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June 15, 2022

VIA ELECTRONIC MAIL

Draft Scoping Plan Comments NYSERDA 17 Columbia Circle Albany, NY 12203-6399

Re: Draft Scoping Plan Comments

Dear Co-Chairs Harris and Seggos and Members of the Climate Action Council:

The New York Division of the Nature Conservancy respectfully submits the following comments with respect to the Draft Scoping Plan issued by the New York State Climate Action Council on December 31, 2021.

The Nature Conservancy is a global, science-based conservation organization operating in all 50 states and in over 70 countries, with decades of experience protecting the land and waters upon which all life depends. With the support of more than one million members globally, the Conservancy has protected more than 120 million acres of land, 5,000 river miles and currently manages more than 150 marine conservation projects around the world. The Conservancy is committed to using a science-based approach and working collaboratively with stakeholders to tackle climate change and biodiversity loss.

Introduction

The Nature Conservancy applauds the NYS Energy Research Development Authority (NYSERDA), the Department of Environmental Conservation (NYSDEC) and the members of the Climate Action Council ("CAC" or "Council"), Advisory Panels, and the Climate Justice Working Group (CJWG) for their leadership and approach in developing a comprehensive Draft Scoping Plan ("Plan").

We commend the Council for drafting a thorough Plan including strategies to address economywide greenhouse gas (GHG) emissions and sequestration opportunities in New York State and invest in adaptation and resilience measures. The strategies outlined in the plan are ambitious and extensive, but as the Council notes, "while the scale of the effort to implement the Climate Act is enormous, so is the challenge it is meant to address."

We agree with and underscore the Council's statements that immediate and bold action on both climate mitigation and adaptation are imperative. Even if we are successful at achieving our climate mitigation goals, New York will still have a great deal of climate-related impacts to contend with—all climate impacts are equally important, and we must accordingly address that need with equal emphasis.

We commend the Council and the CJWG for applying an equity lens throughout this Plan and, as the Climate Act ("Act") requires, recommending strategies to ensure benefits reach "communities that have historically witnessed and continue to bear the disproportionate health and socioeconomic burdens of environmental pollution and climate change." The Nature Conservancy also applauds the CJWG for developing draft criteria for defining Disadvantaged Communities to guide equitable implementation of the Act. We especially appreciate that once finalized this will be an important tool to guide equitable conservation and environmental policy work beyond the Act. The Nature Conservancy looks forward to incorporating this guidance into our strategies and projects.

We would also like to underscore the Council's recognition that the successful implementation of the Act will provide both environmental and economic benefits for New Yorkers <u>and</u> serve as a model for climate action across the United States and globally. New York's leadership in creating a zero-emission economy to prevent further global warming is essential, and as a global organization we are grateful for the opportunity to point to New York's progressive action to guide and inspire action elsewhere.

Below we provide overarching comments on areas that intersect throughout the Plan. That will be followed by focused comments on the following specific sections: Analysis of the Plan (Chapter 9), Transportation (Chapter 11), Electricity (Chapter 13), Agriculture and Forestry (Chapter 15), Economy-Wide Strategies (Chapter 17), Land Use (Chapter 19), and Adaptation and Resiliency (Chapter 21).

We thank the Council for recognizing that the Draft Scoping Plan is, as stated, "the foundation of extensive collaboration." It will take the collective effort of governments, organizations, and stakeholders across the State to achieve the goals of the Act. The Nature Conservancy remains committed to supporting New York as it works to achieve its climate mitigation and clean energy goals and invest in adaptation and resilience measures.

Overarching Comments on the Plan

Throughout the Plan there are strategies creating incentives for various climate policy outcomes including smart growth, complete streets, building efficiency, infrastructure upgrades, and other local projects. These are fundamental local government concerns, and accordingly all aspects of the Plan would benefit from local governments effectively working to advance goals and objectives related to carbon emissions reduction. One way of achieving this would be incentives and other methods of enhancing local uptake of key programs or practices that will drive down

pollution. The Plan, however, does not contain recommendations aimed at ensuring the integration of climate objectives in municipal planning and decision-making statewide. These might include, for example, amending the New York State Town Law to ensure local planning through Comprehensive Plans, zoning laws and regulations, and building codes include evaluations of emission reductions and climate impacts.

Further, the Plan should address how state funded programs across all sectors will, to the extent practicable, be reoriented and charged with meeting the state's climate goals, along with other program objectives. Implementing this plan will require a "whole government approach" and as a practical matter to be effective it must be a priority across agencies and sectors including but not limited to economic development, transportation, health, education and higher education, housing, and many more. Because the state provides billions each year to projects in sectors outside the environment that materially impact on the ability to achieve the goals of the Act, we must ensure that *all* state entities are working to integrate climate mitigation (and adaptation) objectives into public funding programs. For example, should the Regional Economic Development Councils continue to evaluate projects, prioritize regional initiatives and provide funding to communities across the state, their charge must also include ensuring projects will advance the state's climate goals. We recommend considering using the Consolidated Funding Application as a 'low hanging fruit' opportunity to start integrating climate considerations into a variety of programs.

Finally, there is no doubt that local community leadership will be the foundation for successful and timely achievement of the Act's goals. Our experience working with local communities has demonstrated that effective engagement often demands going beyond what is required by law. We encourage the Council to ensure that all entities and local officials responsible for implementation of the strategies outlined in the Plan prioritize early outreach to and thorough engagement with local communities and stakeholders. A collaborative, 'design thinking' approach will both jump start the local buy-in and serve to head off problems before they emerge.

Evaluation of the Plan

We commend the Council for undertaking the Integration Analysis outlined in Chapter 9 and Appendix G. The mitigation scenarios will help the Council evaluate the total potential costs and potential economic and non-economic benefits of meeting its GHG obligations. A notable omission, however, is that the approach used did not take into consideration land use constraints. That will result in an incomplete picture of the environmental and social costs, benefits, and tradeoffs of achieving the different scenarios, and is likely to result in avoidable controversies and other obstacles to implementation.

Accordingly, we strongly recommend the Council build on this excellent analysis by running the models under three-to-four environmental constraint scenarios. Doing so will importantly help the state identify potential barriers to meeting its climate goals and help the Council and the public design policy, planning, and market solutions that achieve the state's goals and maximize benefits for people, wildlife, and society – a critical ingredient of success.

A similar approach was taken by The Nature Conservancy in California in its Power of Place study¹ and has been the subject of a peer-reviewed publication². The study modeled California's 2050 electricity sector to determine optimal pathways to meet the state's clean energy goals and economy-wide decarbonization targets, while also considering ecological constraints and impacts. Researchers found that with appropriate planning, California can achieve its clean energy goals while limiting development on important natural and agricultural lands. The conservation data developed for the study and the results are now being used by the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC) in the development of the statewide Integrated Resource Plan and are reflected in the state's implementation study for Senate Bill 100 – California's 100 percent zero-carbon energy mandate. New York's approach must be similarly comprehensive – while trade-offs will, of course, be necessary, a thoughtful and comprehensive approach that expressly considers land use constraints will under any circumstances result in a better outcome.

