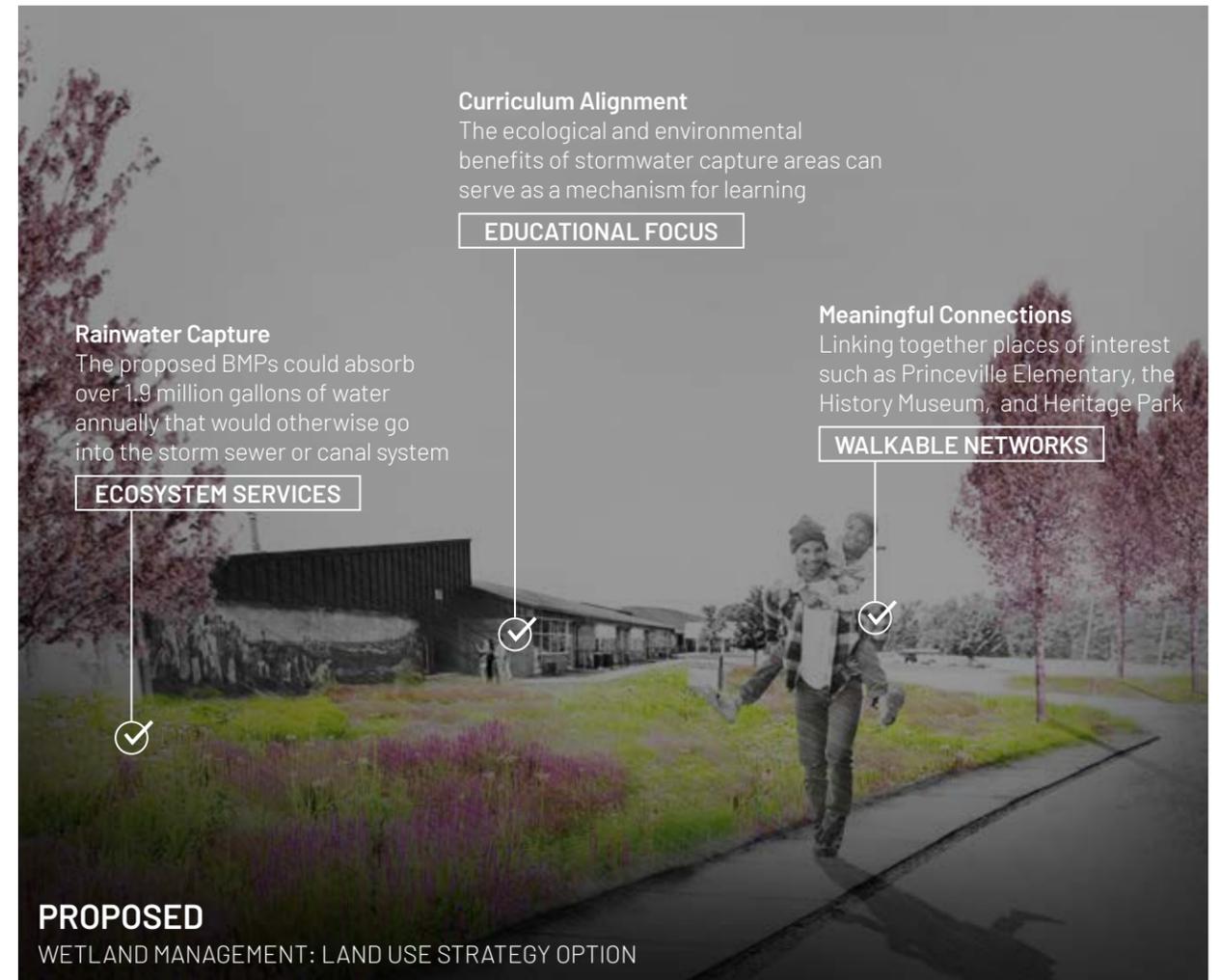
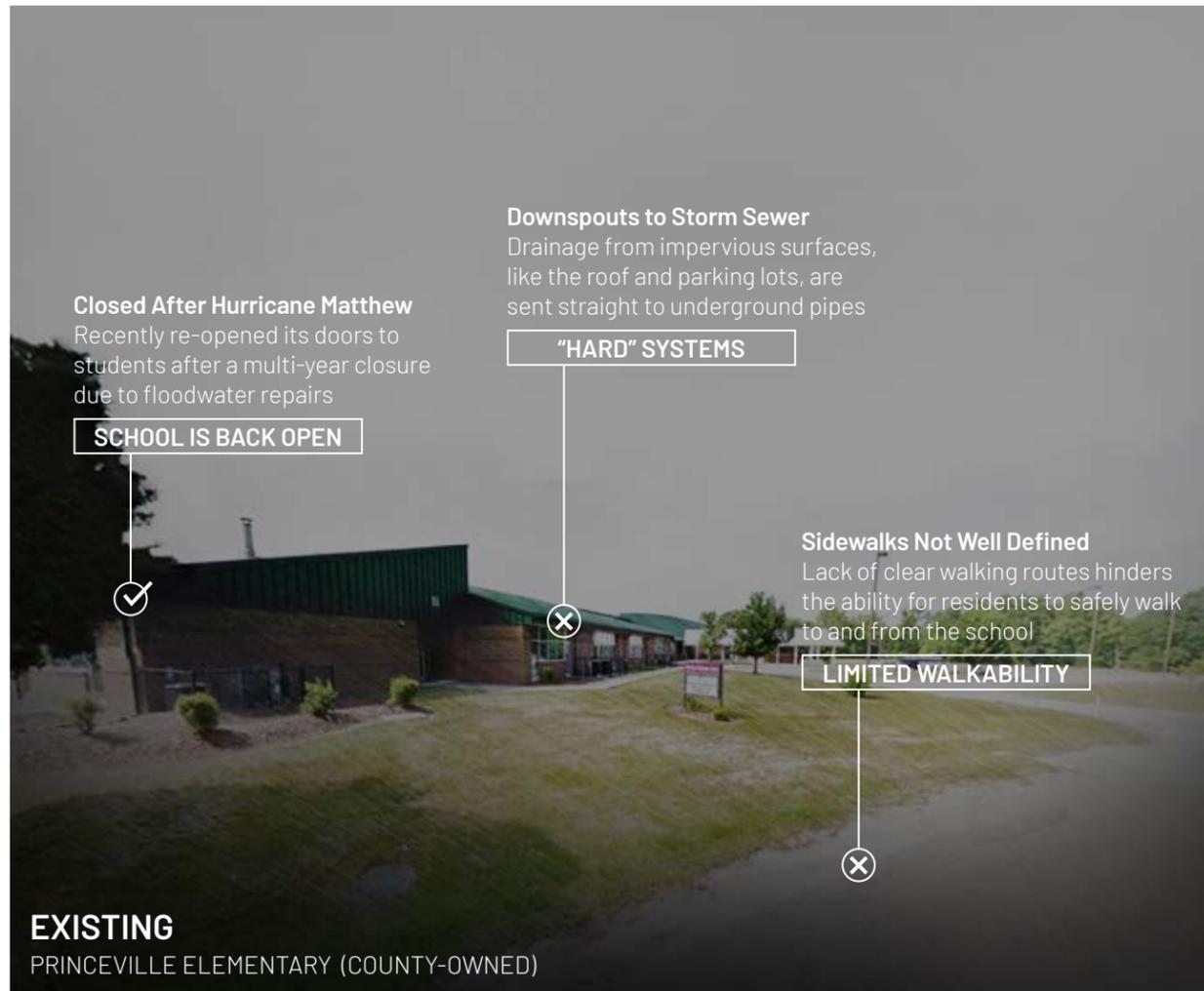
**1,910,243 gallons**

estimated stormwater captured by devices annually

**\$1,362 annual savings**

converted as Edgecombe County stormwater utility fee





## STEP-BY-STEP FOR IMPLEMENTATION

**1. Identify Existing Municipally Owned Properties.** Improvement projects on municipally owned properties will greatly transform the walkability and desirability of Princeville’s civic core if connected to identified places of interest, such as Town Hall, Princeville Elementary School, Mount Zion Primitive Baptist Church, etc. Planning for projects that connect the constellation of community and culturally significant places will promote greater social cohesion among Princeville residents.

**2. Utilize External Grants and Match (If Needed) to Fund Implementation.** Because Princeville’s population is small and its tax base limited, excess revenue to internally fund the construction of environmental enhancement projects may not be available. Therefore, it is recommended that the town partner with allied groups that can assist with writing external grants to fund the implementation of the projects recommended in this report. The town should, however, use portions of appropriated beautification funds and/or recovery-related cash reserves

as a “match” for grants, which will make applications more competitive. Although drawing matching funds from existing revenue streams reduces these resources, the net gains are often dramatic because externally sourced monies enable projects to significantly increase their scale, scope, reach, and impacts.

**3. Negotiate Monitoring and Maintenance Agreements (If Needed).** Certain types of improvement projects, and sometimes specific grantors, may require some level of post-construction monitoring and maintenance. In cases where the town is not able to self-monitor a project, maintenance agreements should be negotiated with a third-party service provider prior to committing to a project.

The example provided here illustrates a cost-savings to the land owner (calculated at an equivalency of \$1,362 dollars saved per year using Edgecombe County stormwater utility fees). These savings can be used as collateral for negotiating cost reductions

in applicable taxes or utility fees that, in turn, can be reallocated to support the proper maintenance and/or monitoring of a property.



**Manteo Middle School + First Flight Middle School:** Manteo, North Carolina + Kill Devil Hills, North Carolina



**Mount Tabor Middle School:** Portland, Oregon

## CASE STUDIES + PRECEDENT

### Manteo Middle School + First Flight Middle School Manteo, North Carolina + Kill Devil Hills, North Carolina

*“What’s all the fuss about a little rain?”*

When rain falls on hard surfaces such as parking lots, roads and rooftops it is not absorbed into the ground. Instead this “stormwater runoff” along with water from sprinklers and home car washes collects pollutants such as pet waste, auto fluids, sediment, fertilizers and pesticides and flows into our creeks, rivers and sounds. This brew of chemicals, nutrients and sediment can lead to fish kills, closed swimming and shellfish harvest areas and buried oyster beds.

*A Solution to Pollution*

An easy way to prevent stormwater runoff is to enable water to soak into the ground. Soil and plants will filter out pollutants, and the water can recharge our groundwater and feed our streams and wetlands. Rain gardens are one of many low-impact development

tools that can reduce the stormwater runoff entering our coastal waters. The federation works with schools along the coast to install rain gardens that are designed to catch and infiltrate stormwater runoff before it can pollute coastal waters.

*School Yard Rain Gardens: Living Classrooms*

Rain gardens are constructed shallow depressions containing native plants and mulch. They work the way nature does. They capture stormwater runoff so it can soak into the ground. The federation is teaming up with schools all along the northeast, central and southeast coast to design, build, plant and maintain rain gardens on their campuses. Besides the benefit to the local creeks, the rain gardens serve as living classrooms. Federation’s educators work with teachers to engage the students in classroom activities focused on the water cycle, plants, soil and stormwater. Then the students work with parents, community volunteers, federation staff and project partners to install mulch and native shrubs, flowers, grasses and trees in the rain garden. Throughout the school year

the teachers and students use the rain gardens for lessons and activities, and they work with community volunteers to care for them.” - nccoast.org

### Mount Tabor Middle School Portland, Oregon

“The Mount Tabor Middle School Rain Garden is regarded as one of Portland’s most successful examples of sustainable stormwater management. This project transformed an underutilized asphalt parking area into an innovative rain garden that melds the concepts of art, education, and ecological function. Built in the summer of 2006, the Mount Tabor Middle School Rain Garden has not only turned a “gray space” into a “green space”, but it is also helping solve the local neighborhood’s combined sewer infrastructure problems [...]

The paramount design challenge for retrofitting the Mount Tabor Middle School Rain Garden was creating simple, cost-effective, and

low-maintenance design solutions while still maintaining a well integrated, visually intriguing, and functional site design. Most of the rain garden’s design is predicated on the concept of enhancing the beauty of the site while minimizing future maintenance efforts.” - asla.org/awards/2007

# GREENWOOD + ANNEXES

## WETLAND CONNECTIONS

As town boundaries continue to expand to the east, determining methods of connecting historic areas of Princeville to newly annexed areas of Princeville are imperative. Ideally, these decisions should be made ahead of or in close coordination with new development plans to ensure that community cohesion is achieved. As one of only two major thoroughfares connecting the annexes to Princeville's civic core, Greenwood Boulevard (and Main Street) must serve as a connective thread, especially if the right-of-way is improved with sidewalks, trees, and native vegetation.

### EXISTING CONDITION + OPPORTUNITY

Enhancing the Greenwood Boulevard right-of-way with streetscape improvements will better connect Princeville's civic core to the new land annexes.

While improvements within the public right-of-way do not require any property acquisitions, streetscape enhancements will require a significant financial investment to conduct surveys, complete design and engineering, and install sidewalks and landscape plantings along the entire corridor. Combined, proposed improvements will stretch over 1.8 miles from the intersection of Main Street and Mutual Boulevard to the 88-acre annex. This requires approximately 1.4 miles of new sidewalk, with 8 street crossings, and a vegetative strip with a mixture of canopy trees and low plantings to buffer the sidewalk from the street.

It is recommended that, in general, the path be routed parallel to the existing, overhead powerline corridor along the south side of Greenwood Boulevard. A mowed strip of land capable of reducing sidewalk construction costs presently exists within this corridor.

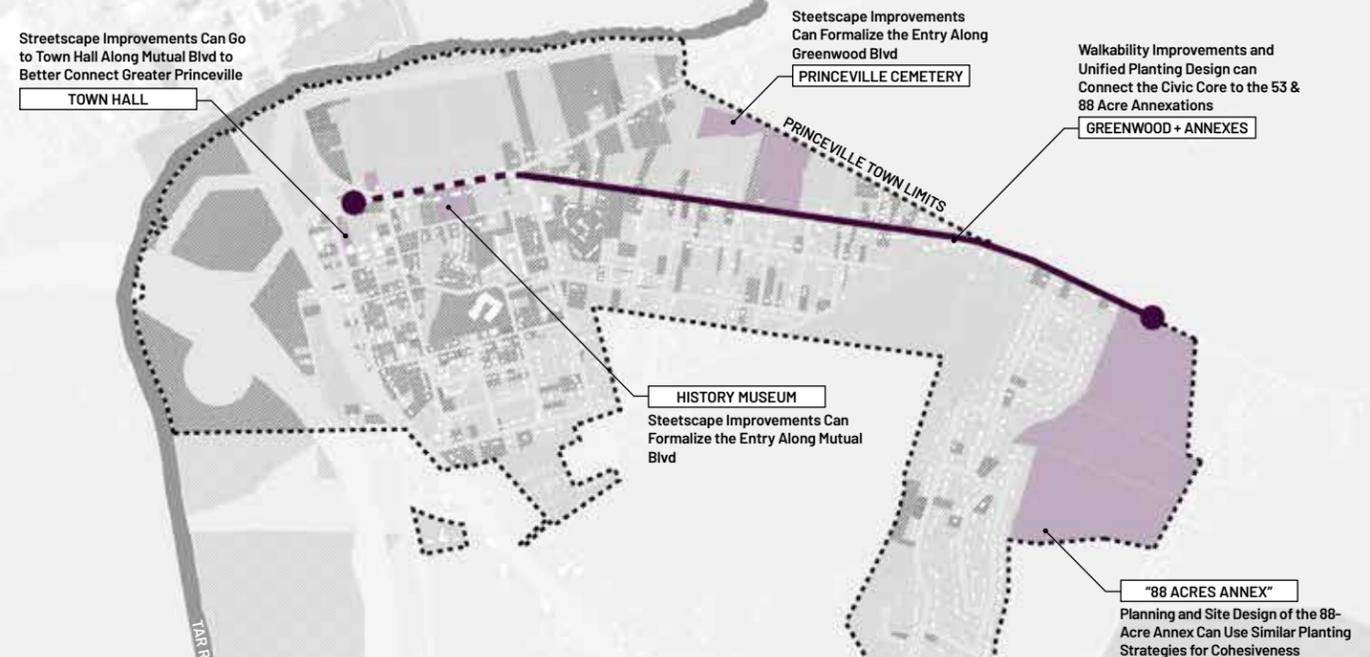
**9,670** linear feet  
total length of proposed sidewalk (7,630 newly installed)

