# NJ Department of Environmental Protection State Plan Endorsement Opportunities & Constraints Assessment Report Woodstown, Salem County

April 25, 2023

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## **Introduction**

Municipal Plan Endorsement is a voluntary review process designed to ensure the coordination of state, county, and municipal planning efforts in achieving the goals and policies of the State Planning Act (Act). The State Development and Redevelopment Plan (State Plan) is the blueprint for achieving these goals and provides the template for coordination. The endorsement process expands upon the requirements of the Municipal Land Use Law (MLUL) and incorporates many planning initiatives of the State agencies.

This document constitutes the Department of Environmental Protection's (DEP) component of the State Opportunity and Constraints Assessment (OCA) conducted as part of the Plan Endorsement process. This document provides an overview of the Department's regulatory and policy concerns within the Borough of **Woodstown, Salem County**. The information provided herein is intended to reflect the Department's current information concerning the Borough. Recommendations may be found throughout the document **in bold** and are listed for easy reference in the Summary of and Recommendations section at the end of this report.

## **Overview**

Woodstown submitted a Municipal Self-Assessment (MSA) which was deemed complete by the Department of State's Office of Planning Advocacy (OPA) and submitted to NJDEP for review on **February 17, 2023.** Woodstown encompasses approximately **1.62 square miles and 1034 acres with a population of approximately 3,678 (1920) and surrounded by Pilesgrove Township.** Woodstown is concentrating their future growth and planning in this area while subject to flooding, is not tidally influenced and is **outside of the jurisdiction of the NJ Pinelands Area and the CAFRA**. Any changes to ordinances, updates to the Master Plan, proposed changes to State Plan designated areas, or proposed redevelopment plans must be consistent with State Plan. The existing State Plan center encompasses the entire town. **The NJDEP is working with the Office of Planning Advocacy and the municipality to review existing undeveloped center areas of repetitive flooding and habitat.** 



## **Woodstown Characteristics**

Woodstown is a mature community that encompasses several distinct neighborhoods and growth areas. Land use throughout the borough is divided between, public property/parks/preserved open space, roadways, schools, critical infrastructure, emergency services, municipal facilities, commercial and residential development, houses of worship, and privately owned vacant land. Within Woodstown **1034.32** acre boundary, 693.12 acres (67%) is urban, 96.70 acres (14%) is designated commercial/industrial, 162.98 acres is open space of which 63.93 acres is Municipal owned Open Space and 99.05 acres are State owned Green Acres encumbered. There are no open space acres preserved with federal funding and no preserved farmland. **Public water is provided by the Woodstown Water Company and sewer wastewater is handled by Woodstown Sewerage Authority.** 

#### Land Use Cover – Woodstown

Woodstown is composed of many different planning areas and significant areas of historic and natural resources designated for protection and preservation.



#### Woodstown Boro. Total Area = 1,034.32 Acres

LULC 2015		
LULC 2015 Type	Acres	Percent
AGRICULTURE	151.93	14.7
BARREN LAND	0.00	0.0
FOREST	71.89	7.0
URBAN	693.12	67.0
WATER	29.46	2.8
WETLANDS	87.92	8.5
TOTAL		
URBAN (693.12 Acres)	Acres	Percent
Residential	457.47	66.0
Commercial/Services/ Industrial	96.70	14.0
Other	138.95	20.0

#### **Existing Woodstown Center**

Woodstown's current State Plan center designation was set to expire on January 11, 2022 but the expiration date has been extended. Woodstown is proposing to restore and preserve the borough's natural and historic resources, preserve open space, and to address sustainable economic development, stormwater management, affordable housing and congestion concerns consistent with the planning goals and objectives within the State Plan. Zoning in Woodstown designates certain areas for commercial growth. Woodstown is proposing for State Plan endorsement the readoption of the existing Center that encompasses the entire town. The proposed Woodstown Center for State Plan endorsement includes environmentally sensitive and flood areas and is primarily in Planning Area (PA) 4 (Rural) as illustrated in the map below. The MSA presented by Woodstown proposes reendorsement of the following existing area that includes the entire town boundary. The additional map depicts Borough zoning.



<u>NJDEP Center Recommendation Summary</u>: Based on the identification of additional parcels in environmentally sensitive areas, the DEP recommends endorsement of center areas excluding low density housing, undeveloped parcels with threatened and endangered species habitat or within the Salem River flood zone and/or areas subject to repetitive flooding. These recommendations will be utilized in a series of discussions between Woodstown, the Office of Planning and Advocacy (OPA) and the New Jersey Department of Environmental Protection (NJDEP) to identify a center for endorsement that provides the most protection for natural and historic resources of Woodstown.

**<u>CES Overlay</u>**: The DEP is recommending that undeveloped areas identified as wetlands, habitat and/or within the flood zone should have a critical environmentally sensitive (CES) zoning overlay.

# Existing Woodstown Center MSA Comments: The following represents the DEP's opportunities and constraints comments with a focus on the proposed center(s).

## **Impervious Surfaces**

With additional development within the proposed center boundaries, Woodstown must address how to manage and minimize any additional impervious surface. An increase in stormwater runoff may result in a discharge of excessive nutrient and pollutant loads to nearby surface water bodies. Additional stormwater runoff can also lead to soil and stream bank erosion and further degradation of valuable surface water bodies.

As a result of changing climate conditions, including increases in temperature and precipitation, the ability of the municipality to manage an increase in stormwater in situ will be challenged by an increase in new construction of impervious surfaces. The existing center proposed for re-endorsement, excluding surface water, covers 1,004.85 acres. Within the total existing center of 1,004.85 acres excluding surface water, the acres of impervious surfaces increased between 2012 and 2015 from 212.73 (21.2% of total existing center) to 300.12 acres (29.9%) for an approximate increase in impervious surface of 8.7% in that 3 year period.

Woodstown Boro., Salem				
Woodstown Boro. Total Area (without surface wa				
	Acres of	Pct of	Acres of	Pct of
	Impervious 2012	Impervious 2012	Impervious 2015	Impervious 2015
Existing Center (1,004.86 ac)	212.73	21.2	300.21	29.9

Woodstown Borough, Salem Impervious Surface % (2012)



# **Climate Change Impacts**

In past OCA reports, DEP has largely focused on assessing the impacts to the development potential of municipalities based on environmental resources and water/wastewater capacity. In addition to addressing those issues, this OCA will consider the current and future impacts of climate change on those issues, as well as climate mitigation (e.g. greenhouse gas reduction, renewable energy) and climate resilience (e.g. vulnerability to increased flooding).

New Jersey issued its first *Scientific Report on Climate Change* (1) on June 26, 2020. The report details the latest science and describing the current and projected impacts of climate change, specific to New Jersey. As atmospheric levels of carbon dioxide and other greenhouse gases increase, Allentown can expect to see increases in average temperature, precipitation, flooding, and impacts to its extensive natural resources. Following, are key findings of the Scientific Report that may be germane to Allentown Borough.

<sup>1</sup> https://www.nj.gov/dep/climatechange/docs/nj-scientific-report-2020.pdf

## Temperature

- New Jersey is warming faster than the rest of the Northeast region and the world.
- Since 1895, New Jersey's annual temperature has increased by 3.5° F.
- Historically unprecedented warming is projected for the 21st century with average annual temperatures in New Jersey increasing by 4.1° F to 5.7° F by 2050.
- Heatwaves are expected to impact larger areas, with more frequency and longer duration by 2050.
- Climate change could result in a 55% increase in summer heat-related mortalities.

#### **Precipitation**

- Annual precipitation in New Jersey is expected to increase by 4% to 11% by 2050.
- The intensity and frequency of precipitation events is anticipated to increase due to climate change.
- Droughts may occur more frequently due to the expected changes in precipitation patterns.
- The size and frequency of floods will increase as annual precipitation increases.

#### Air Quality

- The effects of climate change are likely to contribute to an increase in air pollution, lead to increased respiratory and cardiovascular health problems, like asthma and hay fever, and a greater number of premature deaths.
- Environmental degradation from climate induced increases in air pollution will reduce visibility and cause damage to crops and forests.

#### Water Resources

- Water supplies will be stressed from the increase in the growing season and extreme temperatures expected due to climate change.
- Surface and groundwater quality will be impaired as increased nutrients and contaminants enter waters due to runoff from more intense rain events.

## **Agriculture**

- The productivity of crops and livestock are expected to change due to the climate-induced changes in temperature and precipitation patterns.
- New Jersey may become unsuitable for specialty crops like blueberries and cranberries in the future as higher temperatures reduce necessary winter chills.

#### <u>Forests</u>

• The persistence of Southern pine beetle in New Jersey represents an early example of the destruction of invasive pests that can occur due to climate change impacts.

• Wildfire seasons could be lengthened, and the frequency of large fires increased due to the hot, dry periods that will result from increased temperatures.

## **Terrestrial Carbon Sequestration**

• The loss of forest habitats to climate change will result in carbon losses and increase New Jersey's net greenhouse gas emissions.

## **Terrestrial Systems**

- Climate change is likely to facilitate expansion of invasive plant species.
- 29% of New Jersey's bird species are vulnerable to climate change, including the American Goldfinch which is the state bird of New Jersey.

## Freshwater Systems

- Freshwater fish, like brook trout, that need cold-water habitats are expected to lose habitat as water temperatures increase due to climate change.
- Reptiles with temperature-dependent sex determination could experience changes in sex ratios as New Jersey temperatures increase.

## **Climate Change Mitigation**

As climate change, energy use, and environmental sustainability take on a larger role in New Jersey's policies, land use planning should promote energy efficiency, and specifically, integrate green building design and Greenhouse Gas (GHG) reduction into its planning and regulatory structures.

New Jersey's Global Warming Response Act calls for an 80% reduction of GHG emissions from 2006 levels by the year 2050. Released in October of 2020, the GWRA 80x50 Report2 was written in response to that mandate and builds on the State's previous efforts to address and reduce greenhouse gas emissions. The report analyzes New Jersey's emissions reductions to date, evaluates plans presently in place for further reducing emissions, and presents a set of strategies across seven emission sectors for policymakers to consider in formulating legislation, regulations, policy and programs.

The 80x50 Report concludes that, "New Jersey can meet its goal of reducing GHG emissions to 80% below 2006 levels by 2050 – protecting our people, economy, and environment from the worsening impacts of climate change to which our state is uniquely vulnerable. Reaching our 80x50 goal requires planning and collaboration across all economic sectors, levels of government, political boundaries, and administrations, all fixed on a carbon neutral future. Achieving this goal depends upon a swift and decisive transition away from our reliance on fossil fuels, accomplished through adaptive policies that also ensure reliability and remain responsive to the scope and pace of efforts to electrify the transportation and building sectors while expanding renewable energy sources. However, only by working in concert across time and economic sectors can we implement the long-term, structural

<sup>2</sup> https://www.nj.gov/dep/climatechange/docs/nj-gwra-80x50-report-2020.pdf

changes to how we generate and use energy, build our homes and businesses, operate our industries, develop and preserve our land, grow our food, manage our waste, and transport our people and products."

While the 80x50 Report focuses on state-level actions, action at the municipal level will be crucial to meet the state's GHG reduction goals. The Municipal Plan Endorsement Guidelines identify a series of mandatory requirements that will make substantial progress. Additionally, New Jersey's climate change website identifies similar and additional actions for local governments at https://www.nj.gov/dep/climatechange/action.html.

## **Climate Resilience**

Pursuant to Governor Murphy's Executive Order 89, the state has released for public comment a Draft Climate Change Resilience Strategy (CCRS) to promote the long-term mitigation, adaptation, and resilience of New Jersey's economy, communities, infrastructure, and natural resources throughout the State in a manner consistent with the Scientific Report on Climate Change. Much like the 80x50 Report, the CCRS will identify state-level action, including guidance and strategies for municipalities to implement resiliency measures, including through changes to plans, by-laws, regulations, policies, or land use standards. Executive Order 89 also requires the Climate & Flood Resilience Program at DEP to provide technical guidance and support to counties and municipalities in their efforts to plan for and address the current and anticipated impacts of climate change in accordance with the CCRS. Plan Endorsement is one avenue for the state to provide that assistance.

# **Flooding and Flood Zones**

The Federal Emergency Management Agency (FEMA) maps Special Flood Hazard Areas (SFHA) adjacent to streams or rivers that experience flooding during periods of high precipitation and/or stormwater discharge. Woodstown participates in the National Flood Insurance Program (NFIP). Several developed areas are within the flood zone.

FEMA has identified flood hazard areas within Woodstown. Approximately 113.22 acres (11.3%) of the Borough's total land cover excluding surface water are in the FEMA 100 year flood hazard area and an additional 37.48 acres (3.7%) are in the FEMA 500 year flood hazard area for a total of 150.7 acres (15%) of the borough in the floodplain and within FEMA SFHA. Woodstown has also identified inadequacies with their existing stormwater management system to address repetitive flooding and increased precipitation events. Woodstown should update its municipal annex to the Salem County Hazard Mitigation Plan on a regular interval to address changing climate conditions.



