



ATTACHMENT G:
SMARTS USER GUIDE



SMARTS User Guide

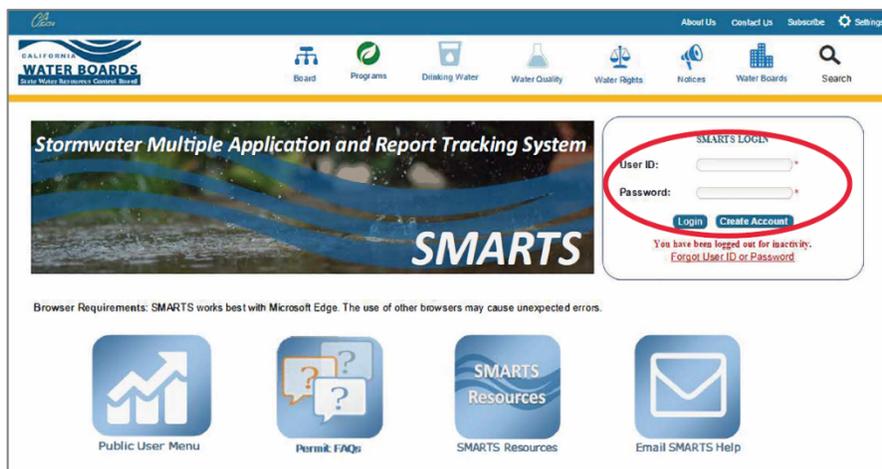
Part 1: Submitting Project Information in SMARTS

Use the State’s Storm Water Multiple Application & Report Tracking System (SMARTS) system to determine the preliminary Risk Level for a Traditional construction project or to determine the post-construction water balance for the project.

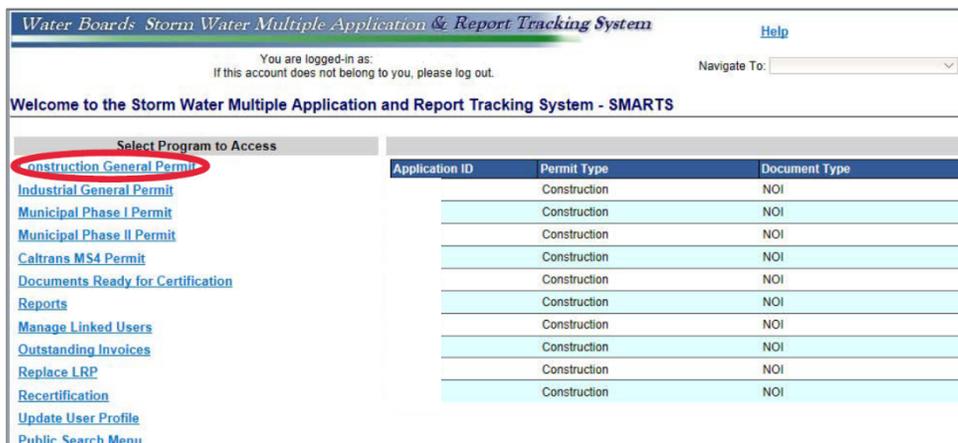
Step 1: If you do not have access to SMARTS use the guide for getting a SMARTS account at the following link:

https://smarts.waterboards.ca.gov/smarts/faces/help/new_user_registration.pdf

Step 2: Login to your SMARTS account. ↻



Step 3: Navigate to Construction General Permit. ↻





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Step 4: Navigate to New NOI/Waiver Application. 



Water Boards Storm Water Multiple Application & Report Tracking System [Help](#)

You are logged-in as: _____
If this account does not belong to you, please log out. Navigate To: _____

