Blue Acres Landscape Design Visioning Project

New Milford and Pleasantville Report



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RUTGERS–NEW BRUNSWICK
Center for Urban Environmental Sustainability
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1. Executive Summary

The Rutgers Center for Urban and Environmental Sustainability (CUES), in partnership with the New Jersey Department of Environmental Protection's Blue Acres Program, developed landscape vision plans for post-buyout properties in New Milford Borough and the City of Pleasantville. The project explored how properties acquired through the Blue Acres Program could provide benefits beyond flood-risk reduction, including ecological function, passive recreation, environmental education, and community open space.

CUES used an interdisciplinary approach combining desktop GIS analysis, ecological assessment, site visits, and community engagement to understand existing conditions and identify opportunities and constraints. In New Milford, community input helped shape a connected landscape of native plantings, stormwater features, walking paths, passive recreation areas, and historic and environmental interpretation zones. In Pleasantville, the team explored potential connections between Blue Acres properties, Lakes Bay, Unity Park, the former high school site, and the municipal marina. Community feedback highlighted significant concerns regarding maintenance, management, safety, and the capacity to support new public spaces, and the preliminary concepts were therefore retained as illustrative visioning materials rather than advanced into further design plans.

Together, the two case studies demonstrate that post-buyout properties can be approached as opportunities for resilient landscape planning while recognizing that each community requires a site- and context-specific response. The resulting vision plans provide a framework for continued discussion among communities, municipalities, Blue Acres, and exploring pathways for future implementation funding. Ultimately, the project demonstrates how landscape visioning can help communities consider new possibilities for post-buyout properties while grounding those possibilities in local conditions, priorities, and long-term environmental health.

2. Introduction

2.1 Project Background

The New Jersey Blue Acres Program is a voluntary land acquisition initiative administered by the New Jersey Department of Environmental Protection (NJDEP). The program is designed to mitigate long-term flood risk by acquiring residential properties that have experienced repetitive flooding or are vulnerable to future flooding based upon elevation and proximity to surface waters. Through the Blue Acres initiative, property owners voluntarily sell their land to the State of New Jersey. Following acquisition, existing structures are removed, and the parcels are permanently preserved as open space. These

lands are either incorporated into adjacent state-owned conservation areas or managed by local governments through a memorandum of understanding with NJDEP.

By restoring flood-prone developed lands to open space, the Blue Acres Program reduces future risks to people and infrastructure while creating opportunities to enhance floodplain function, improve biodiversity, and increase passive recreational amenities. Restored properties can provide numerous climate benefits, including floodwater storage, groundwater recharge, improved water quality, thermal regulation, carbon sequestration, and erosion reduction. Thoughtful restoration planning can transform these parcels into public assets, improving ecological function, increasing habitat value, and maximizing community benefits of permanently protected open space.

This landscape visioning project aims to connect community outreach with site-scale landscape design. The Blue Acres Program provides an important opportunity to transform flood-prone properties into new public open spaces that offer benefits beyond flood-risk reduction. The future of these spaces can be both productive and beautiful, and meaningful spaces for education, recreation, and social interaction. However, plans for these landscapes can be difficult for community members to envision. Landscape renderings and design concepts can help communicate how post-buyout properties may provide passive recreational opportunities, ecological benefits, and contribute to community quality of life. In partnership with the NJDEP's Office of Climate Resilience Blue Acres Program, an interdisciplinary Rutgers team of designers and ecologists developed landscape vision plans for post-buyout properties in New Milford Borough and the City of Pleasantville through The National Coastal Zone Management Program (CZM) grant funding. Drawing on ecological data, community-driven input, and site analysis, the Rutgers team developed realistic landscape concepts for resilient future open spaces in both municipalities.

The project began with a review and preparation of available data by the Rutgers team to establish project goals and identify the information needed to understand each site. An ecological assessment using GIS and NJDEP and county data documented existing environmental conditions, including land cover, soils, topography, surface water, flooding, wetlands, and potential rare, threatened, and endangered species. Stakeholder meetings provided additional insight into local goals, opportunities, challenges, and constraints, while field assessments were used to ground-truth the desktop analysis and document vegetation, habitat types, floristic quality, viewsheds, urban form, and cultural assets. These findings informed the development of preliminary landscape vision plans for each community, incorporating planting strategies, circulation, social spaces, and other landscape elements. Plans, sections, and diagrams were then developed to illustrate the

potential flood mitigation, ecological, recreational, and community benefits of post-buyout landscapes. The project findings, analysis maps, and vision plans were compiled into this final document along with recommendations for future implementation and next steps.

2.2 Flooding Challenges

New Jersey is among the most flood-vulnerable states in the nation due to the combined influences of its extensive coastline, dense network of rivers and streams, highly developed landscape, and changing climate. The state contains nearly 1,800 miles of coastline and more than 6,400 miles of rivers that expose communities to coastal, riverine, flash, and urban flooding. Climate change is amplifying these risks through rising sea levels, increasing storm intensity, and more frequent heavy precipitation events. At the same time, land subsidence and widespread urbanization have reduced the landscape's capacity to absorb and store floodwaters, increasing runoff and the frequency of both major flood events and chronic nuisance flooding.

While flooding is a natural ecological process that supports healthy floodplains, wetlands, and aquatic ecosystems, it becomes a significant hazard when natural landscapes are replaced with homes, roads, and other infrastructure. Developed areas with extensive impervious surfaces generate greater runoff and overwhelm stormwater systems, resulting in more frequent inundation of neighborhoods and transportation corridors. Flooding in these settings causes damage to homes, businesses, and public infrastructure, disrupts transportation and emergency services, reduces property values, and creates long-term economic burdens for municipalities and residents. Even relatively minor or recurrent nuisance flooding can produce substantial cumulative costs through repeated repairs, lost income, and increased demands on public resources.

In addition to economic losses, flooding in developed landscapes degrades environmental quality by increasing erosion, transporting sediment, nutrients, and contaminants into waterways, impairing drinking water supplies, and creating conditions that can increase public health risks. As flood frequency continues to rise, communities throughout New Jersey face growing challenges in balancing development with public safety and environmental protection. Initiatives such as the New Jersey Blue Acres Program represent an important long-term adaptation strategy by relocating development away from high-risk floodplains and restoring these landscapes to natural systems that can safely store floodwaters while providing valuable ecological benefits. As such, landscape visioning for Blue Acres sites can help communities envision the possibilities of post-buyout landscapes, building support for resilient land use, and creating momentum toward future implementation.

2.3 Project Objectives

The project's objective is to develop landscape vision plans that demonstrate how Blue Acres post-buyout properties can be transformed into resilient, ecologically functional, and community-oriented open spaces, using interdisciplinary site analysis, stakeholder input, and illustrative design to establish a foundation for future planning and implementation. Below is a list of project objectives:

- **Develop landscape vision plans for post-buyout properties** in New Milford Borough, Bergen County and Pleasantville, Atlantic County that demonstrate the potential future use of Blue Acres-acquired land.
- **Understand existing environmental and spatial conditions** through GIS analysis, ecological assessment, and field-based site inventory.
- **Incorporate local knowledge and priorities** through stakeholder meetings and an understanding of community goals and challenges.
- **Explore resilient landscape strategies** that respond to each community's specific flooding conditions, including riverine flooding in New Milford and sea-level-rise impacts in Pleasantville.
- **Illustrate the potential benefits of post-buyout open space**, including flood mitigation, ecological restoration and connectivity, recreation, and improved quality of life.
- **Create compelling visualizations**, including plans, sections, and diagrams to envision the potential future landscape design and help communicate the value of Blue Acres buyouts.
- **Provide a foundation for future** implementation by documenting findings, developing preliminary design concepts, and identifying recommendations and next steps.

3. Project Areas Overview

Below is a description of each of the municipalities and Blue Acres parcels selected for this project. The municipalities were selected due to the post-buyout Blue Acres parcel's proximity to tidal waterbodies under the CZM grant.

3.1 New Milford, Bergen County

New Milford is a suburban borough of Bergen County, New Jersey with a population of 16,923 per the most recent 2020 Decennial Census. The town sits on the east bank of the Hackensack River, just south of the Oradell Reservoir. It is known for tree-lined residential streets, local parks, and a tight-knit community feeling with easy access to major highways such as Route 4 and the Garden State Parkway and trains connections to

Hoboken through the New Jersey Transit Pascack Valley Line stopping in nearby River Edge. The town is known as the “birthplace” of Bergen County with a rich history tied to Huguenot pioneer David Demarest Senior. The median income is $114,889 per the 2024 American Community Survey (ACS) 5-Year Estimates.

New Milford serves as the northernmost access point and tidal estuary limit of the Hackensack River. Being in a tidal area means the river in New Milford rises and falls twice daily due to ocean cycles, creating a high-risk zone for flooding where the river transitions from a freshwater stream into a tidal estuary. The town has a long history of flooding due to its location within the Hackensack River floodplain and the presence of numerous tributaries that drain into it. Periods of prolonged rainfall, rapid snowmelt, and tropical storms routinely produce elevated streamflows that inundate low-lying areas throughout the township. Historic floods, including those associated with Hurricanes Irene (2011) and Ida (2021), have demonstrated the vulnerability of residential neighborhoods, transportation corridors, and public infrastructure to recurring damage. Climate projections indicating more frequent heavy precipitation events are expected to further increase flood frequency and severity throughout the Hackensack River watershed, placing additional pressure on communities such as New Milford.

During one of the last major flooding events in April 2022, the flooding concentrated heavily around Columbia Street, Harvard Street, and River Edge Avenue, with water levels reaching up to 2 to 3 feet high in the streets and forcing voluntary evacuations. According to local officials, the river crested and overflowed specifically after the Oradell Reservoir spilled excess water into the Hackensack River following a period of heavy rainfall. The storm caused significant damage to residential basements and local businesses, many of which at the time were still actively recovering or undergoing renovations from the catastrophic remnants of Hurricane Ida. Because of the chronic nature of the flooding in this exact pocket of New Milford, the town officials supported the DEP Blue Acres initiative of buying out and demolishing homes on the most flood-prone streets to mitigate future risk.

Given the recurring flooding challenges and the concentration of Blue Acres buyout parcels in the area, this project focused on properties along Columbia Street and River Edge Avenue as opportunities to explore how clustered post-buyout land could be thoughtfully designed as resilient community-centered open space. The addresses this landscape vision project focuses on are as follows:

Table 1: New Milford Project Sites

Street	**Address Number**
Cedar Road	136

Columbia Street	531, 535, 536, 540, 545, 549, 556, 559, 568, 599, 621, 623, 625, 627, 631, 638, 641, 647, 650, 651, 654, 659, 660, 664, and 668
Harvard Street	630, 639, 643, 648, 654, 660, 668, and 674
Hughes Road	502 and 504
River Edge Avenue	147

3.2 Pleasantville, Atlantic County

Pleasantville is a diverse mainland suburban city in Atlantic County located approximately five miles northwest of Atlantic City. The city acts as a gateway into the Absecon barrier island and hugs the back of Lakes Bay. Based on the 2020 Decennial Census, the town has a total population of 20,629 people. The median income is $53,661 per the 2024 ACS 5-Year Estimates.

The Atlantic County Coastal Region Regional Resilience and Adaptation Action Plan (RRAAP) report submitted to the DEP in October 2022 by the lead environmental consulting company WSP, offers many insights into the demographic and environmental context of Pleasantville. Much of the county's ethnic diversity is concentrated in Pleasantville, where a substantial percentage of the residents are minority or low-income with a growth of non-English speaking and English as a second language residents. As a result, the report emphasizes the importance of ensuring that residents have access to resources and that resilience planning includes populations that may face barriers to accessing assistance.

Pleasantville faces significant exposure to coastal flooding, high-tide flooding, extreme storms, and future sea-level rise, with these risks compounded for socially vulnerable populations. The RRAAP report identifies coastal wetlands and other ecosystems along the Pleasantville shoreline as important regional assets that provide recreation, ecological services, and other quality-of-life benefits, while also recognizing their vulnerability to future flooding. The Action Plan calls for resilience strategies that address both physical and social needs. Pleasantville-specific actions included an adaptation plan for Housing Authority communities and senior centers, with measures such as elevating electrical and mechanical equipment, incorporating solar and battery systems, improving stormwater management through green infrastructure and porous paving, and considering redevelopment of particularly vulnerable facilities. The report also notes that Pleasantville has redevelopment plans already underway and recommends incorporating those efforts into the broader resilience planning process.