Woodstown Boro., Salem

Woodstown Boro. Total Area (	without surface water	= 1,004.85	Acres
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Flood Hazard Area	Acres	% of Total
		Municipal Area
1% (100 Year) Floodplain	113.22	11.3
0.2% (500 Year) Floodplain	additional 37.48 (150.7)	15.0
Source: FEMA Flood Hazard Areas	(Combined)	

NJDEP LULC 2015 Surface Water Removed from FEMA Flood Hazard Area

A limitation of the currently delineated SFHAs is that they do not consider projections of future precipitation due to climate change. While annual increases may not result in significant additional flooding, the increased frequency of shorter but more intense precipitation events is expected to result in additional flooding events. As such, DEP recommends that Woodstown utilize the SFHA for the 1.0 percent (100 year) and the 0.2 percent (500-year) storm for planning purposes. This will allow the Borough to inform its current decisions in a manner that is protective of health and safety from future impacts. Woodstown should also consider flood hazard area riparian buffers of any waterway in future planning. The regulated area of the riparian zone (50, 150 or 300 feet) that may restrict future development in these areas depends on the designation of that regulated waterbody as per the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-4.1 below:

(c) The width of the riparian zone is as follows:

- The width of the riparian zone along any regulated water designated as a Category One water, and all upstream tributaries situated within the same HUC-14 watershed, is 300 feet;
- 2. Except for the regulated waters listed at (c)1 above, the width of the riparian zone along the following regulated waters is 150 feet:

i. Any trout production water and all upstream waters (including tributaries);

ii. Any trout maintenance water and all upstream waters (including tributaries) located within one mile of a trout maintenance water (measured along the length of the regulated water); and

iii. Any segment of a water flowing through an area that contains a threatened or endangered species, and/or present or documented habitat for those species, which is critically dependent on the regulated water for survival, and all upstream waters (including tributaries) located within one mile of such habitat (measured along the length of the regulated water). A list of critically dependent species is available from the Department at the website set forth at N.J.A.C. 7:13-1.3; and

3. For all other regulated waters not identified in (c)1 or 2 above, the width of the riparian zone is 50 feet.

## **Critical Facilities and Assets in Flood Zones**

These flood-prone areas are subject to state and federal regulation which limits new construction and promotes open space preservation. In addition, municipal code should minimize new construction in flood hazard areas and mitigate for any redevelopment of existing structures. Of particular concern are adverse impact to existing assets, infrastructure and buildings within the flood zones, and how a municipality will mitigate for potential increased vulnerability to flooding. Woodstown, in addition to existing structures, critical infrastructure, emergency services, schools, should identify any stormwater, wastewater treatment and discharge, or potable water infrastructure, conveyance, utility piping, power line infrastructure, critical roadways or historic structures in or near flood zones.

While **15 %** of the borough excluding surface water is in the 100 and 500 year flood zone, **58.23** acres (7.2%) of the **807.36** acre critical infrastructure sewer service area is in the combined 100 year and 500 year flood zone.

Sewer Service Area Toral Area (without surface water) = 807.36 Acres					
Sewer Service Area	Acres	% of Total			
within Flood Hazard Area		Sewer Service Area			
1% (100 Year) Floodplain	28.76	3.6			
0.2% (500 Year) Floodplain	additional 29.47 (58.23)	7.2			
Source: FEMA Flood Hazard Area					
NJDEP LULC 2015 Surface Water	Removed from FEMA Flood Hazard Area				

#### Buildings and Structures in flood zone

Borough A	Approx. Total Buildin	igs/ Structu	ires = 1,54	3				
Buildings	/ Structures within F	EMA 1%/ 0	.2% Flood	Hazard Are	eas			
Buildings/	Structures in FEMA	1% (100 Ye	ear) Flood Z	Zone = 39 c	or 2.5 % of	Twp. Total		
Buildings/	Structures in FEMA	0.2% ( 500	Year) Floo	d Zone = 6	58 or 4.4 %	of Twp. To	otal	
Approx. T	otal Buildings/ Struc	tures in FE	MA 1%/ 0.:	2% Flood H	lazard Area	as = 107 or	6.9 % of T	wp. Total
Approx. T	otal Buildings/ Struc	tures in FE	MA 1%/ 0.:	2% Flood H	lazard Area	as = 107 or	6.9 % of T	wp. Total
Approx. T	otal Buildings/ Struc	tures in FE	MA 1%/ 0.7	2% Flood H	lazard Area	as = 107 or	6.9 % of T	wp. Total
Approx. T Woodstov	otal Buildings/ Struc wn Boro. Approx. To	tures in FE tal Roads =	MA 1%/ 0.7	2% Flood H s	lazard Area	as = 107 or	6.9 % of T	wp. Total
Approx. T Woodstov	otal Buildings/ Struc wn Boro. Approx. To	tures in FE tal Roads =	MA 1%/ 0.: = 18.3 Mile	2% Flood H s	lazard Area	as = 107 or	6.9 % of T	wp. Total
Approx. T Woodstov Roads in 1	otal Buildings/ Struc wn Boro. Approx. To 1% FEMA Flood Haza	tures in FE tal Roads = ard Areas =	MA 1%/ 0.: = 18.3 Mile = 0.73 Mile	2% Flood H s s or 3.9 %	lazard Area of Total M	as = 107 or iles	6.9 % of T	wp. Total
Approx. T Woodstov Roads in 1	otal Buildings/ Struc wn Boro. Approx. To 1% FEMA Flood Haza	tures in FE tal Roads = ard Areas =	MA 1%/ 0.: = 18.3 Mile = 0.73 Mile	2% Flood H s s or 3.9 %	lazard Area of Total M	as = 107 or iles	6.9 % of T	wp. Total
Approx. T Woodstov Roads in 1 Roads in	otal Buildings/ Struc wn Boro. Approx. To 1% FEMA Flood Haza 1 & 0.2 % FEMA Floo	tures in FE tal Roads = ard Areas = od Hazard A	MA 1%/ 0.3 = 18.3 Mile = 0.73 Mile Areas = 1.5	2% Flood H s s or 3.9 % 5 Miles or 8	of Total M 8.2 % of To	as = 107 or liles tal Miles	6.9 % of T	wp. Total

Woodstown should regularly update the map areas that flood frequently, including, but not limited to, repetitive loss (RL) and severe repetitive loss (SRL) properties. If a local Floodplain Administrator is interested in obtaining a copy of their community's RL and SRL properties list for planning purposes, a request must be made in writing on the municipality's letterhead and signed by the mayor. The municipality will be required to sign an Information Sharing Access Agreement with FEMA to protect Personally Identifiable Information associated with this list. For more information on this, please contact the Region II Insurance Representative, Marianne Luhrs at Marianne.luhrs@fema.dhs.gov.

Unimpeded transportation via road is critical to safety and can also be subject to flooding. It is recommended that Woodstown identify the linear feet of roadways including critical evacuation routes within the flood zone. It is likely that municipal and public works officials are fully aware of areas in the Borough that flood regularly.

Woodstown should continue to map areas that flood regularly, including roadways/intersections, with particular attention given to evacuation routes or critical access areas. The 2019 Master Plan Re-

examination report recommend that zoning regulations be enhanced as well as building codes to encourage building outside of the flood zone and to minimize construction in flood prone areas to reconstruction of existing buildings. When evaluating any construction within the identified floodplain of Woodstown, one must also consider the cost of damage and replacement in the event of flooding. Construction of any critical utility line and associated infrastructure, emergency services, or public services buildings (schools, hospitals, churches, etc.) should be avoided in the flood hazard area. By avoiding construction in floodplains, one can avoid adverse impacts also to critical roadways and provide a safe level of distance in the event of a flood. NJDEP also supports resiliency measures including elevating critical infrastructure and relocating critical infrastructure outfalls to insure uninterrupted power, sewer and potable water service.

DEP recommends that Woodstown adopt a floodplain development ordinance that is consistent with the most recent standards and National Flood Insurance Programs. For guidance please review the riverine model ordinance at https://www.nj.gov/dep/floodcontrol/modelord.htm and FEMA guidance at https://www.fema.gov/floodplain-management/manage-risk/local.

Future development within the floodplain requires a higher level of regulation through state and federal environmental rules for flood hazard areas. Any proposed conceptual plan should be presented to DEP early in review process, before planning board approval, and before submittal of any permit applications to determine if the project has any fatal flaws rendering it un-permittable in its current design.

**Green infrastructure should be incorporated into all projects within the floodplain**. By creating more open public space, Woodstown gains flood zone buffer areas and additional recreation area as well as enhanced areas for stormwater management. Any opportunity in a flood area to enhance or expand a buffer area protects vulnerable residential areas and minimizes future flood events. **Woodstown shall develop a stream corridor buffer area and protection ordinance.** A reference to Section 21-10-10.24 of Revised General Ordinances is listed in MSA.

The DEP supports Woodstown's recommendation in the MSA to adopt a Flood Mitigation Plan and an All Hazards Mitigation Plan and Flood Ordinance to effectively manage stormwater runoff and mitigate the adverse impacts of climate related flooding within and adjacent to the areas of identified floodplain..

## **Blue Acres**

The central portion of Woodstown borders the Salem River and it's tributaries and is vulnerable to repetitive flooding.

As reference for any future flooding issues, the Green Acres, Farmland, Blue Acres and Historic Preservation Bond Act of 2007 authorized \$12 million for acquisition of lands in the floodways of the Delaware River, Passaic River or Raritan River and their respective tributaries for recreation and conservation. It is also applicable to other areas of repetitive flooding. An additional \$124 million was approved in the Green Acres, Water Supply and Floodplain protection, and Farmland and Historic Preservation Bond Act of 2009. Properties (including structures) that have been damaged by or may be prone to incurring damage caused by storms or storm related flooding, or that may buffer or protect other lands from such damage, are eligible for acquisition. DEP encourages any town that has homes and neighborhoods that repetitively flood to consider contacting the DEP Blue Acres program regarding guidance for buyouts of flood prone properties\_

DEP Blue Acres helps New Jersey residents and communities identify and avoid risks of flooding through strategic climate resilience planning and the state-led acquisition of flood-prone property. Blue Acres acts as the disaster recovery and flood preparedness arm of DEP's Office of Climate Resilience. Blue Acres purchases lands from willing sellers that have been damaged, or may be prone to future damage, due to sea-level rise, storms, or storm-related flooding, or that may buffer or protect other lands from such damage. Once purchased, homes are demolished and the land is public open space. NJDEP encourages any town that has homes and neighborhoods that repetitively flood, or are substantially damaged, to contact Blue Acres for guidance on flood buyouts as part of overall community resilience. https://dep.nj.gov/blueacres/

## **Open Space**

- Open space not only provides Woodstown residents with recreational opportunities, it also acts as a means of climate change mitigation through enhanced tree cover shade and carbon sequestration. It also improves Woodstown's and the state's natural resources by mitigating stormwater runoff, acting as flood storage, and protecting habitat for threatened and endangered species
- Based on the projected population of Woodstown, it is recommended that Woodstown continue to pursue additional acres of public parkland acquisition for direct recreational usage. Woodstown is included in the Salem County Open Space and Recreation Plan but should update as part of the Borough Master Plan and their 2005 Open Space and Recreation Plan, their 2006 Open Space Salem River Greenway Plan and Conservation zoning district to include any additional lands added to the Greenway or conservation district and an updated Critical Natural Resources Analysis. If not completed during 2019 re-examination of the Master Plan, DEP recommends Woodstown update the 2005 natural resources inventory documents to account for any changes since the last inventory as well as climate change considerations.



## **Green Acres**

The Green Acres program was created in 1961 to meet New Jersey's growing recreation and conservation needs. Together with public and private partners, Green Acres has protected over a half a million acres of open space and provided hundreds of outdoor recreational facilities in communities around the State. Woodstown has preserved a total of 162.98 95 acres of open space and 63.93 acres of municipal owned property. The existing center includes a99.05 acres of State owned and Green Acres encumbered land.

Local and State and Federal Open Space				
Acres				
63.93				
0				
99.05				
0.00				

<u>DEP recommends that Woodstown</u> further work with Salem County and surrounding Pilesgrove to provide and expand corridors of open space and natural features to protect historic structures, support habitat connectivity and adapt to changing climate conditions.

## **State Open Space**



If Woodstown pursues additional open space land via State resources, any use of Green Acres encumbered parkland for purposes other than recreation and conservation, even temporary use,

requires Green Acres review and approval at a minimum. Any easements or other conveyance of land granted for other than conservation and recreation purposes (such as for utilities or road right-ofways) on Green Acres-encumbered parkland must be reviewed by the Green Acres Program and will require Commissioner and State House Commission approval. A full jurisdictional determination by the Green Acres Program is required for any land which may have been held for recreation and conservation purposes by the municipality or the county at the time that they accepted Green Acres funding, regardless of whether the lands were listed on a Recreation and Open Space Inventory (ROSI). Please contact the Salem County Steward, Kevin Appelget at kevin.Appelget@dep.nj.gov with any questions or concerns.

Any easements or other conveyance of land granted for other than conservation and recreation purposes (such as for utilities or road rights-of-way) on Green Acres-encumbered parkland must be reviewed by the Office of Transactions and Public Land Administration Public Land Compliance section and will require Commissioner and State House Commission approval. A full jurisdictional determination by the Office of Transactions and Public Land Administration is required for any land which may have been held for recreation and conservation purposes by the municipality or the county at the time that they accepted Green Acres funding, regardless of whether the lands were listed on a Recreation and Open Space Inventory (ROSI).

