



**COLORADO**  
Department of  
Transportation

**CDOT Permanent Water Quality Program Manual  
As of 3/01/2017**

# CDOT Permanent Water Quality Program Manual

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# 1 Introduction, Background and Overview

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## 1.1 Purpose

This document provides criteria on the overall MS4 PWQ Program Requirements. It provides specific criteria on determining when PWQ is required onsite and on using and obtaining PWQ Mitigation Pool funding.

Additionally, this document provides more general requirements on the other aspects of the PWQ Program and points the user to the documents that provide more detailed criteria. For example, an overview is given of the Design Standard requirements, but a reference is given to the PWQ Section of the Drainage Design Manual which gives specific criteria on designing PWQ Control Measures (CMs). Some of the other items discussed include the PWQ Program Design Standards, record keeping, tracking and other requirements.

## 1.2 Program History and Background

The MS4 PWQ Program is a new, first of its kind, program. CDOT worked with the Colorado Department of Public Health and Environment (CDPHE or the Division) over the course of several years to develop a PWQ Program that is effective, flexible and meets the regulatory requirements. The Division approved the Program in April of 2014 under the 2007 MS4 Permit. This is the first time the Division has changed the framework of the PWQ Program Maximum Extent Practicable (MEP) Standard for a permittee.

As the Division explained in the MS4 Permit Fact Sheet, the most significant change is that the Maximum Extent Practicable standard has been changed from installing a PWQ CM at the finish of a development project, to funding and managing a PWQ mitigation pool for installing PWQ CMs throughout the Permit Area. This new standard is based on CDOT spending the same amount of resources to install PWQ as during the previous permit term, but doing so in a manner that allows more flexibility to select locations and designs that are the most effective and efficient. There are, however, a subset of transportation projects that must treat runoff from the project's limits because they have a greater chance of impacting water quality (Onsite PWQ Required Projects). Also, not all projects are eligible for funding from the PWQ Mitigation Pool (see [Section 4.4-Eligibility](#)). It is important to realize that the overall goal of the PWQ Permit requirements is for CDOT to install PWQ overtime to treat all impervious areas of new development and redevelopment.

In other words, the core concept of the program is that CDOT will contribute \$6.5 million annually to the PWQ Mitigation Pool that must be used to construct PWQ CMs that treat CDOT's MS4 area and these CMs do not have to be built with specific construction projects, except for a subset that have the potential to have an impact as a result of new development or redevelopment. The PWQ Program is built around these two elements working synergistically together to eventually treat all MS4 areas.

As a result of the new program requirements, many transportation projects will not be required to construct PWQ CMs to treat stormwater runoff from the project's limits at the time of a construction project. Instead, funds for design, right-of-way (ROW) acquisition and construction of Control Measures that treat CDOT MS4 area will be distributed through a competitive application process. The goal is to focus funding on Control Measures that treat a larger area and to develop partnerships with local agencies, Water Quality Only groups and others entities to promote innovative stormwater solutions, including cost-effective maintenance. Transportation projects that do not require PWQ CMs under this program must still evaluate whether to install PWQ CMs in light of the overall long term program goal of treating all of CDOT's MS4 area. In some instances it will be more efficient and cost effective to install PWQ at the time of a transportation project and in some cases it will make sense to utilize the PWQ Mitigation Pool to treat a project area in the future.

All projects following the PWQ Program must use the criteria outlined throughout this document. It may be helpful to orient yourself to the program by reviewing the visual descriptions [Flow Charts for Determining PWQ Project Categories and Funding Related Processes](#) that can be found on the [PWQ Program website](#). References are provided to connect the visuals to the text.

### 1.3 Revisions and Additional Resources

This PWQ Program Manual is effective starting March 1, 2017. This document is the basis for immediate program implementation of the MS4 PWQ Program and this first version incorporates the changes that CDOT must adopt per the Compliance Schedule in CDOT's MS4 Permit (effective August 28, 2015). The PWQ Program Manual replaces the Interim New Development and Redevelopment (NDRD) Program Guidance implemented under the 2014 Interim Program approved under the 2007 MS4 Permit cycle. The Interim NDRD Program approved by the Division required a Program Description Document (PDD). The 2015 permit has a September 1, 2017 compliance deadline for implementing the PDD requirements. While not yet required, this document continues to be written in a format consistent with a PDD. Another revision is anticipated on September 1, 2017 when a PDD will be written that incorporates the elements of the September 1, 2017 Compliance Schedule requirements.

This document will be housed on the [PWQ Program website](#) and all updates will be posted there. Most documents referenced in this manual will also be posted on the [PWQ Program website](#). This March 1, 2017 PWQ Program Manual reflects the 2015 MS4 Permit requirements that become effective March 1, 2017 per the permit Compliance Schedule deadlines. Projects that are substantially complete prior to March 1, 2017 may be able to continue following the previous permit design standards (Interim NDRD Program). See [Section 5.4.2 Previous Permit Term Standard](#) to see if this applies to your project. All projects that have not completed significant design as of March 1, 2017 must comply with this PWQ Program Manual.

Important Revisions in this Manual follow:

- 1.3.1 *New Pollutants Added to the Roadway Pollutants of Concern (POC) List (Section 3.2.3 - Step 2.C.2 Determine if any impairments are for a pollutant of concern).***
- 1.3.2 *BMP changed to Control Measure (CM):***

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This manual and associated updates are posted on the [PWQ Program website](#).

In the previous permit term, the term Best Management Practice was used to describe practices that were installed to control pollutants in storm water. The Division, in the new permit, uses the term Control Measure. For consistency CDOT has also adopted this change.

A Control Measure is any best management practice (BMP) or other method used to prevent or reduce the discharge of pollutants to state waters. Control measures include, but are not limited to best management practices. Control measures can include other methods such as the installation, operation, and maintenance of structure controls and treatment devices.

Throughout CDOT the abbreviation CM refers to Construction Manager. In this document, and throughout the PWQ Program, Construction Manager will be spelled out where it is used, and CM will mean control measure.

- 1.3.3 Clarified that CDOT's PWQ Program Must Be Followed in CDOT MS4 Area (*Section 3.2 - Determine if Onsite PWQ Evaluation is Required per the EA/EIS and 303(d) Triggers*), *Section 3.4.1: Local Agency Advertised Onsite PWQ Required Project, and 5.2: Overlapping MS4 Permit Areas and Whose Requirements Apply*.**
- 1.3.4 Changed Project Category Terminology (entire document):** The Priority Project Category became the Onsite PWQ Required, Non-Priority Project Category became Onsite PWQ Not Required, and Watershed Projects became Water Quality Only Projects. The intent of this change was to ensure the category names more accurately reflect their meaning.
- 1.3.5 Clarified that the Onsite PWQ Required EA/EIS and 303(d) Trigger Projects include exceptions (*Section 3.1.3 - Step 1C: Determine if Your Project Is Not Considered Onsite PWQ Required Even if a Trigger is Met*):** Section 3.1.3 was updated to clarify that specific types of projects (i.e. above and below ground utilities) are not considered Onsite PWQ Required even when they increase the impervious area by 20% and meet the other requirements of the EA/EIS and 303(d) Triggers. These exceptions do not apply for the Cherry Creek Trigger.
- 1.3.6 *Section 4 - PWQ Mitigation Pool Requirements and Funding* was updated to reflect changes to the Mitigation Pool Selection process.**
- 1.3.7 Sections were reorganized for clarity.**
- 1.3.8 Added More Detailed Guidance on Determining Cherry Creek Trigger and Design Standards**

Contact the Region Water Quality Specialist or the HQ PWQ Program Manager ([dot\\_pwg@state.co.us](mailto:dot_pwg@state.co.us) and 303-757-9814) for assistance with the PWQ Program. Contact information for the Water Quality Specialist can be found on the [PWQ Program website](#). The following appendices provide general information: [Appendix A- Glossary](#) and [Appendix B - Key Resources](#).

## 1.4 Regulations

CDOT's Municipal Separate Storm Sewer System (MS4) permit requires CDOT to implement seven Programs to prevent pollutants from entering state waters. One of these, the PWQ Program (in previous permits the New Development and Redevelopment - NDRD Program) requires CDOT to design and construct PWQ Control Measures (CMs) on certain highway projects considered new development or redevelopment according to regulation. The MS4 permit is administered by CDPHE. While the requirements stem from EPA, CDPHE has authority to implement the permit system. The requirements ultimately come from the Clean Water Act.

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This manual and associated updates are posted on the [PWQ Program website](#).

## 2 PWQ Program Organizational Structure

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This section describes the PWQ Program’s terminology. It provides an overview of project categories, with brief treatment descriptions, and associated funding processes. [Flow Charts for Determining PWQ Project Categories and Funding Related Processes](#) provide a visual description and can be found on the [PWQ Program website](#).

### 2.1 PWQ Project Categories

The PWQ Project Category determines treatment requirements, including whether PWQ is required onsite and if so, which Design Standards apply and which funding process must be followed. Transportation projects must be evaluated to determine categories they fall under. The requirements for each differ significantly in how, when and where they are treated. These Categories are briefly defined here. See [Section 3.0 PWQ Program Steps](#) for determining which category applies to your project.

#### 2.1.1 *Onsite PWQ Not Required*

Onsite PWQ Not Required Projects are CDOT or local agency advertised transportation projects that do not require PWQ CMs to be installed on the project. Projects will not require PWQ CMs if they are located entirely outside the MS4 boundary. Additionally, if none of the PWQ triggers are met PWQ is not required.