Since Pleasantville is located within the coastal plain of Atlantic County, where low elevations and proximity to tidal waterways create substantial and recurring flood risks, resiliency strategies are necessary to fortify and protect the community. These challenges are particularly pronounced in the Lakes Bay area, where the Blue Acres properties are located. Flooding in the project area is caused by multiple interacting processes, including elevated tides, coastal storm surge, intense precipitation, and likely limitations on the ability of local drainage systems to discharge stormwater. As a result, the area suffers from both storm-related flooding as well as chronic nuisance flooding during elevated tidal conditions.

Pleasantville's Strategic Recovery Planning Report (2014) details the community's significant flood risk from both storm impacts and expected sea level rise (SLR). The report concluded that nearly half of the Lakes Bay neighborhood area could be inundated under a 3-ft SLR scenario, which would also increase the impact of storm surge. The landscape visioning site is within these risk zones, located at the end of East Park Ave. There are additional Blue Acres parcels on East Bay Avenue, East Edgewater Avenue, and Oakland Avenue.

3.3 Comparative Context

The two communities represent distinct social, geographic, and flooding contexts, which shaped the opportunities considered for each Blue Acres landscape. New Milford is a relatively affluent suburban borough with a median household income of $114,889 and a population of approximately 16,900. Its Blue Acres parcels are concentrated within an established residential neighborhood along the Hackensack River, where recurring riverine and storm-related flooding has resulted in repeated property damage and residential buyouts. In this context, the landscape vision focuses on how a cluster of formerly residential properties can be transformed into connected, resilient open space that complements the existing neighborhood and provides new opportunities for passive recreation and stewardship for their strong civic groups.

Pleasantville, by comparison, is a more densely populated and economically diverse mainland coastal town, with a population of approximately 20,600 and a median household income of $53,661 with overburdened communities. Its Blue Acres properties are located near Lakes Bay, where low elevations and proximity to tidal waters expose the neighborhood to coastal flooding, storm surge, elevated tides, and projected sea-level rise. The Pleasantville site therefore presents a landscape opportunity that is more directly tied to coastal ecology and adaptation, with potential connections to surrounding parks, the nearby municipal marina, and other future redevelopment within the area.

Together, the two sites demonstrate how Blue Acres landscapes can respond to different forms of flood risk and different community contexts. Although the social and environmental circumstances differ considerably, both projects explore how properties acquired through flood-risk mitigation efforts can be designed with community input and move beyond an indication of vacancy and loss to towards a resilient future with open spaces that provide ecological, social, and recreational value.

4. Existing Conditions Analysis

4.1 Methods

For each site, the CUES team combined desktop GIS analysis with field-based site visits to develop an understanding of existing environmental, spatial, and community conditions and to inform the landscape visioning process. Desktop analysis was used to review available spatial data and identify key site characteristics, including flood zones, topography, land cover, wetlands, open-space connections, and habitat rank. These findings were then supplemented through site visits, allowing the team to observe existing site conditions, vegetation, circulation, views, adjacent development, and other characteristics that may not be fully captured through GIS data. As a whole, the desktop and field assessments provided the basis for identifying opportunities and constraints and translating existing conditions into site-responsive design concepts. The following passages explain the existing conditions in New Milford and Pleasantville.

4.2 New Milford Environmental Inventory and Assessment



Figure 1: Map of New Milford Blue Acres Parcels

Site Observations and Notes

The CUES team conducted a site visit to New Milford on June 1, 2026, to evaluate the on-the-ground conditions of the Blue Acres parcels and gain a better understanding of the character of the landscape, its ecological value, and its surrounding community context. The site visit began near the end of Columbia Street, adjacent to the pedestrian path connecting to Henley Avenue. The area between Henley Avenue and River Edge

Avenue, referred to as the “south” section of the Blue Acres parcels, contains 23 lots in total.

This southern section is generally well maintained, with predominantly mown grass lawns across the former residential properties. Remnants of the former homes remain visible in the landscape, particularly through existing screening vegetation, including established hedges composed primarily of non-native ornamental species such as yews and winged euonymus. Along the Hackensack River, the river edge consists of a mix of native and non-native trees with areas of understory vegetation. In this section, portions of the riverbank show signs of erosion, including exposed and rutted soil. A flood marker located along the sidewalk identifies water elevations at intervals up to five feet, providing a visible reminder of the area's flood history. The surrounding neighborhood is primarily composed of single-family homes. Homes along Harvard Street maintain fences along their property lines bordering the Blue Acres parcels, creating a distinct edge between the former residential lots and the surrounding neighborhood.

Figure 2: New Milford Blue Acres South Parcels Photos



Pedestrian path connecting Henley Ave. to Columbia St.



Columbia Street



Edge conditions at the Hackensack River



Hedge from former homes



View of grassy parcels



View of Columbia Street with sidewalk apron



View of the Hackensack River



Flood marker along the sidewalk

Moving north along Columbia Street, the parcel at 147 River Edge Avenue contains the historic Demarest-Bloomer House. Constructed in the Greek Revival style in the 1800s, the house was added to the Register of Historic Places in November 1985. The property is accessed from the busy River Edge Avenue. The historic structure is currently in poor condition, with vegetation growing along the exterior and deteriorating siding. The former backyard contains an old coach house and barn, both of which show signs of significant deterioration, including missing windows. Because the house is slated for demolition, the structure will be documented by a historic survey. Behind the house is a large dry-laid stone structure that the team was told was formerly used as a water feature. The property also has direct access to the Hackensack River, as well as a small stream located behind the property that passes beneath Columbia Street to the east through a culvert.

Figure 3: Demarest-Bloomer House



View of the property from River Edge Ave.



View of the coach house



Shade structure



Dry-laid stone feature



Back view of the property



Back stream that culverts under Columbia St.

Continuing along Columbia Street, the northern parcels exhibit characteristics similar to those observed in the southern section, including predominantly open, mown areas and remnants of the former residential landscape. Many Canadian geese were seen in this section. This northern section contains 12 parcels. In the middle portion of the site, a woodland buffer separates the back of homes at 552 and 596 Columbia Street from the Hackensack River. This area is designated as open space and is owned by the Borough of New Milford, with access provided from 568 Columbia Street. The woodland provides a notable contrast to the more open and maintained character of the surrounding Blue Acres parcels and represents an existing landscape feature that could contribute to future ecological and recreational connections along the river.

Figure 4: New Milford Blue Acres North Parcels Photos



599 Columbia St. at the corner of River Edge Ave.



136 Cedar Rd.



End of Cedar Rd. looking towards 568 Columbia St.



Blue Acres signage



556 Columbia St.



Northern portion of Columbia St.



Flock of geese



531 and 535 Columbia St.

Overall, the site visit revealed a landscape characterized by a combination of open lawns, remnants of former residential properties, wooded areas, riverfront vegetation, and existing cultural and historic features. The conditions observed along Columbia Street and the Hackensack River demonstrate both the physical effects of repeated flooding and the potential for the acquired properties to function collectively as a more connected and resilient landscape. Existing hedge vegetation, the river edge, the historic Demarest-Bloomer House, and the Borough-owned woodland provide a range of landscape features that can inform future design and restoration strategies. These observations, together with the ecological assessment conducted by ecologist Brooke Maslo during an earlier site visit, provide a foundation for understanding existing site conditions and identifying opportunities and constraints for the proposed landscape vision. The following section reviews the GIS inventory maps and summarizes the ecological observations documented by Brooke Maslo.

GIS Inventory Maps and Ecological Description

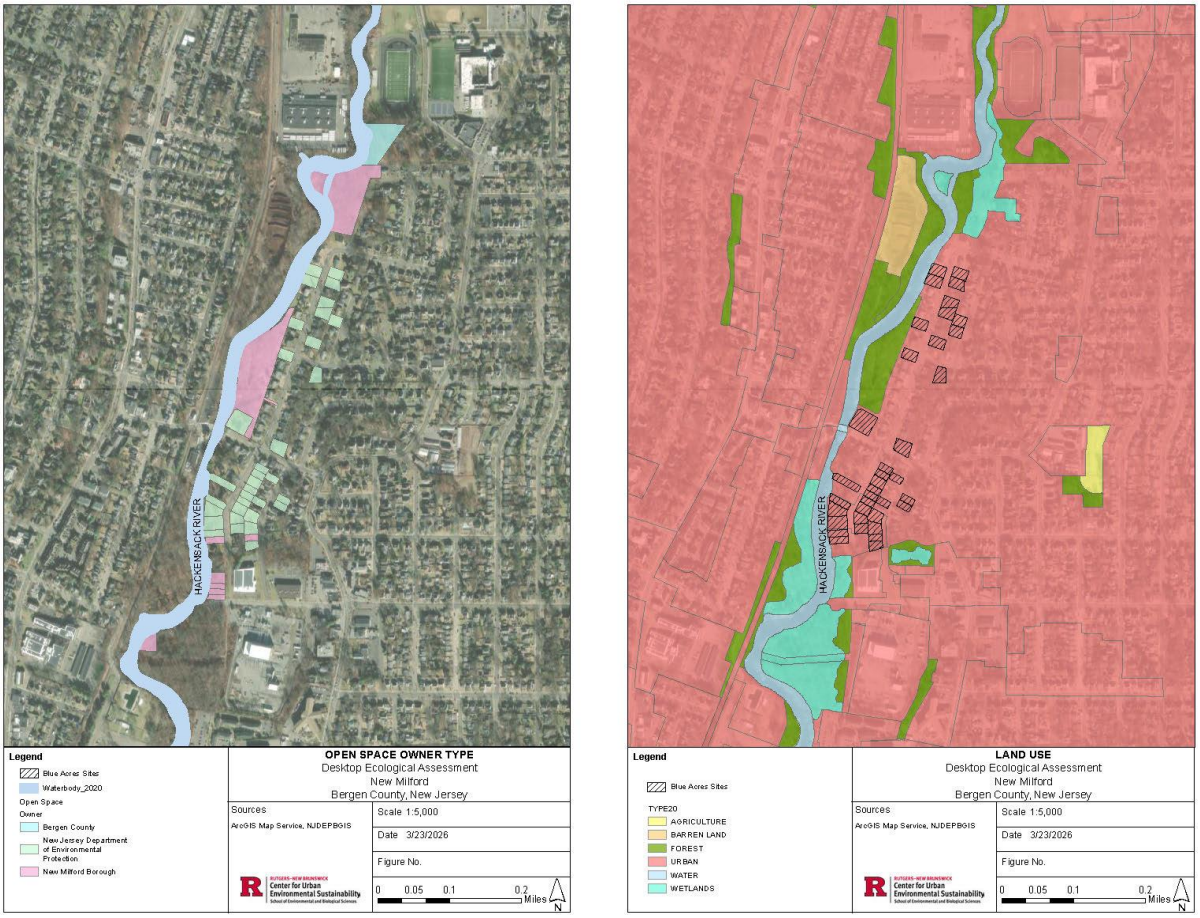


Figure 5: Maps of New Milford's Open Space and Land Use

Open Space and Land Use – There is a total of 37 parcels within the landscape visioning scope. Surrounding these parcels are additional open space areas owner by the New Milford Borough. The large pink swath between Columbia Street and the Hackensack River is a large, forested area that could present opportunities for additional walking trails connected to the Blue Acres sites. The predominant land use within the area is urban residential. Wetlands hug the Hackensack River and boarder the site to the north and south.

