



WATER AND SEWER BOARD SPECIAL MEETING
December 12, 2018 – 6:30 a.m.
2nd Floor Conference Room - 301 Walnut Street
Windsor, CO 80550

The Town of Windsor will make reasonable accommodations for access to Town services, programs, and activities and will make special communication arrangements for persons with disabilities. Please call (970) 674-2400 by noon on the 2nd day prior to the meeting to make arrangements.

AGENDA

A. CALL TO ORDER

1. Roll Call
2. Review of Agenda by the Board and Addition of Items of New Business to the Agenda for Consideration by the Board
3. Public Invited to be Heard

B. CONSENT CALENDAR

C. BOARD ACTION

1. Approval of the October 10, 2018 Minutes
2. Approval of the November 7, 2018 Minutes

D. PRESENTATIONS AND DISCUSSION

1. MS4 Permit Status Update
2. Water Demand and Supply presentation

E. EXECUTIVE SESSION

1. An executive session pursuant to Colorado Revised Statutes § 24-6-402 (4)(e)(I) for the purpose of determining positions relative to matters that may be subject to negotiations; developing strategy for negotiations; and instructing negotiators with respect to water resources.

F. COMMUNICATIONS

1. Staff
2. Board

F. ADJOURN



WATER AND SEWER BOARD REGULAR MEETING
October 10, 2018 – 6:30 a.m.
2nd Floor Conference Room – 301 Walnut Street
Windsor, CO 80550

MINUTES

A. CALL TO ORDER

Board Chairperson Bielawski called the meeting to order at 6:32 a.m.

- | | | |
|---------------------|---------------------------|------------------|
| 1. <u>Roll Call</u> | Chairperson | Greg Bielawski |
| | Vice-Chairperson | Carlos Medina |
| | Secretary | Julie Cline |
| | | Darell Zimbelman |
| | | Milt Tokunaga |
| | | Milton Geiger |
| | | Janene Willey |
| | Town Board Liaison | Ken Bennett |
| Also present: | Town of Severance Liaison | Brad Trujillo |
| | Director of Engineering | Dennis Wagner |
| | Water Resources Manager | John Thornhill |
| | Utility Billing Clerk | Erin Porter |

2. Review of Agenda by the Board and Addition of items of New Business to the Agenda for Consideration by the Board
3. Public Invited to be Heard
There was no public comment.

B. CONSENT CALENDAR

1. Minutes of August 8, 2018 Regular Meeting

Board Member Zimbelman moved to accept the minutes of the August 8, 2018 meeting; Board Member Medina seconded the motion. Motion carried unanimously.

C. BOARD ACTION

1. Amended By-Laws
The Board decided to table the discussion on amending the by-laws to the December 12th meeting

D. PRESENTATIONS AND DISCUSSION

1. Town Board's Resolution of Support for Northern Integrated Water Preferred Alternative
The Army Corps of Engineers released the final Environmental Impact Statement on July 20th, 2018 and the comment period was extended until October 4th, 2018. The Town Board created a resolution in support of NISP which was approved September 24th, 2018. The resolution was submitted to the Corps who thanked the Town for its comments. The Corps are working on a preliminary design currently.

The Board discussed various aspects of NISP including proposed funding, the process and current projects within the Colorado Big Thompson project.

2. Cash-In-Lieu of Water Dedication Increase

Mr. Thornhill presented the current cash-in-lieu (CIL) process for the Town when considering new development, as only 50% or less of water dedication can be CIL. He stated the current CIL rate was \$40,500 per acre foot which is based on a CBT unit price of \$28,350, or 70% of an acre foot, which was established May 1st, 2018.

Mr. Thornhill stated that the market was changing very rapidly and that staff is recommending reviewing the CIL rates on a quarterly or monthly basis, depending on how quickly rates were increasing. The Town has contracted with Front Range Land and Water to provide current CBT market pricing so that staff can make the adjustment to the CIL rate. Mr. Thornhill stated that they were also looking at options such as changing the percentage allowed of CIL and the various pros and cons of each.

Starting October 1st, 2018, cash-in-lieu will increase to \$41,500 per acre-foot.

The Board discussed the difference in dedication for single family versus multi-family and potable vs non-potable systems, as well as the possible impact that NISP would have on dedication. Other items that could potentially impact future water dedication were also discussed such as changing landscaping codes and better public education which could lead to better efficiency.

Board Chairperson Bielawski proposed a special meeting in October to discuss current and future landscaping issues and water conservation efforts. Board Member Tokunaga moved to schedule the special meeting; Board Member Willey seconded the motion. Motion carried unanimously.

3. Windsor 2018 Water Usage Year-To-Date

Mr. Thornhill presented the water usage year to date. The usage increased in September because it was dry and hot, which made up the difference between the projected and the actual usage. He stated the water year started over October 1st.

E. COMMUNICATIONS

1. Staff

Board Member Zimbelman asked about an item discussed in the last meeting, the north sewer extension. Mr. Wagner stated that the project was currently on the shelf because the reason for extending the sewer so quickly, the Rocky Mountain Sports Park, had changed their plan and would no longer be using the property on the corner of Highway 257 and Highway 74 (Harmony Rd).

2. Board

Chairperson Bielawski asked about the reverse osmosis plant that was discussed in the work session and asked Town Board Liaison Bennett about it. Member Bennet shared what he could with the Board in regards to possible future plans for a treatment plant.

Chairperson Bielawski asked about the Fort Collins/Loveland water tank that had been discussed in a previous meeting, Mr. Wagner updated the Board on discussions that he and Town Manager Shane Hale had had with Fort Collins/Loveland Water District, and that there was no decision at present.

Chairperson Bielawski asked about the 2019 budget. Mr. Wagner stated that the Town was currently in the budget review, and that it could be added to the special meeting. Town Board Member Bennett advised the Board about the changes in how the budget was being reviewed, and that there were/are several smaller work sessions rather than one large meeting.

Board Member Cline advised the Board that part of HP would be moving out of Fort Collins and would be looking for options for moving. This could bring in 300-500 new workers into Windsor.

Chairperson Bielawski asked about a comment made by Finance Director Dean Moyer in regards to the austere nature of Storm Drainage Fund. Mr. Wagner stated that it was the least cash positive of all the utility enterprise funds. Chairman Bielawski asked about the increase that took place earlier this year. Ms. Porter confirmed the increase was effective on the February 1st statement.

Chairperson Bielawski asked about the new Storm Water Program Coordinator that was hired. Mr. Wagner stated that by July of 2019 the Town needs to have the Municipal Separate Storm Sewer System (MS4) permit because the Town of Windsor is now a phase 2 community, and new regulations are now in effect. The new coordinator will be administering this program.

Chairperson Bielawski announced the Fall Water Users Meeting for Northern Water would be November 14th in Fort Collins.

F. ADJOURN

Board Vice-Chairperson Medina moved to adjourn the meeting at 7:50 am; Board Members Tokunaga and Cline seconded the motion. Motion carried unanimously.

Submitted by:

A handwritten signature in blue ink, appearing to read "Erin Porter", is written over a horizontal line.

Erin Porter, Utility Billing Clerk



WATER AND SEWER BOARD SPECIAL MEETING
November 7, 2018 – 6:30 a.m.
2nd Floor Conference Room – 301 Walnut Street
Windsor, CO 80550

MINUTES

A. CALL TO ORDER

Board Chairperson Bielawski called the meeting to order at 6:30 a.m.

1. Roll Call

Chairperson	Greg Bielawski
Vice-Chairperson	Carlos Medina
Secretary	Julie Cline (absent)
	Darell Zimbelman
	Milt Tokunaga
	Milton Geiger
	Janene Willey
	Ken Bennett
Town Board Liaison	

Also present:

Director of Engineering	Dennis Wagner
Director of Finance	Dean Moyer
Director of Public Works	Terry Walker
Water Resources Manager	John Thornhill
Communications Manager	Kim Overholt
Customer Service Supervisor	Jessica Scheopner
Utility Billing Clerk	Erin Porter

2. Review of Agenda by the Board and Addition of items of New Business to the Agenda for Consideration by the Board

3. Public Invited to be Heard
There was no public comment.

B. CONSENT CALENDAR

There was nothing to accept

C. BOARD ACTION

1. 2019 Water, Sewer and Drainage budgets

Mr. Moyer reviewed the preliminary budget with the Board. He explained specific line items for revenue and expenditures for each of the water, sewer, and storm drainage budget.

In the water budget, on-call pay, lines maintenance, tap fees, Kern Reservoir loan payments, transmission mains, NISP funding, raw water and non-potable revenue were discussed.

The sewer budget remained relatively consistent from 2017 other than some additional chemical maintenance requirements.

In the storm drainage budget, mosquito spraying and capital improvement projects were discussed.

Board Vice-Chairperson Medina moved to approve the budget; Board Member Willey seconded the motion. Motion carried unanimously.

D. PRESENTATIONS AND DISCUSSION

1. Windsor's Water Efficiency Plan and Community Outreach

Mr. Thornhill presented information on the Water Efficiency Plan to the Board. He discussed the history of Windsor's efficiency efforts and new, ongoing and complete activities for implementation. The ongoing activities include meter testing and replacement, system wide audits, control of apparent losses, water line replacement, toilet and washer rebate programs, and residential water audit kits. The Town Board has also looked at Water Wise Landscaping, but at this time only for non-residential accounts.

There are a few ordinances that have been implemented including water waste ordinances and watering restrictions between May 1 and September 30, restricting watering between 10am and 6pm. There has been some staff discussion about landscape design ordinances and restrictions, but mostly commercial at this point.

The Town does several educational activities throughout the year including bill inserts, website communication, social media, the Water Wagon, the Xeric Demonstration Garden at Treasure Island, xeriscape classes, and garden in the box programs. In 2017, the Town also did a Water Wise Seminar and the Mayors Challenge. Currently, funding is not up to the average conservation program cost of \$2-\$5 per resident, the Town spends about \$0.33 per resident. The 2019 budget is the same as 2018 due to staff transition, but in future more money in the budget will be requested.

Ms. Overholt then spoke to the marketing and communication around the efficiency plan. She stated that she wanted to move away from the term conservation and move more towards sustainability language. She identified the current plan on communicating rate increases in future, stating that the rate increase education work part and parcel with conservation and sustainability.

The communication plan includes various types of communication so as not to turn residents off so that they don't hear the message. She plans to gently educate residents through many outreach activities including newsletter articles, press releases, improving the website, social media, video, fact sheets, brochures, the annual water report, an annual facilities tour, and other communications with developers, builders, businesses, and schools.

E. COMMUNICATIONS

1. Staff

Mr. Thornhill stated that the cash-in-lieu rate was increased first on October 1st, 2018 to \$41,500 per acre foot as discussed in the regular October meeting, but that the CBT cost has been increasing so quickly that the rate was again increased on November 1st, 2018 to \$47,500 per acre foot.

2. Board

The Board discussed highlights of the recent Northern Water tour that was made available to residents on October 19th.

Chairperson Bielawski provided information about the Northern Water Fall Water Users Meeting in Fort Collins on November 14th.

F. ADJOURN

Board Vice-Chairperson Medina moved to adjourn the meeting at 8:35 am; Board Member Tokunaga seconded the motion. Motion carried unanimously.

Submitted by:

A handwritten signature in blue ink, appearing to read "Erin Porter", with a stylized flourish at the end.

Erin Porter, Utility Billing Clerk



MS4 PROGRAM STATUS

December 2018



Brief History of Stormwater Regulation

- Stormwater regulation started with the Federal Water Pollution Act of 1948
- Amendments to this Act brought about the Clean Water Act (CWA) of 1972
- National Pollutant Detection and Elimination System (NPDES) permitting created via the CWA:
 - Large construction sites 5 acres or more
 - Industry, sewage plants
 - Phase I MS4 (Municipal Separate Storm Sewer System) permitting started in 1990 for cities with populations 100,000 or more



Brief History of Stormwater Regulation con't

- Phase II stormwater discharge regulations were activated under NPDES in 1996
 - Construction sites disturbing 1 acre or more, and small municipality (MS4 Phase II) start to receive permit certification under NPDES
 - Multiple permits administered in NPDES; Municipal Separate Storm Sewer System (MS4) is our focus



Brief History of Stormwater Regulation con't

- There are approximately 855 Phase I MS4s covered by 250 Individual Permits
- Most of the 6,695 Phase II MS4s are covered by statewide General Permits, however some states use individual permits

Source: <https://www.epa.gov/npdes/stormwater-discharges-municipal-sources>



Phase I MS4s

The 1990 Phase I regulation requires medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges.

Phase II MS4s

The 1999 Phase II regulation requires small MS4s in U.S. Census Bureau defined urbanized areas, as well as MS4s designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. Phase II also includes non-traditional MS4s such as public universities, departments of transportation, hospitals and prisons.



Brief History of Stormwater Regulation con't

- In Colorado, the Colorado Department of Health and Environment (CDPHE) administers NPDES through the Colorado Discharge Permitting System (CDPS)
- CDPHE first notified Windsor of its MS4 designation in 2012, and Windsor received certification in February of 2018



STATUS: PDD

- Developing the Program Description Document (PDD) – document with links to required info
- Must be:
 - updated to reflect current implementation
 - presentable to the CDPHE within 10 days of a request, and available to the public upon request

Compliance schedule: *Completed by Jan.1, 2018 (for conditions in effect)*



STATUS: Programs and Process

- Five pollution prevention programs required:
 - Public Education and Outreach*
 - Illicit Discharge Detection and Elimination (IDDE)*
 - Construction Sites*
 - Post Construction*
 - Municipal Operations*
- One public involvement process required:
 - Public Involvement and Participation*
- Graduated implementation process; Compliance schedules
- File system set up on O drive for tracking documentation



STATUS: Public Education and Outreach

- Compliance schedule: *Completed by July 2018* (substantially complete Dec 2018)
- Waiting –
 - Auto Shop flyer finalization (in last year's plans to complete this year)
Kim O
 - Mail out to shops (\$100)
- Completed
 - All requirements in PDD EXCEPT references to the IDDE program (this is still in Draft Form, no impact on compliance schedule)
- In Progress
 - Program Document (no impact on compliance schedule, continuous)
 - Sign off on Final Program Document (Shane, Dennis, Kim, Me)

COSTS: Estimated \$600 annually



STATUS: IDDE Program

- Compliance schedule: *Completed by July 1, 2019*
 - Map, Priority Areas – on track for completion July 2019
 - Training – No compliance schedule, continuous
 - Program Document, Regulatory Mechanism & Exemptions – on track for completion July 2019



STATUS: IDDE Program

- Waiting
 - Code finalization
 - Approval of Hazardous materials section in Program Document – Terry - ok, Police – ok, Fire -?
 - Cartegraph reporting and recording mechanism set up – Scott T, due end of Jan. 2018
 - Upcoming training, Parks, Jan. 8
 - Sign off on Final Program Document – Shane, Dennis, Terry, myself, Fire Chief?



STATUS: IDDE Program

- In Progress
 - Program document (exceptions as noted and hazardous materials management agreement with Fire Dept.)
 - Researching disposal options (Brian Rowe)
 - Researching cleanup materials that will reduce man-hour costs



STATUS: IDDE Program

- Completed
 - Phone for tracing ID and Mapping outfalls activated by IT
 - Training, Engineering Dept. Dec. 10

COSTS: Est. \$1,000 - \$20,000



STATUS: Construction Sites Program

Compliance Schedule: *Completed by July 1, 2019*

- Site plan review for stormwater compliance: process is underway, on track for completion July, 2019
- Site inspections, on track to start July, 2019
- Program Document, Regulatory Mechanism & Exemptions tracking – on track for completion July, 2019



STATUS: Construction Sites Program

- Waiting
 - Need to order and install inspection software for phone
 - Code finalization
 - Completion of Program Document – draft started, reviewing with Engineering and Planning
 - Finalize revisions to documents currently used in the review and final acceptance process
 - Sign off on Final Program Document – Shane, Dennis, Scott, myself, ?



STATUS: Construction Sites Program

- In Progress
 - Meeting with NOCO HBA Government Affairs board Dec 12 @ 2 p.m. – education on upcoming requirements
 - Informational meeting with Construction site operators planned for Jan 15
 - Stormwater Program Coordinator is doing plan reviews now for stormwater compliance on projects that will be under construction on or after July 1, 2019



STATUS: Construction Sites Program

- Completed
 - Phone for completing inspections activated by IT

\$1,500 - \$2,000 Est.



STATUS: Post-Construction Program

Compliance Schedule: *Completed by July 1, 2020*

- To meet this schedule, Drainage Criteria Manual needs update now to guide consultants designing water quality structures for future construction
- Extensive discussion underway on long-term O&M agreements
- PDD and Program Document planned for completion by July, 2020



STATUS: Post-Construction Program

- Waiting
 - Code finalization
 - Completion of Program Document
 - Decide: funding a consultant or in-house work to re-write is Windsor's Drainage Criteria (last updated in 2006)
 - Sign off on Final Program Document – Shane, Dennis, Terry, myself, ?

COST: \$1,000-\$30,000 Est.



STATUS: Municipal Operations Program

Compliance Schedule: *Completed by July 1, 2020 PDD and Requirements (except Bulk Storage)*

Completed by July 1, 2021 Bulk Storage

Note: Current plan is that Public Works and Parks will be housed in expanded facilities at the PWF; good opportunity NOW to ensure bulk storage and other requirements are included in designs

COST \$15,000 Est.

MS4 Permit Status

Green = compliant, completed or no deadlines

Yellow = non-compliant at this time, high expectation of meeting deadline

Red = non-compliant, low expectation of meeting deadline

Acronyms

PDD – Program Description Document

MS4 – Municipal Separate Storm Sewer System

EPA – Environmental Protection Agency

CDPHE – Colorado Department of Public Health and Environment

CDPS – Colorado Discharge Permitting System

IDDE – Illicit Discharge Detection and Elimination

ID – Illicit Discharge

NOCO HBA – Northern Colorado Home Builders Association

IT – Information Technology (Town of Windsor)

O&M – Operations and Maintenance

Program Description Document (PDD) for entire permit – must be updated to reflect current implementation, and presentable to the CDPHE within 10 days of a request (Compliance schedule: Completion date Jan. 1, 2018 –for conditions in effect)

Five pollution prevention programs, one public involvement process required in permit; graduated implementation process

File system set up on O drive

1. Public Involvement/Participation **current**
2. Public Education and Outreach
 - a. PDD in draft
3. Illicit Discharge Detection and Elimination
 - a. PDD in draft
 - b. code
 - c. staff training completion
 - d. functional program due July 2019
4. Construction Sites
 - a. code
 - b. PDD and functional program due July 2019
5. Post – Construction SW Management
 - a. code
 - b. in progress, due July 2020
6. Municipal Operations
 - a. Runoff Plans for and 1st Annual Inspections of facilities due July 2020
 - b. Nutrient program due July 2020
 - c. Outdoor bulk storage July 2021

Public Involvement/Participation

Compliance schedule: **None**

1. Waiting
 - a. Cartograph set up for Illicit discharge Reporting/Record Keeping – Scott T, due end of Jan. 2018

- b. Notice of ordinance – through normal channels

Public Education and Outreach (\$600 annually)

Compliance schedule: Completed July 2018 (compliant)

- 1. Waiting
 - a. Auto Shop flyer finalization (in last year's plans to complete this year) – Kim O
 - b. Mail out to shops (\$100)
- 2. Completed
 - a. All requirements in PDD EXCEPT references to the IDDE program (this is still in Draft Form, no impact on compliance schedule)
- 3. In Progress
 - a. Program Document (no impact on compliance schedule)
 - b. Sign off on Final Program Document (Shane, Dennis, Kim, Me)

Illicit Discharge Detection and Elimination Program (\$600-\$1000)

Compliance schedule: Map, Priority Areas – July 2019; Training - None Program Document, Regulatory Mechanism & Exemptions - July 2019

- 1. Waiting
 - a. Code finalization
 - b. Approval of Hazardous materials section in Program Document – Terry - ok, Police – ok, Fire – may need an agreement when new Chief comes in
 - c. Cartegraph reporting and recording mechanism set up – Scott T, due end of Jan. 2018
 - d. Upcoming training, Parks, Jan. 8
 - e. Completed training, Engineering, Dec. 10
 - f. Sign off on Final Program Document – Shane, Dennis, Terry, myself, Fire?
- 2. Completed
 - a. Program document (exceptions above; and decision on training levels, and hazardous materials management – no compliance schedules)
 - b. Phone for tracing ID and Mapping outfalls activated by IT

Construction Sites Program (\$1500-\$1800)

Compliance schedule: Program to be fully functional; PDD completion due and inspections to begin July 2019

- 1. Waiting
 - a. Need to order and customize inspection software for phone
 - b. Code finalization
 - c. Completion of Program Document – draft started, reviewing with Engineering and Planning
 - d. Revision of documents currently used in the review and final acceptance process

2. In Progress

- a. Meeting with NOCO HBA Government Affairs board Dec 12 @ 2 p.m. – education
- b. Informational meeting with Construction site operators planned for Jan 15
- c. Stormwater Program coordinator is doing plan reviews now for stormwater compliance on projects that will be under construction on or after July 1, 2019

3. Completed

- a. Phone for Inspections activated by IT

Post Construction Stormwater Management (\$25,000 - \$30,000)

Compliance schedule: PDD and Requirements must be completed by July 1, 2020

1. Waiting

- a. Discussing code language regarding Long term Operations and Maintenance
- b. Need to fund a re-write of Windsor's Storm Drainage Criteria Manual

Municipal Operations (\$ 15,000)

Compliance schedule: PDD and Requirements (except for Bulk Storage) must be completed by July 1, 2020; Bulk storage requirements must be completed by July 1, 2021

Note: Public Works, IT and Parks will be housed in facilities to be expanded at the current PWF; good opportunity NOW to ensure bulk storage requirements are included in designs



Town of Windsor – MS4 Program Description Document (PDD) MS4 Phase II Permit Version – Modification 4

October 30, 2018
Revision #2

Contents

Part I.C. Program Description Document.....	1
Part I.C.1.c Organizational Chart.....	2
Part I.D. Public Involvement/Participation	2
Part I.E.1 Public Education and Outreach	3
Part I.E.2. IDDE Program	6
Part I.E.3. Construction Sites.....	11
Part I.E.4. Post-Construction Stormwater Management in New Development and Redevelopment	18
Part I.E.5 Pollution Prevention/Good Housekeeping for Municipal Operations	26

Part I.C. Program Description Document

Per the MS4 Permit (issued April 15, 2016, effective July 1, 2016), the permittee must develop and maintain records in the form of a program description document (PDD). The following document meets the requirement found in the MS4 Permit. Requirements subject to a compliance schedule do not need to be addressed in the PDD until the due date in the compliance schedule in Part I.H of the permit.

