

Screening Worksheet for Infiltration/Harvesting and Use Feasibility

Apply these screening criteria for C.3 Regulated Projects* required to implement Provision C.3 stormwater treatment requirements. See the [Glossary \(Attachment 1\)](#) for definitions of terms marked with an asterisk (*). Contact the Planning Project Manager to determine whether the project is smart growth development that meets Special Project* criteria. If the project meets Special Project criteria, it may receive LID treatment reduction credits.

1. Applicant Information

Site Address: _____ APN: _____ File No.: _____
 Applicant Name: _____ Phone No.: _____
 Mailing Address: _____

2. Feasibility Screening for Infiltration

Do site soils either (a) have a saturated hydraulic conductivity* (Ksat) that will NOT allow infiltration of 80% of the annual runoff (that is, the Ksat is LESS than 1.6 inches/hour), or, if the Ksat rate is not available, (b) consist of Type C or D soils?¹

- Yes (continue to Section 3). No – complete the [Infiltration Feasibility Worksheet](#). If infiltration of the C.3.d amount of runoff is found to be feasible, there is no need to complete the rest of this screening worksheet.

3. Recycled Water Use

Check the box below if the project is installing and using a recycled water plumbing system for non-potable water use. If the project is not installing and using a recycled water plumbing system, continue to Section 4.

- The project is installing a recycled water plumbing system, and the installation of a second non-potable water system for harvested rainwater is impractical, and considered infeasible due to cost considerations (skip to Section 6).

4. Calculate the Potential Rainwater Capture Area* for Screening of Rainwater Harvesting and Use

Complete this section for the entire project area. If rainwater harvesting and use is infeasible for the entire site, and the project includes one or more buildings that each have an individual roof area of 10,000 sq. ft. or more, then complete Sections 4 and 5 of this form for each of these buildings.

4.1 Table 1 below is for the **entire project area**.

Table 1: Calculation of the Potential Rainwater Capture Area*				
<i>The Potential Rainwater Capture Area may consist of the entire project area.</i>				
	1	2	3	4
	Pre-Project Total Site Existing Impervious Surfaces ² (sq. ft.)	Proposed Impervious Surfaces ² (IS) of Site Area Disturbed (sq. ft.)		Post-Project Landscaped Areas for Site Area Disturbed (sq. ft.)
		Replaced ³ IS	New ⁴ IS	
a. Enter the totals for the area to be evaluated:				
b. Sum of replaced and new impervious surfaces:	N/A			N/A
c. Area of existing impervious surfaces that will NOT be replaced by the project:		N/A		N/A

¹ Base this response on the site-specific soil report, if available. If this is not available, consult the soil hydraulic conductivity map in [Attachment 3](#).
² Enter the total of all impervious surfaces, including the building footprint, driveway(s), patio(s), impervious deck(s), unroofed porch(es), uncovered parking lot (including top deck of parking structure), impervious trails, miscellaneous paving or structures, and off-lot impervious surface (new, contiguous impervious surface created from road projects, including sidewalks and/or bike lanes built as part of new street). Impervious surfaces do NOT include vegetated roofs or pervious pavement that stores and infiltrates rainfall at a rate equal to immediately surrounding, unpaved landscaped areas, or that stores and infiltrates the C.3.d amount of runoff*.
³ “Replaced” means that the project will install impervious surface where existing impervious surface is removed.
⁴ “New” means the project will install impervious surface where there is currently no impervious surface.
 *For definitions, see [Glossary \(Attachment 1\)](#).

4.2 Answer this question for the entire project area ONLY. If existing impervious surface will be replaced by the project, does the area to be replaced equal 50% or more of the existing area of impervious surface? (Refer to Table 1, Row “a”. Is the area in Column 2 > 50% of Column 1?)

- Yes, C.3. stormwater treatment requirements apply to areas of impervious surface that will remain in place as well as the area created and/or replaced. This is known as the 50% rule.
- No, C.3. requirements apply only to the impervious area created and/or replaced.

