05.17.2022

RESPONSE: PUBLIC WORKSHOP – 3

To

Comprehensive Planning Committee (CPC)

From

Shachi Pandey, Metropolitan Urban Design Workshop

CC AKRF

Re

Response to
Comments Received
during Public
Workshop – 3 on the
topics Open Space &
Recreation, and
Sustainability &
Climate Resilience

Dear Members of the CPC,

We have submitted our second draft of Chapter 6: Open Space & Recreation, and Sustainability and Climate Resilience for your review.

This second draft, responds to the community feedback received during the Orangetown Comprehensive Plan Public Workshop - 3, held on April 27, 2022. We are also attaching a summary document, which was created for review and any additional feedback from the Orangetown Environmental Committee (OEC), the Parks and Recreation Office, and any other community based organizations (CBOs) that focus on open space, sustainability, and climate resilience.

We are including the following summary for your review

Table 1: 2003 Recommendations and Implementation Status

As requested during Public Workshop - 3, this table has been created to provide an overview of 2003 Comprehensive Plan recommendations and the status of their implementation. The table lists recommendations with their intended purposes as well as associated actions and strategies. We request the CPC, OEC, Parks and Recreation Office, any other interested CBOs to please indicate the implementation status of the actions and strategies, and whether they are still relevant for the 2022 Comprehensive Plan. The column to the furthest right includes proposed actions and strategies from the 2022 Comprehensive Plan that corresponds to those of the 2003 plan. The 2022 recommendations are marked as entirely new, updated from 2003, or carried over without any changes from 2003.

In the 2003 Comprehensive Plan, recommendations relevant to Chapter 6 of the 2022 Comprehensive Plan are discussed under the section "Recreation and Open Space" which has the following subsections:

- 1. "Open Space and Environmental Protection",
- 2. "Open Space", and
- 3. "Environmental Protection"

Together, these address subjects including open space acquisition, active recreation, stormwater management, and flood mitigation. Elsewhere in the plan, another relevant subsection "Environmental Protection Regulations and Cluster Development" encompasses topics on zoning methods for environmental protection, wetland protection, and steep slope development regulations.

Most of these topics are also addressed in the 2022 Comprehensive Plan, Chapter 6: Open Space & Recreation, and Sustainability & Climate Resilience, which are split into two distinct sections. These two sections expand upon more specific strategies for flood mitigation, stormwater management, wetland and water protection, and regulating steep slope development. In addition, newly introduced recommendation

MUD Workshop

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

topics include carbon emissions reduction, climate resilient landscaping and urban forestry practices, environmental stewardship programs, and specific regulatory measures for stormwater management and water quality among others.

Table 2: 2022 Comprehensive Plan Proposed Recommendations and Implementation Timeline

Table 2 outlines the 2022 Comprehensive Plan proposed recommendations, their intended purpose, associated strategies and actions, and a suggested timeline for implementation. The actions and strategies in this table have been defined in greater detail. We request the CPC, OEC, Parks and Recreation Office, and any other interested CBOs to further refine the implementation pathway by editing the suggested timeline, and adding to the list of partnership organizations and funding resources.

Based on the feedback received during the community workshops as well as the surveys, the following items were highlighted to be issues of top concern for residents, business, and Town institutions. The following chart lists the 2022 recommendations that respond to the community's recommendations.

Summary of 2022 Comprehensive Plan Recommendations for Open Space & Recreation, and Sustainability & Climate Resilience

Orangetown Residents' Top Concerns	2022 Comprehensive Plan Relevant Recommendations [included in current contract]
Sustainable	(Sustainability and Climate Resilience)
infrastructure for flooding and stormwater management	Establish a green infrastructure and structural retrofitting program to reduce phosphorus, nitrogen, and pathogen loading.
Creating a Climate	(Sustainability and Climate Resilience)
Action Plan	Establish a Climate Working Group to seek funding for and to develop a Climate Action Plan.
Protecting major	(Sustainability and Climate Resilience)
water bodies including Sparkill Creek and Lake Tappan	Review and update local regulations to promote resilient construction practices, manage stormwater, and reduce flooding.
. appair	Improve water quality by addressing root causes of contamination, protecting wetlands and watersheds, and aiding in their environmental performance.

	Establish a green infrastructure and structural retrofitting program to reduce phosphorus, nitrogen, and pathogen loading.		
Flooding,	(Sustainability and Climate Resilience)		
stormwater, and water quality issues	Mitigate the harmful impacts of flood events through development regulations and preventative measures, including steep slope ordinances.		
	Review and update local regulations to promote resilient construction practices, manage stormwater, and reduce flooding.		
	Map stormwater conveyance including drainage areas, outfalls, and discharge points for all of Orangetown's municipalities.		
	Improve water quality by addressing root causes of contamination, protecting wetlands and watersheds, and aiding in their environmental performance.		
	Establish a green infrastructure and structural retrofitting program to reduce phosphorus, nitrogen, and pathogen loading.		
	Expand on existing stormwater public awareness programs to include a wider range of stakeholders and educational information.		
Tree planting	(Open Space and Recreation)		
	Consider and adopt urban forestry and landscaping best practices.		
	Expand community programming and the ecological role of parks in habitat restoration.		
	Educate young residents about the environmental importance of parks and promote park stewardship.		
Open space	(Open Space and Recreation)		
acquisitions	Work with NYS legislature to establish a preservation fund and acquire property for open space, recreation, or historic preservation.		

RESPONSE: PUBLIC WORKSHOP - 3

Protecting viewsheds	(Open Space and Recreation) Develop a viewshed protection ordinance.			
Unmaintained natural areas in conservation easements	(Open Space and Recreation) Use cluster development and conservation easements to preserve large contiguous areas of open space and protect environmentally sensitive areas.			
Access to the waterfront and open space	(Open Space and Recreation) Provide greater continuity between Orangetown's local parks and open spaces, the regional open space corridor, and waterfront areas.			