#### 2.1.2 *Onsite PWQ Required*

Onsite PWQ Required projects are transportation projects that are within, or partly within, CDOT’s MS4 area and meet one or more of the Onsite PWQ Required Triggers. These projects must design and construct PWQ Control Measures to treat stormwater runoff from within the project’s limits. Treatment is required because these projects have the greatest potential to cause or contribute to water quality impairment. These projects have access to Mitigation Pool funding, but the process followed to obtain funding depends on several factors. See [Section 4 - PWQ Mitigation Pool Funding and Requirements](#) for Mitigation Pool eligibility and process.

Onsite PWQ Required Projects are further classified by what triggers treatment, which includes the following. More than one trigger may apply and each trigger has different treatment requirements, and requirements have to be met for all applicable triggers (see [Section 3 - PWQ Program Steps](#) and [Section 5 - Design Standards](#)).

- In the Cherry Creek Reservoir Drainage Basin and has more than an acre disturbance or has 500 square feet of increased impervious area; **and/or**
- Part of an EA or EIS **AND** has an increase in impervious area of 20% or greater; **and/or**
- On the 303(d) list of impaired waters (for specific pollutants of concerns) **AND** has an increase in impervious area of 20% or greater.

#### 2.1.3 *Plus Project*

Plus Projects are CDOT or local agency advertised transportations that decide *to treat more than the minimum required by the PWQ Program and MS4 Permit Onsite requirements*. Please see [Section 4.2 Reasons for Pursuing “Plus” or “Water Quality Only” Funding](#) and

Section 4.3 - Determine Whether to Apply for Funding to Treat Additional CDOT MS4 Area.  
There are two types of Plus projects:

- **Onsite PWQ Required Plus Projects** *treat more than the minimum impervious area required* by the permit (the amount of impervious area required varies based on the Design Standard used). These projects may apply for funding for the “Plus” portion that treats more than the impervious area requirements triggered by Onsite PWQ Required trigger.
- **Onsite PWQ Not Required Plus Projects** are projects that treat PWQ Onsite even when they are not required to do so. When located in the MS4 area these projects may apply for Mitigation Pool funding.

#### 2.1.4 Water Quality Only Project

Water Quality Only Projects are not associated with a specific transportation or other construction project. While there may be other project elements, the primary purpose of these projects is to treat water quality. They may involve CDOT, a tribe, a local agency, a Watershed group or another entity requesting funding to support Water Quality Only improvement that treats a portion of CDOT MS4 area.

## 2.2 Funding Category

There are two main funding categories, the **Onsite PWQ Required Approval Process** and the **Mitigation Pool Committee Selection Process**. Projects eligible for the **Onsite PWQ Required Process** do not require project teams to seek approval through the Mitigation Pool Committee for the portion of the project requiring PWQ treatment. **Mitigation Pool Committee Selection Process** is a competitive process requiring project teams to submit an application to the Mitigation Pool Committee.

These Categories, including eligibility and process requirements are described in more detail in [Section 4.5 - Funding Processes](#).

## 3 PWQ Program Steps

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This section provides a step by step approach for determining if PWQ CMs are required. These steps correspond to the PWQ Evaluation and Tracking (PET) form.

**Note:** if your project is a **Water Quality Only Project** you can go straight to [Section 5.1.3 Design Standards for Water Quality Only and Plus Projects](#) and [4 -PWQ Pool Requirements and Funding](#). Water Quality Only means it is a stand-alone water quality project with the primary purpose being to treat Water Quality and a significant amount of that is CDOT MS4 area.

### 3.1 STEP 1: Determine if Onsite PWQ Evaluation is Needed Per the PWQ Required Triggers

The following steps are to determine if the project needs to evaluate the need to install PWQ per the Onsite PWQ Required triggers.

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This manual and associated updates are posted on the [PWQ Program website](#).



### 3.1.1 Step 1A: Determine If Onsite PWQ Evaluation is Required per the Cherry Creek Trigger

If your project does not meet this criteria then the Cherry Creek Reservoir Drainage Basin requirements do not apply.

1. Drains to the Cherry Creek Reservoir Drainage Basin;

If the project drains to the Cherry Creek Reservoir Drainage Basin your project must meet the requirements of the [Cherry Creek Reservoir Control Regulation 72](#) for the portions draining to the Cherry Creek Reservoir Basin. You will determine whether these criteria require the installation of PWQ CMs in [Step 2B](#).

**Note:** This step only applies to parts of Region 1 and Region 2, since these are the only two regions with areas draining to the Cherry Creek Reservoir Basin.

### 3.1.2 Step 1B: Determine If Onsite PWQ Evaluation is Required per the EA/EIS and 303(d) Triggers

If your project does not meet BOTH of these criteria, the PWQ Program EA/EIS and 303(d) Trigger requirements do not apply and onsite PWQ Control Measures are not required per the 303(d) or EA/EIS Trigger requirements:

1. Disturbs one or more acres or is part of a larger common plan of development;
2. In (or partially in) a CDOT MS4 area.

If your project meets both criteria, it must evaluate whether Onsite PWQ is required per the EA/EIS and 303(d) requirements in steps **2C** & **2D**. Work with your Region Water Quality Specialist(s) as early as possible to determine if further evaluation is needed.

#### 1. Determine if the project disturbs more than one acre or if it is part of a larger common plan of development

The requirement for whether a project must be evaluated for water quality is the same as for obtaining a Colorado Discharge Permit System (CDPS) Stormwater Construction Permit (SCP). Your project requires a SCP if: 1) it disturbs one or more acres or 2) disturbs less than an acre, but is part of a larger common plan of development.

#### 2. Determine if the project is within the CDOT MS4 area boundary

CDOT's MS4 permit only applies to CDOT MS4 area. In general, you can determine MS4 area using the [CPLAN](#). See [Section 6.2 - MS4 Boundary Tools & Documentation](#) for more info on documenting the MS4 boundary. CDOT's MS4 area is determined by where CDOT's right of way or property intersects another MS4 area.

CDOT's PWQ MS4 Program always applies for any CDOT or other entities project area that falls within CDOT's MS4 boundary.

**Please note that local agency MS4 Permit requirements may still apply.** If your project includes areas in another jurisdiction's right of way, coordinate with your Region WPCM or Water Quality Specialist(s), and with the jurisdiction as needed, to determine if the jurisdiction's MS4 requirements apply and, if so, how to comply with them.

### **3.1.3 Step 1C: Determine if Your Project is Not Considered Onsite PWQ Required Even if a Trigger is Met**

The following types of projects are not considered Onsite PWQ Required projects even if they trigger the EA/EIS or 303(d) triggers: above and underground utilities, guardrail/cable rails, sidewalk/trail/bike lane slab repair/installation, curb and gutter repair, resurfacing projects falling under the maintenance definition, maintaining existing shoulders, culvert drainage repairs, fence installation/repair, and concrete slab repair.

These exceptions do not apply to the Cherry Creek Reservoir Trigger.

Roadway "maintenance" projects includes projects that do not change the existing template of the roadway which includes the roadway and shoulders to the point of slope selection and maintenance to existing drainage features. Maintenance projects do not change the existing template of the roadway; do not disturb more than 1 acre of subbase or subgrade at any one time; and do not include activities such as widening, paving previously unpaved shoulders, other project work beyond the shoulders, slope flattening, roadway realignment and other roadway and/or drainage improvements. Maintenance projects do not disturb one acre or more beyond the "Z slope" or shoulders which do not lead to any increase of impervious surface.

Roadway maintenance projects include treatments or overlays with a net surface gain of 6 inches or less and base/subbase is not exposed. Maintenance projects include shouldering projects that increase the roadway elevation by 2 inches or less with an overall treated depth not exceeding the 6 inch limit identified for reconstruction and disturb less than 1 acre of subbase or subgrade at any one time. Maintenance projects include rubbilization and overlay projects with a net surface gain of 6 inches or less and disturb less than 1 acre of subbase or subgrade at any one time.

Regardless of how you answer the above questions, your answers must be documented in the CJ20N tab in SAP.

**If your project drains to the Cherry Creek Reservoir Basin you must complete the PET form and fill out the Cherry Creek Supplemental to the PET form.**

**If your project disturbs one or more acres or is part of a larger common plan of development and is in, or partially in, the MS4 area, you must also complete the *PET Form*.**

*Both forms and associated directions are located on the [PWQ Program website](#) and completed forms should be placed in the project file.*

### 3.2 STEP 2: Determine If PWQ Control Measures are Required Per an Onsite PWQ Required Trigger

All of step 2 must be documented in the PET form.

If the project requires further trigger evaluation, from step 1, then this next step will determine whether your project is an Onsite PWQ Required Project that requires design and construction of PWQ Control Measures to treat runoff from within the project's limits. Additional resources include a visual description in *Flow Charts for Determining PWQ Project Categories and Funding Related Processes* and the *PET Form*, available on the [PWQ Program website](#).

The PWQ Program defines Onsite PWQ Required Project(s) as those which meet one or more of the following criteria/triggers:

- In the Cherry Creek Reservoir Drainage Basin and has over an acre of disturbance or over 500 ft<sup>2</sup> increased imperviousness; **and/or**
- Part of an EA or EIS **AND** has in increase in impervious area of 20% or more; **and/or**
- On the 303d list of impaired waters for specific pollutants of concerns **AND** has an increase in impervious area of 20% or more.