#### **Potential Future Planning and Funding Opportunities:**

The Municipal Self-Assessment Report identified maintaining the Borough's rural character, conserving the Borough's natural resources, providing adequate recreational areas and facilities to meet the needs of the community, and developing a safe and efficient circulation system coordinated with the land use pattern. Green Acres can help Woodstown Borough achieve their goals through land preservation, park development, and stewardship funding opportunities.

Green Acres applauds Woodstown Borough for working to preserve and maintain the Borough's parkland, as identified by the Borough's Recreation and Open Space Inventory (ROSI). As of the most recent recorded ROSI (2018), the Borough has approximately 75 acres preserved for conservation and recreation purposes. Many of these preserved parcels align with the proposed Greenways outlined in the Borough's most recent Open Space and Recreation (2005). Therefore, the proposed strategies will further assist the Borough in completing and bolstering their Greenways.

- Salem River Greenway
  - Consider acquiring parcels or working with landowners to obtain conservation easements to preserve missing links along the Greenway. Green Acres funds land acquisition for conservation and outdoor recreation purposes.
  - Consider a water trail along Salem River for canoeing, kayaking, fishing, and other aquatic recreational activities. Green Acres will fund canoe launches, signage, parking lots, and trail access improvements under park development funding.
  - Consider expanding the walking path/trail around Memorial Lake to connect with other areas along the Greenway, other recreational facilities, and the Borough's schools.

- Map 5 of the OSRP indicates that there are bald eagle foraging areas along the 48 and 49 blocks. Consider developing bird blinds or other observation areas for the public to enjoy bird watching.
- Chestnut Run Greenway
  - Consider working with landowners, B.O.E., Chestnut Run Pool Association, to obtain conservation easements to protect the ecosystem services of Chestnut Run
  - Consider building a trail between the Chestnut Run Pool Association and the athletic fields of the Elementary and High Schools.
- Northern Greenbelt
  - Since this stream is on the border of Woodstown Borough and Pilesgrove Township, consider partnering with Pilesgrove Township to acquire parcels or obtain conservation easements along this Greenbelt.

The Borough may consider restoring the Greenway's ecosystem services, as Google Maps Streetview shows the pervasiveness of invasive species. Green Acres will fund most projects that support landscape restoration, including, but not limited to, invasive species removal, the creation and/or restoration of meadows, woodlands, and wetlands, green infrastructure, and pollinator gardens. FEMA flood hazard area mapping indicates that there are homes at risk of flooding that are adjacent to the Greenways. Therefore, restoring the ecosystem services of the Greenways will also mitigate the effects of flooding on neighboring residents.

Green Acres can also support the Borough's goals of efficient circulation by funding trail projects. Specifically, the OSRP included a North-South trail which traverses through neighborhood streets and parkland (both existing parkland and proposed land to acquire). Green Acres funds trail projects on land owned by the Borough or through conservation easements with private landowners. Consider including the trail as part of park development application with Green Acres.

Green Acres funds land acquisitions for conservation and outdoor recreation projects. The Borough may contact Jessy Muttathil at jessy.muttathill@dep.nj.gov with any questions regarding park and open space acquisition projects. Green Acres also funds park development projects, including, but not limited to, trails, playgrounds, canoe launches, parking lots, lighting, and signage. The Borough may contact Bruce Bechtloff at bruce.bechtloff@dep.nj.gov with any questions regarding park development projects. For stewardship funding, please contact Bruce Bechtloff at <u>bruce.bechtloff@dep.nj.gov</u>. For more information on the Green Acres Program and for examples of assistance applications, please refer to https://www.nj.gov/dep/greenacres.

Please note that the placement of stormwater management and other climate change mitigation and adaptation infrastructure on Green Acres-encumbered parkland that is required for a non-parkland project or that is intended to serve other development is not permissible under Green Acres regulations. However, resiliency measures that are intended to serve the park and which may have indirect local impacts to flooding may be permitted. Please contact the Salem County Compliance Officer, Maude Snyder, at maude.snyder@dep.nj.gov with any questions or concerns.

# Review of Woodstown Borough's Existing Parkland, Proposed Planning Areas and Development Activities:

The Borough received approval of its first Green Acres funding project in 2008 (Green Acres Project #1715-07-009). Since then, Woodstown Borough has partnered with the Green Acres Program and others to acquire open spaces within the Borough and in adjacent Pilesgrove Township under the "Salem River Greenway" Planning Incentive. Green Acres Program has helped to fund the acquisition of seven properties, totaling approximately 205 acres in Woodstown and Pilesgrove under this Planning Incentive. In addition, Woodstown Borough contains significant state protected conservation areas that are part of the Salem River Wildlife Management Area.

Woodstown Borough closed on three acquisitions under the Green Acres Planning Incentive, involving seven lots. Payment #1 included four lots owned by Woodstown Associates, LLC (Block 49, Lots 28 & 29 in Woodstown and Block 78, Lots 1 & 2 in Pilesgrove). These properties were jointly funded with the DEP. Woodstown matched their 50% grant of \$300,000 with Municipal Open Space Trust funds. The DEP acquired and now manages the property as part of the Salem River Wildlife Management Area. Payment #2 included two lots which were acquired through a cooperative arrangement with Salem County, Pilesgrove and Woodstown. Woodstown was granted \$100,000 to aid in the acquisition of Block 10, Lot 1 (3.681 acres) in Woodstown and Block 26, Lot 4 (85.273 acres) in Pilesgrove. Both properties were acquired by Pilesgrove from Property owner Musumeci and are managed by Pilesgrove. Payment #3, of approximately \$71,500.00, was used to acquire a 12.37 acre portion of Block 46, Lot 5 in Woodstown Borough from JPO Enterprises, LLC. This property is owned and managed by the Borough. Woodstown Borough's Salem River Greenway Planning Incentive grant award remains open and a balance of nearly \$110,360.00 remains for future acquisitions.

As a condition of Green Acres funding, and an open project, all lands that are held by Woodstown for recreation and/or conservation purposes become encumbered parkland. According to Woodstown Borough's most recent 2018 Recreation and Open Space Inventory (ROSI), there is a total of 74.72 acres of land owned and managed by the municipality of Woodstown Borough. See ROSI table attached.

The most recent inspection was made on May 15, 2022 of the Borough's three Green Acres funded parks. The Inspection Report notes that GA Project # 1715-07-009-06/ Musumeci is being farmed under a lease agreement. The Report identifies a significant encroachment at GA Project #1715-07-009-07/ JPO Enterprises. There is illegal use of the open field area. The report states that the use needs to stop, and the fencing needs to be removed. Woodstown was informed that the entire 12 acres must be open to public access and the use of the park must comply with Green Acres rules. The only issue noted for GA Project #1715-07-009-08/ LaRosa is that a Green Acres sign needs to be posted. **The Department does not have a record that the compliance matters were addressed by the Borough.** These three Green Acres funded parcels, the additional unfunded parkland listed on the ROSI and the State-owned Wildlife Management Area within and adjacent to the Borough provide open space and protection of the Salem River corridor in addition to providing recreational opportunities to the area residents. The Borough's Municipal Self-Assessment Report acknowledges the following:

The Borough of Woodstown has strived to take every measure possible to preserve and protect the natural resources in the Borough. The Salem River serves as the most prominent and

most valuable resource in the Borough. The Salem River essentially bisects the Borough from east to west, and it serves as a fairly wide existing natural greenway. The combination of wetlands, open water, and steep slopes in this area create a unique and important value to the area. The quality of life in the Borough may in fact be attributed to this comparably large area of the Borough being environmentally sensitive.

The current petition for Plan Endorsement is to re-adopt the Borough's existing town center which encompasses the entire Borough. The Borough is more densely developed than the surrounding area and has effectively served as the region's center for years. Woodstown's Municipal Self Assessment recognizes the need to balance continued growth and redevelopment with environmental protections. Woodstown adopted a conservation zone in the Borough's more environmentally sensitive areas to advance those protection efforts that build on the state, county and municipal land preservation efforts with the assistance of the Green Acres Program.

As a general reminder to the Borough, any use of Green Acres-encumbered parkland for purposes other than outdoor recreation and conservation, even temporary use, requires Green Acres review and approval at a minimum. Any easements or other conveyance of land granted for other than conservation and recreation purposes (such as for utilities or road rights-of-way) on Green Acresencumbered parkland must be reviewed by the Office of Transactions and Public Land Administration Public Land Compliance section and will require Commissioner and State House Commission approval. A full jurisdictional determination by the Office of Transactions and Public Land Administration is required for any land which may have been held for recreation and conservation purposes by the municipality or the County at the time that they accepted Green Acres funding, regardless of whether the lands were listed on a Recreation and Open Space Inventory (ROSI). Please contact the Salem County Compliance Officer, Maude Snyder, at maude.snyder@dep.nj.gov with any questions or concerns.

#### **Natural and Historic Resources**

New Jersey is the most densely populated state in the nation. One of the consequences of this is the extreme pressure that is placed on our natural resources. As the population grows, we continue to lose or impact the remaining natural areas of the state. As more and more habitat has been lost, people have also gained a greater understanding of and appreciation for the benefits and necessity of conserving the natural ecosystems of the state.

For example, we know that wetlands are critical for recharging aquifers, lessening the damage from flooding and naturally breaking down contaminants in the environment. Forests and grasslands protect the quality of our drinking water, help purify the air we breathe and provide important areas for outdoor recreation. Collectively, these habitats are of critical importance to the diverse assemblage of wildlife found in New Jersey, including endangered, threatened and special concern species.

#### Wetlands

Woodstown has 71.89 acres of deciduous forested land (7.0%) and 87.92 acres (8.5%) of wetlands which are protected under state and federal regulation. Category 1 (C1) or critically dependent wildlife (CDW) species are associated with Woodstown that would require a riparian buffer of 300 feet. Wetlands outside C1 category riparian buffers would be 50 feet.

Freshwater wetlands and transition areas (buffers) are regulated by the Freshwater Wetlands Protection Act rules (NJAC 7:7A). Previously misunderstood as wastelands, wetlands are now recognized for their vital ecological and socioeconomic contributions. Wetlands contribute to the social, economic, and environmental health of our state in many ways:

- Wetlands protect drinking water by filtering out chemicals, pollutants, and sediments that would otherwise clog and contaminate our waters.
- Wetlands soak up runoff from heavy rains and snow melts, providing natural flood control.
- Wetlands release stored flood waters during droughts.
- Wetlands provide critical habitats for a major portion of the state's fish and wildlife, including endangered, commercial and recreational species.
- Wetlands provide high quality open space for recreation and tourism.

There are on-site activity limits on lands identified as wetlands. The NJ Freshwater Wetlands Protection Act requires DEP to regulate virtually all activities proposed in the wetland, including cutting of vegetation, dredging, excavation or removal of soil, drainage or disturbance of the water level, filling or discharge of any materials, driving of pilings, and placing of obstructions. The Department may also regulate activities within 150 feet of a wetland as a transition/buffer area.

> Woodstown Borough, Salem C1 Waters and Wetlands



## **Center Flood Hazard Areas**

Woodstown has 15% of land within FEMA Flood Hazard Areas. The proposed center includes at least a small portion of a flood hazard area, therefore any proposed activities in those areas would need to be compliant with the Flood Hazard Area Control Act Rules found at N.J.A.C 7:13.

## **Surface Water**

Woodstown has several valuable and recreational bodies of water including streams, tributaries and lakes. These water bodies are subject to flooding which is exacerbated by an increase in impervious cover and a decrease in stormwater's ability to infiltrate the ground. All surface waters in the town require at least a 50 to 300 foot riparian zone buffer which are determined and regulated in the NJDEP Flood Hazard Area Control Act Rules.



Woodstown Borough, Salem Surface Water Quality Standards

## **Open Waters – Surface Water Quality Standards (SWQS)**

Salem River (FW2-NT)	Enters the proposed center south of E.
(Memorial Lake)	Millbrooke Avenue, travels west, then enters
	the east end of Memorial Lake (which is
	divided into 3 basins by a railroad & S. Main
	Street). The River exits the lake at Mill Street,
	then meanders north crossing West Avenue
	and leaving the center approx. 350 ft south of
	Marlton Road.
Chestnut Run (FW2-NT)	Enters the proposed center from the East side
	just north of East Avenue (RT40), then crosses
	the center in West-south- westerly direction
	until meeting and joining the Salem River.
Salem River Trib	Borders the Northern perimeter of the center
	between North Main Street and Auburn Road.

C1 waters\* are indicated within the designated Center on the Salem River from the Veteran Memorial Lake Dam to the Chestnut Run confluence with the river. This may be due to the presence of E/T mussels which are also found below the West Avenue Bridge. The C1 designation should be extended beyond the West Avenue Bridge.

No Anadromous waters within the proposed Center.