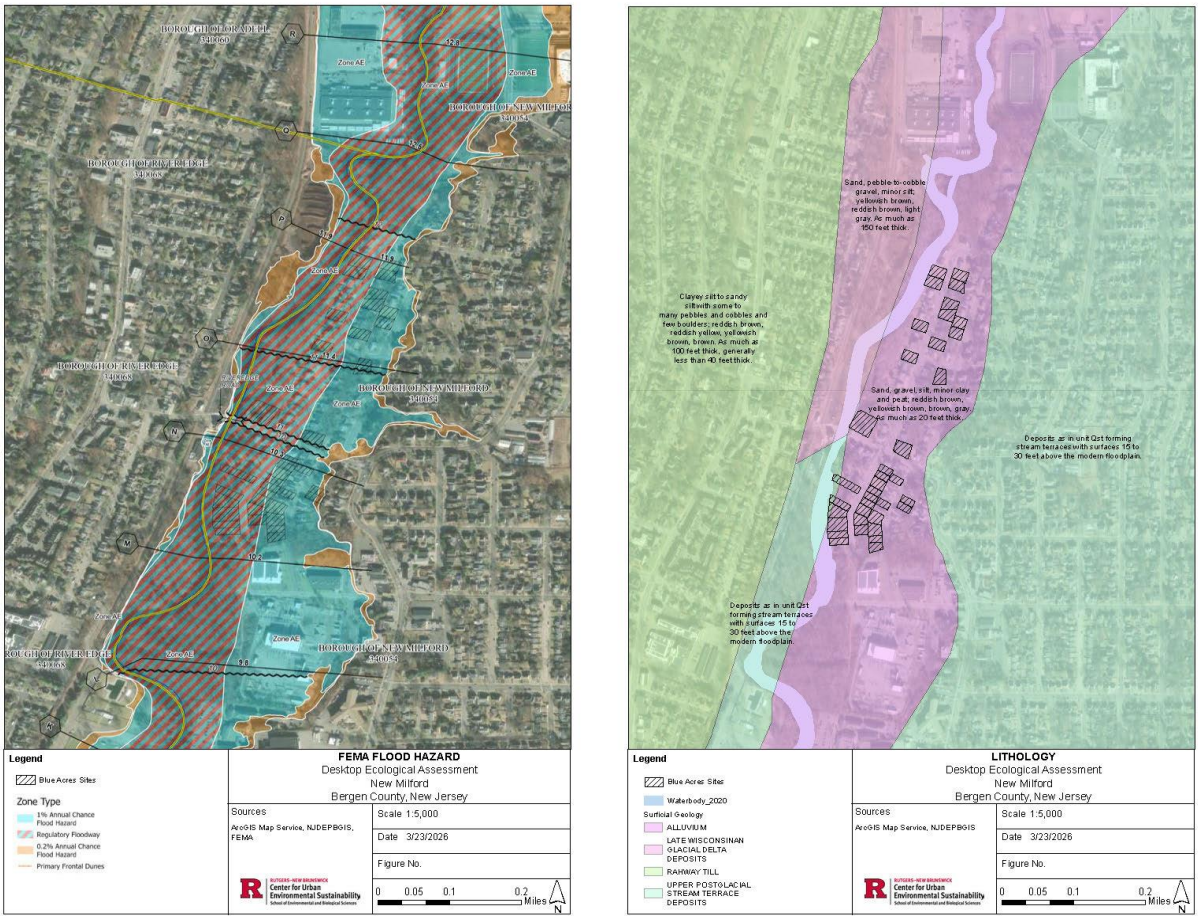


Figure 6: Maps of New Milford's FEMA Flood Hazards and Lithology

Soils and Surficial Geology – The Blue Acres properties in New Milford are underlain by primarily alluvial deposits, with some areas represented by upper post-glacial stream terrace deposits. Developed areas extending beyond the floodway consist of Rahway Till, Late Wisconsinian glacial delta deposits and upper postglacial stream terrace deposits. These materials influence site hydrology, drainage characteristics, groundwater movement, and vegetation patterns, making them important considerations in the development of restoration concepts.

Four primary surficial geologic settings occur within the project area:

1. Floodplain Alluvium: Most Blue Acres parcels adjacent to the Hackensack River are underlain by recent alluvial deposits consisting of sand, gravel, silt, minor clay, and peat. These sediments are deposited during typical and repeated flood events and are generally characterized by shallow groundwater, periodic inundation, and variable drainage conditions. Their hydrologic characteristics make them well suited

for restoring riparian forests, floodplain wetlands, and other native communities adapted to frequent flooding.

2. Late Wisconsinan Glacial Delta Deposits: Portions of the eastern side of the project area are underlain by glacial delta deposits composed primarily of sand and pebble gravel with minor silt, clay, peat, and cobble gravel. These coarser-textured materials typically exhibit greater permeability and improved drainage relative to adjacent floodplain deposits. Where elevations are sufficient to reduce flood frequency, these areas provide suitable conditions for restoration of native upland forest and meadow habitats.

3. Rahway Till: Areas west of the Hackensack River are underlain by Rahway Till, a dense glacial deposit consisting of clayey silt to sandy silt containing pebbles, cobbles, and occasional boulders. These finer-textured materials generally have lower permeability alluvial deposits, resulting in slower infiltration and a greater potential for seasonal saturation or surface ponding. Restoration strategies in these areas should emphasize native species tolerant of mesic to wet-mesic soil conditions.

4. Upper Postglacial Stream Terrace Deposits: There exists a relatively narrow band of upper stream terrace deposits adjacent to portions of the river. These deposits consist primarily of stratified sand, gravel, silt, minor clay, and organic peat. These soils represent older floodplain surfaces that are now elevated above the current channel. Consequently, they experience inundation less frequently than the active floodplain. Their intermediate hydrologic and soil-moisture characteristics bridge the gap between wetlands and adjacent uplands, supporting opportunities for restoration of floodplain forest edges and other transitional habitat communities.

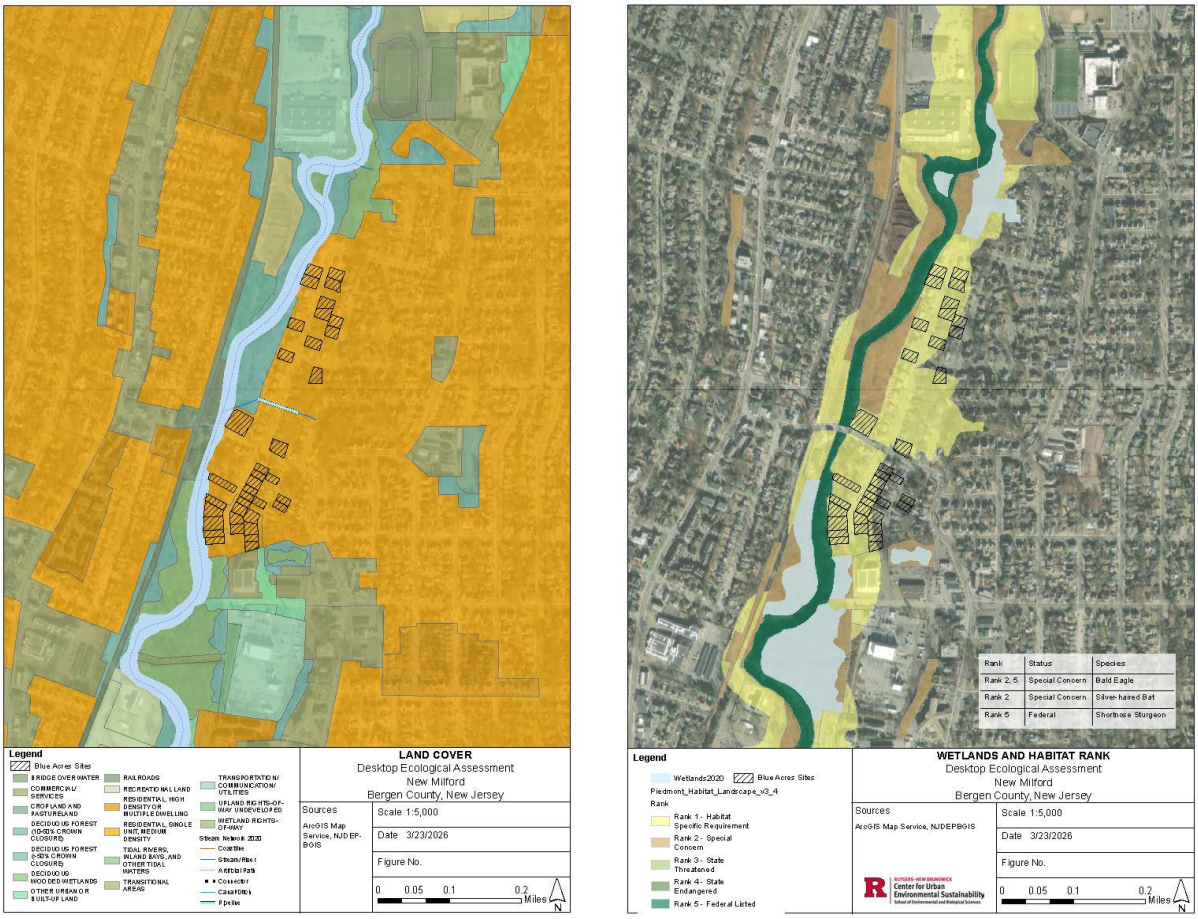


Figure 7: Maps of New Milford's Land Cover and Landscape Project Habitat Rank

Vegetation – The Hackensack River riparian corridor has historically supported a diverse mosaic of floodplain forests, freshwater wetlands, shrublands, and wet meadows. Although much of the surrounding landscape has been converted to residential and commercial development, the remaining natural vegetative communities are strongly influenced by local hydrology, soil moisture, and flood frequency.

Well-drained portions of the floodplain typically support riparian forest communities dominated by sycamore (Platanus occidentalis), river birch (Betula nigra), and silver maple (Acer saccharinum). Areas that experience more prolonged flooding or seasonal saturation are commonly characterized by red maple (Acer rubrum), swamp white oak (Quercus bicolor), pin oak (Quercus palustris), and black gum (Nyssa sylvatica). The shrub layer often includes spicebush (Lindera benzoin), silky dogwood (Cornus amomum), arrowwood viburnum (Viburnum dentatum), and elderberry (Sambucus canadensis), while herbaceous wetlands support species such as skunk cabbage (Symplocarpus foetidus), sensitive fern (Onoclea sensibilis), marsh fern (Thelypteris

palustris), sedges (Carex spp.), and rushes (Juncus spp.). Disturbances associated with historic land use and canopy openings have also facilitated the establishment of early successional vegetation, vines, and invasive plant species in portions of the corridor.

Native Vegetation and Ecotypes

Deciduous Woodlands: Woodlands surrounding the Blue Acres properties are deciduous, consisting of a mix of both floodplain and upland species. Red maples, sycamore, tulip poplar, and various oaks are well represented. The understory was mostly bare, with little to no native species except for boneset (Eupatorium perfoliatum), poison ivy (Toxicodendron radicans), and Virginia creeper (Parthenocissus quinquefolia).

Edge Habitat: The edge of most forested areas is dominated by invasive species, primarily mugwort (Artemesia vulgaris) and multiflora rose (Rosa multiflora). There were also patches of Japanese knotweed (Reynoutria japonica) along the riparian edge.

Former Residential Properties: The Blue Acres parcels within the project area consist primarily of mowed turf. Scattered mature native trees exist, including red oak (Quercus rubra), tulip poplar, and maples. Remnant, ornamental plantings, such as privet (Ligustrum) and winged euonymus (Euonymus alatus) are present as well. There is also a large patch of highly invasive bamboo (Phyllostachys sp.).