4.3 Enter the square footage of the Potential Rainwater Capture Area*. If you answered “no” to Question 4.2, this amount is from Row “b” in Table 1. If you answered “yes” to Question 4.2, this amount is the sum of Rows “b” and “c” in Table 1: _____ sq. ft.

4.4 Convert the measurement of the Potential Rainwater Capture Area* from square feet to acres (divide the amount in Item 4.3 by 43,560): _____ acres.

4.5 Does the project have at least one **building roof area of 10,000 square feet** or more? If so, complete Table 2 and Items 4.6 and 4.7 below (if not, continue to Item 5). Attach additional tables for each additional individual building roof area of 10,000 sq. ft. or more, as applicable.

Table 2: Calculation of the Potential Rainwater Capture Area* <i>The Potential Rainwater Capture Area may consist of a building(s) with a roof area(s) of 10,000 sq. ft. or more.</i>				
	1	2	3	4
	Pre-Project Total Site Existing Impervious Surfaces ⁵ (sq. ft.)	Proposed Impervious Surfaces ⁷ (IS) of Site Area Disturbed (sq. ft.)		Post-Project Landscaped Areas for Site Area Disturbed (sq. ft.)
		Replaced ⁶ IS	New ⁷ IS	
a. Enter the totals for the area to be evaluated:				
b. Sum of replaced and new impervious surfaces:	N/A			N/A
c. Area of existing impervious surfaces that will NOT be replaced by the project:		N/A		N/A

4.6 Enter the square footage of the Potential Rainwater Capture Area* from Row “b” in Table 2: _____ sq. ft.

4.7 Convert the measurement of the Potential Rainwater Capture Area* from square feet to acres (divide the amount in Item 4.6 by 43,560): _____ acres.

5. Feasibility Screening for Rainwater Harvesting and Use

5.1 Use of harvested rainwater for landscape irrigation:

Is the onsite post-project landscaping (Column 4 in Table 1 or 2) LESS than 2.5 times the size of the Potential Rainwater Capture Area* (Item 4.3 if evaluating for entire site area, or Item 4.6 if evaluating for a roof area(s) of 10,000 sq. ft. or more)? (Note that the landscape area(s) would have to be contiguous and within the same Drainage Management Area to use harvested rainwater for irrigation via gravity flow.)

- Yes (continue to 5.2).
- No – direct runoff from impervious areas to self-retaining areas* OR refer to Table 11 on page 33 and the curves in Appendix F of the [BASMAA Feasibility Criteria Report](#) to evaluate feasibility of harvesting and using the C.3.d amount of runoff for irrigation.

⁵ Enter the total of all impervious surfaces, including the building footprint, driveway(s), patio(s), impervious deck(s), unroofed porch(es), uncovered parking lot (including top deck of parking structure), impervious trails, miscellaneous paving or structures, and off-lot impervious surface (new, contiguous impervious surface created from road projects, including sidewalks and/or bike lanes built as part of new street). Impervious surfaces do NOT include vegetated roofs or pervious pavement that stores and infiltrates rainfall at a rate equal to immediately surrounding, unpaved landscaped areas, or that stores and infiltrates the C.3.d amount of runoff*.

⁶ “Replaced” means that the project will install impervious surface where existing impervious surface is removed.

⁷ “New” means the project will install impervious surface where there is currently no impervious surface.

*For definitions, see [Glossary \(Attachment 1\)](#).