Table 1: 2003 Recommendations and Implementation Status

2003 Recommendations and Implementation Status				
Intended Outcome	2003 Strategies and Actions	2022 Actions & Strategies		
			a) Entirely new	
		(Guiding Questions: If implemented,	b) Updated from 2003	
		to what extent? If not, why not? Is it	c) Carried over without any changes from 2003	
		still relevant?)		

Recommendation 1

"Strengthen the two north-south open space corridors that already exist in Orangetown - in the Lake Tappan - Hackensack Riverway and the Clausland Mountain corridor - through acquisition of lands for open space and through zoning and land planning techniques (including clustering) that limit development on steep slopes and wetlands, and along ridge lines and water bodies. These areas should be priority locations for open space acquisition."

(Comprehensive Plan 2003, II-1)

Acquire open space to improve access and connectivity between parks and open space and protect environmentally sensitive areas.

Strategy 1A

"OPDAC (Orangetown Park Development Advisory Committee) has proposed 10 acquisition sites and eight transitory sites where open space should be preserved through techniques other than acquisition." (*Comprehensive Plan 2003*, I-25) It is important to note that the inventory only includes parcels over two acres of size that were coded as vacant by the Town Assessor." (*Comp Plan 2003*, III-5)

Strategy 1A Locations

Protected acquisition sites

- 1. Parcel 65.16-1-1(partial), 65.15-1-11, and 65.15-2-12: 3 contiguous parcels (including Blake Property) encompassing ~40 50 acres off Bradley Hill Rd in Blauvelt.
- Parcel 74.16-1-22: Encompassing ~3.76 acres, this parcel is off Queens Court in Sparkill and overlooks Route 340 and Thorpe Village.
- 3. Parcel 77.20-1-1 and 77.15-1-31: Encompassing approx. 21 acres and a portion of Sparkill Creek, these parcels are located off Oak Tree Road in Tappan.
- 4. Parcel 68.11-3-39, 68.11-3-40, 68.16-1-1, and 68.12-1-14: These parcels total approx. 15 acres and border Route 304 in Pearl River and buffer residential uses near Railroad Avenue.
- 5. Parcel 74.09-2-40: approx. 6 acres, this parcel is in Orangeburg and is contiguous to Independence Park.
- 6. Parcel 77.11-3-4: approx. 7 acre, contains an abandoned service station, and is next to Tappan Memorial Park
- 7. Parcel 77.15-3-20: approx. 2/3 acre, this parcel is adjacent to the southern terminus of the Rail Trail.
- Parcel 69.20-2-28 and 69.20-2-29 (western portions): approx.
 acres in size, these parcels are located off Van Wyck Road in Blauvelt; these parcels also border an abandoned section

(OPEN SPACE & RECREATION)

2022 Recommendation/ Work with NYS legislature to establish a preservation fund and acquire property for open space, recreation, or historic preservation.

Associated Actions and Strategies/ Open spaces for potential acquisition

- 1) The Hackensack River blue corridor, including open areas within the Rockland Psychiatric Center (RPC) site.
- 2) The Palisades Ridge green corridor where it intersects with the Sparkill Creek watershed and open areas in the southeast portion of Town
- 3) Dinosaur Property between Route 303 and North Greenbush Road
- 4) HNA property in Palisades (formerly the IBM Conference Center)
- 5) Gesner Avenue Park
- 6) Towt Park
- 7) Olsen Center
- 8) Central Avenue Field

	of rail line (parcel 69.20-2-76) which could be used as a rail-	
	trail in the future	
	9. Parcel 65.15-1-1: approx. 17 acres, this site is on the	
	Orangetown/Clarkstown border and is the site where	
	dinosaur tracks were located.	
	10. Parcel 73.20-1-23: approx. 20 acres in size, and is located off	
	Blaisdell Road in Orangeburg	
	Transitory sites	
	(III-6)	
	1. Parcel 73.20-1-23: ~20 acres in size, and it located off	
	Blaisdell Rd in Orangeburg	
	2. Parcel 73.11-1-2 and others: this is the land at the Rockland	
	Psychiatric Center, over 330 acres of which is proposed to be	
	sold by the State	
	3. Parcel 77.12-1-44 and 77.12-1-45: located off Route 340 in	
	Sparkill, approx. 38 acres in size, contain a portion of Sparkill	
	Creek, and are adjacent to Town-owned land to the NE and	
	the Rail-Trail to the West	
	4. Parcel 77.06-3-13 and 77.06-3-23: 2 parcels totaling over 17	
	acres currently owned by the German Masonic Home and	
	includes land leased for the Town's summer camp program	
	5. Parcel 69.14-1-28: approx. 104 acres, this area contains the	
	Kaufmann Campgrounds and Manhattan Woods Golf Course,	
	and a portion of the Naurashaun Brook	
	6. Parcel 68.07-2-1 and 68.12-3-21: 2 parcels currently owned	
	by American Home Products total almost 15 acres, and	
	separate industrial uses from residential uses	
	7. Parcel 73.10-1-4 and 73.10-1-5: located off Blue Hill Road	
	West, this is the Mercedes site, which totals nearly 7 acres	
	8. Parcel 68.20-2-4: located on Central Avenue in Pearl River,	
	Central Avenue Field totals nearly 5 acres which is used as a	
	community play area/open space, and is owned by the Pearl	
	River School District	
	Tubibit 10 about all ODDAC accommodations for a state	
	Exhibit 18 shows all OPDAC recommendations for potential	
	acquisition or conservation easement. (V-14)	
Drotost large sentimes	Ctratage 1D	(ODENICRACE & DECDEATION)
Protect large, continuous areas	Strategy 1B	(OPEN SPACE & RECREATION)
open space	Encourage cluster development and flevibility in subdivision design	2022 Pacammondation / Headly standay alanmont and concernation accompany
	Encourage cluster development and flexibility in subdivision design	2022 Recommendation/ Use cluster development and conservation easements to
	and site planning where significant environmental features exist.	preserve large contiguous areas of open space and protect environmentally sensitive
	(Comp Plan 2003, V-2)	areas.

