The Nature Conservancy in Massachusetts
20 Ashburton Place, Suite 400
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November 14, 2025

Thank you for the opportunity to provide comments to the Energy Facilities Siting Board ("EFSB" or "Board") regarding the proposed regulations, 980 CMR 15.00: CUMULATIVE IMPACT ANALYSIS AND STANDARDS FOR APPLYING SITE SUITABILITY CRITERIA Facility Siting and Permitting ("Siting Proposal").

The Nature Conservancy ("TNC") is pleased to submit these comments in support of the Healey-Driscoll administration's efforts to balance the growing need for renewable energy facilities, while tackling climate change, and protecting nature.

TNC is a global conservation organization working toward a world where people and nature thrive, with a mission to conserve the lands and waters on which all life depends.

Overall, as set forth below, in our comments and in the following sections discussing specific regulations, we believe that the proposed regulations require significant modifications to meet the intent of the Climate Law with regard to meaningful implementation of site suitability criteria and mitigation hierarchy.

General Comments re Site Suitability

In our prior comments to the EFSB on its proposed regulations in EFSB 25-10, we noted the importance of site suitability criteria and application of the mitigation hierarchy as a foundational element of the Climate Act. We have attached a copy of our comments in EFSB 25-10 for reference and request that they be incorporated by reference as part of our submittal here. The statute requires that the EFSB apply EEA's Site Suitability Guidance ("Guidance") as part of its regulatory framework.

The Guidance underscores the importance of site suitability as a priority of the Climate Act and provides clear directions to EFSB with respect to its consideration of site suitability criteria and reviews. Specifically, the Guidance requires, among other things, the use of a site suitability assessment with specific screening criteria included in the scoring

framework (climate change resilience, carbon storage and sequestration, biodiversity, agricultural resources, and social and environmental burdens).

The site suitability assessment is the tool that provides information to decision makers as early as possible to allow time for project design change. "Applicants should estimate the Total Site Suitability Score and Criteria-Specific Suitability Scores for any sites under consideration for hosting an Applicable Facility as early as possible prior to submitting an application for a Consolidated Permit, Consolidated Local Permit, or Consolidated State Permit to the EFSB or a Local Government, as applicable, to allow time to make design changes or choose a different site if the Applicable Facility is determined to be likely to receive a high Total Site Suitability Score or one or more high Criteria-Specific." Guidance at 9. Clearly the Guidance recognizes that Site Suitability is a key element in any determination of design and site location.

In addition, the Guidance directs the EFSB to specifically include site suitability criteria in its reviews:

- The EFSB should incorporate the site suitability criteria in its CIA and Route and Site Scoring analyses as feasible, particularly for projects that are required to complete a CIA and therefore not required to complete a Site Suitability Assessment. Guidance at 18.

- The EFSB is recommended to consider the Total Site Suitability Score in its decisions alongside other aspects of the project. The Total Site Suitability Score should be considered in the context of the project's design plan and planned mitigation measures. Guidance at 18.

- The EFSB should use the criteria-specific suitability scores as a resource to determine if minimization or environmental mitigation measures should be required for a project to receive a consolidated permit. Guidance at 18.

- The EFSB should evaluate the criteria-specific suitability scores and associated documentation provided to determine if additional information or evidence should be provided by the Applicant of the Applicable Facility. Guidance at 19.

Thus according to the Guidance, the EFSB needs to ensure site suitability is a fundamental (e.g., a stand-alone analysis) as part of its review of CEIF projects, provide that site suitability is included in and not replaced by any CIA review in a Burdened Area (e.g., CIA should include an assessment of site suitability criteria), include the consideration of Total Site Suitability Score in its decisions, and evaluate criteria-specific suitability scores as a

part of any assessment of minimization and mitigation. Our comments, submitted as part of EEA's Guidance process, explain that CEIF projects, otherwise required to submit a CIA, should also be required to conduct a site suitability assessment. Many of the core criteria, i.e., forest carbon, biodiversity and climate resilience, are present and documented in the Burdened Areas and should be considered. We have further discussed below the need for a site suitability assessment in addition to a CIA in Burdened Areas.

EFSB's Standards for Applying Site Suitability Criteria

As part of EFSB 25-10, the EFSB stated that it was directed to establish "standards for applying site suitability criteria developed [by EEA pursuant to M.G.L. c. 21A, § 30] to evaluate the social and environmental impacts of proposed clean energy infrastructure project sites include a mitigation hierarchy to be applied during the permitting process to avoid or minimize or, if impacts cannot be avoided or minimized, mitigate impacts of siting on the environment, people and goals and objectives of the commonwealth for climate mitigation, carbon storage and sequestration, resilience, biodiversity and protection of natural and working lands to the extent practicable." M.G.L. c. 164, § 69T. EFSB 25-10, 980 CMR 13.00 Regulation Guidance, at 18-19. It provided that CEIF Applicants must:

- Use the Site Suitability Criteria established by EEA to evaluate proposed sites and routes, as applicable. In the case of proposed LCTDIF and SCTDIF that are not in "newly established public rights of way," there is no required evaluation for such facilities using the Site Suitability Criteria in such locations; and

- Include a summarizing an analysis of candidate routes and sites using the Site Suitability Criteria, and explain how, and to what degree, the Site Suitability Criteria influenced the Applicant's selection of a preferred route/site versus alternative locations. Include a narrative on how the Site Suitability Criteria guided the Applicant's Project development approach in terms of avoiding, minimizing, and mitigating impacts on the environment and people to the greatest extent possible.

In its proposed Standards for applying site suitability Guidance, the EFSB notes that it "follows" the Guidance and will requires applicants to file a Site Suitability Report. See 980 CMR 15.10 (1) and (3). With respect to the Guidance, we noted in our comments to EEA our concern about the unnecessarily broad definition of "newly established public rights of way" and the overly expansive carve out of transmission related infrastructure from the requirement to undertake a site suitability assessment. We hope that the Guidance, as revised, will reflect our comments and EFSB will be required to more broadly review a site suitability assessment for transmission infrastructure.

TNC Comments

We reiterate our comments submitted in EFSB 25-10, 980 CMR 13.00, and recommend that Site Suitability Criteria should be included on a par with cumulative impact requirements. Specifically, site suitability should be included as part of definitions of 980 CMR 1.04(1) (c), added as an additional category in 13.03(1), General Requirements, and be included as part of any consideration of environmental impacts pursuant to 980 CMR 13.03(1)(i).

With respect to 980 CMR.15.00, we have the following comments:

15.10 (1) Applicability. The proposed regulations do not require a Site Suitability Assessment and Site Suitability Scoring if the Project SGA intersects on one or more Burdened Areas. We noted in our comments in EFSB 25-10 that this is over broad and will allow projects that just touch a Burdened Area to not be required to submit/perform a Site Suitability Assessment. Many projects in the built environment that would be subject to CIA, would benefit from a Site Suitability review as well, e.g., all areas of the Commonwealth have some degree of ecological value (biodiversity, forest carbon, climate resilience) and should be evaluated for site suitability and similarly, projects that overlap with Burdened Area and non-Burdened Area would benefit from a Site Suitability Assessment. For example, BioMap has evaluated and mapped all cities and towns for their ecological value. CIAs and Site Suitability Assessments apply distinct criteria and it would be inconsistent with the Act to not require a Site Suitability Assessment at all, particularly on areas with small BA intersections in a rural setting with larger environmental impacts.

15.10 (4). Consideration by the Board. This section appropriately identifies the factors referenced in the Guidance that require Board consideration. However, as we noted in our prior comments in EFSB 25-10, we hope that the Board would more specifically explain how the Site Suitability Assessment and the analysis of non-cumulative environmental and social indicators will be considered, weighed and made actionable as part of the EFSB's final decisions. In the absence of any explanation, although there is a reference to the Guidance in 15.10 (1), there is no roadmap regarding how the Board will apply the Site Suitability criteria in any determination.