Sector Strategies

Chapter 11 – Transportation

Given the transportation sector is a large and growing source of emissions in New York State, The Nature Conservancy appreciates ongoing efforts by the State to reduce transportation emissions. As the Plan states, much more must be done to meet the Climate Act goals. We commend the Council for developing a robust suite of strategies for the transportation sector, including comprehensive strategies for zero-emission vehicle (ZEV) adoption and relevant infrastructure development. Complementary to ZEV deployment, the Council has recommended important strategies to reduce vehicle miles traveled (VMT) and incentivize lower emission transportation options via public transit and mobility alternatives, smart growth and mobilityoriented-development, and market-based solutions. In addition to reducing GHG emissions, all strategies in this section would have public health benefits statewide via improved air quality, particularly in Disadvantaged Communities overburdened by air pollution from vehicle exhaust.

1. <u>Smart Growth and Mobility-Oriented Development (T6 – T9)</u>

The Nature Conservancy agrees that encouraging smart growth and mobility-orienteddevelopment is an important pillar of reducing transportation emissions, and we encourage expanded focus on related programs and incentives. In order to meet the Climate Act goals, however, we suggest the Council consider and incorporate strategies that would amend the New York State Town Law to require that local planning—through Comprehensive Plans and zoning laws, regulations, and building codes—includes evaluation of emission reductions and climate impacts and ensures integration of climate objectives in planning and decision-making relevant to transportation development and maintenance.

¹ Wu, G.C., Leslie, E., Allen, D., Sawyerr, O., Cameron, D.R., Brand, E., Cohen, B., Ochoa, M., & Olson, A. (2019, June). *Power of Place Land Conservation and Clean Energy Pathways for California*. The Nature Conservancy. <u>https://bit.ly/3mc1Yhn.</u>

² Grace C Wu et al 2020 Environ. Res. Lett. 15 074044. *Low-impact land use pathways to deep decarbonization of electricity*. <u>https://doi.org/10.1088/1748-9326/ab87d1</u>.

2. Transportation Sector Market-Based Policies (T10)

The Nature Conservancy strongly supports the implementation of congestion pricing in the Manhattan Central Business District as quickly as possible and without any new exemptions. It has been a tortured path to this point, and the opportunity offered by congestion pricing as it relates to achieving the climate goals justifies raising this to the highest level of political attention. Indeed, the benefits of congestion pricing—including reducing air pollution caused by traffic and generating funding for critically needed repairs and improvements to the region's public transportation systems—are now more pressing than ever as the COVID-19 pandemic has brought unprecedented traffic and decreased MTA ridership revenue. We encourage the State's further exploration and implementation of strategies that increase funding for low-carbon mass transit systems and reduce transportation pollution in other metropolitan areas of the state, including through market-based policies to reduce GHG emissions and air pollution outlined in the Plan.

3. Lower Carbon Renewable Fuels (T12)

The Nature Conservancy supports including the recommended lower carbon renewable fuels strategies in the final scoping Plan. The Draft Plan's transportation recommendations appropriately focus on transportation electrification as the first and foremost goal for decarbonizing this sector. Layering a Clean Fuel Standard (CFS) onto the electrification strategies could both complement and accelerate electrification and result in additional near-term reductions in GHGs and other emissions from fossil fuel combustion. As the Plan notes, "under the most aggressive scenarios identified for transition to zero-emissions technologies, fossil fuels are expected to constitute most of the fuel mix until the mid- or late-2030s."

As New York transitions to electrified transportation and to an electric grid powered by zeroemitting resources, it is important to keep on the table clean fuel options that offer loweremitting alternatives to traditional gasoline and diesel, which a CFS would incentivize. In addition to reductions in GHG emissions, a CFS can incentivize near-term reductions in copollutants³ and complement the suite of policies needed to address transportation pollution. Furthermore, a CFS can be designed to support the transition to electrification through revenue allocation. The Nature Conservancy encourages the State to move forward with proposed legislation that would establish such a standard, with special attention to ensuring policies reduce air pollution in Disadvantaged Communities.

Chapter 13 – Electricity

We acknowledge and appreciate the progress New York State has made to date toward achieving the Clean Energy Standard (CES) goal of 70 percent renewable energy by 2030 ('70x30') as mandated in the Climate Act. Recent projects currently operational and those projects currently in the queue will help our communities and citizens across New York play a critical part in solving the climate crisis. Future large-scale projects are essential to the State achieving its

³ See, e.g., Ha, H. and T.R. Brown. 2022. A review of the scientific literature on greenhouse gas and co-pollutant emissions from waste-and coproduct-derived biomass-based diesel and renewable natural gas. Bioeconomy Development Institute, State University of New York College of Environmental Science and Forestry.

ambitious climate mitigation and renewable energy goals. In addition to reducing GHG emissions, these projects will bring additional benefits including economic development and the creation of tens of thousands of good jobs, and better public health from cleaner air and water, particularly in Disadvantaged Communities who have borne the brunt of fossil-fueled generation and related air and water quality issues.

1. Transitioning New York's Power Sector to a Clean Energy Economy (E1, E2, E3, E5, E6)

The Nature Conservancy fully supports the accelerated deployment of renewable energy systems and the well-planned phase-out and retirement of fossil-fueled generation facilities and supports the strategies as outlined in the Plan. As the state moves towards a carbon-free economy and increasing sources of renewable generation are integrated into the electric grid, a frequent review of reliability needs will be a crucial element in successfully achieving this phase-out. A prioritized effort on reducing emissions within Disadvantaged Communities during this transition is needed to ensure these communities are seeing reduced GHG emissions as intended by the Act. It will also provide a reasonable timeframe for host communities who will be impacted by the economic loss of ramping-down these facilities to make future economic plans and adjustments, which should accordingly include consideration of repurposing the site for the deployment of clean energy technologies. As is noted in other areas of our comments, early, robust, transparent, and collaborative engagement with affected communities is critical to a successful clean energy transition.

We also agree the use of Distributed Generation (DG) and Distributed Energy Resources (DERs) will be critical to reducing GHG emissions while simultaneously improving reliability of the electric grid by locating clean energy resources closer to end-users. Further increasing the use of DG and DERs in Disadvantaged Communities will facilitate the expedited retirement of fossil-fueled generation, providing better air quality and improving public health within these communities and statewide. Finally, increasing the use of Community Choice Aggregation (CCA) programs, microgrids, and other community-scale programs will help facilitate the adoption of new technologies, transform how consumers use and purchase their energy, and increase local revenue to communities with the potential to enroll thousands of customers within a community to a district energy system.