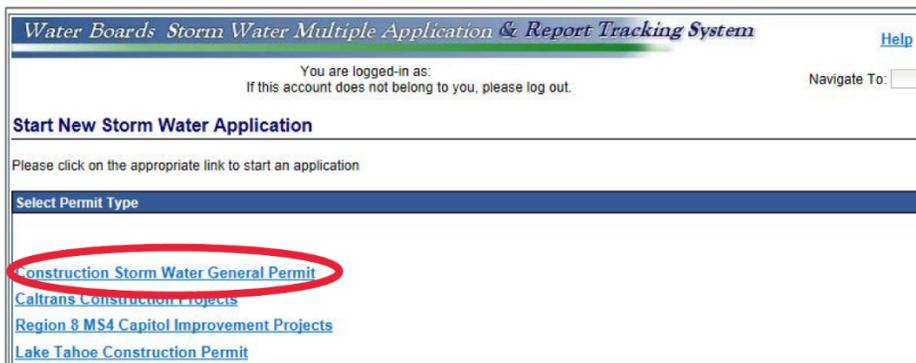
Welcome to Storm Water Multiple Application Reporting and Tracking System - SMARTS

Construction Permit Menu

- New NOI/Waiver Application** (circled in red)
- Active NOIs
- Pending NOIs/NOTs/COIs
- Terminated NOIs
- Annual/Ad hoc Reports
- CBPEL SG - QSD
- Back to Main Menu

Application ID	Application Type	Status
WDID	Construction - NOI	Not Submitted
	Construction - NOI	Not Submitted
	Construction - NOI	Not Submitted

Step 5: Navigate to Construction Storm Water General Permit. 



Water Boards Storm Water Multiple Application & Report Tracking System [Help](#)

You are logged-in as: _____
If this account does not belong to you, please log out. Navigate To: _____

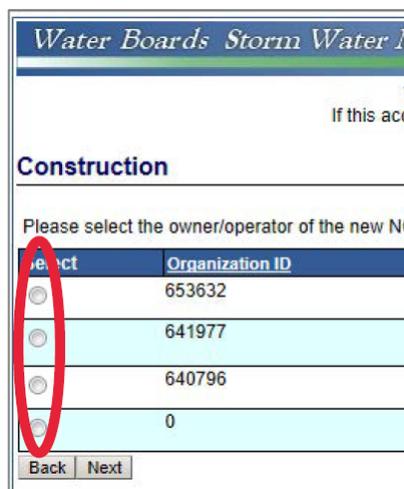
Start New Storm Water Application

Please click on the appropriate link to start an application

Select Permit Type

- Construction Storm Water General Permit** (circled in red)
- Caltrans Construction Projects
- Region 8 MS4 Capitol Improvement Projects
- Lake Tahoe Construction Permit

Step 6: Select the Owner/Operator. 



Water Boards Storm Water M

You are logged-in as: _____
If this acco

Construction

Please select the owner/operator of the new NO

Project	Organization ID
<input type="radio"/>	653632
<input type="radio"/>	641977
<input type="radio"/>	640796
<input type="radio"/>	0

Back Next



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Step 7: Go to the Site Info tab and enter the project information.

Step 8: Take a Screen Shot and Save for submittal.

Step 9: Click the Save & Continue button. ↻

Water Boards Storm Water Multiple Application & Report Tracking System [Help](#)

You are logged-in as: Navigate To:
 If this account does not belong to you, please log out.

Site Information

The application is organized into different tabs. Please complete all applicable tabs before submitting the form. If you want to complete the application at a later time, please click on "Save & Exit".

WDID/App ID: - 503804 Owner:
 Status: Not Submitted Site:
 Order No: 2009-0009-DWQ
 Permit Type: Construction - NOI

Site Name: * Contact First Name:
 Street Address: * Contact Last Name:
 Address Line 2: Title:
 Latitude: * Longitude: * [Lookup Map](#) Phone: *
 (Decimal degrees only, minimum 5 significant digits Ex: 99.99999) Emergency Phone: E
 City: All * E-mail:
 County: Select * Total Site Size: *
 Regional Board: Select *
 State/Zip: CA *

Additional Information (Construction Specific)

Total Area to be Disturbed: Acres * Percent of Total Disturbed:
 Imperviousness Before Construction: % * Imperviousness After Construction:
 Tract Number(s):
 Mile Post Marker:
 Is the construction site part of larger common plan of development? Yes No *
 Name of plan or development:
 Construction Commencement Date: (mm/dd/yyyy)
 Complete Grading Date: (mm/dd/yyyy) Complete Project Date:

Type of Construction

Construction
 Residential Commercial Industrial Reconstruction Transportation Utility:
 Other: *
 Linear Utility Project
 Above Ground Below Ground Gas Line Water/Sewer Line Communication Line Cable Line Electrical
 Other: *



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Part 2: Preliminary Risk Level Calculation

To determine the preliminary Risk Level for a Traditional construction project, use the State's Storm Water Multiple Application & Report Tracking System (SMARTS) system.