4.3 Pleasantville Environmental Inventory and Assessment

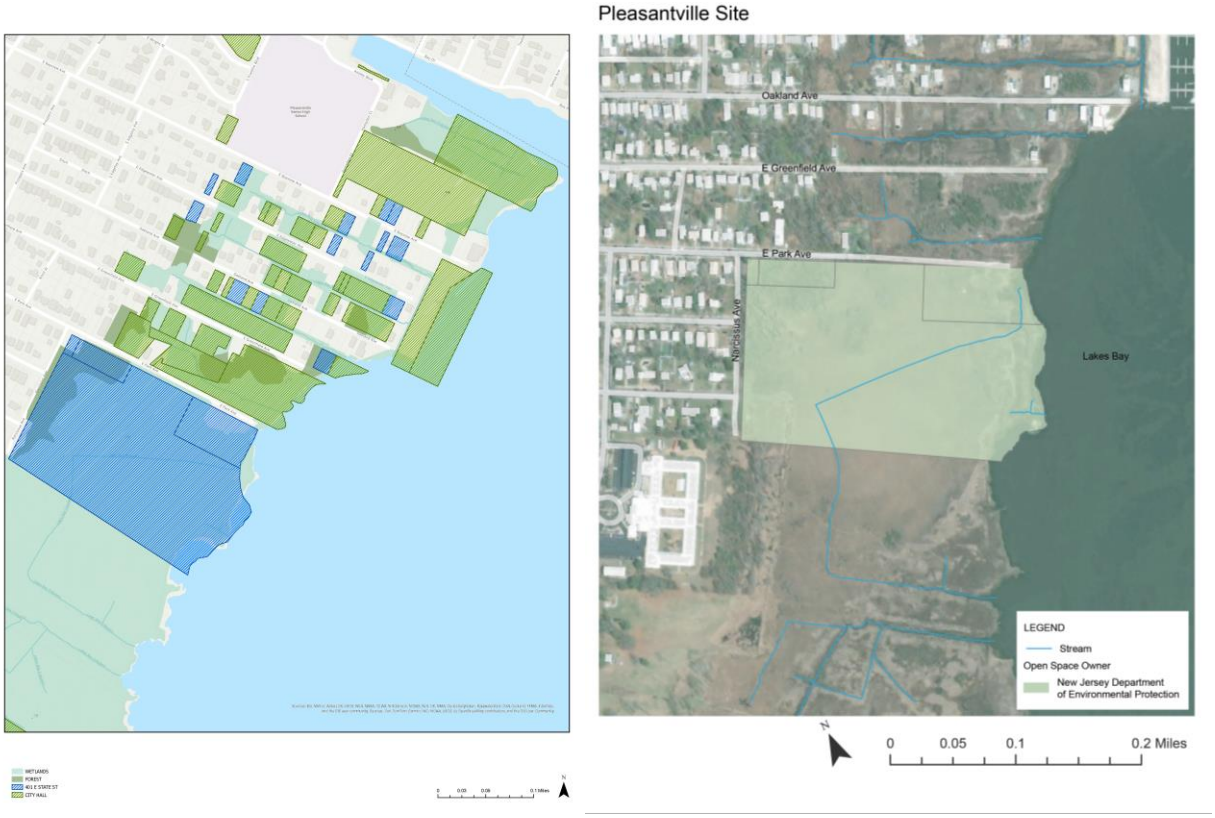


Figure 8: Map of Pleasantville's Open Space and East Park Avenue Site

Site Observations and Notes

The primary site for the Pleasantville visioning exercise is located at the eastern end of East Park Avenue, encompassing Blocks 4, Lots 6, 12, 29, and 33, between Narcissus Avenue and Lakes Bay. The CUES team visited Pleasantville on June 23, 2026, to assess existing site conditions and observe the surrounding streets, Blue Acres properties, and nearby community assets. The visit began along East Park Avenue, where the roadway transitions to an unpaved surface of primarily gravel and sand as it approaches Lakes Bay. The surrounding residential area reflects a range of housing conditions and flood-adaptation strategies, including homes in varying states of upkeep, properties for sale, and elevated or stilted homes designed to reduce exposure to floodwaters. These conditions provide important context for understanding how the neighborhood has been affected by and adapted to its location within a flood-prone coastal landscape.

Within the visioning site, vegetation changes noticeably along the transition from the former residential landscape toward Lakes Bay. Areas where homes likely once stood are characterized by mixed native and non-native secondary woody growth. Closer to the shoreline, this vegetation transitions to stands of common reed (Phragmites), followed by

salt-tolerant Spartina-dominated vegetation near the water's edge. The shoreline appears to be stabilized in part by the dense root systems of the Spartina, with mussels and pockets of fiddler crabs observed along the intertidal edge. At the end of East Park Avenue, a few benches provide limited opportunities to sit and view the bay; however, there are currently limited opportunities to access or move through the surrounding vegetated areas.

Figure 9: Pleasantville Blue Acres East Park Avenue Site



East Park Ave. leading to Lakes Bay



Mix of phragmites, knotweed, red cedar, and groundsel tree



Benches and view of Lakes Bay towards Atlantic City



View of the site looking south



Bench amongst the phragmites



Fiddler crab burrows along the shore

The team also visited additional Blue Acres parcels in the surrounding area, as well as the former high school site, Lakes Bay Unity Park, and the municipal marina. East Greenfield, Oakland, and East Edgewater Avenues are largely unpaved and are surrounded by vegetation characteristic of coastal and shore-wetland environments. The former high school site is undergoing redevelopment, while Lakes Bay Unity Park provides a substantial existing recreational resource, including playgrounds, a splash pad, running track, picnic and pavilion areas, and an event space. A pedestrian bridge connects the park to the nearby municipal marina on East Bayview Avenue. At the time of the site visit, the marina

was closed to the public due to safety concerns associated with the docks, however; it presents a significant potential for future recreational use. A small footbridge was seen connecting between East Edgewater Avenue and the marina.

Figure 10: Pleasantville Context Photos



Mussels and spartina grass at the end of East Greenfield Ave.



Construction on the former high school site



Lakes Bay Unity Park



Pedestrian walkway bridge connecting Unity Park to East Bayview Ave.



Municipal marina lot



Pedestrian bridge connecting marina to East Edgewater Ave.

Taken together, the site observations indicate an opportunity to strengthen connections among several existing and planned community assets. The Blue Acres parcels, Lakes Bay Unity Park, municipal marina, and future redevelopment of the former high school site are located within a relatively close network of open spaces and waterfront destinations. A connected system of paths, overlooks, seating areas, and ecological features could build upon these existing resources while providing greater access to the site's coastal landscape. The existing transition from residential land to coastal wetland vegetation also presents an opportunity to make the ecological processes associated with flooding, wetlands, and Lakes Bay more visible and accessible through future landscape

design. The following section reviews the GIS inventory maps and summarizes the ecological observations documented by Brooke Maslo.

GIS Inventory Maps and Ecological Description

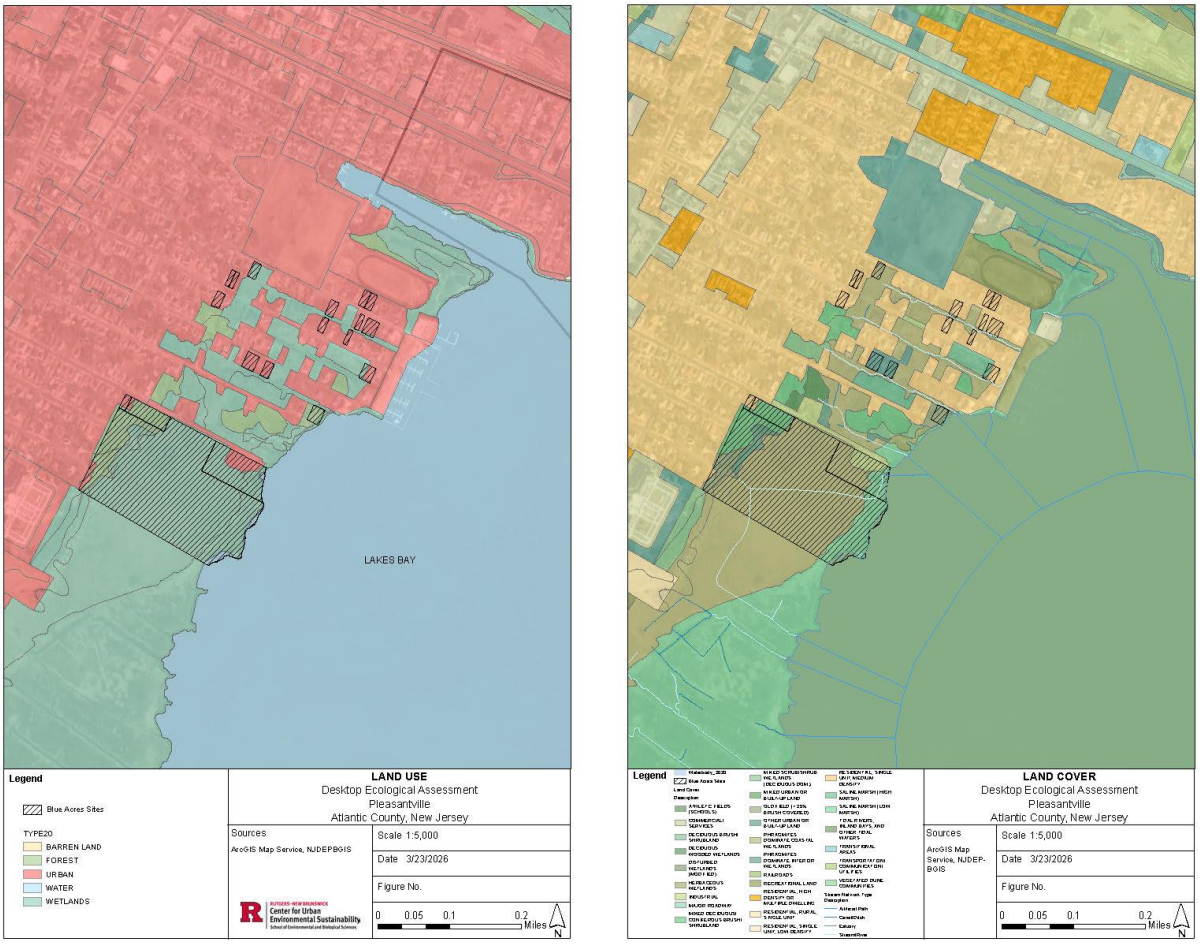


Figure 11: Maps of Pleasantville's Land Use and Land Cover

Land Cover – The Lakes Bay shoreline and surrounding coastal landscape historically supported a diverse mosaic of salt marshes, tidal wetlands, coastal shrublands, and coastal woodlands. Although much of the surrounding landscape has been converted to residential and recreational development, remnant natural communities remain along Lakes Bay and adjacent undeveloped areas. Vegetation within these communities is strongly influenced by small differences in elevation, salinity, tidal inundation, soil moisture, and exposure to coastal conditions.

Low-lying areas subject to regular tidal inundation typically support salt marsh vegetation dominated by saltmarsh cordgrass (Spartina alterniflora), with salt-meadow grass (S. patens), spike grass (Distichlis spicata), and other salt-tolerant species occurring

at slightly higher elevations and in areas experiencing less frequent inundation. Along the transition from marsh to upland, observed vegetation included switchgrass (Panicum virgatum), groundsel tree (Baccharis halimifolia), northern bayberry (Morella pensylvanica), and eastern red cedar (Juniperus virginiana). Better-drained coastal uplands support woodland and shrub communities characteristic of New Jersey's coastal plain, including eastern red cedar, black cherry (Prunus serotina), sassafras (Sassafras albidum), and oaks (Quercus spp.). Disturbance associated with historic development, maintained landscapes, and abandoned residential properties has also created conditions favorable to early-successional and invasive vegetation.