**323** street trees  
total number of proposed street trees

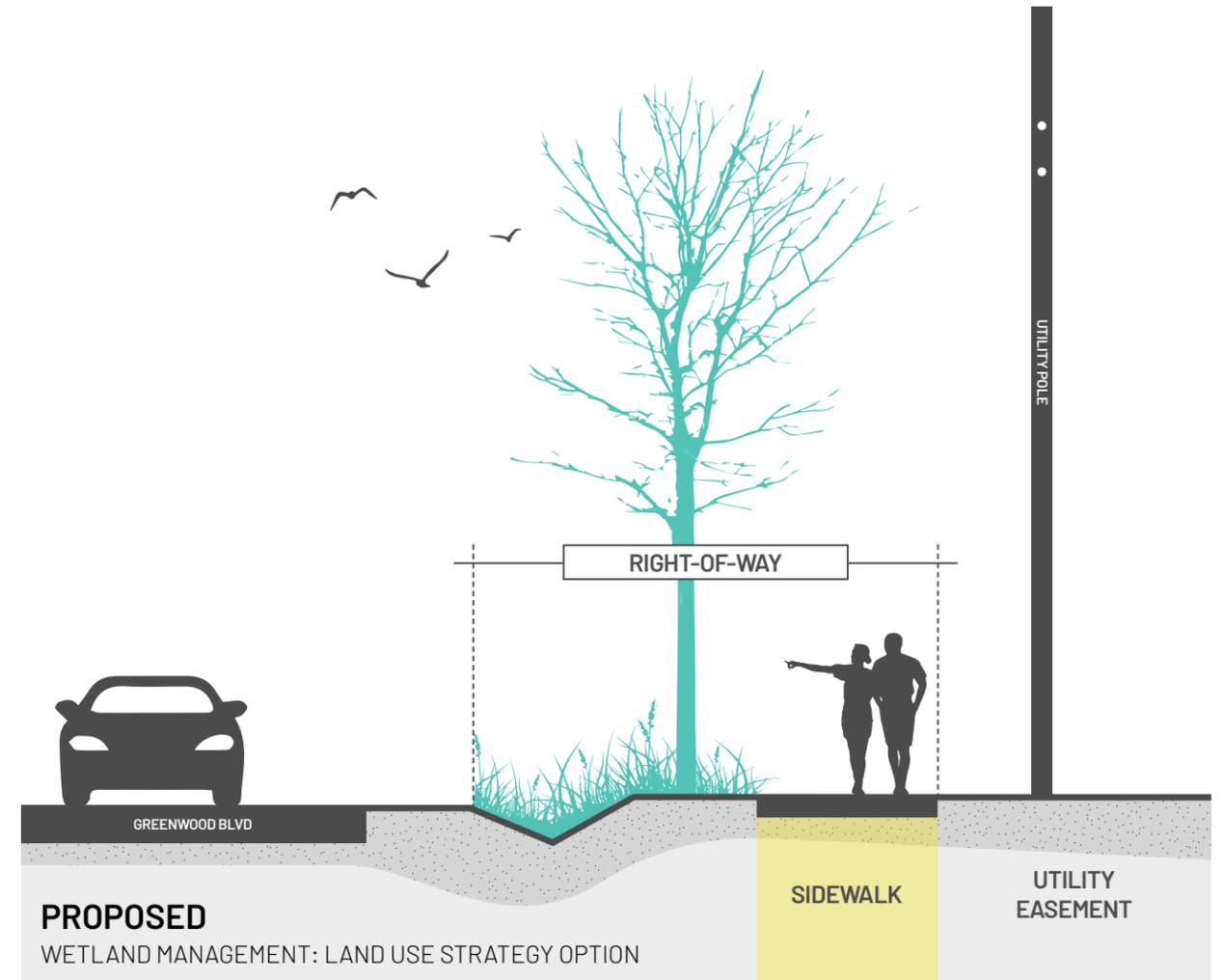
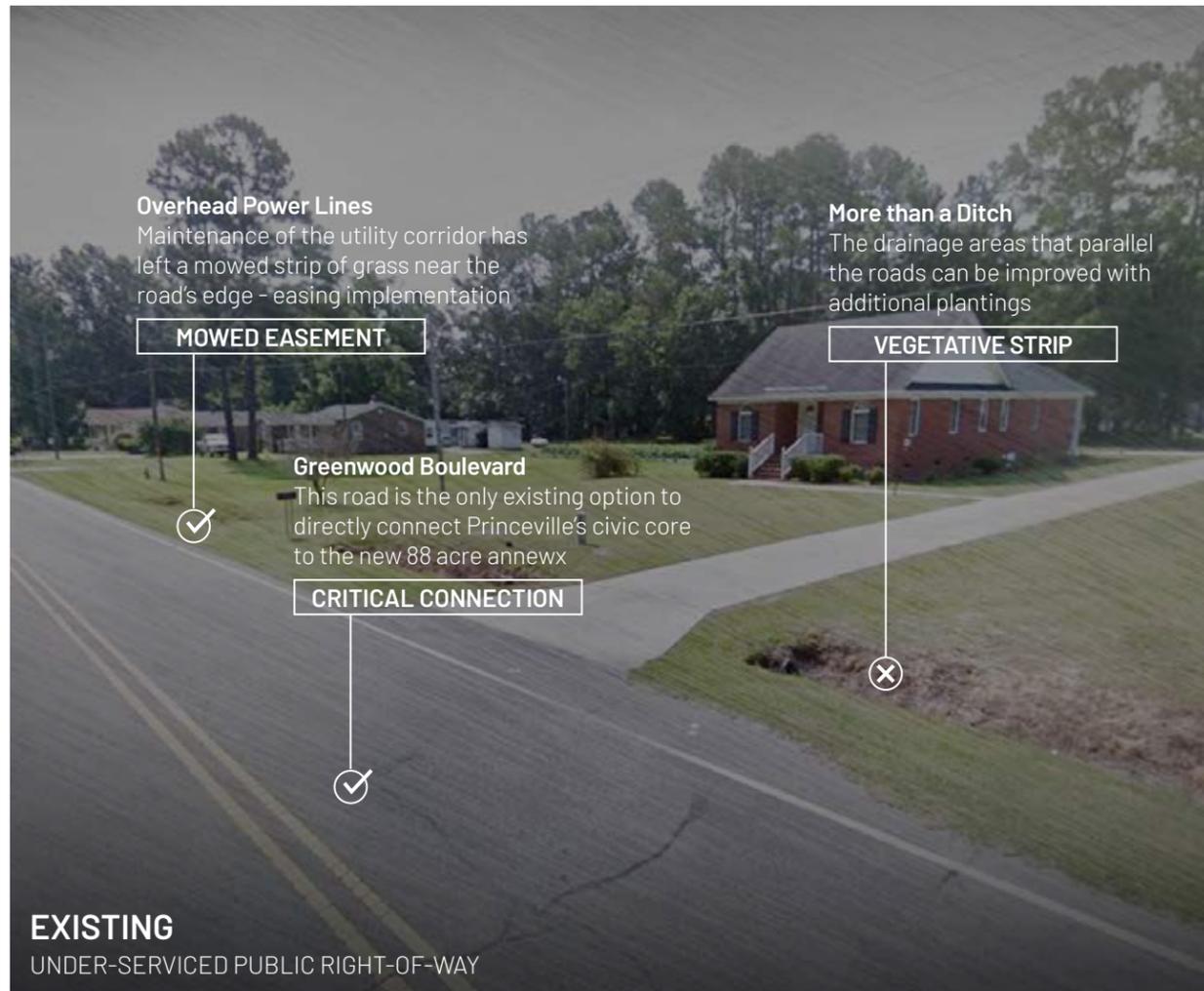
**8** crosswalks  
total number of proposed crosswalks

