

CPUC Subcommittee: Environment, Climate Change, and Resiliency

Draft of final Goals from subcommittee:

Goals:

I. Protect the quality of life and Town character by reducing the impacts from climate. (Resiliency)

Objectives for Goal I.

- a. By 2030 complete the 10 Action Steps necessary to achieve certification as a Climate Smart Community through the Climate Smart NY program <https://climatesmart.ny.gov/actions-certification/getting-started/>.
- b. Encourage and incentivize resiliency through town practices, procedures, rules and regulations wherever practicable. Including but not limited to improving stormwater infrastructure, protecting wetlands and other open space, reducing heat island by preserving and planting trees, managing town forests and open space for ecosystem health, reducing wildfire risk, creating alert systems and plans for extreme weather events, requiring conservation subdivision design wherever appropriate, and improving environmental education and outreach at Town parks.

II. Reduce community wide contributions to climate change pollution by reducing greenhouse gas emissions. (Contributes to climate change)

Objectives for Goal II.

- a. By 2030 complete the 10 Action Steps necessary to achieve certification as a Climate Smart Community through the Climate Smart NY program <https://climatesmart.ny.gov/actions-certification/getting-started/>.
- b. Encourage and incentivize alternative clean energy production wherever feasible, including at Town owned facilities, improve clean transportation systems and associated infrastructure (EV Town fleet, EV charging infrastructure, bike lanes, etc), encourage alternative agricultural practices that sequester carbon (forest pastures, no-till seeding), encourage/require LED external lighting and fixtures that reduce ambient light pollution, and be proactive in siting renewable energy production.

Initial Meeting:

Wednesday, August 9, 2023, via Zoom

Present: Peter Barber (Town Supervisor), Ken Kovalchik (Town Planner), Laura Barry, Caitlin Ferrante, Neil Gifford, Stephen Wilson

Subcommittees: each subcommittee will look at relevant portions of the Comp Plan, update any goals/recommendations if needed. Is there anything else we need to address as we look forward to the next 20 years, etc?

Purpose: Recommendations on updated goals to send to CPUC for November 2023 meeting.

Meetings aren't required to follow open meetings law, but Town is trying to be transparent. Looking to plan recurring meetings of subcommittees. Can meet via zoom. Also open to meet in person/gatherings in areas around Town.

Important Dates:

- Sept 1st: Draft Recommendations for Goals due
- Middle/End of Oct: Final recommendations from Subcommittees
- Nov 14th: Summarizing full Subcommittee recommendations to CPUC

Next Subcommittee meetings:

- 4pm EMS Station 1, Thursdays (weekly, as needed), starting Thursday, 8/17/23

From Jesse at MJ (Email 7/27/23):

As this involves an *update* to the existing Comprehensive Plan for Guilderland, the work of the subcommittee will be to:

1. Review the *existing* goal(s) pertaining to the natural environment and determine whether changes are needed to the wording and/or content of the stated goal(s), to account for the changing needs of the community/region;
2. Generate a list of draft recommendations/objectives/action items to achieve the updated goal(s).

The existing goal for Natural Resources (Goal B.7) can be found on page 3-15 of the *Guilderland Comprehensive Plan 2000* (available in hyperlinked folder). Documents relevant to the work of this subcommittee can be accessed by clicking the hyperlink [HERE](#). Summaries of public input received through the update process can be viewed via [the Project Website](#).

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Meeting #2:

Thursday, August 17, 2023, EMS Station #1

Present: Ken Kovalchik (Town Planner), Laura Barry, Caitlin Ferrante, Neil Gifford, Stephen Wilson

Are we putting together several goals, or are we overlaying environmental issues over other subcommittees?

Watervliet Reservoir: high setbacks/buffers (town rules/laws)

Setbacks as follows:

Reservoir mean high water mark setback = 500';

Watercourse flowing directly into the reservoir = 250' setback on either side of the watercourse;

All other watercourses = 100' setback on either side of the watercourse.