Steps 1 – 9: Complete Steps 1-9 in Part 1.

Step 10: Navigate to the Risk tab.

Step 11: Click on the Erosivity Calculator in the Sediment Risk Factor Worksheet. 

Owner Info	Developer Info	Site Info	Risk	Addl. Site Info	Post Construction	Billing Info	Attachments	Certification	Reports	Inspections	Print	Status History	Linked Users	NOTS	COIs	
SEDIMENT RISK FACTOR WORKSHEET Instructions: Enter R,K and LS factor values. System will calculate watershed erosion estimates and site sediment risk factor A. Sediment Risk																
A) R Factor Value: (What's this?)														<input type="text"/>		<input type="button" value="Erosivity Calculator"/>
B) K Factor Value (weighted average, by area, for all site soils) (What's this?) ***If not using the SWRCB map(Populate K Factor) upload your analysis on the Attachment Tab prior to submitting to the SWRCB.														<input type="text"/> *		<input type="button" value="Populate K Factor"/>
C) LS Factor (weighted average, by area, for all slopes) (What's this?) ***If not using the SWRCB map(Populate LS Factor) upload your analysis on the Attachment Tab prior to submitting to the SWRCB.														<input type="text"/> *		<input type="button" value="Populate LS Factor"/>
Watershed Erosion Estimate (=R*K*LS) in tons/acre														<input type="text"/>		
Site Sediment Risk Factor Low Sediment Risk: < 15 tons/acre Medium Sediment Risk: >= 15 and <75 tons/acre High Sediment Risk: >= 75 tons/acre														<input type="text"/>		



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Step 12: Fill in the requested information and press submit. ↻

Select a construction period

Start Date:

(Format: mm/dd/yyyy)

End Date:

(Format: mm/dd/yyyy)

The start date is the date of initial earth disturbance. The end date is the date of final site stabilization.

NOTE: If your construction project extends beyond the estimated end date, you will need to either recalculate the R factor based on a new end date, or apply for NPDES permit coverage.

Please enter the Latitude/Longitude information of the project/site.

(Do not enter negative numbers)

Latitude ° ' " N
(Degrees/Minutes/Seconds)

Longitude: ° ' " W
(Degrees/Minutes/Seconds)

Latitude ° . ' N
(Degrees/Minutes.Decimal Minutes)

Longitude: ° . ' W
(Degrees/Minutes.Decimal Minutes)

Latitude . ° N
(Decimals)

Longitude: . ° W
(Decimals)

If you do NOT have the Latitude/Longitude information, please enter the project/site address.

Address:



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Step 13: Navigate back to the SMARTS **Sediment Risk Factor Worksheet** and fill in the **R** factor with the calculated erosivity index value.

Step 14: Populate the **K Factor** and the **LS Factor**. ↻

Owner Info	Developer Info	Site Info	Risk	Addl. Site Info	Post Construction	Billing Info	Attachments	Certification	Reports	Inspections	Print	Status History	Linked Users	NOTs	COIs
SEDIMENT RISK FACTOR WORKSHEET Instructions: Enter R,K and LS factor values. System will calculate watershed erosion estimates and site sediment risk factor A. Sediment Risk															
A) R Factor Value: (What's this?)															
B) K Factor Value (weighted average, by area, for all site soils) (What's this?) ***If not using the SWRCB map(Populate K Factor) upload your analysis on the Attachment Tab prior to submitting to the SWRCB.															
C) LS Factor (weighted average, by area, for all slopes) (What's this?) ***If not using the SWRCB map(Populate LS Factor) upload your analysis on the Attachment Tab prior to submitting to the SWRCB.															
Watershed Erosion Estimate (=R*K*LS) in tons/acre															
Site Sediment Risk Factor Low Sediment Risk: < 15 tons/acre Medium Sediment Risk: >= 15 and <75 tons/acre High Sediment Risk: >= 75 tons/acre															

Step 15: Read the three questions outlined in the **Receiving Water (RW) Risk Factor Worksheet** and Select **Yes** if the answer is yes to any of the three questions. Select **No** if the answer is no to all three questions.