Protect viewsheds and sensitive	Strategy 1C	(OPEN SPACE AND RECREATION)
slopes.	<u> </u>	
·	Ridge line protection can limit development in areas prone to adverse	2022 Recommendation/ Develop a viewshed protection ordinance.
	visual impacts, such portions of the Clausland Mountain, including the	
	Route 9W / Tweed Blvd area.	Goals of viewshed protection ordinance:
	, and the second	
		1) Protecting the sight line corridors to the shorelines and ridgelines of Orangetown.
		2) Restricting ridge-line development to ensure more natural views from lower reaches.
Protect wetlands.	Strategy 1D	(SUSTAINABILITY AND CLIMATE RESILIENCE)
riotect wetlands.	Strategy 1D	(SOSTAINABILITY AND CLIMATE RESILIENCE)
	Wetlands and waterbodies should be protected by a 100-feet buffer	2022 Recommendation/ Improve water quality by addressing root causes of
	zone that limits development. Wetlands should also be mapped,	contamination, protecting wetlands and watersheds, and aiding in their environmental
	•	
	accompanied with analysis of wetland functions. Permits are required	performance.
	for wetland disturbance. If there is no alternative to wetland	
	disturbance, mitigation measures can include wetlands replacement,	Associated Actions and Strategies/
	restoration, and enhancement.	1) Strictly define watercourses and whether that includes water bars, swales, and
		roadside ditches beyond natural streams, wetlands, or waterbodies.
	The Town should establish a minimum area for the wetlands,	2) Critical Environmental Areas need particular attention because recent high-
	waterbodies, and steep slopes under regulation. (Comp plan 2003, V-	intensity storms have resulted in increased flooding on their steep slopes.
	3)	Review effectiveness of current zoning code.
		3) Wetlands, streams and other water bodies should be designated as Critical
		Environmental Areas and registered with NY State. This should also include
		identified aquifer recharge zones.
		4) A riparian overlay zone with special protections should be considered for some
		sensitive areas, including Sparkill Creek, to guide development and
		redevelopment.
		5) With rare exception, development within the 100-year floodplain of any stream
		should be prohibited.
		6) Appropriate buffers to development near streams (typically within 100 feet)
		should be implemented wherever possible.
		7) Promote alternatives to the wide use of landscaping chemicals.
		8) Educate residents and landscapers about the detrimental impacts of the over-
		use of lawn and garden chemicals.
		9) Develop a Town wetlands protection ordinance that adheres to federal
		guidelines that regulate pesticide, fertilizer use, and pollution from run-off.
Maximize continuous open space	Strategy 1E	(OPEN SPACE AND RECREATION)
	Strategy IL	(OF LIN SPACE AND RECREATION)
areas.	Employ innovative zening techniques such as DLID and dustering to	Action and Stratogics /
	Employ innovative zoning techniques such as PUD and clustering to	Action and Strategies/
	preserve open space. PUD zoning, a type of floating zone, would	Use cluster development and conservation easements to preserve large contiguous
	specify types of uses, the amount of open space, and the maximum	areas of open space and protect environmentally sensitive areas.
	density of dwelling units per acre or FAR. Clustering, or average	
	density, reduces lot sizes and bulk control in a development without	
	reducing overall site density and the land not used for development is	
	considered permanent open space. (Comp Plan 2003, V-4)	

Mitigate flooding.	Strategy 1F	(SUSTAINABILITY AND CLIMATE RESILIENCE)
	The Town can create drainage districts for each of the Town's drainage areas (including Sparkill Creek, Hackensack Creek, Cherry Brook, Muddy Creek, and Pascack Brook) in conjunction with	2022 Recommendation/ Mitigate the harmful impacts of flood events through development regulations and preventative measures.
	addressing existing flooding as well as the future effects of	Actions and Strategies/
	development. " (<i>Comp Plan 2003,</i> V-4)	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.
Increase permeability and	Strategy 1F	(SUSTAINABILITY AND CLIMATE RESILIENCE)
ecological performance of	Land banking of required parking in which there are waivers of the	Astions and Stustenies/
parking lots.	paving of required parking, with landscaping provided on an interim basis.	Actions and Strategies/ 1) Require use of permeable parking surfaces where possible, and remove
	Dasis.	impermeable paving from vacant lands.
		2) Consider reducing minimum parking requirements.
		3) Prioritize tree planting along large swatches of paved areas including
		excessively wide roads and parking lots.
		4) Land banking of required parking.
Mitigate flooding.	Strategy 1G	(SUSTAINABILITY AND CLIMATE RESILIENCE)
	Work with Rockland County Drainage Agency to address flooding issues. (Comp Plan 2003, III-8)	2022 Recommendation/ Map Stormwater Conveyance including drainage areas, outfalls, and discharge points for all of Orangetown's municipalities.
		Astions and Stustenies/
		Actions and Strategies/ Expanded stormwater public education program should include awareness about the
		impacts of phosphorus, nitrogen, and pathogens on water bodies, and ways in which
		each stakeholder can take action to limit run-off and pollutants. At a minimum the
		education should include:
		 Impacts of stormwater discharges on water bodies.
		 Pollutants of concern and their sources.
		 Actions to reduce pollutants in stormwater runoff.
		 Hazards associated with illicit discharge and improper disposal of waste.
		 Ways to report illicit discharges and water quality issues.
Improve access and connectivity	Strategy 1H	(OPEN SPACE AND RECREATION)
between parks and open space	Create a Capabill Creak Creamus Path (Come Blow 2022 1/2)	2022 Becommendation / Dunids and the between Operation (Ashers)
and protect environmentally sensitive areas.	Create a Sparkill Creek Greenway Path. (Comp Plan 2033, V-2)	2022 Recommendation/ Provide greater continuity between Orangetown's local parks and open spaces, the regional open space corridor, and waterfront areas.
		Potential connections could be explored at:
		W Erie Street's intersection with the Clarke Rail Trail
		 Orangeburg Rd intersections with Veteran's Field, Independence Park, Greenbush
		Center, and Route 303 close to Clausland Mountain Park