## Surface Water Quality Standards

The Surface Water Quality Standards (SWQS) are rules established under the New Jersey Administrative Code at N.J.A.C. 7:9B that include the policies, surface water classifications, and surface water quality criteria necessary to protect the quality of New Jersey's surface waters. The SWQS protect the health of New Jersey waters and ensure that they are suitable for all existing and designated uses, including recreation and water supply. SWQS also protect the health of New Jersey citizens and visitors by ensuring that the waters at our bathing beaches are safe for swimming, that water supplies are suitable sources of drinking water, and that the fish and shellfish harvested from our waters are safe to eat. SWQS protect waters for other uses such as trout production and trout maintenance, and agricultural and industrial use.

The SWQS establish designated uses (e.g., drinking water supply, recreation, etc.) to the State's surface waters, classify surface waters based on those uses (e.g. FW1, FW2-TP, etc.), and set water quality criteria that protect the designated uses for each water classification. The SWQS contain various policies for protecting water quality, including general, technical, antidegradation, nutrients, and mixing zones. The SWQS also contain procedures for establishing and modifying water quality-based effluent limitations for NJPDES point sources and reclassifying specific stream segments.

Surface waters are classified based on the type of waterbody and the designated use of the waterbody. Freshwaters are classified as FW1 waters (not subject to any man-made wastewater discharges) and FW2 waters (all other freshwaters except Pinelands waters). FW1 waters are non-degradation waters set aside for posterity because of their unique ecological significance. FW2 waters are further classified based on their ability to support trout, which thrive in cooler stream temperatures. Trout classifications include trout production (FW2-TP), trout maintenance (FW2-TM), and non-trout (FW2-NT).

The SWQS establish antidegradation policies for all surface waters of the State (see N.J.A.C. 7:9B-1.5(d)). The antidegradation policies require that all existing and designated uses shall be maintained and protected for all surface waters of the State; impaired waters must be restored to meet SWQS; and existing water quality shall be maintained.

- 1. Category One (C1) Waters: This tier of antidegradation designation applies to surface waters designated as C1 waters (see N.J.A.C. 7:9B-1.4). C1 waters are protected from any measurable change to existing water quality because of their exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resources. C1 waters have more stringent antidegradation requirements than Category Two waters.
- 2. Category Two (C2) Waters: This tier of antidegradation designation applies to surface waters designated as C2 waters (see N.J.A.C. 7:9B-1.4). Some lowering of existing water quality may be allowed in C2 waters based upon a social and/or economic justification. However, all existing and designated uses must be protected in all cases and waterbodies that are generally not meeting criteria must be improved to meet water quality criteria. All waterbodies not designated as Outstanding Nature Resource Waters or Category One receive the Category Two antidegradation designation.

Additional information is also provided in the Antidegradation/Category One Fact Sheet. Woodstown's acres of floodplain are protected under state and federal regulation. Overlays are recommended for protected areas in flood zone C1 (300 foot buffer), C2 waters (50 foot buffer), Wetlands, Surface Water and Open Space (local, non-profit, State, Federal).

Woodstown shall confirm if there are any impaired waters within municipal boundaries requiring a total maximum daily load (TMDL) restoration plan as outlined by US Clean Water Act. Information is

available at <u>https://www.nj.gov/dep/dwq/tmdl/0614.html</u>. Woodstown has been working to establish a stream corridor buffer plan and conservation greenway that would reduce sedimentation to valuable waterways in Woodstown. Stormwater management would also be improved by preventing excessive sedimentation, reducing impervious surface, promoting on site stormwater management, and upgrading the existing borough stormwater management system.

#### **Dam Safety**

There is One (1) NJDEP regulated dam in Woodstown - the Veteran memorial Lake Dam in the Salem River floodplain.



#### **Vulnerable, Threatened and Endangered Species**

The proposed town center should avoid undeveloped areas of ranked habitat as well as migration corridors and should be assessed for habitat impact if any redevelopment is proposed that might adversely impact to threatened and endangered species or their habitat.

Despite being the most densely populated state in the nation, and the fifth smallest in area, New Jersey provides habitat for an incredible number and diversity of wildlife species. There are more than 400 species of vertebrate wildlife which can be found within the state, due in large part to the state's geographic position within North America, as well as 134 freshwater fish and 336 marine finfish. New Jersey lies at the southern edge of the range of many "northern" species and the northern edge of the range of many "southern" species.

Many imperiled species require large contiguous tracts of habitat for survival. The consequence of the rapid spread of suburban sprawl is the loss and fragmentation of important wildlife habitat and the isolation and degradation of the smaller habitat patches that remain. Small patches of fields, forests and wetlands interspersed with development provide habitat for common species that do well living near humans, but do not provide the necessary habitat for most of our imperiled wildlife. We need to conserve large, contiguous blocks of forests, grasslands and wetlands to assure the survival of imperiled species over the long-term.

Future increases in stormwater runoff, flooding and contamination will adversely impact terrestrial and aquatic species. Climate change can adversely impact plants, trees, aquatic and terrestrial animals, reptiles, fish and birds. Increases in temperature and periods of drought can result in loss of suitable conditions for a tree or plant species to survive as well as a higher risk of wildfire.

The New Jersey Endangered Species Conservation Act was passed in 1973 and directed the New Jersey Department of Environmental Protection (DEP) to protect, manage and restore the state's endangered and threatened species.

**Endangered Species** are those whose prospects for survival in New Jersey are in immediate danger because of a loss or change in habitat, over-exploitation, predation, competition, disease, disturbance or contamination. Assistance is needed to prevent future extinction in New Jersey.

**Threatened Species** are those who may become endangered if conditions surrounding them begin to or continue to deteriorate.

There are other classifications for wildlife as well, including Stable, Species of Special Concern and Undetermined. For a complete listing of species monitored by the ENSP, see the Species Status Listing. A full listing of the state's threatened and endangered species can be found at https://www.nj.gov/dep/fgw/tandespp.htm.

#### Landscape Project

Designed to guide strategic wildlife habitat conservation, the Landscape Project is a pro-active, ecosystem-level approach for the long-term protection of imperiled species and their important habitats in New Jersey. The project began in 1994 to protect New Jersey's biological diversity by maintaining and enhancing imperiled wildlife populations within healthy, functioning ecosystems. The Landscape Project focuses on large land areas called "landscape regions" that are ecologically similar with regard to their plant and animal communities. Using an extensive database that combines imperiled and priority species location information with land-use/land-cover data, the Landscape Project identifies and map areas of critical importance for imperiled species within each landscape region.

Landscape Project critical habitat maps were developed to provide users with peer-reviewed, scientifically-sound information that is easily accessible. Critical habitat maps were designed for use by anyone, but especially those individuals and agencies who have the responsibility for making land-use decisions, i.e., municipal and county planners and local planning boards, state agencies, natural resource and lands managers, the general public, etc. Critical area maps can be integrated with planning and

protection programs at every level of government - state, county and municipal, can provide the basis for proactive planning, zoning and land acquisition projects

Most importantly, the critical information Landscape Project products provide can be used for planning purposes before any actions, such as proposed development, resource extraction (such as timber harvests) or conservation measures, occur. Proper planning with accurate, legally and scientifically sound information will result in less conflict. Less time will be wasted, and less money spent, attempting to resolve endangered and threatened species issues.

Additional information about the Landscape Project can be found at https://www.nj.gov/dep/fgw/ensp/landscape/index.htm.

Woodstown Landscape Rank ed Threatened and Endangered Species are present as follows for entire town:

#### T& E Habitat - Landscape Project Borough Wide

Some habitat within Surface Water.

Landscape Project T& E	
Rank	Acres
1	85.77
2	25.19
3	21.30
4	249.05
5	0.00
Vernal Pool Habitats	#
Potential	3
Documented	0

Naural Heritage Priority Site = 0 Acres

These rankings define the following habitat types:

- Rank 1 is assigned to species-specific habitat patches that meet habitat-specific suitability requirements but do not contain confirmed sightings of endangered, threatened, and special concern wildlife species.
- Rank 2 is assigned to species-specific patches containing one or more occurrences of habitats of special concern.
- Rank 3 is assigned to species-specific habitat patches containing one or more occurrences of State threatened species.
- Rank 4 is assigned to species-specific habitat patches with one or more occurrences of State endangered species.
- Rank 5 is assigned to species-specific habitat patches containing one or more occurrences of wildlife listed as endangered and threatened pursuant to the Federal Endangered Species Act of 1973.

#### Proposed Woodstown Center Assessment

- Key: F Fed, S State , E Endangered , T Threatened , SC Special Concern, S Stable
- CSP Consensus State Status Pending Rule Revision
- SOA Species Occurrence Area indicate possible presence
- L Landscapes indicate habitats valued for



## **General comment**

The Center boundary proposed by Woodstown should avoid E&T habitats. Adjustments should be made to the existing center to avoid flooding, wetlands or identified habit. While portions of the proposed center are already well developed, forested habitat buffer on both sides of the Salem River and tributaries stream corridor should be maintained. For any development proposals within Woodstown, applicants should provide evidence of consultation with DEP GEO-WEB. (https://www.nj.gov/dep/gis/geowebsplash.htm)

The comments and recommendations of the NJ DEP's Fish and Wildlife's (NJFW), Office of Environmental Review (OER) are subject to change, if any additional environmental issues or concerns, that may negatively affect resources under the purview of NJFW are discovered during pre-construction surveys, or the construction phase of any proposed project. The OER should be contacted upon discovery at (609) 960-4502 or (609) 292-9451.

## **Existing Woodstown Center:**

#### **Avian Species**

Bald Eagle	(S/E) 2 Nests, 1 buffer / foraging	SOA/L
Upland Sandpiper	(S/E) Breeding Sighting	L
Bobolink	(S/T) Breeding Sighting	L
Eastern Meadowlark	(SC) Breeding Sighting	L
Brown Thrasher	(SC) Breeding Sighting	SOA/L
Wood Thrush	(SC) Breeding Sighting	SOA
Great Blue Heron	(SC) Foraging	SOA/L
Cooper's Hawk	(SC) Breeding Sighting	L

## **Terrestrial species**

Triangle Floater	(S/T) Live Individual Sighting	SOA/L
Creeper	(SC) Live Individual Sighting	SOA/L
Eastern Box Turtle	(SC) Occupied Habitat	L
*Northern Myotis	(F/E – CSP/E) Summer range	
*Little Brown Bat	(CSP/E) Summer range	
*Tri-colored Bat	(CSP/E) Summer range	
*Eastern Small-footed Myotis	(CSP/E) Summer range	
*Big Brown Bat	(CSP/SC) Summer range	

(\*These Bats are found statewide in habitats with highly suitable roost trees {trees with shaggy or exfoliating bark, and trees of any species over 26 inches dbh})

### Landscape Project 3.3

Woodstown Center - Piedmont

0% - Rank 5 22% - Rank 4 2% - Rank 3 3% - Rank 2 8% - Rank 1 65% - No Rank

Woodstown should continue to promote ongoing and proposed community environmental education and public outreach events.

Woodstown, while completing a master plan re-examination in 2019, should verify when it last updated it's Natural Resources Inventory (<u>https://boundbrook-nj.org/13038-2</u>) since 2005 as well as update its Conservation Plan to include any additions to the conservation district and any additional

**areas set aside for open space preservation and greenway establishment.** DEP supports the municipality's commitment to conservation and renewable energy, although it encourages the Borough to pursue it in an ecologically responsible manner.

Woodstown should continue to protect the Borough's open spaces and the recolonization and reuse of open field habitats for ground nesting and foraging birds. Further research is needed to determine the causes and nature of direct and indirect effects of the placement of solar arrays on and/or over ground nesting habitat on birds.

## Connecting Habitat Across New Jersey (CHANJ) Mapping

A review of the Department's CHANJ mapping (information on this mapping found at https://www.nj.gov/dep/fgw/ensp/chanj.htm) shows that in proximity to the proposed center , there are identified wildlife travel corridors that could serve as viable wildlife passageway through Woodstown and around the proposed center primarily for nesting birds and bog turtle. A passageway classified as a more restricted wildlife corridor is shown in brown. While a passageway classified as less restrictive to wildlife movement is shown in tan, based on the land cover features occurring within it.

## CHANJ Corridors - Habitat corridors overlap in the existing Woodstown Center.

CHANJ Gradient 1 Corridor follows the same path as the Salem River through the proposed Center.



Woodstown Borough, Salem CHANJ Corridor



As noted above, this area is classified as a fairly unrestricted wildlife movement corridor through the existing center . Given the potential significance of this area as a landscape habitat connector/wildlife movement corridor, **DEP recommends that** incorporate an updated habitat corridor overlay into the conservation plan and zoning ordinance. By reducing the development potential of this critical area, the likelihood that this area will remain a suitable corridor is significantly increased.

Note: Cores: Patches of contiguous natural land cover (land and water) at least 78.5 ha in size, which are likely to meet the habitat needs (shelter, forage/prey, reproduction) of most terrestrial wildlife species, especially if functionally linked to other Cores.

Corridors: Continuous swaths of habitat representing the most efficient movement routes between Cores. The Corridors are displayed in color gradients (1-5) based on a cost- weighted distance analysis. Gradient 1 (lightest color) represents the most optimal move-through habitat, whereas gradient 5 (darkest color) is the most marginal.