We need to really start planning for larger and more frequent storm systems. High rain events, hot weather events. Buffering the community from these damaging storms

Things to consider:

- Open space conservation

- Smarter planning along Rt 20 - more trees, pedestrian-friendly, further setbacks from the road
- Conservation Easement Program (School districts we need to discuss tax breaks with: Guilderland, Voorheesville, Schalmont)
- Clustering subdivisions - microgrids (Idea: density bonus for micro solar division)
- Traffic - culvert maintenance
- Flood water and erosion

Other things discussed:

Heat islands

Porous pavement - pros/cons

Green roofing - pros/cons, white roofs are better than black (reflects heat vs absorb)

Rainwater collection

Solar panels - different options: roofs, pedestals, solar canopies

Ideas to promote: All new subdivision roads need to have gray asphalt/concrete

Wastewater treatment

What are we tinkering with?

- Water
- Roofs
- Air related
- Energy

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Two "Bins" of Thought:

1. Encouraging resiliency
2. Reducing emissions

Bethlehem - no further extensions of their water/sewer districts (stops development and focuses on areas ripe for redevelopment in the town).

CDTA - no service to Pine Bush, potentially shrinking their Flex system

Goal from 2000:

Agriculture, Open Space, and Environment:

"Protect important agricultural, natural, and open space resource, which contribute to the diversity, character aesthetics, economy, and general health and welfare of the Town.

Resources such as the Watervliet Reservoir and watershed, viable farmland, ravines, woodlots, streams, aquifers, wetlands, floodplains, the Escarpment, view sheds and the Pine Bush are recognized for their role in drainage, water supply, agriculture, aesthetics, recreation, and wildlife habitat."

(From Neil)

Environment, Climate Change and Resiliency Committee

Possible Goals (note it is my understanding that this is separate from Agriculture, Natural Resources and Open Space):

1. Reduce impacts from climate change on the quality of life and the character of the Town.

2. Reduce townwide contributions to climate change.

Encourage and incentivize resiliency.

Stormwater: (Open Space protection, stormwater infrastructure, etc...)

Heat protection: Open Space protection, street trees and greenspace, light colored roofs and pavement, etc...)

Properly managing town forests - to reduce the risk of wildfire

Making explicit alarm systems for flooding and wildfire

Encourage and incentivize reducing emissions.

Alt and green Transportation and associated infrastructure (bike lanes, ebikes, charging stations, etc...)

Agriculture and Open space protection (Functional ecosystems, and greenspace are best CO2 sequestration)

Encourage green energy production and infrastructure. (Solar, Wind, Hydro, microgrids, transmission, etc...)

RESOURCES:

In addition to the County's Resiliency Plan, there are several NYSDEC resources that may be useful for our group: <https://www.dec.ny.gov/energy/43384.html>. In particular, I found the attached report especially useful in understanding what we are looking at dealing with.

Meeting #3:

Thursday, August 24, 2023, EMS Station #1

Present: Laura Barry, Gillin Felton, Neil Gifford, Stephen...

Building off last week's goal

1. Reduce impacts from climate change on quality of life and the character of the Town.
2. Reduce townwide contributions to climate change.

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Encourage and incentivize resiliency.

- Stormwater: (Open Space protection, stormwater infrastructure, etc...)
- Heat protection: Open Space protection, street trees and greenspace, light colored roofs and pavement, etc...)
- Properly managing town forests - to reduce the risk of wildfire and managing for healthy ecosystems (addressing invasive species, clearing of invasive flora/fauna)
- Pest Management: Reducing use of pesticides/herbicides (example neonics, glyphosate/RoundUp), maintaining wetlands
- Making explicit alarm systems for flooding and wildfire to warn town residents of dangers
- Town education opportunities on climate resiliency and environmental issues. (Look into ways the Town can engage with [Green Corps](#))
- Language in Comp Plan to support Conservation Clustering?

Encourage and incentivize reducing emissions.

- Alt and green Transportation and associated infrastructure (bike lanes, ebikes, charging stations, etc...)
- Agriculture and Open space protection (Functional ecosystems, and greenspace are best CO2 sequestration)
- Encourage green energy production and infrastructure. (Solar, Wind, Hydro, microgrids, transmission, etc...) - can we have solar arrays on lawns in residential areas?

- Town leading by example: changing to LED lights, light fixtures (to prevent light pollution - see Colonie town laws), Town Fleet, Charging stations, any other ways the town can lead on addressing emissions
- Town shall be proactive where renewable energy can be cited

Neil will send Caitlin rationale bullet points on why we need to address resiliency.

