

**Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
DEPARTMENT OF ENERGY RESOURCES**

**SMALL CLEAN ENERGY INFRASTRUCTURE FACILITY SITING &
PERMITTING (225 CMR 29.00)**

DRAFT GUIDELINE

Guideline on Minimization and Mitigation Measures

Effective Date: March xx, 2026

Background and Purpose

1. This document provides guidance regarding qualifying Minimization and Mitigation measures for impacts identified in Criteria-Specific Suitability Scores under 225 CMR 29.07 and Compensatory Environmental Mitigation under 225 CMR 29.07. This guidance was developed in consultation with **Criterion**

A Small Clean Energy Infrastructure Facility (SCEIF) should be sited and designed to avoid, minimize or, if impacts cannot be avoided or minimized, mitigate impacts and environmental and land use concerns to the greatest extent possible. The Local Government should use an SCEIF's Criteria-Specific Suitability Scores and Total Site Suitability Score to determine if Minimization or Mitigation measures should be required for an Applicant to receive a Consolidated Local Permit.

The levels and types of required Minimization or Mitigation measures will be informed by the Applicant's Criteria-Specific Site Suitability Scores and Total Site Suitability Score and should be related to the specific impacted criteria. Applicants and Local Governments should consult § 1.2 of this Guideline when proposing or prescribing, respectively, Mitigation or Minimization measures.

An SCEIF shall receive a Criteria-Specific Suitability Score for each of the following categories of impacts:

- Climate change resilience;
- Carbon storage and sequestration;
- Biodiversity;
- Social and environmental burdens; and
- Agriculture resources.

Assessments of an SCEIF's climate change resilience, carbon storage and sequestration, biodiversity, agricultural resources, and social and environmental burdens will result in a numerical score which can be modified by assessment of an SCEIF's development potential and social and environmental benefits.

The recommended permit requirements and corresponding score ranges are listed below:¹

Criteria Score Range	Suitability (for specific criteria)	Interpretation (for specific criteria)
Less than or equal to 1.0	Highly suitable, minimal impact	No minimization or mitigation measures required
1.1 to 2.0	Suitable, low impact	Modest minimization and/or mitigation measures may be required
2.1 to 3.0	Moderately suitable, moderate impacts	Minimization and/or mitigation measures likely required
3.1 to 4.0	Not very suitable, moderate to high impact	Significant minimization and/or mitigation measures likely required
Greater than 4.0	Unsuitable, high impact	If permitted, will generally require extensive minimization and/or mitigation

1.1 Score Modifiers

Score Modifiers may be applied to adjust Criteria-Specific Suitability Scores or the Total Site Suitability Score, but in no instance shall a Total Site Suitability Score be greater than 25 or less than 0. Local Governments must allow Applicants to apply modifications before Qualified Minimization or Mitigation measures are assigned. Modifiers are assessed based on an SCEIF's development potential and/or social and environmental benefits agreed to by an Applicant and a Local Government.

See § 1.2 of this Guideline and § IV(C) of *Site Suitability Assessments for Clean Energy Infrastructure* for further information on score modifications.

1.1.1 Development Potential

Development potential will be scored based on whether the site meets the requirements of certain types of highly suitable or highly unsuitable categories of land. In general, Brownfields, Eligible Landfills, and Previously Developed Lands are considered highly suitable sites, whereas Protected Open Space is considered highly unsuitable. SCEIFs sited on a Brownfield, Eligible Landfill, or Previously Developed Lands shall receive a Criteria-Specific Suitability Score of zero for the following criteria categories:

- Carbon storage and sequestration;
- Biodiversity;
- Social and environmental burdens; and

¹ *Site Suitability Assessments for Clean Energy Infrastructure* § V(C)(ii)

- Agriculture resources.

Please see § IV(C)(i) of *Site Suitability Assessments for Clean Energy Infrastructure* for further explanation of development potential scoring.

1.1.2 Social and Environmental Benefits

A social and environmental benefits score may be calculated to reflect any social and environmental benefits provided by the proposed SCEIF. An Applicant who wishes to apply this score modifier may do so only after entering into a written agreement with the Local Government which binds the Applicant to delivering agreed-upon benefits in exchange for modification of the SCEIF's Total Site Suitability Score.