The Nature Conservancy thanks NYSERDA for enabling New York to be a national leader in offshore wind (OSW) development. We support the state's goals to develop 9,000 MW of OSW by 2030 while also protecting vital marine life and existing ocean uses. Through our representation on NYSERDA's Environmental Technical Working Group (ETWG), The Nature Conservancy has consistently commented that the development of OSW along the Atlantic Coast does not have to be achieved at the expense of the ecologically and economically significant living marine and avian species. By using the best available science and information and involving stakeholders in advance of site selection and construction, user conflicts and impacts can be avoided or at least meaningfully minimized. To do this well, data must be transparently shared within meaningful timeframes, and stakeholders should have meaningful opportunities to assess and comment on the data that is being used to inform decisions. It is important for stakeholders to look holistically at the data collected and to understand the criteria and reasoning used during decision-making. Where the data is lacking or the need for research to support decision-making is obvious, responsible agencies should make every effort to fund the research

and identify pathways to obtain the information needed before making decisions. As this will not always be possible, developers should also be given clear guidance to design projects in ways that 1) avoid or minimize adverse effects to natural resources, 2) provide reasonable compensation for injuries and loss, and 3) allow and encourage adaptative management as we learn, and data becomes available.

The Nature Conservancy supports the strategies outlined within the Draft Scoping Plan to achieve these goals to transition the state's power sector to clean energy, with specific support and recommendations for the following:

- The State should ensure the continued adequate funding of the *Electric Generation Facility Cessation Mitigation Program* to assist host communities of existing fossil generation facilities as this transition moves forward.
- The Nature Conservancy supports project siting initiatives such as NYSERDA's *Build Ready Program* aimed at siting large-scale projects on environmentally low-impact areas, including previously disturbed lands, retired generation sites, and brownfield sites. Just as critical to increasing renewable energy projects is protecting our vital natural resources and environment through 'smart siting' practices and meaningful collaboration with Disadvantaged Communities (*see Section 2 for further recommendations*).
- We agree with the Plan's strategy that the State should evaluate and adjust policies, regulatory initiatives, and procurement targets as necessary to deploy needed renewable energy systems to meet the requirements of the Climate Act. Sending clear market signals to renewable energy developers is critical to attracting the private investment needed to meet the ambitious goals set by New York. The Public Service Commission's (PSC) directive for NYSERDA to enter contracts for Tier 1 renewables (4,500 GWh annually per solicitation) and offshore wind (700 1,000 MW/year) sends these market signals. The state should continue an aggressive procurement schedule through 2026 to meet the deployment of renewable energy systems as mandated by the Act.
- As part of the future procurement process for OSW contracts, The Nature Conservancy
 recommends that the State include clear direction, guidance, stipulations, and scoring criteria
 for developers and require that projects are designed in ways that best reflect New York's
 environmental, social, and domestic economic goals.
- Incentivizing and expanding on existing programs to increase the use of DG/DERs within low-and-moderate-income (LMI) and environmental justice communities will help expedite the retirement of fossil-based generation within these communities and contribute to better public health outcomes. Special efforts should be made to ensure solar savings for LMI communities do not conflict with or prevent access to other LMI energy savings programs.
- We agree with the Plan's strategies to address current resistance in upstate New York communities to ground-mounted solar. In addition, we support efforts to address a streamlined permitting process for rooftop and parking lot solar projects, the creation of 'solar-ready' zones, and establishing robust resource and education initiatives to support host communities. (*See Section 2 for further recommendations and comments*).

 New York should continue to encourage the development of CCA programs where communities choose 100 percent renewable energy as the default supply, specifically where participants are automatically enrolled in Community Solar, with a specific focus on Disadvantaged Communities.

2. Clean Energy Siting, Permitting Review, and Community Outreach (E4)

Accelerating and deploying a vast amount of large-scale renewable energy projects and distributed generation is needed to meet the clean energy and GHG emission reduction goals mandated by the Act. We agree the State will need a 'multi-pronged approach' to ensure host community buy-in of these projects, including extensive public engagement and education on the community benefits associated with hosting these projects. The Nature Conservancy has extensive experience in promoting the 'smart siting' of renewable energy projects, as well as community engagement to build awareness of co-benefits and working with local officials to support renewable energy systems.

Working with our partners at the Defenders of Wildlife and using our California Power of Place initiative as a model, we recently launched the Long Island Solar Roadmap⁴ to advance the deployment of mid- to large-scale solar power on Long Island in a way that minimizes environmental impacts, maximizes benefits to the region, and expands access to solar energy. Using an online interactive tool, the roadmap identifies low-impact sites for commercial and utility-scale solar arrays and illustrates their energy generation potential.

The Nature Conservancy also partnered with New Yorkers for Clean Power to develop *Building Our Clean Energy Future*, a toolkit⁵ for communities seeking to support clean energy projects in their cities, towns, or villages. Most recently, we are conducting research, through a grant-funded initiative by NYSERDA, on how communities in the Upstate region view non-residential solar projects—what works well, what does not, and how project design aspects could be changed for more community acceptance.⁶

We support the strategies identified in the Plan to achieve these objectives, and offer the following recommendations on several of these strategies:

 As recommended by the CJWG, The Nature Conservancy supports further efforts by the State to find effective methods to incorporate more input from communities hosting renewable energy projects while achieving the aggressive goals of the Act. If local governments feel their voices are not considered during the siting and permitting process, and perhaps even earlier in the site identification process, they will be more likely to oppose these critical clean energy projects. We encourage the Office of Renewable Energy Siting (ORES) and other state entities to work collaboratively with community stakeholders to establish a

⁴ (2019, July). Long Island Solar Roadmap: A collaborative approach to finding low-conflict sites for solar energy. <u>https://bit.ly/3Ocbr4n.</u>

⁵ Building Our Clean Energy Future: A Toolkit for Supporting Wind & Solar Projects. <u>https://bit.ly/3NU6v3J.</u>

⁶ The Nature Conservancy hosted two virtual workshops April 28th and May 3rd to solicit community input entitled: New York Solar Solutions Workshop—Expanding Benefits and Building Community Support for Non-Residential Solar. (NYSERDA has not reviewed the information contained herein, and the opinions expressed in this document do not necessarily reflect those of NYSERDA or the State of New York.)

balance between local government involvement and state decision-making. This sentiment was also a topic of significant discussion during recent non-residential solar workshops attended by upstate community members hosted by The Nature Conservancy.⁷

- We agree the State should continue to encourage and facilitate collaboration between the renewable energy industry and the farming community to ensure the goals of the Act are met while preserving the State's vital agricultural resources. The agriculture and renewable energy sectors working together can advance many shared climate and non-climate objectives. Further, The Nature Conservancy appreciates the opportunity to participate in NYSERDA's Agricultural Technical Working Group (ATWG).
- We agree the State should develop a comprehensive Clean Energy Development Mapping tool to better enable municipalities and local communities make informed land use decisions. The mapping tool should include land restrictions as they relate to natural resources, sensitive environmental areas, and endangered habits and species. It should also integrate finalized maps of Disadvantaged Communities to help ensure community members in those neighborhoods are at the forefront in development discussions (*see Evaluation of the Plan for additional comments*). Early and extensive outreach efforts should be made to meaningfully engage with communities and use their input to refine project size, location, and design attributes—failure to engage in that type of outreach will imperil the state's ability to meet its goals.
- We agree more decommissioning guidance and implementation options should be provided for community-owned projects. During Conservancy-hosted workshops held this Spring, decommissioning was identified as an area of particular interest as communities want to ensure they are not left with abandoned or obsolete infrastructure. Workshop participants were interested in further information on current decommissioning rules and requirements, including a better understanding of local and state government responsibilities for enforcement and specific means to ensuring adequate funds will be available for decommissioning.⁸
- We agree there is significant need for more community education and outreach to inform and engage citizens on the many benefits of a clean energy economy and to increase local ownership in responding to the climate emergency. As noted in the Plan, such outreach and education efforts will need to be flexible, collaborative, and adaptive—there is no "one size fits all." We also agree local governments can play a key role in community education on the many ways climate change is increasingly affecting New Yorkers and how local actions are imperative to solving the crisis and preventing further harm. These initiatives were raised as a critical need to achieve goals of the Plan by several participants at workshops hosted by The Nature Conservancy.⁹
- Non-profits and community-based organizations are trusted messengers within communities, frequently involved with local projects and community events. We support efforts to provide funding to these entities to assist the State in ramping-up educational efforts.
- We agree the State and NYSERDA should develop a more robust and targeted host community benefit program. During 2022 workshops hosted by The Nature Conservancy, participants and developers indicated the current financial compensation for host communities is inadequate. Specifically, the input was that the structure of the PILOTs