#### **Vernal Pools and Vernal Habitats**

**There are** There are 3 potential vernal pools within the proposed Center at the following locations: Blocks/Lots: B51,L10; B47, L3; B15,L2

In 2001, DEP partnered with Rutgers University Center for Remote Sensing and Spatial Analysis (CRSSA) to develop a method for mapping potential vernal pools throughout New Jersey. Through an on-screen visual interpretation of digital orthophotography, CRSSA identified over 13,000 potential pools throughout the state. A subset of these pools was field verified and confirmed, with an 88% accuracy rate, to meet the physical characteristics to qualify as a vernal pool (Lathrop et al. 2005).



In accordance with N.J.A.C. 7:7A-1.4, the term "vernal habitat" includes a vernal pool - or the area of ponding - plus any freshwater wetlands adjacent to the vernal pool. Vernal habitat areas mapped in the Landscape Project rely upon those data developed by the DEP and CRSSA to identify sites that should be field checked for possible identification as vernal habitat areas. DEP staff is in the process of field-verifying these pools. The Department also maps vernal habitat areas based upon on-the-ground assessment of sites not captured by the CRSSA mapping. The Landscape Project includes all of the CRSAA-identified sites, as well as sites identified by on-the-ground reconnaissance.

## State Wildlife Action Plan

The **State Wildlife Action Plan** (SWAP) is a strategic and cost-effective strategy for preserving the state's wildlife resources for the future. Recovering species that have reached threatened or endangered status is typically more costly than preventative actions that keep species populations from reaching such declines. Proactive management actions identified in the SWAP are intended to keep species from becoming threatened or endangered or to aid in the recovery of those that are already listed.

State Wildlife Action Plans are proactive plans created by virtually every state and U.S. territory that assess the health of each state's wildlife and habitats, identify the problems they face, and outline the actions that are needed to conserve them over the long term. The New Jersey Wildlife Action Plan identifies both priority species and habitats, assesses the threats they face and outlines actions to take to improve or stabilize their condition.

New Jersey's State Wildlife Action Plan (2018) was approved by the U.S. Fish and Wildlife Service in July 2018. New Jersey's Plan serves as a blueprint for conserving our wildlife heritage over the next decade. The Plan identifies priority actions over the next five to ten years to address the myriad threats facing our wildlife populations and their habitats. It also identifies species of greatest conservation need in New Jersey, as well as 107 focal species that are of the highest conservation priority.

New Jersey's State Wildlife Action Plan can be found at https://www.nj.gov/dep/fgw/ensp/wap/pdf/wap\_plan18.pdf

#### **Natural Heritage Priority Sites**

There are **no** Natural Heritage Priority Sites located in Woodstown. There are no valued grids for plants overlay in any of the proposed Center.

## Natural Heritage Grid Map (This layer indicates occurrences of State Listed plants)

The Natural Heritage Grid Map indicates that there may be occurrences of sensitive plants within the proposed center. Specifically, the Natural Heritage Grid Map values grids for the following data sensitive species/ecological communities: Cornel-leaf Aster. The valued grids overlay the northwest corner portion of the proposed center.

A full listing of Rare Plant Species and Ecological Communities Presently Recorded in the NJ Natural Heritage Database for Somerset County can be found at: https://www.nj.gov/dep/parksandforests/natural/heritage/textfiles/monmouth.pdf.

More information about State Endangered plant species and Plant Species of Concern and the codes used on the list of species can be found at:

## https://www.nj.gov/dep/parksandforests/natural/heritage/njplantlist.pdf

#### https://www.nj.gov/dep/parksandforests/natural/heritage/nhpcodes 2010.pdf

Within Woodstown, partially developed and/or disjointed or unsuitable habitat may be reviewed if any development is proposed in this area through an updated natural resources survey and a habitat suitability determination.

#### **Forest Fire Management and Mitigation**

Adverse effects of climate change increases in average daily temperature contribute to an increase in the potential for forest fires. Public and private property, infrastructure, public safety, and utilities could be compromised in a wildfire emergency. The impacts of a wildfire event can be reduced through the enhancement of the Borough's emergency response plan and through the implementation of pre-event wildfire mitigation and response measures. Forest fuel loading conditions are characterized by fire

hazard ratings (map below) and through coordination with the New Jersey Forest Fire Service and the New Jersey Emergency Management Program.

**Woodstown has not adopted a Wildfire Protection Plan (CWPP) with NJ Forest Fire Service** and should update their Community Forest Management Plan and street tree species inventory in the town center and proposed redevelopment areas. Woodstown should also consider initiating a Community Stewardship Incentive Program.

## **Cultural and Historic Resources**

The 2019 Master Plan re-examination and the MSA (pg 34) included a brief summary of Woodstown's recognized historic structures inventory, Plan Element and ordinance 2019-6 which expanded the historic district. The Borough should clarify if and when any additional areas were added to the State and National Registers of Historic Places. **Woodstown shall confirm any Historic District boundaries with the NJ State Historic Preservation Office and update the historic sites inventory as needed.** The MSA acknowledges the presence, appreciation, and importance of the Borough's historic properties which are either eligible for inclusion or fully listed on the New Jersey and National Registers of Historic Places.

Within the proposed centers, Woodstown shall encourage the preservation and adaptive reuse of historic or significant buildings, Historic and Cultural Sites, neighborhoods and districts in ways that will not compromise either the historic resource or the ability for a Center to develop or redevelop; coordinate historic preservation needs with public access and tourism efforts.

Historic preservation efforts should be accomplished in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*, 1983.

It is critical to protect our cultural and historic resources. The New Jersey Historic Preservation Office (HPO) administers a variety of programs that offer protection for historic properties. The HPO consults with federal agencies under Section 106 of the National Historic Preservation Act for federally funded, licensed or permitted projects. At the state level, the New Jersey Register of Historic Places Act requires that actions by state, county, or local governments, which may impact a property listed in the New Jersey Register of Historic Places, be reviewed and authorized through the HPO. The HPO also provides advice and comment for a number of permitting programs within the Department of Environmental Protection, including some permits required under the Division of Land Resource Protection. The Historic Preservation Office also maintains an inventory of historic properties in each municipality.

The Historic Preservation Office (HPO) encourages municipal civic planning with a design development philosophy embodying sustainability, limiting environmental impacts through rehabilitation of existing structures over 50 years old, climate resiliency guided by preservation principals, and leadership in energy & environmental design (LEED)-based compatible design for new construction within historic districts. Information on the location of known historic structures, historic districts, and historic landscapes and/or structures over 50 years old is available here for Municipal Self-Assessment (MSA) consideration: <u>NJHPO Historic Property Viewer</u>. Also, archaeological sites, historic properties and historic

districts in tidal or storm surge areas are particularly threatened by sea level rise and need to be considered as part of the larger municipal climate change efforts.

The HPO further encourages municipalities to complete inventories of their historic properties, historic districts and archeological sites within their jurisdiction for consideration during planning activities. Protection of the integrity of historic properties, historic districts and archeological sites is crucial for maintaining a municipality's unique sense of place. In addition, municipalities are required to consider changes and impacts to all municipally owned properties listed on the New Jersey Register of Historic Places pursuant to the New Jersey Register of Historic Places Act <u>NJ Register Act</u>.

Further, municipalities can obtain authority to identify, evaluate, designate and regulate historic resources through New Jersey's Certified Local Government (CLG) program <u>CLG Program</u>. The CLG program offers municipalities the opportunity to participate more directly in state and federal historic preservation programs through the development and adoption of a local historic preservation ordinance creating a historic preservation commission which conforms to the specifications of the Municipal Land Use Law and the National Park Service's approved *New Jersey Certified Local Government Guidelines*. As a CLG, a municipality is eligible to apply for Historic Preservation Fund (HPF) grants for a variety of local preservation activities. (<u>CLG grants</u>).

Finally, the HPO also plays a formal role during the following regulated activities: any federal undertaking, such as ownership, funding, licensing, or permitting which is subject to Section 106 of the National Historic Preservation Act in consultation with the lead federal agency; any State of New Jersey's Division of Land Resource Protection Freshwater Wetlands, Highlands Preservation Area Approval, Waterfront Development, Upland Development, or CAFRA permits; any environmental assessments under Executive Order 215, or any state, county, or municipal undertakings on a property listed on the New Jersey Register of Historic Places pursuant to the New Jersey Register of Historic Places Act (see above). These regulatory reviews not only address above ground historic architecture and landscapes, but archaeological resources related to pre-Contact period and early historic period development within New Jersey.

## Historic Resources in Floodprone Areas

Within Woodstown, there are several areas of historic and cultural significance including the Borough. Several historic buildings may be in the flood zone. However, the Borough should update their historic structure inventory throughout the Borough and determine if any parcel identified by lot and block are in the 100 or 500 year flood zone and indicate if any are in the proposed center.



This map is for information only and not for regulatory purposes.	rposes.	This map is for information only and not for regulatory purp
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April 2023

NJEMS_SIID	FEATNUM	FEATNAME
77004584	1	178 E. Millbrooke Avenue
77017852	1	152 Millbrooke AVE
77019067	1	Bridge No. 450
77024691	1	128 E. Millbrooke Avenue
77025374	1	The Bee Hive Hair Salon
77026490	1	Bridge No. 1705150
77027897	1	112-114 E. Millbrooke Avenue
77029433	1	121 E. Millbrooke Avenue
77030022	1	115 E. Millbrooke Avenue
77031105	1	182-184 E. Millbrooke Avenue
77034130	1	138 Millbrooke AVE
77038740	1	180 E Millbrooke AVE
77038893	1	49 W. Millbrooke Avenue
77041579	1	County Bridge No. 449 over Salem River

77046861	1	192 E. Millbrooke Avenue
77050052	1	200 Millbrooke AVE
77053304	1	County Bridge No. 448 over Salem River
77055112	1	116-118 E. Millbrooke Avenue
77058525	1	144 E. Millbrooke Avenue
77061680	1	142 Millbrooke AVE
77067278	1	309-311 S. Main Street
77068108	1	321 S. Main Street
77075821	1	110 E. Millbrooke Avenue
77085657	1	150 Millbrooke AVE
77087075	1	156 Millbrooke AVE
77091037	1	231 S. Main Street
77093392	1	323 S. Main Street
77103148	1	319 S. Main Street
77105282	1	132 E. Millbrooke Avenue
77111695	1	65 W. Millbrooke Avenue
77116725	1	186 Millbrooke AVE
77117179	1	72 Marlton Road
77124281	1	120 E. Millbrooke Avenue
77124582	1	313 S. Main Street
77126528	1	148 Millbrooke AVE
77128523	1	301 S. Main Street
77136724	1	188 Millbrooke AVE
77139524	1	The David and Mary Basset House 1755
77139529	1	140 Millbrooke AVE
77259146	1	WWI Memorial

Woodstown should update it's Historic Preservation Plan of the Master Plan to include climate resilience and social equity.

- Update the Historic Districts Inventory Woodstown should provide a table in any master plan re-evaluation of all lots and blocks in historic districts, if they are in the most recently endorsed center, and if they are in the a) 100 or 500 year flood zone, 2) rank 3,4,5 threatened and endangered species habitat, 3) SSA or 4) public water system.
- Update the Woodstown Historic Preservation Implementation Ordinance to address Climate Resilience
  - Historic structures should be evaluated and protected with enhanced stormwater management plans and flood minimization plans. DEP adopted Elevation Design Guidelines for Historic Properties in December 2019, which can be found at https://www.state.nj.us/dep/hpo/images/\_MULT\_DG\_32\_v2\_ID14078r.pdf.
  - **Zoning Update** Woodstown. should revise the Borough code to implement within the historic districts the following: define and adopt an historic district buffer area, adopt

architectural and development standards within and adjacent to the district, establish an Historic Preservation Commission, continue to update the historic sites inventory and include historic sites in capital improvement program especially related to flood resiliency

## Wastewater and Water Supply

## Wastewater Analysis

The infrastructure to collect and convey sanitary wastewater within the municipality is owned and operated by the Woodstown Sewerage Authority. The existing center is partially within the sewer service area.



## **Capacity Analysis**

The Borough must consider existing capacity as well as any future building to ensure that a WWTP does not exceed capacity. The WQMP rule at NJAC 7:15-4.5(b)5 adopted in 2013 requires that if the "<u>existing</u> permitted flow is 80% or more at the time of WMP development, a municipality must determine, as part of the buildout analysis, if remaining projected growth (for buildout of the SSA) will result in a capacity deficiency and, if the potential for a capacity deficiency exists." **Any WQMP amendment must also be** 

**consistent with the County Wastewater Management Plan.** The WTP should be discharging, on a monthly average, below 80% of the permitted capacity including proposed ten-year development plan until next master plan re-examination plan in 2026. Woodstown shall assess the Salem County-wide draft WMP buildout analysis for the entire proposed service area in MGD and percent capacity and if that accommodates any future center development in Woodstown.

## Wastewater Infrastructure in Floodprone Areas

Critical utility infrastructure like powerlines, stormwater sewers, and potable water lines can be adversely impacted by flooding. The Woodstown Sewerage Authority wastewater treatment plant sewer service area covers **807.36 acres** and **80%** of the total 1004.85 acres of Woodstown excluding surface water and 7.2% is in the combined 100 year and 500 year flood zone.