(From Neil 9/6/23) NOTE: Consultants may want to consider contacting the NYS Climate Smart Community Coordinator for help in drafting this section of the Comprehensive Plan Update. Guilderland is already registered in the Climate Smart Community program, according to the NYS website.

Here is her contact information.

Tara Donadio

Capital District Regional Planning Commission

Tara.Donadio@cdrpc.org

(518) 453-0850

Bullet points on why...

Why address resiliency? Three fundamental reasons...

1. **It's happening:** "Some [physical effects of climate change](#) are already "locked in" because of past GHG emissions and slow global and national response to addressing climate change." Impacts appear to be happening more quickly than expected, not only in increasing average temperatures over time, but more importantly and impactfully, through increasingly frequent and powerful extreme events (e.g. exceptional precipitation events, exceptional heat, etc.). Resiliency can reduce the impact of these changes on the community, its infrastructure and its economy.
2. **It's a wise investment of planning and dollars:** Investing in climate mitigation through proactive planning and incremental improvements (protecting wetlands and other important open space, improving stormwater systems, reducing heat islands, etc.) is likely less expensive than simply responding to catastrophic events when they occur, as we see repeatedly in other communities (eg. VT flooding in 2023, extremely late frost in 2023, Canadian and HI wildfires, etc.)
3. **It's more effective:** Reducing greenhouse gas pollution and improving resilience community wide is much more likely to have a desired impact that benefits residents and businesses than individuals working separately.

Important context for the Town's consultants from NYSDEC website [Climate Change Effects and Impacts - NYS Dept. of Environmental Conservation](#). The hyperlinked references below have the details that may be worth summarizing and referencing in the Comp Plan Update to explain why action is needed or why the new goals are recommended.

"New York's [Responding to Climate Change in New York State](#) (ClimAID) report (2011, 2014) (leaves DEC website), the [National Climate Assessment](#) (2018) (leaves DEC website), DEC [Observed and Projected Climate Change in NYS](#) (PDF), and other climate impact assessment reports show that a variety of climate change impacts have already been observed across the northeastern United States and in [New York State](#). These climate change reports clearly show, based on scientific

data, that significant climate change impacts are already occurring. People, plants and wildlife, and ecosystems are facing an uncertain future unless adequate actions are taken to adapt to climate change impacts already unfolding and expected to intensify over time. GHG emissions must also rapidly and significantly be reduced in the near future and eventually eliminated to prevent the increasingly harmful impacts of climate change over the next several decades.”

I found these facts from the NYS ClimAid Report useful for context...

Changes in Extreme Events

- Extreme heat events are very likely to increase and extreme cold events are very likely to decrease throughout New York State.
- Intense precipitation events are likely to increase. Short-duration warm season droughts will more likely than not become more common.

Meeting #4:

Thursday, Sept 7, 2023, EMS Station #1

Present: Laura Barry, Caitlin Ferrante, Neil Gifford

Working to finalize the goals we had put together during Meeting #3:

1. Reduce impacts from climate change on the quality of life and the character of the Town.
2. Reduce townwide contributions to climate change.

*** Encourage and incentivize resiliency.**

WHY (from NYS ClimAid Report):

- Extreme heat events are very likely to increase and extreme cold events are very likely to decrease throughout NYS.
- Intense precipitation events are likely to increase. Short-duration warm season droughts will more likely than not become more common.

HOW:

- Stormwater: (Open Space protection, stormwater infrastructure, etc...)
- Heat protection: Open Space protection, street trees and greenspace, light colored roofs and pavement, etc...)
- Properly managing town forests - to reduce the risk of wildfire and managing for healthy ecosystems (addressing invasive species, clearing of invasive flora/fauna)
- Making explicit alarm systems for flooding and wildfire to warn town residents of dangers
- Pest Management: Reducing use of pesticides/herbicides (example neonics, glyphosate/RoundUp), maintaining wetlands
- Town education opportunities on climate resiliency and environmental issues. (Look into ways the Town can engage with [Green Corps](#))
- Town website: have a page on the Town website with education for General Public (native plants, tree committee, how to be climate resilient as a citizen)
- Language in Comp Plan to support Conservation Clustering?