It is necessary to evaluate your project for all triggers, if trigger evaluation is required per the previous steps, as ALL applicable trigger-specific Design Standards will apply.

#### 3.2.1 Step 2A: Determine the project impervious amounts and % increase

This step, in combination with the below steps, is needed to determine whether your project is an Onsite PWQ Required and which Onsite PWQ requirements may apply. Even if the project is not an Onsite PWQ Required, you must document the impervious area as described on the *PET Form*. The PET Form directions stipulate how the increase in impervious area is determined. Note that in determining this calculation the entire project boundary should be used even when a portion of it is outside the MS4 boundary.

#### 3.2.2 Step 2B: Determine if Onsite PWQ Required Per the Cherry Creek Trigger

Projects that must be evaluated for Onsite PWQ Required per the Cherry Creek Trigger will fall into one of three Tiers. Projects that fall into Tier 1 will not require Onsite PWQ. Project that fall into Tier 2 or Tier 3 will require Onsite PWQ, but the design standards differ between the two Tiers.

##### Step 2.B.1: Determine whether your project is a Tier 1

Using the information from steps 1B & 2A, determine if your project will

- disturbs less than one acre and results in less than 500 ft<sup>2</sup> of imperviousness for new development; or
- disturbs less than one acre and results in less than 500 ft<sup>2</sup> of increased imperviousness for redevelopment.

If either of the above applies to your project then your project is a Tier 1 project and does not require the installation of Onsite PWQ per the Chery Creek Trigger requirements. Document this on the Cherry Creek Supplement to the PET form and proceed to step 2C.

If neither of the above applies then proceed to the next step.

### **Step 2.B.2: Determine if your project is exempt from the Cherry Creek Trigger Requirements**

Work with your Water Quality Specialist, the local agency representative and the Cherry Creek Reservoir Basin Authority to determine if your project meets any of the following exemptions per Regulation 72.7.2(c)(4)(i):

- Agricultural Activities; (i.e., agricultural and silvicultural activities generating nonpoint source discharges, including runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not CAFOs. This exclusion does not extend to the construction of facilities or other activities generating stormwater runoff associated with industrial construction activity);
- Emergency and routine repair and maintenance operations for all underground utilities;
- Land Disturbances at residential or commercial subdivisions that already have adequate Post Construction BMPs installed and operating for the entire subdivision, approved in compliance with this regulation, and with adequate capacity to treat any additional discharges;
- Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility;
- Emergency operations related to flood, fire, or other force majeure that maintain the original line and grade, hydraulic capacity, or original purpose of the facility;
- Land disturbance to undeveloped land that will remain undeveloped following disturbance and will be reclaimed in accordance with subsection 72.7.2(b)(5)(ii)(B);
- Excluded Roadway Projects (means activities associated with the maintenance, repair, preservation, and associated minor modifications to roadways, and associated appurtenant features, that do not permanently expand the original footprint of the roadway and do not increase the impervious area);
- Underground utility construction, provided that stormwater runoff and erosion from soil and material stockpiles are confined and will not enter the drainage system.

If your project does not meet any of the exemptions above, then Onsite PWQ is required per the Cherry Creek Trigger. Proceed to the next step to determine whether your project is a Tier 2 or Tier 3 project. If your project meets one of the above exemptions PWQ is not Required Onsite per the Cherry Creek Trigger, but may still be required per the EA/EIS or 303(d) Triggers.

Document the results of this step the Cherry Creek Supplement to the PET Form.

### **Step 2.B.3: Determine whether your project is a Tier 2 or 3**

Using the information from steps 1B and 2B determine whether your project is a Tier 2 or Tier 3 project as described below.

**Tier 2 Project:** Project that meet either of the following criteria are considered Tier 2 Projects:

- disturb less than one acre and result in more than 500 ft<sup>2</sup> but less than 5,000 ft<sup>2</sup> of imperviousness for new development, or

- disturb more than one acre and result in more than 500 ft<sup>2</sup> and less than 5,000 ft<sup>2</sup> of increased imperviousness for redevelopment, including disturbances of existing impervious areas.

**Tier 3 Project:** Project that meet either of the following criteria are considered Tier 3 Projects:

- disturb greater than one acre or result in more than 5,000 ft<sup>2</sup> of imperviousness for new development, or
- disturb greater than one acre or result in more than 5,000 ft<sup>2</sup> of increased imperviousness for redevelopment, including disturbances of existing impervious areas.

Document the results of this step the on the Cherry Creek Supplement to the PET Form. Design Standards specific to these Tiers are discussed in [Section 5.1.1 - Design Standards for Cherry Basin Onsite PWQ Required Trigger](#).

### 3.2.3 Step 2C: Determine if Onsite PWQ Required Per the 303(d) Trigger

**Step 2.C.1: Determine if the project, or portions of the project, discharge to a 303(d) listed segment**

In this step, you must determine if any of the stream segments or other water bodies the project drains to are listed on Colorado's 303(d) list. See CDOT's [CPLAN](#) or [Regulation 93 \(93.3\)](#) to determine if the stream segments the project drains to are impaired. If you have the appropriate software, you can also use [CDPHE's GIS maps](#) to see the segment and impairment.

**You must record all impaired segments and the associated impairments on the PET Form.** If there are no impairments, the project does not trigger 303(d) Onsite PWQ Required Project requirements. However, for documentation purposes, you must still complete this section of the form.

**Step 2.C.2 Determine if any impairments are for a pollutant of concern**

Use the information you obtained in [Step 2.C.1](#) and [Step 3.2.1](#) to complete this step. If your project increases the impervious area by 20% or more (Step 2A) and is impaired for any of the below pollutants then it triggers the 303(d) Onsite PWQ Required Project requirements:

- Total Suspended Solids
- Ammonium Nitrogen
- Arsenic (total and potentially dissolved)
- Cadmium (total and potentially dissolved)
- Chloride
- Chromium (total and potentially dissolved)
- Copper (total and potentially dissolved)
- Magnesium (total and potentially dissolved)
- Manganese (total and potentially dissolved)
- Oil and Grease
- Total Phosphorous

- Sodium
- Zinc
- Sediment

You must follow the applicable Design Standards for any portions of the project draining to a segment listed for one of the above pollutants. If the project is not listed for one of these, then it does not trigger the 303(d) Onsite PWQ Required Project requirements, but the project should consider installing PWQ as discussed in [Step 3](#).

### **3.2.4 Step D: Determine if Onsite PWQ Required Per the EA/EIS Trigger**

If the project increases the impervious area by 20% or more (Step 2B) and is an EA/EIS then it triggers the EA/EIS Onsite PWQ Required Project requirements. Even if it does not meet the trigger the project should consider installing PWQ as discussed in [step 3](#).

### **3.3 Step 3: Consider Installing More than the Minimum Permit Requirement**

Whether your project is an Onsite PWQ Required or is an Onsite PWQ Not Required project teams should consider if they can install more than what is minimally required by the MS4 permit. There are two reasons. CDOT must spend a certain amount of Mitigation Pool funding each year and CDOT must eventually treat the entire MS4 permit boundary. Therefore projects that have an opportunity to install more than the minimum required should do so, especially if doing so is likely to be more affordable now than in the future. PWQ Mitigation Pool funding is available for these projects as described briefly in the next step and in more detail in [Section 4 - Mitigation Pool Requirements & Funding](#).

This evaluation should take into account whether it will be more cost effective to install PWQ now, with the transportation project, or later as PWQ Mitigation Pool Project. The evaluation should also consider the feasibility of doing the project now or in the future. These considerations should be included in the project file.

### **3.4 Step 4: Determine PWQ Funding if Your Project Requires Onsite PWQ CMs**

#### **3.4.1 Local Agency Advertised Onsite PWQ Required Project**

If you are a local agency advertised Onsite PWQ Required Project, you are not eligible for PWQ Mitigation Pool funds (except for Plus portions) and you must use project funds or other funding sources for required PWQ Control Measures to treat runoff from within the project limits.

Also, refer to [Section 5 - Design Standards](#) for specific requirements. Note that local agency projects working in the CDOT MS4 boundary must comply with all the same program requirements as CDOT advertised projects. Local Agency Projects working outside CDOT ROW and receiving federal or state funds must certify that they are meeting their MS4 Permit requirements.

**Note: Plus portions of a local agency advertised project may be eligible for Mitigation Pool funds.**

### 3.4.2 CDOT advertised Onsite PWQ Project budgeted at \$100 million or less

If your project is a CDOT advertised Onsite PWQ Required Project with a total project budget less than \$100 million, it is eligible to receive funding for PWQ Control Measures to treat runoff from within the project's limits. Proceed to [Section 4 - PWQ Mitigation Pool Requirements and Funding](#). Also, refer to [Section 5 - Design Standards](#) for specific requirements.

### 3.4.3 CDOT advertised Onsite PWQ Required Project with a budget that exceeds \$100 million

If your project is a CDOT advertise Onsite PWQ Project with a total project budget of more than \$100 million **mitigation pool funding is dependent on funding availability. You must apply to the MPC for Mitigation Pool funding. See [Section 4.5.1 - Onsite PWQ Required Funding Approval Process](#) and [Section 4.6 - PWQ Funding Tracking Requirements for application requirements and tracking requirements.](#)**

If your project is an Onsite PWQ Not Required Project document this in CJ20N. If you had to evaluate for the triggers, but are still an Onsite PWQ Not Required Project you must also document on the *PET Form* and place in the project file.

If your project is installing PWQ for any reason you must fill out the CJ20N tab in SAP and fill out the *PET Form*. The original PET form should be placed in the project file and a copy should be sent to the PWQ Program Manager at [dot\\_pwq@state.co.us](mailto:dot_pwq@state.co.us) within 30 days after ad date.

When submitting the *PET Form* to the PWQ Program Manager use the subject "PET Form Submittal."

## 4 PWQ Mitigation Pool Requirements and Funding

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### 4.1 Overview

#### 4.1.1 Mitigation Pool Structure

Money will be placed in the Pool several years in advance. Funds have been distributed through 2020.

Of the \$6.5 million 25% is taken from RPP and 75% from SUR and the amount deducted from each of these Pools is based on the percentage of MS4 each region has.

Pool distributions occur in June before the start of the fiscal year. OFMB will update distributions then and include the amounts from RPP and SUR that were used to fund the PWQ pool. OFMB will deduct the RPP based on the below percentages (determined by MS4 lane miles in each region):

- Region1: 2,282 miles = 60.5%
- Region 2: 624 miles = 16.5%

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- Region 3: 227 miles = 6%
- Region 4: 591 miles = 16%
- Region 5: 46 miles = 1%

**Note:** Surface Treatment is now a statewide pool. While the regions do not get an allotment, the Materials Branch/Pavement Management Program accounts for this portion of funds going to the PWQ Pool. The SUR budget total for each region reflects the amount deducted from each region. The SUR Manager includes the calculations for the deductions based on the lane mile percentages above in those calculations.

Regional distribution and/or budgets should reflect the amount after funds are withdrawn.

OFMB will notify RTDS, Business Managers, and Planners about the next regional distributions.

#### **4.1.2 Mitigation Pool Committee (MPC)**

The MPC Committee is responsible for selecting, reviewing and accepting projects that receive Mitigation Pool funding. Except for Onsite PWQ Required under with a total project cost under a \$100 million, which receive funding through a streamlined process, as described in [Section 4.5.1: Onsite PWQ Project Funding Approval Process](#).

The MPC is also responsible for approving pilot technologies and EA/EIS variances as described in the [Variance Process](#) located on the [PWQ Program website](#).

The MPC Charter outlines the MPC responsibilities.

#### **4.1.3 Mitigation Pool Expenditure**

Funds for design, ROW acquisition and construction of PWQ Control Measures will be distributed in the following order, provided projects meet screening criteria:

- Funds will be distributed first to CDOT advertised Onsite PWQ Required Projects budgeted at \$100 million or less that are required to construct PWQ Control Measures to treat runoff from the project limits, due to regulations.
- Remaining resources in the Mitigation Pool will be used to fund projects through a competitive application process. CDOT, tribes, local agencies, Water Quality Only groups or other entities can apply for funds as long as CDOT MS4 area is treated. Eligible projects include the “Plus” portion of CDOT and local agency advertised Projects and Water Quality Only Projects (see descriptions in [Section 2](#) or [Appendix A: Glossary](#)).

## **4.2 Reasons for Pursuing “Plus” or “Water Quality Only” Funding**

CDOT’s PWQ MS4 permit requires two approaches to water quality. This first approach is holistic and generally allows CDOT the flexibility to build PWQ CMs when and where it makes the most sense so that CDOT can install PWQ in the most efficient, effective and fiscally responsible manner. The goal of the permit is to eventually have all MS4 impervious area treated. The second approaches PWQ in a more traditional manner. It requires CDOT to install PWQ on specific transportation projects. However, it is only on projects that pose a potential impact to water



quality. In order to be successful these two approaches need to work together to fulfill CDOT's requirements under the MS4 permit.

The first approach requires CDOT to spend the Mitigation Pool Money designing and building PWQ. CDOT is required to spend 80% of the Mitigation Pool on a 3 year rolling average and must eventually treat the entire MS4 area. While the Onsite Approach uses some Mitigation Pool money, it alone does not nearly meet this requirement. In order to meet this requirement CDOT has a Mitigation Pool Committee that awards money to both local agencies and CDOT projects that are building PWQ CMs that treat more than the onsite component.

Project that are already required to install PWQ CMs to treat the new impervious area have the opportunity to meet this overarching requirement in a way that is most cost effective to CDOT. It is usually less expensive and easier to provide treatment now than it will be in the future as urbanization increases. Additionally, the PWQ built on these projects, when well thought out, can provide treatment for future projects in a corridor.

#### 4.3 Determine Whether to Apply for Funding to Treat Additional CDOT MS4 Area

Additional funding may be available for the following types of transportation projects through the Mitigation Pool Committee selection process:

- The “Plus” Projects which are CDOT or local agency projects with the potential for *additional treatment in CDOT MS4 area, beyond what is required* by the permit requirements. Note that when a project is both an “Onsite Required” and “Plus” project, Mitigation Pool funding must be approved by the Mitigation Pool Committee.
- Water Quality Only Projects that are not associated with a specific transportation project, and have an opportunity to support Water Quality Only improvement efforts that treat a portion of CDOT MS4 area.

Considerations for determining whether your project is a good candidate for funding include:

- **Future projects in the same basin(s) as your project:** Will there be future CDOT projects (particularly future Onsite PWQ Required Projects) that you can treat with this project? Treating multiple projects at one time can be a significant cost savings to CDOT. In order for this to be accepted by CDPHE, the PWQ Control Measures need to treat runoff from both the project and future projects prior to that runoff entering Waters of the State.
- **Partnering opportunities that make treatment more cost effective:** Are there private land developers, adjacent land owners, metropolitan districts, and other federal, state, and local governments who have an interest in improving water quality in nearby areas? It may be worthwhile to combine resources for an expanded project that will have a significant impact on improving water quality. There may also be opportunities for these partners to conduct maintenance activities for PWQ Control Measures through an Intergovernmental Agreement (IGA). These types of projects would be good candidates for applying to the Mitigation Pool Committee for funding.
- **Cost savings by treating now instead of later:** Will there be a cost savings if CDOT treats this area now? How difficult may it be to treat this area in the future versus treating it now?

While PWQ treatment is not currently required; CDOT must eventually treat its entire MS4 area.

If you think your project is a good candidate for an Onsite PWQ Required Plus Project, Non-Onsite PWQ Required Plus Project or Water Quality Only Project, you will have to submit an application to the PWQ Mitigation Pool Committee. Proceed per [Section 4.2.2 - Mitigation Pool Committee Selection Process](#).

#### 4.4 Eligibility

CDOT transportation projects, portions of local agency advertised transportation projects and Water Quality Only projects are eligible for Mitigation Pool funding consideration as long as CDOT MS4 area is treated (see exceptions below). They are not guaranteed funding because the PWQ Mitigation Pool is limited to \$6.5 million annually. The likelihood of receiving funds is based on the type of project and associated funding process, as outlined below in [Section 4.5 - Funding Related Processes](#).

In order to be eligible projects must meet the design standards outlined in this document, be designed and constructed in accordance with this manual and the PWQ Section of the Drainage Design Manual located on the [PWQ Program website](#), and meet all the CDOT MS4 Permit requirements. Project money can only be used to Design and Construct PWQ. Projects must be willing to track the PWQ costs as described in [Section 4.6 - PWQ Funding Tracking Requirements](#).

**Local Agency Advertised Onsite PWQ Required Projects** are not eligible for the Onsite PWQ Required Funding Approval Process. Projects are eligible to receive funding for *additional treatment in CDOT MS4 area, beyond what is required*, the Onsite PWQ Required “Plus” component, through the Mitigation Pool Committee selection process.

Please consult your Region WPCM or Water Quality Specialist(s) first for eligibility questions. If there are still questions you may contact the PWQ Program Manager.

#### 4.5 Funding Related Processes

There are three different funding processes:

- **Onsite PWQ Required Project Funding Approval Process:** Funds will be distributed first to CDOT advertised Onsite PWQ Required Projects budgeted at \$100 million or less and require PWQ Control Measures to treat runoff from within the project limits, due to regulations.
- **Mitigation Pool Committee Selection Process:** Remaining resources in the Mitigation Pool will be used to fund projects through a competitive application process.
- **Non-Mitigation Pool Process:** Other funding sources are used to fund PWQ Control Measures.

**Reminder:**

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Projects using Mitigation Pool Funding must submit cost estimates to the PWQ Program Manager at [dot\\_pwq@state.co.us](mailto:dot_pwq@state.co.us) as early as possible to ensure funding is encumbered. Changes to estimates should be also be sent to the PWQ Program Manager.

#### 4.5.1 Onsite PWQ Required Project Funding Approval Process

##### Total Project Cost Less Than \$100 Million

CDOT advertised Onsite PWQ Required Projects with a total project cost less than a \$100 million must provide PWQ Control Measures to treat runoff from within the project site limits at the time of construction, and therefore have first access to the PWQ Mitigation Pool. If your project is a CDOT advertised Onsite PWQ Required Project, you do not have to submit a funding request to the Mitigation Pool Committee. Instead, you must coordinate with:

- The **PWQ Program Manager**, who will verify that the project is an Onsite PWQ Required Project and that funds are being provided only for the portions of the PWQ Control Measure that meet specific treatment requirements. The PWQ Program Manager will review required documentation. Once approved the PWQ Program Manager will request the fund transfer from the PWQ HQ Pool to the PWQ Region Pool.

The project shall submit the *PET Form*, *PET Form Treatment maps*, and the *Treatment Area and Cost Estimate Tables* to the PWQ Program Manager for review. For budgeting purposes the project may provide preliminary documentation during design and final documentation prior to the funds being transferred. See [Section 4.6 - PWQ Funding Tracking Requirements](#) for details. All of these documents can be found on the [PWQ Program website](#).

It is possible, although unlikely, that the projected cost of all the CDOT advertised Onsite PWQ Required Project budgets will exceed the \$6.5 million in the Mitigation Pool for a fiscal year. In this case, the PWQ Program Manager will recommend to the Mitigation Pool Committee a list of Onsite PWQ Required Projects that will receive funding, based upon the project cost estimates. The Committee will review and make the final decision on which projects, or portions of projects, receive funding.

##### Total Project Cost Greater Than \$100 Million

CDOT advertised Onsite PWQ Required Projects with a total project cost greater than a \$100 million must provide PWQ Control Measures to treat runoff from within the project site limits at the time of construction, and therefore may have access to the PWQ Mitigation Pool. However, since these projects have since a high cost they could use the majority of the Pool money, therefore they require approval from the Mitigation Pool Committee. The Committee will review the project and consider available funding. They may deny funding, or approve partial or full funding.

Coordinate with the **PWQ Program Manager**, who will verify that the project is an Onsite PWQ Required Project and that funds are being provided only for the portions of the PWQ Control Measure that meet specific treatment requirements. The PWQ Program Manager will review required documentation and submit to the PWQ MPC. Once approved the PWQ

Program Manager will request the fund transfer from the PWQ HQ Pool to the PWQ Region Pool.

The project shall submit the *PET Form*, *PET Form Treatment maps*, and the *Treatment Area and Cost Estimate Tables* to the PWQ Program Manager for review. For budgeting purposes the project may provide preliminary documentation during design and final documentation prior to the funds being transferred. It is recommended that the project also submit a one page description of the PWQ CMs being installed and any specific benefits they will provide. See [Section 4.6 - PWQ Funding Tracking Requirements](#) for details. All of these documents can be found on the [PWQ Program website](#).

#### **4.5.2 Mitigation Pool Committee Selection Process**

CDOT, local agencies, Water Quality Only groups or other entities may apply for funds as long as CDOT's MS4 area is treated. Eligible projects include the "Plus" portion of CDOT or local agency advertised Projects, and Water Quality Only Projects.

The Mitigation Pool Committee will be responsible for reviewing and selecting projects and allocating funds. The MPC will send a Call for Stormwater Project Applications and select which of the projects receive funding. Projects must meet the screening requirements to receive funds. Several factors will contribute to which projects receive funds, including, but not limited to cost effectiveness, project readiness, ease of maintenance and water quality benefit.

Detailed application guidance has been developed for local agency applicants and CDOT applicants. For local agency advertised projects visit the [PWQ Local Agency Call for Projects website](#) and for CDOT advertised projects visit the [PWQ Program website](#). These project must track Mitigation Pool money as described in [Section 4.6 - PWQ Funding Tracking Requirements](#)

#### **4.5.3 Non-Mitigation Pool Process**

As described in the [Section 4.4 Eligibility](#), there are some projects in which other funding resources must be used for PWQ Control Measures. In these cases, you must still submit a PWQ Control Measure cost estimate and *PET Form* to the PWQ Program Manager ([dot\\_pwg@state.co.us](mailto:dot_pwg@state.co.us)) within 30 days after the ad date, and save a copy with required signatures in the project file.

Regardless of the source of funding all projects must track Mitigation Pool money as described in [Section 4.6 - PWQ Funding Tracking Requirements](#).

### **4.6 PWQ Funding Tracking Requirements**

#### **4.6.1 Procedures for CDOT Advertised Projects Using WebTransport**

Since funds cannot be guaranteed, even for Onsite PWQ Required Projects, it is critical that you provide cost estimates to the PWQ Program Manager ([dot\\_pwg@state.co.us](mailto:dot_pwg@state.co.us)) as early as

possible and at key updates to allow for budgeting. In other words, it is essential that you provide cost estimates at Scoping, Field Inspection Review (FIR) and Final Office Review (FOR). In order to receive Mitigation Pool funding final documentation must be received prior to transferring funds.

**Important Variation in Process for Projects Approved Through the Mitigation Pool Committee Selection Process** - The project does not need to submit updated Cost Estimates, unless the cost is reduced, since the project is only approved for the amount approved by the Mitigation Pool Committee. If the project would like additional funding due to a project change an amendment must be submitted to the Mitigation Pool Committee. Approval is not guaranteed.

Steps for obtaining funding include:

1. **In Scoping, determine if the project is an Onsite PWQ Required Project** (see [Section 3 - PWQ Steps](#)) and submit a preliminary, unsigned *PET Form* to the PWQ Program Manager and the Region Water Quality Specialist(s)/WPCM. It is critical that you coordinate with the Region WPCM or Water Quality Specialist(s) at this stage.
2. **Develop a Scoping level cost estimate** for the project and submit it to the PWQ Program Manager. An [Example Cost Estimate Spreadsheet](#) can be found on the [PWQ Program website](#) that provides an overview of what should be included. In addition:
  - The cost estimate should only be for the portions of the project requiring treatment under the Onsite PWQ Required requirements. See the [PWQ Tracking Design Bulletin](#) for tracking requirements.

Note: All PWQ Control Measures must be designed to treat all flows captured by the facility. Therefore, in instances where flows that do not require treatment cannot be routed around the facility, they can be included in the cost estimate. This needs to be demonstrated in the design documents.

- If you are applying for funding for *additional treatment in CDOT MS4 area beyond the minimum required*, the Onsite PWQ Required “Plus” component, you will need to split the costs for the Onsite PWQ Required and the Plus portions in separate rows in your cost estimate.
  - Submit the Treatment Area Spreadsheet and the PET treatment table (make sure it meets the requirements outlined in the PET Form directions) to describe what requires treatment under the Onsite PWQ Required Project requirements. Distinguish between the required treatment area and the Onsite PWQ Required “Plus” portion.
3. **Submit refined cost estimates to the PWQ Program Manager at FIR and FOR (unless there are no changes)**, and note any changes that significantly impact the water quality costs. These refined estimates must include expectations of when funding will be needed, per fiscal year. Funding over multiple fiscal years is encouraged for larger projects.
  4. **Submit a final PWQ project cost estimate before ad.**

5. **Submit the completed and signed *PET Form*, final *PET Map*, and final *Cost Estimate and Treatment Tables* to the PWQ Program Manager prior to fund transfer for final review and approval, and save a copy with required signatures in the project file. The form must be current.**
6. **The CDOT Project Manager sends a request to transfer the funds to the PWQ Program Manager.** An example request can be found on the [PWQ Program website](#).

#### 4.6.2 *Procedures for Local Agency Projects and CDOT Advertised Projects Not Using WebTransport*

Since funds cannot be guaranteed, even for Onsite PWQ Required Projects, it is critical that you provide cost estimates to the PWQ Program Manager ([dot\\_pwg@state.co.us](mailto:dot_pwg@state.co.us)) as early as possible and at key updates to allow for budgeting. In other words, it is essential that you provide cost estimates at Scoping, Field Inspection Review (FIR) and Final Office Review (FOR). In order to receive Mitigation Pool funding final documentation must be received prior to transferring funds.

**Important Variation in Process for Projects Approved Through the Mitigation Pool Committee Selection Process** - The project does not need to submit updated Cost Estimates, unless the cost is reduced, since the project is only approved for the amount approved by the Mitigation Pool Committee. If the project would like additional funding due to a project change an amendment must be submitted to the Mitigation Pool Committee. Approval is not guaranteed.

Steps for obtaining funding include:

1. **In Scoping, determine if the project is an Onsite PWQ Required Project** (see [Section 3 - PWQ Steps](#)) and submit a preliminary, unsigned *PET Form* to the PWQ Program Manager and the Region Water Quality Specialist(s)/WPCM. It is critical that you coordinate with the Region WPCM or Water Quality Specialist(s) at this stage.
2. **Develop a Scoping level cost estimate** for the project and submit it to the PWQ Program Manager. An [Example Cost Estimate Spreadsheet](#) can be found on the [PWQ Program website](#) that provides an overview of what should be included. In addition:
  - If applicable, the cost estimate should separate the costs for the Onsite PWQ Required portion from any “Plus” portions from only be for the portions of the project requiring treatment under the Onsite PWQ Required requirements. See the [PWQ Tracking Design Bulletin](#) for tracking requirements. Since these projects are not using WebTransport they should provide the relevant information through the submittal of invoices and should track these in a spreadsheet.

Note: All PWQ Control Measures must be designed to treat all flows captured by the facility. Therefore, in instances where flows that do not require treatment cannot be routed around the facility, they can be included in the cost estimate. This needs to be demonstrated in the design documents.

- If you are applying for funding for *additional treatment in CDOT MS4 area beyond the minimum required*, the Onsite PWQ Required “Plus” component, you will

need to split the costs for the Onsite PWQ Required and the Plus portions in separate rows in your cost estimate.

