2016 Stormwater Facility Credit Program (SFCP) Credit Calculator: For Facilities Built According to 2016 Seattle Code Requirements

Version: 11-10-16

| Drainage Rate Tier: | | | Performance Factors | | | | Weighted | Facility Credit | |
% Hard Surface Area Managed (see note 1)	WQ/FC Classification	Stormwater Facility Type	TSS Reduction	Runoff Volume Reduction	2-yr Peak Flow & Duration Reduction	25-yr Peak Flow Reduction	Weighted Performance Factor (see note 2)	Facility Credit (see note 3)	Adjusted Facility Credit (see note 4)
						Facility Credit Scaling Factor=		50%	
Water Quality (WQ)									
Design Standard: Treatment of the water quality design storm volume or flow rate									
Basin types: Basins requiring basic, enhanced, or phosphorus treatment		Weighting Factor=	60%	40%	0%	0%			
0%	WQ- Level 1	• Non-infiltrating bioretention • Biofiltration swale (basic, wet, continuous inflow, or compost amended) • Filter strip (basic or compost amended) • Media filter drain / • Basic or large sand filter basin • Sand filter vault • Linear sand filter • Wet pond • Wet vault / • Stormwater treatment wetland • Detention/wet pond • Detention/wet vault • Detention/stormwater wetland • Proprietary BMPs	81%	20%	NA	NA	57%	29%	0%
0%	WQ- Level 2	• Infiltration trench • Infiltrating bioretention • Permeable pavement facility / • Permeable pavement surface • Infiltration basin • Infiltration chamber / • Splashblock, trench, sheet flow, or concentrated flow dispersion meeting basic filter strip requirements	94%	94%	NA	NA	94%	47%	0%
Flow Control #1 (FC#1) - On-site Stormwater Management									
Design Standard: On-site Performance Standard or On-site List Approach									
Basin types: All		Weighting Factor=	15%	35%	40%	10%			
0%	FC#1- Level 1	• Single-family residential cistern • Perforated stub-out connection	13%	10%	11%	27%	13%	7%	0%
0%	FC#1- Level 2	• Vegetated roof • Sheet flow dispersion / • Concentrated flow dispersion • Splashblock downspout dispersion / • Trench downspout dispersion • Non-infiltrating bioretention	58%	25%	60%	70%	48%	24%	0%
0%	FC#1- Level 3	• Rain garden • Infiltrating bioretention / • Permeable pavement facility • Permeable pavement surface / • Rainwater harvesting	95%	90%	83%	28%	82%	41%	0%
0%	FC#1- Level 4	• Full dispersion • Infiltration trench / • Dry well	98%	93%	89%	52%	88%	44%	0%
Flow Control #2 (FC#2) - Wetland Protection									
Design Standard: Total runoff volume within 20 percent of the pre-project volume during a single event and within 15 percent on a monthly basis.									
Basin types: Wetlands		Weighting Factor=	15%	30%	30%	25%			
0%	FC#2- Level 1	• Vegetated roofs • Detention cistern • Detention vault / • Detention pipe • Detention pond (with impermeable liner) / • Detention/ wet pond • Detention/ wet vault • Detention/ stormwater wetland	55%	0%	57%	82%	46%	23%	0%
0%	FC#2- Level 2	• Sheet flow dispersion • Concentrated flow dispersion / • Splashblock downspout dispersion • Trench downspout dispersion / • Permeable pavement facility • Permeable pavement surface	96%	84%	89%	40%	76%	38%	0%
0%	FC#2- Level 3	• Infiltrating bioretention • Full dispersion • Infiltration trench / • Dry well • Infiltration chamber / • Infiltration basin • Rainwater harvesting	99%	99%	96%	61%	89%	45%	0%
Flow Control #3 (FC#3) - Pre-developed Forested									
Design Standard: Match half 2-year to 50-year flow duration to forested condition									
Basin types: Creek basins		Weighting Factor=	15%	30%	30%	25%			
0%	FC#3- Level 1	• Vegetated roofs • Detention cistern • Detention vault / • Detention pipe • Detention pond (with impermeable liner) / • Detention/ wet pond • Detention/ wet vault • Detention/ stormwater wetland	55%	3%	46%	93%	46%	23%	0%
0%	FC#3- Level 2	• Sheet flow dispersion • Concentrated flow dispersion / • Splashblock downspout dispersion • Trench downspout dispersion / • Permeable pavement facility • Permeable pavement surface	94%	82%	87%	40%	75%	38%	0%
0%	FC#3- Level 3	• Infiltrating bioretention • Full dispersion • Infiltration trench / • Dry well • Infiltration chamber / • Infiltration basin • Rainwater harvesting	100%	100%	97%	77%	93%	47%	0%
Flow Control #4 (FC#4) - Pre-developed Pasture									
Design Standard: Match half 2-year to 2-year flow duration to pasture condition									
Basin types: Creek basins		Weighting Factor=	15%	30%	45%	10%			
0%	FC#4- Level 1	• Vegetated roofs • Detention cistern • Detention vault / • Detention pipe • Detention pond (with impermeable liner) / • Detention/ wet pond • Detention/ wet vault • Detention/ stormwater wetland	55%	0%	57%	82%	42%	21%	0%
0%	FC#4- Level 2	• Sheet flow dispersion • Concentrated flow dispersion / • Splashblock downspout dispersion • Trench downspout dispersion / • Permeable pavement facility • Permeable pavement surface	96%	84%	89%	40%	84%	42%	0%
0%	FC#4- Level 3	• Infiltrating bioretention • Full dispersion • Infiltration trench / • Dry well • Infiltration chamber / • Infiltration basin • Rainwater harvesting	99%	99%	96%	61%	94%	47%	0%
Flow Control #5 (FC#5) - Peak Control									
Design Standard: 2- and 25-year peak control									
Basin types: Public combined sewer, capacity-constrained, small lakes		Weighting=	0%	25%	40%	35%			
0%	FC#5- Level 1	• Detention cistern • Detention vault • Detention pipe / • Detention pond (with impermeable liner) • Detention/ wet pond • Detention/ wet vault / • Detention/ stormwater wetland • Non-infiltrating bioretention • Vegetated roofs	NA	2%	90%	80%	65%	33%	0%
0%	FC#5- Level 2	• Sheet flow dispersion • Concentrated flow dispersion / • Splashblock downspout dispersion • Trench downspout dispersion / • Permeable pavement facility • Permeable pavement surface	NA	85%	85%	52%	73%	37%	0%
0%	FC#5- Level 3	• Infiltrating bioretention • Full dispersion • Infiltration trench / • Dry well • Infiltration chamber / • Infiltration basin • Rainwater harvesting	NA	100%	100%	89%	96%	48%	0%
							Total Adjusted Facility Credit		0.0%

