

## SEMSWA Water Quality Treatment Matrix

Action – level of treatment required	BMP Required	Submittal Requirements	Source
<i>Regulated Activities</i>			
New impervious area for a new development and an Increase in impervious area for redevelopment of less than or equal to 500 sf and less than one acre of disturbance. (Tier 1)	No formal BMP required <sup>10</sup>	No formal requirements - Discuss potential for minimizing directly connected impervious areas (MDCIA) by routing impervious area through vegetated areas	Cherry Creek Control Regulation (CCCR) (1/1/10)
New impervious area for a new development and an Increase in impervious area for redevelopment greater than 500 sf and less than or equal to 5000 sf, with less than one acre of disturbance. (Tier 2)	MDCIA <sup>11</sup> , water quality enhancement <sup>12</sup> , or allowed alternate BMP <sup>13</sup>	Technical Drainage Letter outlining the BMP proposal with attached calculation exhibits, as necessary. Sketch drawing to support BMP design.	CCCR
New impervious area for a new development and an Increase in impervious area for redevelopment greater than 5000 sf or any land disturbance greater than 1 acre. (Tier 3)	Provide Water Quality Capture Volume	Phase III, CD's, O&M, Easements, PIA	CCCR
Large lot single family development – lots 2 ½ acres or larger that with a disturbance greater than 1 acre or greater than 10% impervious area (10,890 sf total)	Provide Water Quality Capture Volume (see Tier 3 requirements)	Phase III, CD's, O&M, Easements, PIA	CCCR
Roadway work with new impervious area or an Increase in impervious area for existing improvements of less than or equal to 500 sf and less than one acre of disturbance. (Tier 1)	No formal BMP required <sup>10</sup>	No formal requirements - Discuss potential for minimizing directly connected impervious areas (MDCIA) by routing impervious area through vegetated areas	CCCR
Roadway work with new impervious area or an Increase in impervious area for existing improvements greater than 500 sf and less than or equal to 5000 sf, with less than one acre of disturbance. (Tier 2)	MDCIA <sup>11</sup> , water quality enhancement <sup>12</sup> , or allowed alternate BMP <sup>13</sup>	Technical Drainage Letter outlining the BMP proposal with attached calculation exhibits, as necessary. Sketch drawing to support BMP design.	CCCR
Roadway work with new impervious area or an Increase in impervious area for existing improvements greater than 5000 sf or any land disturbance greater than 1 acre. (Tier 3)	Provide Water Quality Capture Volume	Phase III, CD's, O&M, Easements, PIA	CCCR
<i>Authorized Exclusions<sup>4</sup></i>			
Construction of a sidewalk or driveway <sup>5</sup>	No formal BMP, encourage MDCIA	Written request for exclusion with attached technical justification as to the impact	CCCR
Underground utility installation <sup>6</sup>	No formal BMP		
Rural road construction and maintenance <sup>7</sup>	No formal BMP, ditch analysis		
Trails <sup>9</sup>	No formal BMP, encourage MDCIA		
<i>Automatic Exclusions<sup>1</sup></i>			
Agricultural activities <sup>2</sup>	No formal BMP	No formal requirements	CCCR
Emergency and routine repair and maintenance operations for all underground utilities			
Routine maintenance of facilities <sup>3</sup>			
Large lot single family development <sup>8</sup>	No Formal BMP, see SEMSWA study	Justify appropriate conditions through Land Use Process	CCCR

<sup>1</sup> **Automatic Exclusions** may be defined as activities that are considered exempt from requiring post construction best management practices including both water quality capture volume and water quality enhancements with no formal documentation to SEMSWA specific to the activity required.

<sup>2</sup> **Agricultural Activities** are defined as those processes associated with the preparation, establishment, cultivation, and harvesting of crops, irrespective of zoning and not including the construction of any structures or activities on agricultural properties not directly related to the above.

<sup>3</sup> **Routine Maintenance** is defined as work performed to maintain the original line, grade, hydraulic capacity, and purpose of the facility with land disturbances less than 1 acre.

<sup>4</sup> **Authorized Exclusions** may be defined as activities that can be exempt to formal water quality capture volume and/or water quality enhancements provided adequate technical justification is provided to show the impact associated with the activity. Requests are made through the SEMSWA Technical Review Committee (TRC), with a recommendation from the Water Quality Program.

<sup>5</sup> **Sidewalks**, for the purpose of this document, cannot be considered exempt if constructed as part of a roadway improvement.

<sup>6</sup> **Utility installation** includes utilities under hard surfaced roads, streets, or sidewalks, provided the disturbance is confined to the area which is hard surfaced.

<sup>7</sup> **Rural roads** are defined as those roads meeting rural designation by City of Centennial or Arapahoe County Transportation Plan with greater than one acre of disturbance associated with rural residential or collector roadways serving or adjacent to large lot single family developments, not to include urban roadways with roadside ditches.

<sup>8</sup> **Large lot single family** development can be defined as disturbance greater than one acre on a single-family residential lot with an area greater than or equal to 2 ½ acres in size and having a total site imperviousness less than 10%

<sup>9</sup> **Trails** can be defined as access areas constructed for the purpose recreation, and can be combined with access for operations and maintenance, not to include sidewalks that are parallel to or generally adjacent to roadways and are used as street pedestrian access.

<sup>10</sup> **Tier 1 development and redevelopment** is based on the cumulative impervious area added to a site over the history of the development.

<sup>11</sup> **Minimizing directly connected impervious areas (MDCIA)** can be defined as discharging runoff across non-engineered vegetation that is a distance of 50 feet with a slope that doesn't exceed 4%.

<sup>12</sup> **Water quality enhancements** are defined as water quality BMPs, as defined in UDFCD Volume III and/or chapter 14 of the Stormwater Management Manual that provide treatment but not water quality capture volume.

<sup>13</sup> **Alternate BMPs** are defined as measures that improve the drainage characteristics of the site, such as retrofitting a component of an existing detention pond onsite to have water quality components, improving and stabilizing an outfall into a drainageway, completing an O&M Manual and Maintenance Agreement, dedicating a drainage easement, etc.