

LEED® Canada for Existing Buildings: Operations and Maintenance 2009 Rating System [Canada]

Sustainable Sites, Credit 5 Site Development: Protect or Restore Open Habitat

Intent

Conserve existing natural site areas and restore damaged site areas to provide habitat and promote biodiversity.

Requirements

During the performance period, have in place native or adapted vegetation* covering a minimum of 25% of the total site area (excluding the building footprint) or 5% of the total site area (including the building footprint), whichever is greater.

Improving and/or maintaining off-site areas with native or adapted plants can contribute toward earning SS Credit 5. Every 2 square meters off-site can be counted as 1 square meter on-site. If off-site areas are used to contribute to the credit, at least half of the on-site soft landscaping shall comply with the credit requirements. **Offsite areas must be documented in a minimum 5-year contract with the owner of the offsite area that specifies the required improvement and maintenance of the off-site area. The off-site area must be located within an 800km radius of the project site.**

The off-site area must meet the Canadian Land Trust Alliance (CLTA) member land trust requirements by either being donated to a CLTA member land trust, or the property owner must enter into a conservation agreement with a CLTA member land trust. If the *LEED® Canada for Existing Buildings: Operations and Maintenance* applicant is not the off-site property owner prior to the arrangement with a land trust, the *LEED® Canada for Existing Buildings: Operations and Maintenance* applicant **must be contractually responsible for any endowment funds that the land trust requires and for any required improvement and/or maintenance activities.**

Other ecologically appropriate features that contribute to this credit are natural site elements beyond vegetation that maintain or restore the ecological integrity of the site, including water bodies, exposed rock, unvegetated ground or other features that are part of the historic natural landscape within the region and provide habitat value.

Projects using vegetated roof surfaces may apply the vegetated roof surface to this calculation if the plants meet the definition of native/adapted and provide the habitat and biodiversity intent of the credit.

Potential Technologies & Strategies

Perform a site survey to identify site elements and adopt a master plan for management of the building site. Activities may include removing excessive paved areas and replacing them with landscaped areas or replacing excessive turf grass area with natural landscape features. Work with local horticultural extension services or native plant societies to select and maintain indigenous plant species for site restoration and landscaping.

Coordinate with activities, technologies and strategies under SS Credit 3 [integrated pest management, erosion control and landscape management].

* For purposes of this credit, native/adapted vegetation or plants are indigenous to a locality or cultivars of native plants that are adapted to the local climate and are not considered invasive species or noxious weeds.

LEED 2009 for Existing Buildings: Operations and Maintenance Rating System [USA and International]

SS Credit 5: Site Development—Protect or Restore Open Habitat

Intent

To conserve existing natural site areas and restore damaged site areas to provide habitat and promote biodiversity.

Requirements

During the performance period, have in place native¹ or adapted vegetation² covering a minimum of 25% of the total site area (excluding the building footprint) or 5% of the total site area (including the building footprint), whichever is greater.

Improving and/or maintaining off-site areas with native or adapted plants can contribute toward earning this credit provided the improvement and maintenance are documented in a contract with the owner of the off-site area. Every 2 square feet off-site can be counted as 1 square foot on-site.

Other ecologically appropriate features that contribute to this credit are natural site elements beyond vegetation that maintain or restore the ecological integrity of the site, including water bodies, exposed rock, unvegetated ground or other features that are part of the historic natural landscape within the region and provide habitat value.

Potential Technologies & Strategies

Perform a site survey to identify site elements and adopt a master plan for management of the building site. Activities may include removing excessive paved areas and replacing them with landscaped areas or replacing excessive turf grass area with natural landscape features. Work with local horticultural extension services or native plant societies to select and maintain indigenous plant species for site restoration and landscaping. Coordinate with activities, technologies and strategies under SS Credit 3: Integrated Pest Management, Erosion Control.

LEED 2009 for Neighborhood Development Rating System [Canada only]

SLL (Smart Location and Linkage) Prerequisite 2 [mandatory] Imperiled Species and Ecological Communities Conservation

Intent

To conserve imperiled species and ecological communities.

Requirements

FOR ALL PROJECTS

Consult with the state Natural Heritage Program and state fish and wildlife agencies to determine whether species listed as threatened or endangered under the federal Endangered Species Act, the state's endangered species act, or species or ecological communities classified by NatureServe as GH (possibly extinct), G1 (critically imperiled), or G2 (imperiled) have been or are likely to be found on the *project* site because of the presence of suitable habitat and nearby occurrences. If the consultations are inconclusive and site conditions indicate that imperiled species or ecological communities could be present, using a qualified biologist, perform biological surveys using accepted methodologies during appropriate seasons to determine whether such species or communities occur or are likely to occur on the site.

OPTION 3. Sites with Affected Species or Ecological Community: Habitat Conservation Plan Equivalent
Work with a qualified biologist, a nongovernmental conservation organization, or the appropriate state, regional, or local agency to create and implement a conservation plan that includes the following actions:
a. Identify and map the extent of the habitat and the appropriate buffer, not less than 100 feet, according to best available scientific information.