Recommendation 2		<u> </u>	
"Make certain that proposed deve uncontrolled runoff." (<i>Comp Plan</i>	·	arefully examined prior to approvals, with	h mitigation measures provided to protect water resources and steep terrain from
Ensure that development near Lake Tappan and Clausland Mountain are carefully examined to protect water quality and mitigate uncontrolled runoff.	"When designing site plans and subdivisions on the steepest terrain, particularly the Clausland Mountain area, this Comprehensive Plan recommends that the town should not allow any development on slopes in excess of 35% unless proper mitigation measures are proposed, including all reasonable efforts to redesign the developments to avoid such slopes. Any development on slopes of 20% or greater should strive to utilize the natural terrain, thus minimizing possibilities for erosion. These thresholds are figures that have been used throughout both Rockland and Westchester Counties in order to protect steep slopes. Structures should be designed to fit into the hillside. Regrading should blend into the natural slope of the land, although the types of soils found on Clausland Mountain may warrant cuts and fills of up to 33%. Replanting should consist of indigenous vegetation, replicating the original landscaping to the extent possible. Measures to control soil erosion during construction should be required as part of the site plan or subdivision plan approval. (Comp Plan 2003, V-3)		(SUSTAINABILITY AND CLIMATE RESILIENCE) 2022 Recommendation/ Review and update local regulations to promote resilient construction practices, manage stormwater, and reduce flooding. Actions and Strategies/ 1) Develop guidelines for stormwater discharges from construction activities to reduce pollutants in runoff. 2) Develop guidelines to address post-construction stormwater runoff from new development and redevelopment projects. 3) Require the use of bioretention, permeable paving, and/or vegetated swales instead of paved gutters for new development and redevelopment projects.
	ditional active recreation, such as soccer, baseball, swimming, and otheres for additional indoor recreation facilities. This specifically includes lan		, its school districts, and local clubs and organizations, such as the Little League. In omp Plan 2003, II-1)
Acquire and develop open space for active recreation.	"The area to the immediate north of Veterans Memorial Highway has been recognized as an ideal park of public-private recreation site. If developed in this way, this site could act as an extension of the town's Veterans Memorial Park, which is located directly across Orangeburg Road to the south. Additional open space farther to the north, across Old Orangeburg Road, lying between the Gaelic Fields and Lake Tappan, might also be desirable open space that could become potential parkland or recreational facilities." (Comp Plan 2003, IV-24)		
Recommendation 4			
"Work with County and other con	nmunities (possibly including Clarkstown or Ramapo, among others), wh	nere appropriate, to secure outside fundir	ng for other acquisition of open space lands and recreation sites." (Comp Plan 2003, II-1)