Sewer Service Area Toral Area (without surface water) = 807.36 Acres					
Sewer Service Area	Acres	% of Total			
within Flood Hazard Area		Sewer Service Area			
1% (100 Year) Floodplain	28.76	3.6			
0.2% (500 Year) Floodplain	additional 29.47 (58.23)	7.2			
Source: FEMA Flood Hazard Area					
NJDEP LULC 2015 Surface Water					



Woodstown, has several building facilities with discharges to surface water that are regulated by the NJDEP with a New Jersey Pollutant Discharge Elimination System (NJPDES) permit. Some of these facilities are also in the flood zone. Most (if not all) sewage producing structures within the municipality are currently within Woodstown Sewer Service Area (SSA). The 25ac-contigous Environmentally Sensitive Area (Wetlands, Category 1 water buffers, etc.) goes through most of the section of the town

outside the SSA. If any development is proposed within the area outside the SSA, a WQMP amendment would be needed at this time. The developing parties in question should come in for a Permit readiness meeting to see what would be needed for the amendment process. Please note that the current SSA is based on the Future Wastewater Map (adopted 6/18/2013). Areas currently within the SSA and 25 ac clip are deemed consistent, but could be removed in the near future as we prepare to work with the county on the next Wastewater Management Plan. This areas could still be available for SSA, but will require an amendment prior to development.

Woodstown should provide an updated map of wastewater piping in the Borough, and update its Wastewater Management Plan as necessary to include additional proposed development, additional adopted WMP amendments, infrastructure upgrades, increased capacity needs and climate resilience.

#### **Potable Water Supply**

The Division of Water Supply and Geoscience, Bureau of Water Allocation and Well Permitting (Bureau) has reviewed the Self-Assessment as part of Woodstown's State Plan Endorsement proposal. Woodstown, located in Salem County, lies within the public water service area served by Woodstown Borough Water Department (WBWD) regulated under Water Allocation Permit Number 5167 (Permit). According to the Well Permitting section of the Bureau, in recent years no permits to drill domestic wells have been issued in Woodstown Borough.

The Permit includes 3 Middle Potomac Raritan Magothy (MPRM) aquifer wells and 2 Mt.Laurel-Wenonah (MLW) aquifer wells. The permitted allocation limits are 19 million gallons per month (mgm) and 174.1 million gallons per year (mgy) from all diversion sources. The MPRM also has aquifer specific limits of 15 mgm and 68 mgy and the MLW of 13 mgm and 136 mgy. The overall peak annual usage within the past 5 years was 139.182 mg in 2022 with a monthly peak of 15.347 mg in August 2022. The peak annual usage within the past 5 years from the MPRM was 108.526 mg in 2022 with a monthly peak of 15.289 mg in August of 2022 and for the MLW was 81.397 mg in 2019 with a monthly peak of 9.743 mg in July of 2020, respectively.

Natural replenishment of groundwater in the PRM aquifer has not been occurring on a regional basis, as illustrated by the findings of U.S. Geological Survey Scientific Investigations Report 2013–5232, <u>Water-Level Conditions in the Confined Aquifers of the New Jersey Coastal Plain, 2008</u>. This report documents the expansion of the regional cone of depression in this aquifer's potentiometric surface. In addition, this report also documents the formation of an elongated cone of depression underlying parts of central Burlington, Camden, and Gloucester Counties. Woodstown (Salem County) is located over 10 miles to the southwest of the southern edge of the area where natural replenishment is not occurring. Locally, natural replenishment of PRM groundwater is probably occurring because the observed fluctuations do not follow a continual decreasing trend and the fluctuations can be attributed to seasonal usage. However, U.S. Geological Survey Scientific Investigations Report 2011–5033, <u>Simulated Effects of Allocated and Projected 2025 Withdrawals from the Potomac-Raritan-Magothy Aquifer System, Gloucester and Northeastern Salem Counties, New Jersey, which documents that in Gloucester and Northeastern Salem Counties, new Jersey, which documents that in Gloucester and Northeastern and regional to detect any possible changes that could affect the long-term reliability of the PRM aquifer in the region.</u>

Woodstown Borough, Salem Water Purveyor Area



Natural replenishment of groundwater in the WBWD MLW aquifer wells is most likely occurring as illustrated by the findings of U.S. Geological Survey Scientific Investigations Report 2013–5232. WBWD Well 4 has had similar water levels of (36') 1998, (38') 2003, and (36') 2008.

WBWD submitted a Water Conservation and Drought Management Plan (Plan) on September 23, 2020 and an update to the Plan should have been submitted by September 30, 2022. According to the 2020 Plan, WBWD promotes water conservation and Resolution 2001-49 places restrictions on lawn watering (odd/even irrigation days), car washing, filling pools, washing paved surfaces, and is enforced by Woodstown Police Department with potential fines. The Plan also included calculations for acceptable unaccounted-for-water, with the most recent percentage reported as 3.7 percent in 2019. In addition, Text Condition 3 of the Permit requires that water shall not be used to serve non-potable, consumptive purposes for new projects that are greater than 50 percent non-potable and greater than 50 percent consumptive, where, as determined by the Department, alternate water sources, including but not limited to reclaimed water for beneficial reuse, are feasible to serve the non-potable, consumptive needs of the project. The last Water Utilization Report was submitted on April 25, 2022 for the monitoring period of 01/01/2022-03/31/2022, which indicated that WBWD had an unaccounted-forwater of 2.5 percent for the prior calendar year, 2021. To aid in identifying the existing and proposed water supply sources and the strategies that document how water supply capacity will exist for the amount of growth detailed in the Endorsed Master Plan, the Borough and County shall refer to the 2017-2022 NJ State Water Supply Plan and contact the Bureau of Water Allocation and Well Permitting.

## Capacity Analysis

The Bureau of Water Systems Engineering (BWSE) Deficit/Surplus webpage indicates that the Woodstown Borough's sources of potable water, water system (Borough of Woodstown (PWSID #: NJ1715001)) has a surplus of water available to service all pending projects that have received approval through the BWSE. The BWSE's Deficit/Surplus analysis for the Borough indicates these facilities have sufficient treatment capacity and infrastructure to meet public demand via the 5 active potable supply wells and water treatment plants has a firm capacity of 1.980 MGD. This capacity is more than their summer and peak demand.

Attached is the Deficit/Surplus Table (updated as of 03/28/2023) for the public community water system Borough of Woodstown (PWSID #: NJ1715001)) that serves the Woodstown Borough in Salem County.

- 1. Firm capacity (total capacity-largest source) 1.980 MGD
- 2. Water Allocation limits = 19.000 MGM, 174.100 MGY
- 3. Current (utilized) peak demands = 0.495 MGD, 15.347 MGM, 139.182 MGY
- 4. Surplus (available) water = 1.430 MGD, 2.800 MGM, 28.226 MGY

Firm Capacity:	1.980	MGD							
Allocation Limits:			Contract L	imits:			Total Limi	ts:	
(Monthly)	19.000	MGM	(Monthly)		MGM		(Monthly)	19.000	MGM
(Yearly)	174.100	MGY	(Yearly)		MGY		(Yearly)	174.100	MGY
Five Year Peak Demand:			Allocated	Demand:			Deficit/Su	rplus:	
(Daily)	0.495	MGD	(Daily)	0.055	MGD		(Monthly)	2.800	MGM
Month/Year	08/2022		(Monthly)	0.853	MGM		(Yearly)	28.226	MGY
(Monthly)	15.347	MGM	(Yearly)	6.692	MGY				
Month/Year	08/2022						Firm-Peak	Total:	
(Yearly)	139.182	MGY	Total Peak	Demand:			(Daily)	1.430	MGD
Year	2022		(Daily)	0.550	MGD				
			(Monthly)	16.200	MGM				
			(Yearly)	145.874	MGY	WAP	Number:	5167	

#### Water Supply Infrastructure in Flood prone Areas

Potable drinking water may also be provided to the residents of the Woodstown outside the public water system via private, non-community and community wells. Woodstown shall work with the County Department of Health and conduct an inventory of private water supply wells to determine which are located within a flood zone. The borough shall also identify any water supply infrastructure from private wells that is located in the flood zone and determine their specific vulnerability to flooding events to both inform the owners of their vulnerability and identify potential

solutions to that vulnerability. A Well Search should be conducted to inventory all currently documented private domestic and commercial wells within the Borough .

#### Well Head Protection Areas

There are Public Supply wells in the central east border of Woodstown and designated wellhead protection areas. The Borough should update their Water Conservation Plan within a Municipal Water Conservation Ordinance. Woodstown should also adopt a Wellhead Protection Ordinance. WHPA delineation methods are described in Guidelines for Delineation of Well Head Protection Areas in New Jersey.(www.state.nj.us/deo/njgs/whpaguide.pdf)



Woodstown Borough, Salem Well Head Protection Areas

## Stormwater Management

Improvements to surface water infiltration and stormwater management can be implemented in many ways including replacing impervious pavement with pervious surfaces, maintain and restore all surface water bodies potential for additional stormwater retention through dredging and silt control, constructing green infrastructure, requiring buffers to surface water bodies, restoring wetland areas, adhering to state requirements for stormwater management best management practices, and adding stricter municipal building codes. To reduce flooding as temperatures and precipitation rise, **DEP** 

recommends that Woodstown continue to address stormwater runoff and improve stormwater retention on site at its source including updating their stormwater ordinance and stormwater management plan.

The MSA did not indicate if they are in compliance with stormwater management permit (Section 21-11 of revised general ordinances). Woodstown shall confirm the following: 1) their Stormwater Ordinance is in compliance; 2) that they are they are in compliance with their stormwater NJPDES MS4 permit; 3) that they have updated their Stormwater Management Plan and Ordinance by the deadline of March 2021; 4) that the Borough has submitted any required electronic outfall pipe map to DEP; 5) that the borough is in compliance with an public information requirements according to their permit approvals; 6) that their Stormwater pollution prevention plan (SPPP) has been updated; 7) that they have met their public education requirements; 8) conducted the required annual employee training and; 9) have a prioritized a list of any outfalls in need of scour repair.

The Borough should also inventory and update their maps of any stormwater outfalls located within the flood zone and determine their specific vulnerability to flooding events. Zoning ordinance and building codes should be updated to incorporate overlays for aquifer recharge, stream corridor and greenway conservation, and steep slope erosion control.

Woodstown should seek opportunities to install green infrastructure measures and expand stream corridor buffer areas to offset increased stormwater, but also to lower the impacts of the heat-island effect by reducing the amount of impervious surfaces.

## Social Vulnerability and Human Health

#### **Population Assessment**

**Woodstown is not an overburdened community** and had a population of approximately 3678 in 2020. The Housing Plan Element of 1989 is mentioned in the 2019 re-examination plan and MSA and indicates that housing is concentrated in the center area and overall includes 1606 housing units of which 201 (12.5%) were vacant. Transportation and evacuation routes are concentrated along Route 40 and Route 45.

In planning for climate change related resilience measures, Woodstown must also consider the vulnerability of various populations within the Borough to adverse effects of climate change. All residents of Woodstown are vulnerable to adverse impacts of a climate change, including an increase in temperature and precipitation and a degradation of natural resources. However, climate change also impacts residents differently based on their location in the Borough, their social and economic situation, and their ability to anticipate, resist, or recover from a natural hazard.

For those living near Woodstown's flood zones, increased stormwater runoff under elevated precipitation and current impervious cover conditions could lead to catastrophic flooding. Any vulnerable residents that are adjacent to or in the floodplain may be at greater risk to flooding. Woodstown should continue to evaluate residents living in tracts close to or in the floodplain including the elderly, disabled, minorities, and those without personal transportation to identify the social vulnerabilities they may face as a result of increased flooding. For example, if there are people without

cars who rely on public transportation, increased flooding could result in loss of wages or their jobs if they cannot get to work on flooded days.

## **Environmental Justice**

As of September 2020, New Jersey has passed new environmental justice legislation and guidance, building on Executive Order 23 to mandate integration of equity considerations into government decision-making. All municipalities should seek to reduce disproportionate environmental and public health stressors and increase environmental and public health benefits for communities of concern, which defined as community block groups having concentrations of low-income, minority, or limited English-proficient residents. Municipalities should empower residents, particularly their most socially vulnerable residents, to meaningfully participate in decision-making that affects their environment, communities, and health. More information can be found on the Office of Environmental Justice Website, https://www.nj.gov/dep/ej/.

The Woodstown Housing and Fair Share Plan in accordance with Municipal Land Use Law (MLUL) has been drafted and is currently under review for inclusion in the Housing Element of the Master Plan and next re-examination report. Woodstown shall meet any requirements of the Council on Affordable Housing (COAH), identify vacant properties and acres completed under COAH rules NJSA 5:97-5.1 and identify efforts to meet affordable housing obligations through the development of vacant land and rehabilitation of vacant or underutilized existing buildings. Although it may be difficult to meet required affordable housing units because the lack of available vacant land, the DEP does not support affordable housing in flood zones or undeveloped areas of habitat. The Borough should determine if any vacant lots under consideration for affordable housing construction have regulated wetlands, are in the 100 year flood zone, or have identified state or federal threatened or endangered species and habitat.