Specifically, we note the reference in the purpose of 980 CMR 15.01 to implement provisions regarding Cumulative Impact Analysis and "standards for applying site suitability criteria." In addition, we note the requirements generally in 980 CMR 13.00 with respect to the general requirements (13.03) and more specific requirements (13.03(2)) that the applicant to describe the selection process, alternative analysis, chose a location to avoid, minimize and mitigate if impacts cannot be avoided or minimized, provide criteria related and total Site Suitability Scores and is sited in a location that will provide reliable,

resilient and clean supply of energy consistent with the commonwealth's climate change and greenhouse gas goals. What is unclear is how the EFSB, as part of its permit decision process, will weigh and balance each one of these elements in reaching a determination whether the site is suitable or should be avoided, whether minimization and mitigation measures are adequate and/or what additional measures should be taken. How the Board will "consider", as set forth in Section 15.10 (4) Site Suitability, criterial specific scores and total Site Suitability Score is the question, e.g., what does consider mean. We are particularly concerned that the process, in its consideration of multiple factors, will diminish the import of site suitability as a primary consideration as required by the Act. Additional information (and associated regulations) about the Board's specific process and evaluation of these factors would be helpful.

Thank you for your time and consideration. Please feel free to contact us if you have any questions.

Sincerely,

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ATTACHMENT

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Comments of the Nature Conservancy in Massachusetts on MA EFSB Proposed Regulations, EFSB 25-10, 980 CMR 1.00, 2.00, 13.00, 14.00, 16.00 and 17.00.

November 7, 2025

The Nature Conservancy ("TNC") respectfully submits its comments on proposed regulations promulgated as part of the Energy Facilities Siting Board ("EFSB") Docket 25-10 ("EFSB Regulations").

TNC is a global conservation organization committed to finding durable solutions that support ecosystems and communities with a mission to conserve the lands and waters on which all life depends. TNC has been deeply engaged in the policy, planning, and implementation of renewable energy policy in Massachusetts and across the globe.

TNC is pleased to submit these comments as part of our going support of the Healey-Driscoll administration's efforts to balance the growing need for renewable energy facilities, while tackling climate change, and protecting nature. In Massachusetts, the Commonwealth's decarbonization goals and increased electricity demand require us to first conserve energy as much as possible and concurrently more than double the generation of renewable electricity. When considering where to site energy infrastructure, we must also consider the Commonwealth's goals for land use such as biodiversity, forest carbon and resilience. To avoid conflicts with these land-related goals, we should support robust Site Suitability Criteria, and the application of the Mitigation Hierarchy to Avoid, Minimize, and Mitigate impacts.

Background

On September 12, 2025, as part of EFSB 25-10, the EFSB opened a rule making and proposed regulations to implement the Climate Act, including revisions to 980 CMR 1.00, Rules for the Conduct of Adjudicatory Proceedings and 980 CMR 2.00, General Information and Conduct of Board Business and promulgating new regulations, 980 CMR 13.00, Consolidated Permits for Clean Energy Infrastructure Facilities; 980 CMR 14.00, De Novo Adjudications of Consolidated Local Permit Applications; 980 CMR 16.00, Pre-Filing Consultation and Engagement Requirements; and 980 CMR 17.00, Constructive Approvals.

Also on September 12, 2025, the Department of Energy Resources ("DOER") filed proposed regulations regarding streamlining the permitting of small clean energy infrastructure projects which also considered site suitability criteria. In addition, on September 12, 2025, Executive Office of Energy and Environmental Affairs ("EEA") released its draft Guidance on Site Suitability Assessments for Clean Energy Infrastructure ("Guidance"). Finally, on October 31, 2025, the EFSB and the Office of Environmental Justice and Equity ("OEJE") issued proposed regulations regarding the application of the Cumulative Impact Analysis and Site Suitability as part of the Consolidated Permit process.

TNC filed comments regarding, among other things, site suitability and the mitigation hierarchy in response to DOER's proposed regulations and EEA's Guidance, and plans to comments on EFSB/OEJE's Cumulative Impact Analysis draft regulations on November 17, 2025. Our comments below primarily refer to 980 CMR 13.00.

General Comments

The Climate Act directed EEA to develop site suitability criteria and the Board to establish standards for "applying site suitability criteria as developed" by EEA. EEA was required "to evaluate the social and environmental impacts of proposed clean energy infrastructure project sites include a mitigation hierarchy to be applied during the permitting process to avoid or minimize or, if impacts cannot be avoided or minimized, mitigate impacts of siting on the environment, people and goals and objectives of the commonwealth for climate mitigation, carbon storage and sequestration, resilience, biodiversity and protection of natural and working lands to the extent practicable." M.G.L. c. 164, § 69T. See 980 CMR 13.00 Regulation Guidance at 18.

In our comments to DOER's proposed regulations and to the Guidance as described above, we noted the importance of site suitability criteria and referenced the mitigation hierarchy as a foundational element of the Climate Act. As part of this proceeding, we appreciate the overlap and the need for coordination among EEA, DOER and EFSB. We also note that at this stage additional comments are being solicitated as part of EFSB/OEJE's Cumulative Impact Analysis draft regulations. Accordingly, in order to ensure that our concerns are considered in this part of the ongoing process, we reiterate our comments on the Guidance, as submitted to DOER and to EEA and attached here as Appendix A, and recommend that the EFSB Regulations provide, among other things, the following:

- Include explicit and detailed definitions of avoid, minimize, mitigate, nature positive and no net loss.
- Clarify that the mitigation hierarchy sequencing is required as part of any

consideration of potential environmental impacts and specifically state that the application of the mitigation hierarchy sequentially prioritizes and sets thresholds for avoidance, then minimization, followed by mitigation of any negative consequences.

- Consider core criteria (biodiversity, forest carbon, and climate resilience) distinctly from consideration of development potential and social and economic benefits and burdens which are three separate categories, quantitatively and qualitatively distinct.
- Apply a separate benefit score for evaluating, scoring, and weighting the core criteria (biodiversity, carbon sequestration and storage, and resilience).
- Expand the definition of site suitability assessments to require application of science-based criteria, data and thresholds in determining Site Suitability Scores for Forest Carbon, Biodiversity, and other values. TNC supports the use of the credible, peer reviewed and publicly available BioMap, National Forest Carbon Monitoring System, and UMass Conservation Assessment and Prioritization System ("CAPS") data to support a robust site suitability approach. Specifically, under XI. PROPOSAL & ANALYSIS: ENVIRONMENTAL IMPACTS:
    - A.2. Terrestrial Ecology: This section needs to include an assessment of BioMap, analogous to EEA's "Guidance". Sites should be described in the context of intersection with all BioMap components, including Core Habitat, Critical Natural Landscape, Local Components, and Regional Components. This section also needs to reference UMass CAPS Index of Ecological Integrity, again in keeping with EEA's "Guidance".
    - D. 7. Aquatic Ecology: Similarly, this section should explain the intersection with BioMap Aquatic Core Habitat and Aquatic Buffers.
    - G. Climate Mitigation and Resiliency/1. Greenhouse Gas Emissions: Sites should be assessed for Forest Carbon on the site, in keeping with EEA's "Guidance", which states: "The National Forest Carbon Monitoring System shall be used to calculate the Criteria-Specific Suitability Score for Carbon Storage and Sequestration…", using "Total Ecosystem Carbon (2070)" data.
- Require that site suitability assessments use certified and qualified personnel.
- Expand the definition of newly established right of way to apply to any right of way used or accessed by the public whether or not laid out by public authority and which may or may not already house utility infrastructure.
- Require that Transmission and Distribution Infrastructure be subject to a Site Suitability Criteria, e.g., not limited by a narrow definition of newly established right of way as noted above or to a burdened area.
- To avoid confusion and promote efficiency, EFSB's regulations should incorporate these elements or, as an alternative, specifically reference them as

provided in the Guidance. Moreover, EFSB's and DOER's regulations should be consistent.