- Submit the Treatment Area Spreadsheet and the PET treatment table (make sure it meets the requirements outlined in the PET Form directions) to describe what requires treatment under the Onsite PWQ Required Project requirements. Distinguish between the required treatment area and the Onsite PWQ Required “Plus” portion.
3. **Submit refined cost estimates to the PWQ Program Manager at FIR and FOR (unless there are no changes)**, and note any changes that significantly impact the water quality costs. These refined estimates must include expectations of when funding will be needed, per fiscal year. Funding over multiple fiscal years is encouraged for larger projects.
  4. **Submit a final PWQ project cost estimate before ad.**
  5. **Submit the completed and signed *PET Form*, final PET Map, and final Cost Estimate and Treatment Tables** to the PWQ Program Manager prior to fund transfer for final review and approval, and save a copy with required signatures in the project file. The form must be current.
  6. **The CDOT Project Manager sends a request to transfer the funds to the PWQ Program Manager.** An example request can be found on the [PWQ Program website](#).

#### **4.6.3 Procedures for CDOT Projects Installing PWQ and Not Using Mitigation Pool Funds**

These project are still required to track the cost to design and install PWQ CMs if they are required as a result of CDOT’s MS4 permit. Invoices should be used to track these costs and recorded in a spreadsheet that shall be submitted to the PWQ Program manager.

## **5 Design Standards and Other Design Requirements**

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All PWQ Control Measures need to treat runoff prior to that runoff entering Waters of the State, and must follow the Design Standards outlined below and as described in CDOT’s MS4 Permit. All PWQ CMs must be designed in accordance with the PWQ Section of the Drainage Design Manual (DDM) and must meet good engineering, hydrologic, and pollution control practices. The DDM can be found on the [PWQ Program website](#).

All projects located within CDOT’s MS4 boundary must comply with these requirements even if they are advertised by a local agency or other entity.

Your project could meet the criteria for multiple PWQ Control Measure triggers (see [Section 3 - PWQ Program Steps](#)), and must comply with the Design Standards’ requirements for ALL applicable triggers. Please note that projects that have completed significant design prior to March 1, 2017

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may fall under the previous permit design standards. Please see [Section 5.4.2 - Previous Permit Design Standard](#) if you think this may be the case for your project.

## **5.1 MS4 Permit Required Design Standards**

### **5.1.1 Design Standards for the Cherry Creek Basin Onsite PWQ Required Trigger**

#### ***Tier 3 Design Standards for Cherry Creek Basin Onsite PWQ Required Trigger***

##### ***Applicable Design Standards and/or Requirements:***

Onsite PWQ Required per the Cherry Creek Trigger projects that are a Tier 3 must install WQCV PWQ CMs that are designed to capture and treat, at a minimum, the 80th percentile runoff event. All CMs must be designed in accordance with the PWQ Section of CDOT's Drainage Design Manual. All PWQ CMs must meet the requirements of the [Cherry Creek Reservoir Control Regulation 72](#), (5 CCR 1002-72), part 72.7.2(c).

##### ***Area Where Requirements Apply:***

Any portions of the project discharging to the Cherry Creek Reservoir Control Regulation.

#### ***Tier 2 Design Standards for Cherry Creek Basin Onsite PWQ Required Trigger***

##### ***Applicable Design Standards and/or Requirements:***

Onsite PWQ Required per the Cherry Creek Trigger projects that are a Tier 2 must install PWQ CMs that meet the below criteria:

- The WQCV storm event is assumed not to leave the site, as demonstrated by suitable hydrologic analysis;
- Runoff is discharged as sheet flow across a grass buffer area, designed in accordance with Urban Drainage Flood Control District (UDFCD) Volume 3 requirements.
- Runoff is discharged from the site through a grass swale in combination with implementation of Minimize Directly Connected Impervious Areas (MDCIA) practices in accordance with UDFCD Volume 3.
- Runoff is discharged from the site through a constructed wetland channel. (V) Runoff is discharged across undisturbed and vegetated land a minimum distance of 50 feet or 3 times the distance criteria for grass buffers, whichever is greater, with a slope not exceeding 4 percent over that distance;
- Allowed discharge of a storm event adequately protects water quality, as demonstrated by a hydrologic analysis accepted by the CDOT Hydraulic Engineer; or
- Alternative CMs and/or site condition requirements may be used if they are shown to have comparable or better nutrient removal characteristics for the given use, in comparison to the above listed CMs/site condition requirements, when properly designed and implemented. These CMs/ site condition requirements must be met go through the Region and MPC Variance Process. This process is posted on the [PWQ Program website](#).



All CMs must be designed in accordance with the PWQ Section of CDOT's Drainage Design Manual. All PWQ CMs must meet the requirements of the [Cherry Creek Reservoir Control Regulation 72](#), (5 CCR 1002-72), part 72.7.2(c).

**Area Where Requirements Apply:**

Any portions of the project discharging to the Cherry Creek Reservoir Basin.

**Note:** These standards do not replace the requirements outlined under the Design Standards for 303(d) and EA/EIS Triggers outlined below. In some instances the requirements maybe be met with the same CM. Work with your Water Quality Specialist, applicable local agency and the Cherry Creek Basin Authority to determine if the requirements can be met by the same PWQ CM or if different PWQ CMs are required.

### 5.1.2 Design Standards for EA/EIS and 303(d) Triggers

Although the EA/EIS Onsite PWQ Required Trigger and 303(d) Onsite PWQ Required Trigger must meet the same Design Standards, the treatment requirements may apply to different areas of the project depending on the Design Standard chosen. The amount of impervious area requiring treatment varies based on the Design Standard chosen.

**Applicable Design Standards and/or Requirements:**

You must choose one or a combination of the following Design Standards for treating the required impervious area. These Design Standards and associated design criteria requirements can be found in the PWQ Section of the DDM located on the [PWQ Program website](#).

1. **WQCV Standard:** The control measure(s) is designed to provide treatment and/or infiltration from impervious surfaces with a surface area equal to or greater than 90% of the new impervious surface area located within the portion of the project discharging runoff to the 303(d)-listed segment for a roadway pollutant of concern. In addition the design drain time of the WQCV shall be a minimum of 12 hours. Evaluation of the minimum drain time shall be based on the pollutant removal mechanism and functionality of the control measure implemented. Consideration of drain time shall include maintaining vegetation necessary for operation of the control measure.
  
2. **Runoff Reduction Standard:** The control measure(s) is designed to infiltrate into the ground where site geology permits, evaporate, or evapotranspire a quantity of water equal or greater than 60% of what the calculated WQCV would be if, [all][90% of new]\* impervious area for 303(d) triggers or 90% of the new impervious are from EA/EIS triggers, from the applicable portion of the project discharged without infiltration. This base design standard can be met through practices such as green infrastructure. "Green infrastructure" generally refers to control measures that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated. Green infrastructure can be used in place of or in addition to low impact development principles.

The steps include:

- a. Calculate what the WQCV of the all impervious areas would be if you were not using infiltration; and
- b. Design infiltration Control Measures to infiltrate 60% of the WQCV.

\*Which option applies depends on the trigger. Use [all] if the 303(d) trigger applies. Use [90% of new] if the EA/EIS trigger applies. See Section 2.2.4.2 for information on triggers.

3. **Pollutant Removal Standard:** The control measure(s) is designed to treat at a minimum the 2-year, 1-hour peak runoff flow. The control measure(s) shall be designed to treat to an expected median effluent concentration for total suspended solids (TSS) of 30 mg/L from impervious surfaces with a surface area equal to or greater than 90% of the new impervious surface area located within the portion of the project discharging

**Area Where Requirements Apply:**

- **EA/EIS Trigger:** Entire project boundary (within CDOT MS4 area)
- **303(d) Trigger:** Any portions of the project draining to a 303(d) listed segment (listed for any of the Pollutants of Concern) and is within the CDOT MS4 area.

**Equivalent Benefit**

The WQCV design standard and the pollutant removal (TSS) design standard state the CM must treat runoff from an area equivalent to 90% of the new impervious area. The following more specific requirements apply:

1. Unless the 303(d) trigger applies, a WQCV CM or a TSS CM may treat runoff from impervious surfaces anywhere within the project limits with an area equal to at least 90% of the impervious area being added by the project. The entire area treated must be within the CDOT's MS4 area.
2. If new impervious area will drain to a waterbody on the 303(d) list for a roadway pollutant of concern, a WQCV CM or a TSS CM must be constructed that treats runoff from impervious surfaces with an area totaling at least 90% of the new impervious area. Additional conditions apply to the impervious area treated. The impervious area treated must all drain to the impaired water, must be located entirely within the project area, and must be entirely within CDOT's MS4 area.

If a WQCV or TSS CM treats runoff from impervious area as required by the second condition above, the area treated may apply towards the total area that must be treated as required by the first condition; however, the reverse is not true. If portions of a project drain to more than one waterbody on the 303(d) list for a pollutant of concern, each portion of the project must be addressed individually in accordance with the requirements of the second condition for WQCV and TSS CMs.

The runoff reduction (infiltration) design standard does not require any specific area to be treated. Rather, it requires that a certain volume of water be infiltrated. How this volume of water is calculated depends on the trigger. If the 303(d) trigger applies, the volume to be infiltrated is 60% of the WQCV calculated for all impervious area within the applicable portion of the project area. If the EA/EIS trigger applies, the volume to be infiltrated is 60% of the WQCV calculated for 90% of new impervious area within the applicable portion of the project area. The following more specific requirements apply:

1. Unless the 303(d) trigger applies, the required volume of water to be treated by an infiltration CM may be runoff from anywhere within the project limits. The entire area treated must be within the CDOT's MS4 area.
2. If new impervious area will drain to a waterbody on the 303(d) list for a roadway pollutant of concern, the required volume of water to be treated by an infiltration CM must be runoff

from area that drains to the impaired water, is located entirely within the project area, and is entirely within CDOT's MS4 area.