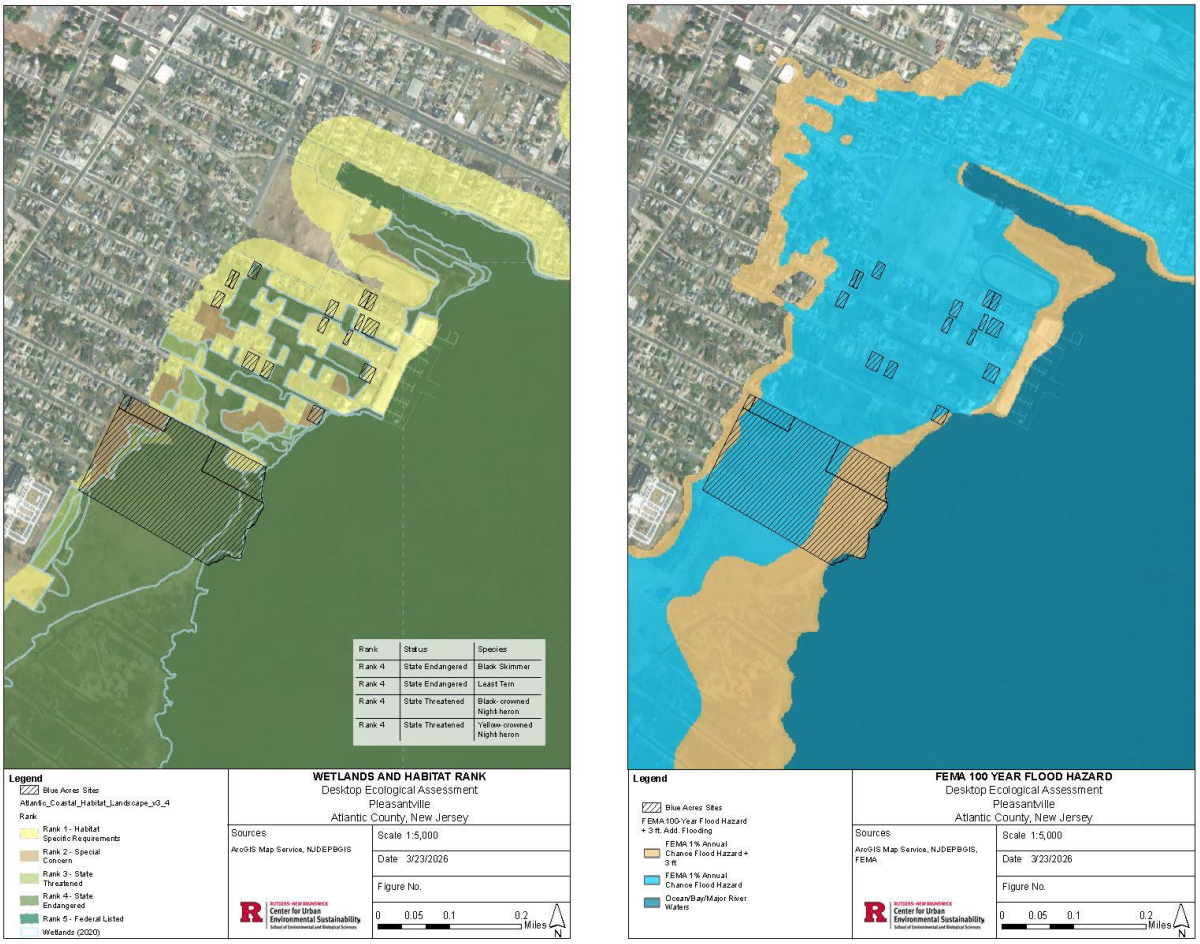


Figure 12: Maps of Pleasantville's Landscape Project Habitat Rank and FEMA 100 Year Flood

Habitat Rank – The NJDEP Landscape project classifies the majority of the project area as Rank 4, indicating that much of the landscape is habitat for one or multiple state and federally listed endangered species. These areas include active season roosting and foraging sites for black-crowned night herons (Nycticorax nycticorax) and yellow-crowned

night herons (Nyctanassa violacea), as well as foraging sites for least terns (Sternula antillarum) and black skimmers (Rynchops niger).

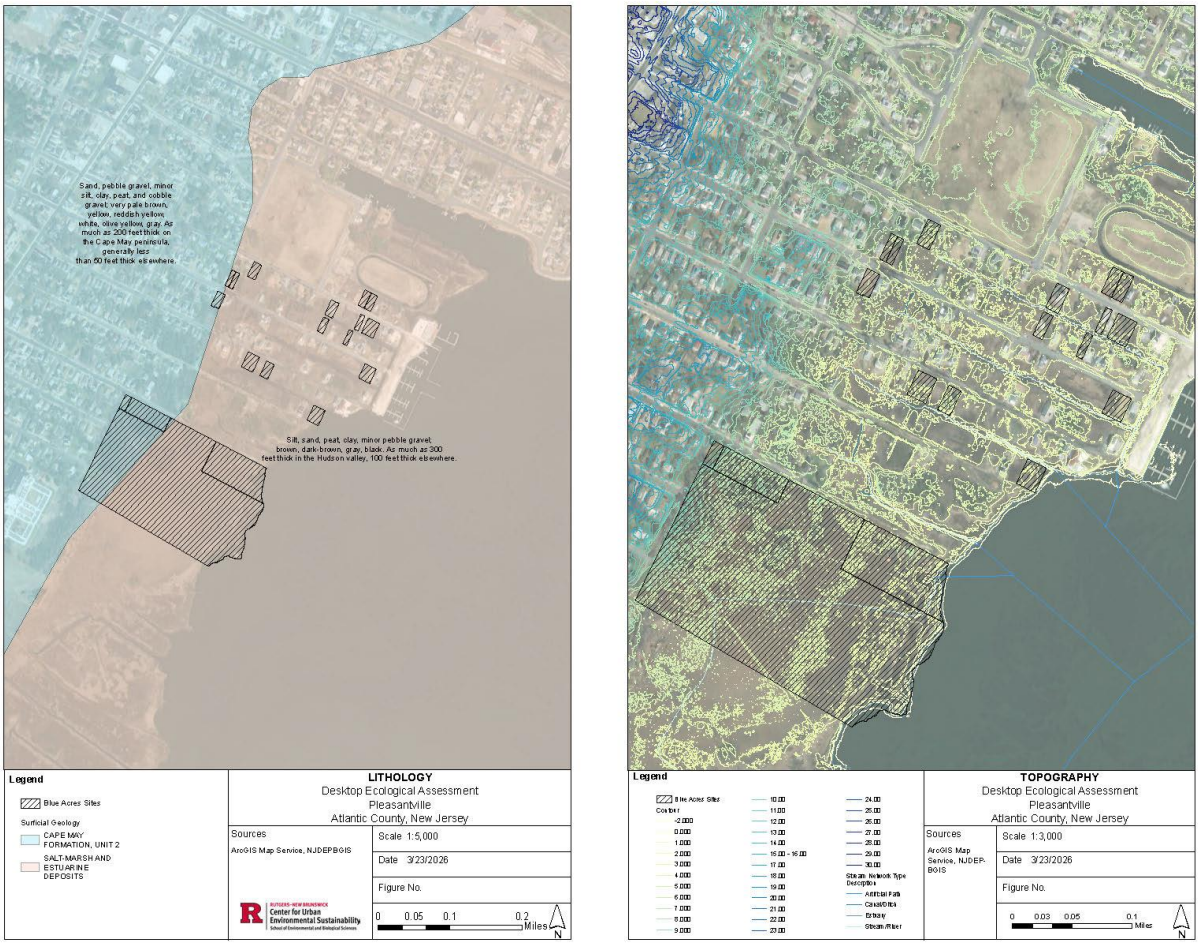


Figure 13: Maps of Pleasantville's Lithology and Topography

Soils and Surficial Geology – The Blue Acres properties in Pleasantville are located within a low-lying coastal landscape adjacent to Lakes Bay. Surficial geology within and surrounding the project area reflects the site's proximity to this estuarine system and consists primarily of salt-marsh and estuarine deposits, with the Cape May Formation, Unit 2 occurring immediately west of the project area. These underlying materials influence soil drainage, groundwater conditions, vegetation, and the suitability of different restoration approaches.

Most of the Blue Acres properties are situated over salt-marsh and estuarine deposits. These deposits consist primarily of silt, sand, peat, and clay, with minor pebble gravel. The relatively high proportion of fine sediments and organic material is characteristic of low-energy coastal environments where sediment and organic matter

accumulate over time. These materials are generally associated with low elevations, shallow groundwater, poor drainage, and periodic saturation or inundation. Such conditions are well suited to the establishment of wetland and wet meadow vegetation and may provide opportunities for the creation or enhancement of stormwater wetlands where site elevations and hydrologic conditions are appropriate.

Immediately west of the project area, the underlying geology transitions to the Cape May Formation, Unit 2, which is composed predominantly of sand and pebble gravel with smaller amounts of silt, clay, peat, and cobble gravel. These coarser sediments generally provide greater permeability and drainage than the adjacent estuarine deposits. The transition between the Cape May Formation and the lower-lying estuarine deposits likely contributes to spatial variation in soil moisture and drainage across the broader landscape and should be considered when selecting native plant communities and developing grading and stormwater management concepts.

Native Vegetation and Ecotypes

Salt Marsh and Tidal Wetlands: Salt marsh vegetation occurs along the Lakes Bay shoreline and other low-elevation portions of the surrounding landscape where tidal inundation and saline conditions strongly influence plant community composition. Lower marsh areas are typically dominated by salt marsh cordgrass, while higher marsh elevations support salt-meadow cordgrass, spike grass, and associated salt-tolerant vegetation.

Coastal Woodlands and Shrublands: At higher elevations and in areas experiencing less frequent tidal inundation, salt marsh vegetation transitions into coastal shrubland and woodland. Characteristic woody vegetation includes eastern red cedar, northern bayberry, groundsel-tree, black cherry, sassafras, poison ivy (Toxicodendron radicans), Virginia creeper (Parthenocissus quinquefolia), sumacs and oaks

Edge Habitat: The interface between remaining natural vegetation and developed areas supports a mixture of native early-successional vegetation and non-native or invasive species. Roads and former residential lots include such invasive species as mugwort (Artemisia vulgaris), common reed (Phragmites australis), Japanese knotweed (Reynoutria japonica), tree-of-heaven (Ailanthus altissima), and honeysuckles (Lonicera spp.).

Former Residential Properties: The Blue Acres parcels within the project area are largely vegetated by common reed and native salt marsh vegetation.

5. Community Engagement

5.1 New Milford

On June 1, 2026, the CUES and NJDEP Blue Acres teams, in partnership with the Borough of New Milford, hosted a community meeting and design charrette focused on the future of the Blue Acres parcels. The meeting began with presentations from project partners introducing the project scope, potential landscape visioning approaches, and existing site conditions. Following the presentations, approximately 25 community members participated in a design charrette organized into two groups. Participants were provided with base maps of the Blue Acres sites, trace paper, and Post-it notes to document their concerns, observations, and ideas for the future landscape.

The charrette was intended to supplement the team's site analysis with local knowledge and better understanding of how residents currently experience the area. In particular, the team sought input on desired features and uses, as well as concerns about potential changes to the Blue Acres properties. Discussions addressed a range of neighborhood concerns, including several issues beyond the scope of the landscape visioning project like undesired uses in woodland areas outside of the Blue Acres sites and perceived contamination of the Hackensack River. Participants expressed distain for presence of deer and geese. At the same time, participants identified a number of potential landscape improvements, including walking trails, fishing opportunities, native and pollinator gardens, additional trees, and plantings or other landscape strategies to help manage and absorb stormwater.



Figure 14: New Milford 6.1.26 Community Meeting Photos

Following the group discussions, participants reconvened to share their primary concerns and ideas with the larger group. The most frequently identified concerns included undesirable uses, privacy, water quality, and animal droppings. Suggested landscape features included trees, native meadows, walking trails, pollinator plantings, and green infrastructure designed to absorb and manage floodwater. A playground was also suggested as a potential community amenity.

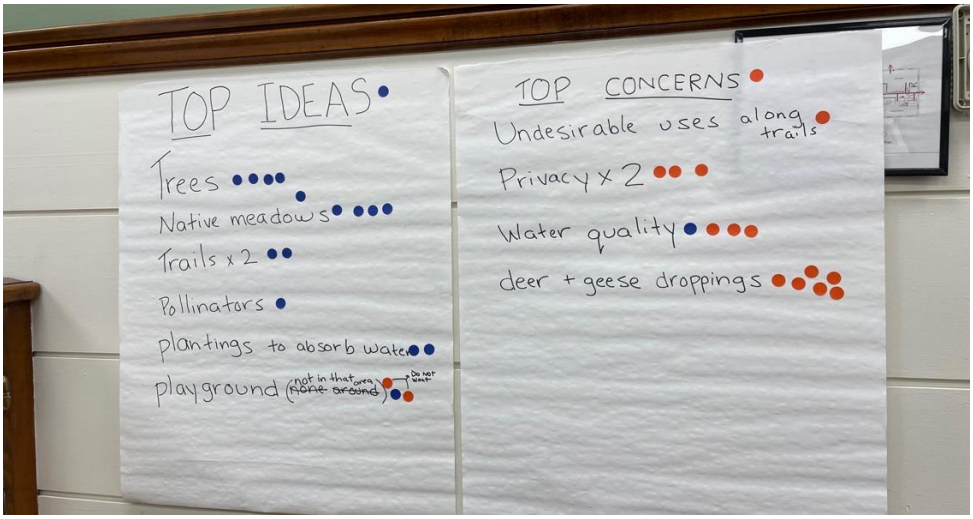


Figure 15: New Milford 6.1.26 Community Meeting Top Ideas and Concerns

On August 17, 2026, the CUES and NJDEP Blue Acres teams, again in partnership with the Borough of New Milford, hosted a second community meeting to present preliminary landscape designs developed in response to the first round of community input. The meeting began with a brief presentation reviewing the project and summarizing the feedback received during the June charrette. The CUES team then presented three preliminary design plans, with individual boards addressing the southern Blue Acres parcels, the Demarest-Bloomer House at 147 River Edge Avenue, and the northern parcels. Boards depicting plant suggestions and photos of the Demarest-Bloomer House were also prepared. . It should be noted that the Demarest-Bloomer House is in the process of seeking review and approval from the New Jersey Historic Sites Council related to the demolition of the historic structure after submission of Application for Project Authorization for New Jersey Register Review. This could include mitigation requirements to protect any archeological remains that could impact the eventual design implementation.