Step 16: Select **Populate Receiving Water Risk**. ↻

RECEIVING WATER (RW) RISK FACTOR WORKSHEET A. Watershed Characteristics		
A.1.(a) Does the disturbed area discharge directly or indirectly to a 303(d) listed waterbody impaired by sediment? <p style="text-align: center;"><u>OR</u></p> A.1.(b) Is the disturbed area located within a sub-watershed draining to a 303(d) listed waterbody impaired by sediment? <p style="text-align: center;"><u>OR</u></p> A.2. Is the disturbed area located within a planning watershed draining to a waterbody with designated beneficial uses of COLD, SPAWN AND MIGRATORY?		Populate Receiving Water Risk: Select ▼ Yes = High, No = Low Statewide Map of High Receiving Water Risk Watersheds



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*Note that the **Combined Risk Level Matrix** automatically populates from the **Sediment and Receiving Water Risk Factor Worksheets**.

Step 17: Take a Screen Shot and save for submittal. Press **Save & Continue**. 

C. Combined Risk Level Matrix

		Sediment Risk		
		Low	Medium	High
Receiving Water Risk	Low	Level1	Level2	
	High	Level2		Level3

Project Sediment Risk:

Project Receiving Water Risk:

Project Combined Risk:

Save & Exit



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Part 3: Post-Construction Water Balance:

To determine the post-construction water balance for the project, use the State's **Storm Water Multiple Application & Report Tracking System (SMARTS)** system.

Steps 1 – 9: Complete Steps 1-9 in **Part 1**.

Step 10: Go to the **Post Construction** tab and answer the questions. Questions will appear in SMARTS as questions are answered. Below are a few possible outcomes.

Option 1:

Owner Info	Developer Info	Site Info	Risk	Addl. Site Info	Post Construction	Permitting Info	Attachments	Certification	Requirements	Reports	Inspections	Print	Status History	Linked Users	NOTs	COIs
Is the project located within a permitted Phase I or Phase II Municipal Separate Storm Sewer System (MS4) area? Yes ▼																
Note: Non-traditional small MS4s that lie within a Phase I or II MS4 area but are NOT designated must comply with the Construction General Permit post construction calculator.																
Does the Phase I or Phase II MS4 have an approved Stormwater Management Plan (SWMP) that includes post-construction requirements? Yes ▼																
Upload documentation to demonstrate compliance with the Phase I or Phase II MS4 post-construction requirements																
Save & Exit Save & Continue																

Option 2:

Is the project located within a permitted Phase I or Phase II Municipal Separate Storm Sewer System (MS4) area? Yes ▼																	
Note: Non-traditional small MS4s that lie within a Phase I or II MS4 area but are NOT designated must comply with the Construction General Permit post construction calculator.																	
Does the Phase I or Phase II MS4 have an approved Stormwater Management Plan (SWMP) that includes post-construction requirements? No ▼																	
Will the project use an alternative method to calculate runoff volume or use different site design measures than those listed in the CGP calculator? No ▼																	
Will the project be subdivided into smaller sub-areas or drainage management areas? Yes ▼																	
Sub Areas:																	
Sub Area ID	Name	County	Size(acres)	Delete													
Add New Sub Area																	



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Option 3:

Is the project located within a permitted Phase I or Phase II Municipal Separate Storm Sewer System (MS4) area? Yes ▼

Note: Non-traditional small MS4s that lie within a Phase I or II MS4 area but are NOT designated must comply with the Construction General Permit post construction calculator.