If an infiltration CM treats a runoff volume as required by the second condition above, the volume treated may apply towards the total volume that must be treated as required by the first condition; however, the reverse is not true. If portions of a project drain to more than one waterbody on the 303(d) list for a pollutant of concern, each portion of the project must be addressed individually in accordance with the requirements of the second condition for infiltration CMs.

PWQ CMs must be designed in accordance with the PWQ Section of the Drainage Design Manual and must meet good engineering, hydrologic, and pollution control practices.

### **5.1.3 Design Standards for Water Quality Only or "Plus" Portion of Projects**

Control Measures for the "Plus" portion of projects and Water Quality Only projects must meet one of the following three standards. These projects or the applicable portions of them, are not required to treat runoff from a project's limits. In other words, the Design Standards for these projects are essentially the same as for Onsite PWQ Required, except the area treated is chosen by the project team and not dictated by a transportation project.

1. **WQCV Standard:** The control measure(s) is designed to provide treatment and/or infiltration of the WQCV for all of the area draining to the control measure. In addition the design drain time of the WQCV shall be a minimum of 12 hours. Evaluation of the minimum drain time shall be based on the pollutant removal mechanism and functionality of the control measure implemented. Consideration of drain time shall include maintaining vegetation necessary for operation of the control measure.
2. **Runoff Reduction Standard:** The control measure(s) is designed to evaporate, transpire, evapotranspire, or infiltrate into the ground where site geology permits a quantity of water equal or greater than 60% of what the calculated WQCV would be if all impervious area for the control measure for the drainage area discharged without infiltration. This base design standard can be met through practices such as green infrastructure. "Green infrastructure" generally refers to control measures that use or mimic natural processes to evaporate, transpire, evapotranspire, infiltrate or reuse stormwater on the site where it is generated. Green infrastructure can be used in place of or in addition to low impact development principles.
3. **Pollutant Removal Standard:** The control measure(s) is designed to treat at a minimum the 2-year, 1-hour peak runoff flow. The control measure(s) shall be designed to treat to an expected median effluent concentration for total suspended solids (TSS) of 30 mg/L from the drainage area.

## **5.2 Overlapping MS4 Permit Areas & Whose Requirements Apply**

### **5.2.1 Local Agency Advertised Projects Working in CDOT's MS4 Area**

Local agency projects working in the CDOT MS4 boundary must comply with all of the same program requirements as CDOT advertised projects for the portions of the project located within the CDOT MS4 boundary. The only exception is that when an Intergovernmental Agreement (IGA) is in place, the Local Agency may perform the site plan review, acceptance of the CM, inspections, and maintenance activities to meet the requirements of the CDOT MS4 permit. The PWQ CMs must be designed to meet the CDOT MS4 Design Standards and other PWQ Program and design criteria.

### **5.2.2 Local Agency Projects working outside CDOT ROW and Receiving Federal or State Funds**

These projects do not have to follow the CDOT MS4 Permit requirements for the portions of the project located outside the CDOT MS4 area, but must certify that they are meeting the applicable MS4 Permit requirements. The project documentation must clearly show that the project is not inside the CDOT MS4 boundary. Any of the portions of the project located in CDOT's MS4 boundary must comply with 5.2.1.

### **5.2.3 CDOT Advertised Projects Working in CDOT's MS4 Area**

CDOT projects working in the CDOT MS4 boundary must comply with all CDOT MS4 Permit requirements for the portions of the project located within the CDOT MS4 boundary. The Local Agency's MS4 Permit requirements cannot be followed. The only exception is that when an Intergovernmental Agreement (IGA) is in place, the Local Agency may perform the site plan review, acceptance of the CM, inspections, and maintenance activities to meet the requirements of the CDOT MS4 permit. The PWQ CMs must be designed to meet the CDOT MS4 Design Standards and other PWQ Program and design criteria.

### **5.2.4 Local Agency Projects working outside CDOT ROW**

The portions of the project located outside the CDOT MS4 area may follow the applicable MS4 permittees requirements. The project must clearly document the areas of the project located in the other entity's MS4 boundary and how CDOT is meeting that permittees requirements. Any of the portions of the project located in CDOT's MS4 boundary must comply with 5.2.3.

## **5.3 Non-MS4 Permit Design Standards**

Occasionally, CDOT must install PWQ CMs for reasons other than MS4 permit requirements. For example, NEPA may require a PWQ CM be constructed where CDOT is contributing to a TMDL. If a requirement for PWQ treatment exists that does not result from the MS4 permit, the CDOT Water Quality Specialist shall be consulted to determine the appropriate design standards.

## **5.4 Other Design Requirements**

PWQ CMs must be designed in accordance with the PWQ Section of the Drainage Design Manual and must meet good engineering, hydrologic, and pollution control practices.

### **5.4.1 Phasing Requirements**

All Onsite PWQ Required shall meet the following:

- At the completion of the project or phase of the project, all projects shall have operational control measures.
- If the control measure will be removed under a future phase(s) of the project, then the permittee can defer the control measure implementation for up to 2 years or until the future phase(s) of the project is completed, whichever is sooner.

### **5.4.2 Previous Permit Term Standard**

The previous permit term or Interim NDRD Design Standards may be applied for projects that have undergone significant design on or before the Compliance Schedule date of March 1, 2017. These standards can be applied to impervious surfaces with a surface area equal to or greater than 90% of the new impervious surface area associated with the 303(d) or EA/EIS Trigger. The Previous Permit Term standard can be used when one of the following criteria are met:

- The control measure(s) was implemented (fully constructed and operable) for the applicable portion of the Onsite PWQ Required EA/EIS and/or 303(d) Trigger project prior to March 1, 2017.

- The control measure(s) for the applicable portion of the Onsite PWQ Required Project (per the EA/EIS or 303(d) Trigger) was substantially designed and has started the permittee's review process prior to March 1, 2017.
- The control measure(s) has been substantially designed and approved by the permittee for the applicable portion of the Onsite PWQ Required EA/EIS and/or 303(d) Trigger project prior to the compliance date in Part I.H. Substantially designed means that the drainage and hydraulic calculations have been completed for the control measure(s).

The previous permit design standard is the design approved by CDOT consistent with the requirements of the previous permit or interim program.

Any modifications to the control measure(s) shall be consistent with the requirements of the previous permit or interim program.

Control measures installed under the prior permit term or interim program standard shall not be removed unless replaced by another control measure that meets the requirements of the current MS4 Permit and this PWQ Program Manual.

## 6 Documentation, Tracking and Other Requirements

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### 6.1 PWQ Location

Control Measures can be located within project limits or adjacent to project limits, as long the project is treating the required CDOT project impervious area, treatment occurs prior to entering Waters of the State and access is given through an easement or other legal means of access. The PWQ treatment must be built prior to closing out/accepting the transportation project.

### 6.2 MS4 Boundary Tools and Documentation

Use [CPLAN](#) to determine the MS4 boundary. Click content and then Environmental Water Quality and then select the applicable MS4 Boundary. This layer shows all local agency MS4 areas. CDOT's MS4 area is determined by where CDOT's right of way or property intersects another MS4 area.

Take a snip of the MS4 area, save with the date and place in the project file to document the MS4 boundary. Since CDOT is required to periodically update the MS4 boundary, this step is important to record the MS4 boundary at the time the project was in design and demonstrate that applicable requirements have been met.

### 6.3 Pool Documentation

Refer to the [Design Bulletin 2015-5 Tracking PWQ Mitigation Pool](#) and [Construction Bulletin 2015-6 Permanent Water Quality Mitigation Pool](#) for requirements on tracking PWQ Mitigation Pool money. This bulletins should be used anytime PWQ Mitigation Pool money is used and should be read as soon as the decision to use Mitigation Pool money is made. Additional information on the processes associated with Mitigation Pool funding can be found on [PWQ Program website](#).

## Appendix A: Glossary

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Note: Where possible definitions have been taken from regulation. In these cases the source has been noted and a link provided.

**CDOT MS4 Area:** CDOT owned land (e.g., right of way) within MS4 boundaries, which are shown in the MS4 layer in OTIS.

**Control Measure:** Any best management practice (BMP) or other method used to prevent or reduce the discharge of pollutants to state waters. Control measures include, but are not limited to best management practices. Control measures can include other methods such as the installation, operation, and maintenance of structure controls and treatment devices. {(Source: [CDOT 2015 MS4 Permit Minor Modification 1 \(Effective October 16, 2015\)](#)}.

**Discharge:** The discharge of pollutants as defined in section 25-8-103(3) C.R.S., and also includes land application. (Source: [Regulation 61](#))

**Equivalence:** The Design Standards for EA/EIS and 303(d) triggers state that an area equal to either 90% the new impervious area (WQCV or Pollutant Removal Standard) or a quantity of water equal to 60% of the all applicable impervious area (Runoff Reduction Standard). In both cases equivalence means the following:

1. The control measure(s) must treat runoff from impervious surfaces with a surface area equal to or greater than 90% of the new impervious surface area from the project. All impervious surface areas used to meet this target must be part of the Onsite PWQ Required development project and must be located within the permit area. Control measures implemented to meet the requirement in ii, below, can also be used to meet these requirements, if applicable.
2. If there is a portion of the project that discharges runoff to a stream segment that is on the 303(d) list for a roadway POC, then the control measures must be implemented to treat runoff from impervious surfaces that are part of the project that discharge runoff to a stream segment that is on the 303(d) list for a roadway POC. The control measure(s) must treat runoff from impervious surfaces with a surface area equal to or greater than 90% of the new impervious surface area located within the portion of the project discharging runoff to that segment. All impervious surfaces used to meet this surface area target must be part of the Onsite PWQ Required development project, located within the permit area, and must discharge runoff to the listed segment.