**58,020** square feet  
approximate area of proposed right-of-way planting area

— NEW SIDEWALK + PLANTING PROPOSED  
- - - EXISTING SIDEWALK + NEW PLANTING PROPOSED



NORTH 0 mi 0.25 mi 0.50 mi 1.00 mi



## STEP-BY-STEP FOR IMPLEMENTATION

**1. Receive Opinion of Cost.** Because the scope, timeline, and permitting associated with this project are likely to be highly variable based on contractor availability and coordination with the North Carolina Department of Transportation (NCDOT), it is important for the town to receive an Opinion of Cost from 2-3 qualified contractors prior to raising and/or allocating funds.

This will help town leaders gauge project feasibility as compared against existing or anticipated budgetary constraints and seek out external funding opportunities, if required.

**2. Provide Notice to Neighbors.** Should the project be permitted, the town must provide written notice to any neighbors that may have portions of their property encroached upon as part of the broader scope of work to be completed.

**3. Contract Engineering Services.** If the budget allows, it is recommended that the town consult with a multi-service

design and engineering firm that offers surveying, civil engineering, landscape architecture, permitting, and construction administration. This is the most cost-effective use of funds to cover soft costs tied to the project.

**4. Submit RFQ/RFP for Construction.** Soon after contracting engineering services, the town will need to issue a Request for Qualifications (RFQ) or Request for Proposals (RFP) to solicit a general contractor to construct and install the proposed streetscape improvements.

**5. Coordinate with Plans for 88-Acres.** If the Greenwood Boulevard improvements take place prior to the planning and design of the 88-acre annexation, all drawings and specifications associated with the streetscape improvement project should be shared with the consultant team responsible for master planning the 88 acres. This will ensure uniformity of and cohesion in streetscape aesthetics across both projects.

Any recommendation for town-wide planting design templates should also be coordinated as part of Greenwood Boulevard and annexation improvement efforts.

# CHURCH ST CORRIDOR

## WETLAND CONNECTIONS

The densest contiguous area of vacant parcels in Princeville exists along the northern section of Church Street across from Mt. Zion Primitive Baptist Church. This area consists of some of the lowest-elevation parcels in town and is highly susceptible to both riverine and stream flooding via the undersized canal located between Church Street and Tyson Street. Combining these high-risk, public and private lots to support a shared, single use is the best method of repurposing these parcels into a beneficial use for Princeville's citizens.

### EXISTING: THE COST OF DOING NOTHING

The town annually loses money on the lots identified as part of the Church Street Corridor restoration project. In 2019 alone, only \$427.00 of the \$764.00 that was billed in property taxes was received as revenue. However, even if the town received all of the billed property taxes, the cost of minimal maintenance activities on these lots (i.e. mowing semi-regularly) likely exceeds the potential revenues. Research conducted as a component of this study suggests that the estimated annual net loss associated with maintaining these properties is \$625.00.

These underutilized lots are located in the heart of Princeville's historic core. A combination of stream restoration and streetscape improvements is capable of converting these properties into a high-functioning and aesthetically pleasing civic landscape. Because of i) anticipated height of floodwaters in this zone, ii) the presence of no fewer than eight lots with FEMA deed restrictions that limit development potential, and iii) the present extent of vacancy, it is recommended that the town actively seek legal agreements with the remaining property owners in an effort to secure and consolidate the lots for a single use.

**5.48 acres**  
total size of proposed project (27 parcels)

**\$427 revenue**  
property taxes collected (2019); \$764 billed

**\$1,052 costs**  
estimated cost of maintenance at \$192/acre/year

**-\$625 net income**  
estimated annual profit from selected parcels



# CHURCH ST CORRIDOR

## WETLAND CONNECTIONS

More than just a stream restoration, repurposing these lots as a single, park-like amenity will benefit Princeville's citizens by connecting Town Hall and Mt. Zion Primitive Baptist Church to Princeville Elementary School. In order to implement this project, legal agreements with the remaining private landowners in this area must be agreed upon and signed prior to engaging with the general public about proposed uses or raising funds for construction of the project.

### PROPOSED: VALUE-ADDED

The social and ecological benefits of this project are substantial given its size and location in Princeville's historic, civic core. It is likely that the town will need to raise external funds to generate the resources required to hire consultants and to cover construction costs. Metrics associated with the schematic design representation of design are provided below to increase the competitiveness of town-sponsored grant applications and to illustrate the overarching community benefits to existing private landowners in the project area.

In total, the proposed project will: i) restore approximately 1,517 linear feet of stream; ii) add nearly one-half mile of new sidewalks; iii) plant 48 street trees; and iv) remove approximately 13,311 square feet of impervious surfaces, including remaining structures and a (proposed) decommissioned portion of Dancy Street that will no longer be viable or needed. It is also recommended that the town consider alternative versions of this proposed plan in the event that not all property owners are willing or able to comply with the desired land-use adjustments.

