



Infiltration/Rainwater Harvesting and Use Feasibility Screening Worksheet

Apply these screening criteria for C.3 Regulated Projects* required to implement Provision C.3 stormwater treatment requirements. If the agency has already determined that Provision C.3 treatment requirements will be met using infiltration facilities or rainwater harvesting and use, this form is not required. See the Glossary (Attachment 1) for definitions of terms marked with an asterisk (*). Contact municipal staff to determine whether the project meets Special Project* criteria. If the project meets Special Project criteria, it will receive LID treatment reduction credits.

1. Applicant Info

Site Address: _____, CA APN: _____
 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) 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 if the project is installing and using a recycled water plumbing system for non-potable water use.
 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 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. For Special Projects that receive < 100% LID treatment reduction, skip Sections 4 through 6 of this form and use the Rainwater Harvesting and Use Feasibility Worksheet to determine feasibility of harvest and use.

4.1 Table 1 is completed for (check one): The whole project Area of 1 building roof (10,000 sq.ft. min.)

Table 1: Calculation of the Potential Rainwater Capture Area*					
<i>The Potential Rainwater Capture Area may consist of either the entire project area or one building with a roof area of 10,000 sq. ft. or more.</i>					
	1	2	3	4	
	Pre-Project Impervious surface ² (sq.ft.), if applicable		Proposed Impervious Surface ² (IS), in sq. ft.		Post-project landscaping (sq.ft.), if applicable
			Replaced ³ IS	Created ⁴ IS	
a. Enter the totals for the area to be evaluated:					
b. Sum of replaced and created impervious surface:	N/A				N/A
c. Area of existing impervious surface 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 soil hydraulic conductivity maps 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 "Created" means the project will install new impervious surface where there is currently no impervious surface.
 * For definitions, see Glossary (Attachment 1).

4.2 Answer this question ONLY if you are completing this section for the entire project area. If existing impervious surface will be replaced by the project, does the area to be replaced equal at least 50%, but less than 100%, of the existing area of impervious surface? (Refer to Table 1, Row "a". Is the area in Column 2 \geq 50%, but < 100%, 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 are evaluating only the roof area of a building, or 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:

_____ square feet.

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.

5. Feasibility Screening for Rainwater Harvesting and Use

5.1 Use of harvested rainwater for landscape irrigation:

Is the onsite landscaping LESS than 2.5 times the size of the Potential Rainwater Capture Area* (Item 4.3)? (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)
- No – direct runoff from impervious areas to self-retaining areas* OR refer to Table 11 and the curves in Appendix F of the LID Feasibility Report to evaluate feasibility of harvesting and using the C.3.d amount of runoff for irrigation.

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. Enter the result here:

_____)

Is the number of dwelling units per impervious acre LESS than 100 (assuming 2.7 occupants/unit)?

- Yes (continue)
- No – complete the Rainwater Harvesting/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*. Enter the result here:

Does square footage of the interior floor space per impervious acre equal LESS than 70,000?

- Yes (continue)
- No – complete the Rainwater Harvesting/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*. Enter the result here:

_____.

Does square footage of the interior floor space per impervious acre equal LESS than 21,000?

- Yes (continue)
- No – complete the Rainwater Harvesting/Use Feasibility Worksheet

* For definitions, see Glossary (Attachment 1).

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 (gal/day): _____

Is the non-potable demand LESS than 2,400 gal/day per acre of the Potential Rainwater Capture Area?

- Yes (continue) No – refer to the curves in Appendix F of the LID Feasibility 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 bioretention facilities for compliance with C.3 treatment requirements. The applicant is encouraged to maximize infiltration of stormwater if site conditions allow.

7. Results of Screening Analysis

Based on this screening analysis, the following steps will be taken for the project. (If biotreatment is allowed, check the biotreatment option only. If further analysis is needed, 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
 - Individual building(s), if applicable, describe: _____
 - Evaluating the feasibility of harvesting and using the C.3.d amount of runoff for irrigation, based on Table 11 and the curves in Appendix F of the LID Feasibility 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 LID Feasibility Report.

If further analysis of infiltration or rainwater harvesting/use is required, download and complete the infiltration and/or rainwater harvesting/use feasibility forms, as necessary, at the City of Albany's Environmental Services website:

Signature

Print Name

Date

Circle one: (Licensed Soils Engineer / Licensed Civil Engineer / Licensed Architect / Licensed Landscape Architect)

Name, address and telephone number of the Consultant’s office.

* For definitions, see Glossary (Attachment 1).