The PDD must include the names of the most recent version of the documents, date of the document, and location(s) where the supporting documentation is maintained. The PDD must be available to the public at reasonable times during regular business hours and maintained in a format that can be submitted to the Division within 10 business days of a request.

Information in the PDD may be revised by the permittee at any time. The permittee must modify the PDD as changes occur to ensure that the information is up to date. The [MS4 Certification Electronic Library](#) on the Water Quality Control Division's website contains communities' MS4 factsheet and certification, which indicates contacts, fees and state waters to receive discharge.

Part I.C.1.c Organizational Chart

PDD Requirement: Part I.C.1.c Organizational chart indicating responsibility over applicable departments by the legal contact.

Legal Contact: (receives all legal documentation pertaining to the permit certification)
Shane Hale, Town Manager

Facility Contact: (contacted for general inquiries regarding the facility)
Janine Hegeman, Stormwater Program Coordinator

Billing Contact: (receives the invoice pertaining to the permit certification)
Janine Hegeman, Stormwater Program Coordinator

CDPS Permit Holder:
Shane Hale, Town Manager

Any changes in contact must be provided to the Division on a Change of Contact form. This form is available on the Division's website at www.coloradowaterpermits.com.

Link to Town's Org Chart: <T:\HR\Organization Chart> This chart is updated monthly.

Part I.D. Public Involvement/Participation

Part I.D.1.a.Public Involvement and Participation Process

Program Requirements (Part I.D.1)	Recordkeeping (Part I.D.2)	Compliance Schedule
The permittee must implement and document a Public Involvement and Participation process that complies with state and local public notice requirements for actions conducted, when applicable, to comply with this permit. The following requirements apply: a. The permittee must follow its own public notice requirements to provide opportunities for public involvement that reach a majority of citizens within the permittee's jurisdiction through the notification process.	a. Copies of the documents used to provide public notice and any public comment received as part of the public notice process.	None given.

PDD Requirement: Part I.D.3.a. A list of citation(s) and location(s) of the written procedures used for the permittee's public notice process.

Title	Document Location
Town of Windsor Home Rule Charter – Article IV – Town Board Procedures 4.1 Town Meetings	https://library.municode.com/co/windsor/codes/chapter_and_municipal_code?nodeId=TOWIHORUCH_ARTIVTO_BOPR_4.1ME

Town of Windsor Home Rule Charter – Article IV – Town Board Procedures 4.5 Meetings to be Public; Executive Sessions	https://library.municode.com/co/windsor/codes/chart er and municipal code?nodeId=TOWIHORUCH_ARTIVTOBOPR_4.5MEBEPUEXSE
Town of Windsor Home Rule Charter – Article IV – Town Board Procedures 4.10 Ordinances-Adoption Procedures	https://library.municode.com/co/windsor/codes/charter and municipal code?nodeId=TOWIHORUCH_ARTIVTOBOPR_4.10ORDOPR

Part I.D.1.b and c. Public Involvement and Participation Process

Program Requirements (Part I.D.1)	Recordkeeping (Part I.D.2)	Compliance Schedule
b. The permittee must provide a mechanism and processes to allow the public to review and provide input on the control measures. <u>At a minimum, the permittee must provide a statement on the permittee's web site that the PDD is publicly available for review and comment.</u> c. The permittee must have the ability to accept and respond (in accordance with permit requirements) to information submitted by the public, including information on illicit discharges or failure to implement or meet control measure requirements associated with applicable construction activities, applicable development sites, or municipal operations.	b. Documentation of the mechanism used to allow the public to provide input. c. Records of information submitted by the public in accordance with Part I.D.1.c and any actions the permittee took to address the information.	None given.

Part I.D.3.b. The website address containing the statement that the PDD is available for public review.

Town of Windsor: <http://windsorgov.com/1159/Federal-Stormwater-Program>

Part I.D.3.c. Mechanisms to accept, respond to, and maintain records of information submitted by the public.

Cartegraph (internal, record keeping) YourGov <http://windsorgov.com/yourgov>

Part I.E.1 Public Education and Outreach

Part I.E.1.c.i. Illicit Discharges:

Program Requirements (Part I.E.1)	Recordkeeping (Part I.E.1)	Compliance Schedule
i. The permittee must provide information to businesses and the general public regarding the permittee's prohibitions of and the water quality impacts associated with illicit discharges as part of the public education program. The permittee may incorporate the education and outreach to meet this requirement into the education and outreach strategies provided in accordance with Part I.E.1.a.ii. The information must include the following:	i. A written list of the targeted business(es) that are likely to cause an illicit discharge or improperly dispose of waste and the education and outreach activity for the targeted business(es).	Begin Implementation July 1, 2018 (applies to this entire section) COMPLETED December 1, 2018

Program Requirements (Part I.E.1)	Recordkeeping (Part I.E.1)	Compliance Schedule
(A) The permittee must determine the targeted businesses that are likely to cause an illicit discharge or improperly dispose of waste. At a minimum, the permittee must identify at least one type of business and a list of those businesses that fit the identified type of business. (B) The permittee must develop and implement at least one education and outreach activity to those businesses identified in Part I.E.1.a.i.(A). Educational materials and activities, individually or as a whole, must describe water quality impacts associated with illicit discharges and the improper disposal of waste, the behaviors of concern, and actions that the business can take to reduce the likelihood of illicit discharges and the improper disposal of waste.		

PDD Requirement: Part I.E.1.c.i. Illicit Discharges: A list of citation(s) and location(s) of the written procedures used to determine the targeted business(es), the outreach activity(ies) conducted, and the outreach distribution mechanism(s).

Title	Document Location
Replace once Auto shop flyer goes out	\\tow-fin\data\$\eng\COMMON\MS4 - Since 2017\MCMs\EDUCATION AND OUTREACH Part1.E.1\MATERIALS\UTILITY BILL INSERT
DRAFT Windsor IDDE Program	..\..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx

Part I.E.1.c.ii. Education and Outreach Activities:

Program Requirements (Part I.E.1.a)	Recordkeeping (Part I.E.1.b)	Compliance Schedule
ii. Education and Outreach Activities Table: Each year, the permittee must implement at least four education and outreach activities (bulleted items) and at least two must be from the Active and Interactive Outreach column. The activities can be the same from year to year or be different each year.	ii. Education and Outreach Activities: A written list of the targeted pollutant sources and/or pollutants, the target audience, and distribution mechanism for each activity and the following: (A) Dates the activities were implemented, including, as applicable, dates of events and the materials that were made available. (B) Documentation of the activities that were provided and/or made available and the dates of distribution. Signs, markers, or equivalent intended to be maintained for the permit term must be described with location information.	Begin Implementation January 1, 2018 COMPLETED December 1, 2018

PDD Requirement: Part I.E.1.c.ii. Education and Outreach Activities: A list of the activities from Table 1 selected for implementation for each calendar year.

Title	Document Location
EDUCATION AND OUTREACH TABLE 2018 Documentation	..\PUBLIC EDUCATION\Recordkeeping\2018 Documentation

Part I.E.1.c.iii. Nutrients:

Program Requirements (Part I.E.1)	Recordkeeping (Part I.E.1)	Compliance Schedule
iii. Nutrients: As part of their public education program, the permittee must specifically address the reduction of water quality impacts associated with nitrogen and phosphorus in discharges from the MS4. Permittees can meet the requirements of this section through contribution to a collaborative program to evaluate, identify, target, and provide outreach that addresses sources state-wide or within the specific region or watershed that includes the receiving waters impacted by the MS4 permittee's discharge. (A) The permittee must determine the targeted sources (e.g., residential, industrial, agricultural, or commercial) that are contributing to, or have the potential to contribute, nutrients to the waters receiving the discharge authorized under the MS4 permit. (B) The permittee must prioritize which targeted sources are likely to obtain a reduction in nutrient discharges through education. The permittee must distribute educational materials or equivalent outreach to the prioritized targeted sources. Educational materials or equivalent outreach, individually or as a whole, must describe stormwater quality impacts associated with nitrogen and phosphorus in stormwater runoff and illicit discharges, the behaviors of concern, and actions that the target source can take to reduce nutrients. The permittee may incorporate the education and outreach to meet this requirement into the education and outreach strategies provided in accordance with Part I.E.1.a.ii.	iii. Nutrients: A written list of the targeted sources that are contributing to, or have the potential to contribute nutrients to stormwater and the education and outreach activity for the targeted sources.	Part A: Completed by January 1, 2018 COMPLETED January 1, 2018 Part B: Begin implementation July 1, 2018. COMPLETED September 26, 2018

PDD Requirement: Part I.E.1.c.iii. Nutrients: A list of citation(s) and location(s) of the written procedures used to determine factors considered and the targeted sources, the prioritized targeted sources, the outreach activities conducted, and the outreach distribution mechanisms.

Title	Document Location
-------	-------------------

Stormwater_Nutrient Pollution 2018_Bill Insert_FINAL	..\PUBLIC EDUCATION\Recordkeeping\2018 Documentation
DRAFT Windsor IDDE Program	..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx

Part I.E.2. IDDE Program

Part I.E.2.c.i. Storm Sewer System Map

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
i. Storm Sewer System Map: The permittee shall maintain a current map of the location of all MS4 outfalls within the permit area, and the names and location of all state waters that receive discharges from those outfalls.	i. Storm Sewer System Map: The current map.	None given.

PDD Requirement- Part I.E.2.c.i. Storm Sewer System Map: A list of citation(s) and location(s) of the storm sewer system map and procedures for updating the map for new outfalls or expanded permit areas.

Title	Document Location
WING map	https://towco.maps.arcgis.com/home/webmap/viewer.html?webmap=26ecc3e24ebf44f0a8a728115275805f
DRAFT Windsor IDDE Program	..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx

Part I.E.2.c.ii. Regulatory Mechanism:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
ii. Regulatory Mechanism: The permittee's regulatory mechanism must: (A) Prohibit illicit discharges into the MS4; (B) Have a procedure to request access to property(ies), as necessary to implement the illicit discharges procedures, to include judicial action; and (C) Provide the permittee the legal ability to cease or require to be ceased and remove, or require and ensure the removal of, and impose penalties for all illicit discharges for the period from when the illicit discharge is identified until removed.	ii. Regulatory Mechanism: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2019

PDD Requirement- Part I.E.2.c.ii. Regulatory Mechanism: A list of the citation(s) and location(s) of the required elements of the regulatory mechanism, including a list of the associated program documents used to meet the regulatory mechanism requirements.

Title	Document Location
Municipal Code Chapter 13 Article V Sec. 13-5-50. - Illicit discharge prohibited; exemptions. DRAFT	

DRAFT Windsor IDDE Program	..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx

Part I.E.2.c.iii. Regulatory Mechanism Exemptions:

Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
iii. Regulatory Mechanism Exemptions: Procedures must be implemented to ensure that any exemptions, waivers, or variances included in the regulatory mechanism are applied in a manner that complies with the terms and conditions of this permit.	iii. Regulatory Mechanism Exemptions: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2019

PDD Requirement- Part I.E.2.c.iii. Regulatory Mechanism Exemptions: A list of the citation(s) and location(s) of regulatory mechanism elements that allow for exemptions and the documented procedures that confirm that any exemptions, waivers, and variances comply with the permit.

Title	Document Location
Municipal Code Chapter 13 Article V Sec. 13-5-50. - Illicit discharge prohibited; exemptions.	
DRAFT Windsor IDDE Program	..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx

Part I.E.2.c.iv. Tracing an Illicit Discharge:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
iv. Tracing an Illicit Discharge: The permittee must implement procedures to respond to reports/identification of illicit discharges...The permittee must document and implement procedures, including the tools needed, to trace the source of an illicit discharge when identified within the MS4.	iv. Tracing an Illicit Discharge: (A) The applicable program documents and procedures used to respond to reports/identification of illicit discharges.	Completed January 1, 2018

PDD Requirement: Part I.E.2.c.iv. Tracing an Illicit Discharge: (A) A list of citation(s) and location(s) of the written procedures for tracing an illicit discharge, including the citation(s) and location(s) of supporting documents.

Title	Document Location
DRAFT Windsor IDDE Program	..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx

Part I.E.2.c.iv. Tracing an Illicit Discharge:

Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
iv. Tracing an Illicit Discharge: The	iv. Tracing an Illicit Discharge:	Completed

Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
permittee must implement procedures to respond to reports/identification of illicit discharges...The permittee must document and implement procedures, including the tools needed, to trace the source of an illicit discharge when identified within the MS4.	(B) The permittee must maintain centralized recordkeeping systems of illicit discharge responses conducted by the permittee. Records maintained by other departments can be in different centralized recordkeeping systems. The centralized record keeping system must contain the information in Part 1.E.2.b.vi(A) below or provide a reference to where the information is maintained.	January 1, 2018

PDD Requirement: Part I.E.2.c.iv. Tracing an Illicit Discharge: (B) Documenting an Illicit Discharge: 1) A list of citation(s) and location(s) of the record keeping system(s) used to maintain the required information.

Title	Document Location
DRAFT Windsor IDDE Program	..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx
Illicit Discharge Investigations Spreadsheet	

PDD Requirement: Part I.E.2.c.iv. Tracing an Illicit Discharge: (B) Documenting an Illicit Discharge: 2) A list of citation(s) and location(s) of the written procedures used for documenting information on illicit discharge reports, including if applicable, identification of how information is consolidated between separate functional groups within the permittee's organization.

Title	Document Location

Part I.E.2.c.v. Discharges that could be Excluded from being effectively prohibited:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
v. Discharges that can be Excluded from being Effectively Prohibited: The following discharges do not need to be effectively prohibited and the permittee is not required to address the discharges as illicit discharges in accordance with the requirements of this permit. The permittee must list all discharges excluded from being effectively prohibited in their regulatory mechanism as an allowable non stormwater discharge. Any discharges listed below that are not listed in the permittee's regulatory mechanism must be effectively prohibited. See Part I.E.2.a.v.(A)-(Y)	v. Discharges that could be excluded from being effectively prohibited: (A) Copies of all required submittals to the Division. (B) Copies of the documents used to provide any required public notice and any public comment received as part of the public notice process.	Completed July 1, 2019 No Discharges identified

PDD Requirement: Part I.E.2.c.v. Discharges that could be Excluded from being effectively prohibited:

A list of citation(s) and location(s) of the written procedures for excluding discharges from being effectively prohibited and the discharges that have been excluded from being effectively prohibited.

Title	Document Location
Municipal Code Chapter 13 Article V Sec. 13-5-50. - Illicit discharge prohibited; exemptions.	
Windsor IDDE Program App A	..\..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx

Part I.E.2.c.vi. Removing an Illicit Discharge:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
vi. Removing an Illicit Discharge: When an illicit discharge is identified, the permittee must remove or require the removal of the source of the illicit discharge. The permittee must also cease or require the cessation of the illicit discharge. After the illicit discharge has been ceased, the permittee must also minimize surface contamination by removing or requiring the removal of surface residue or other type of pollutant source. The removal requirement can be met by notifying the Division through a written report when CDPS or NPDES general permit coverage is available for a discharge and the discharge is not subject to prohibitions against issuance of a permit in regulation 61.8(1). The permittee must also have written procedures for requiring cleanup from the operator and procedures for cleanup conducted by the permittee, when necessary, to remove materials associated with the illicit discharge.	vi. Removing an Illicit Discharge: (A) The information used by the permittee to identify repeat occurrences from the same responsible party concerning the same type of illicit discharge. The permittee must document and maintain records of each illicit discharge identified by the permittee that includes the following information, or identifies that the information is unknown or not applicable: 1) The date that the illicit discharge was reported to and/or identified by the permittee. 2) The date the permittee responded to the reported/identified illicit discharge. 3) The location of the illicit discharge. 4) Responsible party for the illicit discharge (if identified). 5) A description of the source and nature of the illicit discharge. 6) A description of how the source of the illicit discharge was eliminated/resolved. 7) Documentation of enforcement actions (if applicable).	Completed January 1, 2018

PDD Requirement: Part I.E.2.c.vi. Removing an Illicit Discharge: A list of citation(s) and location(s) of the written procedures for removing an illicit discharge, including the citation(s) and location(s) of supporting documents.

Title	Document Location
Windsor IDDE Program Section 4	..\..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx

Part I.E.2.c.vii. Enforcement Response:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
vii. Enforcement Response: The permittee must	vii. Enforcement Response: The	None given.

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
implement appropriate written enforcement procedures and actions to eliminate the source of an illicit discharge when identified/reported, discourage responsible parties from willfully or negligently repeating or continuing illicit discharges, and discourage future illicit discharges from occurring. The written procedures must address mechanisms for enforcement for all illicit discharges from the moment an illicit discharge is identified/reported until it is eliminated. The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the responsible party to ensure that findings of a similar nature are enforced upon consistently. Written enforcement procedures must include informal, formal, and judicial enforcement responses.	applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	

PDD Requirement: Part I.E.2.c.vii. Enforcement Response: A list of citation(s) and location(s) of the specific enforcement mechanisms available and written procedures for enforcement response, including the citation(s) and location(s) of supporting documents. The document(s) must detail the types of escalating enforcement responses the permittee will take in response to common violations and time periods within which responses will take place.

Title	Document Location
Windsor IDDE Program Section 5	..\..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx
Municipal Code Chapter 13 Article V Sec. 13-5-140. - Enforcement, abatement, remedies.	

Part I.E.2.c.viii. Priority Areas:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
viii. Priority Areas: The permittee must locate priority areas with a higher likelihood of having illicit discharges, including areas with higher likelihood of illicit connections. At a minimum, the priority areas must include areas with a history of past illicit discharges.	viii. Priority Areas: The map and/or list of priority areas.	Completed January 1, 2018

PDD Requirement: Part I.E.2.c.viii Priority Areas. A list of citation(s) and location(s) of the priority areas.

Title	Document Location
Windsor IDDE Program Section 2 and App E	..\..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx

Part I.E.2.c.ix. Training:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
ix. Training: The permittee must train applicable municipal staff to recognize and appropriately respond to illicit discharges observed during typical duties. The permittee must identify those who will be likely to make such observations and provide training to those individuals. The training must address how suspected illicit discharges will be reported/identified, general information for recognizing and responding to illicit discharges observed during typical duties, information on the sources and types of operations or behaviors that can result in an illicit discharge, and information on the location of priority areas.	ix. Training: Name and department of each individual trained, date of training, the type of training, and a list of topics covered.	None given.

PDD Requirement: Part I.E.2.c.ix Training. A list of citation(s) and location(s) of the training program and supporting documents.

Title	Document Location
Windsor IDDE Program Section 7	..\..\IDDE\Program Development\DRAFT Windsor IDDE Program.docx
Sign In Sheets	..\..\IDDE\Recordkeeping\Training\Sign in Sheets
Training Materials	..\..\IDDE\Recordkeeping\Training\Materials

Part I.E.3. Construction Sites**Part I.E.3.c.i. Exclusions:**

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
i. Exclusions: A) Construction Activities with R-Factor Waiver B) Activities for County Growth Areas: 1) Construction activities on sites that began as part of a plan of development prior to the effective date of this permit. 2) Large lot single family development... C) Activities for Growth Areas: 1) Facilities associated with oil and gas ...	i. Exclusion: Maintain records for activities covered under Part I.E.3.a.i(A) and Part I.E.3.a.i(B)(1)(2). Records must include the site name, owner name, location, completion date, project disturbed acreage, and reason for exclusion.	Completed July 1, 2019

PDD Requirement: Part I.E.3.c.i. Exclusions: A list of citation(s) and location(s) of regulatory mechanism(s) that allow for exclusions and supporting documents used to implement the process.

Title	Document Location
Example: Municipal Code Section 13.30.020 New construction and redevelopment.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code.

	S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping
Stormwater Construction Program Procedures, Section 1, Codes, Resolutions, and Ordinances.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping

Part I.E.3.c.ii. Regulatory Mechanism:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
ii. Regulatory Mechanism: (A) The ability to implement sanctions against entities responsible for applicable construction activities. (B) Require control measures to be implemented for all applicable construction activities from initial disturbance until final stabilization.	ii. Regulatory Mechanism: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2019

PDD Requirement: Part I.E.3.c.ii. Regulatory Mechanism: A list of the citation(s) and location(s) of the required elements of the regulatory mechanism, including a list of the associated program documents used to meet the regulatory mechanism requirements.

Title	Document Location
Example: Municipal Code Section 13.30.020 New construction and redevelopment.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping
Stormwater Construction Program Procedures, Section 1, Codes, Resolutions, and Ordinances.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping

Part I.E.3.c.iii. Regulatory Mechanism Exemptions:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
iii. Regulatory Mechanism Exemptions: Procedures must be implemented to ensure that any exemptions, waivers or variances included in the regulatory mechanism are applied in a manner that complies with the terms and conditions of this permit.	iii. Regulatory Mechanism Exemptions: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2019

PDD Requirement: Part I.E.3.c.iii. Regulatory Mechanism Exemptions: A list of the citation(s) and location(s) of regulatory mechanism elements that allow for exemptions and the documented procedures that confirm that any exemptions, waivers, and variances comply with the permit.

Title	Document Location
Example:	Example:

Municipal Code Section 13.30.020 New construction and redevelopment.	(website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping
Stormwater Construction Program Procedures, Section 1, Codes, Resolutions, and Ordinances.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping

Part I.E.3.c.iv. Control Measure Requirements:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
iv. Control Measure Requirements: The permittee's Construction Sites Program must address selection, installation, implementation, and maintenance of control measures that meet the requirements of Part I.B. Control measures must prevent pollution or degradation of state waters. Control measures must also be appropriate for the specific construction activity, the applicable pollutant sources, and phase of construction...Control measures must meet the minimum requirements below. (A) Appropriate control measures must be implemented prior to the start of construction activity, control potential pollutants during each phase of construction, and must be continued through final stabilization. Appropriate structural control measures must be maintained in operational condition. (B) Control measures must be selected, designed, installed, implemented, and maintained to provide control for all potential pollutants...at a minimum...(see the list of 12 in permit)	iv. Control Measure Requirements: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	None given.

PDD Requirement: Part I.E.3.c.iv. Control Measure Requirements: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee requires operators to meet the requirements in Part I.E.3.a.iv. A list of the citation(s) and location(s) of supporting documents, including any documents that provide control measure design considerations, criteria, or standards.

Title	Document Location
Example: Municipal Code Section 13.30.020 New construction and redevelopment.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping
Stormwater Construction Program Procedures, Section 2, Standards and Requirements.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Construction

Program\Recordkeeping

Part I.E.3.c.v. Site Plans:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
v. Site Plans: (A) Renewal Permittees: For the time period between the effective date of this permit and the date by which a renewal permittee meets the conditions in Parts I.E.3.a.v (B) through (C), the renewal permittee must continue to implement ... in accordance with the terms and conditions of the previous permit.	None given.	None given.
v. Site Plans: (B) Site Plan Requirement: The permittee must require operators to develop site plan(s) that locate (if applicable) and identify all structural and non-structural control measures for the applicable construction activities. The site plan(s) must contain installation and implementation specifications or a reference to the document with installation and implementation specifications for all structural control measures. A narrative description of non-structural control measures must be included in the site plan(s).	v. Site Plans: Copy of the final site plan reviewed to meet the initial site plan review requirement, and confirmation of the permittee's review and acceptance.	Completed July 1, 2019
v. Site Plan (C) Initial Site Plan Review: The permittee must implement site plan review for all applicable construction activities prior to the start of construction activities. The waiver, however, does not apply to the requirements of Part I.E.3.a.v(A). Initial site plan review shall include the following: 1) Confirmation that the site plan includes appropriate control measures for all stages of construction, including final stabilization. 2) Confirmation that the control measures meet the requirements in Part I.E.3.a.iv. 3) Confirmation that the site plan meets the requirements in Part I.E.3.a.v(A).	v. Site Plans: Copy of the final site plan reviewed to meet the initial site plan review requirement, and confirmation of the permittee's review and acceptance.	Completed July 1, 2019

PDD Requirement: Part I.E.3.c.v. Site Plans: (A) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee requires operators to develop, site plans, including the citation(s) and location(s) of supporting documents.

Title	Document Location
Example: Municipal Code Section 13.30.020 New construction and redevelopment.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping
Stormwater Construction Program Procedures, Section 3, Site Plan Requirements.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Construction

	Program\Recordkeeping
<i>PDD Requirement: Part I.E.3.c.v. Site Plans: (B) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee conducts initial site plan reviews, including the citation(s) and location(s) of supporting documents.</i>	
Title	Document Location
Example: Stormwater Construction Program Procedures, Section 3, Site Plan Requirements, Checklist for Construction Stormwater Plan Review	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping

Part I.E.3.c.vi. Site Inspection:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
vi. Site Inspection: (A) (B) Site Inspection Frequency Exclusion: The permittee is only required to conduct inspections if there are observations or reports of discharges of sediment from disturbed areas: 1) Exclusions: (a) Individual Homes in a Residential Subdivision- Finished Home. (b) Individual Homes in a Residential Subdivision-Unfinished Home (c) Winter Conditions (C) Routine Inspection: A routine inspection must be conducted at least once before final stabilization. Routine inspections do not apply to sites eligible for other inspection frequencies in accordance with this section (Part I.E.3.a.vi). (45 day assessment of control measures, pollutant sources and discharge points) (D) Reduced Site Inspection: Reduced site inspections must occur at the frequency and include the scope indicated below for each type of site: 1) Inactive Site Inspection 2) Stormwater Management System Administrator's Program Inspection 3) Staff Vacancy 4) Indicator Inspection (E) Compliance Inspection	(A) Routine Site Inspection or (B) Reduced Site Inspection: Inspection date, Name of inspector, Site identification, Inspection results including the location of any illicit discharges, failure to implement control measures, and inadequate control measures. The inspection results should also list (not locate) any control measures requiring routine maintenance, If the inspection is conducted in lieu of a compliance inspection, identification of any inadequate control measures that have not been resolved from the previous inspection, Type of inspection (C) Compliance Inspection: Inspection date, Name of inspector, Site identification, Inspection results including any inadequate control measures that have not been resolved from the previous inspection, Type of inspection (D) Operator Compliance Inspection: The report must contain the following: Inspection date, Name of the operator inspector, Site identification, Inspection results including photos of the new or additional control measure to resolve issued from the previous inspection and any inadequate control measures that have not been resolved from the previous inspection.	Completed July 1, 2019

PDD Requirements: Part I.E.3.c.vi. Site Inspection: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for conducting site inspections, including the citation(s) and location(s) of supporting documents that describe the following: (A) The process for determining, implementing, and documenting the inspection frequencies. (B) The process for inspection follow-up, including determining, implementing, and documenting the nature of the follow-up action. (C) The process and tools used for documenting inspections.

Title	Document Location
Example: Stormwater Construction Program Procedures, Section 4, Stormwater Inspection Procedures.	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping

Part I.E.3.c.vii. Enforcement Response:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
vii. Enforcement Response: Implement appropriate enforcement procedures and actions to meet the requirements of Part I.E.3. (A) The permittee must have processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measure requirements. (B) The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the violator to ensure that findings of a similar nature are enforced upon consistently. Enforcement procedures must include informal, formal, and judicial enforcement responses.	vii. Enforcement Response: The applicable codes, resolutions, ordinances and program documents used to meet the permit requirements. Maintain records of the enforcement response.	Part I.E.3.a.vii (B) Completed July 1, 2019

*PDD Requirement: Part I.E.3.c.vii. Enforcement Response: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for enforcement response. The document(s) must detail the types of escalating enforcement responses the permittee will take in response to common violations and time periods within which responses will take place, including as a minimum:
(A) Construction commencing without site plan review in accordance with I.E.3.a.vi.
(B) Control measures not maintained in operational condition at time of permittee inspection, including sites that have temporarily shut down construction activities.
(C) Uncorrected finding(s) from previous inspections.
(D) Failure to implement a control measure for a pollutant source or inadequate control measure resulting in a discharge of pollutants from the applicable construction site or to the MS4.*

Title	Document Location
Example: Municipal Code Section 13.30.020 New construction and redevelopment.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Construction

	Program\Recordkeeping
Stormwater Construction Program Procedures, Section 5, Enforcement.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping

Part I.E.3.c.viii. Training:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
viii. Training: The permittee must provide information to operators of applicable construction activities as necessary to ensure that each operator is aware of the permittee's applicable requirements, including controlling pollutants such as trash. The training must also include information on trash as a pollutant source.	viii. Training: The applicable mechanism or program documents used to train construction operators.	None given.

PDD Requirement: Part I.E.3.c.viii. Training: A list of citation(s) and location(s) of the training program and supporting documents.

Title	Document Location
Example: Stormwater Construction Program Procedures, Section 6, Training.	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping

Part I.E.3.c.ix. For Applicable Construction Activities that Overlap Multiple Permit Areas:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
ix. For Applicable Construction Activities that Overlap Multiple Permit Areas when a written agreement is in place with a co-regulating MS4 permittee: (A) Control measure requirements may be imposed on the operator in accordance with the requirements of a co-regulating MS4 permittee pursuant to the written agreement. (B) Site plan review/acceptance and site inspection actions may be conducted by a co-regulating MS4 permittee to meet the requirement of the permit.	ix. For Applicable Construction Activities that Overlap Multiple Permit Areas: Copies of any written agreements between co-regulating MS4 permittees when required by Part I.E.3.a.ix.	None given.

PDD Requirement: Part I.E.3.c.ix. For Applicable Construction Activities that Overlap Multiple Permit Areas: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee meets all permit requirements in Part I.E.3 for construction activities for which the permittee is the owner or operator, if different than procedures for private sites.

Title	Document Location
Example:	Example:

Stormwater Construction Program Procedures, Section 3, Site Plan Requirements. Section 4, Stormwater Inspection Procedures Section 5, Enforcement	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Construction Program\Recordkeeping
--	--

Part I.E.4. Post-Construction Stormwater Management in New Development and Redevelopment

Part I.E.4.c i. Excluded Sites:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
i. Excluded Projects: Permittees may exclude the following from the requirements of an applicable development project. (A) "Pavement Management Projects" (B) Excluded Roadway Redevelopment (C) Excluded Existing Roadway Areas (D) Aboveground and Underground Utilities (E) Large Lot Single Family Projects (F) Non-Residential and Non- Commercial Infiltration Conditions (G) Sites with Land Disturbance to Undeveloped Land that will Remain Undeveloped (H) Stream Stabilization Sites (I) Trails (J) Oil and Gas Exploration (K) County Growth Areas:	i. Excluded Sites: Maintain records for activities covered under Part I.E.4.a.i. Records must include the site name, owner name, location, completion date, project acreage, reason for exclusion, and any information required below. (A) Pavement Management Projects – The acreage of the excluded impervious area for rehabilitation and reconstruction of pavement that are not maintenance sites. (B) Excluded Roadway Redevelopment – The acreage of the excluded impervious area. (C) Excluded Existing Roadway Areas for Roadway Redevelopment – The acreage of the excluded impervious area. (D) Non-Residential and Non-Commercial Infiltration Conditions – The acreage of the excluded impervious area. (E) Sites with Land Disturbance to Undeveloped Land that will Remain Undeveloped Redevelopment – The acreage of the excluded impervious area. (F) Stream Stabilization Sites Redevelopment – The acreage of the excluded impervious area. (G) Trails – The acreage of the excluded impervious area.	Completed July 1, 2020

PDD Requirement: Part I.E.4.c i. Excluded Sites: A list of citation(s) and location(s) of regulatory mechanism(s) that allow for exclusions and supporting documents used to implement the process.

Title	Document Location
Example: Municipal Code Section 13.30.030 Newly created or existing BMP management.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

Stormwater Post Construction Program Procedures, Section 1, Codes, Resolutions, and Ordinances.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction \Recordkeeping
---	--

Part I.E.4.c ii. Regulatory Mechanism:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
ii. Regulatory Mechanism: To the extent allowable under state or local law, implement a regulatory mechanism to meet the requirements in Part I.E.4.a., including: (A) Require control measures to be implemented for all applicable development sites. (B) Enforce the conditions of the exclusions above if applicable. (C) Require the long-term operation and maintenance of control measures . (D) Ensure that mechanisms are in place as necessary to meet this requirement for control measures used to meet the requirements of this permit by an applicable development site in the permit area that are located outside of the jurisdictional control of the permittee. (E) Implement sanctions against entities responsible for applicable development sites and for the long-term operation and maintenance of the control measures.	ii Regulatory Mechanism: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2020

PDD Requirement: Part I.E.4.c ii. Regulatory Mechanism: A list of the citation(s) and location(s) of the required elements of the regulatory mechanism, including the section of the regulatory mechanism used for enforcement activities. A list of the associated program documents used to meet the regulatory mechanism requirements.

Title	Document Location
Example: Municipal Code Section 13.30.030 Newly created or existing BMP management.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping
Stormwater Post Construction Program Procedures, Section 1, Codes, Resolutions, and Ordinances.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

Part I.E.4.c iii. Regulatory Mechanism Exemptions:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
iii. Regulatory Mechanism Exemptions: Procedures must be implemented to ensure that any exclusions, exemptions, waivers, and variances included in the	iii. Regulatory Mechanism Exemptions: The applicable codes, resolutions, ordinances, and program	Completed July 1, 2020

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
regulatory mechanism are applied in a manner that complies with the terms and conditions of this permit.	documents used to meet the permit requirements.	

PDD Requirement: Part I.E.4.c iii. Regulatory Mechanism Exemptions: A list of citation(s) and location(s) of regulatory mechanism elements that allow for exemptions. A list of the documented procedures that confirm that any exemptions, waivers, and variances comply with the permit.

Title	Document Location
Example: Municipal Code Section 13.30.030 Newly created or existing BMP management.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping
Stormwater Post Construction Program Procedures, Section 1, Codes, Resolutions, and Ordinances.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

Part I.E.4.c.iv. Control Measure Requirements:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
iv. Control Measure Requirements: The permittee's requirements and oversight for applicable development sites must be implemented to address the selection, installation, implementation, and maintenance of control measures in accordance with requirements in Part I.B. The "base design standard" is the minimum design standard for new development and redevelopment. The control measures for applicable development sites shall meet one of the following base design standards listed below: (A) WQCV Standard (B) Pollutant Removal Standard (C) Runoff Reduction Standard (D) Applicable Development Site Draining to a Regional WQCV Control Measure (E) Applicable Development Site Draining to a Regional WQCV Facility (F) Constrained Redevelopment Sites Standard (G) Previous Permit Term standard	iv. Control Measure Requirements: The applicable codes, resolutions, ordinances and program documents used to meet the permit requirements, including the procedures to determine which design standard applies to each applicable development site and the design specifications for each design standard (if applicable).	Completed July 1, 2020

PDD Requirement: Part I.E.4.c.iv. Control Measure Requirements: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee requires operators to meet the requirements in Part I.E.4.v, including any documents that provide control measure design considerations, criteria, or standards.

Title	Document Location
-------	-------------------

Example: Municipal Code Section 13.30.030 Newly created or existing BMP management.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping
Stormwater Post Construction Program Procedures, Section 2, Standards and Requirements.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

Part I.E.4.c.v. Site Plan Requirements:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
v. Site Plans (A) Site Plan Requirements: Site plans that include control measures for the applicable development projects must include the following: 1) Design details for all structural control measures implemented to meet the requirements of Part I.B.4. 2) A narrative reference for all non-structural control measures for the project, if applicable. 3) Documentation of operation and maintenance procedures to ensure the long term observation, maintenance, and operation of the control measures. The documentation shall include frequencies for routine inspections and maintenance activities. 4) Documentation regarding easements or other legal means for access of the control measure sites for operation, maintenance, and inspection of control measures. (B) Site Plan Review: The permittee shall implement a site plan review process for applicable development sites. The site plan review shall include the following minimum requirements designed to prevent inadequate control measures from being implemented or modified: 1) Confirmation that control measures meet the requirements of Part I.E.4. 2) Confirmation that site plans meet the requirements of Part I.E.4.a.v. (C) The permittee must meet the requirements	v. Site Plans: Copies of final site plans for all applicable development sites. (A) For all sites for which the stormwater runoff going to a regional WQCV control measure or facility is applied: The name and location of the regional WQCV control measure or facility. (B) For all sites for which the constrained redevelopment sites standard is applied: The site plan and the permittee's written determination that it is not practicable to meet any of the other design standards in Parts I.E.4.a.iv(A)(B) or (C). The permittee's written determination shall include an evaluation of the applicable redevelopment sites ability to install a control measure without reducing surface area covered with the structures. (C) For all sites for which the previous permit term standard is applied: Date of the start of the permittee's review process, the permittee's approval of the site plan (if applicable), the control measure implementation, and any modifications to the site plan. (D) The applicable documentation for the operation and maintenance procedures that ensure the long-term observation, maintenance, and operation of control measures, including routine inspection frequencies and maintenance activities. (E) The applicable documentation regarding easements or other legal means for access to the control measure for	Completed July 1, 2020

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
of Part I.E.4.a.v(A) and (B) before approving any modifications to the site plan.	operation, maintenance, and inspection of control measures.	

PDD Requirement: Part I.E.4.c.v. Site Plan Requirements: (A) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee requires operators to develop, maintain, and modify site plans, including the citation(s) and location(s) of supporting documents.

Title	Document Location
Example: Municipal Code Section 13.30.030 Newly created or existing BMP management.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping
Stormwater Post Construction Program Procedures, Section 2, Standards and Requirements.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

PDD Requirement: Part I.E.4.c.v. Site Plan Requirements: (B) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee conducts initial site plan reviews, including the citation(s) and location(s) of supporting documents.

Title	Document Location
Example: Stormwater Post Construction Program Procedures, Section 3, Plan Review Checklist and Procedure.	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

PDD Requirement: Part I.E.4.c.v. Site Plan Requirements: (C) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has operation and maintenance procedures that ensure the long-term observation, maintenance, and operation of control measures, including routine inspection frequencies and maintenance activities.

Title	Document Location
Example: Municipal Code Section 13.30.030 Newly created or existing BMP management.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping
Stormwater Post Construction Program Procedures, Section 4, Long-Term Operation and Maintenance.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

PDD Requirement: Part I.E.4.c.v. Site Plan Requirements:(D) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has procedures to ensure that structural control measures have easements or other legal means for access to the control measure for operation, maintenance, and inspection of control measures.

Title	Document Location
-------	-------------------

Example: Municipal Code Section 13.30.030 Newly created or existing BMP management.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping
Stormwater Post Construction Program Procedures, Section 2, Standards and Requirements.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

Part I.E.4.c.vi. Construction Inspection and Acceptance and Post Acceptance Oversight Site Inspection:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
vi. Construction Inspection and Acceptance: The permittee must implement inspection and acceptance procedures to ensure that control measures are installed and implemented in accordance with the site plan and include the following: (A) Confirmation that the completed control measure operates in accordance with the approved site plan. (B) All applicable development sites must have operational permanent water quality control measures at the completion of the project. In the case where permanent water quality control measures are part of future phasing, the permittee must have a mechanism to ensure that all control measures will be implemented, regardless of completion of future phases or site ownership. In such cases, temporary water quality control measures must be implemented as feasible and maintained until removed or modified. All temporary water quality control measure must meet one of the design standards in Part I.E.4.a.iv.	vi. Construction Inspection and Acceptance: Maintain records of inspections conducted during construction and the permittee's acceptance of the control measure(s).	Completed July 1, 2020

PDD Requirement: Part I.E.4.c.vi. Construction Inspection and Acceptance and Post Acceptance Oversight Site Inspection: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for inspections, including the citation(s) and location(s) of supporting documents that describe the following:

(A) The process and tools used for documenting inspections.

(B) The process for inspection follow-up, including determining, implementing, and documenting the nature of the follow-up action.

(C) The process for determining, implementing, and documenting Post Acceptance Site Inspection frequencies if different than once a permit term.

(D) Procedures for determining ownership through property records, as needed.

Title	Document Location
Example: Stormwater Post Construction Program Procedures,	Example: (Stormwater Management Files) A PDF of the Manual

Section 4, Long-Term Operation and Maintenance .	S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping
--	---

Part I.E.4.b vi. Post Acceptance Oversight:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
vii. Long-Term Operation and Maintenance and Post Acceptance Oversight: The permittee must implement written procedures which include the following minimum requirements to ensure adequate long-term operation and maintenance of control measures to ensure that they are functioning as designed: (A) Procedures to enforce the requirements for the owner or operator to implement and maintain control measures when necessary. (B) Oversight shall include inspections of field conditions and control measures to confirm conformity with the site plan, identify any inadequate control measures, and identify control measures requiring routine maintenance, such as trash removal. All functional elements of control measures shall be inspected at a frequency determined by the permittee. Inspections of each control measure shall occur at least once during the permit term except when Inspections for oversight of control measures on individual residential lots serving only the individual lot shall occur as determined by the permittee and may rely on alternative oversight process.	vii. Post Acceptance Oversight: Maintain inspection records with the following minimum information for all inspections conducted to meet the minimum inspection frequency: (A) Inspection date (B) Name of inspector (C) Control measure identification, including the type of control measure (D) Owner of the control measure (E) Confirmation that the control measure operates in accordance with the approved plan (F) Inspection findings including, when present: inadequate control measures and control measures requiring routine maintenance (G) Confirmation that the control measure is operating as designed or a list of follow up actions Permittees only have to keep the inspection records for the once a permit term inspection. Permittees do not have to keep records for inspections conducted more frequently than required by this permit.	Completed July 1, 2020

PDD Requirement: No PDD requirement

Part I.E.4.c.vii. Enforcement Response:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
viii. Enforcement Response: Implement appropriate written enforcement procedures and actions to meet the requirements of Part I.E.4. The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the violator to ensure that findings of a similar nature are enforced upon consistently. The permittee must have processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators	viii. Enforcement Response: Maintain records of the enforcement response.	Completed July 1, 2020

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
of control measure requirements. Written enforcement procedures must include informal, formal, and judicial enforcement responses.		