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

program and the host payment benefit are not adequately compensating communities for hosting these projects.¹⁰

• We agree with the Draft Scoping Plan that ORES and other state entities should continue to improve and streamline the process for cost-effective, timely, and environmentally responsible siting of large-scale renewable energy projects across New York, while delivering significant benefits to local communities. It is imperative, however, that the state rigorously apply the mitigation hierarchy to balance development impacts with conservation. This means avoiding sensitive wildlife and habitat, minimizing impacts, and once impacts have been avoided and minimized to the maximum extent practicable, offsetting residual impacts. When possible, developers should look to improve environmental conditions, such as through the creation of new reefs at the base of offshore wind turbines. We also encourage the State to support delivery of compensatory mitigation solutions using the full suite of well-established mechanisms (mitigation banks, in-lieu fee programs, and permittee-responsible compensation). This approach, which historically has not been utilized in New York, will maximize compensatory mitigation options, minimize costs, and improve environmental outcomes.

3. Advancing Energy Storage and Investing in Infrastructure Upgrades (E6, E7)

To meet the objectives of the Act, significant investments in energy storage technology and deployment will be required as the State increases its reliance on renewable energy systems, both on and offshore, given the nature of their intermittent supply. Energy storage is a key technology for enabling the development of renewable energy, improving grid flexibility and reliability, and reducing GHG emissions. The State's recent Power Grid Study identified a significantly higher need for storage than originally planned, estimating the need for more than 15 GW of energy storage to meet the clean energy goals mandated by the Act.¹¹

Significant investments will also be needed in transmission and distribution system infrastructure upgrades to integrate more renewable energy into the electricity grid and reliably deliver this clean power to load centers. New York's electricity grid has historically been constrained due to aging infrastructure and system bottlenecks preventing clean power from being delivered from upstate to downstate, from where the power is mostly generated to areas with high load centers. We applaud efforts taken to date by the State to address these issues.

We support the strategies outlined within the Plan to meet this goal, and offer the following recommendations with respect to those strategies:

 A permanent and robust program to support energy storage development for both grid-scale and distributed storage, for both co-located storage with renewables, and for stand-alone storage, will be necessary to achieve the state's climate and clean energy goals. The program should provide enough long-term market certainty to attract investment and development of storage projects at a level that maintains competition and achieves at least 6 GW of in-service

¹⁰ Ibid.

¹¹ NYSDPS and NYSERDA, 2021. New York Power Grid Study, Albany. Retrieved from <u>https://on.ny.gov/3NI9KS7</u>.

storage by 2030 and ensures industry viability beyond 6 GW. The program can provide more certainty for financeable projects through long-term contracts.

- The State should identify key transmission and distribution upgrades, improvements, and new infrastructure needed to deliver renewable energy from where it is built (both upstate and offshore) to where the load demand exists.
- New and expanded policy initiatives, funding for research and development, and market mechanisms to support increased deployment of storage technologies are needed to maximize their potential use and to lower costs ultimately paid by consumers. An effective energy storage program should also foster geographic diversity, covering the entire state, including the Long Island Power Authority territory.
- We agree New York should identify potential Renewable Energy Zones, thereby determining the quantity of renewable energy needed in each zone and develop a plan for building adequate transmission for energy delivery both into and out of each zone.
- We agree with the Plan that New York should conduct further planning and pursue system upgrades on Long Island and in New York City to facilitate 9 GW of offshore wind. We also agree the State should continue to promote multiport infrastructure investment to support and facilitate the growth of the offshore wind industry and supply chain in New York.

4. Exploring Future Technology Solutions (E10)

As noted by the Plan, while the 2030 requirement under the Act will be achieved through energy delivery, efficiency, renewable energy systems, and energy storage technologies, the 2040 goal cannot currently be achieved with existing technologies alone. The Power Grid Study has identified an estimated delta of 15 to 25 GW of remaining electricity generation needed in 2040 in order to meet energy demand and maintain system reliability, requiring other solutions as needed to balance energy supply and demand to be considered.¹² The Plan identifies several potential technologies to bridge the demand gap and meet the 2040 requirement. We are confident that with appropriate public sector commitment and funding alternative technologies to close this gap can advance rapidly. In fact, the technologies we are promoting today to meet the 2030 goal will likely not be in the same form 15 years from now—but more efficient or replaced. Significant and thoughtful investment in research and development in future technologies is necessary to not only meet the State's climate goals, but for New York to remain competitive as a leader in technology innovation.

We support the strategies outlined within the Plan to meet this goal, and offer the following recommendations for the strategies outlined within the Plan:

- NYSERDA should continue to explore and where appropriate support technologies and innovation as they emerge and mature, including technologies which might not yet be on the market but could play a potential role in meeting the 2040 goal.
- As a national leader on climate mitigation, the State should aggressively advocate for and leverage federal resources focused on transmission and zero-carbon solutions.
- The State should conduct further analysis of advanced fuels as technological innovations are made to reasonably determine potential GHG lifecycle emissions and other potential public health impacts and consider as part of the future scenario to meet the 2040 goal.

¹² Ibid.

• Ensure a robust and comprehensive public engagement process to incorporate public input on new and/or alternative technologies to meet energy demand and the 2040 goal.

Chapter 15 – Agriculture and Forestry

We very much appreciate the elevated role given to natural and working lands as a climate solution in the Draft Plan. To close the gap between renewable energy GHG reductions and the State's goal of net zero GHG emissions by 2050, innovative approaches to increasing carbon sequestration and storage along with well-managed collaboration between the private and public sectors will be essential. Using New York's forests, wetlands, and agricultural lands to sequester and store carbon is the most efficient and cost-effective solution. As documented in the State's Integration Plan, however, the land sector alone cannot realize the Plan's stated sequestration goal of 60 MMT CO2e. Increasing GHG reductions or sequestering carbon through other means, such as advancements in technology, will be a major adjunct to the gains that can be realized through increasing carbon stores in natural and working lands.