*** Encourage and incentivize reducing emissions.**

HOW:

- Alt and green Transportation and associated infrastructure (bike lanes, ebikes, charging stations, etc...)
- Agriculture and Open space protection (Functional ecosystems, and greenspace are best CO2 sequestration)
- Encourage green energy production and infrastructure. (Solar, Wind, Hydro, microgrids, transmission, etc...) - can we have solar arrays on lawns in residential areas?
- Town leading by example: changing to LED lights, light fixtures (to prevent light pollution - see Colonie town laws), EV Town Fleet, Charging stations, any other ways the town can lead on addressing emissions
- Town shall be proactive where renewable energy can be cited

Rationale for why we need to address resiliency:

- **It's happening:** Impacts appear to be happening more quickly than expected, not only in increasing average temperatures over time, but more importantly and impactfully, through increasingly frequent and powerful extreme events (e.g. exceptional precipitation events, exceptional heat, etc.). Resiliency can reduce the impact of these changes on the community, its infrastructure and its economy.
- **It's a wise investment of planning and dollars:** Investing in climate mitigation through proactive planning and incremental improvements (protecting wetlands and other important open space, improving stormwater systems, reducing heat islands, etc.) is likely less expensive than simply responding to catastrophic events when they occur, as we see repeatedly in other communities (e.g. VT flooding in 2023, extremely late frost in 2023, Canadian and HI wildfires, etc.)
- **It's more effective:** Reducing greenhouse gas pollution community-wide/at the municipal level is more likely to have a desired impact for everyone than individuals working separately.

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From Neil:

Important context for the Town's consultants from NYSDEC website [Climate Change Effects and Impacts - NYS Dept. of Environmental Conservation](#). The hyperlinked references below have the details that may be worth summarizing and referencing in the Comp Plan Update to explain why action is needed or why the new goals are recommended.

"New York's [Responding to Climate Change in New York State](#) (ClimAID) report (2011, 2014) (leaves DEC website), the [National Climate Assessment](#) (2018) (leaves DEC website), DEC [Observed and Projected Climate Change in NYS](#) (PDF), and other climate impact assessment reports show that a variety of climate change impacts have already been observed across the northeastern United States and in [New York State](#). These climate change reports clearly show, based on scientific data, that significant climate change impacts are already occurring. People, plants and wildlife, and ecosystems are facing an uncertain future unless adequate actions are taken to adapt to climate change impacts already unfolding and expected to intensify over time. GHG emissions must also rapidly and significantly be reduced in the near future and eventually eliminated to prevent the increasingly harmful impacts of climate change over the next several decades."

Meeting #5:

Thursday, Sept 14, 2023, EMS Station #1

Present: Laura Barry, Caitlin Ferrante, Neil Gifford, Stephen Wilson

From Public: Joan McKeon, Karen White

For 9/14/2023 Meeting:

Discuss Climate Smart NY. Getting started page here: <https://climatesmart.ny.gov/actions-certification/getting-started/>

TOG must have already done steps 1 and 2; Pass a resolution to join the program, and Register. Curious who the designated primary person is within the Town. A user guide and tutorial videos for the Climate Smart program are available on the website.

You can see the 10 Action Steps to certification here: [Certification Actions](#) Achieving Certification in the program by a certain date or implementing each of the subsequent steps by certain dates, could be a recommended objective?? Certification is a point-based scoring system, which is detailed at the action link.

This may be too much detail for a Comp Plan update, beyond the goals we have. However, Is developing a Climate Smart plan, and designating/hiring a point person to shepherd the whole process, a couple of reasonable objectives we should recommend within the goals we have already discussed?

Concerns from public:

- Smoke and human health
- Something to include: how can we address the continued use of burning fossil fuel
- Noise pollution
- Light pollution

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Goals going forward:

- **Reduce impacts from climate change on the quality of life and the character of the Town. (Resiliency)**
- **Reduce townwide contributions to climate change.**
 - To do this, the Town shall implement, to the fullest, its Climate Smart Communities enrollment

*** Encourage and incentivize resiliency.**

WHY (from NYS ClimAid Report):

- Extreme heat events are very likely to increase and extreme cold events are very likely to decrease throughout NYS.

- Intense precipitation events are likely to increase. Short-duration warm season droughts will more likely than not become more common.