- b. To the maximum extent practicable, **protect the identified habitat and buffer in perpetuity by donating or selling the land or a conservation easement on the land to an accredited land trust or relevant public agency.**
- c. If on-site protection can be accomplished, analyze threats from development and develop a monitoring and management plan that eliminates or significantly reduces the threats.
- d. **If any portion of the identified habitat and buffer cannot be protected in perpetuity, quantify the effects by acres or number of plants and/or animals affected, and protect from development in perpetuity habitat of similar or better quality, on-site or off-site, by donating or selling a conservation easement on it to an accredited land trust or relevant public agency. The donation or easement must cover an amount of land equal to or larger than the area that cannot be protected.**

SLL Credit 7: Site Design for Habitat or Wetland and Water Body Conservation

Intent

To conserve *native plants*, wildlife habitat, *wetlands*, and *water bodies*.

Requirements

OPTION 2. Sites with Significant Habitat

... Protect significant habitat and its identified buffers from development in perpetuity **by donating or selling the land, or a conservation easement on the land, to an accredited land trust** or relevant public agency (a deed covenant is not sufficient to meet this requirement). **Identify and commit to ongoing management activities, along with parties responsible for management and funding available, so that habitat is maintained in *preproject* condition or better for a minimum of three years after the project is built out.** The requirement for identifying ongoing management activities may also be met by earning SLL Credit 9, Long-Term Conservation Management of Wetlands and Water Bodies.

OPTION 3. Sites with Wetlands and Water Bodies

... Do not disturb wetlands, water bodies, and their buffers, and protect them from development in perpetuity **by donating or selling the land, or a conservation easement on the land, to an accredited land trust** or relevant public agency (a deed covenant is not sufficient to meet this requirement). **Identify and commit to ongoing management activities, along with parties responsible for management and funding available, so that habitat is maintained in *preproject* condition or better for a minimum of three years after the project is built out.** The requirement for identifying ongoing management activities may also be met by earning SLL Credit 9, Long-Term Conservation Management of Wetlands and Water Bodies. The project does not meet the requirements if it has negative effects on habitat for species identified in Option 2(a) [endangered species or species of special concern]

SLL Credit 8: Restoration of Habitat or Wetlands and Water Bodies

Intent

To restore *native plants*, wildlife habitat, *wetlands*, and *water bodies* that have been harmed by previous human activities.

Requirements

Using only native plants, restore *predevelopment* native ecological communities, water bodies, or wetlands on the *project* site in an area equal to or greater than 10% of the *development footprint*. Work with a qualified biologist to ensure that restored areas will have the native species assemblages, hydrology, and other habitat characteristics that likely occurred in predevelopment conditions. **Protect such areas from development in perpetuity by donating or selling the land, or a conservation easement on the land, to an accredited land trust** or relevant public agency (a deed covenant is not

sufficient to meet this requirement). **Identify and commit to ongoing management activities, along with parties responsible for management and funding available, so that restored areas are maintained for a minimum of three years after the project is built out or the restoration is completed**, whichever is later. The requirement for identifying ongoing management activities may also be met by earning SLL Credit 9, Long-Term Conservation Management of Wetlands and Water Bodies. The project does not meet the requirements if it has negative effects on habitat for species identified in Option 2(a) of SLL Credit 7, Site Design for Habitat or Wetland and Water Body Conservation.

SLL Prerequisite 4: Agricultural Land Conservation [mandatory]

Intent

To preserve irreplaceable agricultural resources by protecting prime and unique soils on farmland and forestland from development.

Requirements

OPTION 5. Sites with Impacted Soils

If development footprint affects land with prime soils, unique soils, or soils of state significance, as identified in a state Natural Resources Conservation Service soil survey, **mitigate the loss through the purchase of easements providing permanent protection from development on land with comparable soils** in accordance with the ratios based on densities per acre of *buildable land* as listed in Tables 1 and 2 [ratios vary from twice to half the affected area]. **All off-site mitigation must be located within 100 miles [160km] of the project.**

SLL Credit 9: Long-Term Conservation Management of Habitat or Wetlands and Water Bodies

Intent

To conserve *native plants*, wildlife habitat, *wetlands*, and *water bodies*.

Requirements

Create and commit to implementing a long-term (at least ten-year) management plan for new or existing onsite native habitats, water bodies, and/or wetlands and their buffers, and create a guaranteed funding source for management. Involve a qualified biologist or a professional from a natural resources agency or natural resources consulting firm in writing the management plan and conducting or evaluating the ongoing management. The plan must include biological objectives consistent with habitat and/or water resource conservation, and it must identify (1) procedures, including personnel to carry them out, for maintaining the conservation areas; (2) estimated implementation costs and funding sources; and (3) threats that the *project* poses for habitat and/or water resources within conservation areas (e.g., introduction of exotic species, intrusion of residents in habitat areas) and measures to substantially reduce those threats. The project does not meet the requirements if it has negative effects on habitat for species identified in Option 2(a) of SLL Credit 7, Site Design for Habitat or Wetland and Water Body Conservation [endangered species or species of special concern].