



LEED 2009 for Existing Buildings: Operations & Maintenance

WE CREDIT 3: WATER EFFICIENT LANDSCAPING

All fields and uploads are required unless otherwise noted.

ALL OPTIONS

This static sample form has been modified for offline access. All sections of the form are visible. Sample forms are for reference only.

- ☐ Project conditions do not allow for installation of vegetation on the grounds. Therefore planters, a vegetated roof(s), and/or a courtyard landscape have been installed. (Optional)

Planter, vegetated roof and/or courtyard landscape area:

 sf

Total site area within the LEED project boundary:

 sf

Percentage of planter, vegetated roof, and/or courtyard landscape area:

 %

The project is ineligible to apply for this credit because the landscape area is less than 5% of the building site area.

Select one of the following:

- ☐ **Submetered Irrigation:** Permanently installed subsystem metering is in place for the irrigation systems at the project building and associated grounds.
- ☐ **Non-Metered Irrigation:** Irrigation systems are not metered separately from other water subsystems at the project building and associated grounds.

SUBMETERED IRRIGATION

Performance period start:

Invalid Date range: The performance period must be between 89 and 731 days, and must end within 90 days of the overall project performance period given in the Project Information section.

Performance period end:

Select one of the following:

- ☐ **Baseline Calculation (Option 1):** Irrigation water reduction is determined by comparing metered irrigation water use against a calculated mid-summer baseline irrigation water use.
- ☐ **Independent Tool (Option 3):** Irrigation water reduction is determined by using an independent performance and ranking tool.

BASELINE CALCULATION

Mid-summer baseline irrigation water use for the WE Credit 3 performance period:

 kGal

The mid-summer baseline irrigation water use was calculated based on (select one of the following):

- ☐ Summary results from three consecutive years of historic water use data from the project building and associated grounds, recorded by an irrigation-specific water consumption submeter, establishing an average irrigation volume baseline.
- ☐ Empirical calculations establishing the typical irrigation water use for the region based on the use of an average irrigation system and landscaping scheme, as well as background information establishing the technical soundness of the data informing those calculations.

Upload WEc3-1. Provide documentation showing all data from which the baseline irrigation water use was derived.

Actual metered irrigation water use for the WE Credit 3 performance period: kGal

Upload WEc3-2. Provide a summary table of meter data collected during the performance period to establish the actual irrigation water use for the project building and associated grounds. The performance period must include at least three months of data during the regional growing season.

- ☐ The baseline and actual metered water use data has been provided consistently, both in terms of the duration of the period and the seasonal period encompassed, which includes the regional growing season.

Percent reduction in potable water or other natural surface or subsurface resource use for irrigation: %
The percent reduction must be at least 50% for 1 point, 62.5% for 2 points, 75% for 3 points, 87.5% for 4 points, and 100% for 5 points.

INDEPENDENT TOOL

Baseline irrigation water use for the WE Credit 3 performance period: kGal

Actual metered irrigation water use for the WE Credit 3 performance period: kGal

Upload WEc3-3. Provide documentation based on an independent irrigation performance and ranking tool that substantiates that the values above are technically valid and the rationale for the conversion to the percentage reduction of potable water over conventional means of irrigation.

- ☐ The baseline and actual metered water use data has been provided consistently, both in terms of the duration of the period and the seasonal period encompassed, which includes the regional growing season.

Percent reduction in potable water or other natural surface or subsurface resource use for irrigation: %
The percent reduction must be at least 50% for 1 point, 62.5% for 2 points, 75% for 3 points, 87.5% for 4 points, and 100% for 5 points.

NON-METERED IRRIGATION

Select one of the following:

- ☐ **LEED Design & Construction Streamlined Path:** The project building earned a prerequisite or at least one point for water efficient landscaping under LEED for New Construction, LEED for Core and Shell, or LEED for Schools.
- ☐ **Theoretical Performance Calculation (Option 2):** Irrigation water reduction is determined by comparing theoretical baseline and design mid-summer irrigation water use.
- ☐ **No permanent irrigation:** The landscaping installed does not require permanent irrigation systems. Temporary irrigation systems used for plant establishment will be removed within one year of installation.



LEED DESIGN & CONSTRUCTION STREAMLINED PATH

Percentage reduction of irrigation water use, demonstrated towards a LEED credit, from a calculated baseline case:

 %

Upload L-7. Provide the LEED Certification Scorecard(s) showing the previously earned credit.

Select one of the following:

- ☐ The design and construction elements that contributed to the previously-earned credit have not been altered, replaced, or removed.
- ☐ The design and construction elements that contributed to the previously-earned credit have been altered, replaced, or removed. These changes do not affect the ability of the project to meet the LEED-EB: O&M requirements of this credit.

Describe the circumstances of these changes.

THEORETICAL PERFORMANCE CALCULATION

Performance period start:

Invalid Date range: The performance period must be between 89 and 731 days, and must end within 90 days of the overall project performance period given in the Project Information section.