HOW:

- Stormwater: (Open Space protection, stormwater infrastructure, etc...)
- Heat protection: Open Space protection, street trees and greenspace, light colored roofs and pavement, etc...)
- Properly managing town forests - to reduce the risk of wildfire and managing for healthy ecosystems (addressing invasive species, clearing of invasive flora/fauna)

- Making explicit alarm systems for flooding and wildfire to warn town residents of dangers
- Pest Management: Reducing use of pesticides/herbicides (example neonics, glyphosate/RoundUp), maintaining wetlands
- Town education opportunities on climate resiliency and environmental issues. (Look into ways the Town can engage with [Green Corps](#) or new [Climate Corps](#))
- Town website: have a page on the Town website with education for General Public (native plants, tree committee, how to be climate resilient as a citizen)
- Language in Comp Plan to support Conservation Clustering?

*** Encourage and incentivize reducing emissions.**

HOW:

- Alt and green Transportation and associated infrastructure (bike lanes, ebikes, charging stations, etc...)
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- Encourage green energy production and infrastructure. (Solar, Wind, Hydro, microgrids, transmission, etc...) - can we have solar arrays on lawns in residential areas?
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- Town shall be proactive where renewable energy can be cited

TO DO:

- Create solid goals and objectives - find language
- Provide the why/how language to MP (ask them to include)

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From Peter:

Easements:

With State legislative approval, we established a conservation easement program that provides real property tax breaks for landowners who agree to protect environmentally sensitive areas. The Town and Albany County are participating and we're working on getting schools districts (five of them) on board.

Tree/Forest Preservation

We also created a Tree Preservation Committee that will work with reviewing boards and departments to protect native species and encourage proper plantings. We're seeking grants for a tree inventory and expert assistance in preparing a forestry plan.

To get the process starting, I was going to contact you to see if you could provide the new committee with an overview on the Preserve's efforts to promote native trees.

Solar PV Generation:

In addition to a solar facility near Amsterdam for which the Town receives credits on its National Grid, the Town signed an option contract with GE Solar for a community solar facility on the Town's former landfill. This effort was supported by the EPA. Its future success is dependent upon upgrades to National Grid's capacity infrastructure.

We also are a partner in a Community Choice Aggregation program, an effort with neighboring municipalities to combine purchasing power to acquire green energy at lower costs. As you

may know, that effort has stalled because of ongoing supply issues and complicated regulatory requirements. We're considering a pivot to community solar projects.

Energy Conservation:

We have just completed the purchase of National Grid's street luminaries (612 in total) and converted them to LED.

Electric Vehicle Charging:

We've installed free EV charging stations, and we're working on installations in town parks.

Town Parks - Linear Recreation & Open Spaces/Non-street connectivity:

Ken and CJ (Parks) can fill you in on open space and park expansions, and are efforts to create non-motorized connectivity between neighborhoods and points of interest.

More details about these efforts can be found under "[Environmental Initiatives](#)" at the Town Supervisor's webpage.

Noise pollution: consider ways of reducing noise pollution for people and nature.

Trees and shrubs, road surfaces, sound walls, ect...

Draft of final Goals and Subcommittees

Goals:

II. Protect the quality of life and Town character by reducing the impacts from climate (Resiliency)

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Objectives for Goal I.

- c. By 2030 complete the 10 Action Steps necessary to achieve certification as a Climate Smart Community through the Climate Smart NY program <https://climatesmart.ny.gov/actions-certification/getting-started/>.
- d. Encourage and incentivize resiliency through town practices, procedures, rules and regulations wherever practicable. Including but not limited to improving stormwater infrastructure, protecting wetlands and other open space, reducing heat island by preserving and planting trees, managing town forests and open space for ecosystem health, reducing wildfire risk, creating alert systems and plans for extreme weather events, requiring conservation subdivision design wherever appropriate, and improving environmental education and outreach at Town parks.

II. Reduce community wide contributions to climate change pollution by reducing greenhouse gas emissions. (Contribute less to climate change).

Objectives for Goal II.

- c. By 2030 complete the 10 Action Steps necessary to achieve certification as a Climate Smart Community through the Climate Smart NY program <https://climatesmart.ny.gov/actions-certification/getting-started/>.

- d. Encourage and incentivize alternative clean energy production wherever feasible, including at Town owned facilities, improve clean transportation systems and associated infrastructure (EV Town fleet, EV charging infrastructure, bike lanes, etc), encourage alternative agricultural practices that sequester carbon (forest pastures, no-till seeding), encourage/require LED external lighting and fixtures that reduce ambient light pollution, and be proactive in siting renewable energy production.

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