Participants were invited to review the plans and provide a final round of feedback using sticky notes placed directly on the design boards. Feedback during this meeting was generally focused on specific design elements and their proposed locations rather than broader concerns about the overall direction of the plans. Participants expressed continued interest in incorporating additional herbaceous and wildflower plantings, as well as more rain gardens and other green infrastructure strategies across the three areas.

Together, the two community meetings provided an important progression from broad community concerns and aspirations toward more specific design feedback. The June charrette helped identify the issues, uses, and landscape features that were most important to participants, while the August meeting provided an opportunity to evaluate

how those priorities were translated into preliminary designs. Community input was therefore used to refine the landscape vision plans. Both meetings provided opportunities for residents to engage in the design process to share local knowledge and voice their needs and, importantly concerns, in these vulnerable areas.

5.2 Pleasantville

Despite the intention to follow a similar two- meeting public engagement format as illustrated in New Milford, only one community meeting could be held in Pleasantville during the project period. Several variables led to the condensed engagement format in Pleasantville, including significant staff, facility, and other resource constraints on the local government level. Because there would be only one opportunity for community input during the design development process, the CUES and NJDEP Blue Acres teams prepared preliminary concepts and illustrative materials to provide a tangible starting point for discussion. The meeting was originally scheduled for the Pleasantville Library for August 5, 2026.

On the day before the meeting, the Blue Acres team was informed that the scheduled meeting room would no longer be available because it was needed as workspace for municipal employes because City Hall had to be closed. Because community members had already RSVP'd and there was no opportunity to reschedule another meeting, the CUES and Blue Acres teams proceeded with the engagement as planned. Printed boards displaying key project information, site analysis, preliminary concepts, and illustrative examples were prepared for the meeting. Upon arrival, a member of Pleasantville's City Council assisted the teams in securing access to the municipal courtroom within the Police Department, allowing the meeting to proceed indoors.

The meeting was organized with the same general structure of the planned presentation, with the boards arranged sequentially to explain the project, existing site conditions, and preliminary landscape concepts. The materials included two diagrams illustrating potential trail connections within the broader area and through the East Park Avenue site, as well as a board presenting illustrative examples of potential landscape elements. These examples showed how features such as trails, benches, pavilions, bird blinds, and other landscape improvements could potentially be incorporated into the site. The images were intended to communicate the character and range of possible interventions rather than represent finalized proposals.

Approximately 20 residents gathered for the workshop. Before the project team could formally begin the presentation, attendees initiated a broader discussion about the project and other challenges affecting the community. Much of the initial discussion reflected concerns about changes occurring within the neighborhood, a general distrust of

government-led initiatives and outside organizations, and skepticism regarding the municipality's ability to maintain existing infrastructure and public spaces.

Because these concerns were raised before the project could be formally introduced, there was initially a misunderstanding regarding the purpose of the meeting and the status of the drawings being presented. Some attendees understood the preliminary illustrations to represent a committed project that would be implemented, rather than conceptual materials intended to facilitate discussion and solicit community input. The project teams subsequently clarified that the drawings were illustrative concepts developed to explore possibilities for the Blue Acres properties and that no specific design or use had been approved for implementation.

After the initial concerns had been heard and acknowledged, the CUES and NJDEP Blue Acres teams presented the project materials, explaining the purpose of the Blue Acres acquisitions, the existing conditions of the properties, the potential opportunities associated with post-buyout land, and the role of the visioning process. The teams emphasized that the purpose of the meeting was to listen to residents and understand their perspectives, concerns, and priorities.

Community members continued to express significant concerns regarding the municipality's management of existing parks, roads, infrastructure, and public spaces. In the context of these broader concerns, participants expressed limited support for introducing additional programmed uses or new landscape infrastructure within the Blue Acres properties. The discussion indicated that residents had substantial reservations about the capacity to maintain and manage additional public amenities in this area and that, from the perspective of many participants, leaving the properties largely undeveloped was preferable to introducing new uses.

The feedback from the meeting provided an important counterpoint to the preliminary design concepts and demonstrated the importance of considering local capacity, maintenance, management, and community expectations alongside physical and ecological opportunities. Based on the feedback received, the CUES and NJDEP Blue Acres teams determined that further development of the preliminary concepts would not be appropriate within the scope of this project. The Pleasantville concepts were therefore retained as illustrative visioning materials and not advanced into more detailed design proposals. The work already completed allowed the project to document existing conditions and explore potential landscape opportunities. The meeting gave residents a platform to air their concerns and learn more about the Blue Acres mission. The team learned that it may need more time to identify partners within the neighborhood to work

with, to reinvestigate the municipality's capacity for stewardship and management, before another attempt for a visionary design process could be started.

6. Landscape Vision Plans

6.1 Vision Plan – New Milford

Using feedback gathered during the New Milford community meetings, together with observations of existing site conditions, the CUES team developed a set of preliminary landscape vision plans intended to respond to community priorities while strengthening the ecological and functional performance of the Blue Acres properties. The designs incorporate community suggestions for native plantings, passive recreation, and spaces for gathering and learning, while also addressing opportunities for increased floodwater and stormwater retention, expanded tree canopy, habitat enhancement, and reduced long-term maintenance through the use of no-mow areas. Across the three sections, the overarching goal is to create open, calm, and predominantly natural spaces for passive recreation that are responsive to the site's floodplain context and connected to the history and character of New Milford.

For the purposes of design development, the Blue Acres properties were organized into three sections: the northern parcels, the Demarest-Bloomer House historic property, and the southern parcels. The northern and southern areas share similar site conditions and therefore incorporate many of the same landscape typologies. Four primary planting types form the basis of the landscape framework:

Shrub Hedge Row: Provides habitat, privacy screening, and windbreaks using native species including Blackhaw Viburnum, Serviceberry, Elderberry, Staghorn Sumac, Summersweet, Carolina Allspice, and Red Osier Dogwood.

Herbaceous Wetland: Provides wet-site-tolerant planting within rain gardens and other low areas to help filter and retain stormwater. Species include Swamp Milkweed, Northern Blue Flag, Cardinal Flower, Swamp Rose Mallow, Joe-Pye Weed, Common Rush, and Purple Coneflower.

Pollinator Meadow: Provides low-maintenance, no-mow areas that support pollinators and seasonal habitat. Species include Bee Balm, New England Aster, Black-Eyed Susan, Little Bluestem, Butterfly Weed, Ironweed, and Milkweed.

Woodland: Expands and strengthens existing wooded areas using species including Red Maple, Sweetbay Magnolia, White Oak, Silver Maple, Tulip Poplar, Black Tupelo, and Sweetgum.

Figure 16: New Milford North and South Parcel Design Plans



Northern Parcels

The northernmost portion of the site design consists of two moderately sized parcels located on either side of Columbia Street. Each parcel incorporates a central rain garden planted with herbaceous wetland species, with a walking path following its perimeter. Native shrub hedge rows are located along property boundaries to provide privacy screening for adjacent residences while also creating additional habitat.

The larger parcel in the center incorporates a walking path connecting Columbia Street with Hughes Road, providing a pedestrian connection through the Blue Acres properties. A second rain garden provides additional opportunities for stormwater retention, while expanded woodland plantings build upon the site's existing wooded areas.

Four smaller, single-lot parcels are located within the northern section. The two parcels west of Columbia Street incorporate walking trails along the Hackensack River that connect to the woodland owned by the municipality. The vision would be to expand the existing tree canopy with additional native plantings to reduce the maintenance needs of

lawn. The two parcels east of Columbia Street incorporate shallow rain garden depressions planted with herbaceous wetland species. Attendees of the second community meeting advocated for these water capturing spaces. The areas would connect with an existing drainage swale between the remaining residences, creating a larger landscape system for temporary water storage and infiltration during wet conditions.

Southern Parcels

The southern portion of the study area consists of two larger areas and three individual parcels. The three individual parcels incorporate additional woodland plantings that build upon existing wooded areas and strengthen the vegetated character of the river corridor.

The larger parcel west of Columbia Street centers on an herbaceous wetland depression designed to provide additional opportunities for stormwater retention. For all future detention basins, rain gardens, and other stormwater capturing spaces, soil preparation and addition of a filtration layer of stones would be crucial for allowing water to permeate into the ground. A walking trail loops around the depression and extends toward the Hackensack River, while the remainder of the parcel is characterized by pollinator meadow and additional tree plantings that expand the existing canopy.

The larger parcel east of Columbia Street provides the greatest opportunity for community activity within the southern portion of the site due to its size and central location. Walking paths connect Columbia Street and Harvard Street while also following the perimeter of the property. Between the path and Columbia Street are two distinct areas for passive community use. The first is an open grass lawn that can accommodate informal, unprogrammed activities during dry weather and provide a flexible area for emergency vehicle access or staging during flood events. Boarding the space would be a native hedgerow. The hedgerow serves as an ecological haven for birds and pollinators, but also as a screen that defines and pays homage to the suburban footprint that was once there.

The second is a nature education zone, envisioned as a gathering and environmental learning space for children and adults. Pollinator meadows and herbaceous wetland rain gardens occupy the northern and southern portions of the parcel, providing habitat while also contributing to stormwater management. Shrub hedge rows are located along portions of the site perimeter where paths and gathering areas approach neighboring properties, providing privacy screening and a more defined landscape edge.

Demarest-Bloomer House Historic Property



Figure 17: New Milford Blue Acres Historic Parcel Design Plan

For the Demarest-Bloomer House site, this design vision imagines a post-demolition site that honors the historic home through a celebration of place and spaces for community members and groups like the Arts Committee and Historic Preservation Council to host programming. The design concept positions this property as a central destination within the larger collection of Blue Acres parcels while recognizing and preserving its historic character.

The concept interprets the footprint of the historic house as a landscape feature, with the former building footprint laid out in crushed gravel and the interior and exterior

walls represented through pavers laid into the ground. This treatment allows the historic structure to remain legible within the landscape while creating an open space that can be used for passive recreation and community gatherings. An open-sided shelter occupies the approximate location of the former dining room and provides a flexible gathering space for educational talks, concerts, or art shows. Along the central path in the rear yard, a colonial-style garden references the property's historic character and introduces additional ornamental and educational planting.

The central path connects southward to River Edge Avenue, where an existing sidewalk provides a connection toward the southern Blue Acres parcels. To the north, a walking trail passes through the existing woodland along the Hackensack River and connects to the northern parcels. These connections position the historic property as a potential link within the larger network of pedestrian and recreational spaces in the northern and southern parcels.

The dry-laid stone structure located in the backyard is preserved as an existing landscape and historic feature. A smaller loop trail extends from the central path toward the river, with seating positioned along the waterfront to provide opportunities for fishing, observation, and other passive recreation. Combining all these elements allows the historic property to function as both a destination and a connecting landscape within the broader Blue Acres vision.