the second secon	Т		(ODEN CRACE AND DECREATION)
orm regional collaborations to cquire funding for open space			(OPEN SPACE AND RECREATION)
equisitions.			2022 Recommendation/ Work with NYS legislature to establish a preservation fund an
aquisitions.			acquire property for open space, recreation, or historic preservation
ecommendation 5			
pgrade existing park facilities a	nd recreation programs, where necessary, to provide additional	recreational opportunities for current and future	populations; utilize recreation fees collected through the subdivision process, user
es, other town funds, and outsi	de grants to support the recreation program. Improve opportunit	ties for Town-owned indoor recreation for youth	and seniors, in additional to collaboration with schools and libraries." (Comp Plan
<i>03,</i> II-1)			
			T ()
prove and increase Town parks			(OPEN SPACE AND RECREATION)
d recreational opportunities.			Actions and Stratogics /
			Actions and Strategies/ 1) Transform defunct public waterworks and utilities, such as the former pump
			station at Towt Park, into reservoir and industrial gardens.
			Station at Tower ark, into reservoir and industrial gardens.
ecommendation 6			
reserve major portions of Rockl	and Psychiatric Center as open space, particularly the area to the	e east of Lake Tappan; secure and develop major	portions of that site for active recreation, with the possible participation of private
ctor recreation providers." (Con		. ,	
•			
llaborate with private sector	Strategy Locations	Yes, there is a program developed with	(OPEN SPACE AND RECREATION)
creation providers to develop	RPC site, particularly the area east of Lake Tappan.	United Water that allows recreational	
rts of RPC site for active		access to Lake Tappan in the summer	2022 Recommendation/ Repurpose defunct and obsolete infrastructure for
creation.		months on a permit basis	recreational use.
			Actions and Strategies/
			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.
ecommendation 7			
			wheelchair accessible trails, and access to water for passive recreation activities.
mprove, maintain and expand the		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities.
mprove, maintain and expand the		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities.
mprove, maintain and expand the cycle traffic along major roadwa		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities. rs and villages; seek to have designated trails provided, such as Rail-Trail, to help reduce
mprove, maintain and expand the cycle traffic along major roadwa		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities.
mprove, maintain and expand the cycle traffic along major roadward prove connections between the spaces and reduce bike		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities. rs and villages; seek to have designated trails provided, such as Rail-Trail, to help redu (OPEN SPACE AND RECREATION)
mprove, maintain and expand the cycle traffic along major roadward prove connections between the spaces and reduce bike		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities. rs and villages; seek to have designated trails provided, such as Rail-Trail, to help reduce (OPEN SPACE AND RECREATION) 2022 Recommendation/ Provide greater continuity between Orangetown's local park
mprove, maintain and expand the cycle traffic along major roadward prove connections between the spaces and reduce bike		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities. rs and villages; seek to have designated trails provided, such as Rail-Trail, to help reduce (OPEN SPACE AND RECREATION)
mprove, maintain and expand the cycle traffic along major roadwann prove connections between the spaces and reduce bike		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities. rs and villages; seek to have designated trails provided, such as Rail-Trail, to help reduce (OPEN SPACE AND RECREATION) 2022 Recommendation/ Provide greater continuity between Orangetown's local park and open spaces, the regional open space corridor, and waterfront areas.
mprove, maintain and expand the cycle traffic along major roadward prove connections between the spaces and reduce bike		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities. rs and villages; seek to have designated trails provided, such as Rail-Trail, to help reduce to the second seek to have designated trails provided, such as Rail-Trail, to help reduce to the second seek to have designated trails provided, such as Rail-Trail, to help reduce to the second seek to have designated trails provided, such as Rail-Trail, to help reduced to the second seek to have designated trails provided, such as Rail-Trail, to help reduced to the second seek to have designated trails provided, such as Rail-Trail, to help reduced to the second seek to have designated trails provided, such as Rail-Trail, to help reduced to the second seek to have designated trails provided, such as Rail-Trail, to help reduced to the second seek to have designated trails provided, such as Rail-Trail, to help reduced to the second seek to have designated trails provided, such as Rail-Trail, to help reduced to the second seek to have designated trails provided, such as Rail-Trail, to help reduced to the second seek to have designated trails provided, such as Rail-Trail, to help reduced to the second seek to have designated trails provided, such as Rail-Trail, to help reduced to the second seek to have designated trails provided to the second seek to have designated trails provided to the second seek to t
mprove, maintain and expand the cycle traffic along major roadward prove connections between the spaces and reduce bike		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities. rs and villages; seek to have designated trails provided, such as Rail-Trail, to help reduce (OPEN SPACE AND RECREATION) 2022 Recommendation/ Provide greater continuity between Orangetown's local park and open spaces, the regional open space corridor, and waterfront areas. Actions and Strategies/ Potential connections could be explored at:
mprove, maintain and expand the cycle traffic along major roadward prove connections between the spaces and reduce bike		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities. rs and villages; seek to have designated trails provided, such as Rail-Trail, to help reduce (OPEN SPACE AND RECREATION) 2022 Recommendation/ Provide greater continuity between Orangetown's local park and open spaces, the regional open space corridor, and waterfront areas. Actions and Strategies/ Potential connections could be explored at: 1) W Erie Street's intersection with the Clarke Rail Trail
mprove, maintain and expand the icycle traffic along major roadward prove connections between pen spaces and reduce bike affic along major roadways.		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities. rs and villages; seek to have designated trails provided, such as Rail-Trail, to help reduce (OPEN SPACE AND RECREATION) 2022 Recommendation/ Provide greater continuity between Orangetown's local park and open spaces, the regional open space corridor, and waterfront areas. Actions and Strategies/ Potential connections could be explored at: 1) W Erie Street's intersection with the Clarke Rail Trail 2) Orangeburg Rd intersections with Veteran's Field, Independence Park, Greenbush
mprove, maintain and expand the cycle traffic along major roadward prove connections between one spaces and reduce bike		between major open space areas, hamlet center	wheelchair accessible trails, and access to water for passive recreation activities. rs and villages; seek to have designated trails provided, such as Rail-Trail, to help reduce (OPEN SPACE AND RECREATION) 2022 Recommendation/ Provide greater continuity between Orangetown's local park and open spaces, the regional open space corridor, and waterfront areas. Actions and Strategies/ Potential connections could be explored at: 1) W Erie Street's intersection with the Clarke Rail Trail

commendation 8			
rovide access to Lake Tappan a	nd to the Hudson River for boating and other recreational opportunitie	es; work with the State, local villages, and p	private utility companies to achieve this objective." (Comp Plan 2003, II-2)
crease access to water and	Strategy Locations	Yes, there is a program developed with	(OPEN SPACE AND RECREATION)
arian recreational uses.	Lake Tappan and Hudson River	United Water that allows recreational	
		access to Lake Tappan in the summer	Actions and Strategies/
		months on a permit basis	Open space acquisitions of Towt Park, Gesner Park, and the Olsen Center.
commendation 9			
mnrovo onon chaco character a	long portions of the Town's major readways, particularly Poute 202, pe	ossibly with both a landscaped modian and	with wide front yard landscape strips for developments along the right-of-way, except
r the proposed hamlet centers.		ossibly with both a landscaped median and	with wide from yard landscape strips for developments along the right-of-way, excep
the proposed numer centers.	(6011) 1 1411 2003) 11 2)		
prove visual character of the	Strategy 9A		(OPEN SPACE & RECREATION)
wn's major roadways.			
	Introduce extensive landscaping and buffer treatment along road		Actions and Strategies/
	frontages, along property lines where non-residential uses abut		1) Enhance the Town tree ordinance to discourage the felling of trees, to require that
	residential uses, and around and within parking lots. (Comp Plan		replacements be native and drought-resistant species, and, to extend protection to
	2003, V-7)		younger trees.
			2) Minimize tree clearing and discouraging greenfield development.3) Plant trees in vacant and underutilized lands.
			4) Plant climate-resilient street trees for shade and aesthetics and applying for fundir
			to make this possible.
			5) Re-establish the Street Shade Tree planting program overseen by the Shade Tree
			Commission.
			6) Educate and provide resources to residents about suitable species, planting best
			practices, and regulations.
			7) Empower the Shade Tree Commission to oversee and recommend changes to the
			Town's tree ordinance.
			8) Work with the Planning Board, ACABOR, and the Commission to set standards for t
			landscaping plans.
			9) Prioritize tree planting along large swatches of paved areas including excessively
			wide roads and parking lots.
			10) Aggregate the bulk purchase of saplings with other municipalities in order to lower costs.
commendation 10	<u> </u>	1	COSTO
commendation 10			
rovide additional landscaping a	and urban design treatment within the major downtown hamlet center	s, particularly Pearl River; improve the visu	ual character of Orangeburg Rd between Route 202 and the Palisades Parkway with a
	ment program to identify this area a as a major center in Town." (Comp		
prove visual character of	Strategy Locations		(OPEN SPACE & RECREATION)
adways and proposed			
wntown hamlet centers to	Major downtown hamlet centers such as Pearl River and Orangeburg		Actions and Strategies/
tract economic development	Rd between Route 202 and the Palisades Parkway		
d new residents.			

Recommendation 11 "Create a Conversation Advisory of variety of environmental issues."	• •	ted in the Town in the 1970s and 1980s,	1) Enhance 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) Minimize tree clearing and discouraging greenfield development. 3) Plant trees in vacant and underutilized lands. 4) Plant climate-resilient street trees for shade and aesthetics and applying for funding to make this possible. 5) Re-establish the Street Shade Tree planting program overseen by the Shade Tree Commission. 6) Educate and provide resources to residents about suitable species, planting best practices, and regulations. 7) Empower the Shade Tree Commission to oversee and recommend changes to the Town's tree ordinance. 8) Work with the Planning Board, ACABOR, and the Commission to set standards for the landscaping plans. 9) Prioritize tree planting along large swatches of paved areas including excessively wide roads and parking lots. 10) Aggregate the bulk purchase of saplings with other municipalities in order to lower costs.
Prioritize conservation in the Town's future planning.		Yes, the Orangetown Environmental Committee was created.	(SUSTAINABILITY AND CLIMATE RESILIENCE)
Town 3 facule planning.		Committee was created.	2022 Recommendation/ Establish a Climate Working Group to seek funding for and to develop a Climate Action Plan.

Table 2: 2022 Comprehensive Plan Proposed Recommendations and Implementation Timeline

Legend: 2003 CARRY OVER Actions and Strategies

Subsection	2022 Recommendations	Intended Outcome	Actions and Strategies	Timeline (S/M/L) S= 1 year, M = up to 5 years, L = up to 10 years	Funding Sources and Partnerships
Sustainability & Climate Resilience	Establish a Climate Working Group to seek funding for and to develop a Climate Action Plan.	Create a timeline of actionable goals to make Orangetown more climate resilient.	At a minimum, the Climate Action Plan would lay out a road map and targets for limiting community greenhouse gas (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. Climate Action Plan action items can include: 1) Creating a realistic timeline for strategies and projects in the Plan 2) Establishing metric for tracking success and measuring the efficacy of strategies. 3) Forming regional collaborations for all major infrastructure projects. 4) Pursuing higher certifications for the NYS Climate Smart Community program and the NYSERDA Clean Energy Community program.		Town Board Orangetown Environmental Committee NYSERDA
	Expand on existing public awareness programs to include a wider range of stakeholders and educational information.	Engage community members and stakeholders to be active proponents of good stormwater management practices.	 Expanded stormwater public education program should include awareness about the impacts of phosphorus, nitrogen, and pathogens on water bodies, and ways in which each stakeholder can take action to limit run-off and pollutants. At a minimum the education should include: Impacts of stormwater discharges on waterbodies. Pollutants of concern and their sources. Actions to reduce pollutants in stormwater runoff. Hazards associated with illicit discharge and improper disposal of waste. Ways to report illicit discharges and water quality issues. 	S	Town Board Sparkill Creek Watershed Alliance Rockland County Stormwater Consortium
	Map Stormwater Conveyance including drainage areas, outfalls, and discharge points for all of Orangetown's municipalities.	Build a robust database to inform and build more incisive stormwater management strategies.	 Develop a GIS-based stormwater network geodatabase that enables improved stormwater analysis and datadriven management strategies Update the geodatabase as new infrastructure is and when inaccuracies in existing data require correction 	S	Town Board Sparkill Creek Watershed Alliance Rockland County Stormwater Consortium

Improve water quality by addressing root causes	Improve water quality.	1) Implement regulations for general Groundwater	M	Planning Board, with assistance
of contamination, protecting wetlands and		Protection Zones delineated by Rockland County		from Town Board and OBZPAE
watersheds, and aiding in their environmental		Department of Health.		
performance.		2) Strictly define watercourses and whether that includes		
		water bars, swales, and roadside ditches beyond		
		natural streams, wetlands, or waterbodies.		
		3) Establish watercourse buffer zones and set their widths		
		based on parameters such as bank stabilization,		
		nitrogen and phosphorus retention, erosion prevention,		
		wildlife habitat preservation, and flood mitigation.		
		4) Set zoning standards that regulate watercourse		
		alteration, new and expansion of preexisting structures,		
		preservation and increase of vegetation, public		
		recreation, roadway construction, utility structures, and		
		landscaping practices within buffer zones.		
		5) Introduce watercourse overlay districts that set primary		
		and secondary buffer zones as well as prohibiting		
		activity near rivers, perennial watercourses, and		
		intermittent watercourse.		
		6) Critical Environmental Areas need particular attention		
		because recent high-intensity storms have resulted in		
		increased flooding on their steep slopes. Review		
		effectiveness of current zoning code.		
		7) Wetlands, streams and other waterbodies should be		
		designated as Critical Environmental Areas and		
		registered with NY State. This should also include		
		identified aquifer recharge zones.		
		8) A riparian overlay zone with special protections should		
		be considered for some sensitive areas, including		
		Sparkill Creek, to guide development and		
		redevelopment.		
		9) With rare exception, development within the 100-year		
		floodplain of any stream should be prohibited.		
		10) Appropriate buffers to development near streams		
		(typically within 100 feet) should be implemented		
		wherever possible.		
		11) Promote alternatives to the wide use of landscaping		
		chemicals.		
		12) Educate residents and landscapers about the		
		detrimental impacts of the over-use of lawn and garden		
		chemicals.		
		13) Call on the Palisades Interstate Parkway and NY State		
		Thruway Authority to minimize the use of road salt on		
		these highways.		
		14) Enact a local law prohibiting pet waste on municipal		
		properties and prohibiting goose feeding.		