PDD Requirement: Part I.E.4.c.vii. Enforcement Response: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for enforcement response. The document(s) must detail the types of escalating enforcement responses the permittee will take in response to common violations and time periods within which responses will take place.

Title	Document Location
Example: Municipal Code Section 13.30.030 Newly created or existing BMP management.	Example: (website) The municipal code section http://www.codepublishing.com/CO/Glendale/#!/Glendale13/Glendale1330.html#13.30.040 (Stormwater Management Files) A PDF of the code. S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping
Stormwater Post Construction Program Procedures, Section 6, Enforcement.	(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

Part I.E.4.c.viii. Tracking:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
ix. Tracking: Implement and document procedures and mechanisms to track the location of and adequacy of operation of control measures implemented in accordance with the program.	ix. Tracking: Maintain records of the required control measure and regional WQCV control measure and facilities information.	None given.

PDD Requirement: Part I.E.4.c.viii. Tracking: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for maintaining the required tracking information.

Title	Document Location
Example: Stormwater Post Construction Program Procedures, Section 7, Tracking Procedures.	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

Part I.E.4.c.ix. Training:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
x. Training: Train applicable municipal staff to inspect the control measures in accordance with the permittee's procedures in Part I.E.4.a.vi and vii. The permittee must	x. Training: Name and title of each individual trained, date of training, the type of training, and	None given.

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
identify those who will be likely to inspect the control measures and provide training to those individuals. The training must also include information on trash and its effects on water quality.	a list of topics covered.	

PDD Requirement: Part I.E.4.c.ix. Training: A list of citation(s) and location(s) of the training program and supporting documents.

Title	Document Location
Example: Stormwater Post Construction Program Procedures, Section 8, Training.	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

Part I.E.4.c.x. For Applicable Construction Activities that Overlap Multiple Permit Areas:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
xi. For applicable development sites that overlap multiple permit areas (co-regulating MS4 permittee), when a written agreement is in place with a co- regulating MS4 permittee the following is required: (A) Control measure requirements may be imposed on the operator in accordance with the requirements of a co-regulating MS4 permittee pursuant to the written agreement. This requirement does not apply to applicable development sites in the permit area of the Colorado Department of Transportation. (B) Site plan review/acceptance and site inspection actions may be conducted by a co- regulating MS4 permittee to meet the requirement of the permit.	xi. For Applicable Construction Activities that Overlap Multiple Permit: Copies of any written agreements between co-regulating MS4 permittees when required by Part I.E.4.a.xi.	None given.

PDD Requirement: Part I.E.4.c.x. For Applicable Construction Activities that Overlap Multiple Permit Areas: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee meets all permit requirements in Part I.E.4 for applicable development site for which the permittee is the owner or operator, if different than procedures for private sites.

Title	Document Location
Example: Stormwater Post Construction Program Procedures, Section 2, Standards and Requirements.	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Post Construction\Recordkeeping

Part I.E.5 Pollution Prevention/Good Housekeeping for Municipal Operations

Part I.E.5.c.i. Municipal Facility Runoff Control Measures:

Program Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
ii. Municipal Facility Runoff Control Measures: (A) The permittee shall implement control measures to prevent or reduce potential discharges of pollutants to the MS4 from the applicable municipal facilities listed below. New written procedures shall be developed and implemented for any new applicable municipal facilities prior to associated pollutant sources being present. 1) Vehicle maintenance facilities 2) Asphalt and concrete batch plants which are not already authorized by a separate CDPS or NPDES discharge permit 3) Solid-waste transfer stations where waste and recyclables are briefly held before further transport 4) Outdoor storage yards with exposed stockpiles of materials, including stockpiles of road deicing salt, salt and sand, sand, and rotomill material (B) The permittee shall implement the following categories of control measures as necessary to prevent or reduce the pollutant sources present: 1) Preventive maintenance 2) Good housekeeping 3) Spill prevention and response procedures 4) Structural control measures 5) Evaluation of non-stormwater discharges 6) Employee training	i. Municipal Facility Runoff Control Measures: For each applicable municipal facility: (A) Facility identification (B) Description of all pollutant sources (C) Control measures implemented, including installation and implementation specifications and information (D) Staff (position title) responsible for implementation of control measures and associated documentation (E) Description of control measures implemented for bulk storage structures.	Completed July 1, 2020

PDD Requirement: Part I.E.5.c.i. Municipal Facility Runoff Control Measures: A list of citations(s) and locations(s) of the following:

(A) List of applicable municipal facilities.

(B) List of facilities the permittee owns or operates that are subject to separate CDPS or NPDES permit coverage under the state's general stormwater permits for discharges of stormwater associated with industrial activity.

(C) Citation(s) and location(s) of supporting documents of the municipal facility runoff control measures, including documents that provide control measure installation and implementation specifications and information.

Title	Document Location
Example: Pollution Prevention/Good Housekeeping for Municipal Operations Program Procedures, Section 1, Applicable Facilities; Section 3, Facility SOPs	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Good Housekeeping\Recordkeeping

Part I.E.5.c. ii. Municipal Facility Runoff Control Measures:

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
ii. Municipal Facility Runoff Control Measures: (C) The permittee shall implement written	i. Municipal Facility Runoff Control Measures: (F) Maintain inspection records with the	Completed July 1, 2020

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
municipal facility inspection procedures, which must at a minimum include the following: 1) An annual visual inspection of each applicable municipal facility. 2) A verification that the written procedures and documentation reflect current conditions. 3) Observation of locations and areas where stormwater from municipal facilities are discharged off-site; or discharged to waters of the state, or to a storm sewer system that drains to waters of the state. 4) Observation of facility conditions, including pollutant sources and control measures, to identify inadequate control measure and control measure requiring maintenance.	following minimum information for all inspections conducted to meet the minimum inspection frequency: 1) Inspection date 2) Name of inspector 3) Applicable facility identification 4) Inspection findings including, when present: inadequate control measures, control measures requiring routine maintenance, and if there was any evidence of polluted discharges from the facility 5) Confirmation and documentation that the control measures are adequate or a list of follow up actions	

PDD Requirement: Part I.E.5.c.i. Municipal Facility Runoff Control Measures: (D) Citation(s) and location(s) of supporting documents for inspections, including the written procedures for conducting inspections.

Title	Document Location
Example: Pollution Prevention/Good Housekeeping for Municipal Operations Program Procedures, Section 1, Applicable Facilities and Requirements; Section 2, Facility Inspections	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Good Housekeeping\Recordkeeping

Part I.E.5.c. ii. Municipal Operations and Maintenance Procedures:

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
iii. Municipal Operations and Maintenance Procedures: The permittee shall implement control measures that prevent or reduce discharges for applicable municipal operations that are not covered under Part I.E.5.a.ii(A). New written procedures shall be developed and implemented for any new applicable municipal operations prior to associated pollutant sources being present. (A) At a minimum, implementation of the procedures must prevent or reduce stormwater pollution from the following operations conducted by the permittee: 1) Operation and maintenance of streets, roads, highways 2) Operation and maintenance of municipal parking lots 3) Operations at maintenance and storage yards 4) Operations at maintenance shops with outdoor storage areas 5) Operation and maintenance of snow dumps/snow disposal areas	ii. Municipal Operations and Maintenance Procedures: Control measures implemented, including installation and implementation information.	None given.

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
6) Operation and maintenance of sites used for temporary storage of sweeper tailings or other waste piles 7) Park and open space maintenance 8) Building maintenance 9) New construction of municipal facilities 10) Application of pesticides, herbicides, and fertilizers 11) Large outdoor festivals and events 12) Construction activities not subject to the requirements of Part I.E.3 13) Maintenance, replacement, and construction of utilities and the storm system, including operations, such as storage, dewatering, or disposal, associated with removal of sediment, debris, and other pollutant sources from the MS4, including removal of materials, such as trash, from control measures implemented in accordance with Part I.E.4, unless covered by a separate CDPS or NPDES permit.		

PDD Requirement: Part I.E.5.c.ii. Municipal Operations and Maintenance Procedures: A list of citations(s) and locations(s) of the following:

(A) List the municipal operations to which this program applies.

(B) Citation(s) and location(s) of supporting documents, including documents that provide control measure installation and implementation specifications and implementation.

Title	Document Location
Example: Pollution Prevention/Good Housekeeping for Municipal Operations Program Procedures, Section 1, Applicable Facilities; Section 4, Municipal Operations and Maintenance SOPs	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Good Housekeeping\Recordkeeping

Part I.E.5.c.iv. Nutrient Source Reductions:

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
iv. Nutrient Source Reductions: The permittee shall implement a municipal operations program that has the ultimate goal of preventing or reducing nitrogen and phosphorus in stormwater runoff associated with the applicable municipal operations and facilities. (A) The permittee shall evaluate, identify, and document the municipal operations and facilities that are and/or have the potential to contribute nitrogen and phosphorus to the waters receiving the discharge authorized under this permit (identified municipal operations nutrient sources). The permittee is authorized to meet the requirements of this section through contribution to a collaborative program to evaluate, identify, and target	iii. Nutrient Source Reductions: Control measures implemented to prevent or reduce nitrogen and phosphorus from municipal operations, including installation and implementation information.	Completed July 1, 2020

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
sources state-wide or within the specific region or watershed that includes the receiving waters impacted by the permittee's discharge(s). At a minimum, the permittee shall include the storage and application of fertilizer, including subsequent stormwater or irrigation runoff from areas where fertilizer has been applied, as an identified municipal operations nutrient source if these operations were not covered under Part I.E.5.a.ii and iii.		

PDD Requirement: Part I.E.5.c.iii. Nutrient Source Reductions: A list of citations(s) and locations(s) of the method used to evaluate operations and facilities to identify sources of nitrogen and phosphorus discharges from the MS4 that can be controlled through the implementation of control measures.

Title	Document Location
Example: Nutrient Source Reduction Strategy Document	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Good Housekeeping\Recordkeeping

Part I.E.5.c.iv.Outdoor Bulk Storage:

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
v. Outdoor bulk storage structures, of more than 55 gallons, for petroleum products and any other liquid chemicals located at applicable municipal facilities must have control measures implemented that provide secondary containment or equivalent protection that contains all spills and prevents any spilled material from entering state waters. For the scenario of a single containment system serving multiple tanks, the containment system must have sufficient capacity to contain 10% of the volume of containers, or the volume of the largest container plus 10%, whichever is greater. Bulk storage on mobile refuelers that are subject to the authority and control of the U.S. Department of Transportation, as defined in the Memorandum of Understanding between the Secretary of Transportation and the Administrator of EPA, dated November 24, 1971 are not subject to the requirements of Part I.E.5.a.ii(A)(5). Before the implementation of such controls, the permittee shall implement practices, such as spill prevention and response, to prevent or reduce pollutants in runoff associated with bulk storage structures.	iv. Bulk Storage: Description of control measures implemented for bulk storage structures, if applicable.	Completed July 1, 2021

PDD Requirement: Part I.E.5.c.iv.Outdoor Bulk Storage: iv. Bulk Storage: A list of citations(s) and locations(s) of procedures to ensure that this requirement is met.

Title	Document Location
-------	-------------------

Example:

Pollution Prevention/Good Housekeeping for Municipal Operations Program Procedures, Section 1, Applicable Facilities and Requirements

Example:

(Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Good Housekeeping\Recordkeeping

Part I.E.5.c.v.Training:

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
vi. Training: Train applicable municipal staff to implement the Pollution Prevention/Good Housekeeping for Municipal Operations, including training for employees that will conduct inspections in accordance with Part I.E.5.a.ii(C). The permittee must identify those who will be likely to inspect the control measures and provide training to those individuals. The program must inform public employees responsible for operations with the potential to result in an illicit discharge about the permittee's prohibitions against, and potential impacts associated with, illicit discharges from municipal operations. The training must also include information on trash and its effects on water quality.	v. Training: Name and department of each individual trained, date of training, the type of training, and a list of topics covered.	None given.

PDD Requirement: Part I.E.5.c.v.Training: v. Training: A list of citation(s) and location(s) of the training program and supporting documents.

Title	Document Location
Example: Pollution Prevention/Good Housekeeping for Municipal Operations Program Procedures, Section 5, Training	Example: (Stormwater Management Files) A PDF of the Manual S:\Storm Water\PROGRAMS\Good Housekeeping\Recordkeeping

*Town of Windsor
Illicit Discharge Detection
and Elimination (IDDE)
Program*

Draft Revised

*3/2017, 9/2018, 10/2018,
11/2018, 12/2018*

July 1, 2019 (Proposed adoption date)

CDPS GENERAL PERMIT
COR0900000
MUNICIPAL SEPARATE STORM
SEWER SYSTEMS (MS4 – Phase II)

Certification Number: **COR090112**

Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Town Manager (printed): _____

Town Manager Signature: _____

Date: _____

Document Reviewed By (printed): _____ Title: Director of Engineering

Signature: _____

Date: _____

Document Reviewed By(printed): _____ Title: Director of Public Works

Signature: _____

Date: _____

Document Prepared By(printed): _____ Title: Storm Water Coordinator

Signature: _____

Date: _____

DOCUMENT REVISION LOG

Document # ID1	Title: IDDE Program	Print Date: [Date]
Revision # 0	Prepared By: Janine Hegeman	Date Prepared: 10/25/2018
Effective Date: [Date]	Reviewed By: [Reviewer's Name and Title]	Date Reviewed: [Date]
Effective Date: [Date]	Reviewed By: [Reviewer's Name and Title]	Date Reviewed: [Date]
Standard: CDPHE MS4 Permit Certification # COR090112	Approved By: [Approver's Name]	Date Approved: [Date]

Contents

INTRODUCTION	5
Illicit Discharges	5
SECTION 1: CODES, RESOLUTIONS, AND ORDINANCES (PART I.E.2.A.II AND III)	5
Chapter 13, Article V, Stormwater Quality	6
Allowed Non Stormwater Discharges	6
SECTION 2: MAPPING (PART I.E.2.A.I)	7
Locating Priority Areas (Part I.E.2.a.viii)	8
SECTION 3: TRACING AN ILLICIT DISCHARGE (PART I.E.2.A.IV; B.IV, C.IV.)	8
Tracing and Reporting Process	9
Unresolved Illicit Discharge Reporting	9
Physical Tracing Options	9
SECTION 4: REMOVING AN ILLICIT DISCHARGE (PART I.E.2.A.VI)	11
Illegal Connections from Homes and Businesses	11
Illegal Dumping/Discharges	11
SECTION 5: ENFORCEMENT (PART I.E.2.A.VII)	12
Informal Enforcement Response	13
Formal Enforcement Response	13
Judicial Enforcement Response	13
SECTION 6: TRAINING (PART I.E.2.A.IX)	14
Visual Observation Training (VOT)	14
Observation and Documentation Training (ODT)	14
Hazardous Materials Spill Response	15
SECTION 7: RECORD KEEPING (PART I.E.2.B.IV)	15
APPENDIX A: INTERNAL PROCESS FOR ALLOWING NON-STORMWATER DISCHARGES	16
APPENDIX B: GUIDANCE FOR REPORTING SPILLS UNDER THE COLORADO WATER QUALITY CONTROL ACT AND DISCHARGE PERMITS	18
APPENDIX C: GUIDANCE ON RESPONDING TO AN ILLICIT DISCHARGE	20
Response Flow Chart Guidance	21
APPENDIX D: LOW RISK POTABLE WATER GUIDANCE	22
APPENDIX E: LAND USES ASSOCIATED WITH PRODUCING ILLICIT DISCHARGES	28
APPENDIX F: ILLICIT DISCHARGE REPORT FORM	29
APPENDIX G: DEFINITIONS	30

INTRODUCTION

In order to fulfill the U.S. EPA National Pollution Discharge Elimination System (NPDES) requirements, The Town of Windsor is required to implement an Illicit Discharge Detection and Elimination (IDDE) program, as a part of the Town's Municipal Separate Storm Sewer System (MS4) permit. The Town's permit is certified through the Colorado Department of Public Health and Environment (CDPHE), and, as such, is subject to periodic auditing. The desired end state of the Town's Illicit Discharge Detection and Elimination Program is to prevent, to the greatest extent possible, any substance other than naturally occurring stormwater (see exceptions below) from entering the Town's storm sewer system.

Illicit discharges enter the MS4 through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains – also known as illicit connections) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by storm drains, and paint, used oil or other pollutants dumped directly into a drain). Illicit discharges can result in untreated discharges to the Cache la Poudre River. These discharges can contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria, to the river, and can negatively impact water users downstream. Water quality is degraded and can harm or threaten agriculture, aquatic life, wildlife, and human health.

This guidance has been created to assist Town of Windsor staff in locating priority areas with a higher likelihood of having illicit discharges, to educate staff on illicit discharge recognition, and the reporting of suspected illicit discharges as well as internal and external reporting requirements for bona fide illicit discharges.

Illicit Discharges

The term "illicit discharges" is defined in the permit as "Any discharges to an MS4 that is not composed entirely of stormwater except discharges specifically authorized by a CDPS or NPDES permit and discharges resulting from emergency firefighting activities."

There are many types of illicit discharges that, in accordance with the permit, need to be prohibited. Only the discharges listed in Part.I.2.a.v. of the permit can be excluded from being effectively prohibited (to be referenced as "allowed non stormwater discharges" from this point forward). (See Section 1 for a list of discharges that are "allowed non stormwater discharges" within the Town).

Section 1: Codes, Resolutions, and Ordinances (Part I.E.2.a.ii and iii)

To the extent allowable under state or local law, Town must implement a regulatory mechanism to meet the IDDE requirements outlined in the MS4 Permit. The Town must:

- 1) Prohibit illicit discharges into the MS4;
- 2) Have a procedure to request access to property(ies), as necessary to implement the illicit discharges procedures, to include judicial action; and
- 3) Provide the permittee the legal ability to cease and remove, or require cessation and removal, or require and ensure the removal of, and impose penalties for all illicit discharges for the period from when the illicit discharge is identified until removed.

The Town uses the following methods to meet the regulatory mechanism required by the permit:

Chapter 13, Article V, Stormwater Quality

The Town will enact a Stormwater Ordinance (Chapter 13, Article V) effective July 1, 2019. Section 13-5-50 of the ordinance specifically prohibits illegal discharges and allows for noncompliance remedies. The ordinance states, "No person shall discharge or cause to be discharged into the MS4 or watercourses any illicit discharge, including, but not limited to, the following:

- (1) Chemicals, petroleum products, paint, varnishes, solvents, oil and grease and other automotive fluids, pesticides, herbicides, and fertilizers, or other toxic materials;
- (2) Nonhazardous liquid, solid wastes and yard wastes;
- (3) Hazardous materials, sewage, fecal coliform and pathogens, dissolved and particulate metals;
- (4) Trash, refuse, rubbish, garbage, food wastes, pet wastes, litter, other discarded or abandoned objects, floatables and cleaning products;
- (5) Landscaping materials, sediment, lawn clippings, leaves, branches or other landscaping and yard debris;
- (6) Construction activities wastes and residues including, but not limited to, painting, paving, concrete placement, saw cutting, material storage and earthwork;
- (7) Wastes and residues that result from mobile washing operations; discharges from toilets; sinks; industrial processes; cooling systems; boilers; fabric cleaning; equipment cleaning; commercial vehicle cleaning and substances added to the storm drain to control root growth;
- (8) Any other material that is considered harmful to humans, animals, or aquatic life and its habitat."

Section 13-5-60 concerns illicit connections:

- (a) Generally. The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited. This prohibition expressly includes, without limitation, illicit connections made prior to the adoption of this Article, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (b) Cleaning of paved surfaces required. The owner of any paved parking lot, street or drive shall clean the pavement as necessary to reduce, to the maximum extent practicable, an illicit discharge of pollutants. Paved surfaces shall be cleaned by dry sweeping, wet vacuum sweeping, collection and treatment of wash water or other methods in compliance with this Article.

Allowed Non Stormwater Discharges

Per the Phase II MS4 Permit and the Town of Windsor's Stormwater Ordinance, the MS4 needs to address the following categories of non-stormwater discharges or flows (i.e., illicit discharges) only if the MS4 identifies them as significant contributors of pollutants to the small MS4 (which the Town does not):

- a) Agricultural stormwater runoff;
- b) Irrigation return flow;
- c) Landscape irrigation and lawn watering;
- d) Diverted stream flows;
- e) Rising groundwater;
- f) Uncontaminated groundwater infiltration to the storm drain system;
- g) Uncontaminated foundation and footing drains;
- h) Water from crawl space pumps;

- i) Air-conditioning condensation;
- j) Springs;
- k) Individual residential car washing;
- l) Flows from riparian habitats and wetlands;
- m) Dechlorinated swimming pool discharges in accordance with the CDPHE's Low Risk Discharge Guidance: Swimming Pools;
- n) Water from incidental street sweeping (including associated sidewalks and medians) and that is not associated with construction); and
- o) Discharges resulting from emergency firefighting activities.
- p) Uncontaminated pumped groundwater (Note: Discharges containing groundwater that comes into contact with construction activity is not considered "uncontaminated" due to the potential for sediment content.)
- q) Water line flushing in accordance with CDPHE's Low Risk Policy Discharge Guidance: Potable Water
- r) Discharges from potable water sources in accordance with CDPHE's Low Risk Discharge Guidance: Potable Water.
 - i. The potable water shall not be used in any additional process. Processes include, but are not limited to, any type of washing, heat exchange, manufacturing, and hydrostatic testing of pipelines not associated with treated water distribution systems.
 - ii. Charity car washes are allowed provided the activity follows the guidance under "Alternative Disposal Options" in the Low Risk Discharge Guidance Discharges of Potable Water document (Appendix D).
- s) Dye testing in accordance with the manufacturers recommendations
- t) Stormwater runoff with incidental pollutants
- u) Discharges authorized by a CDPS or NPDES permit
- v) Discharges that are in accordance with CDPHE's Low Risk Policy guidance documents or other Division policies and guidance documents where the Division has stated that it will not pursue permit coverage or enforcement for specified point source discharges.
- w) Discharges added to the list of "Discharges that can be Excluded from being Effectively Prohibited" through the process detailed in the CDPS General Permit for Stormwater Discharges Associated with MS4s.

