



LEED ND: Built Project | v4 - LEED v4



Wetlands and water body conservation

Required

Glossary

Intent

To preserve water quality, natural hydrology, habitat, and biodiversity through conservation of wetlands and water bodies.

Requirements

Limit development effects on wetlands, water bodies, and surrounding buffer land according to the requirements below.

Case 1. Sites without sensitive areas

Locate the project on a site that includes no preproject wetlands, water bodies, land within 50 feet (15 meters) of wetlands, and land within 100 feet (30 meters) of water bodies.

Case 2. Sites with sensitive areas

If the site has preproject wetlands, water bodies, land within 50 feet (15 meters) of wetlands, or land within 100 feet (30 meters) of water bodies, select one of the following two options:

Option 1. No development on wetlands and water bodies

Locate the project such that preproject wetlands, water bodies, land within 50 feet (15 meters) of wetlands, and land within 100 feet (30 meters) of water bodies are not affected by new development, unless the development is minor improvements or is on previously developed land.

OR

Option 2. Rainwater management and protected buffers

Earn at least 1 point under GIBC8 Rainwater Management, and limit any development beyond minor improvements to less than the percentage of buffer land listed in Table 1.

Table 1. Maximum allowable area of development within buffer zone, by project density

Residential density		Nonresidential density (FAR)*	Percentage of buffer land** where development beyond minor improvements is allowed
DU/acre*	DU/hectare*		
> 25	> 62	> 1.75	≤ 20%
> 18 and ≤ 25	> 45 and ≤ 62	> 1.25 to ≤ 1.75	≤ 15%
> 10 and ≤ 18	> 25 and ≤ 45	> .75 to ≤ 1.25	≤ 10%
≤ 10	≤ 25	≤ .75	≤ 5%

* For this option, a mixed-use project may use either its residential or its nonresidential density to determine the percentage of allowable development, regardless of which is higher.

** Buffer width may vary as long as the total buffer area is equal to the area within 50 feet (15 meters) of wetlands and/or within 100 feet (30 meters) of water bodies, minus excluded features (see list of minor improvements, below). In no case may the buffer width be less than 25 feet (7.5 meters) for wetlands and 50 feet (15 meters) for water bodies, measured from the edge. Inside this minimum buffer, only minor improvements and/or improvements that result in no ecological impairment of the wetland or water body, as determined by a qualified biologist, are allowed.

For all projects

Comply with all local, state, and federal regulations pertaining to wetland and water body conservation.

The following features are not considered wetlands, water bodies, or buffer land that must be protected for the purposes of this prerequisite:

- previously developed land;
- man-made water bodies (such as industrial mining pits, concrete-lined canals, or stormwater retention ponds) that lack natural edges and floors or native ecological communities in the water and along the edge;
- man-made linear wetlands that result from the interruption of natural drainages by existing rights-of-way; and
- wetlands that were man-made incidentally and have been rated "poor" for all measured wetland functions, as assessed by a qualified biologist using a method that is accepted by state or regional permitting agencies (or a local equivalent for projects outside the U.S.).

Minor improvements within the buffer may be undertaken to enhance appreciation for the wetland or water body, provided such facilities are open to public access. Only the following improvements are considered minor:

- Bicycle and pedestrian pathways no more than 12 feet wide (3.5 meters), of which no more than 8 feet (2.5 meters) may be impervious;
- Activities to maintain or restore native natural communities and/or natural hydrology;
- One single-story structure not exceeding 500 square feet (45 square meters) per 300 linear feet (90 linear meters) of buffer, on average;

- Grade changes necessary to ensure public access;
- Clearings, limited to one per 300 linear feet (90 linear meters) of buffer on average, not exceeding 500 square feet (45 square meters) each, for tables, benches, and access for nonmotorized recreational watercraft;
- Removal of the following tree types:
 - Hazardous trees, up to 75% of dead trees
 - Trees less than 6 inches (150 millimeters) diameter at breast height
 - Up to 20% of trees more than 6 inches (150 millimeters) diameter at breast height with a condition rating of 40% or higher.
 - Trees under 40% condition rating
 - The condition rating must be based on an assessment by an arborist certified by the International Society of Arboriculture (ISA) using ISA standard measures or for projects outside the U.S. an equivalent certified professional utilizing equivalent methodology; and
- brownfield remediation activities.

Off-street parking is not considered a minor improvement.

Direct development of wetlands and water bodies is prohibited, except for minimal-impact structures, such as an elevated boardwalk, that allow access to the water for educational and recreational purposes. Structures that protrude into wetlands or water bodies may be replaced, provided the replacement structure has the same or smaller footprint and a similar height.