5.2 Use of harvested rainwater for toilet flushing or non-potable industrial use:

- a. **Residential Projects:** Proposed number of dwelling units: _____
Calculate the dwelling units per impervious acre by dividing the number of dwelling units by the acres of the Potential Rainwater Capture Area* in Item 4.4 (if evaluating the entire project area) or in Item 4.7 (if evaluating the roof area of a building).
When evaluating the entire project area, enter the result here: _____
When evaluating the roof area of a building, enter the result here: _____
Is the number of dwelling units per impervious acre LESS than 96 (assumes 2.92 occupants/unit)?
 Yes (continue to 5.2.b.). No – complete the [Rainwater Harvesting and Use Feasibility Worksheet](#).
- b. **Commercial/Industrial Projects:** Proposed interior floor area: _____ sq. ft.
Calculate the proposed interior floor area (sq. ft.) per acre of impervious surface by dividing the interior floor area (sq. ft.) by the acres of the Potential Rainwater Capture Area* in Item 4.4 (if evaluating the entire project area) or in Item 4.7 (if evaluating the roof area of a building).
When evaluating the entire project area, enter the result here: _____
When evaluating the roof area of a building, enter the result here: _____
Does square footage of the interior floor space per impervious acre equal LESS than 70,000?
 Yes (continue to 5.2.c.). No – complete the [Rainwater Harvesting and Use Feasibility Worksheet](#).
- c. **School Projects:** Proposed interior floor area: _____ sq. ft.
Calculate the proposed interior floor area per acre of impervious surface by dividing the interior floor area (sq. ft.) by the acres of the Potential Rainwater Capture Area* in Item 4.4 (if evaluating the entire project area) or in Item 4.7 (if evaluating the roof area of a building).
When evaluating the entire project area, enter the result here: _____
When evaluating the roof area of a building, enter the result here: _____
Does square footage of the interior floor space per impervious acre equal LESS than 21,000?
 Yes (continue to 5.2.d.). No – complete the [Rainwater Harvesting and Use Feasibility Worksheet](#).
- d. **Mixed Commercial and Residential Use Projects**
- Evaluate the residential toilet flushing demand based on the dwelling units per impervious acre for the residential portion of the project, following the instructions in Item 5.2.a, except you will use a prorated acreage of impervious surface, based on the percentage of the project dedicated to residential use.
 - Evaluate the commercial toilet flushing demand per impervious acre for the commercial portion of the project, following the instructions in Item 5.2.b, except you will use a prorated acreage of impervious surface, based on the percentage of the project dedicated to commercial use.
- e. **Industrial Projects:** Estimated non-potable water demand (gallons/day): _____
Is the non-potable demand LESS than 2,400 gallons/day per acre of the Potential Rainwater Capture Area?
 Yes (continue to Section 6). No – refer to the curves in Appendix F of the [BASMAA Feasibility Criteria Report](#) to evaluate feasibility of harvesting and using the C.3.d amount of runoff for industrial use.

6. Use of Biotreatment

If only the “Yes” boxes were checked for all questions in Sections 2 and 5, or the project will have a recycled water system for non-potable use (Section 3), then the applicant may use appropriately designed biotreatment facilities for compliance with C.3 treatment requirements. The applicant is encouraged to maximize infiltration of stormwater as site conditions allow.

*For definitions, see [Glossary \(Attachment 1\)](#).

7. Results of Screening Analysis

Based on this screening analysis, the following steps will be taken for the project (check all that apply):

- Implement biotreatment measures (such as an appropriately designed bioretention area).
- Conduct further analysis of infiltration feasibility by completing the Infiltration Feasibility Worksheet.
- Conduct further analysis of rainwater harvesting and use by (check one):
 - Completing the Rainwater Harvesting and Use Feasibility Worksheet for:
 - The entire project area.
 - Individual building(s) with a roof area(s) of 10,000 sq. ft. or more, if applicable, describe: _____
 - Evaluating the feasibility of harvesting and using the C.3.d amount of runoff for irrigation, based on Table 11 (on page 33) and the curves in Appendix F of the BASMAA LID Feasibility Criteria Report.
 - Evaluating the feasibility of harvesting and using the C.3.d amount of runoff for non-potable industrial use, based on the curves in Appendix F of the BASMAA LID Feasibility Criteria Report.