The permit allows the Town to propose discharges to seek Division approval to allow the permittee to allow the discharges. Upon approval by the Division, the Town is not required to address the discharges as illicit discharges. The [SOP for Allowing Non-Stormwater Discharges](#) (Appendix A) is the process the Town uses to evaluate whether it will allow a non-stormwater discharge and submittal process to the Division for approval.

Section 2: Mapping (Part I.E.2.a.i)

The Phase II MS4 Permit requires the Town to "maintain a current map of the location of all MS4 outfalls within the permit area, and the names and location of all state waters that receive discharges from those outfalls." The permit defines a municipal separate storm sewer system outfall as "a point source...at the point where a municipal separate storm sewer discharges to state waters." The current outfall map is maintained [here](#) as a GIS layer on the Town's website.

The storm drain system map is updated periodically by IT/GIS when new connections to the system are made.

Locating Priority Areas (Part I.E.2.a.viii)

Many Town staff working in Public Works, Utility Operations, Code Compliance, Parks, and Engineering, spend a significant amount of time in the field and are familiar with the Town's infrastructure. Town staff typically find trash & debris in culverts during regular maintenance activities on MS4 conveyances and structures, noting the location and other information in **Cartegraph**. Town staff receive training to be aware of the potential of illicit discharges at the sites and activities listed in Appendix E, and how to report a discharge (See Section 6). Citizens' complaints and reports are also investigated and then tracked in **Cartegraph**. The Town is developing a "priority areas" map through this process. In the future, this map may be used to assist with decisions for capital improvements projects that involve the MS4.

Priority areas identified:

Using the guidelines provided above, the Town identified the following priority areas within the Town boundaries:

Residential areas

Section 3: Tracing an Illicit Discharge (Part I.E.2.a.iv; b.iv, c.iv.)

The permit does not require the Town to actively seek out unreported Illicit Discharges through techniques referred to as dry weather monitoring. However, the Town is required to identify and respond to illicit discharges observed during day-to-day normal work activities. Illicit discharges can be categorized as either direct or indirect.

- Examples of Direct Discharges:
 - Sanitary wastewater piping that is directly connected from a home to the storm drain system,
 - Materials (e.g., used motor oil, paint) that have been dumped illegally into a storm drain catch basin,
 - A shop floor drain that is connected to the storm drain system, and
 - A cross-connection between the sanitary sewer and the storm drain system.
- Examples of Indirect Discharges:
 - An old and damaged sanitary sewer line that is cracked and leaking sewage into a storm drain line, and
 - A failing septic system that is leaking into a storm drain line or causing surface discharge into the MS4.

Typical illicit surface discharges that may be observed by field personnel in Windsor include:

- Overflows of sanitary sewer systems
- Over-application of fertilizers, pesticides, or herbicides onto landscaping and impervious surfaces
- Dewatering of construction sites
- Improper washing of concrete ready-mix trucks,
- Commercial use of soaps and detergents to clean pavement, sidewalks, vehicles, and equipment,
- Latex- or oil-based paints and solvents disposed of in gutters or inlets
- Restaurant grease disposed of in gutters or inlets
- Leaking dumpsters

- Fuel spills
- Hazardous materials dumped along roads

Tracing and Reporting Process

Reporting of an illicit discharge in the Town will occur through citizen observation, field staff observation, information submitted to the Town's website, or other miscellaneous means. Tracking this data provides information that can assist in determining priority areas, tracing sources of illicit discharges and removing sources of illicit discharges. Tracking the data collected in the IDDE Program will play an important role in the evaluation and refinement of the Program. In addition, tracking will provide reporting information required by the Water Quality Control Division.

In extreme, rare cases, the incident could become the focus of a judicial process that would require the first staff person on site to provide valuable information, and possibly testimony and evidence. For that reason, it is necessary to be as thorough as possible on the initial investigation.

Once notification of an illicit discharge is received and verified, the following steps may be taken:

- Notifications from an area of the Town where a spill previously occurred can be traced through Mapping/GIS. Maps can be produced and then reviewed in the field. Notes are taken by field staff for consideration of establishing a priority area.
- The Town collects information regarding the illicit discharge, including type of discharge, reporting party, remarks on the discharge, and type of mitigation used for the discharge in Cartegraph. Follow-up is conducted if necessary. See Appendix F, Illicit Discharge Report Form.

All reports of illicit discharges will be archived by the Town's Stormwater Program Coordinator for a period of three (3) years from the inception date of the report. Both illicit discharges that are resolved (traced, removed and reported to the Colorado Department of Public Health and Environment [CDPHE], if needed) and unresolved illicit discharges will be recorded. Records will be located [here](#).

Unresolved Illicit Discharge Reporting

Through field observation or citizen reporting there may be the instance where an illicit discharge is untraceable or cannot be removed. This may be due to the discharge no longer occurring, or evidence of an illicit discharge cannot be found. An Illicit Discharge Report Form will be completed to the extent possible and recorded as above.

Physical Tracing Options

The following techniques may be considered for tracing illicit discharges. The Town may use these methods only if it is determined to be beneficial: manhole observation, video inspection, smoke testing, and dye testing. Procedures for these processes are discussed below.

Manhole Observations

A key tracing technique is to follow dry-weather flows upstream along the conveyance system to bracket the location of the source. This can be accomplished by taking the following steps:

- Consult the MS4 map.
- Check the next "upstream" manhole with a junction to see if there is evidence of discharge. Consider sampling each manhole that has a discharge.

- Repeat these steps until a junction is found with no evidence of discharge; the discharge source is likely to be located between the junction with no evidence of discharge and the next downstream junction.
- Be aware of the surrounding areas and look for water in gutters and streets.

Manhole observations can be time-consuming, but they are generally a necessary step before conducting other tests.

Video Inspection

Mobile video cameras can be guided remotely through storm sewer lines to observe possible illegal connections into storm sewer systems and record observations electronically. Town staff can observe the videos and note any visible illegal connections. This technique is time-consuming and expensive but thorough and usually definitive, and it does not require the intrusion on members of the public that some of the other methods do.

Smoke Testing

This technique involves injecting non-toxic smoke into storm sewer lines and then noting the emergence of smoke from sanitary sewer vents in illegally connected buildings or from cracks and leaks in the storm sewer lines. The injection is accomplished by placing a smoke bomb in the storm sewer manhole below ground and forcing air in after it. Smoke-generating machines can also be used. Test personnel will be stationed at points of suspected illegal connections or cracks/leaks, noting any escape of smoke (indicating an illicit connection or damaged storm sewer infrastructure). Prior to performing this test, it is necessary to inform building owners and occupants in the area in advance. It is also advisable to inform the police and fire departments.

For a more thorough smoke-test program, the sanitary sewer lines can also be smoked. For buildings that do not emit smoke during either the sanitary sewer or the storm sewer system tests, sewer gas may be venting inside, which is hazardous. Interviews with various IDDE program staff at other permitted MS4s suggest that the smoke-test method is more effective in infiltration/inflow investigations of the sanitary sewer system than in detecting illegal connections to the storm sewer system.

Smoke may cause minor irritation of respiratory passages; residents with respiratory conditions should receive special attention to determine if it is safe for them to be present for the testing. Smoke testing is typically used to survey an area all at once, in contrast to dye testing, which tests one building at a time.

Dye Testing

This technique involves flushing non-toxic dye into toilets and sinks and observing storm sewer and sanitary sewer manholes and storm sewer outfalls for the presence of the dye. Prior to performing this test, it is necessary to inform building owners and occupants in advance and gain permission for entry. Local public health and state water quality staff should also be notified so that they will be prepared to respond to citizens calling about any dye observed in surface waters.

To perform the test, a crew of two or more people is needed. One person is inside the building; the others are stationed at the appropriate storm sewer and sanitary sewer manholes (which should be opened) and/or outfalls. The inside person drops dye into a plumbing fixture (i.e., toilet or sink) and runs a sufficient amount of water to move the dye through the plumbing system. The inside person then informs the outside crew that the dye has been dropped, and the outside crew watches for the dye in the storm sewer and sanitary sewer, recording the presence or absence of the dye.

The test is relatively quick (about 30 minutes per test), effective (results are usually definitive), and cheap. Dye testing is best used when the likely source of an illicit discharge has been narrowed down to a few specific houses or businesses.

Section 4: Removing an Illicit Discharge (Part I.E.2.a.vi)

The Town of Windsor's Municipal Code prohibits illicit discharges, and contacting and securing the cooperation of the responsible party is the most beneficial way to correct the illicit discharge and eliminate future discharges. If the responsible party is unwilling to remedy the problem, legal action may be necessary to secure their cooperation. Timeframes for eliminating illicit discharges and achieving compliance can be combined with education. Staff guidance for responding and removing an illicit discharge can be found in Appendix C.

This section groups the action of removing an illicit discharge into two categories: compliance assistance and enforcement for illegal connections from homes and businesses; and responding to and preventing illegal dumping/discharges.

Surface contamination from an illicit discharge is minimized by removing or requiring the removal of surface residue or other type of pollutant source. In cases where a site has or should have coverage under a CDPS or NPDES general permit for a discharge and the discharge is not subject to prohibitions against issuance of a permit in regulation 61.8(1), the removal requirement is generally met by notifying the CDPHE through a written report completed by the Stormwater Program Coordinator.

Illegal Connections from Homes and Businesses

There is a range of ways in which the Town may wish to handle the removal of illegal connections between homes or businesses and the storm sewer system. Enforcement measures are detailed in Section 6, Enforcement; however, the Town will use judgment as to what mix of compliance assistance and enforcement actions is appropriate in a given situation. Typically, the Town responds to the discovery of an illegal connection in a graduated manner, beginning with efforts to obtain voluntary compliance and escalating to increasingly severe enforcement actions if compliance is not obtained. The illicit connection is plugged if possible to remove the source of the discharge until a permanent solution can be implemented. Depending on the location, cleanup of the source material from an illicit connection is completed at the direction of Larimer or Weld County Health Departments.

Often, home or business owners are not aware of the existence of illegal connections between their buildings and the storm sewer systems. In these cases, providing the responsible party with information about the connection, its environmental consequences, the applicable regulations, and how to remedy it may be enough to secure voluntary compliance.

Illegal Dumping/Discharges

It is often difficult to identify and locate the individual(s) responsible for illicit discharges; therefore, the Town's program to address illicit discharge focuses on education and prevention, backed up by enforcement to the extent possible.

The following key strategies may be used in the Town to remove an illicit discharge/stop illegal dumping:

- Site maintenance and controls. Measures are taken to clean up areas where illegal dumping has taken place, and controls such as signs or access restrictions are used, as appropriate, to prevent further dumping.
- The Town requires residue and surface contamination from illicit discharges to be removed if possible. In some cases, clean up of a discharge is not possible or feasible, as in cases of paint washed into the creek, or paint dried in the curb and gutter.
- For cases where the responsible party is unknown, the Town is responsible for removal and clean up of residue and surface contamination from illicit discharges. For non-hazardous pollutant sources, Public Works crews take action to mitigate surface residue depending on the pollutant type and amount of pollutant. Illicit discharges are only washed down where wash water is captured and discharged into the sanitary sewer (if approved). Sand absorbents or socks, pillows, or pads are used to capture spilled liquid. All clean-up materials are properly disposed of.
- For hazardous materials, the Town will contact the Windsor/Severance Fire Department for guidance.

Section 5: Enforcement (Part I.E.2.a.vii)

Per the MS4 Phase II Permit, the Town must “implement appropriate written enforcement procedures and actions to eliminate the source of an illicit discharge when identified/reported, discourage responsible parties from willfully or negligently repeating or continuing illicit discharges, and discourage future illicit discharges from occurring. The written procedures must address mechanisms for enforcement for all illicit discharges from the moment an illicit discharge is identified/reported until it is eliminated. The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the responsible party to ensure that findings of a similar nature are enforced upon consistently. Written enforcement procedures must include informal, formal, and judicial enforcement responses.”

The following procedures address how the Town complies with the permit requirements stated above and serves to guide Town staff in enforcement of stormwater violations within the Town. When stormwater non-compliance is identified by the Town, enforcement actions are taken promptly. An action the Town takes against the party in non-compliance is based on the nature and severity of the situation and in accordance with the Town’s Stormwater Quality Ordinance. The Town uses professional judgment and enforcement discretion to determine the appropriate level of compliance assistance and enforcement actions in a given situation.

Non-compliance incidents are classified as minor or major violations. Major violations are generally those acts or omissions that lead to a discharge of pollutants to the MS4. This generally includes chronic violators, intentional acts, or discharges that are not removed or resolved in a timely manner. Minor violations are generally instances of non-compliance that do not directly result in such a discharge, or may be considered an incidental discharge, and are addressed by the responsible party immediately upon notification. Serious discharges may require an immediate escalation to a higher level of enforcement. The level of enforcement response depends upon several factors:

- Severity of the violation: the duration, quality, and quantity of pollutants, and effect on public safety and the environment;
- The violator’s knowledge (either negligent or intentional) of the regulations being violated;
- A history of violations and /or enforcement actions individual or contractor; and/or

- The potential deterrent value of the enforcement action.

Typically, the Town enforces on illicit discharges in a graduated manner, beginning with efforts to obtain voluntary compliance and escalating to increasingly severe enforcement actions if compliance is not obtained. Each of the items below can be used in any order and can be used concurrently.

Informal Enforcement Response

The following steps may be used by the Town when enforcing the Stormwater Quality Ordinance:

1. Identify the source property owner or their designated representative.
2. Make contact through any medium available to notify the property owner of the infraction. Attempt to meet with the property owner or their designated representative to discuss requirements and infraction. The preferred medium is verbal notification but is not limited to this. This may also require involving the Windsor Police or Code Enforcement Officer to respond.
3. Education materials and/or verbal warning is given.

Timeframe to respond to an illicit discharge with informal enforcement is 48 hours, but no more than 72 hours. In some cases where it is determined that the discharge potential is minimal (no weather in the forecast, material is not easily discharged, storm inlets are not close by), the response may take a week.

Formal Enforcement Response

The enforcement steps that the Town might take are summarized below:

1. The Town sends the property owner a compliance order per the ordinance, which could require the violator to take steps such as monitoring, elimination of an illicit connection or discharge, and/or payment of a fine.
2. If the person receiving the written compliance order fails to correct the violation within the timeframe indicated in the order, the Town may “enter the affected property and perform or cause to be performed all required work.” The Town then may require reimbursement from the violator for the cost of the abatement, including administrative costs.

In addition, the Town may seek enforcement action from state or federal authorities. Involvement of state or federal authorities may also be necessary if the source of an illicit discharge is located outside of the Town boundaries.

The timeline for formal enforcement response is typically within a seven days and immediate when necessary.

Judicial Enforcement Response

The following steps may be used by the Town when enforcing the Town’s Stormwater Quality Ordinance:

1. Identify the source property owner or their designated representative.
2. Make contact through any medium available to notify the property owner of the infraction. Attempt to meet with the property owner or their designated representative to discuss requirements and infraction. The preferred medium is verbal notification but is not limited to this. This may also require involving Windsor Police or Code Enforcement to respond.
3. Issue warning letter stating time frame for corrective action(s) to be completed.
4. Escalation to ordinance enforcement procedures including a written compliance order containing a compliance schedule or fines. Monetary fines are assessed as outlined in the Town’s Municipal Code, Sec. 1-4-20.

The timeline for judicial enforcement response is determined by court schedules.

Section 6: Training (Part I.E.2.a.ix)

Monitoring the quality of stormwater entering the waters of the state within the Town relies heavily on a variety of staff visually monitoring the MS4. There are two types of staff trained on the detection of pollutants to assist in preventing and helping eliminate sources of impurities to the waterways. The groups are:

1. Specific staff that have the duty of initiating or conducting field investigations of reported illicit discharges, such as the Stormwater Program Coordinator and Public Works. (Observation and Documentation Training).
2. Ancillary staff who are in the field for other purposes such as Engineering, Parks, Police Dept. etc. (Visual Observation Training).

Visual Observation Training (VOT)

VOT is offered to staff who drive a Town vehicle and have the opportunity for visual, albeit casual, drive-by observation of the Town's MS4. Staff is given basic training on the types of illicit discharges that may occur. Staff is trained to recognize pollutants so that they can immediately intervene to identify and help eliminate sources of pollution entering the MS4. Training may include videos, standard operating procedures (SOPs), fact sheets, table top exercises, and question and answer sessions. Training materials are located [here](#).

Observation and Documentation Training (ODT)

STT is required for specific Town staff that is part of the Stormwater Team and has the responsibility of responding to an IDDE incident. The training consists of inspection personnel reviewing and using the Illicit Discharge Form, a review of the IDDE PDD, and can include topics and methods used in VOT.

Employee Type/Job Responsibilities	Training Topics	Documentation
Town of Windsor Staff that work outdoors: Police Dept., Parks Dept., Engineering Dept. and others.	VOT: may include fact sheets, typical illicit discharges, and question and answer sessions, table top exercises, review of the Illicit Discharge Report Form	Name, department, date of training, type of training, and list of topics covered (sign-in sheet)
Public Works	ODT: all of the above and review of IDDE PDD and SOPs	See above. All documentation to be recorded here .

Hazardous Materials Spill Response

Commented [JH1]: Emailed Terry Walker, Craig Dodd, Joe Seaman 11-21-2018 for review approval

Hazardous materials incidents encompass a wide variety of potential situations including fires, spills, transportation accidents, chemical reactions, explosions, and similar events. Hazards involved may include toxicity, flammability, radiological hazards, corrosives, explosives, health hazards, chemical reactions, and combination of factors. The Town of Windsor has access to a Hazardous Materials Response Team, as part of the Windsor/ Severance Fire Department, trained to the Hazardous Materials Response Operations Level, as defined by NFPA 472 and Standard Operating Guidelines. These plans provide a general framework for handling a hazardous materials incident. It is not the duty of Town staff other than those specifically trained in this area, or the Storm Water Program Coordinator, to participate in Hazardous Materials Response and mitigation even if the MS4 is affected. The Coordinator will be informed by the DERA or other officer in charge at the scene. As needed, the Coordinator will collect the information required and call the Environmental Release and Incident Reporting Line for all qualifying spills as indicated in the "Guidance for Reporting Spills under the Colorado Water Quality Control Act and Discharge Permits" in Appendix B, and will complete an IDDE report form.

Most hazardous materials incidents in the Windsor area involve traffic accidents. Vehicles often leak hazardous fluids onto paved surfaces in these situations; tow truck operators are qualified, and required by law, to manage and clean up these spills, and properly dispose of the clean-up materials.

Section 7: Record Keeping (Part I.E.2.b.iv)

All records and reports of illicit discharges will be archived by the Town's Stormwater Program Coordinator for a period of three (3) years from the inception date of the report. Both illicit discharges that are resolved (traced, removed and reported to the Colorado Department of Public Health and Environment [CDPHE], if needed) and unresolved illicit discharges will be recorded. Training records will also be retained in this location. Records will be located [here](#).

Appendix A: Internal Process for Allowing Non-Stormwater Discharges

Town of Windsor Standard Operating Procedure

Name: Internal Process for Allowing Non-Stormwater Discharges

Page: 1 of 2

Issue Date: March 20, 2017

Supersedes: xx

Background

Windsor's MS4 general permit (COR-0900000, CDPS Permit Certification Number COR-090112), states that, "The permittee may propose discharges in accordance with the requirements below to seek Division approval to allow the permittee to not effectively prohibit the discharges. Upon approval by the Division, the permittee is not required to address the discharges as illicit discharges in accordance with the requirements of this permit...The permittee must complete the following actions for discharges to be authorized by the Division:

- 1) The permittee must submit a list of the discharges and the basis that the discharges meet one of the following criteria:
 - (a) The discharges, with proper management, are not expected to contain pollutants in concentrations that are toxic or in concentrations that would cause or contribute to a violation of a water quality standard; or
 - (b) The discharges are not eligible for coverage under a CDPS or NPDES general permit and prohibiting the discharges would result in changes to existing practices for the owner or operator of the discharges that are determined by the permittee to be impracticable.
- 2) For all such discharges identified prior to the effective date of this permit and that will continue to be allowed, the information required by Subsection (1) must be submitted to the Division for approval in accordance with the compliance schedule in I.H.
- 3) The discharge is not approved until the permittee receives an approval letter from the Division.
- 4) The Division may deny approval of the discharge in writing. The Division's denial will be based on a determination that the provided information does not demonstrate that the criterion of Part I.E.2.v(Y)(1) has been met.
- 5) The permittee must public notice the discharges authorized by the Division in accordance with its public notification procedures.
- 6) The permittee must notify the Division within 30 days and revise its regulatory mechanism and procedures within 180 days if the permittee becomes aware of new information that the discharges authorized using the criterion in Part I.E.2.a.v(Y) no longer meets the criteria of that Part."