Specific Comments on the Draft Regulations

We appreciate that EFSB has cross referenced the Guidance in its regulations. We are hopeful that the Guidance will incorporate many of our comments as submitted in that proceeding and that the EFSB will address our concerns as noted above. With respect to EFSB's proposal in 25-10, we applaud the required use of the Site Suitability Criteria established by EEA to evaluate proposed sites and routes and the applicability of Site Suitability Criteria as part of the Prefiling Requirements set forth in 980 CMR 16.00.
In addition, we believe that Site Suitability Criteria should be included on a par with cumulative impact requirements in the definitions. Accordingly, 980 CMR 1.04(1)(c) should be amended to require applicants to demonstrate compliance with site suitability criteria as well as cumulative impact requirements. In other words, we are concerned that the Board is proposing that a Site Suitability Analysis and Scoring would not be required if a CIA is conducted. This seems to be contrary to the requirements of the Climate Act.

In addition, the regulations should provide for a clear statement of how the Board will assess the site suitability criteria, e.g. the Total Site Suitability Score, in its decision and how it will weigh the site suitability criteria scores comparatively with other factors. The regulations should more specifically explain how the Site Suitability Analysis and the analysis of non-cumulative environmental and social indicators will be considered and made actionable as part of the EFSB's final decisions. We will further consider this point, among others, in our comments on 980 CMR 15.00 (Cumulative Impact Analysis and Standards for Applying Site Suitability Criteria).
Finally, we note that the Siting Board is considering requiring Applicants to address Site Suitability Criteria in their description of environmental impacts pursuant to 980 CMR 13.03(1)(i). (Decision Opening Rulemaking at 15). We would agree that Site Suitability Criteria should be included as part of the Applicant's obligation to "describe environmental impacts of the proposed CEIF Project, including both environmental benefits, burdens, and a description of efforts to avoid, minimize, and mitigate burdens."

We look forward to submitting further comments in 980 CMR 15.00.

Thank you for your time and consideration. Please feel free to contact us if you have any questions.

Sincerely,

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October 17, 2025

RE: Comments of The Nature Conservancy in Massachusetts 225 CMR 29.00 - Small Clean Energy Infrastructure Facility Siting and Permitting (Submitted via email)

Thank you for the opportunity to provide comments to the Department of Energy Resources ("DOER") regarding the proposed regulations, 225 CMR 29.00 - Small Clean Energy Infrastructure Facility Siting and Permitting ("Siting Proposal").

The Nature Conservancy ("TNC") is pleased to submit these comments in support of the Healey-Driscoll administration's efforts to balance the growing need for renewable energy facilities, while tackling climate change, and protecting nature.

TNC is a global conservation organization working toward a world where people and nature thrive, with a mission to conserve the lands and waters on which all life depends.

Overall, as set forth below, in our comments and in the following sections discussing specific regulations, we believe that the proposed regulations provide a strong framework and include reasonable compromises supported by both the conservation community, municipalities and developers. At the same time, as noted, specific elements need further review and revision.

Summary of Comments

- We strongly support and appreciate the use and application of the science-based data, criteria, and thresholds in site suitability guidelines on Forest Carbon and Biodiversity and we are offering a refined definition of Climate Change Resilience.
- The Solar Massachusetts Renewable Target Program's ("SMART") eligibility criteria and preferential scoring and mitigation hierarchy should continue to be the primary mechanism for controlling and managing land use and development impact from relatively smaller projects.
- The regulations need to define terms and clarify that the mitigation hierarchy sequencing is required as part of any consideration of potential environmental impacts

and specifically state that the application of the mitigation hierarchy sequentially prioritizes and sets thresholds for avoidance, then minimization, followed by mitigation of any negative consequences.

- We continue to urge that the core criteria (biodiversity, forest carbon, and climate resilience) be considered and addressed distinctly from consideration of development potential and social and economic benefits and burdens which are three separate categories, quantitatively and qualitatively distinct.
- The regulations should apply to any right of way used or accessed by the public whether or not authorized by a public authority and which may or may not already house utility infrastructure.
- The regulations should apply to the infrastructure, such as sub-stations, which drive development of nearby clusters of renewable energy generation.

Background

TNC and the Executive Office of Energy and Environmental Affairs ("EEA") and DOER have a long history of collaboration and alignment on rapidly deploying clean energy while providing better outcomes for people and nature. We proudly served on the Commission on Energy Infrastructure Siting and Permitting ("CEISP"). TNC advocated for the legislature to enact the CEISP's recommendations into An Act Promoting a Clean Energy Grid, Advancing Equity, and Protecting Ratepayers ("Climate Act"). Since the enactment of the law, we have appreciated and participated in many stakeholder sessions and provided verbal and written comments on DOER's straw proposals.

As part of the Climate Act, the Commonwealth is providing a streamlined siting and permitting process, with unique incentives for renewable energy. The Act requires compliance with existing environmental law and includes strong guardrails and guidelines to ensure the Commonwealth is working in an integrated way to avoid conflicts between development and conservation goals.

We support the integrated approach developed by the administration and stakeholders to weave together science-based site suitability and local experiences from robust community engagement to help determine better outcomes for people and nature in a more efficient siting and permitting process. Specifically, the Climate Act requires, as part of the "methodology for determining the suitability of sites" and as part of the mitigation hierarchy to be applied, consideration of core criteria, i.e., biodiversity, forest carbon, and climate resilience. The core criteria, as referenced specifically in the Climate Act, are derived from laws, policies, plans that include goals for reaching 30 percent of Massachusetts' lands conserved by 2030, maintaining and expanding carbon dioxide pollution removal by natural and working lands, protecting biodiversity, and strengthening climate change resilience. The approach, as mandated in the Climate Act, requires a

sequential mitigation hierarchy to first avoid impacts on people and nature, what cannot be avoided must be minimized, and what cannot be minimized, be mitigated.

General Comments

TNC offers the following general comments regarding the Siting Proposal. As appropriate, in the following section, some of these comments are incorporated into our recommendations regarding specific draft regulatory provisions.

Criteria: We strongly support and appreciate the application of science-based criteria, data, and thresholds in determining Site Suitability Scores for Forest Carbon, Biodiversity, and other values. TNC supports the use of the credible, peer reviewed and publicly available BioMap, National Forest Carbon Monitoring System, and UMass Conservation Assessment and Prioritization System ("CAPS") data to support a robust site suitability approach. This data is used by public agencies, NGOs, and academia to support effective and efficient decision support, prioritization, and policies.

Small Scale Development: Most future land-based solar developments are expected to be under 25MW. DOER's small-scale regulations will be the primary vehicle through which many land-based solar facilities will be sited and permitted.

Regulations versus guidelines: Regulations are the foundation of siting and permitting and need to include strong requirements that are linked to, and translated into, guidance relating to site suitability and mitigation. We need clear guidelines to implement the regulations and provide transparency for communities, regulators, and the regulated community.

Interfacing with SMART: Solar developers have consistently indicated that they cannot build ground-mounted solar arrays without Solar Massachusetts Renewable Target Program ("SMART") incentives. The interface between the processes required as part of the small-scale regulations and SMART needs clarity and alignment. The SMART program should continue to be the primary mechanism for controlling and managing land use and development impacts from smaller projects. Accordingly, developers should obtain permits from local governments as set forth in the 225 CMR 29.00 as well as authorization to participate in SMART for relatively smaller projects, i.e., projects up to 5 MWs. For eligible projects, the SMART mitigation hierarchy, eligibility criteria, and mitigation formula scoring requirements should not be replaced by the Siting Proposal. SMART is a voluntary program with specific requirements imposed to incentivize solar development and support conservation goals.

