

STEP-BY-STEP GUIDANCE

Qualifying species include threatened or endangered species under the U.S. Endangered Species Act, those listed by a state endangered species act, or those classified by NatureServe as G1, G1, or G2 (see *Reference/Standards*).

Projects teams have several options for gathering imperiled species and communities information from NatureServe. County-level data is available on the NatureServe website. Team members can reference the results of the website query as they determine whether ecological communities exist or if there is habitat necessary to support threatened or endangered species, located on the project site. Teams can also work with NatureServe directly to find more site-specific information if results are inconclusive or a more detailed survey is necessary.

Project teams outside the U.S. should use local equivalents to these agencies. If an equivalent to the U.S. Natural Heritage Program or the state wildlife agency cannot be determined, see *Further Explanation/Interpretation/Go*.

STEP 6. DETERMINE LOCATION OF WETLANDS AND WATER BODIES

Use project site maps to locate any wetlands or water bodies.

Include land within 50 feet (15 meters) of wetlands or land within 100 feet (30 meters) of water bodies.

U.S. project teams should consult the U.S. Army Corps of Engineers' Wetlands Delineation Manual for further guidance on delineating wetlands.

STEP 7. LOCATE DEVELOPMENT FOOTPRINT TO AVOID ANY SENSITIVE AREAS

If the previous steps reveal any prime farmland, flood hazard zone, imperiled species habitat, or wetlands or water bodies and their surrounding buffers, design the project such that the development footprint does not encroach on the sensitive areas.

STEP 8. UNDERTAKE ONLY APPROVED MINOR IMPROVEMENTS AROUND WETLANDS AND WATER BODIES

Ensure that any necessary improvements to enhance appreciation of the wetland or water body and its buffer are considered minor, per the credit requirements. Project teams should evaluate the trade-offs between access to the wetlands or water bodies and the ecological consequences of the access for those areas.



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Option 1 can now be referenced as "Option 1: Previously Developed Land."

Option 2 can now be referenced as "Option 2: Avoidance of Sensitive Land."

Further Explanation

Identifying Sensitive Habitat

Minor improvements within the wetland and water body buffers may be undertaken to enhance appreciation of them, provided such facilities are open all building users. 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 per 300 linear feet (90 linear meters) on average, not exceeding 500 square feet (45 square meters);

Grade changes necessary to ensure public access;

Clearings, limited to one per 300 linear feet (90 linear meters) on average, not exceeding 500 square feet (45 square meters) each;

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 local equivalent for projects outside the U.S.

For Option 3, Brownfield Remediation: Reference the US EPA's National Priorities list as a resource.



REQUIREMENTS

NC, CS, SCHOOLS, RETAIL, DATA CENTERS, WAREHOUSES & DISTRIBUTION CENTERS, HOSPITALITY, HEALTHCARE

Option 1. Previously Developed Land

Locate the development footprint on land that has been previously developed.

Option 2. Avoidance of Sensitive Land

Locate the development footprint on land that does not meet the following criteria for sensitive land:

Prime farmland is defined as prime farmland, unique farmland, or farmland of statewide or local importance under Title 7, Volume 6, Parts 400 to 699, Section 657.5 of the United States Code of Federal Regulations (or the local equivalent for projects outside the United States). It is also identified in a state Natural Resources Conservation Service soil survey (or local equivalent for projects outside the U.S.).



REQUIREMENTS +

A floodplain is a flood hazard area that has been formally recognized by a municipal or state government, is shown on an unofficial flood hazard map, or both.

Locate on a location that is totally outside any floodplain subject to a 1% or greater danger of flooding in any given year for projects in areas without legally adopted flood hazard maps or legal designations.

Land designated as habitat for the following species:

✓Species that are listed as threatened or endangered under the U.S. Endangered Species Act or the state's endangered species act, or

✓Species or ecological communities that NatureServe has labeled as G1 (possibly extinct), G1 (critically endangered), G2 (imperiled), or G3 (vulnerable)

✓Species that are listed as threatened or endangered have local equivalent standards (for projects outside the U.S.) that NatureServe data doesn't cover.

✓Waterbodies: Areas on land that are less than 100 feet (30 meters) from a body of water, except for small changes.

✓Wetlands: Any area within 50 feet (15 meters) of a wetland that hasn't been changed too much.

CONNECTION TO ONGOING PERFORMANCE

LEED O+M S5 credit Site Management : During an assessment , a project team may find features such as vegetation, land use, or hydrology that require protection to achieve this credit. The same assessment may be used to identify protection measures in the related credit. LEED O+M S5 credit

Rainwater Management : Sensitive land or previously undeveloped land on the project site that is left undisturbed may be used to manage runoff and help achieve the related credit.

REQUIRED DOCUMENTATION

Documentation	Option 1	Option 2
Site map(s) showing project boundary, development footprint, any previous development, any sensitive areas, and any minor improvements in required buffers	X	X
Explanation of the previous development on the site	X	
Description of how the project team verified prime farmland, flood hazard, and sensitive habitat criteria were met		X

REFERENCED STANDARDS

U.S. Department of Agriculture, United States Code of Federal Regulations Title 7, Volume 6, Parts 400 to 699, Section 657.5: soils.usda.gov/technical/handbook/contents/part622.html

U.S. Fish and Wildlife Service, List of Threatened and Endangered Species: fws.gov/endangered

NatureServe Heritage Program, GH, G1, and G2 species and ecological communities: natureserve.org

FEMA Flood Zone Designations: msc.fema.gov

TERMS AND DEFINITIONS

Brownfield real property or the expansion, redevelopment, or reuse of which may be complicated by the presence or possible presence of a hazardous substance, pollutant, or contaminant

Development footprint the total land area of a project site covered by buildings, streets, parking areas, and other typically impermeable surfaces constructed as part of the project

Previously developed altered by paving, construction, and/or land use that would typically have required regulatory permitting to have been initiated (alterations may exist now or in the past). Land that is not previously developed and landscapes altered by current or historical clearing or illing, agricultural or forestry use, or preserved natural area use are considered undeveloped land. The date of previous development permit issuance constitutes the date of previous development, but permit issuance in itself does not constitute previous development.

Water body the surface water of a stream (first order and higher, including intermittent streams), arroyo, river, canal, lake, estuary, bay, or ocean. It does not include irrigation ditches.

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