This Standard Operating Procedure (SOP) will serve to guide the Town in determining if a particular occasional incidental, non-stormwater discharge would be allowed in the Town of Windsor.

Process for Allowable Non-Stormwater Discharges

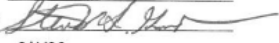
The purpose of Windsor's Stormwater Ordinance (Chapter 13, Article V of Windsor's Municipal Code) is to protect and enhance the quality of water entering Windsor's drainage system.

In evaluating discharges, Windsor will review relevant information such as the chemical makeup, quantity, duration, and location of the discharge, and any previous historical information about the discharge (or similar discharges) to ensure that such discharge will not be detrimental to water quality in Windsor's MS4. If such a determination is made, it will be documented, including any required controls or conditions placed on the discharge and submitted to the Division for approval. The discharge is not permitted until the Town receives a response letter from the Division stating the discharge is approved.

Appendix B: Guidance for Reporting Spills under the Colorado Water Quality Control Act and Discharge Permits

Colorado Water Quality Control Division

WATER QUALITY CONTROL DIVISION

Policy No: WQE-10
Initiated By: Daye Akers
Approved By: 
Effective Date: 3/1/08
Revision No.:
Revision Date:

Guidance for Reporting Spills under the Colorado Water Quality Control Act and Colorado Discharge Permits

I. Purpose

To provide guidance on applicable Colorado reporting requirements pursuant to § 25-8-601(2), C.R.S., that pertains to spills or discharges that may cause pollution of State waters. This guidance does not relieve an entity of any other statutory or regulatory requirements applicable to a spill. Facilities possessing a Colorado Discharge Permit System (CDPS) permit should follow applicable permit terms and conditions regarding spill reporting and response. This guidance is not intended to supersede or modify such permit terms and conditions or the applicable statute and regulations. This guidance does not limit the existing rights or responsibilities of persons with respect to spill reporting. For example, persons retain the right and responsibility to determine in the first instance whether a particular spill is covered by an existing permit or may cause pollution to State waters (i.e., surface or ground waters).

II. Statutory Requirement Addressed

Colorado Water Quality Control Act - Spill Reporting Requirements - § 25-8-601(2), C.R.S.

"Any person engaged in any operation or activity which results in a spill or discharge of oil or other substance which may cause pollution of the waters of the state contrary to the provisions of this article as soon as he has knowledge thereof, shall notify the division of such discharge."

State waters means any and all surface and subsurface 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 (§ 25-8-103 (19), C.R.S.).

Examples of State waters include, but are not limited to, perennial streams, intermittent or ephemeral gulches and arroyos, ponds, lakes, reservoirs, irrigation canals or ditches, wetlands, stormwater conveyances (when they discharge to a surface water), and groundwater.

III. Policy/Applicability

The Division distinguishes between reporting requirements for spills that occur with respect to activities that result in a discharge that is authorized under a CDPS permit and those that are not. For non-permitted activities, or in the case of an activity where a permit does not address reporting of or response to a given spill, the Division recommends that the responsible person(s) take the following actions:

1. Immediately report spills that may result in a non-permitted discharge of pollutants to State waters to the Environmental Release and Incident Reporting Line at 1-877-518-5608;
2. Include the following information, if available, when notifying the Division of a spill:
 - a. The name of the responsible person and, if not reported by that person, the name of the person reporting the spill and the name of the responsible person if known;
 - b. An estimate of the date and time that the spill began or the actual date and time, if known;

- c. The location of the spill, its source (e.g., manhole, tanker truck), and identification of the type of material spilled (e.g., untreated wastewater, biosolids, specific chemical);
- d. The estimated volume of the spill and, if known, the actual date and time the spill was fully controlled/stopped.
- e. Whether the spill is ongoing and, if it is, the rate of flow and an estimate of the time that the spill will be fully controlled, if known;
- f. Measures that are being or have been taken to contain, reduce, and/or clean up the spill;
- g. A list of any potentially affected area and any known downstream water uses (e.g., public water supplies, irrigation diversions, public use areas such as parks or swim beaches) that will be or have been notified; and
- h. A phone number and e-mail to contact a representative of the responsible person that is in charge of the response. Where a non-responsible person is reporting the spill, they are encouraged, but not required, to provide contact information.

Reporting and management of spills that occur with respect to activities resulting in a discharge authorized under a permit should be performed in accordance with the specific requirements of that permit. If the permit does not provide specific reporting or management response requirements for a given spill that may pollute State waters, the Division recommends that the responsible person report the spill in accordance with the procedures listed above.

This guidance only addresses reporting requirements under the Division's authority. The person or entity engaged in any operation or activity that results in a spill is responsible for any other applicable reporting requirements associated with the spill to other regulatory agencies.

Section 25-8-601(2), C.R.S. only addresses spill reporting to the Division. Section 25-8-202(7), C.R.S. provides certain water quality responsibilities to other state "implementing agencies." The Division's position is that, where a spill to the ground that may impact ground water only is fully and timely reported to an implementing agency having jurisdiction over that spill, the intent of section 601(2) has been fulfilled, and the spill need not also be reported to the Division. The Division suggests that the responsible person confirm with the implementing agency that a spill falls under the jurisdiction of the implementing agency at the time it is reported in order to avoid possible legal liability should it fall under the Division's jurisdiction.

IV. Division Examples of Non-Reportable Spills

The Division has identified the following examples of types of spills that are considered "non-reportable" under § 25-8-601(2), C.R.S. Documentation of such spills, including the information listed in section III.2.a – III.2.f above, should be maintained by the responsible person for Division review for a period of three years.

1. A spill to a generally impervious surface or structure (e.g., paved street/parking lot, storm sewer, warehouse floor, manhole, vault, concrete basement), or onto soils, that is fully contained in/on the impervious surface/structure or soils, or that is managed in a manner so that it will not reach State waters at the time of the spill or in the future. Such spills that are cleaned up within 24 hours will be considered by the Division to have no potential to reach State waters. However, even if such spills are not cleaned up within 24 hours, the responsible person may be able to "fully contain" or otherwise manage a spill such that it will not reach State waters. Where there is a sump pump present in a basement to which a spill occurred, the responsible person must establish that the pump did not discharge to State waters during the time between the start of the spill and the completion of clean-up in accordance with best management practices.
2. A spill or discharge that is managed consistent with best management practices that are established in accordance with a CDPS discharge permit or any Water Quality Control Commission-adopted control regulation related to spill management or reporting.
3. A spill of potable water from a public water system that does not reach surface waters.

Appendix C: Guidance on responding to an Illicit Discharge

- Determine if the situation is an emergency. **If it is an emergency, call 911.**
- Determine if the situation requires immediate response.
- If the situation requires an immediate response, during regular office hours:
 - For construction projects or road projects, call the Stormwater Program Coordinator (Janine Hegeman).
 - For fixed facilities and/or industrial sites such as restaurants and concrete plants, call the Stormwater Program Coordinator (Janine Hegeman).
 - The IDDE Team should be emailed (IDDETeam@windsorgov.com) with the information about the potential discharge to keep everyone updated.
- If the situation requires an immediate response outside of regular office hours, forward to on call staff.
- Priorities when responding or investigating a possible illicit discharge:
 1. **If safe to do so, take immediate steps to prevent further discharge to the MS4.** This should be done before any other responses are undertaken.
 2. Prevent pollutants from entering state waters in future storm events.
 3. Take photos.
 4. Consider whether civil or criminal penalties should be recommended.
- If the situation does not require an immediate response:
 - For construction projects or road projects, call the Stormwater Program Coordinator (Janine Hegeman) to investigate and respond. Take photos.
 - For fixed facilities and/or industrial sites such as restaurants and concrete plants, call the Stormwater Program Coordinator (Janine Hegeman) to investigate and respond. Take photos.
 - Sometimes a situation may be investigated by the staff that has responded if it makes sense (for example, if a homeowner spilled paint and staff responded and oversaw/assisted with cleanup). In this case, most likely the responding staff would fill out the appropriate Illicit Discharge Report Form with any pictures and additional documentation.
- The investigator will gather the following information, if possible, and fill out the illicit Discharge Report Form:
 - Speak with the person(s) who originally observed and notified the Town of the discharge.
 - Go to the site, take pictures, write down observations, and collect samples if deemed appropriate.
 - Contact the owner of the site; arrange a visit with a site representative.
 - Tour the site, carefully write down the conditions you observe, take any additional pictures needed, and inform the representative of any problems you see.
- The Illicit Discharge Report Form and supporting documentation will be saved on the O\drive [here](#).
- If enforcement is necessary, discuss the possible responses with the stormwater coordinator (Janine Hegeman) and refer to the Enforcement Procedures for guidance.
- If a written notification of violation is sent to the site owner:
 - Outline the complaint and the findings.
 - List any required response, including mitigations, with specific deadlines. It should be noted that the entity is in violation until the unacceptable condition is corrected. A deadline is not intended to be interpreted as permission to violate until that deadline is met.
 - Specify any penalties.
- Once all unacceptable conditions have been corrected, and mitigation has been completed, ensure the Illicit Discharge Report Form is updated with conclusion/actions taken.

Commented [DRB2]: Once a team is established, we should set up an email address.

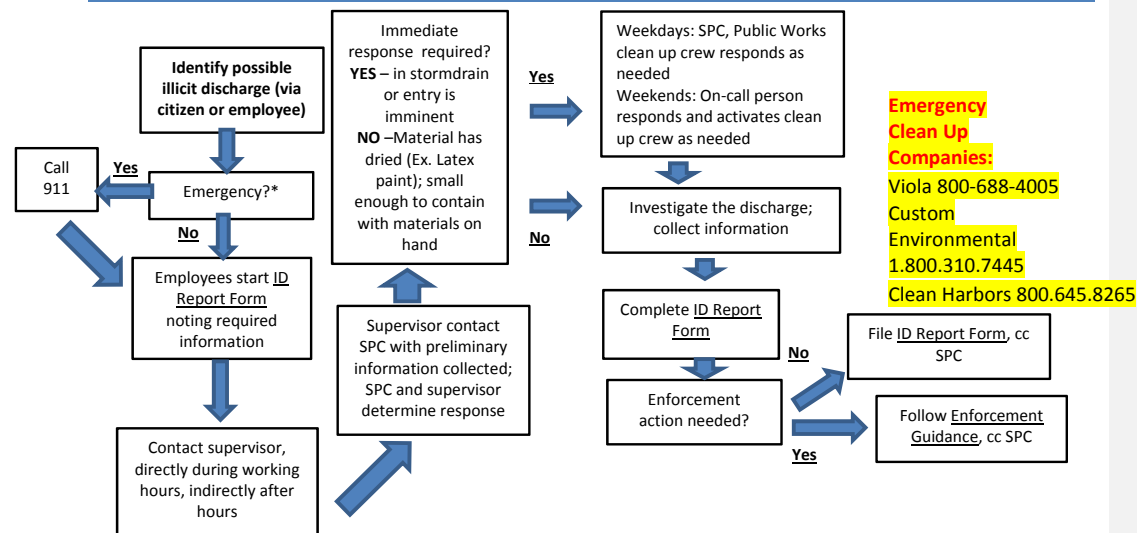
Commented [JH3]: Does PW have on-call staff?

Commented [DRB4]: Discuss with Carrie & Dennis. Can public works be on-call staff, or would it be 911 if emergency during non-working hours?

Commented [DRB5]: We cannot inflict penalties until the ordinances have been adopted.

Commented [DRB6]: Until ordinances are adopted, this will have to be through the State.

Response Flow Chart Guidance



* What constitutes an emergency?

- Hazardous waste OR location
- Too large to contain

SPC** - Stormwater Program Coordinator

Appendix D: Low Risk Potable Water Guidance



COLORADO

Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

Low Risk Discharge Guidance

Discharges of Potable Water

January 15, 2016

Table of Contents

Scope and Purpose of Modification-----	Page 1
Background and Discussion-----	Page 2
Criteria, Conditions, and Control Measures----	Page 3
Alternative Disposal Options-----	Page 6

Scope and Purpose of Modification

This revised guidance document is effective January 15, 2016. In addition to editorial revisions, the following substantive modifications were made:

- Added definitions.
- Clarified the limitations on discharges for which this guidance is applicable, including what is included in a "potable water distribution system."
- Clarified that certain discharges associated with "super-chlorinated" water may be allowed under this guidance when the criteria and conditions are met.
- Added conditions allowing for the use of chemical dechlorination.
- Clarified the requirements and practices for preventing erosion.
- Identified an allowable concentration for residual chlorine in discharges to classified surface waters, consistent with 5 CCR 1002-31, The Basic Standards and Methodologies for Surface Water.

Changes related to potable water distribution systems were made in response to comments received on the draft permit COG604000 General Permit for Discharges from Hydrostatic Testing of Pipelines, Tanks, and Similar Vessels. The final permit was issued on November 23, 2015 and is effective on April 1, 2016. Summaries of the comments and the division's responses are included in the fact sheet for the final permit. In the final permit, the division excluded discharges of potable water from potable water distribution systems and reaffirmed that these discharges are more appropriately covered in accordance with WQP-27, Low Risk Discharges Policy, as an alternative to general permit coverage. The division determined that clarifications should be made to this guidance regarding the issues raised during the general permit renewal process and aligned the timeline of this update with the timeline for issuance of the final permit.

In regard to clarifications regarding what is included in a potable water distribution system, the division found that discharges associated with testing of new lines were consistent with scope of the guidance as long as the construction and installation methods did not render the water non-potable. Clarity was added to this guidance since construction contractors had previously applied and obtained authorization for the discharge of water, including potable water, associated with the installation and testing of new lines, under the COG604000 General Permit.

In regard to super-chlorinated water, the division determined that the super-chlorination of water in potable water distribution systems does not render the water non-potable, and that control measures for dechlorination of super-chlorinated water are highly effective and widely available. Since comments on the COG604000 General Permit requested clarification regarding whether permit coverage under the general permit would be available for super-chlorinated discharges, and since in response to other comments the division excluded all discharges from potable water systems from the COG604000 General permit, the division is clarifying in this modification to the guidance document that certain discharges associated with super-chlorinated water may be allowed under this guidance.

4880 Cherry Creek Drive N., Denver, CO 80246-1634 P 303-692-2808 www.colorado.gov/cdpha/mgcl
John W. Hickmolegus, Governor | Larry Walls, MD, MEdPH, Executive Director and Chief Medical Officer



Background and Discussion

This discharge policy guidance has been developed in accordance with WQP-27, Low Risk Discharges Policy. This guidance is only applicable to discharges meeting the low risk discharge criteria and conditions identified below. Refer to the Alternative Disposal Options section at the end of this document for additional information for discharges that do not meet the criteria and conditions of this guidance.

When the provisions of this guidance are met, the division will not actively pursue permitting or enforcement for the discharge of potable water, unless on a case-by-case basis the division finds that a discharge has resulted in an adverse impact to the quality of any state waters receiving the discharge.

Discharges of potable water are a type of industrial activity with short term, infrequent discharges that with proper management are not expected to contain pollutants in concentrations that are toxic or that would cause or contribute to a violation of a water quality standard. The typical pollutant of concern is total residual chlorine, however, depending on how the discharge occurs, total suspended solids and oil and grease may become pollutants of concern. These pollutants can be handled using dechlorination techniques, filters, oil booms, and other control measures.

There are a large number of discharges of potable water. For example, approximately 2,000 public water systems are subject to the Colorado Primary Drinking Water Regulations (5 CCR 1002-11). There are additional public and private systems that distribute water intended for human consumption which are not subject to 5 CCR 1002-11. These systems operate potable water distribution systems that generate the types of discharges covered by this guidance. From October 2001 through December 2008, the division had a general permit in place, the Treated Water Distribution Permit (COG380000), to authorize discharges from potable water distribution systems. During the seven years permit coverage was available, 35 systems applied for and obtained permit coverage, a small number relative to the number of systems expected to discharge. The division established the Low Risk Discharge Policy in June 2008 to provide an alternative to general permit coverage for low risk discharges. The division issued the first low risk discharge guidance for potable water discharges in January 2009, which aligned with the timeline for termination of the COG380000 general permit. The division finds that these types of discharges may occur at all times of the year, and require a resource intensive effort to permit, without resulting in a clear general benefit to environmental quality due to the low risk nature of the discharge.

The criteria provided in this guidance must be met, and all of these conditions must be followed, by anyone claiming to discharge under this low risk guidance.

The following are examples of common discharges that do not meet the criteria for discharging under this guidance. Discharges that do not meet the criteria for coverage under this guidance shall otherwise be disposed of properly, which may include sending to the sanitary sewer with permission of the local wastewater treatment facility or treating and discharging under a CDP5 discharge permit (see the Alternative Disposal Options section at the end of this document).

- Discharges associated with installing or repairing pipe, fittings, and appurtenances for distribution of potable water and for which the discharge water would not meet the definition of potable water are not covered by this guidance. For example, the following would not be covered under this guidance: discharges from cleaning debris and foreign materials from new sections of pipe which have pollutant concentrations making the water unsuitable for human consumption in accordance with Colorado Primary Drinking Water Regulations (5 CCR 1002-11).
- Discharges from cleaning or maintaining components at a construction or utility yard are not covered by this guidance.
- Discharges from a distribution system, tank or storage facility that is used for conveyance or storage of materials other than potable water are not covered under this guidance.

Criteria, Conditions, and Control Measures

➤ Definitions

- ❖ Backflow Prevention Assembly or Device: means any mechanical assembly or device installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the mechanical assembly is appropriate for the identified contaminant at the cross connection and is an in-line field-testable assembly.
- ❖ Classified State Surface Water: is a surface water with a classification in the Classification and Numeric Standards Regulation for each of the seven river basins in Colorado. Classifications for each segment within the river basin can be found in the numeric and standards table for each basin regulation.
- ❖ Control measures: are any best management practice or other method used to prevent or reduce the discharge of pollutants to waters of the state.
- ❖ Potable Water: means water suitable for human consumption in accordance with Colorado Primary Drinking Water Regulations (5 CCR 1002-11), or water intended for human consumption from a public or private supply system not subject to 5 CCR 1002-11.

➤ Low Risk Discharge Criteria

This guidance is applicable to point source discharges that meet the following criteria and that meet the conditions listed in the next section. See the Alternative Disposal Options section for guidance on addressing water not meeting these criteria.

- ❖ The discharge shall be of potable water from a potable water distribution system, including tanks and storage facilities that are part of that system. This includes lines supplying potable source water to other systems, not separated by a backflow preventer, where free mixing with the potable system occurs (e.g. fire suppression lines, irrigation lines, etc.). A system has been "maintained for potable water distribution use" when it will be or is currently delivering or storing potable water (i.e. existing systems).

➤ Conditions

The following conditions must be followed by anyone discharging potable water. See the Alternative Disposal Options section for guidance on addressing water not meeting these conditions.

- ❖ Exclusion of Process Discharges: With the exception of hydrostatic testing of potable water distribution systems, the potable water shall not be used in any additional processes. Processes include, but are not limited to, any type of washing, heat exchange, manufacturing, or hydrostatic testing of pipelines not associated with treated water distribution systems.
- ❖ Requirement for Removal of Chlorine: If the discharge is directly to a state surface water (any stream, creek, gully, whether dry or flowing), it must not contain any residual chlorine in excess of 0.011 mg/L. The operator is responsible for determining what is necessary for removing chlorine from the discharge. If the discharge is to a ditch, chlorine content may be limited by the owner of the ditch. However, if the ditch returns flow to classified state surface waters, it must not contain residual chlorine in excess of 0.011 mg/L at the point where it discharges to the classified state surface water. It is recommended that if an operator is unsure of the status of the receiving water for a discharge in accordance with this guidance, that they assume a receiving water is a classified state surface water and therefore subject to the 0.011 mg/L chlorine limitation.

- ❖ **Exclusion of Discharges with Cleaning Materials and Added Chemicals:** The addition of cleaning materials or chemicals to the potable water source water or discharge is not allowed under this guidance, except for additional chlorine and dechlorination chemicals meeting the conditions below.
 - Additional chlorine may be added to the potable water source for the purposes of maintaining the potable water distribution system, including the use of super-chlorinated water. Special attention should be paid to the selection and use of control measures implemented for dechlorinating super-chlorinated waters.
 - Dechlorination chemicals may be added to the discharge for the purposes of removing residual chlorine and in accordance with the manufacturer's label.
- ❖ **Controlling Erosions:** The discharge shall not cause erosion of a land surface that could cause pollution of the receiving water. Signs of visible erosion that have the potential to cause pollution without downstream controls measures implemented include the formation of rills or gullies on the land surface. Energy dissipation devices designed to protect downstream areas from erosion by reducing velocity of flow (such as hose attachments and erosion controls), may be necessary to prevent erosion.
- ❖ **Limiting Solids in Discharge:** The discharge shall not contain solid materials in concentrations that can settle to form bottom deposits detrimental to the beneficial uses of the state waters or form floating debris, scum, or other surface materials sufficient to harm existing beneficial uses.
- ❖ **Additional Requirements and Property Rights:**
 - All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts, ditch owners, and other local agencies regarding any discharges to storm drain systems, conveyances, ditches or other water courses under their jurisdiction.
 - The guidance included in this document in no way reduces the existing authority of the owner of a storm sewer, ditch owner, or other local agency, from prohibiting or placing additional conditions on the discharge.