Woodstown should confirm when they adopt their housing fair share plan and when it was included in their Housing Element of the Master Plan and affordable housing ordinance. The Borough should develop an overlay for proposed affordable housing on vacant or underutilized land including any areas proposed in the cores or areas deemed in need of redevelopment and to incorporate recent climate resilience and environmental justice guidance.

## **Healthy Communities**

DEP strongly encourages Woodstown to work with its municipal and county Offices of Emergency Management (OEMs) to review their Emergency Management Plans and complete a Hazard Mitigation Plan as a matter of planning, especially but not limited to potential flooding of critical utilities, roadways and historic structures located in the flood zone and vulnerable to flooding related to increased precipitation. Water, sewer utilities, and piping are subject to flooding. **Woodstown should document that they have an up to date Emergency Master Plan consistent with the Salem County Plan and that they have received an approval letter from NJ State Police for their Local Emergency Management Plan.**  Department of Health data is limited, at this time, for Woodstown due to its size. DOH data is more available for municipalities with larger populations. Data for Woodstown can be found at https://www-doh.state.nj.us/doh-shad/.

## Greenhouse Gas Emission Reduction

The degradation of air quality and elevated temperatures can lead to negative health issues. Elevated temperatures can interrupt power supply to all residences which could impact those who need electricity for medical equipment in their homes and loss of air conditioning could increase heat stress and its associated impacts. Woodstown shall conduct an energy audit of all municipal owned buildings to identify energy inefficiencies. The Borough should also explore utilization of alternative fuels and green energy.

Traffic congestion relief is a priority in Woodstown along it's existing and proposed commercial and evacuation routes as they explore alternative bikeways, walking paths and additional parking.

Woodstown shall adopt a Greenhouse Gas Emissions Reduction Ordinance that encompasses energy efficiency and sustainable alternatives to transportation including bike paths and walking trails. The DEP has a model ordinance available as guidance.

## Contaminated Sites, Solid and Hazardous Waste, & Recycling

## Known Contaminated Sites

The MSA and 2019 Master Plan Reexamination Report did not reference known contaminated sites (KCS) with a summary map of sites, remediation classification exception areas and any deed notices. The MSA did mention areas in need of redevelopment.

A GIS review indicates Known Contaminated Sites in and adjacent to proposed centers and node that may be an ongoing source of contamination or active remediation **. To protect public health, Woodstown should maintain and update a map of known contaminated sites and their remediation status.** A KCSL Inventory should not only include maps but also a table of site name, address, lot and block, NJDEP Program Interest Number, and note which sites are within the boundary of the proposed Cores or areas in need of redevelopment or identified for any future housing needs. **Woodstown should also conduct an inventory of home sources of contamination including residential underground heating oil tanks and septic systems**. More than 15 contaminated sites are located within or immediately adjacent to the proposed center including dry cleaners, underground storage tanks , gas stations and industrial sites. Adhering to DEP regulations for spill prevention and completing any required remediation and long-term groundwater monitoring of existing contamination are required in order to protect this valuable resource and public health

These known contaminated sites in the area of the proposed center are also identified with Groundwater Contamination Areas (Classification Exception Areas) undergoing either active remediation or remediation through natural attenuation.

https://www.state.nj.us/dep/srp/guidance/cea/cea\_guide.htm

## **Brownfields**

Woodstown has identified several areas in need of redevelopment Including vacant properties within the municipality in section IV of the MSA but did not identify any Brownfields designated redevelopment areas <u>https://www.nj.gov/dep/srp/brownfields/bda/</u>. The Borough may be interested in technical and financial assistance for remediation of contaminated lands along the railroad right of ways and in existing industrial/commercial areas. **Woodstown should identify if any of the Known Contaminated Sites (KCS) meet the DEP definition of a brownfield site**. Woodstown can also refer to Sustainable Jersey's web site and the Brownfield Action for information on how to identify and prioritize any known Brownfields

## The Brownfield Act (N.J.S.A. 48:3-51) defines "brownfield" as:

"[A]ny former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of a contaminant."

## The Solar Act (N.J.S.A. 48:3-51) also defines "brownfield" as:

"[A]ny former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of a contaminant."



Woodstown Borough, Salem Gas Stations It is often difficult for municipalities to identify their brownfields. It's even tougher for municipalities to navigate through the cleanup process and partner with willing developers. Sustainable Jersey is a good place to start. Many municipalities are part of the Sustainable Jersey Certification Program. There are Actions within Sustainable Jersey specific to brownfields. They are: Brownfield Inventory and Prioritization; Brownfield Reuse Planning; Brownfield Marketing; and Brownfield Assessment and Investigation. Each of these Sustainable Jersey Actions provide information on why they are important and how they can be accomplished. There are also resources provided to help municipalities accomplish the Action goals and examples of what other municipalities have done. The DEP has also created programs to aid municipalities with the cleanup of their brownfield sites.

If the Borough pursues brownfield cleanup and development in the future, DEP recommends taking actions as part of the Sustainable Jersey Certification Program. These actions include Brownfield Inventory and Prioritization, Brownfield Reuse Planning, Brownfield Marketing, and Brownfield Assessment and Investigation. Each of these Sustainable Jersey Actions provide information on why they are important and how they can be accomplished. There are also resources provided to help municipalities accomplish the Action goals and examples of what other municipalities have done. The DEP has also created programs to aid municipalities with the cleanup of their brownfield sites.

#### Contaminated Sites and Waste Facilities in Flood-prone Areas

Woodstown, upon updating it's inventory of known contaminated sites if older than 10 years, should identify which of the identified KCSs are in the 100 year flood zone. An initial review by NJDEP indicates a number of sites within the flood zone but this should be confirmed.

#### Solid and Hazardous Waste

DEP recommends that Woodstown update their waste management plan to encourage increased recycling and reduction of solid waste removal by public, and private facilities that either collect, transfer, process, or dispose of solid waste or recyclables on its municipal inventory. The municipality should also continue to inform its residents of any opportunities for recycling including additional drop-off depot locations and opportunities for residents, any Borough plans to build additional waste management facilities in town, and any additional waste facilities or services to provide a more holistic view of how the Borough manages its waste.

#### Recycling

The Division of Sustainable Waste Management, Bureau of Planning and Licensing reviewed the Self-Assessment and have the following general comments and questions:

The Borough is obligated to list at least one municipal recycling ordinance although this was not listed or discussed in the MSA. Solid Waste management and Food Waste Management were also not mentioned in the MSA. Woodstown, although a registered town, should confirm adoption of a Recycling Ordinance and Program and seek certification by Sustainable Jersey. The MSA mentions in the 2019 master plan re-examination report the adopted state and county recycling efforts but no recycling specific ordinance link was provided. If not already done so, Woodstown should provide the NJDEP a recycling statement of consistency to meet the requirements of N.J.S.A. 13:1E-99.11 et seq. (Recycling Act), NJ Statewide Mandatory Source Separation and Recycling Act. As part of their plan, Woodstown should identify a recycling coordinator and should provide the State with tonnage reports each year and publicize recycling provisions every six months.

DEP recommends that the Borough notify the State of any future updates to the current recycling ordinances adopted through a statement of consistency, pursuant to N.J.S.A. 13:1E-99.16(b). Future communication with the State should also include long-term plans including recycling education campaigns, how the municipality plans to enforce proper recycling practices, and potential plans to build upon the current recycling infrastructure in order to provide the State with an understanding of how the municipality plans to improve its current recycling system.

- 1. <u>NJAC 5:85-7.9</u>: Self-Assessment Report, form, content, adoption and submission requirements
  - #2 of this statute requires each municipality to provide an inventory of all available public facilities and services.
  - DEP recommends that not only public, but also private facilities that either collect, transfer, process, or dispose of solid waste or recyclables be included as well
    - Woodstown should confirm that it does have an operational recycling depot in town while also utilizing county facilities. Requirement is satisfied.
- 2. <u>NJAC 5:85-7.13</u>: Consistency review; (d), subsection 2 outlines the requirements needed for a complete and consistent municipal plan.
  - XVII of this section requires the municipality to provide a recycling statement of consistency
    - MSA satisfactorily mentions following Solid Waste Management
  - DEP recommends <u>N.J.S.A. 13:1E-99.11 et seq.</u> (Recycling Act), NJ Statewide Mandatory Source Separation and Recycling Act and its various requirements explicitly be mentioned in this section. Requirements should include:
    - Statement that municipality has appointed a recycling coordinator requirement met
    - Statement that municipality has included provisions for recycling in their master plans requirement met
    - Statement that municipality provides the State with tonnage reports each year not mentioned
    - Statement that municipality publicizes recycling provisions every six months alluded to but not fully discussed
- 3. <u>NJAC 5:85-7.13</u>: Consistency review; (d), subsection 2 outlines the requirements needed for a complete and consistent municipal plan.
  - XVIII of this subsection requires the municipality to list at least one municipal recycling ordinance.
    - No explicit ordinance provided
  - DSWM recommends that <u>all</u> recycling ordinances adopted by a municipality should be included so that the State is aware of what each municipality is doing in order to collect recyclables and improve upon the existing recycling system.
  - Providing a statement of consistency that the municipality has adopted ordinances requiring that all county mandated recyclable materials are source separated and the generator is reporting all recycling to the town pursuant to N.J.S.A. 13:1E-99.16(b) would acknowledge the requirements of this legislation in the town's self-assessment

- MSA mentions town has adopted state and county recycling goals
- 4. DEP recommends that any additional recycling information that remains mostly consistent over time should be included in a self-assessment as well.
  - Due to recycling changing greatly overtime, listing specifics such as the current recycling hauler, where the recyclables are processed, or current tonnages would be unnecessary.
  - Components of a municipality's recycling system that are more long term, should be included. This can include, but is not limited to:
    - Recycling education campaigns (somewhat mentioned)
    - How the municipality plans to enforce proper recycling practices
    - Potential plans to build upon current recycling infrastructure.
  - This is a recommendation from DSWM and is not specifically mandated in the selfassessment requirements.
  - Including this provision would provide the State with an understanding of how a municipality plans to improve its current recycling system.

## **Assessment of Proposed Planning Areas**

The Borough presented a general overview of areas determined to be in need of redevelopment. The Department offers the following preliminary comments:

As general guidance for early planning for any new major development project, especially if it requires an extension of sewer and critical infrastructure or a planning area amendment, it is recommended that the Borough submit to the Office of Planning and Assessment as early as possible in the planning process a map of the proposed development with project description, GIS shp files, a table with impacted lots and block, current lot use as developed commercial, residential or vacant, pristine or previously disturbed, forested or open, and any area in the proposed development parcels within the 100 year flood zone or within threatened and endangered species habitat. Coordination with NJDOT is also required and recommended before planning board approval. In addition, as multiple NJDEP permits and approvals may be required to complete a proposed development project, the DEP recommends early planning consultation with the Department prior to planning board approval to identify any permitting requirements and constraints. A pre-application conceptual meeting can be scheduled with the NJDEP through the Office of Permitting and Project Navigation at (609) 292-3600 and <u>https://www.nj.gov/dep/pcer/</u>

## **Conclusion**

The NJDEP is currently working with the municipality and OPA to identify adjustments to the existing center proposed by the Borough of Woodstown in the MSA:

- Reduction of proposed center to remove flood areas along the Salem River, other stream corridor buffer areas, wetlands, and undeveloped areas of habitat and/or flooding.
- **CES Overlays**: Include a CES overlay of undeveloped areas of habitat and/or in flood zone within the Borough. To be consistent with not only the Municipal Land Use Law, the State Plan, underlying land use and natural resources, modifications to the Proposed Center should be made to avoid and minimize impacts to threatened and endangered species and habitat, Wetlands, Flood Zones, Historic Resources, Surface Water Quality and Critical Infrastructure.

These modifications are responsive to projected climate change impacts, allowing Woodstown to avoid, prepare for, minimize the effect of, adapt to and recover from extreme weather events and changes in environmental conditions that have the potential to adversely affect the resources and residents of the Borough.

## Summary of Recommendations

## **Assessment of Proposed Center**

In reviewing the Woodstown Master Plan, the 2019 Re-examination Report and the State Plan endorsement Municipal Self Assessment dated February 2023, endorsement of a revised Woodstown center or centers should promote preservation of historic districts, preservation of natural resources, and growth of public access conservation areas. Woodstown may have last updated it's Natural Resources Inventory and Land Use Inventory in 2005 and it should be updated to incorporate additional climate and EJ impacts.