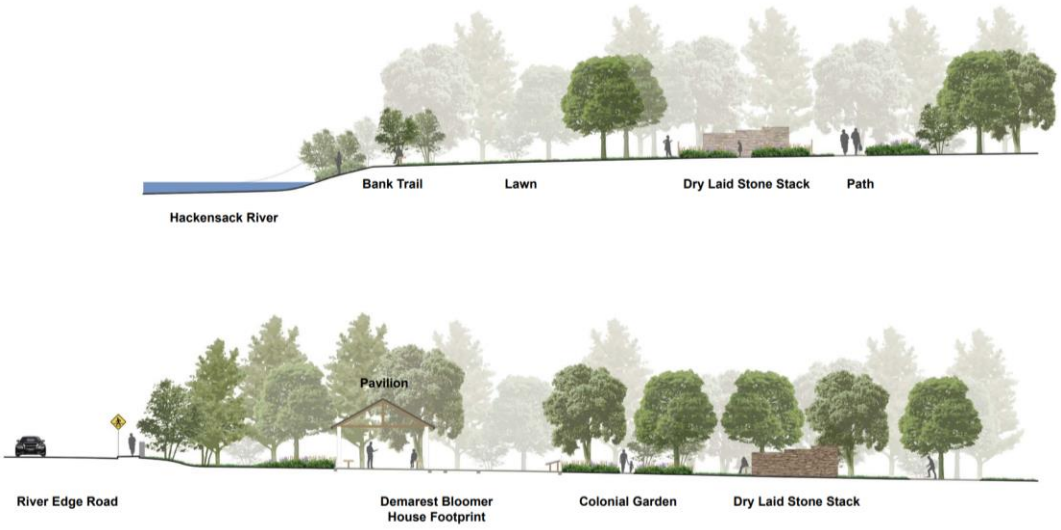


Figure 18: New Milford Blue Acres Historic Parcel Sections

Overall Design Approach

Across the three main areas, the landscape vision establishes a connected framework of paths, native plant communities, woodland expansion, stormwater landscapes, and spaces for passive recreation. Rather than treating the individual Blue

Acres parcels as isolated properties, the designs consider them as a coordinated landscape system linked by pedestrian circulation and the Hackensack River corridor. The proposed landscape typologies are intended to provide multiple benefits through simultaneously supporting habitat and biodiversity, improving stormwater retention, expanding tree canopy, reducing maintenance requirements, and creating spaces for residents to walk, gather, observe nature, and engage with the area's history. Together, these interventions illustrate how post-buyout properties can be transformed into resilient and meaningful open spaces while remaining compatible with the surrounding residential neighborhood and the site's primary flood-management function.

6.2 Vision Plan – Pleasantville

All concepts in this section were developed prior to the community meeting, where it became clear that for the time being, the best way to serve the community is to leave the parcels as they are.

Two primary types of parcels were identified in Pleasantville along Lakes Bay. The largest and southernmost parcel was identified as the most suitable location for a passive recreation park and was addressed through the Site Enhancements plan. The remaining parcels are smaller and sporadically distributed throughout the neighborhood between the East Park Avenue and Lakes Bay Unity Park. These parcels were addressed through a Neighborhood Connections concept.

Because there was no community meeting prior to the development of the Pleasantville concept plans, many of the proposed features were based on amenities that have been requested and successfully utilized at other Blue Acres sites. The primary Pleasantville site consisted of healthy existing wetland communities, so the intent of the design was to create opportunities for residents to interact with the existing landscape while providing space for passive recreation.

East Park Avenue Site Enhancement



Figure 19: Pleasantville East Park Avenue Site Design Concept

The Site Enhancements concept proposed a series of paths and gathering spaces distributed throughout the parcel. The primary path would loop from Narcissus Avenue to Lakes Bay and back, with an additional connection at East Park Avenue. Along the path, proposed amenities included seating areas overlooking the water, bird blinds, and a bird-watching tower, providing opportunities for passive recreation, wildlife observation, and engagement with the existing wetland landscape.

Neighborhood Connections Concept

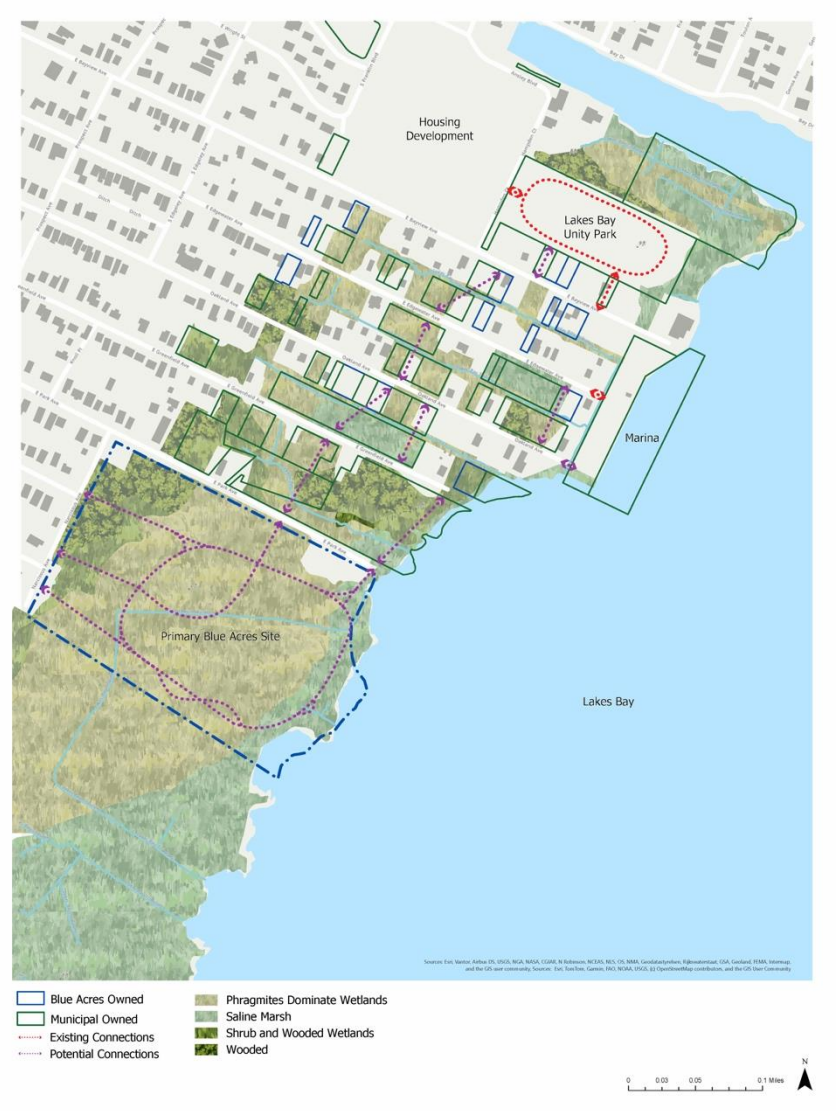


Figure 20: Pleasantville Neighborhood Connections Diagram

The Neighborhood Connections concept was based on using the individual Blue Acres properties that were unsuitable for park space as a network of pedestrian connections throughout the community. By incorporating walking paths through these parcels, a continuous connection could potentially be created from the primary Blue Acres parcel at East Park Avenue to Lakes Bay Unity Park. Similar connections are already present within the neighborhood, including the existing path linking Lakes Bay Unity Park to East Bayview Avenue near the municipal marina, as shown in the northern portion of the Neighborhood Connections plan.

Overall Design Approach

The concepts presented in this passage were developed before direct community input was received. During the August 5th community meeting, feedback was overwhelmingly in favor of leaving the Blue Acres properties in their existing condition, with no additional interventions. As a result, these concepts were not advanced for further development within this report.

While no intervention is proposed for the Blue Acres properties, the concepts illustrate potential opportunities for the sites to support passive recreation and strengthen connections within the community in the future. If community priorities or site conditions change, a connected system of paths, gathering areas, and landscape-based recreation opportunities could help link existing and emerging destinations throughout Pleasantville. In particular, the Blue Acres properties could serve as potential connections between Lakes Bay Unity Park, the marina, and the new development planned for the former high school site, creating a more cohesive network of public spaces and pedestrian routes.

Over time, these connections could provide residents with additional opportunities for walking, wildlife observation, informal gathering, and access to the waterfront, while also strengthening social connections between different areas of the neighborhood. Rather than treating the individual Blue Acres properties as isolated parcels, future planning could consider their collective potential as part of a larger network of open space and community connections. This approach could allow for incremental improvements as opportunities arise, while respecting the community's current preference to leave the properties in their existing condition.

7. Anticipated Benefits

7.1 Environmental Benefits – New Milford

Flood Resilience Benefits

The Blue Acres Program provides a unique opportunity to restore natural floodplain processes while reducing flood risk to surrounding communities. Historically, the Hackensack River floodplain functioned as a natural system that temporarily stored floodwaters, slowed runoff, and gradually released water back into the river and underlying groundwater. Residential development and associated impervious surfaces have diminished many of these functions, reducing the floodplain's capacity to manage stormwater and increasing the volume and velocity of runoff entering the river. Returning former residential properties to natural and nature-based landscapes will help to restore

these hydrologic processes while increasing the long-term resilience of the Hackensack River watershed.

The proposed restoration concepts will use native vegetation and strategically located stormwater wetlands to improve the management of surface runoff generated from adjacent developed areas. These wetlands will be designed to temporarily capture and detain runoff, which can reduce peak discharge rates and allow sediments to settle before discharging into the river. Such processes promote the natural uptake of nutrients and other pollutants by wetland vegetation. In conjunction with native floodplain forests, meadow communities, and riparian plantings, these added green stormwater infrastructure features will increase infiltration, enhance groundwater recharge, stabilize soils, and reduce erosion along drainage pathways and streambanks.

Restoring floodplain function across multiple Blue Acres properties also provides cumulative watershed-scale benefits. Rather than relying solely on engineered stormwater facilities, a network of restored floodplain habitats and stormwater wetlands distributes stormwater storage and treatment throughout the landscape, increasing the capacity of the watershed to manage more frequent and intense precipitation events. As climate change continues to increase the frequency of heavy rainfall in northern New Jersey, these nature-based solutions offer a flexible and sustainable approach to improving community resilience while enhancing the long-term health of the Hackensack River and its tributaries.

Ecological Benefits of Floodplain Restoration

Although the remaining floodplain supports valuable natural habitats, these areas have become increasingly fragmented by residential development, roads, utility corridors, and other infrastructure that reduce habitat quality and limit wildlife movement. Restoring former residential parcels to native floodplain communities will increase the extent of contiguous natural habitat while enhancing patches of forest, wetlands, and riparian vegetation along the Hackensack River. Because floodplains and waterways function as interconnected ecological systems, restoration of these properties will strengthen habitat connectivity throughout the watershed, creating a more resilient ecological network capable of supporting diverse plant and wildlife communities.

Targeted habitat restoration and ecological design can substantially enhance biodiversity by increasing both habitat quantity and structural complexity. Reestablishing native floodplain forests, shrublands, wetlands, and meadow communities will restore the vertical vegetation structure needed to support a wide variety of wildlife, providing nesting, foraging, roosting, and cover for resident species while creating valuable stopover habitat for migratory birds along the Atlantic Flyway. The incorporation of native fruiting trees and shrubs will increase seasonal food availability for birds and mammals, particularly during

periods when natural resources are limited. Likewise, native meadow habitats will provide abundant floral resources for pollinators and other beneficial insects while creating important foraging habitat for birds that utilize open and edge habitats.

Restoration of native vegetation will also improve the overall ecological quality of the project area by increasing habitat diversity across the floodplain. The establishment of a mosaic of forests, wetlands, shrublands, and meadows will create a wider range of ecological niches than currently exists on the predominantly developed landscape, supporting greater species richness and promoting healthier ecological communities. As restoration is implemented across multiple Blue Acres properties, these individual sites will enhance the Hackensack River corridor, facilitate wildlife movement, promote genetic exchange among populations, and strengthen the long-term ecological integrity of the Hackensack River watershed.

7.2 Social and Recreational Benefits – New Milford

In New Milford, the addition of spaces for residents to walk, gather, and experience nature would create new social and recreational opportunities within the Blue Acres landscape. While the acquisition of properties can initially leave visible gaps in the neighborhood, the transformation of these vacant parcels into thoughtfully designed landscapes can help turn a sense of loss into an opportunity for community stewardship, beautification, and connection. Expanded paths and natural areas would provide opportunities for passive recreation, such as walking, exploring, observing wildlife, and enjoying the seasonal changes of the landscape, while also creating informal places for neighbors to encounter one another and spend time outdoors.