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Final Parcel Credit Calculation	
Total Facility Credit	0%
Rate Tier Multiplier (see note 5)	0%
Final Parcel Credit (see note 6)	**0%**

Notes:

1) For the water quality standard, enter PGHS treated as a percent of the total hard surface area. For the flow control standard(s), enter hard surface area managed as a
     percent of the total hard surface area.

2) The "Weighted Performance Factor" is the weighted average of the performance factors for a given facility and performance standard. "Weighting Factors" assign greater or lesser weight
     to each performance factor relative to the environmental priorities for the type of basin in which the project is located.

3) The "Facility Credit" is the "Weighted Performance Factor" multiplied by 50%.

4) The "Adjusted Facility Credit" is the "Facility Credit" multiplied by the "% Hard Surface Managed" by the facility.

5) The "Drainage Rate Tier Multiplier" is the percentage of the customer's bill attributable to hard surface area runoff. Credit is only offered for runoff managed which originates on hard surface.

6) The "Final Parcel Credit" is the "Drainage Rate Tier Multiplier" multiplied by the sum of a property's "Adjusted Facility Credits" (i.e., the "Total Adjusted Facility Credit").
     The final parcel credit is capped at 50%. The "Final Parcel Credit" is the credit percentage applied to the customer bill.

7) Fractional credits are not offered - no credit will be offered for credits that are calculated to round to less than 1%.

8) Applicable standards will depend on project type, size, and drainage basin (see Volume I, Chapter 4 and 5).

9) TSS is used as an indicator of water quality treatment; Volume is used as an indicator of volume reduction via infiltration or reuse.

10) If multiple flow control standards apply to a project, the largest applicable credit is applied (e.g., if an area is mitigated for FC#1, FC#4 and FC#5, enter the % hard surface managed
     under the flow control standard that provides the highest credit for the facility used).

11) If both flow control and water quality standards apply to a project, credit will be given for both (e.g., if an area meets both treatment and flow control standards, enter the % hard surface
     managed under both the water quality and flow control standards- the resulting "% Hard Surface Managed" may exceed 100%).

Drainage Rate Category		% Impervious or Parcel Area	Drainage Rate Tier	Drainage Rate Multiplier (see note 5)
General Service/Large Residential	Undeveloped-Regular	0-15%	**G1**	**30%**
	Undeveloped-Low Impact	0-15%	**G1L**	**23%**
	Light-Regular	16-35%	**G2**	**63%**
	Light-Low Impact	16-35%	**G2L**	**62%**
	Moderate-Regular	36-65%	**G3**	**83%**
	Moderate-Low Impact	36-65%	**G3L**	**79%**
	Heavy	66-85%	**G4**	**93%**
	Very Heavy	86-100%	**G5**	**99%**
Small Residential		<2,000 sq ft	**R1a**	**85%**
		2,000-2,999 sq ft	**R1b**	**84%**
		3,000-4,999 sq ft	**R2**	**79%**
		5,000-6,999 sq ft	**R3**	**78%**
		7,000-9,999 sq ft	**R4**	**74%**

Color Key:

20%	**Customer/applicant data entry (Rate Tier and % impervious or PGHS area managed).**
10%	**Stormwater Facility Credit**
Tier/%	**Lookup Table to convert impervious area impacts of facility to composite Rate Credit Percentage.**
15%	**Rate Credit that will appear on and modify bills, reflecting stormwater facilities and Rate Tier.**