Proposed SCEIFs can have one (1) point subtracted from their Total Site Suitability Score, up to a total of five (5) points, for demonstrating each of the following benefits:

- Improves local habitat;
- Improves outdoor air quality by displacing emitting source;
- Creates expanded recreational opportunities;
- Funds publicly available EV charging stations;
- Applies community solar bill credits to electric utility customer accounts or otherwise lowers energy costs in the host municipality;
- Establishes cultural easements, in partnership with tribal and indigenous communities;
- Creates or maintains local jobs;
- Has pollinator-friendly design; or
- Other benefits which improve quality of life, as prioritized by the host community.

See § IV(C)(vii) of *Site Suitability Assessments for Clean Energy Infrastructure* for more information about social and environmental benefits scoring.

1.2 Qualifying Minimization and Mitigation Measures for Criteria-Specific Suitability Scores

Required Mitigation measures must have a rational nexus to the specific criteria on which the score was assessed. Qualifying Mitigation measures involving replacement of impacted resources (e.g., tree replacement, wetlands replacement, or habitat replacement) should adhere to a “no net loss” goal and at least a one-to-one replacement ratio of impacted land area.

Proposed SCEIFs that are considered highly suitable (defined as sites with a Total Site Suitability Score of five or below) and have minimal impact according to the Site Suitability Score may still be required to comply with local, state and federal Minimization or Mitigation requirements (e.g., stormwater and erosion control measures). See § IV(D) of *Site Suitability Assessments for Clean Energy Infrastructure* for a non-exhaustive list of resources related to statutes and regulations of note.

The tables below are intended to provide municipalities with a menu of Mitigation strategies to address environmental impacts of proposed SCEIFs. The Applicant may propose Minimization

or Mitigation measures which have a rational nexus to the proposed SCEIF's impact but are not included in this list for consideration and approval by the Local Government.

1.2.1 Climate Change Resilience

Qualifying measures for climate change resilience will be assessed based on the Site Footprint's exposure to: (1) riverine flooding; and (2) coastal flooding from sea level rise and storm surge. Applicants should consult with or contract with a certified environmental engineer, hydrologist, or other resilience expert to ensure the qualifying Minimization and Mitigation Measures are implemented properly and in accordance with scientific standards.

Impacts to:	<i>Qualifying Minimization Measures</i>
Either Coastal or Riverine Flooding	Avoid siting facilities within known floodplains or areas prone to coastal storm surge
	Incorporate stormwater management techniques and best management practices, such as retention areas, swales, and dry wells to reduce soil erosion
	Implement green infrastructure practices such as utilizing rain gardens/bioretention, permeable pavements, bioswales, tree plantings
	Establish buffer strips (planted or naturally occurring vegetation, such as trees, shrubs, legumes, or grasses) to stabilize streambanks and shorelines, and prevent bank erosion and slumping
	Establish filter strips (vegetated areas along water bodies, designed to slow the movement of overland flow of water so that sediment will be left behind, provide an opportunity for vegetation to remove nutrients from subsurface flow, provide shade to the adjacent water body to maintain cool water temperature, and protect bank stability and prevent erosion) as defined in <i>Massachusetts Forestry Best Management Practices Manual</i>
	Implement erosion and sedimentation controls
	Wetlands protection as required under the <i>Wetlands Protection Act</i>
	Install, establish, and maintain appropriate vegetated ground cover between and under the SCEIF to facilitate infiltration
	Utilize Low-Impact Development ² construction and maintenance techniques such as minimal grading, maintaining existing vegetative cover, no removal of topsoil, and avoid post-construction decompaction to avoid and minimize soil compaction to achieve low bulk density and adequate soil depth for infiltration
	Incorporate soil/rooting depth into stormwater and water quality monitoring
	Raise SCEIF equipment height above the Federal Emergency Management Agency (FEMA) flood levels to support pollinator-friendly design
	Require foundation specifications that meet wet soil conditions to address structural integrity and corrosion issues

² See. Executive Office of Environmental Affairs, Water Resources Commission [Low Impact Development](#)