- The Borough needs to further identify in the proposed preservation or redevelopment areas any vulnerabilities to future flooding and adverse impacts related to climate change. Resiliency actions and restrictions should be applied to any sections in flood zones. DEP can offer Technical Assistance in clarifying development constraints for sites.
- 2. Future development in the proposed center will likely be limited by a shortage of available vacant and open land, overlapping restrictions of Special Flood Hazard Areas, and regulated riparian zones. The Borough's zoning ordinance should be updated to include overlays that address stormwater management, aquifer recharge, steep slopes, 100 year and 500 year flood zones and critical habitat and habitat corridors. This includes a CES overlay for structures in the 100 year and 500 year flood zone and environmentally sensitive areas (ESA).
- 3. Woodstown should update its Land Development Ordinance to include sustainable development practices.
- 4. Woodstown must demonstrate consistency with the State Plan and NJDEP guidance for climate resilience and environmental Justice. While not required in State Plan Endorsement rules, guidance or templates, the Borough did not provide in the MSA a summary table of all ordinances and plans with most recent date each was adopted or updated. It is recommended that Woodstown maintain an updated summary table of all ordinances and plans and include it in future Master Plan re-examination reports. Attached is only one example of a summary table that the Borough may use to track and update their current ordinances and plans and update as needed to reflect any changes. Any State Plan required ordinances, plans, zoning, etc. may need to be reviewed and updated to include climate resilience, updated inventories data, and social vulnerability and environmental justice.

## Climate Change Resiliency

- 1. Woodstown should prepare for climate impacts described in the state Climate Change Science Report and available on the NJDEP website by completing a climate vulnerability assessment and adopting a Climate Resiliency Plan and incorporate climate resiliency into all applicable ordinances.
- 2. This analysis has an extended focus on increased precipitation and flooding. The Borough should also prepare for impacts of increased heat.
- 3. Woodstown shall update it's Hazard Mitigation Plan and chapter in the County Plan and shall include a NJ State Police approval letter for the Local Emergency Management Plan.
- 4. Woodstown k should adopt a tree management plan to also prepare long-term adaptive management forestry practices to preserve its tree cover as precipitation and temperatures increase.
- 5. Woodstown should expand its conservation corridors connecting parks and walkable community areas via easements and additional open space preservation.

## **Flooding**

- 1. To address flooding increases, largely due to increases in intense short-term rain events, DEP recommends that Woodstown utilize the Special Flood Hazard Area for the 1.0 percent (100 year) and 0.2 percent (500-year) storm. In assessing flood vulnerability, the Borough should evaluate its sewer, water, and stormwater infrastructure vulnerability , as well as its transportation and evacuation routes.
- 2. Woodstown is included in the Salem County Open Space and Recreation Plan. The Borough should identify open space, vacant, and underutilized land vulnerable to future flooding and should maintain up to date mapping and inventory of areas that flood regularly, including repetitive loss (RL) and severe repetitive loss (SRL) properties, roadways and intersections, with particular attention to evacuation routes or critical access areas.
- 3. Future development in the Borough will likely be limited by overlapping restrictions of Special Flood Hazard Areas and riparian zones, wetlands, and critical environmental species habitat.
- 4. When evaluating any construction within the identified floodplain of Woodstown, the Borough and others involved must also consider the cost of damage and replacement in the event of flooding.
  - Any proposed conceptual redevelopment or conservation plan should be presented to NJDEP early in the review process, before planning board approval, and before submittal of any permit applications to determine if the project has any fatal flaws rendering it un-permittable in its current design. Pre-application guidance is available at <a href="https://www.nj.gov/dep/pcer/">https://www.nj.gov/dep/pcer/</a>
- 5. The DEP recommends that Woodstown, as per the 2019 Master Plan Re-examination Report, enhance its own zoning regulations and building codes to encourage building outside of the

flood zone and to minimize construction in flood prone areas to reconstruction of existing buildings. Flood zone area new construction or redevelopment of existing buildings should avoid high density concentration and areas of severe flooding.

- Construction of any critical utility line and associated infrastructure, emergency services, or public services buildings (schools, hospitals, churches, etc.) should be avoided in the flood hazard area and any currently within the flood zone should be mitigated for flood resilience. When evaluating any construction within the identified floodplain of Woodstown, one must also consider the cost of damage and replacement in the event of flooding.
- 6. DEP recommends that Woodstown adopt an updated floodplain development ordinance (https://www.ecode360.com/35610472) that is consistent with the most recent standards and National Flood Insurance Programs. For Guidance please review the riverine model ordinance at https://www.nj.gov/dep/floodcontrol/modelord.htm#:~:text=The%20Model%20Ordinance%20i dentifies%20the,not%20be%20the%20Construction%20Official and FEMA guidance at https://www.fema.gov/floodplain-management/manage-risk/local.
- DEP encourages any town that has homes and neighborhoods that repetitively flood to consider contacting the DEP Blue Acres program regarding buyouts. (https://www.nj.gov/dep/greenacres/blue\_flood\_ac.html)
- 8. Green infrastructure should be incorporated into all projects within the floodplain.

## Historic Resources

- Woodstown should update its Historic and Cultural Resources Inventory if older than 10 years, especially for historic properties in the flood zone, and update its Historic Preservation Implementation Ordinance to include climate resilience. Historic structures within the Borough's Historic Districts should continue to be evaluated and protected with enhanced stormwater management and flood minimization plans within the municipal code.
- 2. Woodstown should revise the Borough code to implement within the historic districts the following:
  - Adopt an updated Historic district overlay with defined historic district buffer area;
  - Adopt architectural and development standards within and adjacent to the district;
  - Maintain an Historic Preservation Commission;
  - Continue to update the historic sites inventory and include historic sites in capital improvement program especially related to flood resiliency; and
  - Adopt an Historic vista ordinance
    https://www.ecode360.com/35605049?highlight=vistas&searchId=441724271165681
    7#35605049)

# Open Space and Wildlife

DEP recommends that Woodstown regularly update their natural resources inventory and revise as necessary with any additions their resource conservation protection overlay. With a deficit of acres of center recreation land, the Borough should continue to identify additional parkland for public community use in proximity to it's center and walkable areas.

Woodstown should update as necessary their Open Space and Recreation Plan Element of 2006 to enhance the Woodstown chapter included in the Salem County Open Space and Recreation Plan in order to further protect the Borough's open spaces and expand conservation easements.

- Continue to work with Salem County and surrounding municipalities to provide and expand corridors of open space and natural features.
- Support habitat connectivity, adaptation to changing climate conditions, and to protect historic structures between and including town NGO, state, and federal open space within the Borough.
- Woodstown should also incorporate conservation easement tracking and monitoring in its Open Space Plan and a Habitat Conservation Protection ordinance.

Woodstown should expand on its long-term tree shade and forestry adaptive management practices to preserve its tree cover as precipitation and temperatures increase.

- Update and/or adopt its tree ordinance to protect trees during development and in accordance with a Community Forest Management Plan
- Adopt a Community Wildfire Protection Plan utilizing guidance from NJ Forest Fire Service

Woodstown should promote the recolonization and reuse of open field habitats for ground nesting and foraging birds.

Woodstown shall continue to expand public outreach and educational opportunities.

## Wastewater, Water Supply, and Stormwater

- 1. Woodstown should regularly re-assess vulnerability of the municipal stormwater, wastewater management system and potable water supply system infrastructure that serves the town including any treatment plants, pump stations, delivery piping or outfalls in the flood zone, determine their specific vulnerability to flooding events, and evaluate resiliency solutions.
- 2. Stormwater Management DEP recommends that Woodstown continue to address stormwater runoff and improve stormwater retention on site at its source, reduce flooding and maintain water quality as temperatures and precipitation rise. Improvements can be implemented in many ways, including replacing impervious pavement with pervious surfaces, maintaining and restoring all surface water bodies potential for additional stormwater retention through dredging and silt control, constructing green and natural infrastructure, requiring buffers to

surface water bodies, restoring wetland areas, adhering to state requirements for stormwater management best management practices, and adding stricter municipal building codes.

- 3. DEP recommends that Woodstown confirm compliance with their MS4 permit and update it's stormwater pollution prevention plan and ordinance to reflect any updates in climate resilience.
  - Woodstown shall achieve compliance with the MS4 permit by submitting to DEP an outstanding required elements including outfall location maps in the borough.
  - Inventory and update maps of any stormwater outfalls located within the flood zone and determine their specific vulnerability to flooding events.
  - If not already done, it is recommended that Woodstown update it's ordinance to incorporate overlays for aquifer recharge, stream corridor and greenway conservation, and steep slope erosion control.
  - Adopt an Impervious Surface Reduction Plan Evaluate and reduce impervious surfaces and improve stormwater in-situ recharge.
  - Stream Corridor and Green Infrastructure Woodstown should seek opportunities to install green infrastructure measures and expand stream corridor buffer areas to offset increased stormwater runoff and to lower the impacts of heat-island effect directly related to the amount of impervious surfaces.
- 4. Wastewater Management Woodstown has it's own public wastewater treatment system and provides some capacity for treatment of a portion of Pilesgrove's wastewater. Woodstown shall confirm if there are any private and/or commercial/industrial septic systems in the Borough and if any are located in the flood zone and vulnerable to adverse impacts of climate change. While it appears that the entire developed area of the town is included in SSA, any identified houses in need of expansion of a sewer service area to relieve failing septic systems as a health priority should be identified and evaluated if they are located in a flood zone.
  - DEP supports ongoing resiliency improvement measures in Woodstown and infrastructure resilience inclusion in an updated municipal chapter of the Salem County Hazard Mitigation Plan that may require relocating any conveyance or outfall pipe.
  - Any effort to extend a sewer service area or build an on-site wastewater package plant will require a Water Quality Management Plan amendment. Woodstown includes many areas of wetlands, flood hazard and areas identified as habitat for threatened and endangered species. Future evaluation of the County approved sewer service area may eliminate those species habitat areas. Such parcels would be subject for review either through a Municipal Chapter of the Salem County Wastewater Management Plan or through a site specific amendment pursuant to the DEP Water Quality Management rules.

- 5. Potable water supply system Woodstown has their own municipal public potable water supply system and should inventory if there are any remaining private wells in town and if any are in the 100 year flood zone. Woodstown shall identify any water supply infrastructure is located in the flood zone and determine their specific vulnerability to flooding events.
  - Woodstown shall adopt and update as necessary an existing Water Conservation Plan to address climate resilience.

## Contaminated Sites, Solid and Hazardous Waste, and Recycling

- Woodstown shall update their Known Contaminated Sites Inventory of the Borough if older than 10 years although a summary was provided in the MSA. Woodstown shall delineate which known sites are currently undergoing active or passive remediation efforts and regular groundwater monitoring. The Borough should identify if any of these Known Contaminated Sites (KCS) also meet the current DEP definition of a brownfield site and evaluate for redevelopment.
- 2. If the Borough pursues brownfield cleanup and development in the future, DEP recommends taking actions as part of the Sustainable Jersey Certification Program.
- 3. Woodstown should expand its inventory of potential sources of contamination by identifying all commercial and private home underground storage tanks and septic systems. This should be updated regularly.
- 4. Woodstown should update it's recycling ordinance and update its municipal solid waste and recycling management plan to identify not only public, but also private facilities that either collect, transfer, process, or dispose of solid waste or recyclables on its municipal inventory. Woodstown should notify the State of any update to its recycling ordinances adopted through a statement of consistency, pursuant to N.J.S.A. 13:1E-99.16(b).

## Environmental Justice and Social Vulnerability

- 1. As per new environmental justice legislation, all municipalities should seek to reduce disproportionate stressors and increase benefits for socially vulnerable populations and frontline communities. Woodstown can do this by empowering residents, particularly its most socially vulnerable residents, to meaningfully participate in decision-making that affects their environment, communities, and health.
- 2. Woodstown included a land use inventory in the 2019 re-examination report that may have been over 10 years old. If older than 10 years, it should be updated to further identify sustainable development potential while meeting conservation and environmental protection goals.
- 3. Woodstown shall update its affordable housing ordinance to include climate resilience and shall develop an overlay for proposed affordable housing on vacant or underutilized land.
- 4. The Borough should update any assessment of any Redevelopment Areas vulnerable to future flooding, with regulated wetlands and/or with identified critical species habitat during the planning process that would limit any future affordable housing.

## Greenhouse Gas Reduction and Energy

- 1. All communities are encouraged to implement actions to meet New Jersey's goals for greenhouse gas emissions reduction. The Sustainable Jersey Gold Star in Energy identifies a suite of actions and levels of performance that municipalities can take to reduce greenhouse gas emissions. Information on the goals star standard can be found at https://www.sustainablejersey.com/actions/gold-star-standards.
- 2. DEP supports any efforts by Woodstown to pursue the utilization of renewable energy, although it encourages the Borough to pursue it in an ecologically responsible manner. Woodstown shall conduct an energy audit of all municipal buildings and adopt an updated Energy Master Plan.
- 3. DEP supports renewable energy through solar arrays installation, although it expresses concerns for their placement in ground nesting habitats for birds and any area that may be preserved as open space farmland preservation. Woodstown should continue to protect the Borough's open spaces and the recolonization and reuse of open field habitats for ground nesting and foraging birds as they evaluate sustainable, renewable and alternative energy sources and sites.
- 4. Woodstown shall adopt a Greenhouse Gas Emissions Reduction Ordinance that encompasses energy efficiency and sustainable alternatives to transportation including bike paths, walking trails and contiguous sidewalks and traffic congestion relief. For guidance please refer to the Great Plains Institute database of climate ordinances at: https://www.betterenergy.org/blog/database-of-climate-ordinances-now-available-to-planners/?mc cid=ee681f368d&mc eid=64c234231d

## Attachments