Given the interplay between SMART and the Siting Proposal, and the need for clarity, we suggest the following process for the universe of SMART projects for which siting and permitting rules also apply:

- Pre-Screening**:** DOER should consider eligibility under the SMART program as a crucial step. Under the SMART program, the Preliminary Statement of Qualifications ("PSOQ") indicates that a project has met the necessary criteria to receive incentive payments. The PSOQ is issued based on the eligibility requirements and incorporates incentives utilizing factors that recognize the importance of core criteria. The pre-screening of the siting and permitting process should include SMART requirements and an evaluation of whether a project, as proposed, would qualify for SMART.

- Consistency: The criteria, data, and thresholds for SMART and in siting and permitting, as defined in the Guideline for Site Suitability Assessments for Clean Energy Infrastructure should be consistent with respect to biodiversity, forest carbon, and climate change resilience.

- Primacy**:** Siting and Permitting site suitability should not supersede the SMART Program's eligibility requirements and mitigation formula scoring. SMART is an opt in program in which developers choose to participate. SMART incentives are consistent with the state's environmental laws and with the state's goals for biodiversity, forest carbon, and climate change resilience. SMART's ineligibility and mitigation approach are rigorous approaches that are designed to reduce impacts on nature and people and should therefore be adhered to consistently.

- Objectivity and quantifiability: The SMART mitigation formula is objective and quantified, which will result in consistent application of the mitigation formula across the state and across projects, municipalities, and settings. This consistent approach should be replicated in the Siting Proposal, AND as stated above, SMART eligibility and mitigation calculations should happen first, and apply to all projects, to ensure this consistency.

Mitigation Hierarchy: The regulations need to clarify that sequencing is required as part of any consideration of potential environmental impacts, and specifically state, as set forth in the Climate Act, that the application of the mitigation hierarchy sequentially prioritizes avoidance, then minimization, followed by mitigation of any negative consequences. In addition, the mitigation hierarchy should incorporate the elements of the law protecting nature and people and at a minimum include existing laws and regulations such as the Wetland Protection Act and the Endangered Species Act as well as core site suitability criteria, including specifically, biodiversity, forest carbon and climate change resilience.

In addition, the regulations should provide that the mitigation hierarchy be based on the following principles (and these should be included as definitions in the Siting Proposal):

- Nature Positive: is a net positive for ecosystem values, where impacted and/or converted lands and waters are mitigated through the protection and restoration of lands and waters of equal or greater ecological value.
- Not Net Loss: land of equal ecosystem value to replace land that is impacted or converted.

We have added two items to the appendix of our comments:

- A summary of mitigation principles and best practices from TNC's "Achieving Conservation And Development 10 PRINCIPLES FOR APPLYING THE MITIGATION HIERARCHY" .

- A TNC memo to EEA and the Energy Facilities Siting Board (EFSB) providing a summary of mitigation options (July 2025).

Further, the mitigation hierarchy should include clear thresholds that developers must meet in each stage to advance through the hierarchy. In other words, all efforts should be made to avoid or minimize impacts to the maximum extent possible before any mitigation is allowed. The following principles should be applied:

- **Avoidance** should be a priority and the regulations should provide for a clear pathway to use the site suitability scoring to incentivize projects to avoid impacts.
- **Minimization and Mitigation actions** should focus on maintaining key ecological functions and meeting ecological targets.
    - Minimization refers to onsite actions to reduce impacts, while mitigation is designed to replace, repair, rehabilitate, or restore areas that are affected by an adverse impact and may include compensation.
    - Mitigation requirements should have performance standards, regulatory oversight and enforcement and a long-term management plan with necessary measures and funding.
    - Mitigation and Minimization are often conflated and need to separately defined and applied.

Mitigation Fees: The regulations should provide clarity and transparency for municipalities on the assessment and management of mitigation fees. Municipalities should have a separate and distinct account into which mitigation fees should be deposited.

State environmental agencies should collaborate with conservation organizations to develop a pre-qualified statewide list of conservation projects which municipalities could fund using mitigation fees. TNC and the Natural Heritage and Endangered Species

Program's Box Turtle Mitigation Program provides an example of a collaboration in the in lieu of fee mitigation program.

In the event a municipality decides to opt out of managing the mitigation fees, any fee should be transferred to a statewide trust fund for the purposes on meeting ecological goals. There are multiple options of existing trust funds that align with the intent of the Act which could accept deposits of mitigation fees that support the criteria under site suitability including:

- The Biodiversity Trust Fund (section 35D1/2 of Chapter 10 of the General Laws) would enable mitigation funds to support the state's biodiversity goals and programs such as land acquisition, habitat management, ecosystem restoration.

- The Global Warming Solutions Trust (Section 35GGG of Chapter 10 of the General Laws); would enable funds to support carbon sequestration and storage, natural and working lands and adaptation/resilience.

Site Suitability Score: It should be noted that some of the five scoring criteria are inversely correlated, i.e. they will not co-occur in the same location. This will reduce the maximum and median scores and the possibility of scores reaching or approaching 25. For example, sites that score high for Agricultural Resources will often get lower scores for Forest Carbon, and vice versa. This should be kept in mind when developing mitigation strategies based on the total (0-25) scoring and places a greater importance on criteria-specific scores.

Resilience: Resilience, as proposed, based on riverine and coastal exposure is a great starting place. Importantly, the current application of resilience appears to focus solely on resilience of energy infrastructure in the face of climate impacts. TNC recommends expanding that concept to include the potential impacts of energy infrastructure development on climate change resilience (e.g., infrastructure and its footprints avoiding exacerbation of impacts such as stormwater runoff, heat island effects, etc.) In addition, TNC recommends using the latest and most precise riverine and coastal flood modeling science, data, and analyses, including those under EEA's ResilientMass Plan and the Office of Coastal Zone Management Coastal Resilience initiative. Moreover, the proposal should consider excessive heat as a criterion, which is also addressed in the Climate Resilience Design Standards Tool. Clearing natural areas in urban areas and existing heat islands can exacerbate extreme heat conditions and flooding from ground/surface water runoff.

Individual/Single Scores: TNC supports the use of a separate benefit score for evaluating, scoring, and weighting the core criteria (biodiversity, carbon sequestration and storage, and resilience). TNC appreciates that the Siting Proposal indicates that the score for each

criterion, the Criteria Specific Suitability Score, can be considered separately as well as collectively. For example, if a project receives a high score for climate resilience but low scores for other criteria, the permitting authority could use that score to require resilience measures in the project design. Finally, we urge that the core criteria be considered and addressed distinctly from consideration of development potential and social and economic benefits and burdens. Core criteria, development potential, and economic benefits and burdens are three separate categories, quantitatively and qualitatively distinct.

Land Use look back: Site suitability project evaluation should include a multi-year (e.g. 5-year) look-back period for forest carbon, BioMap habitat, the Index of Ecological Integrity, and other criteria to ensure there has not been manipulation of the land to affect the site suitability scoring. This avoids the possibility of a perverse incentive to remove trees or degrade habitat to score more favorably under site suitability.

Scoring Process: We support the concept that an applicant may request a Site Suitability Score review from the Department. Reviews of the site footprint impacts should be limited to cases where land use within a footprint have changed (e.g., land clearing, development, etc.) subsequent to the development of site suitability score maps and data. The reviews should not focus on the veracity of the data itself (e.g., BioMap, forest carbon, Index of Ecological integrity, etc.). Habitat and carbon mapping includes sophisticated decision-rules that may not be replicable with a site visit, and remotely sensed and modeled data measure aspects of the landscape that cannot be "ground truthed" in the field.

Site Suitability Reviewers: We endorse the use of site suitability reviewers. We encourage the regulations include some requirements regarding the necessary expertise and credentials in site suitability and other important topics. We also encourage the municipality to have a role in determining the scope of work conducted by the reviewer within the scope of the regulations.