	<i>Qualifying Mitigation Measures</i>
	Execute land conservation agreements, such as easements or land purchases
	Wetlands replacement as required under the <i>Wetlands Protection Act</i>
	Fund studies to identify strategies to reduce flood risk to municipality
	Provide funding to contribute to comprehensive sustainability planning in the host municipality, integrating co-health benefits and greenhouse gas reduction targets for the municipality. The plan is the policy vehicle through which the municipality can address greenhouse gas reduction, air quality improvement, and protection of health, all of which are in furtherance of the Mitigation measures adopted for the project
Coastal Flooding	<i>Qualifying Mitigation Measures</i>
	Conduct a Tidal Restoration Project, which is a project that will restore tidal flow and that does not meet all the eligibility criteria set forth in 310 CMR 10.13, and may be permitted as an Ecological Restoration Limited Project
	Conduct a Shellfish Habitat Restoration Project, which is a project to emplace cultch or other substrate for the purpose of restoring shellfish habitat, and may be permitted as an Ecological Restoration Limited Project provided that in addition to the criteria set forth in 310 CMR 10.24

1.2.2 Carbon Sequestration and Storage

Qualifying measures for carbon storage and sequestration will be selected based on the anticipated carbon emissions and loss of future carbon sequestration associated with the clearing of a site for a SCEIF. Applicants should consult with or contract with a certified forester or carbon project technician to ensure the qualifying Minimization and Mitigation Measures are implemented properly and in accordance with scientific standards.

Impacts to:	<i>Qualifying Minimization Measures</i>
Natural Carbon Cycle	Implement reforestation or afforestation practices with native tree species within the site footprint
	If applicable, incorporate system-based conservation agriculture or agroforestry practices within the site footprint
	Create a sustainable tree nursery and development of a long-term plan to ensure the continued growth and health of wooded areas within the site footprint, or, with permission from the owner, on adjacent parcels of land
	Convert forest slash to biochar
	Restore any wetlands and peatlands on the site footprint
	Reduce damage or compaction to soil by putting slash on skid trails, not harvesting trees in the rain, clearing trees in the winter, and use forwarders instead of whole-tree skidding

	Control invasive species through a variety of methods including manual removal and mulching, and establishing native species
	<i>Qualifying Mitigation Measures</i>
	Execute land conservation agreements, such as easements or land purchases
	Fund an off-site project to enhance natural carbon storage and sequestration that complies with the technical requirements of recognized carbon offset standards, such as the Verified Carbon Standard

1.2.3 Biodiversity

Qualifying measures avoid, Minimize, or Mitigate negative impacts on land and waters with high habitat and biodiversity conservation value. Applicants should consult or contract with a certified ecological restoration practitioner or a certified forester to ensure the qualifying Minimization and Mitigation Measures are implemented properly and in accordance with scientific standards.

Impacts to:	<i>Qualifying Minimization Measures</i>
Habitat	Design projects to avoid and minimize impacts to natural vegetation and habitats, and preserve wildlife corridors
	On-site preservation and enhancement of existing habitat
	Implement reforestation or afforestation practices with native tree and plant species on the Site Footprint
	On-site habitat restoration through enrichment planting of native species
	On-site wetlands restoration
	Incorporate pollinator-friendly design as defined by securing a silver certification or higher from the University of Massachusetts Clean Energy Extension Pollinator Friendly Certification Program
	Build fences (that meet design specifications suitable for the environment) to significantly reduce the risk for vehicle collisions with large animals and reduce traffic mortality for small animals
	Implement stormwater management best practices and erosion and sedimentation controls efforts to reduce runoff
	Use construction practices, permanent native ground cover, and operation practices that enhance soil health and create habitat and water quality co-benefits
	<i>Qualifying Mitigation Measures</i>
	If on-site habitat preservation is infeasible, the Applicant and Local Government may arrange for habitat improvements in other locations within the municipality
	Off-site Habitat restoration through enrichment planting of native species
	Off-site Wetlands restoration

	Fund research and monitoring efforts to track wildlife and improve ecological and management knowledge
	Execute land conservation agreements, such as easements or land purchases on site or on other undeveloped land purchased by the Applicant
Native and Invasive Species	<i>Qualifying Minimization Measures</i>
	Seeding disturbed areas with native grasses and straw bales
	Use invasive-free sand, gravel, mulch and silt barriers
	Dispose of invasive debris in a manner that avoids further spread, such as burning.
	Monitor the Site Footprint for invasive plants for three to five years after the construction. Concentrate monitoring on high traffic areas such as trails, roads, and landings. If invasive plants are discovered, begin control efforts immediately.
	<i>Qualifying Mitigation Measures</i>
	Fund a combination of preventative measures to control the growth of invasive vegetative species. Conduct regular follow-up checks on sites even if populations are no longer visible, to ensure eradication. Often invasive vegetative species can re-occur from seeds left behind or from undetected rhizomes and roots even years after the above ground biomass has disappeared.