1. Carbon Storage is as Important as Carbon Sequestration

At the outset, it is important to distinguish between maximizing carbon storage (the amount of carbon that is retained in a carbon pool within the forest) and maximizing carbon sequestration (the process of removing carbon from the atmosphere for use in photosynthesis, resulting in the maintenance and growth of plants and trees). Both are equally important. New York's forests currently accumulate biomass at a significant rate, and this trend is predicted to continue.¹³ We recommend that the Plan not only highlight the importance of maintaining and increasing forests' carbon sequestration, but also maintaining and increasing carbon storage over time, which is required to reach the state's ambitious climate goals.

Accordingly, we recommend the Council delete or elaborate on the statement on page 199 of the Plan that reads, *"To maximize New York forests carbon sequestration potential, it is critical that forest management activities increase statewide."* In fact, if the frequency and intensity of current forest management activities remain the same, New York will see substantial net carbon sequestration over the next several decades. But if management activities increase too intensely, New York is predicted to see a decline in net forest carbon sequestration.¹⁴ Forestry science is complex, and specialists with expertise must be involved in this aspect of the State's climate policy. This is an inadvertent error in the Plan that could have significant adverse consequences, and accordingly must be corrected.

¹³ Brown, M. L., C. D. Canham, L. Murphy, and T. M. Donovan. (2018, March 30). Timber harvest as the predominant disturbance regime in northeastern U.S. forests: effects of harvest intensification. Ecosphere 9 (3):e02062. <u>https://doi.org/10.1002/ecs2.2062</u>.

¹⁴ Brown, M. L., C. D. Canham, T. Buchholz, J. S. Gunn, T. M. Donovan. 2022. Net carbon sequestration implications of intensified timber harvest in northeastern U.S. forests. In preparation.

2. <u>Private Landowners and Improving Sustainable Forest Management Practices (AF1, AF3 – AF4, AF6 – AF8</u>)

Nearly three-quarters of New York's forests are privately owned, which means individual forest owners have a significant role to play. This is not reflected well in the Plan. Private forestland management needs vastly more attention in the Plan and in State climate policy and actions. We agree that using and improving sustainable forest management practices is a key strategy for enhancing forest carbon storage and sequestration. We strongly support State programs such as Regenerate NY and Agricultural Environmental Management (AEM), and we urge the State to look beyond state land management and programs and expand the use of sustainable forest management practices on private lands through incentives and support. Expanding current programs is important, but not enough. Outreach efforts need to be designed and updated to meet the current needs and goals of family forest landowners in an equitable way, and this can only be achieved with an appropriate focus by the state.

Together with our partner the American Forest Foundation, we recently launched the Family Forest Carbon Program (FFCP) in New York. This program offers a novel opportunity for private landowners to receive funding to maintain or increase carbon storage and sequestration and improve the health and resilience of their woodlands. The FFCP engages forest landowners with new types of incentives supported by the carbon market, helping contribute to the cost of forest management practices and offering opportunities for income. Landowners interested in this program work with professional foresters that provide technical assistance and professional guidance to landowners on the best conservation and management options for their forests.¹⁵

We offer the following recommendations and support for the strategies outlined within the Plan:

- We recommend the establishment of a "community of practice" or working group to improve communication and coordination among organizations focused on carbon-positive forest management and groups working with landowners to implement better practices. Currently, there is no forum where forest conservation and management stakeholders convene. The gaps among science, management, outreach, and implementation need to be bridged, and the diversity of partners engaged in carbon-positive forest management must be broadened.
- We recommend the expansion of outreach and education programs to private landowners to support the implementation of conservation and sustainable forest management. We support DEC working with Cornell College of Agriculture and Life Sciences (CALS) and the State University of New York College of Environmental Science and Forestry (SUNY ESF), and recommend they broaden the coalition and collaborate with additional partners to increase the adoption of forest conservation and management practices on private lands to help meet the State's climate goals.¹⁶
- We agree that identifying areas where forest conservation and better management would provide the greatest benefits is important. We recommend Cornell, ESF, DEC and

¹⁵ Notably, as part of this program, scientific research has been completed that could help advance four of the six strategy components in AF3.

¹⁶ See practices developed by USFS and The Nature Conservancy: Marx, L., Zimmerman, C., Ontl, T., & Janowiak, M. (2021). USDA Forest Service. *Healthy Forests for our future: a management guide to increase carbon storage in Northeast forests*. <u>https://bit.ly/3tbJ1z4</u>.

stakeholders work in partnership and include both social factors and forest ownership into the analysis to achieve measurable results by 2030 and 2050. As part of the effort to develop site-specific models of aboveground forest carbon, we recommend DEC work with ESF to use remote sensing to monitor the change in forest biomass stocks on properties enrolled in tax relief and other programs. Information and data from the National Woodland Owner Survey and other survey data could be used in conjunction with forest carbon stock change datasets to inform where strategies and programs would have the greatest chance of success.

- We recommend that the strategy to identify and prioritize locations for forest management also identify and prioritize locations for forest conservation to advance the State's goal to conserve 30 percent of New York land and inland waters by 2030 (30x30).
- We support the expansion of funding for cost share programs, such as Regenerate NY and AEM.
- We support the proposed amendments to the Real Property Tax Law to create new incentives that allow forest landowners to manage for multiple benefits (such as wildlife habitat, wood products, and carbon storage) and, if desired, conserve their forests in their natural conditions to participate in tax programs. We recommend the development and maintenance of a centralized statewide database to improve oversight, administration, and landowner enrollment systems, including electronic submission for timber harvest, other management actions, and carbon stock change.
- To realize the benefits of in-state carbon sequestration and storage, we recommend further development of the New York Forest Carbon Bank concept (*briefly described in Chapters 15 and 19 of the Plan*). We recommend the development of a New York carbon registry database to track all carbon offset projects in the state. The database would increase the transparency of the carbon offset market, providing users with the ability to see offset credits and projects in a single database. Although the existing major registries provide public access to this information, the data is contained over several unconnected products.¹⁷

3. Forest Pests and Pathogens (AF2)

Forest pests and pathogens are one of the top challenges to the health, regeneration, and sequestration of New York's forests. Forest pests such as beech bark disease and emerald ash borer have reduced the sequestration rates of the state's forest.¹⁸ We support the prevention of forest pests through stronger regulations, regular inspections, and enforcement of wood packaging material and live plant imports. Increased funding for invasive species control by DEC and other organizations is critical.

• We recommend this strategy also include the development and funding of forest management practices that foster tree health and mitigate the detrimental effects of forest pests on carbon sequestration rates.

¹⁷ For an example, see Berkley Carbon Trading Program: Voluntary Registry Offsets Database. <u>https://bit.ly/3zfIHU1</u>.

¹⁸ Quirion BR, Domke GM, Walters BF, Lovett GM, Fargione JE, Greenwood L, Serbesoff-King K, Randall JM and Fei S (2021) Insect and Disease Disturbances Correlate With Reduced Carbon Sequestration in Forests of the Contiguous United States. *Front. For. Glob. Change* 4:716582. <u>https://doi.org/10.3389/ffgc.2021.716582</u>.

4. Soil Health, Nutrient Management, and Agroforestry (AF9 – AF17)

The Nature Conservancy supports the important comprehensive and detailed agricultural strategies. The proposed strategies sufficiently cover the most important and feasible solutions and opportunities. The emphasis on building farmer-to-farmer peer networks and support systems while addressing and removing barriers for all farmers, especially disadvantaged and underserved farmers, is well-placed.

We offer the following recommendations and support for the strategies outlined within the Plan:

- We recommend further emphasizing and prioritizing "whole farm planning" or carbon farm planning as discussed in the Plan. The diversity of farm operations, sizes and geography presents challenges to individually incorporating and sufficiently acting upon strategies that require individual farms to adopt practices or participate in programs. We encourage whole farm planning, including the NYS AEM framework, as well as plans completed by outside planners, consultants, and for-profit companies. These plans can and are incorporating woodlot management, afforestation, soil health, and nutrient management, while developing ways to diversify the farm operation and profitability. It is unlikely that increasing state funding and agency capacity alone will achieve the necessary benefits at the pace needed. Encouraging involvement from various private sector actors such as consultants and emerging firms/start-ups in the carbon farming sphere is likely required.
- There is little discussion of strategies that include the entire agricultural supply chain in the Draft Plan. We recommend developing strategies that influence the supply chain, especially working with the private sector on meeting carbon and sustainability goals.
- We support the establishment of a Payment for Ecosystem Services program that would ensure conservation outcomes and support agricultural producers. Incorporating marketbased strategies to work alongside state-based programs will add incentives for agricultural producers and landowners to manage for beneficial ecosystem services, including soil health and water quality.

5. Municipal Forest Protection and Management (AF5)

The Nature Conservancy strongly supports the Plan's recommendations to support local communities to protect and manage their forest. Specifically, we agree with and emphasize the need to increase the scope and funding levels of Urban and Community Forestry Grants to assist local municipalities with both capital and operational expenses. The urban forest should be defined as all trees in a given city and their associated infrastructure for the purposes of funding and other programs. Further, the varying costs faced by different municipalities should be considered in funding allocation. Grant funding, especially private funding, for urban forest management is insufficient to meet existing needs and thus greater public resources are required. In additional to capital and operational funding for the grants themselves, resources should be prioritized to support program operations.

• The State should increase funding levels and scope of Urban and Community Forestry Grants to assist local municipalities and private landowners in the management of the urban forests, *including inventorying, planning, planting, protection, and maintenance of trees including*

the management of wood waste. Round 15 of DEC's Urban and Community Forest Grants admirably funded 38 projects Statewide; however, support for this program will need to increase to have a greater impact on urban forest carbon benefits.

Statewide and Cross-Sector Policies

Chapter 17 – Economy-Wide Strategies

The Nature Conservancy agrees with the Council that a comprehensive policy which effectively prices emissions, if designed well, could: 1) ensure GHG emissions reduction mandates under the Climate Act are met; 2) serve as an important funding source to support a range of priorities including investments in Disadvantaged Communities; and 3) provide a consistent market signal that incentivizes emissions reductions and seeds a competitive and affordable marketplace for clean energy technologies. The Nature Conservancy supports economy-wide policies such as "carbon pricing" (carbon tax or fee) and "cap-and-invest" options outlined by the Council, given the role such policies can play in rapidly and cost-effectively reducing emissions.

The equitable design of such policies is critical to ensure effectiveness and avoid unintended impacts. We commend the Council for providing comprehensive evaluation criteria in the Plan to guide and evaluate policy options and design. In particular, we support the Council's focus on ensuring any economy-wide policy ensure compliance with GHG emissions limits and be designed to "prioritize emissions reductions of GHGs and co-pollutants in Disadvantaged Communities and alleviate and prevent the formation of co-pollutant hotspots" and avoid regressive impacts to New Yorkers.

The Nature Conservancy looks forward to working with the State and stakeholders on economywide approaches that would effectively limit GHG emissions, fund agreed upon priorities, and prioritize reductions of GHG emissions and co-pollutants in Disadvantaged Communities.

Chapter 19 – Land Use

Forest loss for development and timber harvest are two of the most significant land use activities affecting terrestrial carbon storage. These two activities, however, differ in their subsequent effects on carbon dynamics and other ecosystem services including water and air quality and wildlife habitat. Forest loss is the conversion of forest to non-forest cover types such as development or agriculture. In the case of development, this conversion is usually permanent, resulting in direct emissions from land clearing plus the foregone sequestration by the previous forest. While most forest management in the state is sustainable, timber harvesting is the leading cause of adult tree mortality in northeastern forests,¹⁹ and some regions in New York have a history of mortality exceeding annual growth.²⁰ But, unlike forest conversion, harvesting retains

 ¹⁹ Canham, C. D., N. Rogers, and T. Buchholz. (2013, April) Regional variation in forest harvest regimes in the northeastern United States. *Ecological Applications*. 23:515-522. <u>https://doi.org/10.1890/12-0180.1</u>.
 ²⁰ USDA. (2020, September). New York Forests 2017. Retrieved from <u>https://bit.ly/3x512An</u>.

many trees and allows the forest to regrow, continue sequestering carbon, and allows for the continuance of many ecosystem services.²¹ In addition, wood products store some carbon.

Between 2012 and 2017, there was a net loss in forest land area in New York for the first time in one hundred years. This was due primarily to conversion to agricultural land use (49 percent) and developed land (33 percent).²²

Issues surrounding the competing uses of land will become more complex as renewable energy development, reforestation, afforestation, and development pressures all increase. As previously mentioned in our comments,²³ it is imperative that the State consider land use constraints and optimization when developing the final Plan. We agree with the Draft Plan that the best opportunities for increasing carbon storage and sequestration relative to land use are forest and farm protection (or avoiding conversion), improved management, and reforestation.

There are opportunities to strengthen the solid recommendations already included within the Plan. We offer the following suggestions and support:

1. <u>Reforestation and Afforestation Efforts Need State Coordination and Engagement with the</u> <u>Private Sector (LU2)</u>

Reforestation and afforestation provide the best opportunities for increasing net carbon sequestration across the state, and The Nature Conservancy strongly supports the recommendations to advance these goals. A recent analysis completed by The Nature Conservancy and Cornell University identified 1.7 million acres of post-agricultural lands not in production that are suitable for reforestation and afforestation.²⁴ Yet there are significant barriers to scaling reforestation and afforestation efforts in New York and around the country. As documented in the Plan, a *fourteen to sixty-fold increase in the number of acres planted per year will be required to meet New York's 2050 goal*. Removing these barriers, specifically supply chain barriers, will be key to enabling this important strategy to succeed.

Our research has shown that the biggest obstacle to scaling up reforestation and afforestation is lack of market coordination, as suppliers of seeds and nursery stock do not receive accurate and timely information about future needs and plantings. Nurseries and seed collectors need several years of notice to grow the right tree species in the desired number for large-scale plantings. Setting a clear and ambitious, public reforestation and afforestation objective through the development of a NYS reforestation plan can provide the needed demand forecasting. We recommend a NYS reforestation plan set the ambitious goal of planting one hundred million trees by 2030.

²¹ See forest management described in Chapter 15 of the Plan.