Performance period end:

Reference evapotranspiration rate (ET_O):

Table. Irrigation Baseline Case (July)

Landscape Type	Area (sf)	k _s	k _d	k _{mc} ¹	K _L	ET ₀	ET _L	Irrigation Type	IE	TWA (Gal)
Total area		Baseline Total Potable Water Applied (TPWA) (gal)								

Table. Irrigation Design Case (July)

Landscape Type	Area (sf)	k _s	k _d	k _{mc} ¹	K _L	ET ₀	ET _L	Irrigation Type	IE	CE	TWA (Gal)
Total area		Design total water applied (TWA) (gal)									
		Nonpotable water used (gal)									
		Design total potable water applied (TPWA) (gal)									

1. For each landscape type, the microclimate factor (*k_{mc}*) must be the same for the baseline and design case.

The total landscape area for the baseline case and design case must be equal.

Upload WEc3-4. Provide manufacturer documentation or calculations to support the Controller Efficiency (CE) value entered in the table.

Nonpotable / Reuse water sources used for irrigation in the project building and associated grounds include:

- ☐ On-site captured rainwater
- ☐ On-site treated wastewater
- ☐ On-site captured greywater
- ☐ Public agency sourced, nonpotable treated water
- ☐ Other

Upload WEc3-5. Provide plumbing drawings or other documentation that illustrates nonpotable water systems supporting the quantities entered in the table.

Percentage reduction of potable water: %

The percent reduction must be at least 50% for 1 point, 62.5% for 2 points, 75% for 3 points, 87.5% for 4 points, and 100% for 5 points.

NO PERMANENT IRRIGATION

- ☐ The project building and associated grounds have no permanent irrigation systems.

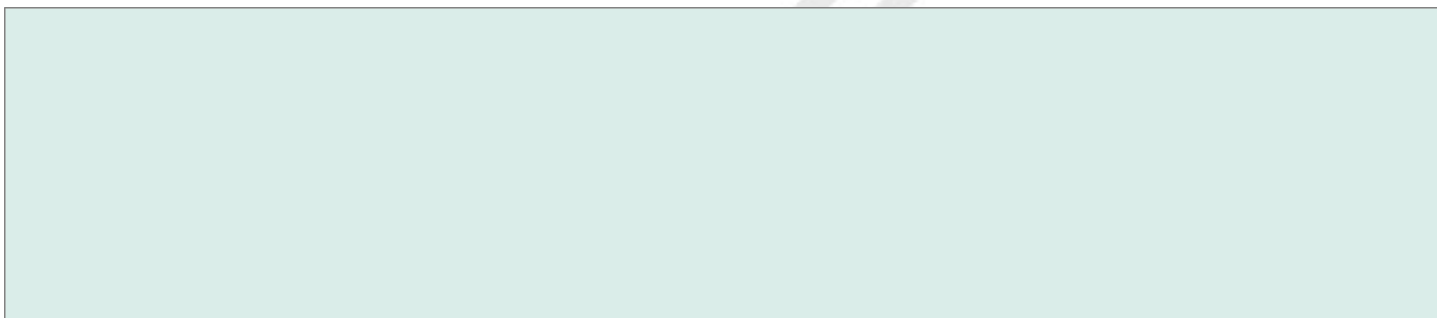
Upload WEc3-6. Provide a signed statement from the facility manager, property manager, or property owner stating that there is no permanent irrigation system installed on the grounds and that temporary or hand-watering occurs only on an as-needed basis and only during periods of drought or for the establishment of new plantings.

ADDITIONAL DETAILS

- ☐ Special circumstances preclude documentation of credit compliance with the submittal requirements outlined in this form.

SPECIAL CIRCUMSTANCES

Describe the circumstances limiting the project team's ability to provide the submittals required in this form. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits.

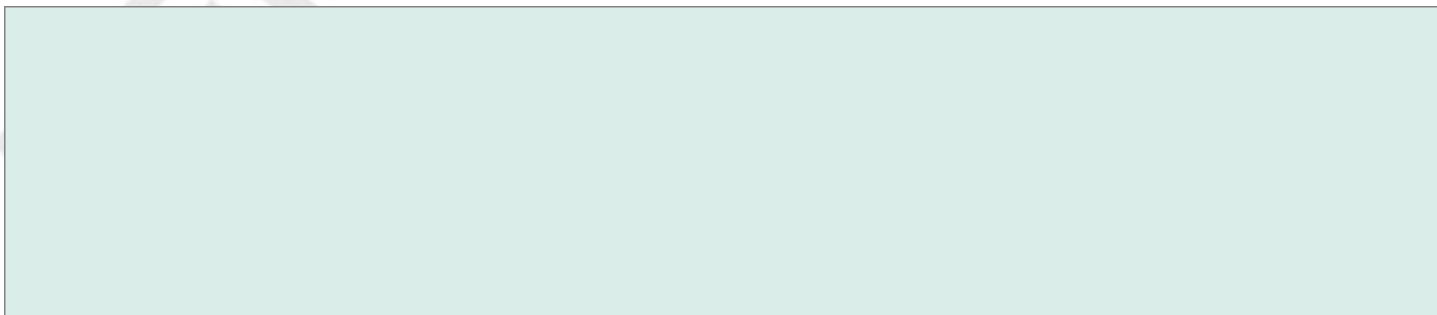


Upload WEc3-SC. Provide any additional documentation that supports the claim to special circumstances. (Optional)

- ☐ The project team is using an alternative compliance approach in lieu of standard submittal paths.

ALTERNATIVE COMPLIANCE PATH

Describe the alternative compliance path used by the project team. Include justification that this path meets the credit intent and requirements. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits.



SUMMARY

WE Credit 3: Water Efficient Landscaping Points Documented: