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**DRAFT RECOMMENDATIONS:
PARKS & OPEN SPACES AND SUSTAINABILITY & CLIMATE RESILIENCY**

To
Comprehensive
Planning Committee
(CPC)

Sustainability & Resiliency
GOAL: PROMOTE SUSTAINABLE DEVELOPMENT AND PLAN FOR CLIMATE RESILIENCY.

From
Shachi Pandey,
Metropolitan Urban
Design Workshop

1 / Develop a Climate Action Plan.

The Town should consider establishing a working committee to seek funding and oversee the development of a Climate Action Plan. At a minimum the Climate Action Plan would lay out a road map and targets for limiting community GHG emissions, switching 100% of Town's energy supply to renewable sources, providing green transportation alternatives as tenable and convenient mode for mobility, defining climate mitigation, environmental stewardship and sustainability, reducing our vulnerability to climate impacts, enhancing quality of life and livability of neighborhoods, boosting opportunities for climate-smart businesses and job creation, and improving public health and equity for all community members.

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AKRF

Re
Draft
Recommendations
for Chapter 6 on
Parks & Open
Spaces and
Sustainability &
Climate Resiliency

2 / Expand Storm Water Public Education Program.

Town of Orangetown should expand on their existing Municipal Separate Storm Sewer System (MS4) public awareness program to include a wider range of stakeholders and educate them about the impacts of phosphorus, nitrogen, and pathogens on waterbodies. Educational information could include:

- 1) Impacts of stormwater discharges on waterbodies.
- 2) Pollutants of concern and their sources.
- 3) Actions to reduce pollutants in stormwater runoff.
- 4) Hazards associated with illicit discharge and improper disposal of waste.
- 5) Ways to report illicit discharges and water quality issues.

3 / Map Stormwater Conveyance.

The Town should take on the mapping of the stormwater conveyance, drainage areas, outfalls, and discharge points for all of their municipalities.

4 / Review and update local regulations to promote resilient construction practices, manage stormwater, and reduce flooding.

The Town should consider developing guidelines for stormwater discharges from construction activities to reduce pollutants in stormwater runoff from construction activities that disturb any area of five thousand square feet or more.

Additionally, guidelines to address post-construction stormwater runoff from new development and redevelopment projects that disturb equal to or greater than one acre area should also be considered. The NYS Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-08-001) and the New York State Stormwater Design Manual can provide helpful guidance to which Town of Orangetown can align their resilient construction practices and develop specific guidelines for construction sites.

MUD Workshop

Shachi Pandey, AICP, LEED AP
MUD Workshop / www.mudworkshop.com
shachi@mudworkshop.com

Furthermore, require the use of bio-retention, permeable paving, and/or vegetated swales instead of paved gutters for new development and redevelopment projects.

5 / Establish a green infrastructure and structural retrofitting program to reduce phosphorus, nitrogen and pathogen loading.

Despite controls and regulations on stormwater discharge, there are bound to be surface pollutants that are included in run-offs from our essential urban infrastructure systems such as roadways, sidewalks, parking lots, and any other impervious surfaces. The type of surface pollutant depends on the source of stormwater runoff, e.g. salt from roadways, petroleum and gasoline from parking lots etc. Both the quantity and quality of stormwater runoff can be controlled to a considerable degree by the use of green infrastructure (GI) systems. GI systems employ plant and soil systems to infiltrate, evapotranspire, and reuse stormwater at the location where it falls. GI is a planning, design and conversation approach to protect, maximize and mimic the ecological performance of natural areas in managing and reducing stormwater. It reduces the flow of stormwater to sewer systems or surface waters sources including streams, wetlands, lakes etc., and removes pollutants, including heavy metals, from stormwater before it permeates into the ground or enters surface waterways.

Depending on the context, there are a range of GI approaches that can be applied to collect, clean and permeate stormwater. These include green roofs, tree trenches, rain gardens, vegetated swales, pocket wetlands, infiltration planters, vegetated median strips, reforestation, and protection and enhancement of riparian buffers and floodplains.

The Town can take several measures to introduce green infrastructure and manage the quantity and quality of surface run-offs:

- 1) Require all new off street parking to use permeable surfaces and where possible, redevelop existing parking lots with impermeable surfaces to include permeable surfaces and remove paving from vacant lands. Refer to NYS Stormwater Management Design Manual for design specifications.
- 2) Include GI Practices and infrastructure in complete streets / street design specifications and refer to NYS Stormwater Design manual for planning and implementation.
- 3) Require the use of permeable paving for overflow parking and snow removal areas.
- 4) Establish a GI Grant Program.
- 5) Educate and encourage property owners to capture stormwater before it reaches the sidewalks.
- 6) Assess rules for minimum parking requirement and make sure they reflect the true requirement.

- 7) Require all new subdivisions to include stormwater treatment for new roads in accordance with NYS requirements.
- 8) Consider setting limits to impervious surfaces on any lot, so that a portion of the overall permitted land coverage is permeable and ensure that permeable areas are maintained as such.
- 9) Develop requirements for runoff from sidewalks and streets in urban areas to be directed into below grade drainage systems / practices.
- 10) Wherever possible, grade sidewalks and roadways to drain onto landscaped areas rather than onto the street.

6 / Mitigate the harmful impacts of flood events through development regulations and preventative measures.

- 1) Introduce Town ordinances to protect steep slopes and ridgelines from erosion.
- 2) Develop and implement a program of native planting.
- 3) Limit the addition of impervious surfaces.
- 4) Identify and develop mitigation plans for areas at high risk of flooding, including making improvements to public infrastructure.
- 5) Limit any new development in areas with high risk of flooding.

7 / Reduce carbon emissions and promote healthier air quality.

- 1) Create and enforce regulations to limit air pollution coming from light industrial zoned areas, especially those close to residential neighborhoods.
- 2) Set clear targets and provide timeline and guidelines for reducing carbon emissions.
- 3) Limit truck traffic and deliveries during peak hours by incentivizing businesses to choose off-hour deliveries.
- 4) Reroute truck traffic from residential areas and schools to major highways and roads.
- 5) Create connected, safe and walkable communities with generous pedestrian infrastructure (sidewalks, crosswalks, pedestrian lights, landscaping), and public transportation (bus stops and shelters) on Rt 303 and throughout Orangetown.
- 6) Relocate commuter parking to existing developed areas with safe, sheltered bus stops to encourage the use of public transportation.
- 7) Encourage the installation of electric vehicle (EV) charging stations in public areas.
- 8) Beginning with schools and businesses, advertise and enforce efforts to limit the use of engine idling within the Town.
- 9) Ban the use of gasoline powered leaf blowers.

8 / Limit the use of fossil fuels as a source of energy supply and incentivize the use of green building technologies for new development projects and retrofits.

- 1) Assess energy usage / demand by land use, type of building, new development, and redevelopment.

- 2) Retrofit / upgrade all municipal buildings for high energy efficiency and switch 100% of energy supply to renewable sources. Incentivize businesses and institutional buildings to do the same.
- 3) Build on the success of the Town's Community Choice Aggregation Program and provide additional Town incentives for green energy such as fast-tracked approvals and tax incentives.
- 4) Fully participate in the next phase of the Rockland Community Power CCA program by adopting the 100% New York-sourced renewable electricity option as the default supply for its residents and small businesses.
- 5) Explore alternatives to the existing electrical grid infrastructure which is aging and has limited ability to take advantage of advanced technologies. These alternatives should promote micro-grid Community-Distributed Generation of electricity such as through Community Solar installations, which is currently being established, as a means to protect critical infrastructure and to lower the stress on the existing utility infrastructure.
- 6) Encourage building performance code certifications such as Energy Star and/or LEED for new construction over a certain size.
- 7) Require the use of green building technologies for heating and cooling for all new construction and redevelopments.
- 8) Continue to enforce the recently adopted NYStretch Code for development, and improve the energy efficiency of building systems including heating, cooling, and lighting.

9 / Enforce code to limit light pollution.

Orangetown's zoning code Section 4.27 sets out requirements for constraining exterior artificial lighting, however, its enforcement is limited and the code is widely ignored in both commercial and residential areas. The Town should consider promoting awareness around the negative impacts of light pollution and educate the public about methods to tackle and reduce it. The Town should also consider stricter enforcement of its code section 4.27 by limiting light pollution in building applications through the ACABOR board.

Parks & Open Spaces**GOAL: PRESERVE THE TOWN'S NATURAL RESOURCES AND INCREASE ACCESS TO PARKS AND OPEN SPACE.****1 / Work with the New York State legislature to establish a preservation fund that can be used to acquire property for open space, recreation, or historic reservation.**

The 2003 Orangetown Comprehensive, informed by the Ad Hoc Open Space Committee's proposals, recommended the acquisition of two open space areas including:

- 1) The Hackensack River blue corridor, including open areas within the Rockland Psychiatric Center (RPC) site, and
- 2) the Palisades Ridge green corridor where it intersects with the Sparkill Creek watershed and open areas in the southeast portion of Town.