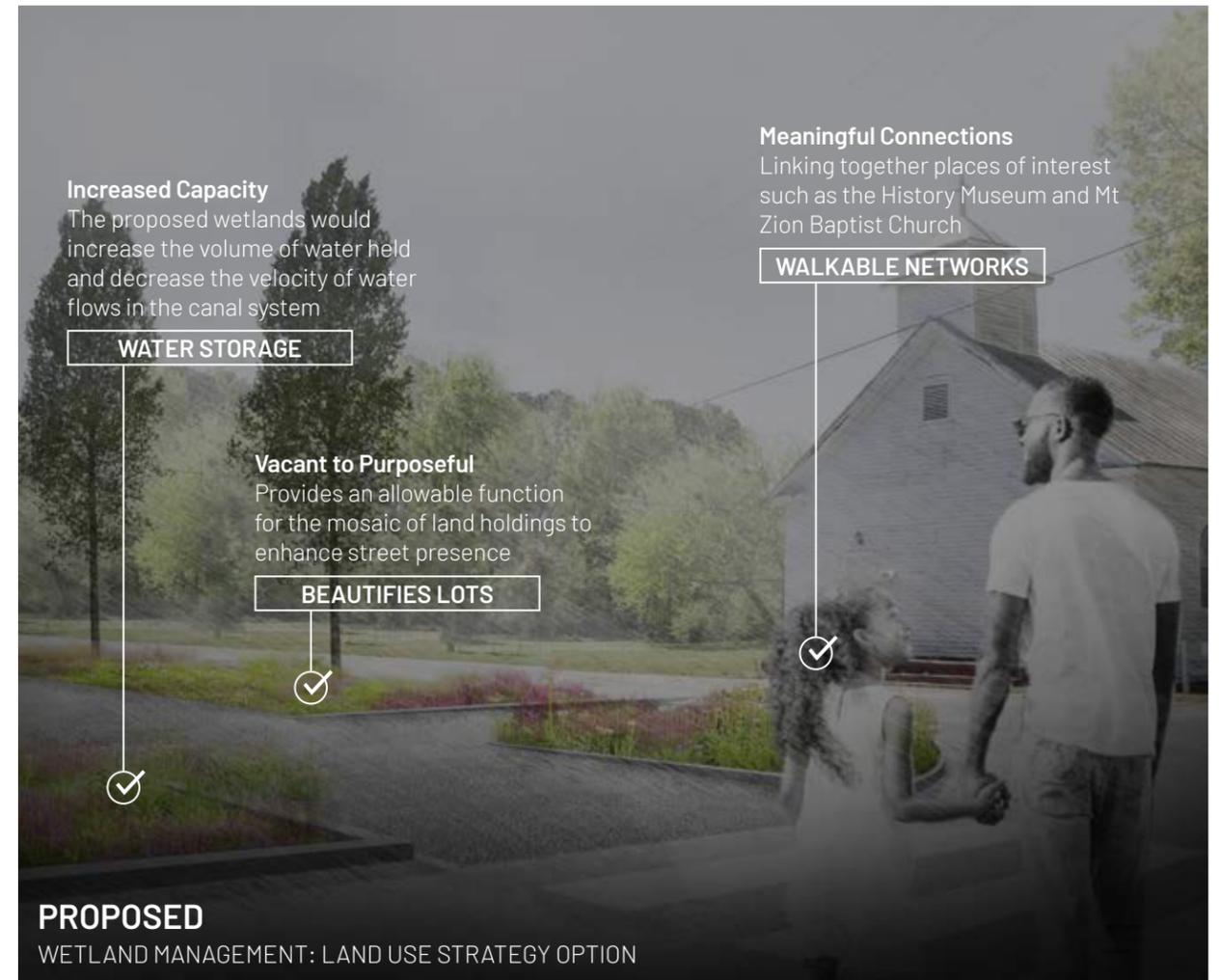
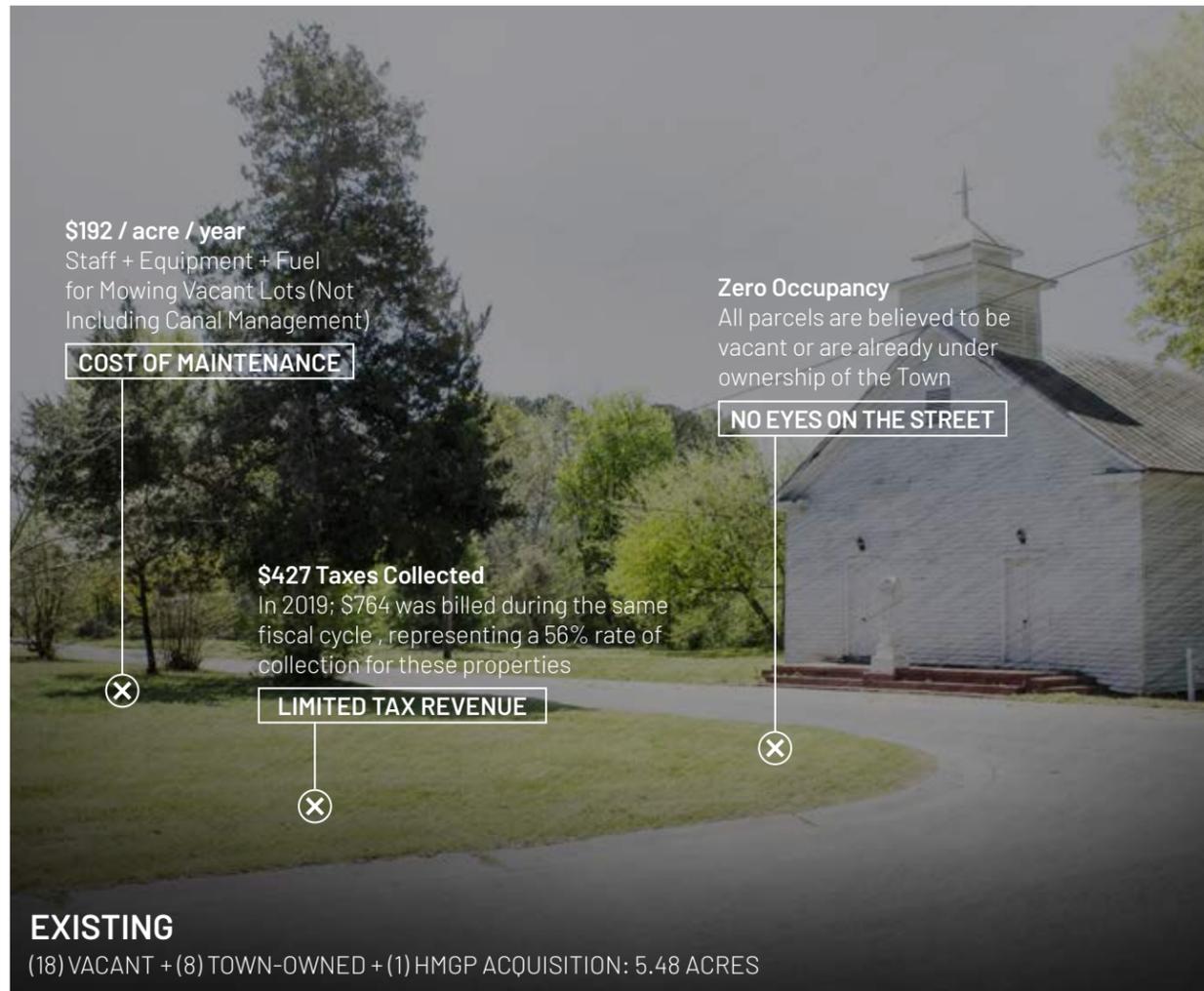
**1,517** linear feet  
total length of proposed stream restoration

**2,577** linear feet  
total length of proposed sidewalks (0.48 miles)

**48** street trees  
proposed along Church Street and Walston Street

**13,311** square feet  
total impervious surfaces removed (buildings + Dancy Street)





## STEP-BY-STEP FOR IMPLEMENTATION

**1. Identify Existing Municipally Owned + HMGP + Vacant Properties.** A critical first step in project pre-planning is identifying and assessing various ownership conditions that exist within the project area. In this case, there are a mixture of town-owned lots (with deed restrictions), HMGP applicants (with anticipated deed restrictions), and privately-owned vacant parcels that require outreach and legal assistance.

**2. Commence Outreach Efforts via Legal Aid to Determine Possible Land-Use Consolidation Alternatives.** Transitioning privately-owned vacant lands into publicly accessible, town-controlled land uses is a complex and legally challenging process. The appropriateness of legal actions and/or the establishment of town ordinances to combat vacant, nuisance, and non-compliant properties must be treated delicately given the town's history of land ownership. The ultimate goals for the Church Street project are to repurpose the lots for public benefit and to provide fair compensation to landowners should they agree to a sale and deed

transfer. Precedent examples of vacant lot programs are provided in the Appendix of this report.

**3. Utilize External Grants and Match (If Needed) to Fund Implementation.** Because Princeville's population is small and its tax base limited, excess revenue to internally fund the construction of environmental enhancement projects may not be available. Therefore, it is recommended that the town partner with allied groups that can assist with writing external grants to fund the implementation of the projects recommended in this report.

The town should, however, use portions of appropriated beautification funds and/or recovery-related cash reserves as a "match" for grants, which will make applications more competitive. Although drawing matching funds from existing revenue streams reduces these resources, the net gains are often dramatic because externally sourced monies enable projects to significantly increase their scale, scope, reach, and impacts.

**4. Negotiate Monitoring and Maintenance Agreements (If Needed).** Certain types of improvement projects, and sometimes specific grantors, may require some level of post-construction monitoring and maintenance. In cases where the town is not able to self-monitor a project, maintenance agreements should be negotiated with a third-party service provider prior to committing to a project. The example provided here illustrates an estimated cost-savings to the town of \$625.00 annually (based on 2019 public tax records). These calculations can be used to support a grant application or the savings can be reallocated post-construction to support the maintenance and/or monitoring of the project.



## CASE STUDIES + PRECEDENT

### Rocky Branch Stream Restoration Raleigh, North Carolina

“Rocky Branch is an urban creek that runs more than a mile through NC State’s campus and drains into Walnut Creek, a tributary of the Neuse River. Nearly ten years ago, NC State partnered with NC Sea Grant to implement a three-phase restoration project of Rocky Branch which was completed in 2010.