Utility Transmission Infrastructure: Utilities should be required to avoid, minimize, and pay compensatory mitigation for grid projects which enable projects - such as ground-mount solar -- which convert adjacent natural and working lands. We absolutely need to enhance the electric grid's capacity to deliver more clean, affordable energy. In the proposed framework, however, electric utilities' choices of sites for new or expanded electricity transmission and distribution projects are currently exempt from site suitability guidance and requirements to avoid, minimize, or mitigate impacts from developers of solar, wind, or energy storage projects. To be economically viable, new energy generation projects such as ground-mounted solar must be located within five miles of an interconnection site, and most are even closer. As such these regulations, as well as those

applying to large CEI projects, should hold utilities - and not just energy developers - accountable for avoiding, minimizing, and mitigating the impacts not only from their transmission and distribution project sites, but also for impacts to nearby natural and working lands because this is where generation and storage projects must locate to secure affordable interconnections.

Specific Comments and Suggested Revisions on Regulations

As noted above, TNC strongly supports the Siting and Permitting Regulations as proposed and appreciates DOER's work in developing the proposal. We offer the comments below on specific sections.

Suggested revisions to the draft regulations are noted in *italics* indicate additions and bracketed sections [ ] indicate deletions. In each case, explanations are referenced below in Comments. In some sections, we offer just Comments.

225 CMR 20.02: Definitions

As discussed below, a definition of avoid should be included (as well as other additions/revisions as noted) and definitions related to minimization and mitigation should be revised. We suggest the following definitions:

Avoid: Measures taken to avoid creating impacts from the outset, such as careful spatial or temporal placement of elements of infrastructure, in order to completely avoid impacts on certain components of biodiversity, forest carbon, and other values.

- Comment: With respect to the mitigation hierarchy, avoidance is the first and most important step for supporting conservation goals and to protect sensitive resources as required by the Act. Measures, including careful, science based and clearly defined, spatial or temporal placement of infrastructure, should be considered at the outset to avoid creating direct, indirect, and cumulative impacts to habitat and species. Efforts to avoid and minimize impacts should be made to the maximum extent practicable and take into account the most recent and robust technology, and available science, before mitigation is considered. Mitigation practices and sequentially mitigation/offsets are then applied to address residual impacts. Avoidance is critical to ensure that sensitive resources are not harmed. Accordingly, the Siting Proposal should require that mitigation only be considered after avoidance and minimization efforts.

Minimize: Measures taken to reduce the duration, intensity, and/or extent of impacts (including direct, indirect, and cumulative impacts, as appropriate) that cannot be completely avoided, as far as is practically feasible.

- Comment: Once a site has been selected for development, the design and operation of a facility has significant influence on the overall impact. Considerations such as design of fencing, height and spacing, site preparation, and vegetation management can all contribute to improved outcomes for wildlife by minimizing impacts and enhancing co-benefits of the facility.

Mitigation. Measures taken which have been subject to review and input from the general public and include, but are not limited to, the repair, rehabilitation, or restoration of an area affected by an adverse impact of siting. Mitigation should include reducing or eliminating the impact over time by preservation and maintenance operations during the life of the facility, and/or compensation for the impact by replacing or providing substitute resources or environments. Two types of mitigation should be considered:

- Rehabilitation/Restoration: Measures taken to rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/or minimized.
- Offset: Measures taken to compensate for any residual significant, adverse impacts that cannot be avoided, minimized, and/or rehabilitated or restored, in order to achieve no net loss or a nature positive outcome for biodiversity, forest carbon, and other values. Offsets can take the form of positive management interventions such as restoration of degraded habitat and ecologically valuable lands and waters, arrested degradation or averted risk, and protecting areas to prevent loss of biodiversity, forest carbon, and other values.

- Comment: The definition of mitigation should be more specific as proposed.

Definitions for Nature Positive and No Net Loss should be included in the definitions.

Nature Positive. is a net positive for ecosystem values, where impacted and/or converted lands and waters are mitigated through the protection and restoration of lands and waters of equal or greater ecological value.

Not Net Loss. No Net Loss of land of equal ecosystem value to replace land that is impacted or converted.

Public Right of Way. Any way that is accessible to the public (whether or not authorized by a public authority) and/or that is established on public property and which may or may not already house utility infrastructure.

- Comment: This addition is discussed below in comments relating to 225 CMR 29.07 (1).

Site Footprint. The area of land and water encompassed by Small Clean Energy Infrastructure Facility's equipment, plus any land significantly impacted by construction of the Small Clean Energy Infrastructure Facility, including, but not limited to, land a*ltered of its natural vegetative composition and structure by* clearing, grading, and roadways.

- Comment: The additional language is designed to mirror the more comprehensive language utilized in SMART.

Site Suitability Score Reviewer. A *third-party* entity *with expertise in evaluating and assessing short- and long-term impacts of development on sensitive environmental areas* selected by the Executive Office of Energy and Environmental Affairs, in consultation with the Department that will be responsible for calculating Criteria-specific Suitability Scores and Total Site Suitability Scores.

- Comment: As noted, the entity should be a qualified third party with expertise in evaluating and assessing short- and long-term impacts of development on sensitive environmental areas. This could be like certification and training of Licensed Site Professionals and/or service providers for the Municipal Vulnerability Preparedness Program.

225 CMR 29.06 Public Health, Safety and Environmental Standards.

The Applicant's Small Clean Energy Infrastructure Facility shall comply with all criteria and standards including but not limited to setback requirements, zoning criteria, compliance monitoring, discharge controls, erosion and runoff prevention, monitoring impacts on abutting properties, contamination and remediation, encroachments on critical resources, Emergency Response Plan requirements, *wetlands resources, Priority Habitat* and measures to address potential harms relating to abandonment of a Small Clean Energy Infrastructure Facility.

- Comment: The listed criteria should also include wetland resources and Priority Habitat, used to implement the MA Endangered Species Act as these are regulated under current Massachusetts statutes.

225 CMR 29.07 (1): Application of Site Suitability Guidance.

(1) Exemptions. The following types of Small Clean Energy Infrastructure Facilities shall be exempt from the requirements of 225 CMR 29.07:
(b) A Small Clean Transmission and Distribution Infrastructure Facility that is not sited in a newly established public right of way, as defined in the Site Suitability Guidance;

- Comment: The Climate Act provides that "the executive office of energy and environmental affairs shall establish and periodically update a methodology for determining the suitability of sites [ ] for clean transmission and distribution infrastructure facilities in newly established public rights of way." The Guidance defines a public right of way as any "way laid out by public authority that permits public access or that is established on public property, and which may or may not already house utility infrastructure." The Climate Act does not define newly established public right of way. As defined in the Guidance, this provision may allow for an unnecessarily broad exemption to impacts from the siting and permitting required for Small Clean Transmission and Distribution Infrastructure Facilities. Public rights of way, as defined and applied to areas that are currently "permitted" by public authorities or "established" would limit application of the siting and permitting scheme to only those areas that are newly designated by public authorities. Unless clarified, wide areas of sensitive areas, not public and/or not new, would not be subject to the rules. The intent of the Climate Act was to limit impacts from Small Clean Energy Infrastructure Facilities, and to ensure that new transmission line routes and particularly new lines, e.g., not existing rights-of-way (newly established) would be subject to the siting regulations. The provision as drafted and without clarification may be too broad. The definition in the Guidance should be revised and included in the regulations.

225 CMR 29.07 (3): Application of Site Suitability Guidance.

(3) Site Suitability Report. Except in the case of a proposed Small Clean Energy Infrastructure Facility that meets the criteria for an exemption under 225 CMR 29.07(1), all Applicants seeking a Consolidated Local Permit shall be required to provide a Site Suitability Report to the Local Government as part of their Consolidated Local Permit Application, which shall include the following information pertaining to the Small Clean Energy Infrastructure Facility:

1. The Total Site Suitability Score;
2. All Criteria-specific Suitability Scores;

3. An explanation of why the site for the proposed Small Clean Energy Infrastructure Facility was chosen *and what measures were undertaken to avoid impacts*;
4. Proposed Minimization and Mitigation Measures for any impacts identified in Criteria- specific Suitability Scores, pursuant to 225 CMR 29.07(5) through (7);

- Comment: The Site Suitability Report should also include and assess measures to avoid impacts (or the related site location) identified as part of any assessment of Criteria- specific Suitability Scores, pursuant to 225 CMR 29.07(5) through (7).

225 CMR 29.07 (5): Application of Site Suitability Guidance.

(5) Minimization and Mitigation Measures

(a) Application of Site Suitability Report. A Local Government may use the Site Suitability Report required by 225 CMR 29.07(3) *to ensure that efforts were undertake to avoid impacts and that [*to prescribe different types of] Minimization and Mitigation Measures *were applied to limit [*which shall have a rational nexus to] the impacts of the proposed Small Clean Energy Infrastructure Facility's siting on the environment, people, and the Commonwealth's goals and objectives for climate mitigation, resilience, environmental justice, biodiversity, and protection of natural and working lands, to the *maximum* extent practicable.

(b) Scope and Type of Minimization and Mitigation Measures. The scope and type of Minimization and Mitigation Measures that a Local Government may require shall be based on a Small Clean Energy Infrastructure Facility's Total Site Suitability Score and Criteria- specific Suitability Scores and shall meet the specifications in the Department's *Guideline on Minimization and Mitigation Measures*. If the Total Site Suitability Score or Criteria- Specific Suitability Scores are high enough, as prescribed in the Department's *Guideline on Minimization and Mitigation Measures*, such measures may include Compensatory Environmental Mitigation Measures, as prescribed in 225 CMR 29.07(6).

(c) Exemptions for Highly Suitable Facilities. A Local Government may not require Minimization measures for Small Clean Energy Infrastructure Facilities that achieve highly suitable Total Suitability Scores or Criteria-specific Suitability Scores, as prescribed in the Site Suitability Guidance, without the express consent of the Applicant.

- Comment: As noted, the concept of avoidance should be included in the Site Suitability Report and the Local Governments should specifically consider that impacts be avoided as part of its use of the Report. TNC will review the Department's Guideline on Minimization and Mitigation Measures and provide further comments as part of that comment process. In addition, we suggest deleting the reference to rational nexus (that term is unclear) and suggested alternative language. Further, we revised to the extent practical to the "maximum extent practical" to make it consistent with the statute and with other sections of the draft regulation. Finally, we note the carve out (e.g., no mitigation or minimization required) for facilities with "highly suitable Total Suitability Scores or Criteria-specific Suitability Scores" (e.g., low scores) and suggest a clear list of what facilities are to be included in this category be included and that some mechanism (beyond applicant consent) be provided in the event of disagreement.

225 CMR 29.07 (6): Application of Site Suitability Guidance.

(5) Compensatory Environmental Mitigation. A Local Government may offer Compensatory Environmental Mitigation to an Applicant in situations where a proposed Small Clean Energy Infrastructure Facility has received a highly unsuitable Total Site Suitability Score or Criteria- specific Suitability Score, consistent with the Site Suitability Guidance and the Department's *Guideline on Minimization and Mitigation Measures*, or may be mutually agreed to between the Local Government and the Applicant. Such measures shall *be employed to limit the [*have a rational nexus to] impacts of the proposed Small Clean Energy Infrastructure Facility's siting on the local environment and people and be consistent with the Commonwealth's goals and objectives for climate mitigation, resilience, environmental justice, biodiversity. and protection of natural and working lands to the maximum extent practicable. Qualifying Compensatory Environmental Mitigation shall meet the specifications in the Department's *Guideline on Minimization and Mitigation Measures*.

- Comment: This section applies to "highly unsuitable" sites, e.g., facilities that have received a highly unsuitable Total Site Suitability Score or Criteria- specific Suitability Score. The regulations should provide specific controls on this type of process to prevent the development of these otherwise "unsuitable areas" because the compensation provided is attractive to the Local Government. We are concerned that pay to play (e.g., compensation as a quid pro quo for the development of otherwise "highly unsuitable" areas), without detailed guidance, would encourage the uncontrolled development of unsuitable areas and undermine the intent of the strong protections and application of the mitigation hierarchy as set

forth in the statute. In the absence of specific guidelines, this process will allow the development of (and impacts to) sensitive areas with payment of fees. Accordingly, the regulations need to set forth the conditions (and process) by which compensation will be allowed. We suggest aligning with the SMART compensatory mitigation scoring and methodology. In addition, we deleted the reference to "rational nexus" to make the relationship of mitigation and minimization measures to impacts clearer.

225 CMR 29.07 (7): Application of Site Suitability Guidance.

(6) Compensatory Environmental Mitigation Fees. Local Governments may impose Compensatory Mitigation Environmental Fees to satisfy the Applicant's Minimization and Mitigation requirements. The fees shall be paid by the Applicant in lieu of the Applicant's own performance of Minimization and Mitigation Measures under 225 CMR 29.07(5). Payment of Compensatory Environmental Mitigation Fees under this section shall not excuse an Applicant's additional mitigation requirements required under state or federal law.

(a) In setting Compensatory Environmental Mitigation Fees, Local Governments shall refer to the Applicant's Site Suitability Report and calculate the fee in accordance with Department specifications in *Guideline on Minimization and Mitigation Measures*.
(b) Compensatory Environmental Mitigation Fees established by the Local Government shall be paid by the Applicant in a manner to be established by the Local Government. Payment may be made to either the Local Government or a Non-Profit Entity for the purposes of satisfying the Applicant's Minimization and Mitigation Measure requirements under 225 CMR 29.07(5).

- Comment: As noted in our comments to Section (6) above the process under which the Local Governments are allowed to impose Compensatory Mitigation Environmental Fees must be clearly defined such that resources are protected from impacts from the construction, operation, and maintenance of Small Clean Energy Facilities. In addition, organizations referenced in the statute, e.g. the Local Government and Non-Profit entities must have the demonstrated expertise and ability to use the funds in a manner that satisfies the Applicant's Minimization and Mitigation Measure requirements under 225 CMR 29.07(5).

Thank you for your time and consideration. Please feel free to contact us should you have any questions.

Sincerely,

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Appendix

EXHIBIT A; MITIGATION MEMO

To: Mike Judge, Andy Greene, et al
From: The Nature Conservancy
Date: August 15, 2025
Re: Mitigation Hierarchy

This memo is prepared in response to a request for clarification and additional information on the mitigation hierarchy. It provides suggestions on how the Executive Office of Energy and Environmental Affairs and Energy Facilities Siting Board could consider the mitigation hierarchy in the development of clean energy infrastructure siting and permitting regulations and site suitability guidelines. We are happy to meet and answer any questions. Thank you for your time and consideration.

Mitigation Hierarchy is an approach to address potential environmental impacts, sequentially prioritizing avoidance, then minimization, followed by mitigation of any negative consequences. It is applied throughout the planning, design, siting, development, operations, and decommissioning processes. The mitigation hierarchy should incorporate the elements of the law protecting nature and people and at a minimum all existing regulations should be fully adhered to, including the wetland protection act and the endangered species act. And the mitigation hierarchy should be based on the following principles

- **Nature Positive:** is a net positive for ecosystem values, where impacted and/or converted lands and waters are mitigated through the protection and restoration of lands and waters of equal or greater ecological value.
- **Not Net Loss**: if ecologically valuable land is developed, then other lands of equal natural resource value must be set aside to be protected.

The mitigation hierarchy should include clear thresholds that developers must meet in each stage to advance through the hierarchy. In other words, all efforts should be made to avoid or minimize impacts to maximum extent possible before any mitigation is allowed.

Avoid: With respect to the mitigation hierarchy, avoidance is the first and most important step for supporting conservation goals and to protect sensitive resources as required by the Act. Measures taken to avoid creating impacts at the outset (including direct, indirect, and cumulative impacts), such as careful, science-based, clearly defined spatial or

temporal placement of infrastructure to completely avoid impacts to habitat and species. Efforts to avoid and minimize impacts should be made to the maximum extent practicable – considering the most recent and robust technology, available science– before mitigation is considered. Minimization practices, and sequentially mitigation/offsets are then applied to address residual impacts.
Avoidance is critical to ensure that sensitive resources are not harmed. Accordingly, the policy should require that mitigation only be considered after avoidance and minimization efforts.

Minimize: Once a site has been selected for development, the design and operation of the solar facility has significant influence on the overall impact. Considerations such as design of fencing, panel height and spacing, site preparation, and vegetation management can all contribute to improved outcomes for wildlife by minimizing impacts and enhancing co-benefits of the solar facility. Below are some examples, but this is not an exhaustive list.

- **Reduce Barriers to Wildlife Movement** Landscape permeability is an often-cited concern with PV solar development, largely due to perimeter fencing excluding wildlife from the footprint and unknown impacts to animal movement. Wildlife connectivity and movement may be of greatest concern when PV solar facilities are sited within or near intact habitats. An effective method for allowing movement of both large and small animals at large solar installations is to retain unfenced wildlife passageways between fenced solar installations. Solar development near rivers, streams and their associated riparian areas and wetlands should also be avoided, and these areas can serve as wildlife passageways.
- **Protect water quality, avoid erosion, and minimize watershed Impacts** Panel design considerations (including height, spacing, and choice of racking and mounting systems) can impact groundwater infiltration and runoff as well as feasibility of co-located agricultural uses. Incremental increases in space between panel arrays or inclusion of adaptable tracker systems can increase water infiltration opportunities during rain events, especially when the site has sufficient vegetated cover. This can improve groundwater recharge and decrease the risk of stormwater runoff and erosion and sedimentation impacts on water quality. Special care should be taken during site design if streams or wetlands are on or near a site. Whenever feasible, maintain undisturbed vegetative buffers around these features to reduce impacts to nearby wildlife as well as aquatic habitat both within and downstream of the site.
- **Restore native vegetation** Plans for vegetation management can influence components of the site design, so it is recommended that these decisions be made in conjunction with the site design process. Avoiding unnecessary vegetation

clearing and soil grading or other soil disturbances during the pre-construction process can minimize impacts to wildlife and their habitats, reduce erosion potential, improve groundwater recharge, and limit impacts to already sequestered carbon and other soil nutrients. Unnecessary clearing of vegetation, especially on sloped or erosional soils, will often require stronger sedimentation and erosion protocols throughout project construction and will also increase replanting costs. Incorporation of low-growing native plantings or ecoregion-specific seed mixes throughout all or a portion of a site can decrease maintenance costs (after plants are established) while also providing important habitat and other benefits. There is extensive documentation to inform stewardship of plants that support pollinators (see references below).

- **Provide On-Site Habitat** Note: It will be important to consult with MassWildlife to manage habitat for specific *Species of Greatest Conservation Need* that are relevant to each site. In general, this strategy includes many of the same practices as "Restore native vegetation" above. Protect and restore on-site wildlife habitat features (e.g., wetlands, vegetated buffers): If there are special habitat features in or near the proposed solar facility that cannot be avoided via the siting process, the developer can consider incorporating them into site design. Retain or plant native shrubs/trees in buffers or outside of perimeter fence: Native shrubs and trees can be planted away from the panels to provide food and cover for wildlife and pollinators. Hedgerows can help with visual screening of the site and serve as complex structure for wildlife. In addition, this vegetation serves as a carbon sink which helps further mitigate climate change.

Additional minimization design approaches and greater detail can be found in these and other references:

- Recommended Practices for the Responsible Siting and Design of Solar Development in Georgia
- Principles of Low-Impact Solar Siting and Design
- Native Plant Installation and Maintenance for Solar Sites

Mitigate: EEA/EFSB should avoid strategies that encourage or incentivize a race to the bottom in which paying a mitigation fee is the default option. A science-based approach, and the use of the core criteria, would support objective decision making about when avoidance and minimization is necessary, when mitigation/offsets are appropriate and what type of mitigation would be warranted.

Offset: Measures taken to address any residual significant, adverse impacts that cannot be avoided, minimized and / or rehabilitated or restored, to achieve no net loss or a net gain of

biodiversity. Offsets can take the form of positive management interventions such as restoration of degraded habitat, arrested degradation, or averted risk, protecting areas where there is imminent or projected loss of biodiversity.

Compensation: Measures make good or pay damages for loss of biodiversity caused by a project that falls short of achieving no net loss. For instance: conservation actions may not have been planned to achieve no net loss; losses and gains of biodiversity may not have been quantified; no mechanism may be in place for long term implementation; it may be impossible to offset the impacts; or compensation payments may be used for training, capacity building, research or other outcomes that will not result in measurable conservation outcomes on the ground

Valuation for compensation should be based on a nature positive and no net loss of nature's services. Nature's services provide the following benefits :

- **Boost climate resilience** by restoring natural systems that reduce heat, prevent flooding, and cut community costs.
- **Safeguard clean water** by protecting land and tackling pollution at the source.
- **Defend wildlife and nourish communities** by conserving vital habitats where plants and animals thrive.

Mitigation Principles: TNC published a guidance document "Achieving Conservation and Development: 10 Principles for Applying the Mitigation Hierarchy" 7 from which we have selected and paraphrased some of the principles, below:

- The mitigation hierarchy should be applied with clear recognition that many impacts to biodiversity, ecosystem services, and other resources and values cannot be offset. These impacts need to be avoided, as this may be the only means to prevent irreplaceable loss. The mitigation concept cannot be used to infer that sensitive ecosystems can be traded or replaced. There are limits to what can be mitigated/offset.
- Mitigation actions should focus on maintaining key ecological functions and meeting ecological targets and mitigation requirements should have performance standards, regulatory oversight and enforcement and a long-term management plan with necessary measures and funding.
- Mitigation should provide a new contribution to conservation, in addition to what would have occurred without any mitigation/offset. Offset actions that restore, enhance, manage, and/or protect values and functions should be a genuinely new contribution to conservation with a strong probability of success. The amount and

types of offsets required should be measured against project impacts to assess progress toward the mitigation policy goal. Mitigation/offsets must provide a new contribution to enhance the ecosystems beyond what would have occurred without mitigation/offset.

- Mitigation should provide ecologically equivalent values as those lost to project impacts. Offsets should preferably be "in kind" in terms of habitat type, functions, values, and other attributes. "Out-of-kind" offsets may be appropriate in cases where they better meet landscape-level conservation priorities and/or address past disproportional losses to other habitat types.
- Mitigation benefits should accrue in the project-affected landscape. Offsets should be implemented to maximize conservation benefits within a defined spatial extent or unit (e.g., watershed, ecoregion), supporting the accrual of offset benefits in the same landscape as project impacts.
- Offsets should be designed and implemented to safeguard against temporal losses of conservation values that can occur due to the different timing of project impacts and offset benefits. At a minimum, offsets should provide a high level of confidence of protection for at least as long as the direct, indirect, and cumulative project impacts.