Review and update local regulations to promote resilient construction practices, manage stormwater, and reduce flooding.	Manage stormwater and reduce flooding.	 15) Develop a Town wetlands protection ordinance that adheres to federal guidelines that regulate pesticide, fertilizer use, and pollution from run-off. 16) Undertake a study to determine key areas in the Town requiring water protections. This regulatory update should include: 1) Guidelines for stormwater discharges from construction activities to reduce pollutants in runoff. 2) Guidelines to address post-construction stormwater runoff from new development and redevelopment 	S	Planning Board, with assistance from Office of Building, Zoning, Planning, Administration, and
		 projects. Requiring the use of bioretention, permeable paving, and/or vegetated swales instead of paved gutters for new development and redevelopment projects. 		Enforcement (OBZPAE)
Establish a green infrastructure and structural retrofitting program to reduce phosphorus, nitrogen and pathogen loading.	Filter and absorb surface runoff via environmentally sensitive methods.	Green infrastructure (GI) systems employ plant and soil systems to infiltrate, evapotranspire, and reuse stormwater at the location where it falls. The range of GI approaches 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 GI and manage surface runoffs: 1) Require use of permeable parking surfaces where possible, and remove impermeable paving from vacant lands. 2) Include GI Practices in street design specifications. 3) Establish a GI Grant Program. 4) Educate and encourage property owners to capture stormwater before it reaches the sidewalks. 5) Consider reducing minimum parking requirements. 6) Require all new subdivisions to include stormwater treatment for new roads in accordance with NYS requirements. 7) Consider setting limits to impervious surfaces on any lot. 8) Develop requirements for runoff from sidewalks and streets in urban areas to be directed into below grade drainage systems/practices. 9) Wherever possible, grade sidewalks and roadways to drain onto landscaped areas rather than onto the street.	S	Planning Board
Mitigate the harmful impacts of flood events through development regulations and preventative measures.	Flood mitigation.	 Introduce Town ordinances to protect steep slopes and ridgelines from erosion. Develop and implement a program of native planting. Limit the addition of impervious surfaces. 	М	Town Board and Planning Board

Reduce carbon emissions and promote healthier air quality.	Reduce carbon emissions.	 Identify and develop mitigation plans for areas at high risk of flooding, including making improvements to public infrastructure. Limit any new development in areas with high risk of flooding. Create regulations to limit air pollution coming from light industrial zoned areas. Set clear targets and provide timeline and guidelines for reducing carbon emissions. Limit truck traffic and deliveries during peak hours by incentivizing businesses to choose off-hour deliveries. Reroute truck traffic from residential areas and schools to major highways and roads. 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. Relocate commuter parking to existing developed areas with safe, sheltered bus stops to encourage the use of public transportation. Encourage the installation of electric vehicle (EV) charging stations in public areas. Beginning with schools and businesses, advertise and enforce efforts to limit the use of engine idling within 	M	Planning Board
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.	Reduce carbon emissions.	 the Town. Ban the use of gasoline powered leaf blowers. Assess energy usage / demand by land use, type of building, new development, and redevelopment. Retrofit municipal buildings for high energy efficiency and switch 100% of energy supply to renewable sources. Incentivize businesses and institutional buildings to do the same. Build on the success of the Town's Community Choice Aggregation Program and provide incentives for green energy such as fast-tracked approvals and tax incentives. Fully participate in the Rockland Community Power CCA program by adopting the 100% New York-sourced renewable electricity option as the default supply for residents and small businesses. Explore alternatives to the aging electrical grid infrastructure which 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, to protect critical infrastructure and lower the stress on the existing utility infrastructure. 	M	Planning Board

	Rigorously enforce Town Code section 4.27 to limit light pollution.	Limit light pollution	 6) Encourage building performance code certifications such as Energy Star and/or LEED for new construction. 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. 1) Strictly enforce Town code section 4.27 by limiting light pollution in building applications through the Architecture and Community Appearance Board of Review (ACABOR) board. 2) Promote awareness around the negative impacts of light pollution and educate the public about methods to tackle and reduce it. 	S	
Open Space & Recreation	Work with NYS legislature to establish a preservation fund and acquire property for open space, recreation, or historic preservation.	Acquire open space.	The Town should consider the following for acquisition and preservation: 1) The Hackensack River blue corridor, including open areas within the Rockland Psychiatric Center (RPC) site. 2) The Palisades Ridge green corridor where it intersects with the Sparkill Creek watershed and open areas in the southeast portion of Town 3) Dinosaur Property between Route 303 and North Greenbush Road 4) HNA property in Palisades (formerly the IBM Conference Center) 5) Gesner Avenue Park 6) Towt Park 7) Olsen Center 8) Central Avenue Field	M	Town Board
	Use cluster development and conservation easements to preserve large contiguous areas of open space and protect environmentally sensitive areas.	Protect open space and natural areas.	Cluster development groups residential buildings together on a site, thus saving the remaining land area for common open space, conservation, agriculture, and recreation. A conservation easement is an agreement by the landowner to sell the land's development rights to a non-profit organization that agrees to never use those rights, thereby preserving and conserving the land as open space.	М	Town Board
	Develop a viewshed protection ordinance.	Protect viewsheds to scenic vistas and the waterfront.	Viewshed protection is a significant aspect of ridgeline and open space management. A viewshed ordinance for Orangetown would protect sight line corridors to shorelines and ridgeline, as well as restricting ridge line development to ensure natural views from lower reaches. The following	М	Planning Board