The goal of the project was to create a safe and accessible outdoor teaching laboratory. Before the restoration began, the stream was narrow, deep, and suffering from severe erosion, as well as being an eyesore for the campus community. The creek project demonstrates how to stabilize a creek, improve water quality, and create aquatic and wildlife habitat, all while integrating the creek into the campus environment. Using natural channel design techniques, the restoration allows the stream to flow naturally through a newly created floodplain.

The project installed 6,000 feet of trail path along the restored creek to provide a transportation alternative and bring people closer to the creek. A pedestrian underpass at Pullen Road allows safe passage for pedestrians and wildlife beneath a major thoroughfare. The underpass connects the path to Pullen Park and the City of Raleigh Greenway System. Interpretative signs along the greenway explain various restoration concepts.”  
- sustainability.ncsu.edu

### Bayou Auguste Neighborhood Wetland Park Biloxi, Mississippi

“Bayou Auguste Neighborhood Wetland Park transformed a degraded tidal stream into a living landscape, creating a public asset for a historically underserved community. The project implements part of a community plan for East Biloxi, a low-income, racially-mixed community devastated by Hurricane Katrina. The design team secured multiple grants, leading a partnership

Biloxi, Biloxi Housing Authority, Biloxi Public School District, and the Land Trust for the Mississippi Coastal Plain, to leverage grant funds and volunteer labor.

The bayou’s wetland habitat had been seriously impacted over time. Its natural, meandering course was straightened, forming a steeply cut channel that degraded the bayou’s function and aesthetic appeal. To reveal the site’s social and ecological potential, the project reshaped the stream banks to create tidal marsh habitat and open views into the constructed wetland. To provide streambank stability and stormwater filtration, a gabion wall was constructed reusing concrete from the removed retaining wall and filled with locally-sourced oyster shells. These same materials were used in making an outfall structure which reduces stormwater velocity and prevents erosion at the mouth of the culvert. Volunteers contributed over 2800 hours of service and participated in the construction of these elements, installed erosion control materials, removed debris and installed 5000 native plants.

GCCDS engaged the local community and students through educational programs focusing on ways to improve the bayou’s important functions including: 1) restoring and improving nursery habitat for fish and shrimp, essential to the local economy; 2) reducing pollution and debris entering the ocean through the integrated bayou and stormwater system; and 3) creating marshland to contain floodwater from extreme storm events. Bayou Auguste has an important social role allowing the community to enjoy wildlife, encouraging environmental stewardship and appreciating the unique coastal environment that makes Biloxi home.” - gccds.org

# ACTION ITEMS

RECOMMENDED NEXT STEPS TO SUSTAIN MOMENTUM

- 1 CREATE PLANTING DESIGN TEMPLATES,** INCLUDING A SPECIES LIST, INSTALLATION DETAILS, AND MAINTENANCE REQUIREMENTS, TO BE USED AS THE TOWN STANDARD.

PLANT SELECTIONS MUST RESPOND TO FLOOD-PRONE CONDITIONS AND VARIOUS HEIGHT CONSTRAINTS THAT MAY EXIST (I.E., ELECTRIC UTILITIES AND SIGHT LINES).

- 2 CONSIDER ADOPTING LEGAL ORDINANCES FOR VACANT, UNUSED, AND POORLY MAINTAINED LOTS** THAT ENABLE RETENTION BY THE TOWN IF NOT IN COMPLIANCE (EXAMPLES ARE PROVIDED IN THE APPENDIX).

- 3 APPLY FOR EXTERNAL GRANTS** TO FUND LOT PURCHASES AND INSTALLATION COSTS. CONSIDER USING TOWN BUDGET AS MATCH.

## TOWN PROTOCOLS + PROCEDURES

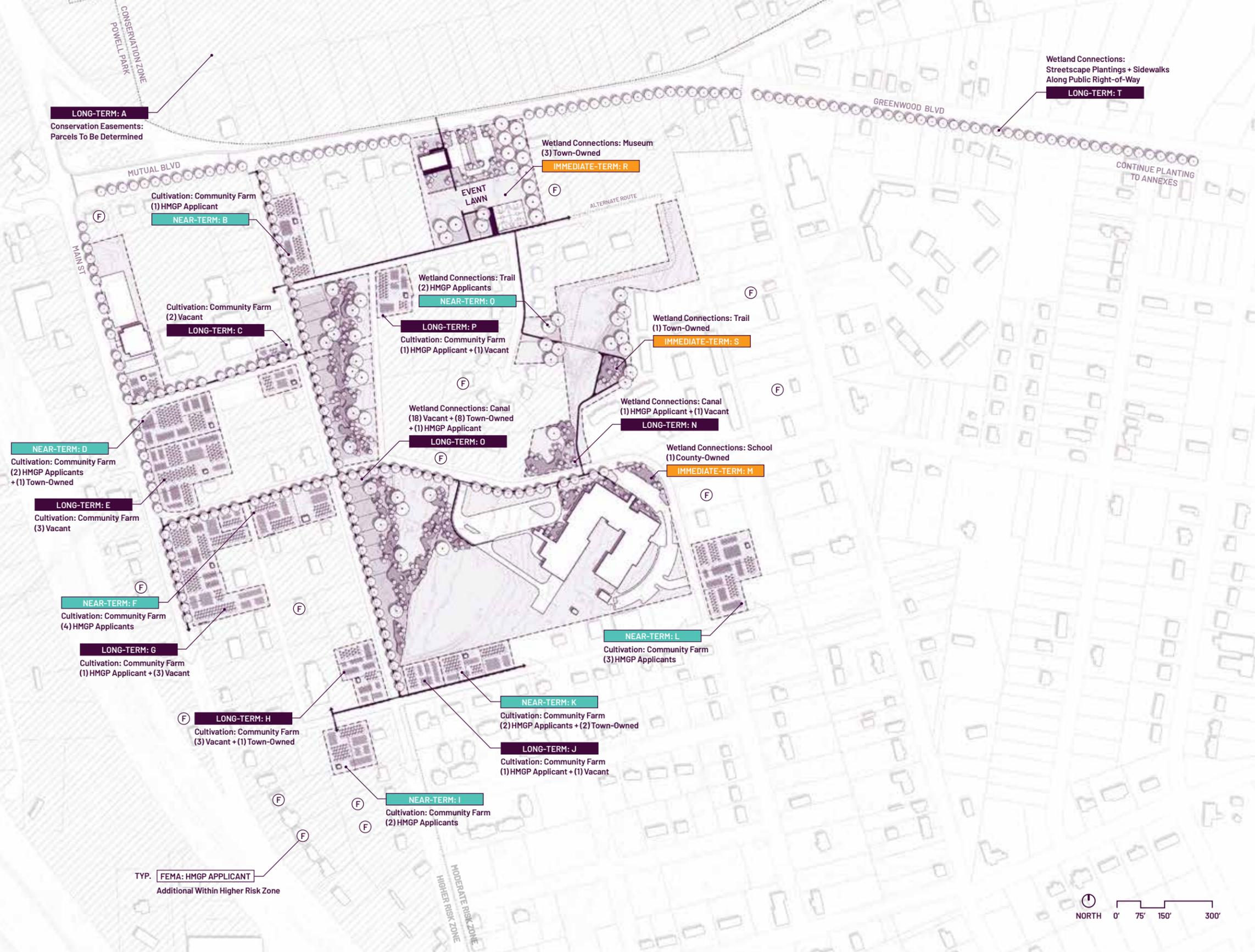
The projects proposed in this section of the report require a significant commitment of time and resources from the town leaders, staff, and partners. Some of the proposed projects, such as creating planting design templates, can be executed by the town by submitting a Request for Proposals (RFP) for qualified professional services consultants.

Other action items needed to realize the next steps for these projects, such as adoption of legal ordinances that address non-compliant, privately-owned vacant lots, is an endeavor that requires a great deal of deliberation between the town leaders, staff, and legal council to cautiously and successfully implement plans of action.