²² See Footnote 20.

²³ See comments on "Evaluation of Plan" and comments on Chapter 15 Electricity.

²⁴ Richardson, D., C. Zimmerman, P. Woodbury, J. Wightman. 2022. Assessing reforestation potential within postagricultural lands in New York State for climate mitigation. Manuscript in preparation.

This need for planning carries over to the workforce to plant and steward trees as well as monitor their health and survival. DEC and other appropriate agencies should work with NGOs to identify regional workforce needs and provide adequate resources to plant and steward trees and restore degraded forests on public and private forestland. We support partnering and collaborating with Indigenous Nations, community-based organizations, educational institutions, and others to develop a robust workforce development program to help scale up reforestation efforts while also advancing diversity, equity, and inclusion goals.

A model for the type of multi-faceted partnership the State could coordinate is the Appalachian Regional Reforestation Initiative (ARRI), a coalition dedicated to restoring forests on coal-mined lands in the Eastern United States. ARRI is a cooperative effort among the Department of Interior's (DOI) Office of Surface Mine Reclamation and Enforcement, state agencies in Alabama, Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia, industry partners, environmental organizations, academia, and landowners.²⁵

The Nature Conservancy strongly supports investing in the Colonel William F. Fox Memorial Saratoga Tree Nursery as soon as possible. The State should provide funding to increase the tree nursery's capacity to support large-scale afforestation and reforestation efforts by implementing upgrades to enhance seed collection, seed storage, seedling production, workforce development, and pre-and post-planting practices. Over the last 25 years, the Nursery has lost significant staff and capacity. It is estimated the Nursery could increase production sixfold (up to six million seedlings), but this will require significant investment.

Additional funding should also be made available for seed banks and private tree nurseries that provide different products than State facilities. Expanding funding while maintaining a balance between private and public nursery production, either through market segmentation or publicprivate collaboration and partnerships, will enable the state to scale-up the seedling production needed to meet the State's goals. This is especially key, given the large gap between the current production of seedlings and what will be needed to meet New York's reforestation and afforestation goals (at least a 180 percent increase in current regional production).

We offer the following recommendations and support for the strategies outlined within the Plan:

- We recommend accelerating seed collection and developing a distributed network of mobile seed collection units. These units can lower costs and increase flexibility to respond to unpredictable seed crops and diverse geographic needs.
- The State should create and expand free tree seedling programs to assist landowners with planting projects.
- The State should also increase landowner assistance and funding for cost-share programs.
- New York should prioritize suitable locations for reforestation and afforestation,²⁶ including locations where natural regeneration is a viable strategy.

²⁵ Appalachian Regional Reforestation Initiative; Office of Surface Mining Reclamation and Enforcement.

https://bit.ly/3axBh3S. ²⁶ Richardson, D., C. Zimmerman, P. Woodbury, J. Wightman. 2022. Assessing reforestation potential within postagricultural lands in New York State for climate mitigation. Manuscript in preparation.

- We encourage the State to embrace private sector programs that work in concert with State programs and goals. For example, the State should utilize the Family Forest Carbon Program to contribute to scaling up reforestation and afforestation efforts.
- We recommend the development and coordination of a "community of practice" on reforestation and afforestation. Currently, there is no forum where stakeholders convene. Improved communication will help to address supply chain issues, such as tree seed supply, nursery stock, workforce availability, funding, and market confidence.

2. <u>Coordinate and Streamline Research and Mapping (LU4 – LU5)</u>

We support the data and mapping recommendations included in the Plan. The Council should clearly acknowledge that New York data used in the implementation of various regulatory programs that govern land use is, in many cases, outdated and that to meet the goals of the Act it is critical the State and other stakeholders use updated and current data stored in a modern way. Significant investments are needed to ensure the best available data and science are easily available and used by all state agencies, regulatory programs, and municipal governments. Without sound, recent data we will be relying on luck to succeed. The data is available, it is inexcusable not to use it.

- A significant effort should be made to compile existing data, unify and build upon it, and make it available throughout the State rather than duplicate efforts. Collaboration and collective data sets will save time and resources, improve decision making, and contribute to better long-term results.
- 3. <u>Expand Strategies to Alleviate the Barriers to Carbon Sequestration and Storage, Ecosystem</u> <u>Restoration, Land Protection, and Energy Siting on Private and Municipal Lands (LU1 –</u> <u>LU4, LU6 – LU7, LU9 – LU10</u>)

Land use policy and management shape New York's ability to mitigate and adapt to climate change. While the Plan recognizes that there are many state agencies and organizations that hold a stake in land use planning and management, it does not thoroughly enough consider private landowners, key decision makers, and managers of land throughout the state. New York State should expand on strategies that alleviate the barriers to carbon sequestration, ecosystem restoration, land protection, and energy siting on privately held lands. Towns and counties within New York State vary widely in their approaches to planning, zoning, and environmental protection as well as their staff sizes and knowledge bases. For example, Suffolk County and its five easternmost towns have been national leaders in protecting woodlands, wetlands, coastlines, and farmland with independent funding sources approved by voters. They are well aware of the natural resources within their borders and have had them mapped for decades.

At the other end of the spectrum are towns, like in the Finger Lakes region, with part-time employees, minimal regulation, and a hands-off approach to private property. For some towns, the protection of open space is not a customary government function. In addition, when it does take place, as when a non-profit land trust buys private property, town officials may primarily be concerned with the loss of tax revenue. Even in large towns with commendable track records in open space preservation, planning department employees spend most of their time responding to

individual applications for construction and alterations rather than engaging in community-wide planning.

Accordingly, further resources are required to enable municipalities to prioritize carbon sequestration and other State mandates. Trainings and materials, new databases, and guidance, as proposed in the Plan, are all important but far from sufficient. We saw after Superstorm Sandy that despite much work by local committees charged with proposing new ways of managing for sea level rise and storm events, a number of towns lacked the staff, skills, and experience needed to implement the suggestions. What is needed is a fresh approach backed by funding and personnel, with flexibility to provide meaningful value to the variety of municipalities—and their specific needs—across the State.

In some areas of the state experiencing development pressure, such as Long Island which is nearing build-out, the only private lands available for development are entirely wooded, meaning trees must be cleared to provide a building envelope. The owners of such parcels ought to have an alternative to selling their land for development. Traditionally, New York State has primarily used open space funds to protect large parcels of land, which continues to be important—as is conserving valuable, smaller land holdings. A dedicated fund to pay market value for small parcels would serve the State's interest in avoiding deforestation and preventing new emissions. Similarly, existing financial incentives such as the state tax credit for conservation easements should be broadly expanded to compete with open-market decisions. The driver of deforestation is profit, and it will only be curbed if there is a way to realize profit in other ways that protect trees rather than sacrifice them.