The Town should continue to acquire and protect open spaces whenever and wherever possible. The following sites should be considered for acquisition and preservation:

- 1) Town-owned property at the RPC site presents a major opportunity for open space preservation and passive to active recreational uses. The site is easily accessible from any point in Orangetown including existing recreation facilities and senior housing.
- 2) It offers a significant opportunity for open space protection and is a key feature in the Hackensack corridor.
- 3) Acquisition should be considered for the "Dinosaur Property" between Route 303 and North Greenbush Road, which is recognized by the State and County for its high scientific value.
- 4) The HNA property in Palisades, formerly the IBM Conference Center, should also be considered as a potential acquisition. The site is nearly 106 acres of largely undeveloped land within the Palisades Ridge green corridor.
- 5) With the dissolution of the Village of South Nyack in the Town of Orangetown, there are opportunities for shoreline open space protection for waterfront parks and open spaces. Most of this shoreline area is under private ownership. However, two river edge parcels including Gesner Avenue park, a small tiered seating area at the water's edge, and Towt park, a former sewage pumping station that would need significant clean up and access improvements before becoming open to the public, will come under the purview of Orangetown Parks and Recreation Office. The clean-up, upkeep and public access of these parks should be prioritized.
- 6) Additionally, the Olsen Center, located at 157 Piermont Avenue has almost 400 feet of river frontage and is currently being considered for sub-division and development. Instead, the Town should consider the ecological significance of this site and protect the significant riparian ecosystem habitat.

- 7) To protect environmentally sensitive areas that lie outside of the Town's green corridor, the Town should also consider the use of cluster zoning which can preserve large contiguous areas of open space. The Town should also consider implementing conservations easements.

2 / Consider and adopt urban forest and landscaping best practices.

Beyond parks and open spaces, Orangetown's street trees and suburban green landscapes form a ubiquitous network of ecological assets that can be powerful in responding to climate change as well as water quality concerns. Trees for streetscaping and open spaces need to respond to shifting climate zones and plant hardiness zones, which are moving north at 13 miles per decade in the US and indicate increasingly warm climate conditions. Common trees in Orangetown today may not be able to survive climate conditions thirty to fifty years into the future. It is therefore advised to update the list of permissible trees in the Town ordinance to incorporate resilient vegetation and tree species from warmer Plant Hardiness Zones as well as trees suitable for urban heat management.

The Town can also establish landscaping practices and chemical application regulations for private property. Orangetown's predominant land use is single family residential, with many associated lawns and open areas. Regulating landscaping practices would help improve the Town's chronic flooding challenges and groundwater quality concerns. Recommended practices include improving water efficiency of lawns, decreasing use of nitrogen fertilizers, and heavily limiting chemical pesticides and lawn care chemicals that harm human and ecological health, such as chemicals glyphosate, carbaryl, 2,4-D, and bifenthrin.

Additional action items and initiatives to be considered include:

- 1) Reviewing and enhancing the Town tree ordinance to discourage the felling of trees, to require that replacements be native and drought-resistant species, and, to extend protection to younger trees.
- 2) Minimizing tree clearing and discouraging greenfield development in general.
- 3) Planting trees in parts of Orangetown's previously developed and now vacant / underutilized lands.
- 4) Setting targets to plant climate-resilient street trees for shade and aesthetics and applying for funding to make this possible.
- 5) Re-establishing the Street Shade Tree planting program overseen by the Shade Tree Commission (the Commission).
- 6) Educating and providing resources to residents so they are better informed about tree suitable species, planting best practices, and regulations.
- 7) Empowering the Commission to oversee and recommend changes to the Town's tree ordinance

- 8) Working together with the Planning Board, ACABOR, and the Commission to set standards for the landscaping plans of new developments and re-developments.
- 9) Prioritizing tree planting along excessively wide roads and large swatch of paved areas such as parking lots.
- 10) Aggregating the bulk purchase of saplings with other municipalities in order to lower costs.

3 / Develop a viewshed protection ordinance.

With the dissolution of the Village of South Nyack, the Town will soon gain jurisdiction over more than one mile of prime Hudson River riparian private and public property. The Town should prioritize the protecting the shorelines and ridgelines of Orangetown review its zoning code to ensure that sight line corridors to the river through private property are maintained. Ridge-line development should be restricted to ensure more natural views from lower reaches. This could be achieved by creating a viewshed overlay district.

4 / Repurpose defunct and obsolete infrastructure for recreational use.

- 1) Encourage conversion of inactive rail lines into rail trail facilities to develop a network connecting with trails in adjacent municipalities.
- 2) Implement the plans for a waterfront park on Lake Tappan within the 216-acres of Town-owned land at the Rockland Psychiatric Center, including walking trails, wheelchair accessible trails, and access to water for passive recreation activities.

5 / Expand community programming and the ecological role of parks in habitat restoration.

In addition to providing passive and active recreation, parks can function as important habitats for native flora and fauna, migratory birds, pollinators such as bees and butterflies, provide food for animals and birds, recharge our aquifers with cleaner water, and play a role in carbon sequestration. For parks to play a more significant role in creating habitats and improving their hydrological performance they can be planted as meadows, natural vegetated buffers, and natural fields. The Town should develop an inventory of locations that might lend themselves for transformation.

In addition, community programming such as farm beds / community gardens and nature centers should be considered in partnership with schools and on their open space and recreational facilities.