Does the Phase I or Phase II MS4 have an approved Stormwater Management Plan (SWMP) that includes post-construction requirements? No ▼

Will the project use an alternative method to calculate runoff volume or use different site design measures than those listed in the CGP calculator? No ▼

Will the project be subdivided into smaller sub-areas or drainage management areas? No ▼

INPUT FOR WATERSHED: Enter watershed details and click on the Compute & Save button.

I.a. Name:

I.b. County:

I.c. Closest Location:

I.d. Size(acres):

Pre-Construction INPUT

I.e. Dominant Soil Type:

I.f. Existing Dominant Non-built Land Use Type:

I.g. Existing rooftop impervious area(acres):

I.h. Existing non-rooftop impervious area(acres):

Post-Construction INPUT

I.i. Proposed Dominant Non-built Land Use Type:

I.j. Proposed rooftop impervious area(acres):

I.k. Proposed non-rooftop impervious area(acres):

OUTPUT:

O.a. Existing Runoff Curve Number: <input type="text"/>	O.d. Proposed Runoff Curve Number: <input type="text"/>
O.b. Design Storm(inches): <input type="text"/>	O.e. Net Credit of Volume Credits(Cubic feet): <input type="text"/>
O.c. Pre-project Runoff Volume(Cubic Feet): <input type="text"/>	O.f. Post-project Runoff Volume(Cubic Feet): <input type="text"/>
O.g. Post-project Runoff Volume minus Volume Credits(Cubic Feet): <input type="text"/>	

To delete the watershed please click on the delete button below:



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Step 11: If **Option 3** appears, type in the **INPUT** information for Watershed, Pre-Construction, and Post-Construction. Then press **Compute & Save**.

Is the project located within a permitted Phase I or Phase II Municipal Separate Storm Sewer System (MS4) area? Yes ▾

Note: Non-traditional small MS4s that lie within a Phase I or II MS4 area but are NOT designated must comply with the Construction General Permit post construction calculator.

Does the Phase I or Phase II MS4 have an approved Stormwater Management Plan (SWMP) that includes post-construction requirements? No ▾

Will the project use an alternative method to calculate runoff volume or use different site design measures than those listed in the CGP calculator? No ▾

Will the project be subdivided into smaller sub-areas or drainage management areas? No ▾

INPUT FOR WATERSHED: Enter watershed details and click on the Compute & Save button.

I.a. Name:

I.b. County:

I.c. Closest Location:

I.d. Size(acres):

Pre-Construction INPUT

I.e. Dominant Soil Type:

I.f. Existing Dominant Non-built Land Use Type:

I.g. Existing rooftop impervious area(acres):

I.h. Existing non-rooftop impervious area(acres):

Post-Construction INPUT

I.i. Proposed Dominant Non-built Land Use Type:

I.j. Proposed rooftop impervious area(acres):

I.k. Proposed non-rooftop impervious area(acres):

OUTPUT:

O.a. Existing Runoff Curve Number:	<input type="text"/>	O.d. Proposed Runoff Curve Number:	<input type="text"/>
O.b. Design Storm(inches):	<input type="text"/>	O.e. Net Credit of Volume Credits(Cubic feet):	<input type="text"/>
O.c. Pre-project Runoff Volume(Cubic Feet):	<input type="text"/>	O.f. Post-project Runoff Volume(Cubic Feet):	<input type="text"/>
O.g. Post-project Runoff Volume minus Volume Credits(Cubic Feet):	<input type="text"/>		

To delete the watershed please click on the delete button below:



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Step 12: One of the following messages will appear:

If you see: *****Pre-project Runoff Volume \geq Post-project Runoff Volume. No further calculation is necessary!** You are done with the Post-Construction calculations. Take a screen shot and save for submittal. Select **Save & Continue**.

- OR -

If you see: *****Post-project Runoff Volume $>$ Pre-project Runoff Volume. Please perform volume credit calculations by clicking on the link below,** then you must move on to **Step 13**.

Step 13: Complete the **Volume Credit Calculator Worksheet**. Click on the runoff reduction measures (porous pavement, tree planting, downspout disconnection, impervious area disconnection, green roof, stream buffer, vegetative swale, rain barrels/cisterns, soil quality) used on the project. Enter in the requested information for each applicable reduction measure and press **Compute & Save** for each measure.