All of these projects will ultimately require investments of town funds and staff time. While the town may be able to use recovery-related funds to cover parts of projects that are tied to disaster relief and planning, many cases will require different modes of financing. In these instances, it is recommended to align with potential project partners to co-write external grant applications.

# PROJECT PHASING

## RECOMMENDED PARTITIONS



### IMMEDIATE-, NEAR-, & LONG-TERM STRATEGIES

Phasing of all proposed Princeville Community Floodprint projects has been generated in accordance with current property ownership status as an indicator of each project's "shovel readiness". Classifying lots in this way indicates whether the town: i) already owns a parcel; ii) is likely to own a parcel in the near future (i.e., HMGP acquisition property); or iii) needs to consult with legal aid and/or project partners regarding the potential of owning a particular parcel in the more distant future (i.e., vacant, privately owned parcel).

Parcels were then clustered into small groups based on proposed land use and ownership status, resulting in three categories for proposed implementation phasing: near-term, immediate-term, and long-term. More detailed parcel information, such as: name and mailing address of current property owner; size of parcel; and tax assessed value of each lot identified within the Princeville Community Floodprint Master Plan, is provided in an appendix to this report and is organized by the project label provided on this phasing diagram.

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**SAMPLE LEASE AGREEMENT FOR ACQUISITION PROPERTIES (SOURCE: EDGECOMBE COUNTY)**

THIS LEASE AND MAINTENANCE AGREEMENT, is made and entered into this the day of \_\_\_\_\_, by and between EDGECOMBE COUNTY, a political subdivision of the State of North Carolina, hereinafter referred to as "LESSOR", and \_\_\_\_\_ residing at \_\_\_\_\_ hereinafter referred to as LESSEE".

WITNESSETH:  
That the LESSOR hereby leases to the LESSEE the premises commonly known as \_\_\_\_\_ consisting of approximately \_\_\_\_\_ acres in Edgecombe County, North Carolina, all as shown on the diagram or survey marked Exhibit "A" which is attached hereto and made a part hereof, and further described by a legal description as \_\_\_\_\_

This LEASE AND MAINTENANCE AGREEMENT is executed upon the following terms and conditions:

**1. TERM.** For Ten (10) years which shall begin on the \_\_\_\_\_day of , 20\_\_\_\_ and shall exist and continue until the \_\_day of 20\_\_, unless sooner terminated as hereinafter set forth.

**2. EXTENSION OF TIME.** It is further understood and agreed by and between the parties hereto that with consent of the LESSOR, may extend the time of this lease on a year to year basis, provided LESSEE has continued to meet the requirements governing this agreement and gives LESSOR written notice of its intent to exercise the right to extend the term of this lease, not less than sixty (60) days, prior to the end of any term.

**3. RENT.** The LESSEE agrees to pay rent to the LESSOR of ONE DOLLAR (\$1.00) per year for the leased premises, payable as TEN DOLLARS (\$10.00) in advance for the full term of the lease, and additional consideration in the form of the required maintenance of the property according to the terms of this Agreement.

**4. ASSIGNMENT/SUBLETTING.** The lease shall not be assigned, or the leased property sublet.

**5. MAINTENANCE.** During the term of this lease, LESSEE shall maintain the real property in good condition; including cutting grass, trimming of shrubs and plants as necessary, and insuring that no

trash nor other debris accumulates upon the property.

**6. PERMISSIBLE USES OF PROPERTY.** The real property, the subject of this Agreement is restricted to certain uses as follows: Open space, recreational, or wetlands; which include: parks, outdoor recreational activities, nature reserves, cultivation, and grazing. NO OTHER USES ARE TO BE PERMITTED UPON THIS PROPERTY. NO NEW STRUCTURES MAY BE PLACED OR CONSTRUCTED UPON THE PROPERTY.

**7. UNLAWFUL USES.** LESSEE shall insure to LESSOR that LESSEE will make no unlawful or offensive use of the premises, nor allow any others to do so.

**8. DEFAULT.** Failure of LESSEE to maintain the property according to the terms of this Agreement shall constitute a default under this Agreement, and if such default shall continue for a period exceeding thirty (30) days, or if the LESSEE shall violate any of the other provisions of this Agreement, and if such default shall not have been cured or such default, the LESSOR, without any other notice or demand, may terminate this Agreement and require LESSEE to immediately surrender the premises.

**9. HOLD HARMLESS.** The LESSEE hereby agrees to indemnify and Hold Harmless the LESSOR for any and all liability arising in connection with this Agreement. It is further agreed that the LESSOR may terminate this Agreement by notifying the LESSEE in writing of its intent to terminate, at least ninety (90) days prior to such Termination. All unearned rent will be refunded to the LESSEE upon such Termination.

IN TESTIMONY WHEREOF, this Agreement has been executed by the parties' hereby, in duplicate originals, as of the date first above written.

LESSEE: \_\_\_\_\_

NORTH CAROLINA  
EDGECOMBE COUNTY

I, a Notary Public of the aforesaid County and State, certify that \_\_\_\_\_ personally appeared before me this day and acknowledged the due execution of the foregoing Agreement

for the purposes herein set forth.

WITNESS my hand and Notarial Seal this the day of \_\_\_\_\_, 20\_\_\_\_\_.

NOTARY PUBLIC \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

LESSOR: Edgecombe County: By, \_\_\_\_\_

NORTH CAROLINA  
EDGECOMBE COUNTY

I, a Notary Public of the aforesaid County and State, certify that personally appeared before me this day and acknowledged that he/she is of Edgecombe County, North Carolina and pursuant to authority duly given, and as an act of the County, he/she executed this Agreement for the purpose herein expressed.

WITNESS my hand and Notarial Seal this the day of \_\_\_\_\_, 20\_\_\_\_\_.

NOTARY PUBLIC \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

## SAMPLE ADOPT-A-LOT PROGRAM FOR ACQUISITION PROPERTIES (SOURCE: KINSTON TEENS, INC.)

Thank you for your interest in the Adopt-A-Vacant Lot Program! We're grateful to offer this positive initiative in our city that encourages community beautification and civic responsibility. The Adopt-A-Vacant Lot Program allows churches, families, businesses and other groups to adopt city-owned vacant lots and transform them into beautiful community amenities. These underutilized spaces present tremendous potential for neighborhood improvement and we'd love for you to take advantage of them!

### How It Works

#### Preliminary

1. Like any great project, it starts with a great idea.

2. Your church, family, business or organization chooses an available lot, and then submits the AVL Adoption Application to Kinston Teens.

- a. If approved, the application is sent to the City of Kinston's Planning Department for review and final approval.
- b. The application may be returned to you if:
  - i. the lot is no longer available, and you need to choose another lot;
  - ii. the application needs clarity or more information; or
  - iii. the application does not fit into the program vision.

#### Your Application Was Approved!

3. After your application has received final approval, you then complete an AVL License Application. This application asks for more technical and legal information regarding your organization, and must be notarized.

4. Once processed, the AVL License for the requested lot is issued to your adopting organization. This license gives you clearance to begin working on your lot.

#### The Lot is Adopted

5. Once you've received your AVL License, you're expected to get the ball rolling on your project.

6. Your organization is encouraged to host a groundbreaking or project kickoff event with representatives from Kinston Teens, the City of Kinston and the Chamber of Commerce! Just reach out to us and we'll help you make it happen!

7. At your expense, you can purchase water or electric utilities from Kinston Public Services.

8. Kinston Teens and Kinston Planning representatives will conduct project reviews twice per year to monitor the progress of adopted lots, to ensure regular maintenance is occurring and to determine program compliance.

9. Continue your work to beautify this lot and take pride in our community! The City of Kinston reserves the right to terminate an AVL License at any time at the discretion of the Kinston City Council.

#### Program Grants

Once an organization has received an AVL License and given the "OK" to begin work on their lot, they are eligible to apply for a Project Grant from Kinston Teens. Organizations can submit a Project Grant Request for up to \$750, to assist with supplies for the completion of a project on their adopted lot. Requests for funding will be reviewed by the Kinston Teens Board of Directors within four weeks of submission.

#### After Two-Year Adoption Period

1. After two years, the lot is reviewed by Kinston Teens for success and positive maintenance.

2. Kinston Teens then makes a recommendation to the Kinston Planning Department to:

- a. Renew the AVL License for another two years;
- b. Graduate the project from the adoption program because of its success; or
- c. Suspend the AVL License.

3. The Kinston Planning Department then reviews AVL License recommendations for approval.

#### Community Acquisition of Lot

4. If the lot has been successfully and positively maintained for two years, it may be 'graduated' from the program.

5. Once graduated, the City of Kinston can, in accordance with applicable state laws, choose to convey the lot to your adopting

organization for free (if the lot is used for a not-for-profit purpose) or sell it at fair market value.

6. Kinston Teens and Kinston Planning representatives will submit a recommendation for sale or conveyance of the lot, and your organization will present the success of your project for review at a meeting of the Kinston City Council.

7. The Kinston City Council will deliberate and vote on the recommendation.

#### Where to Find Lots

You can spot lots eligible for adoption by the "Adopt-A-Vacant Lot" sign located on the lot, or visiting [www.kinstonteens.org](http://www.kinstonteens.org) for a listing and digital map of available lots.

#### Where to Find Forms & More Information

Forms and more information on the Adopt-A-Vacant Lot program can be found at the office of Kinston Teens, on the Kinston Teens website, or at Kinston City Hall.

## SAMPLE SIDEYARD LEASE PROGRAM FOR ACQUISITION PROPERTIES (SOURCE: TOWN OF LYONS, CO)

The Neighborhood Lot Licensure Program is designed to encourage community investment and care for the neighborhood lots so that they may be integrated into the neighborhood in a way that is both aesthetic and useful while reducing the Town's maintenance expenses for those lots. In exchange for the temporary right to use a neighborhood lot or portion thereof, citizens must sign a license agreement with the Town. The license agreement governs the use of the neighborhood lot and establishes the rights and responsibilities of both the Town and the licensee.

For specifics regarding the license agreement, please refer to the form license agreement approved by the Town. For purposes of illustration, some of the rights and responsibilities set forth in that agreement are included here.

### LICENSEE RIGHTS

A licensee will have exclusive, private use of the licensed area. Although licensees are encouraged to plan for and use these spaces in a spirit of mutual benefit to the public (for example, by sharing fruit with neighbors from a tree planted on a licensed lot or by planting a wildflower garden that blooms all summer) such community engagement is not a requirement of licensure.

License agreements are for a one-year term, but the Town may revoke the agreement at any time. If a licensee desires to revise or amend the use of the licensed lot as approved by the Town during the one-year term, the licensee must obtain Town approval of the proposed change and sign a written amendment to the license agreement that incorporates approved change. A licensee may terminate the license agreement at any time by providing written notice to the Town Administrator that specifies the date of the agreement's termination. Licensees may re-apply to the Town annually for additional one-year agreements.

### LICENSEE RESPONSIBILITIES

In exchange for private use of a licensed lot, all licensees assume numerous responsibilities, including but not limited to the following:

1. Use a licensed lot as specified in the application approved by Town staff, in accordance with the terms of a license agreement signed by the licensee and the Town;

2. Develop, adopt, and execute a maintenance plan as specified in the application and approved by the Town;

3. Care for and maintain all trees and plants on site by weeding, pruning, and providing all water necessary to maintaining the licensed lot in a condition acceptable to the Town;

4. Bear all costs for site uses and maintenance;

5. Assume all liability and responsibility for any damage, maintenance or repair of the Licensed Premises;

6. Procure adequate insurance and indemnify the Town against claims arising out of licensee's use of the licensed lot;

7. Waive all rights to sue the Town for any reason arising out of licensee's use of the licensed lot;

8. Comply with Town staff entrance upon and inspection of the licensed lot at any time without notice;

9. Return the licensed lot to the Town in a condition acceptable to the Town upon termination of the license agreement;

10. Comply with all federal, state, county, and local regulations and restrictions on the use and maintenance of the licensed lot, including, but not limited to, the Lyons Municipal Code.

Use of licensed lots must comply with deed restrictions to mitigate hazards and preserve public health, safety, and welfare in light of the great potential for natural flood events. The Town of Lyons has developed additional use restrictions intended to help maintain the quality of life and local character of the Town for its residents.

All site uses must be approved by the Town of Lyons to ensure compliance prior to entering into a license agreement. The license agreement will then incorporate all approved uses in an exhibit to the license agreement. Note: A 'use' may refer to either an activity or a physical feature.

### Permitted Uses of Licensed Lots

+ A use approved by the Town of Lyons and compliant with deed restrictions

+ Gardening

+ Landscaping

+ Natural area

**Prohibited Uses of Licensed Lots** include, but are not limited to:

+ Uses not approved by Town of Lyons

+ Uses that violate Town of Lyons Municipal Code

+ Uses that violate Town of Lyons floodplain regulations

+ Vehicle parking including vehicles, boats, campers/recreational vehicles, tiny homes, or construction equipment

+ Paved vehicular access

+ Site re-grading

+ Walled structures

+ Fences (unless temporary, minimal, and intended to protect plants from animals, and only with advance approval by the Town)

+ Overnight camping

+ Public picnicking

+ Obstructions that may trap debris in a flood event

+ Storage of inventory supporting a commercial operation

+ Storage of construction materials or fill dirt

+ Landfill or storage of hazardous or toxic materials

+ Above or below ground storage tanks, including rain barrels

+ Hydraulic fracturing or horizontal-directional drilling (HDD)

+ Septic tanks

## **SAMPLE PROGRAMS FOR PRIVATELY-OWNED VACANT PROPERTIES (SOURCES: VARIOUS)**

### **Vacant Property Registration Ordinance (VRPO):**

**Source: Center for Community Progress**

“The purposes of a VPRO are threefold:

To ensure that owners of vacant properties are known to the city and other interested parties and can be reached if necessary;

To ensure that owners of vacant properties are aware of the obligations of ownership under relevant codes and regulations; and

To ensure that owners meet minimum standards of maintenance of vacant properties.

In addition, the fee structure established in the ordinance may serve additional purposes, including covering costs incurred by the municipality to deal with vacant properties, and under some circumstances, motivating owners to restore and reuse vacant properties.

A VRPO should include the following elements:

- + A clear definition of which properties and which parties must register;
- + The registration requirements and procedures, including the information required of the owner or lienholder;
- + The fee structure;
- + The obligations of the owner, with respect to maintaining the property; and
- + The penalties for failing to register in timely fashion.”

### **Local Land Banks**

**Source: Lincoln Institute of Land Policy**

“An increasingly popular tool is the local land bank, a governmental entity that acquires, holds, and manages vacant, abandoned, and tax-delinquent property. The properties are acquired primarily through tax foreclosure, and then the land bank develops or, more likely, holds and manages the properties until a new use or owner is identified. Land banks can provide marketable title to properties previously encumbered with liens and complicated ownership histories. They also provide localities with a way to create an inventory and monitor properties, and assemble properties into larger tracts to improve opportunities for targeted economic development.”

### **Nuisance Abatement Laws**

**Source: Lincoln Institute of Land Policy**

“Localities may also enforce state-authorized nuisance abatement laws to address these code violations by requiring an owner to make repairs or improvements, such as trash removal, structural repairs, and building demolition. If an owner refuses, then the municipality can enter the property to undertake these activities and seek to collect the costs from the owner. If that fails, the municipality may place liens on the abandoned property equal to the costs of these actions, enforcing them through foreclosure actions, or in many states by attaching the owner’s assets.

The effectiveness of nuisance abatement laws varies across states, depending on the definition of “nuisance,” the prescribed statutory penalties, and how the local authority chooses to carry out nuisance actions (Mallach 2004).”