		 items can be included in the viewshed protection ordinance: 1) Introduce overlay zoning in all villages and hamlets adjacent to the Hudson River, which places additional restrictions on existing zoned areas to control ridgeline development, density, grading, and vegetation. 2) Enforce existing viewshed overlay zoning that is currently poorly enforced. 3) Limit building heights based on proximity to viewsheds. 4) Designate view corridors, which are planned openings in the built environment that 5) Require viewshed analysis for ridgeline development and acquire ridgeline lands for preservation. 		
Repurpose defunct and obsolete infrastructure for recreational use.	Transform obsolete infrastructure into a recreational resource for users through cost-effective and environmentally beneficial methods.	 Encourage conversion of inactive rail lines into rail trail facilities to develop a network connecting with trails in adjacent municipalities. 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 paths, wheelchair accessible trails, and access to water for passive recreation activities. Repurpose safe materials from RPC demolition in other open space projects within and beyond the RPC site. Remediate open field brownfield sites that are associated with obsolete infrastructure, such as Orangetown Shopping Center, RPC Core Area, and the Orangeburg Pipe site, to become parks. Transform defunct public waterworks and utilities, such as the former pump station at Towt Park, into reservoir and industrial gardens. 	M	Town Board Planning Board Parks and Recreation Office Highway Department
Expand community programming and the ecological role of parks in habitat restoration.	Encourage residence to play active roles in promoting the ecological performance of Orangetown's parks and open spaces	In addition to providing space for 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. Potential programs and organizations that can be established include:	M	Parks and Recreation Office

			 Adopt a Park/Greenway program for local trails such as the Esposito Trail. Town land conservancy. Tree trust in collaboration with the Shade Tree Commission. 		
			 Citizen science programs for ecological monitoring in collaboration with Hudson River Estuary. The Parks and Recreation Office can partner with their County and State counterparts to create more connected community park programs throughout all parks located within Orangetown. Community programming such as farm beds, community gardens, and nature centers in partnership with schools and on their open space and recreational facilities. 		
im	ducate young residents about environmental mportance of parks and promote park tewardship.	Encourage young residents to play active roles in engaging with and advocating for Orangetown's parks and open spaces	 The Parks and Recreation Office, in collaboration with the Orangetown Environmental Committee, can institute a local park and environmental stewardship program for youths and students that focuses on: 1) Environmental education covering nature conservation, hiking trail maintenance, mapping storm drains, plant and wildlife management, cleaning up streams, citizen science, and participate in conservation projects throughout Orangetown as well as the region. 2) Engaging student volunteering and service efforts to create impactful open space and natural resource improvement projects. 3) Increasing engagement with different forms of recreation and catalyze enhancement projects for sports activities in parks, including baseball, golf, playgrounds, swimming, and hiking, etc. 	M	Parks and Recreation Office Town Board Orangetown Environmental Committee
m	Develop sustainable best practices for park naintenance, use of materials, and water ifficiency.	Increase climate resilience of trees and vegetation in Orangetown parks and open spaces and minimize environmental footprint of suburban landscaping practices.	 Prohibit motorized vehicles in parks. Limit bicycles on trails where their use could cause damage. Eliminate park litter. Limit use of artificial turf on playing fields. These cause athletic injuries, increase field temperatures, produce inhalable particles that contain undesirable compounds including per-fluorinated chemicals (PFAS, PFOA). Select construction to minimize environmental impact, have a long service life, be reused and repurposed when possible, improve ground permeability, and increase pavement surface albedo for reducing heat absorption. Use synthetic turf judiciously, only when its benefits are maximized with consideration to flooding and stormwater management consequences. 	S	Parks and Recreation Office

		 Improve water efficiency by utilizing low-impact irrigation systems, creating absorbent landscapes, protecting and restoring natural hydrology, and introducing GI as part of park infrastructure. Soil management should maximize compost use (instead of chemical fertilizers), minimize soil disturbance, and prioritize rejuvenation of existing soils before importing new soils. Planting and vegetation strategies can take on an ecological approach with diversified plant species. The Town can partner with the private sector and local community to assist with park maintenance. 		
Consider and adopt urban forest and landscaping best practices.	Increase climate resilience of trees and vegetation beyond parks and open spaces and minimize environmental footprint of suburban landscaping practices.	 Actions and initiatives can include: 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. Minimizing tree clearing and discouraging greenfield development. Planting trees in vacant and underutilized lands. Planting climate-resilient street trees for shade and aesthetics and applying for funding to make this possible. Re-establishing the Street Shade Tree planting program overseen by the Shade Tree Commission. Educating and providing resources to residents about suitable species, planting best practices, and regulations. Empowering the Shade Tree Commission to oversee and recommend changes to the Town's tree ordinance. Working with the Planning Board, ACABOR, and the Commission to set standards for the landscaping plans. Prioritizing tree planting along large swatches of paved areas including excessively wide roads and parking lots. Aggregating the bulk purchase of saplings with other municipalities in order to lower costs. Land banking of required parking, Transition to impermeable paving for required parking and provide landscaping on a regular basis. 	S	Planning Board, with input from Parks and Recreation Office Shade Tree Commission ACABOR
Provide greater continuity between Orangetown's local parks and open spaces, the regional open space corridor, and waterfront areas.	Increase user access to Orangetown's open spaces and waterfronts.	Potential connections could be explored at: 1) W Erie Street's intersection with the Clarke Rail Trail 2) Orangeburg Rd intersections with Veteran's Field, Independence Park, Greenbush Center, and Route 303 close to Clausland Mountain Park	M	Parks and Recreation Department, with assistance from Highway Department

		3) Introduce connections between adjacent open spaces that lack connection, such as RPC property and Veterans Field being separated by Orangeburg Rd.	