Following is the requested information required for each runoff reduction measure:



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Volume Credit Calculator Worksheets:

Formula **Credit(Cubic Feet)**

[A_Porous Pavement](#)

Input		Output
Area of Brick without Grout on less than 12 inches of base with at least 20% void space over soil	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.00"/> (Square feet)
Area of Brick without Grout on more than 12 inches of base with at least 20% void space over soil	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.0"/> (Square feet)
Area of Cobbles less than 12 inches deep and over soil	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.0"/> (Square feet)
Area of Cobbles more than 12 inches deep and over soil	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.0"/> (Square feet)
Area of Reinforced Grass Pavement on less than 12 inches of base with at least 20% void space over soil	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.00"/> (Square feet)
Area of Reinforced Grass Pavement on at least 12 inches of base with at least 20% void space over soil	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.0"/> (Square feet)
Area of Porous Gravel Pavement on less than 12 inches of base with at least 20% void space over soil	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.00"/> (Square feet)
Area of Porous Gravel Pavement on at least 12 inches of base with at least 20% void space over soil	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.00"/> (Square feet)
Area of Poured Porous Concrete or Asphalt Pavement with less than 4 inches of gravel base (washed stone)	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.0"/> (Square feet)
Area of Poured Porous Concrete or Asphalt Pavement with 4 to 8 inches of gravel base (washed stone)	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.0"/> (Square feet)
Area of Poured Porous Concrete or Asphalt Pavement with 8 to 12 inches of gravel base (washed stone)	<input type="text" value="0"/> (Square feet)	<input type="text" value="0.0"/> (Square feet)
Area of Poured Porous Concrete or Asphalt Pavement with 12 or more inches of gravel base (washed stone)	<input type="text" value="0"/> (Square feet)	<input type="text" value="0"/> (Square feet)

Total Credit Volume:(cubic feet)

Compute & Update

[B_Tree Planting](#)

Input		Output
Number of Proposed Evergreen trees to be planted	<input type="text"/>	<input type="text"/> (Square feet)
Number of Proposed Deciduous trees to be planted	<input type="text"/>	<input type="text"/> (Square feet)
Square feet under an existing tree canopy, that will remain on the property, with an average diameter at 4.5 feet above grade (i.e., diameter at breast height or DBH) is LESS than 12 in diameter	<input type="text"/>	<input type="text"/> (Square feet)
Square feet under an existing tree canopy, that will remain on the property, with an average diameter at 4.5 feet above grade (i.e., diameter at breast height or DBH) is 12 in diameter or GREATER	<input type="text"/>	<input type="text"/> (Square feet)

Total Credit Volume(cubic feet):

Compute & Update

[C_Downspout Disconnection](#)

Note: If you answer yes to all questions, all rooftop area draining to each downspout will be subtracted from your proposed rooftop impervious coverage. [Credit will be provided in the Soil Quality Worksheet.](#)

Do downspouts and any extensions extend at least six feet from a basement and two feet from a crawl space or concrete slab? Select ▼

Is the area of rooftop connecting to each disconnected downspout 600 square feet or less? Select ▼

Is the roof runoff from the design storm event fully contained in a raised bed or planter box, or does it drain as sheet flow to a landscaped area large enough to contain the roof runoff from the design storm event? Select ▼

The Stream Buffer and/or Vegetative Swale credits will not be taken in this sub-watershed area? Select ▼

Percent of proposed rooftop with disconnected downspouts:(%)

Compute & Update

Equivalent Volume:(cubic feet)

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D. Impervious Area Disconnection

Note: If you answer yes to all questions, all non-rooftop impervious surface area will be subtracted from your proposed non-rooftop impervious coverage. [Credit will be provided in the Soil Quality Worksheet.](#)

Is the maximum contributing impervious flow path less than 75 feet or, if equal or greater than 75 feet, is a storage device (e.g. French drain, bioretention area, gravel trench) implemented to achieve the required disconnection length? Select ▼

Is the impervious area to any one discharge location less than 5000 sq ft? Select ▼

Does the impervious area runoff from the design storm event drain as sheet flow to a landscaped area large enough to contain the runoff? Select ▼

The Stream Buffer credit will not be taken in this sub-watershed area? Select ▼

Percentage of the proposed non-rooftop surface area disconnected(%): _____

[Compute & Update](#)

Equivalent Volume:(cubic feet) _____

E. Green Roof

Note: If you answer yes to all questions, 70% of the green roof area will be subtracted from your proposed rooftop impervious coverage.

