

Water Quality Treatment Matrix (Amended 5/19) – Outside of the Cherry Creek Basin

Action	WQ Requirements	Submittal Requirements
Land Disturbances greater than or equal to 1 acre, or part of a common plan of development or sale, for all New Development ¹⁴ and Redevelopment ¹⁵	Post Construction Control Measure meeting MS4 Permit (requires SEMSWA approval if not in the SWMM)	Phase III, CD's, O&M, Easements, PIA
Existing Roadway Areas ¹⁸	Post-Construction Control Measure for the new impervious area only (may require variance request if not in the SWMM).	Phase III, CD's, O&M, easements, PIA, and document the site and owner name, location, completion date, acreage, reason for exclusion, and the acreage of the excluded impervious area.
New Development ¹⁴ or Redevelopment ¹⁵ with less than 1 acre of disturbance	None	None
Pavement Management ¹⁶ (Pavement Management within the CC and greater than an acre of disturbance, please see Tier 1, 2, and 3 requirements)	None	Document the site and owner name, location, anticipated completion date, acreage, reason for exclusion, and the acreage of the excluded impervious area for rehab and reconstruction of pavement that are not maintenance sites.
Excluded Roadways ²⁰	None	None
Roadway Redevelopment ¹⁷ (Roadway Redevelopment within the CC, please see Tier 1, 2, and 3 requirements)	None	Document the site and owner name, location, anticipated completion date, acreage, reason for exclusion, and the acreage of the excluded impervious area.
Non-Residential and Non-Commercial Infiltration Conditions ¹⁹	None	Document compliance with SEMSWA study showing rainfall and soil conditions present, allowable slopes, surface conditions, ratios of impervious to pervious area.
Above ground and below ground utilities ^{6a}	None	No requirements (unless land disturbance to undeveloped land that will remain undeveloped, see separate section)
Trails ^{9a}	None	Document the site and owner name, location, anticipated completion date, acreage, reason for exclusion, and the acreage of the excluded impervious area.
Sites with Land Disturbance to Undeveloped Land that Will Remain Undeveloped	None	Document the site and owner name, location, anticipated completion date, acreage, reason for exclusion, and the acreage of the excluded impervious area.
Stream Stabilization	None	Document the site and owner name, location, anticipated completion date, acreage, reason for exclusion, and the acreage of the excluded impervious area.
Large lot single family development ^{8a}	None	None
Oil and Gas Exploration	None	None

Reference CDPS General Permit for MS4's (Permit) (4/15/16) for areas with disturbances greater than 1 acre and outside of the Cherry Creek Basin.

Reference Cherry Creek Control Regulation (CCCR) (1/1/10) for areas with disturbances under 1 acre and within the Cherry Creek Basin.

¹ **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.

² **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.

³ **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.

⁴ **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.

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

⁶ **Utility installation** includes utilities under hard surfaced roads, streets, or sidewalks, provided the disturbance is confined to the area which is hard surfaced, and the disturbance is less than one acre.

^{6a} **Above Ground and Underground Utilities:** Activities for the installation or maintenance of underground utilities or infrastructure that does not permanently alter the terrain, ground cover, or drainage patterns from those present prior to the construction activity. Includes but is not limited to activities to install, replace, or maintain utilities under roadways or other paved areas that return the surface to the same condition.

⁷ **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. Road construction must be outside of the permit area to be exempt.

⁸ **Large lot single family in the Cherry Creek Basin** 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%

^{8a} **Large lot single family outside the Cherry Creek Basin** 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 20%

^{8b} **Individual Homes** means individual home construction, including development for a single home, not including roads, road gutters, or road improvements, that disturb less than one acre of land during construction and where the owner of the single home holds a GESC permit for construction of only one dwelling unit within the subdivision, if any.

⁹ **Trails** can be defined as access areas constructed for the purpose of 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.

^{9a} **Trails** means bike and pedestrian trail. Bike lanes for roads are not included in the exclusion, unless attached to a roadway and qualifies under

another exemption.

¹⁰ **Tier 1, 2, and 3 development and redevelopment** is based on the cumulative impervious area added to a site over the history of the development.

^{10a} **Tier 1 development and redevelopment** 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.

^{10b} **Tier 2 development and redevelopment** 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.

^{10c} **Tier 3 development and redevelopment** 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.

¹¹ **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%.

¹² **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.

¹³ **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.

¹⁴ **New Development** means land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision for a site that does not meet the definition of redevelopment.

¹⁵ **Redevelopment** means a site that is already substantially developed with 35% or more of existing imperviousness; with the creation or addition of impervious area (including removal and/or replacement), to include the expansion of a building footprint or addition or replacement of a structure; structural development including construction, replacement of impervious area that is not part of a routine maintenance activity; and land disturbing activities.

¹⁶ **Pavement Management Sites** means the rehabilitation, maintenance and reconstruction of existing roadway pavement (*no new impervious area is added*), including roadway resurfacing, mill and overlay, white topping, black topping, curb & gutter replacement, concrete panel replacement, and pothole repair, whose purpose is to provide additional years of service and optimize safety and service.

¹⁷ **Roadway Redevelopment** means sites with the addition of *not more than* 8.25 feet of paved width at any location to the existing roadway; adds less than one (1) acre of paved areas per mile of roadway to existing roadway; does not add capacity to the roadway; and whose purpose is to increase safety or improve roadway functionality.

¹⁸ **Existing Roadway Areas** means the project does not increase the width of the roadway by more than two times the original width, or more, on average.

¹⁹ **Non-Residential and Non-Commercial Infiltration Conditions** means applicable development sites for which post-development surface conditions do not result in concentrated stormwater flow during the 80th percentile stormwater runoff event. In addition, the post development surface conditions must not be projected to result in surface water discharge from the 80th percentile stormwater runoff events. Specifically, the 80th percentile event must be infiltrated and not discharged as concentrated flow.

²⁰ **Excluded Roadways** means activities associated with the maintenance, repair, preservation, and associated minor modification to roadways, and associated appurtenant features, that do not permanently expand the original footprint of the roadway and do not increase the impervious area, with disturbances less than one acre.