Types of Mitigation

- **In Lieu Fee program (ILF)** - one method of "compensatory mitigation" for damages to the environment; it is used to compensate for impacts or unavoidable losses to wetlands/streams due to development, road-construction, or other projects. Mitigation occurs when a permittee provides funds to an in-lieu-fee sponsor, e.g., a public agency or non-profit organization. In most cases, the sponsor collects funds from multiple permittees to pool the financial resources necessary to plan for, build, and maintain the mitigation site. Like mitigation banking, in-lieu fee mitigation is often "off-site." Unlike mitigation banking, it typically occurs after the permitted impacts.
- MA Department of Fish and Game In Lieu Fee Mitigation Program - 4 Basic types of compensatory mitigation allowed by the Corps under the 2008 rule:
    - The preservation (i.e., permanent protection) of aquatic resources and/or habitats and buffers protecting aquatic resources, referred to in this Instrument as habitat protection;
    - The restoration (or re-establishment) of what had historically been an aquatic resource to its former state so there is a gain in aquatic resource acreage;
    - The establishment (creation) of an aquatic resource at a site where there is no evidence that it was previously an aquatic resource; and

- The enhancement (or rehabilitation) of an aquatic resource by restoring degraded functions of an existing wetland, which does not result in a gain in aquatic resource acreage. The Box Turtle Mitigation Program of the Massachusetts Natural Heritage and Endangered Species Program is a good example of an ILF program.
- **Mitigation Banks** – (e.g., established under Clean Water Act under oversight of US Army Corps of Engineers) is a system where the liability of ecological damage is transferred from the permittee to the mitigation banker through a system of credits and debits under regulatory guidelines; a mitigation banker develops, restores, preserves and manages the acreage at a bank site and earns mitigation credits, which are then sold to a permittee or developer for a fee.
    - bank site - the physical acreage that is restored, established, enhanced, or preserved.
    - bank instrument - the formal agreement between the bank owners and regulators establishing liability, performance standards, management and monitoring requirements, and the terms of bank credit approval.
    - Interagency Review Team (IRT) provides regulatory review, approval, and oversight of the bank.
    - Service Area - geographic area within which permitted impacts can be compensated for at a given bank.
- Joint banks & ILFs - can provide mitigation under several different authorities including state requirements.
- Conservation Banks – e.g., for impacts to federally listed species/habitats, a parcel of land containing natural resource values that are conserved/managed in perpetuity for a listed species and used to offset impacts occurring elsewhere to the same resource values on non-bank lands.
- Restoration Banks - for impacts to Endangered Species-listed species habitat

Federal Model

Finally, under the National Environmental Policy Act (NEPA), the Council on Environmental Quality has defined mitigation in its NEPA regulations at 40 CFR 1508.0 to include:

a) avoiding the impact altogether by not taking a certain action or parts of an action,

b) minimizing impacts by limiting the degree or magnitude of the action and its implementation,

c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment,

d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, and

e) compensating for the impact by replacing or providing substitute resources or environments."

This more nuanced approach provides multiple options to address impacts.

EXHIBIT B MITIGATION PRINCIPLES

Summary on Mitigation Principles

"Achieving Conservation And Development 10 PRINCIPLES FOR APPLYING THE MITIGATION HIERARCHY" Bruce McKenney & Jessica Wilkinson | Development by Design Program, The Nature Conservancy April 2015

Principle 1. Landscape Context

The mitigation hierarchy should be applied in a landscape context. Landscape-level assessments of conservation priorities and development scenarios should inform application of the mitigation hierarchy. They should be conducted as far in advance of project decisions and investments as possible and should identify important conservation values and potential direct, indirect, and cumulative impacts to these values.

The mitigation hierarchy is applied with a focus on supporting broader conservation objectives.

Application of the mitigation hierarchy is supported by a structured, transparent, and science-based foundation that drives impact avoidance and minimization and guides offset requirements.

Accountability is strengthened so that, at minimum, offsets fully address a project's unavoidable residual impacts.

Principle 2. Goals

Mitigation policy goals should support conservation objectives and drive accountability in applying the mitigation hierarchy. Mitigation policy goals should provide a clear driver for avoiding and minimizing impacts, and guide offset requirements. Offsets should fully address residual project impacts to achieve, at a minimum, a "no net loss" outcome for conservation.

Options for impact avoidance and minimization are fully considered, including avoiding projects altogether, before offsets are considered.

Offsets are applied for residual impacts only, not used as a justification to approve projects where impacts should have been avoided or minimized.

Principle 3. Mitigation Hierarchy Steps

The mitigation hierarchy should be followed sequentially - avoid, minimize, and then offset impacts. Avoidance is the first and most important step for supporting landscape-level conservation goals. Efforts to avoid and minimize impacts should be made to the

maximum extent practicable – considering existing technology, available science, costs relative to ecological benefits, and the likelihood of success for offset actions – before offsets are considered. Offsets are then applied to address residual impacts.

When it is not possible to offset the impacts (e.g., due to the rarity of the resources, lack of offset opportunities, poor likelihood of offset success, etc.), project impacts are not approved, precluding the need for offsets.

Principle 4. Limits to Offsets

There are limits to what can be offset. The mitigation hierarchy should be applied with clear recognition that many impacts to biodiversity, ecosystem services, and other resources and values cannot be offset. These impacts need to be avoided, as this may be the only means to prevent irreplaceable loss.

Principle 5. Sustainable Outcomes

Mitigation should support long-term, durable outcomes. Minimization and offset actions should be required to meet ecological performance standards and adhere to provisions for adaptive management, monitoring, and enforcement measures to ensure long-term and sustainable outcomes for conservation. Durability of offsets should be secured through designation mechanisms, management, and funding.

Mitigation actions focus on maintaining key ecological functions and meeting ecological targets rather than only administrative standards.

Requirements for meeting performance standards, monitoring, and adaptive management, with regulatory oversight and enforcement, support the sustainability of minimization and offset actions.

Offset agreements include a long-term management plan that outlines necessary management measures and funding for the measures.

Offsets are sited and designed to be self-sustaining and durable.

Principle 6. Stakeholder Engagement Practices

Mitigation should follow best practices for stakeholder engagement. Principles for meaningful stakeholder engagement in the decision-making process, including transparency, rights-based approaches, and use of science and traditional knowledge, are essential in applying the mitigation hierarchy.

Offsets contribute a measurable new benefit to conservation values and functions; they do not take the place of existing or mandated conservation actions that would have been implemented without the offset.

Offsets take into account risks, uncertainties, and other factors in design and implementation to deliver additional conservation benefits consistent with the mitigation policy goal.

Principle 7. Additionality

Offsets should provide a new contribution to conservation, additional to what would have occurred without the offset. Offset actions that restore, enhance, manage, and/or protect values and functions should be a genuinely new contribution to conservation with a strong probability of success. The amount and types of offsets required should be measured against project impacts to assess progress toward the mitigation policy goal.

Principle 8. Equivalence

Offsets should provide ecologically equivalent values like those lost to project impacts. Offsets should preferably be "in kind" in terms of habitat type, functions, values, and other attributes. "Out-of-kind" offsets may be appropriate in some cases where they better meet landscape-level conservation priorities and/or address past disproportional losses to other habitat types.

Offsets either provide conservation benefits like those lost due to the project or are a "trade up" to provide benefits that better meet conservation priorities.

Offsets are located in the project-affected ecoregion, increasing opportunities for ecological equivalence and reducing the potential for conservation "winners and losers" (i.e., benefits not accruing to those affected).

Important ecosystem functions (e.g., flood control benefits) remain supported within the project-affected region.

Principle 9. Location

Offset benefits should accrue in the project-affected landscape. Offsets should be implemented to maximize conservation benefits within a defined spatial extent or unit (e.g., watershed, ecoregion), supporting the accrual of offset benefits in the same landscape as project impacts.

Offsets are implemented in advance or concurrent with project impacts where possible and appropriate.

Temporal losses (e.g., years before offset conservation values reach maturity) are compensated for in the design and/or size of the offset.

Offsets are maintained and effective for the duration of a project's direct, indirect, and cumulative impacts on the species and ecological communities.

Principle 10. Temporal Considerations

Offsets should protect against temporal losses. Offsets should be designed and implemented to safeguard against temporal losses of conservation values that can occur due to the different timing of project impacts and offset benefits. At a minimum, offsets should provide a high level of confidence of protection for at least as long as the direct, indirect, and cumulative project impacts.

Summary of Principles