Is the roof slope less than 15% or does it have a grid to hold the substrate in place until it forms a thick vegetation mat? Select ▼

Has a professional engineer assessed the necessary load reserves and designed a roof structure to meet state and local codes? Select ▼

Is irrigation needed for plant establishment and/or to sustain the green roof during extended dry periods, is the source from stored, recycled, reclaimed, or reused water? Select ▼

Percentage of the proposed rooftop impervious area that is green roof(%): _____

[Compute & Update](#)

Total Credit Volume:(cubic feet) _____

F. Stream Buffer

Note: If you answer yes to all questions, you may subtract all impervious surface draining to each stream buffer that has not been addressed using the Downspout and/or Impervious Area Disconnection credits.

[Flood prone](#)

[Sheet Flow](#)

Does runoff enter the floodprone width* or within 500ft(whichever is larger)of a stream channel as sheet flow**? Select ▼

Is the contributing overland slope 5% or less or it greater then 5% is a level spreader used? Select ▼

Is the buffer area proteced from vehicle or other traffic barriers to reduce compaction? Select ▼

Will the stream buffer be maintained in an ungraded and uncompacted condition and will the vegetaion be maintained in a natural condition? Select ▼

Percentage of the proposed impervious area that will drain into a stream buffer(%): _____

[Compute & Update](#)

Total Credit Volume:(cubic feet) _____

G. Vegetative Swale

Note: If you answer yes to all questions, you may subtract all impervious surface draining to each stream buffer that has not been addressed using the Downspout Disconnection credit.

Have all vegetative swales been designed in accordance with treatment control bmp 30(TC-30-Vegetated Swale) from the California Stormwater BMP Handbook, New Development and Redevelopment(available at www.cabmphandbooks.com)? Select ▼

Is the maximum flow velocity for runoff from the design storm event less than or equal to 1.0 ft per second? Select ▼

Percentage of the proposed impervious area that will drain into a vegetated swale(%): _____

[Compute & Update](#)

Total Credit Volume:(cubic feet) _____

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H. Rain Barrels/Cisterns

Input	
Total number of rain barrel(s)/cistern(s)	<input type="text"/>
Average capacity of rain barrel(s)/cistern(s) in Gallons	<input type="text"/>
Total Credit Volume: <input type="text"/>	
Compute & Update	

I. Soil Quality

Note: If the Soil Quality Volume is larger than or equal to the sum of the Downspout Disconnection, Impervious Disconnection, and Landscape area Rainfall Volumes, then credit will be provided for the sum (Downspout, Impervious & Landscape). If this is not true, then credit will be provided for the Soil Quality Volume only.

Will the soils used for landscaping meet the ideal bulk densities listed in the TABLE1 below? **Select ▼**

Do you know the area-weighted bulk density within the top 12 inches for soils used for landscaping? **Select ▼**

Average depth of landscaped soil media(inches):

Total area of the landscaped areas meeting criteria(acres):

Compute & Update

Soil Quality Equivalent Volume:(cubic feet)

Downspout Disconnection Equivalent Volume:(cubic feet)

Impervious Area Equivalent Volume:(cubic feet)

Total Credit Volume: (cubic feet)

Sands, loamy sands	<1.6
Sandy loams, loams	<1.4
Sandy clay loams, loams, clay loams	<1.4
silt, silt loams	<1.3
silt loams, silty clay loams	<1.1
sandy clays, silty clays, some clay loams(35-45% clay)	<1.1
clays(>45% clay)	<1.1

Step 14: Take a screen shot and save for submittal. Select **Save & Continue**.