The historic Demarest-Bloomer estate provides an additional opportunity to establish a more intentional social gathering space within the landscape. Its grounds could accommodate passive community events such as outdoor music, small performances, seasonal gatherings, and other cultural activities. The area can provide a setting where residents could gather atop the historic house’s footprint, without introducing water-impeding recreational infrastructure. The space could also support the work of the town's Arts Committee and Historic Preservation Council, who voiced desired use of the property during the first community meeting, through providing additional opportunities for exhibitions, educational programming, historic interpretation, and community events that celebrate the area's cultural identity. In this way, the Blue Acres landscape could function not only as flood-resilient open space, but also as a setting for community life, arts, and local history.

The interactive and educational natural area would serve as a grounding space for children and adults alike to explore the ecological systems around them. Interpretive elements and opportunities for observation could help residents understand local vegetation, wildlife, water, and floodplain processes while encouraging a deeper sense of stewardship for the landscape. These spaces would create a network of passive recreational and social opportunities that support everyday enjoyment, informal gathering, environmental education, cultural programming, and community identity while maintaining the primary flood-management function of the Blue Acres land.

7.3 Environmental Benefits – Pleasantville

Flood Resilience Benefits

Although the design process for the Pleasantville was placed on hold, this section outlines the opportunities the Blue Acre program can provide to improve flood resilience within the low-lying Lakes Bay neighborhood by transitioning flood-prone residential properties into natural and nature-based landscapes. Historically, the shoreline surrounding Lakes Bay consisted of salt marshes, tidal wetlands, and other coastal habitats capable of accommodating periodic inundation and temporarily storing surface water. Residential development, impervious surfaces, and modifications to natural drainage patterns have reduced many of these functions and increased the vulnerability of the surrounding neighborhood to flooding. Returning former residential properties to native coastal landscapes can help restore hydrologic function while creating open space that is inherently more compatible with periodic tidal and storm-driven inundation.

Ecological restoration interventions could use native vegetation and strategically located stormwater wetlands to improve management of runoff generated from surrounding developed areas. Stormwater wetlands can temporarily capture and detain runoff, reducing the rate at which stormwater is conveyed toward Lakes Bay while allowing sediments to settle and promoting the uptake of nutrients and other pollutants by wetland vegetation. Native wetland, meadow, shrub, and woodland plantings would complement these features by increasing surface roughness, stabilizing soils, reducing erosion, and slowing the movement of water across the landscape. Collectively, such green infrastructure features could increase temporary water storage and provide additional capacity for managing rainfall within the Lakes Bay neighborhood.

Restoration across multiple Blue Acres properties could also provide cumulative benefits to mitigate the amplified effects of heavy rainfall and elevated tides or storm surge, which likely limit the ability of conventional drainage systems to discharge water to

Lakes Bay. By creating additional areas where stormwater can be temporarily detained, restoration could complement existing drainage infrastructure and increase the capacity of the neighborhood to respond to changing coastal conditions. As sea levels rise and extreme precipitation events become more consequential, integrating stormwater wetlands and flood-tolerant native landscapes into the Blue Acres properties offers a flexible, sustainable approach to strengthening the long-term resilience of the Lakes Bay community.

Ecological Benefits of Coastal Marsh and Woodland Restoration

Although the Lakes Bay area in Pleasantville supports valuable coastal habitats, these natural vegetative communities have become increasingly fragmented by residential development, roads, maintained landscapes, and other infrastructure that reduce habitat quality and interrupt connections among remaining marsh, shrubland, and woodland habitats. Restoring former residential parcels to native coastal communities will increase the extent and continuity of natural habitat adjacent to Lakes Bay while strengthening connections between existing salt marshes and coastal uplands. Because tidal wetlands and adjacent terrestrial habitats function as an interconnected ecological system, restoration of the open space within the project area can help create a more continuous coastal habitat network capable of supporting diverse plant and wildlife communities.

Targeted habitat restoration and ecological design can substantially enhance biodiversity by increasing both habitat area and structural complexity. Reestablishing a mosaic of salt marsh, transitional wetland, native meadow, coastal shrubland, and woodland communities will provide a range of nesting, foraging, roosting, refuge, and cover habitats for resident and migratory wildlife. This is particularly important for birds using New Jersey's coastal habitats during migration along the Atlantic Flyway. Native fruiting shrubs and trees can provide seasonal food resources for songbirds and other wildlife, while native flowering plants will support pollinators and other beneficial insects. Restored marsh and transitional habitats can similarly provide feeding and refuge areas for waterbirds, shorebirds, and other species associated with the Lakes Bay estuarine system.

Restoration would also improve ecological connectivity across the important transition between tidal marsh and coastal uplands. Enhancing vegetation along this environmental gradient can create a greater diversity of ecological niches than occurs on former residential lawns and other highly modified landscapes and allows wildlife to move more readily among complementary habitat types. Importantly, protecting and restoring undeveloped areas immediately landward of existing salt marsh may also provide space for coastal vegetation communities to shift inland as environmental conditions change. As restoration is implemented across multiple Blue Acres properties, individual parcels could

function collectively as a larger habitat complex, expanding and buffering existing natural areas, reducing fragmentation, and strengthening the long-term ecological integrity and resilience of the Lakes Bay coastal ecosystem.

7.4 Social Benefits – Pleasantville

The Pleasantville site presents a variety of opportunities and challenges. While community members expressed concerns about the city's current capacity to manage and patrol a new trails network within the Blue Acres open space, the site's location and ecological character suggest that, with appropriate long-term management, it could become an important passive recreational and environmental resource. Its proximity to the back bay also makes the landscape particularly well suited to a design that embraces its relationship with water, rather than treating flooding solely as a constraint.

The proposed network of paths would create connections between the Blue Acres parcel, the new Lakes Bay Unity Park, the anticipated redevelopment of the former high school site, and the marina. Together, these connections could establish a larger recreational landscape in which the Blue Acres property functions as an ecological link and destination rather than an isolated parcel. Seating areas, trails, interpretive signage, and bird watching tower would provide opportunities for walking, gathering, observing wildlife, and learning about the site's coastal and wetland systems. The proximity to the marina could also create opportunities for water-based passive recreation, such as a dock for kayaking and crabbing, where appropriate access and management can be established.

With ecological restoration, the site could also become a valuable habitat and wildlife-watching destination. Bird blinds and a viewing tower would provide places for residents and visitors to observe birds and other wildlife while minimizing disturbance to sensitive areas. Interpretive elements could explain the site's relationship to the back bay, flooding, coastal ecology, and habitat restoration, creating opportunities for local schools and community organizations to hold nature-based educational events.

Ultimately, the vision is not simply for a new trail system, but for a connected landscape that brings together recreation, ecological restoration, environmental education, and community gathering. Although the concerns raised during community engagement underscore the need to carefully consider maintenance, safety, access, and long-term stewardship, the site's strategic location presents an opportunity to become a richer social and recreational hub as surrounding investments and open-space improvements develop over time.

8. Recommendations and Next Steps

8.1 Post-Restoration Monitoring and Maintenance

Successful restoration depends on routine monitoring and adaptive management during the first several years following implementation. Newly established native vegetation is particularly susceptible to herbivory, drought stress, invasive species competition, and other environmental stressors that can reduce survival and establishment. Regular inspections should be conducted during the first three growing seasons to evaluate plant health, identify maintenance needs, and ensure that restoration objectives are being achieved.

Protection from Herbivory – Newly planted trees and shrubs should be protected from deer and small mammal browsing using tree shelters or other appropriate wildlife exclusion measures. Herbaceous wetland plantings may also require temporary fencing or other protective measures where goose herbivory is anticipated. Protective devices should be inspected regularly and adjusted or removed as vegetation becomes established.

Watering – Supplemental watering should be provided during the first growing season to promote establishment, particularly during extended dry periods. Watering requirements should decrease over time as root systems develop, with additional irrigation provided only as needed during the second and third growing seasons.

Vegetation Management – Competition from invasive and undesirable vegetation should be managed during the establishment period to maximize the survival and growth of native plantings. Mechanical removal and, where appropriate, targeted herbicide applications may be used to control competing vegetation while minimizing impacts to desirable species. Periodic inspections should also identify areas requiring supplemental planting or other adaptive management measures.

Following the initial establishment period, maintenance requirements are expected to decline substantially as native plant communities mature. Long-term management should focus on periodic monitoring, early detection and control of invasive species, maintenance of stormwater management features where applicable, and adaptive management to ensure restoration objectives continue to be met.

8.2 Visions to Implementation

The visions presented in this report offer a steppingstone to identify funding sources, further design development and community conversations. For Pleasantville, it may take a while until the opportunity arises to engage with stakeholders and restart a community-based design process. For new Milford, feedback can be used to refine a

preferred concept and establish a phased implementation strategy, identifying design projects that can be pursued incrementally on a parcel-by parcel basis. Opportunities for grant funding and public investment can be pursued using the design goals and concepts for New Milford as a framework for future funding applications. Once a funding stream for the project (or sections of it) is established, a licensed landscape architecture and engineering team should advance the concept through detailed site analysis, survey and environmental, grading and drainage design, planting plans, accessibility and circulation design, permitting, cost estimating, and construction documents.

9. Conclusion

The Blue Acres Landscape Visioning Project demonstrates the potential for post-buyout properties to serve as more than vacant remnants of former residential development. Through site analysis, ecological assessment, community engagement, and landscape design, the project explored how flood-prone properties can become part of broader systems of resilient open space that support ecological function, passive recreation, environmental education, community identity, and quality of life.

The two study areas also demonstrate that there is no single approach to designing or managing post-buyout landscapes. In New Milford, the concentration of acquired properties and their relationship to the Hackensack River provided an opportunity to develop a cohesive landscape vision connecting multiple parcels. The proposed network of trails, native plant communities, wetlands, woodlands, gathering areas, and historic features illustrates how these properties could collectively function as a resilient neighborhood landscape while retaining their primary role within the floodplain. The Demarest-Bloomer House further demonstrates how cultural and historic resources can be incorporated into a post-buyout landscape and provide opportunities for community gathering, interpretation, and stewardship.

Pleasantville presented a different set of opportunities and constraints. The site's relationship to Lakes Bay and its existing coastal vegetation creates significant potential for ecological restoration, environmental education, and connections to nearby attractions. At the same time, the community engagement process demonstrated that physical opportunities alone do not establish a viable public landscape. Community concerns are important considerations that must inform any future planning effort. In this context, the decision not to advance the preliminary concepts into more detailed designs reflects the value of the visioning process itself: effective landscape planning must respond not only to

what a site can accommodate physically, but also to what a community is prepared and equipped to support.

The project also reinforces the importance of community engagement as an iterative component of landscape planning. In New Milford, community input helped shape specific elements of the vision. In Pleasantville, engagement identified concerns that significantly influenced the direction and extent of design development. In both cases, community input provided information that could not have been obtained through GIS analysis or site observation alone.

Moving from vision to implementation will require additional planning, coordination, and community engagement. The concepts presented in this report should be understood as preliminary design visions rather than construction-ready plans. Where appropriate, future efforts should also consider phased implementation so that planting, habitat restoration, circulation improvements, and other improvements can be evaluated and adjusted over time.

Long-term stewardship will be particularly important. The success of these landscapes will depend not only on their initial design and construction, but also on establishing realistic approaches to maintenance, vegetation management, ecological monitoring, and community stewardship. For sites located within active floodplains and coastal environments, landscape management should anticipate changing hydrologic conditions and allow landscapes to adapt over time.

Ultimately, the value of the Blue Acres program extends beyond the acquisition and removal of flood-prone structures. Post-buyout properties can become opportunities to rethink the relationship between communities, waterways, open space, and flood resilience. The landscape visions developed through this project illustrate several possible ways that this transition can occur, while recognizing that each community must determine the appropriate future for its own properties. By combining ecological understanding, site-specific design, community knowledge, and realistic implementation considerations, the project provides a foundation for future efforts to transform post-buyout land into resilient and meaningful landscapes.