We offer the following recommendations and support for the strategies outlined within the Plan:

- The Nature Conservancy strongly supports the immediate enactment of legislation to "keep forest as forests" requiring developers to purchase and set aside forested land when forest carbon is lost during development and follow the principles of avoid, minimize, and mitigate.
- We recommend the State prevent the conversion of small forested parcels, in part, through the development of a dedicated fund to pay market value for small parcels and through the expansion of the state tax credit for conservation easements.
- The Nature Conservancy supports farmers and family forest landowners who have been historically excluded or marginalized from working lands management programs, particularly women and people of color. We recommend that DEC and other technical advisors expand or adapt landowner outreach and education efforts to landowners with a wide variety of knowledge and experiences in working lands management. As landownership diversifies throughout the state, it is essential that programs are developed in ways that work for new and current landowners. For example, programs that educate and support women woodland landowners on carbon markets could increase their support and participation. Private landowners, a large and diverse group, are essential to the success of the final Plan.
- We recommend increasing technical support for local leaders to effectively engage with private landowners on issues related to municipal planning and zoning.
- We applaud the strategy to support afforestation and reforestation efforts in local communities and recommend strengthening the strategy by integrating afforestation and reforestation into state and municipal plans. Large-scale implementation funding should be

available to support municipal reforestation and afforestation efforts including tailored technical support. The State should develop a Nursery program that provides seedlings and work crews to plant and steward municipal trees long term (*see related comments on page 17*).

<u>Chapter 21 – Adaptation and Resilience</u>

The Nature Conservancy appreciates the inclusion of adaptation and resilience strategies in the Draft Plan. As the Council states, "climate mitigation strategies alone are not sufficient to prepare for the impacts of present and future climate change." We strongly agree with the Council's call for bold action on adaptation and enhancing resilience. The collection of recommendations within the Adaptation and Resilience chapter underscores the need for comprehensive efforts to address New York's adaptation need, in concert with New York's climate mitigation efforts. We agree that a statewide Climate Adaptation and Resilience Plan is an essential first step that is long overdue. But that alone will not be sufficient. A robust funding source and dedicated staff in every agency should be in place to successfully implement an adaptation plan, and executive-level leadership will be required to advance a long-term, multi-agency, and collaborative effort. New York State should also create, support, and foster a significant increase in staff capacity, technical expertise, and funding to support municipal departments that are making decisions every day that affect the safety of community members during dangerous events including heatwaves and hurricanes.

The Nature Conservancy has conducted outreach with numerous municipalities in New York to understand the barriers and challenges preventing them from planning for climate adaptation. Our work identified that the biggest limitation to communities' ability to adapt is capacity at the local level—both organizational capacity and funding match capabilities prevent local governments from accessing available federal and state resources. Providing funding to localities is essential, as are the tools, guidance, and model local laws provided by the State. But more is needed. The Nature Conservancy strongly supports the State expanding technical assistance capacity to help communities access grant funding, provide expert guidance, expand staff expertise, and incorporate best practices into adaptation planning. Mapping of climate risks—and clear communication about these risks—is also critical to successful adaptation. New York State has responsibilities for mapping that have been neglected for too long. We urge the State to use and provide recent data and maps to accurately assess risk and strategically allocate public resources.

We commend New York State for strengthening freshwater wetland regulations this year. The Nature Conservancy recognizes the intrinsic value of healthy wildlife habitats and ecosystems and, simultaneously, notes that these natural systems provide essential resources, services, and protections for humans. We encourage New York State to highlight the many interconnections between climate adaptation in natural systems and climate adaptation for human well-being and safety. Climate adaptation for natural systems is essential to maintain biodiversity, ecosystem services, and life on earth, and human assistance in climate adaptation is essential.

We offer the following recommendations and support for the strategies outlined within the Plan:

- We recommend the State develop a Green Infrastructure Plan. We encourage the DEC and other stakeholders to develop a strategy to incentivize the use of "habitat as infrastructure", such as urban forest and wetlands, to reduce climate risks including the urban heat island effect.
- A critical component of equitable climate adaptation is extensive and accessible public engagement and community involvement in climate adaptation planning, program design, and implementation. We recommend more inclusion of and investment in models and processes that enable local participation in climate adaptation planning be included in the scoping plan. Public engagement efforts should continue to include accessible public meetings and workshops, discussions with local leaders within and apart from government, and feedback sessions where residents—particularly disabled and marginalized community members—provide input, guidance, and expertise on how adaptation plans and strategies can best be applied and implemented in, by, and for their community.
- While this plan recommends an assessment of climate vulnerabilities during land and water planning, which is critical, we recommend this practice be included in all planning efforts. Or, at minimum, those required or funded by the State, for example economic development plans such as the Local Waterfront Revitalization Plan and Comprehensive Plans. A broad, multi-faceted approach to climate adaptation will benefit communities at highest risk from the effects of global warming and face the greatest challenges in adapting to our new climate reality.
- Mandating the disclosure of flood risk and past flood damage during property transactions is an important component of increasing risk awareness, and we urge New York to pass such legislation as soon as possible.
- The Nature Conservancy has a strong track record in helping to shape and support the
 establishment of Community Preservation Funds and watched them evolve over the years to
 better address climate change, especially increasing municipalities' ability to use natural
 areas or "green zones", such as meadows, forests, and wetlands, to protect residents from
 dangerous flooding. We agree that this could be an important tool for municipalities to
 improve community safety between disasters the time best suited to strategic planning and
 decision-making.
- Government regulations are essential to protect shorelines and floodplains and prevent New Yorkers from developing or investing in risky locations. Effective regulation, however, is undermined by outdated information including maps. The Coastal Erosion Hazard Area program maps require updates, and incredibly and inexcusably the tidal wetlands regulatory maps haven't been updated since the 1970s. We urge the State to update these resources more regularly and in a transparent manner. We support New York State continuing to update sea level rise projections, encourage FEMA to improve mapping of flood hazards, and make all mapping digital and readily usable.
- We also support and recommend an expansion of the Resilient New York Program. Their local flood assessment studies help communities better understand their comprehensive flood risks; however, many areas of the state still need such studies.
- The Nature Conservancy strongly supports the strategy to protect the ability of forest ecosystems to sequester carbon. The recommendation should be broadened to include maintaining and increasing forest carbon storage as well as sequestration. The continued

ability of forests to store and sequester carbon are both needed to achieve the State's sequestration goals.

Conclusion

In conclusion, The Nature Conservancy commends the Council Members and many stakeholders who have dedicated their time to the process to create the Draft Scoping Plan. As our comments reflect throughout this document, we believe the State can achieve its nation-leading climate mitigation and clean energy goals in a balanced way that further protects our critical natural resources. As previously noted, this effort will take a 'whole government' approach and collaboration by all state and local entities as well as a broad array of stakeholders to achieve these goals. As we have for many years, The Nature Conservancy is committed to bring our expertise in science, conservation, and policy to assist New York State, and given the urgency of the climate crisis we are particularly ready to lean in to work with the state as it moves forward with the implementation of the Act and toward successfully achieving its goals.

Thank you for the opportunity to participate in this process and to provide comments on the Council's Draft Scoping Plan. We are proud to be working with many stakeholders, partners, local and state officials, and state agency leadership and staff as New York continues to lead the nation, and the world, in its approach to the climate challenge. Please contact Echo Cartwright, Climate Mitigation Director, at echo.cartwright@tnc.org with any questions regarding our comments.

Sincerely,

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