1.2.4 Agricultural Resources

Qualifying measures to protect farmland soil for areas designated as: (i) Prime Farmland; (ii) Farmland of Statewide Importance; and (iii) areas designated as Farmland of Unique Importance. Applicants should consult with or contract with a soil health expert or extension service provider to ensure the qualifying Minimization and Mitigation Measures are implemented properly and in accordance with scientific standards.

Impacts to:	<i>Qualifying Minimization Measures</i>
Soil Health	Plant cover crops after construction activities to stabilize soil, prevent erosion, and increase water retention.
	Reduce soil damage and soil compaction through appropriate methods such as mulching, designating pathways, or using less impactful equipment during construction and maintenance
	Implement stormwater, and erosion and sedimentation control efforts
	Integrate trees into agricultural systems to enhance carbon stocks and provide additional benefits such as improved biodiversity and soil health.
	Incorporate crop diversification strategies on any remaining active agricultural land on the Site Footprint to help spread risk and improve resilience against climate variability.
	Establish a vegetated buffer and design native edible garden to educate and encourage local sustainable harvesting practices
	<i>Qualifying Mitigation Measures</i>

Agricultural Resources	Fund and monitor the restoration of degraded lands
	Fund research and demonstrations/trials and diffusion of new field-level practices
	<i>Qualifying Minimization Measures</i>
	Incorporate agrivoltaics into the Site Footprint design
	Enter into agreement to maintain agricultural uses for a minimum of 10 years
	<i>Qualifying Mitigation Measures</i>
	Sponsor a training program at a local college or provide apprenticeship programs for photovoltaic technicians.
	Develop agricultural conservation easements either onsite or for an equivalent or greater amount of farmland off-site

1.2.5 Social and Environmental Burdens

Qualifying measures avoid, Minimize, or Mitigate negative impacts based on exposure to pollution, and additional public health and income criteria as measured by the [MassEnviroScreen](#) for the most environmentally vulnerable or burdened communities in Massachusetts.

Impacts to:	<i>Qualifying Minimization Measures</i>
Environmentally vulnerable or burdened communities	On-site preservation and enhancement of existing habitat
	Implement reforestation or afforestation practices with native tree and plant species on the Site Footprint
	On-site habitat restoration through enrichment planting of native species
	Incorporate pollinator-friendly design as defined by securing a silver certification or higher from the University of Massachusetts Clean Energy Extension Pollinator Friendly Certification Program
	<i>Qualifying Mitigation Measures</i>
	Creates expanded recreational opportunities
	Funds publicly available EV charging stations
	Applies community solar bill credits to electric utility customer accounts or otherwise lowers energy costs in the host municipality
	Establishes cultural easements, in partnership with tribal and indigenous communities
	Creates or maintains local jobs

2. Compensatory Environmental Mitigation

Per 225 CMR 29.07(6) At their discretion, Local Governments may require the Applicant to pay Compensatory Environmental Mitigation Fees if the project's Total Site Suitability Score is above 15, or any Criteria-specific Suitability Score³ is a four or above. Applicants may not be

³ See. Table in § VIII.C.ii of Site Suitability Guidance.

required to pay Compensatory Environmental Mitigation Fees may for sites with a Total Site Suitability Score of five or below.

The relevant Local Government department or board shall use the formula below to calculate Compensatory Environmental Mitigation Fees. The formula shall include a maximum fee per acre to be applied to the total acreage of the Site Footprint. This maximum fee per acre shall be reviewed and updated regularly by the Department. The maximum fee per acre shall adhere to the rate established by 225 CMR 28.09. The formula shall be:

$$\text{Total Fee} = \text{Maximum Fee Per Acre} * (\text{Total Site Suitability Score}/25) * \text{Number of Acres Impacted on Site Footprint}$$

The Department may determine that an Applicant who is also subject to other mitigation fees under 225 CMR 28.09 satisfies the requirements of that regulation by complying with all applicable Compensatory Environmental Mitigation Fee provisions under the Site Suitability Guidance, 225 CMR 29.07, or any associated regulatory provisions established by the Department requiring the payment of fees for Compensatory Environmental Mitigation for the restoration, establishment, enhancement or preservation of comparable environmental resources.