**Good Engineering, Hydrologic and Pollution Control Practices:** are methods, procedures, and practices that:

- a. Are based on basic scientific fact(s).
- b. Reflect best industry practices and standards.
- c. Are appropriate for the conditions and pollutant sources.
- d. Provide appropriate solutions to meet the associated permit requirements, including practice based and numeric effluent limits.

{(Source: [CDOT 2015 MS4 Permit Minor Modification 1 \(Effective October 16, 2015\)](#)}.

**Green infrastructure:** Generally refers to control measures that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated. Green infrastructure can be used in place of or in addition to low impact development principles. {(Source: [CDOT 2015 MS4 Permit Minor Modification 1 \(Effective October 16, 2015\)](#)}.

**Impervious area:** Developed areas with covering or pavement that prevents the land's natural ability to absorb and infiltrate typical precipitation and irrigation events. Impervious areas include, but are not limited to; roof tops, walkways, patios, driveways, parking lots, storage areas, impervious concrete and asphalt, and any other continuous watertight pavement or covering. {(Source: [CDOT 2015 MS4 Permit Minor Modification 1 \(Effective October 16, 2015\)](#)}.

**Interim PWQ Program:** PWQ Program Modification, as defined by CDPHE in its May 22, 2014 memo entitled "CDPS Permit—New Development and Redevelopment Program Description Modification-Conditional Approval."

**CDOT Interim NDRD Program Guidance:** CDOT Guidance on how to implement the CDPHE May 22, 2014 memo entitled "CDPS Permit—New Development and Redevelopment Program Description Modification-Conditional Approval."

**Major Municipal Separate Storm Sewer Outfall (or Major Outfall):** A municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more). (Source: [Regulation 61](#))

**Minimize:** The term minimize, for purposes of implementing control measures of this permit means reduce and/or eliminate to the extent achievable using Control Measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice. {(Source: [CDOT 2015 MS4 Permit Minor Modification 1 \(Effective October 16, 2015\)](#)}.

**Mitigation Pool:** Funding designated for PWQ Control Measures, which includes \$6.5 million annually that must be spent on a 3-year rolling average in order to be in compliance. CDOT's contribution to the Mitigation Pool, and use of these funds to build PWQ Control Measures, equals compliance with the PWQ Program. It comes from each region's Surface Treatment Pool (STP) and Region Onsite PWQ Required Pool (RRP) based on the number of lane miles each region has in CDOT MS4 areas.

**Mitigation Pool Committee (MPC):** A Committee comprised of CDOT Staff from headquarters and regions that has been formed to oversee the distribution of Mitigation Pool funds and assure compliance with the requirements of the 2014 Interim Program.

**Mitigation Pool Committee Selection Process:** Selection of projects via a Call for Stormwater Project Applications and an application review process. The "Plus" portion of CDOT and local agency advertised Onsite PWQ Required Plus Projects, Non-Onsite PWQ Required Plus Projects and Water Quality Only Projects may request funding.

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This manual and associated updates are posted on the [PWQ Program website](#).

**Non-Onsite PWQ Required No PWQ Project:** A Non-Onsite PWQ Required Project, in which the project team decides not to apply for funding to treat water quality onsite and support Water Quality Only-level improvements. The project team only has to submit the *PET Form* in order to be in compliance.

**Non-Onsite PWQ Required Project:** Transportation projects within CDOT MS4 area that are not required to design and construct PWQ Control Measures onsite.

**Non-Onsite PWQ Required Plus Project:** A Non-Onsite PWQ Required Project in which the project team applies for funding to treat stormwater runoff and support Water Quality Only-level improvements. The treatment area must include a portion of CDOT MS4 area.

**Pollutant:** Dredged spoil, dirt, slurry, solid waste, incinerator residue, sewage, sewage sludge, garbage, trash, chemical waste, biological nutrient, biological material, radioactive material, heat, wrecked or discarded equipment, rock, sand, or any industrial, municipal or agricultural waste. (Source: [Regulation 61](#))

**Pollution:** Man-made or man-induced, or natural alteration of the physical, chemical, biological, and radiological integrity of water. (Source: [Regulation 61](#))

**Onsite PWQ Required Funding Approval Process:** The process to obtain funding for CDOT advertised Onsite PWQ Required Projects. Eligible projects must meet specific requirements, and do not have to obtain approval through the Mitigation Pool Committee.

**Onsite PWQ Required Plus Project:** Onsite PWQ Required Projects that have potential for *additional treatment, including in CDOT MS4 area, beyond Onsite PWQ Required Project requirements*. Project teams may apply for funding for the “Plus” portion that treats more than the Onsite PWQ Required Project trigger requirements. Strategically designing Control Measures to treat a large area may eliminate the need to construct Control Measures for future projects. It uses resources more effectively and helps CDOT with compliance by treating more CDOT MS4 area.

**Onsite PWQ Required Project:** CDOT and local agency advertised transportation projects that have a SCP and are within a portion of CDOTs MS4 area must design and construct PWQ Control Measures to treat stormwater runoff from within the project’s limits (as defined in the title plan sheets) because they meet at least one of three program triggers. Treatment is required because these projects have the greatest potential to cause or contribute to water quality impairment. Control Measures can be located within project limits or adjacent to project limits, as long as treatment occurs prior to entering Waters of the State. The PWQ treatment must be built prior to final acceptance of the transportation project.

**Project Limits:** For the purpose of calculating the %impervious, the project limits should be consistent with the SWMP project limits. Prior to development of the SWMP and the limits noted on the title page of a project’s plan sheets.

**Site:** The area where any facility or activity subject to this regulation is physically located or conducted, including adjacent land used in connection with the facility or activity. (Source: [Regulation 61](#))



**State Waters:** Any and all surface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed. This definition can include water courses that are usually dry. For the purposes of this permit, state waters do not include subsurface waters. State waters are also known as waters of the state. {(Source: [CDOT 2015 MS4 Permit Minor Modification 1 \(Effective October 16, 2015\)](#)}.

**Surface Water:** For the purposes of sections 61.13 and 61.17, all Waters of the State that are also waters of the U.S. (Source: [Regulation 61](#))

**Trigger:** A yes or no determination of whether onsite PWQ Control Measures are required based on a set of criteria.

**Water quality impacts:** The effect of a discharge upon state waters, including, but not limited to the exceedance of permit limitations and/or stream standards or ground water standards; the occurrence of fish or other aquatic organism kills; excessive growth of organisms that affects the taste and odor of a potable water supply source and/or aesthetic quality of a recreational area; and/or the occurrence of conditions resulting in detrimental public health effects. (Source: [Regulation 61](#))

**Water quality standard:** Any standard promulgated pursuant to section 25-8-204 C.R.S. (Source: [Regulation 61](#))

**Water Quality Capture Volume (WQCV):** The volume equivalent to the runoff from an 80th percentile storm, meaning that 80 percent of the most frequently occurring storms are fully captured and treated and larger events are partially treated. {(Source: [CDOT 2015 MS4 Permit Minor Modification 1 \(Effective October 16, 2015\)](#)}.

**Watershed:** The total land area and water bodies that drain into a single river or lake system, and/or is the source of groundwater recharge to that river or lake system (Safe Drinking Water Act - Protecting America's Public Health, poster, EPA816-H-02-003, January 2002). The Water Quality Only of a major river may encompass a number of smaller Water Quality Onlys that ultimately combine. A Water Quality Only is sometimes referred to as a drainage basin or catchment.

**Water Quality Only Project:** A non-transportation project in which CDOT, a tribe, a local agency, a Watershed group or another entity requests funding to support a Water Quality Only-level improvement that treats a portion of CDOT MS4 area.

**State Waters (Water of the State):** See State Waters above.

## Appendix B: Key Resources

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**CPLAN** or **OTIS Map**: <http://dtdapps.coloradodot.info/Otis/Flex/MapView>

Used to determine if a project is in the MS4 area

**Cherry Creek Reservoir Control Regulation (5 CCR 1002-72): Regulation 72 -**  
<https://www.colorado.gov/pacific/cdphe/water-quality-control-commission-regulations>

### 303(d) List Resources

- **Regulation 93 (93.3) Water Bodies Requiring TMDLs or Identified for Monitoring and Evaluation Tables:** <https://www.colorado.gov/pacific/cdphe/water-quality-control-commission-regulations>
- **EPA's Water Quality Only Assessment, Tracking & Environmental Results:** [http://ofmpub.epa.gov/waters10/attains\\_state.control?p\\_state=CO](http://ofmpub.epa.gov/waters10/attains_state.control?p_state=CO)
- **CDPHE's GIS maps** to see the segment: <https://www.colorado.gov/pacific/cdphe/clean-water-gis-maps>
- **CPLAN**

**Regulation 61:** <http://www.colorado.gov/cs/Satellite?c=Page&childpage=CDPHE-Main%2FCBONLayout&cid=1251595703337&page=CBONWrapper>

Amber Williams, the PWQ Program Manager, may be consulted for assistance with this program at [dot\\_pwq@state.co.us](mailto:dot_pwq@state.co.us) and 303-757-9814.