

# PROJECT SHEET BASE DESIGN STANDARDS

Complete one Project Sheet for each project that includes Stormwater Quality BMPs.

## SITE INFORMATION

Project Name:				
Project Location:				
Submitted Date:			Submitted By:	
Acreage Disturbed:				
Existing Impervious:			New Net Impervious:	
Review Date:			Reviewed By:	
✓ Preparer	✓ COG	Requirements		
		Design Details are included for all BMPs		
		List or include a description of any Source Control BMPs (refer to Table 1) or other non-structural BMPs:		
		Does project overlap multiple MS4 Jurisdictions?	Yes	No
		If project overlaps jurisdictions, provide written agreement designating responsibility for BMP requirements, review, inspections		

## DESIGN STANDARDS

Design Standards may be used in combination, as necessary, to meet the requirements. Additional design methods may be considered if they comply with the MS4 Permit. Evaluation of suitability of Stormwater Quality Control Measures (BMPs) is based on pollutant removal, flood attenuation and long-term maintenance. BMPs must be designed in accordance with the most current version of [USDCM vol. 3, Chapter 4 "Treatment BMPs"](#) and meet the specific requirements for each Design Standard used.

1. Indicate below, which Design Standards will be used for the project, and
2. Complete a separate, corresponding Design Standards checklist for each BMP (e.g., WQCV, etc.)

<i>Design Standard</i>	<i># BMPs</i>	<i>Location/Identifying information</i>
WQCV		
Pollutant Removal		
Runoff Reduction		
Regional WQCV Control Measure		
Regional WQCV Facility		

# CHECKLIST WQCV Standard

## WQCV STANDARD Criteria

Control measure(s) must be designed to provide treatment and/or infiltration of the WQCV for 100% of the site.

*Complete checklist if using the WQCV Standard to meet Design Standard requirements.*

Project Name:		
Preparer	COG	Requirements
		Control measure(s) provide treatment and/or infiltration of the WQCV for 100% of the site
		% of site treated:
		BMP type: <span style="float: right;">BMP ID/location:</span>
		See Drainage Report section:

*If less than 100% of the site is treated, complete the following:*

Preparer	COG	Requirements				
		% of site not treated by control measures (not to exceed 20% or 1 acre):				
		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border: none;"></td> <td style="width: 5%; border: none; text-align: center;">%</td> <td style="width: 45%; border: none;"></td> <td style="width: 10%; border: none; text-align: right;">size (acres)</td> </tr> </table>		%		size (acres)
	%		size (acres)			
		Provide explanation that the excluded area is impractical to treat:				
		Provide explanation that another BMP is not practicable for the untreated area:				

# CHECKLIST Pollutant Removal Standard

## POLLUTANT REMOVAL STANDARD Criteria

Control measure(s) must be designed to provide treatment of the 80th percentile storm event. The control measure(s) shall be designed to treat stormwater runoff in a manner expected to reduce the even mean concentration of total suspended solids (TSS), at a minimum, to a median value of 30mg/L or less for 100% of the site. Substantiating data must meet criteria in USDCM vol.3, T-11 and be included in the submittal.

*Complete checklist if using the Pollutant Removal Standard to meet Design Standard requirements.*

Project Name:		
Preparer	COG	Requirements
		Control measure(s) provide treatment of the 80th percentile storm event. The control measure(s) treat stormwater runoff in a manner expected to reduce the even mean concentration of total suspended solids (TSS) to a median value of 30mg/L or less for 100% of the site.
		BMP type: _____ BMP ID/location: _____
		Storm event: _____
		TSS mg/L reduction: _____
		% of site treated: _____
		See Drainage Report section: _____

*If less than 100% of the site is treated, complete the following:*

Preparer	COG	Requirements		
		% of site not treated by control measures (not to exceed 20% or 1 acre):		
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">%</td> <td style="width: 50%; text-align: center;">size (acres)</td> </tr> </table>	%	size (acres)
%	size (acres)			
		Provide explanation that the excluded area is impractical to treat:		
		Provide explanation that another BMP is not practicable for the untreated area:		

# CHECKLIST Runoff Reduction Standard

## **RUNOFF REDUCTION STANDARD Criteria**

Control measure(s) must be designed to infiltrate, evaporate or evapotranspire, at a minimum, a quantity of water equal to 60% of what the calculated WQCV would be if all impervious area discharged without infiltration. This Standard can be met through practices such as Green Infrastructure and Low Impact Development practices.

*Complete checklist if using the Runoff Reduction Standard to meet Design Standard requirements.*

Project Name:		
Preparer	COG	Requirements
		Control measure infiltrates, evaporates or evapotranspirates at least 60% of WQCV
		% treated through runoff reduction:
		BMP type:
		BMP ID/location:
		See Drainage Report section:

# CHECKLIST Regional WQCV Control Measure Standard

## REGIONAL WQCV CONTROL MEASURE STANDARD Criteria

Control Measure(s) must be designed to accept the drainage from the applicable development site. Stormwater from the site must not discharge to a water of the state before being discharged to the Regional WQCV Control Measure. The Regional WQCV Control Measure must be designed to provide treatment and/or infiltration of the WQCV for 100% of the applicable development site.

*Complete checklist if using the Regional WQCV Control Measure Standard to meet Design Standard requirements.*

Project Name:		
Preparer	COG	Requirements
		Control Measure(s) are designed to accept the drainage from the site
		Stormwater from the site must not discharge to a water of the state before being discharged to the Regional WQCV Control Measure
		The Regional WQCV Control Measure is designed to provide treatment and/or infiltration of the WQCV for 100% of the site
		BMP ID/location:
		See Drainage Report section:

*If less than 100% of the site is treated, complete the following:*

Preparer	COG	Requirements		
		% of site not treated by control measures (not to exceed 20% or 1 acre):		
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">%</td> <td style="width: 50%; text-align: right;">size (acres)</td> </tr> </table>	%	size (acres)
%	size (acres)			
		Provide explanation that the excluded area is impractical to treat:		
		Provide explanation that another BMP is not practicable for the untreated area:		

# CHECKLIST Regional WQCV Facility Standard

## REGIONAL WQCV FACILITY STANDARD Criteria

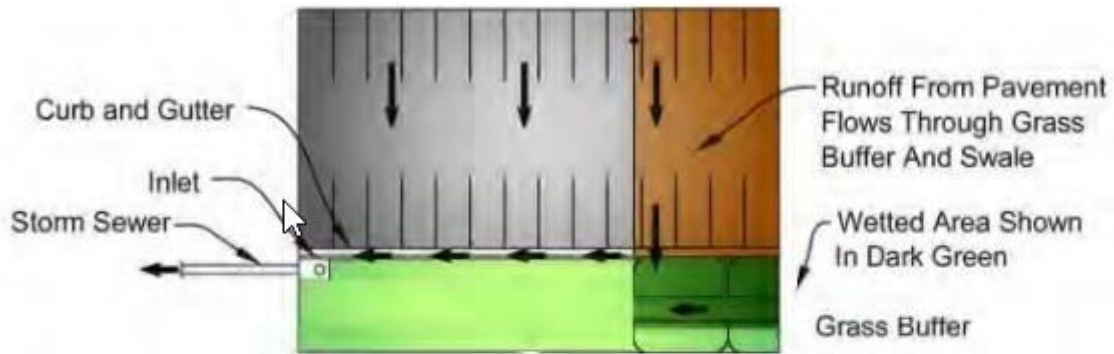
Control Measure(s) must be designed to accept drainage from the applicable development site. Stormwater from the site may discharge to a water of the state before being discharged to the Regional WQCV facility. Before discharging to a water of the state, at least 20 percent of the upstream imperviousness of the site must be disconnected from the storm drainage system and drain through a receiving pervious area control measure comprising a footprint of at least 10 percent of the upstream disconnected impervious area of the applicable development site. In addition, the stream channel between the discharge point of the applicable development site and the Regional WQCV facility must be stabilized.

*Complete checklist if using the Regional WQCV Facility Standard to meet Design Standard requirements.*





Project Name:			
Preparer	COG	Requirements	
		The Regional WQCV Facility is implemented, functional, and maintained following good engineering, hydrologic and pollution control practices.	
		The Regional WQCV Facility is designed and operating in accordance with the original design and/or USDCM vol.3.	
		The Regional WQCV Facility is designed and operating to provide 100% WQCV for its entire drainage area.	
		The Regional WQCV Facility has capacity to accommodate the drainage from the site.	
		The Regional WQCV Facility is designed and built to comply with all assumptions for the development planned within the drainage area and site.	
		Evaluation of the minimum drain time is based on the pollutant removal mechanism and functionality of the facility.	
		The Regional WQCV Facility is designed and constructed with flood control and water quality as the primary use. Recreational ponds and reservoirs or Classified State Waters cannot be used as Regional WQCV Facilities.	
		% of site treated in facility:	
		% of unconnected imperviousness area (prior to facility):	
		% of receiving pervious area (prior to facility):	
		Stream channel stabilized (include documentation)	
		Stream reach:	Method of stabilization:
		Date completed:	Included in project scope:
		BMP type:	BMP ID/location:
		See Drainage Report section:	

# Regional WQCV Facility Standard example

## Example Water Quality Enhancements for Site Tributary to Regional Facility



### **LEGEND**

-  Directly Connected Impervious Area
-  Unconnected Impervious Area (Equal to 20% of the Total impervious area)
-  Receiving Pervious Area (Equal to 10% of the unconnected impervious area)
-  Separate Pervious Area

Graphic courtesy of SEMSWA  
Criteria Regarding Onsite Treatment in a Regional System  
2014