Implementation of Control Measures

Control measures should be implemented as necessary to meet the conditions above, by anyone discharging in accordance with this guidance. The following control measures have been developed by the division to help ensure that the discharge will not negatively affect water quality. When implementing control measures to meet the criteria and conditions of this guidance may not be practical, see the Alternative Disposal Options section for additional solutions.

- ❖ **Discharges to the Ground:** For discharge to the ground, the water should not cause any toxicity to vegetation. When discharging, allow the water to drain slowly so that it soaks into the ground as much as possible.
- ❖ **Chlorine:**
 - **Discharge to the Ground instead of Dechlorination:** The conditions for removing chlorine are not applicable when a discharge is to the ground and does not result in water reaching a state surface water. This option should be considered as an alternative to dechlorination.
 - **Dechlorination:** Potable water is expected to contain chlorine at concentrations greater than the 0.011 mg/L chlorine limitation, and therefore removal of residual chlorine must be done for any direct discharge to state surface waters, or for any discharge to a storm sewer or conveyance where the chlorine will not dissipate to below the 0.011 mg/L limitation prior to reaching a state surface water. Dechlorination, if necessary, may be achieved by allowing water to stand uncovered until no chlorine is detected; ensuring dechlorination occurs between the location it is released from the potable water system but prior to reaching the classified state surface water; or by using a portable dechlorinator.
 - **Additional Control Measures for Chemical Dechlorination:** Many portable dechlorinators rely on the addition of chemicals to remove chlorine from the discharge. All chemical additions must be in

Page 4 of 6

accordance with the manufacturer's specifications. When using chemicals in the dechlorination process, the operator must ensure the following: that proper quantities and rates are used, based on the concentration of chlorine; that adequate mixing occurs; and that enough time is allowed prior to flow reaching a surface water for the dechlorination chemicals to react with the chlorine in the water. In cases where the discharge of water that had been super-chlorinated will occur, operators should allow additional time for the chlorine to dissipate.

- Determining if Chlorine Concentration is below 0.011 mg/L: It is the operators' responsibility to ensure that adequate processes are followed to meet the 0.011 mg/L chlorine limitation prior to discharge to a classified state surface water. It is not required that an EPA approved test method be used to make this determination.
 - Discharge Testing: There are a variety of methods to test for chlorine in the field, but the operator should ensure that the method selected is capable of detecting total residual chlorine down to the 0.011 mg/L limitation. For many methods, it will be necessary to have a test result indicating no (0 mg/L) residual chlorine to ensure that this limitation is met. A common and affordable test method is using a "color-wheel test kit" available from a variety of suppliers of chemical testing/analysis equipment. It is highly recommended that analysis occur for all super-chlorinated discharges.
 - Discharging without Testing: In some cases, it may be possible for an operator to make a determination that the chlorine concentration in a discharge is below 0.011 mg/L without analysis. This may be based on a determination that the given hold time or travel time to a classified state water, based on other discharge-specific variables, will adequately reduce chlorine levels to result in the chlorine limitation being met. It is the operator's responsibility to ensure they understand the variables associated with a specific discharge to ensure that the chlorine limitation has been met.
- ❖ Pollutants Picked Up After Release: The discharge should be conducted to minimize the potential to pick up additional pollutants following release from the potable water distribution systems and prior to discharge to a water of the state.
 - The discharge should be conducted to minimize the potential to pick up additional suspended solids and to control erosion. It is understood that minimal suspension of sediment is inherent to any water running across soils. However potential water quality impacts should be minimized through practices such as diffusing flows and avoiding flows across bare soils.
 - The discharge should be conducted to minimize the potential that it will contact petroleum products/waste, and avoid picking up any oil and grease. When possible, an absorbent oil pad, boom or similar device should be used to eliminate oil from the discharge. A visible sheen must not be evident in the discharge.
- ❖ Preparing and Installing Components: When installing new pipe, fittings and appurtenances into a potable water distribution system, the components should be prepared and maintained in a way to minimize the potential for contribution of pollutants to discharges covered under this guidance.
 - All pipe, fittings, and other appurtenances associated with the discharge should meet industry standards for cleanliness for a public water. Examples of standard operating procedures include, but are not limited to, those found in AIAI/AWWA Standard C600-10, (*Installation of Ductile-Iron Mains and Their Appurtenances*), or any other applicable standard operating procedures that reflect industry standards of cleanliness. When it is necessary to remove debris, foreign material or other gross contamination from components prior to installation, wastewater generated from such activities may not be covered under this guidance. Such activity should occur at a location that allows for generated wastewater to be sent to the sanitary sewer with permission of the local wastewater treatment facility. Such wastewater could also be otherwise collected and disposed of.
 - Practices should be implemented during transport, storage, installation, and maintenance to minimize introduction of contaminants to pipe, fittings, and other appurtenances that could contribute pollutants to discharges.

- ❖ **Removing Pollutants:** Control measures for filtering or settling suspended solids and other debris should be used to remove solids or other debris that have either been picked up after discharge or that originated from within the potable water system. Examples of suspended solid removal practices include but are not limited to, check dams and filter bags. As a final measure downstream from additional control measures, inlet protection can be used to provide some additional removal and to allow for redundancy. Pollutant removal control measures should be used and maintained in accordance with the manufacturers' specifications.

Alternative Disposal Options

Water that does not meet the criteria of this guidance or that cannot be discharged in a manner that meets the conditions of this guidance must be either authorized by a CDPs discharge permit issued by the division, or disposed of through an alternative means. Because the water sources addressed in this guidance are not covered by an existing general permit, it is expected that obtaining a CDPs permit will not be a practical solution for most discharges.

Water not meeting the criteria and conditions of this guidance may be sent to the sanitary sewer with permission of the local wastewater treatment facility or otherwise collected and disposed. If discharge is to the sanitary sewer, contact the local wastewater treatment facility prior to discharge. System owners may grant blanket authorization to discharge to their systems. This must be done to ensure that the facility is able to accept the discharge. Not all facilities are able to accept such discharges. Note that additional restrictions or local guidelines may apply.

If the waste is collected for disposal, it may be hauled off site for disposal at a facility that is authorized to discharge the water through an existing CDPs permit or in accordance with disposal requirements administered through the Colorado Hazardous Materials and Waste Management Division.

Alternatively the water may be land applied in a way that results in complete evapotranspiration. This will likely only be an option when the quantities of water are small.

Appendix E: Land Uses Associated with Producing Illicit Discharges

LAND USE	GENERATING SITE	ACTIVITY PRODUCING DISCHARGE
COMMERCIAL	Auto Repair/Oil Change Shops Building Product Suppliers Car Dealers/Rental Cars Car Washes Fast Food Facilities Food Stores/Super Markets Gas Stations Golf Courses Laundry/Dry Cleaning Motels/Hotels Nurseries and Garden Centers Parks, Trails & Recreation Facilities Restaurants Retail/Shopping Sport Complexes	Building Maintenance Construction Material/Trash & Debris Dumping/Spills Landscaping Materials & Maintenance Lawn/Landscape Watering Mud on Paved Surfaces Outdoor Fluid Storage Parking Lot Maintenance Pond Maintenance Power Washing Swimming Pool/Hot Tub Discharges Vehicle Fueling Vehicle Maintenance/Repair Vehicle Washing
INDUSTRIAL	Auto Recyclers Beverages and Brewing Construction Construction Vehicle Washouts Distribution Centers Food Processing Garbage Truck Washouts Metal Plating Operations Paper and Wood Products Petroleum Storage Printing	All Commercial Activities Construction Material/Trash & Debris Industrial Process Water Landscaping Materials & Maintenance Lawn/Landscape Watering Mud on Paved Surfaces Outdoor Material Storage Power Washing Rinse Water
INSTITUTIONAL	Cemeteries Churches Construction Corporate Campuses Fire & Police Departments Hospitals Municipal Facilities Museums Schools Universities	Building Maintenance Construction Material/Trash & Debris Dumping/Spills Landscape Materials & Maintenance Lawn/Landscape Watering Mud on Paved Surfaces Parking Lot Maintenance Pond Maintenance Power Washing Vehicle Washing
RESIDENTIAL	Apartments Assisted Living Facilities Construction Duplexes Mobile Homes Single Family Town Homes	Construction Material/Trash & Debris Driveway Cleaning Dumping/Spills Landscape Materials & Maintenance Lawn/Landscape Watering Mud on Paved Surfaces Power Washing Septic System Maintenance Swimming Pool/Hot Tub Discharges Vehicle Washing

Appendix F: Illicit Discharge Report Form



ILLCIT DISCHARGE REPORT FORM			
*Required information			
ILLCIT DISCHARGE LOCATION/ADDRESS*			
REPORTING PARTY CONTACT INFORMATION*			
RESPONSIBLE PARTY ADDRESS* Unknown_____			
RESPONSIBLE PARTY PHONE NUMBER* Unknown_____			
RESPONSIBLE PARTY EMAIL ADDRESS* Unknown_____			
DATE/TIME OF DISCOVERY*:			
INSPECTOR NAME:			
INSPECTION DATE:		INSPECTION TIME:	
CALL REFERRED FROM:		TIME CALL RECEIVED:	
MATERIAL*:		EST. QUANTITY*:	
DID MATERIAL ENTER AN INLET/MS4?*		DID MATERIAL REACH WATERS OF THE STATE?	
WAS CDPHE NOTIFIED?		CDPHE CONTACT INFORMATION	
CAUSE: IF UNKNOWN, CHECK HERE_____			
CLEAN UP PROCEDURES COMPLETED BY Town of Windsor or other DATE_____ DESCRIPTION:			
CLEAN UP PROCEDURES COMPLETED BY RESPONSIBLE PARTY DATE:_____ DESCRIPTION:			
FOLLOW UP:			
ENFORCEMENT: NO _____ YES _____ DESCRIPTION:			

Appendix G: DEFINITIONS

“NPDES” National Pollutant Discharge Elimination System. The NPDES permit program addresses water pollution by regulating point sources that discharge pollutants to waters of the United States, and is administrated by the EPA (Environmental Protection Agency).

“CDPHE” The Colorado Department of Public Health and Environment. By its definition herein, the Town recognizes that CDPHE is authorized to administer the NPDES program in Colorado, via the CDPS.

“CDPS” Colorado Discharge Permit System. The CDPS program addresses water pollution by regulating point sources that discharge pollutants to waters of the State.

“Clean Water Act” The federal Water Pollution Control Act (33 USC §1251 *et. seq.*), and any amendments thereto.

“Discharge” Liquid precipitation containing no pollutants, either flowing *into* a storm drain or other MS4 conveyance, OR flowing *out* of a pipe or other conveyance into the Cache La Poudre River.

“Stormwater Program Coordinator” The person authorized by the Town Manager to fulfill the responsibilities that have been empowered with such position.

“Pollutant” Any dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, pathogens, chemical wastes, corrosive substances, biological materials or nutrients, radioactive materials, heat, malodorous substances, wrecked or discharged equipment, rock, sand, slurry, dirt, untreatable waste or industrial, municipal and agricultural waste discharged into or with water.

“Pollution” The presence of any foreign substance (organic or inorganic) in water or wastewater which in sufficient concentration tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which may not create an actual hazard to the public health, but which does adversely and unreasonably affect such waters for domestic use.

“Stormwater” Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

“Waters of the State” Any and all surface and subsurface waters that are contained in or flow in or through the State of Colorado 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 includes all intermittent watercourses.

“Hazardous material” Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or to the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

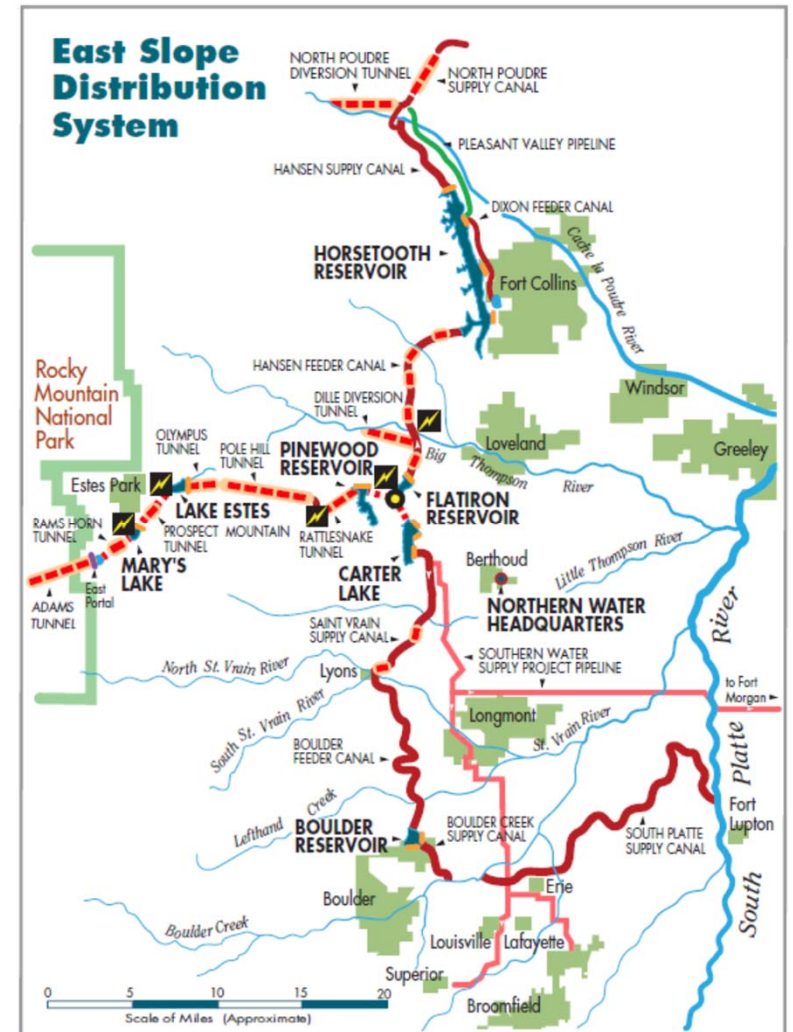
“Non-Hazardous waste” Any solid waste, special waste, or septage that is not otherwise classified as a hazardous waste, biomedical waste, or low level radioactive waste. Solid waste includes garbage, rubbish, refuse, construction and demolition debris, and tires.

“Municipal Separate Storm Sewer System” (MS4) Publicly-owned facilities by which stormwater is collected and conveyed, including, but not limited to, any roads with drainage systems, municipal streets, gutters, curbs, catch basins, inlets, piped storm drains, pumping facilities, retention and detention basins or other water quality structures, and natural and manmade or altered drainage ditches/channels/lakes/reservoirs, and other drainage structures.



Water Demand and Supply

*Water and Sewer Board
December 12, 2018*





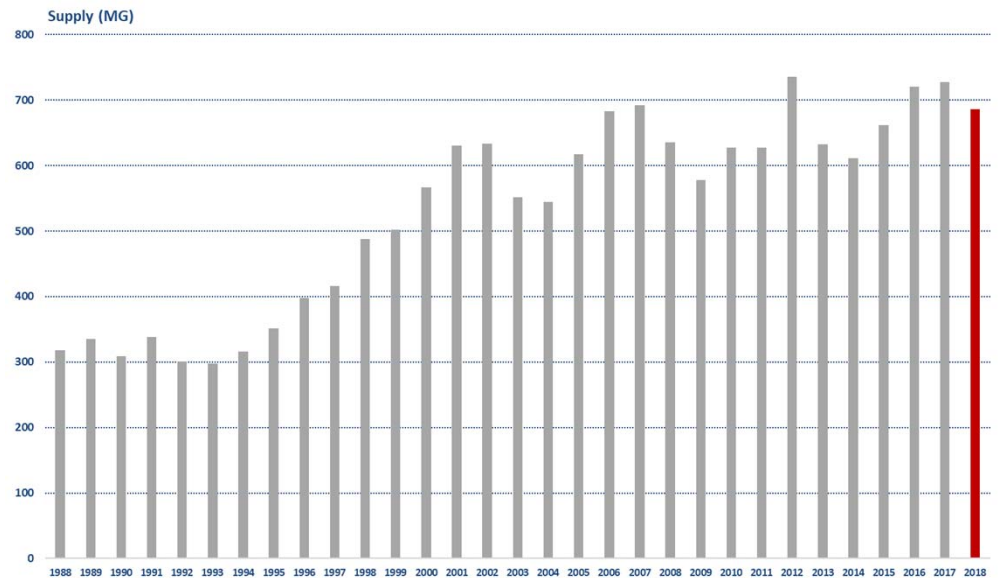
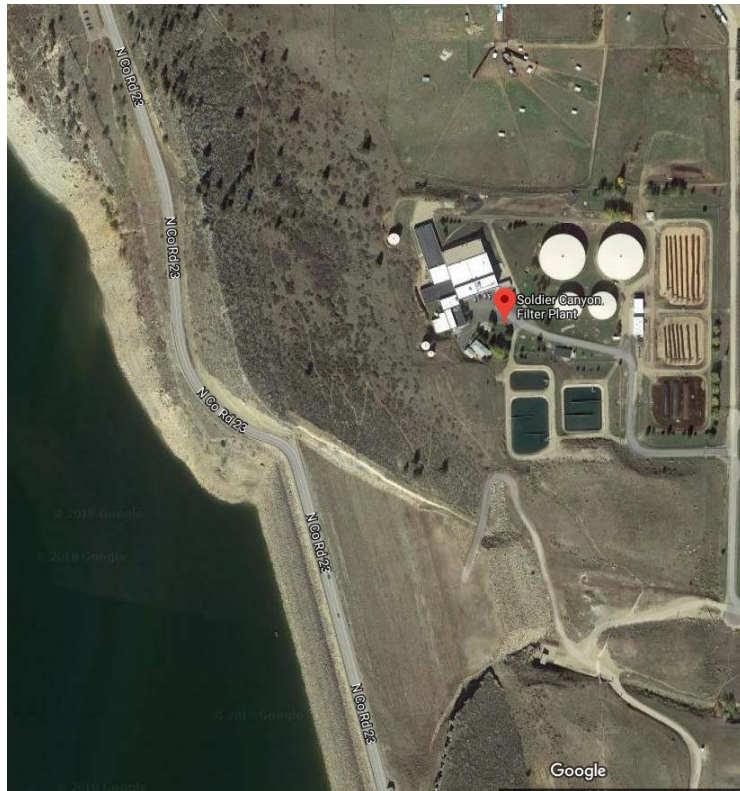
Agenda

- Water System Overview
- Master Plan Review
 - Current Supply
- Future strategies
 - Supply
 - Funding
- Rates and Fees

Water System Overview

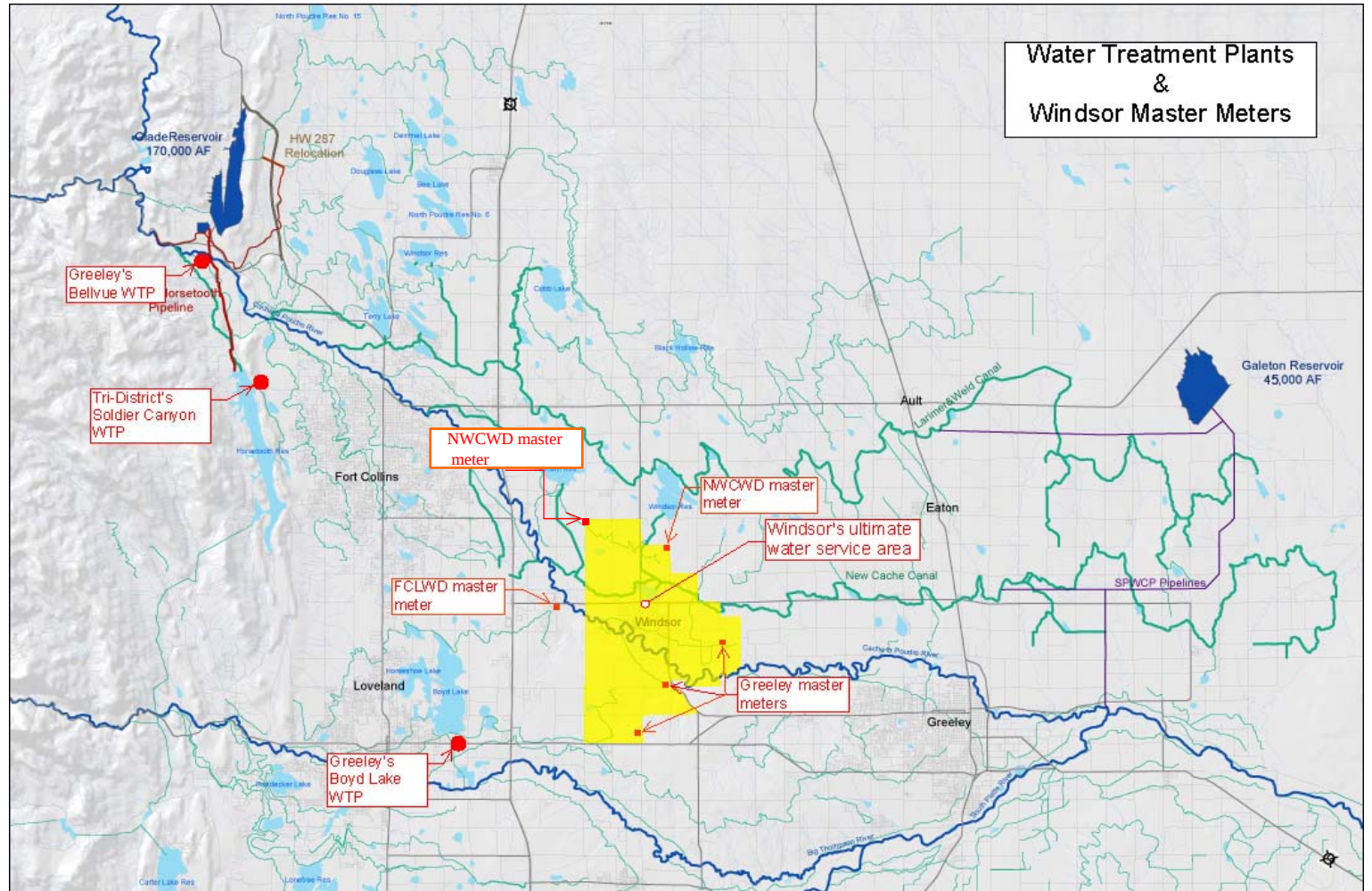


Annual Demand



Annual amount of water treated:

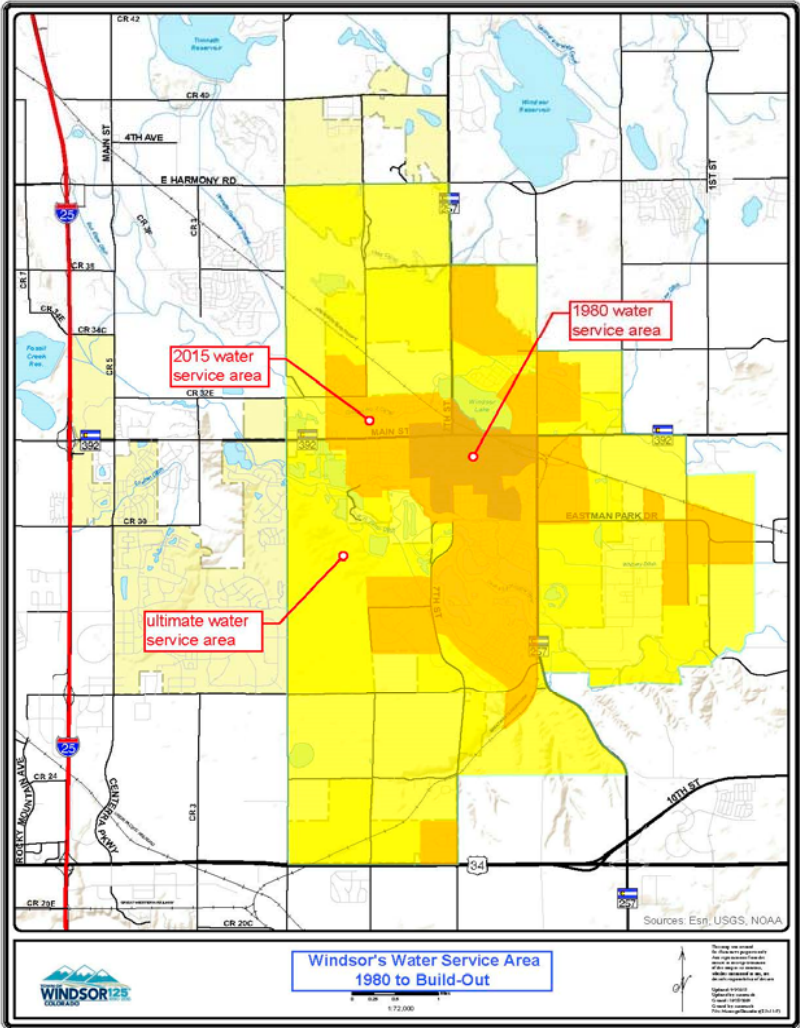
- Greeley: 212 million gallons
- FCLWD: 110 million gallons
- NWCWD: 400 million gallons

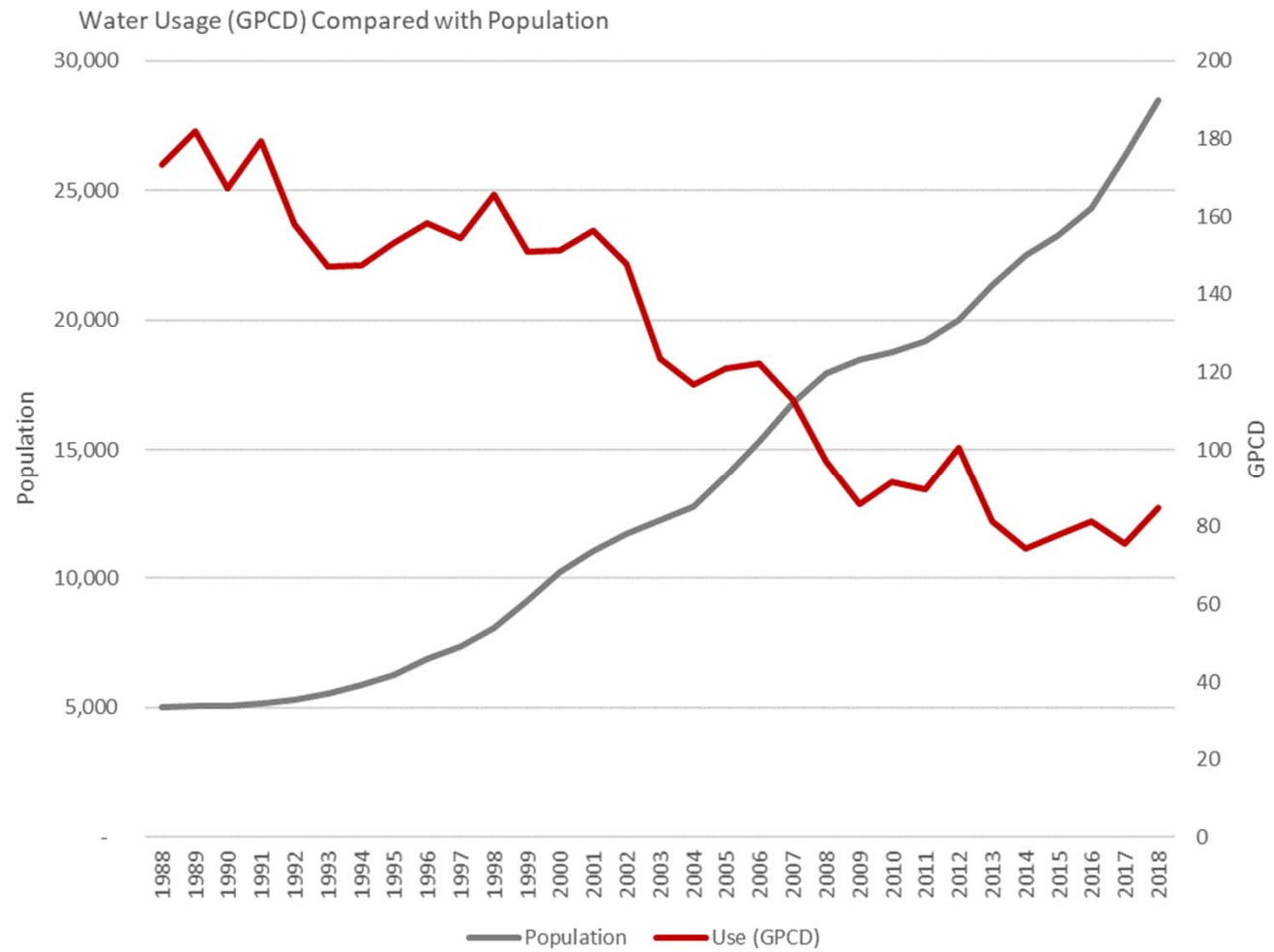




- Average Daily Winter Demand ~ 1.3 mgd
- Peak Day Summer Demand ~ 4 mgd

2003: residential single-source taps = 3,006
residential dual-source taps = 759
2018: residential single-source taps = 3,110
residential dual-source taps = 3,435

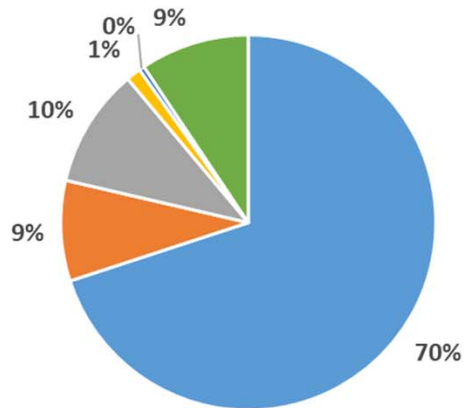






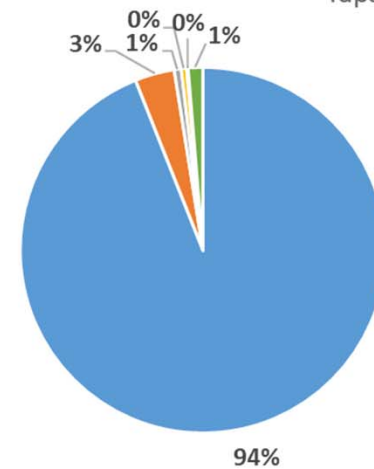
Water Use by Customer Class

Demand by Customer Class

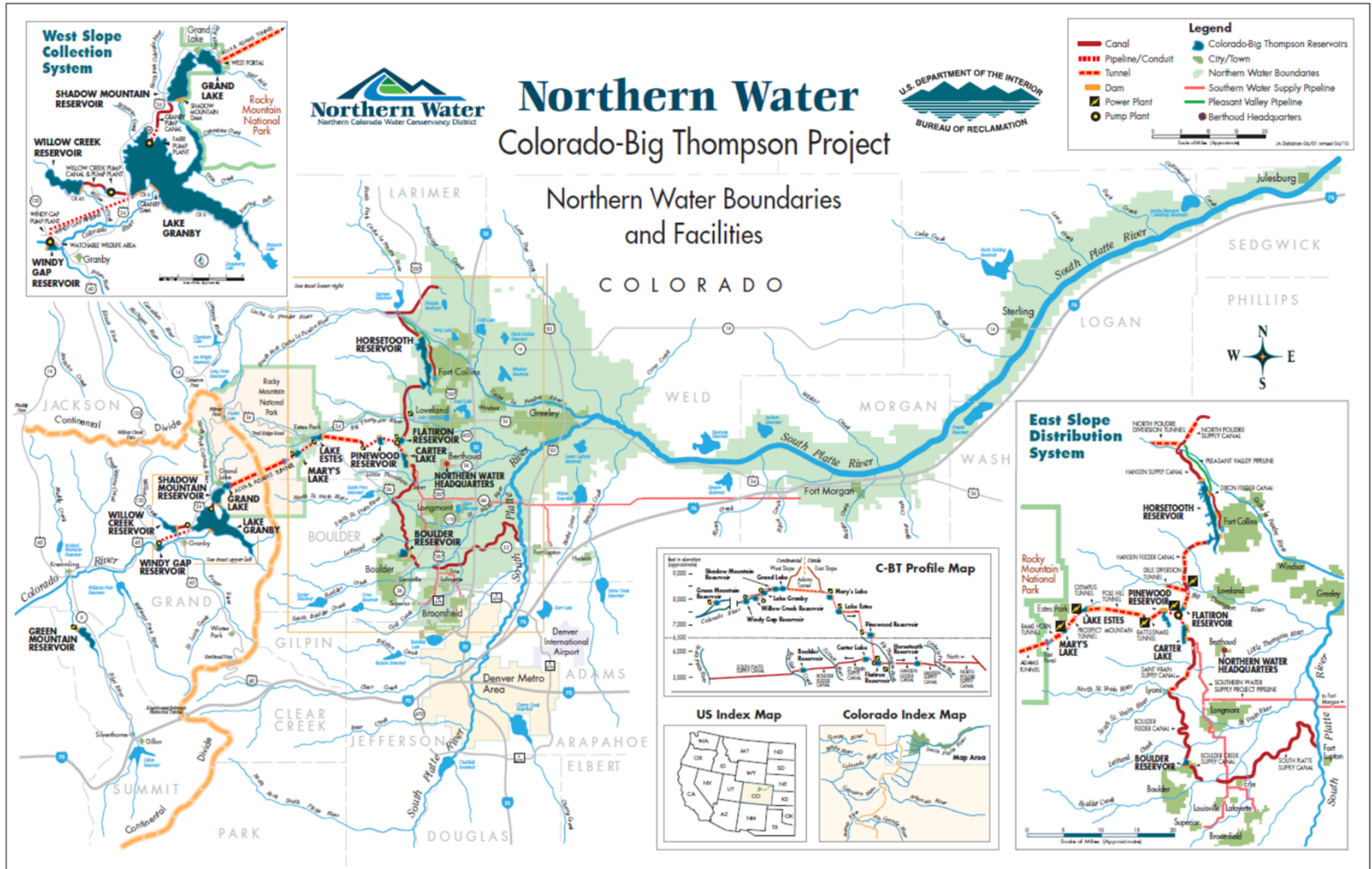


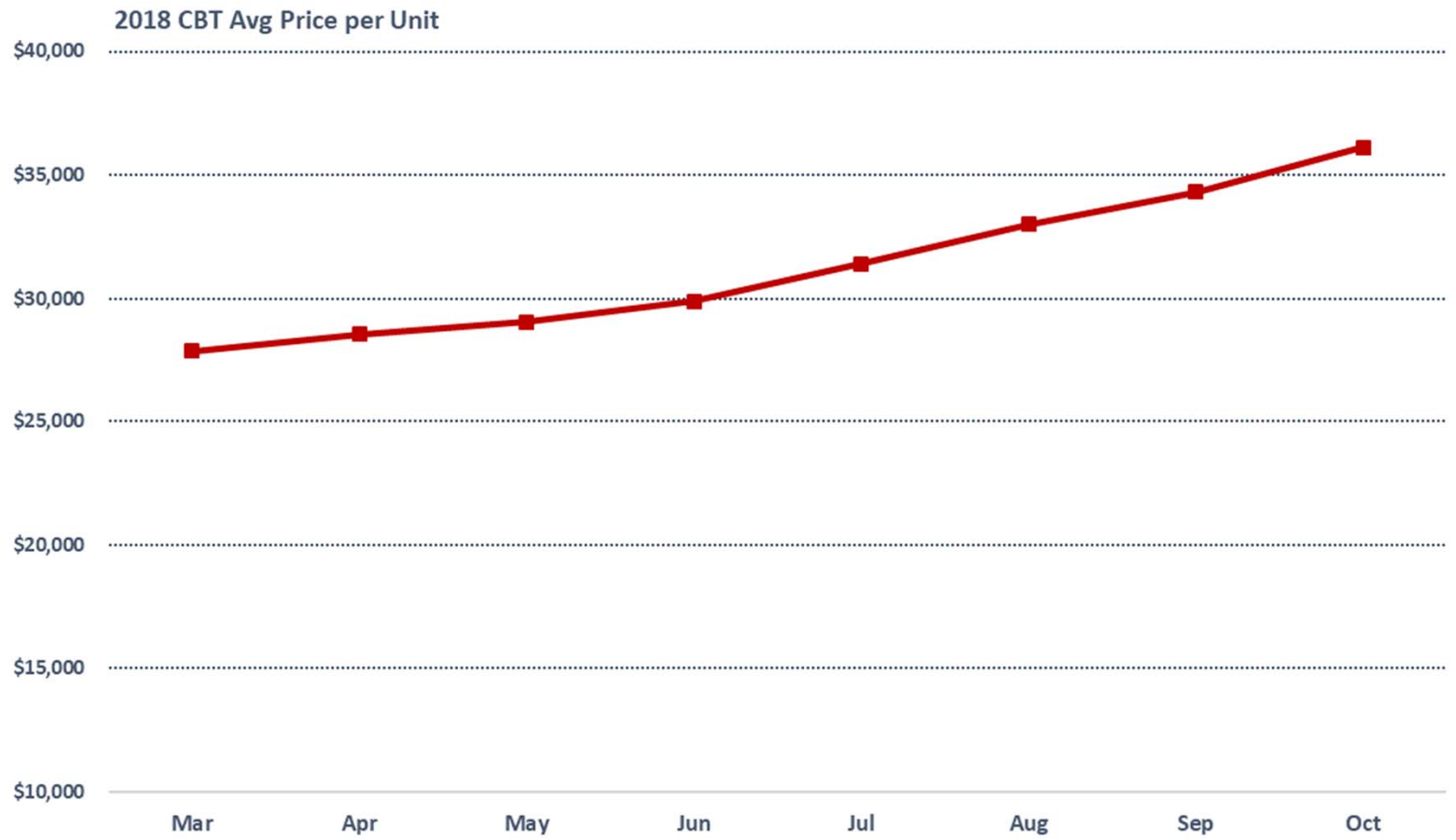
■ Residential ■ Commercial ■ Industrial ■ Schools/Churches ■ Out of Town ■ Landscape Only

Taps by Customer Class



■ Residential ■ Commercial ■ Industrial ■ Schools/Churches ■ Out of Town ■ Landscape Only





Water Master Plan Review



2009 Potable Water Master Plan

- Concern with “one-dimensional” water supply
- Focused plan for water acquisition
- Review water dedication policy
- NISP participation level
- Alternatives to funding for NISP
- Identify target water portfolio



Goal of the PWMP

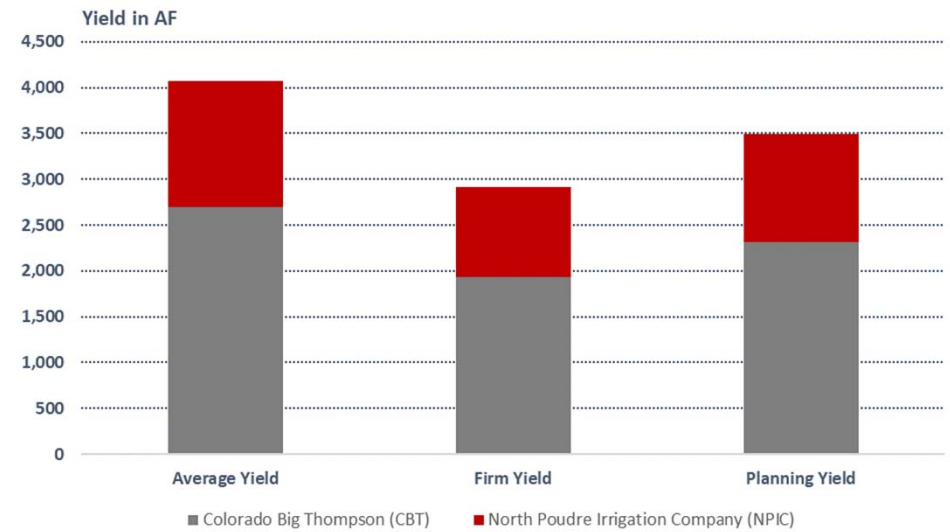
- “The goal of this plan is to provide the Town’s decision makers with the information needed to make sound decisions associated with it’s water portfolio to best position the Town for its future”
- Although the Town encourages growth, ***growth pays its own way***



Current Treatable Water Supply

- Colorado Big Thompson Units
 - 3,859 units
 - Average Yield = 2,701 AF
 - Firm Yield = 1,930 AF
 - **Planning Yield = 2,315 AF**
- North Poudre Irrigation Company
 - 489.75 shares (1,959 CBT units)
 - Average Yield = 1,371 AF
 - Firm Yield = 980 AF
 - **Planning Yield = 1,175 AF**

Total CBT = 5,818 units





Determining Future Demand

- Demand was based on the Comprehensive Plan *at Buildout (~ 102,000 residents)*
- Current Potable Demand (2017) = 2,016 AF
 - With losses = 2,724 AF
- Build-out Potable Demand = 12,542 AF*

*Future potable demand number does not include system losses (9%) or surcharge (17%) from water treatment providers



Total Future Demands at Build-out

WINDSOR WATER SERVICE AREA (Build Out)					POTABLE DEMAND				
Code	Description	Windsor Gross Acres	Windsor Net Acres	No. of Homes	Indoor (ac-ft)	No. of Irrigated Acres	Outdoor (ac-ft)	Total (ac-ft)	% of Total Demand
MFR	Multi-Family Residential	88	84	1,232	188	8	18	206	2%
E-1	Low Density Estate Single Family Residential	881	793	317	80	5	11	91	1%
E-2	High Density Estate Single Family Residential	3,179	2,702	3,973	998	27	62	1,060	8%
RMU	Residential Mixed Use	3,330	2,831	15,984	4,251	388	885	5,136	41%
SFR	Single Family Residential	2,760	2,484	11,040	2,772	279	636	3,408	27%
SCHL	Schools	98			65			65	1%
POSF	Parks, Open Space, Mineral Extraction & Flood Plain	2,745						0	0%
CS	Community Separator	1,837						0	0%
CBD	Central Business District	43	32		15	5	11	26	0%
NGC	Neighborhood & General Commercial	810	608		289	91	210	499	4%
OPUB	Other Public/Semi-Private	45	34		16	5	12	28	0%
I-L	Light Industrial	1,174	880		547	132	304	851	7%
I-H	Heavy Industrial	1,089	817		508	123	282	790	6%
EC	Employment Corridor	620	465		222	47	161	383	3%
	TOTAL	18,698	11,730	32,546	9,951	1,110	2,592	12,543	100%

- Residential Water Demand 9,900 AF
 - Commercial & Other Water Demand 2,643 AF
- Total Water Demand 12,543 AF



Projected Gap at Build-out

- Projected Demand (At the Tap) = 12,542 AF
- Water Supply (At the Plant) = 15,803 AF (26% surcharge)
- 2009 Supply = 2,911 AF
- NISP Participation = 3,300 AF
- Anticipated CBT Acquisition ~ 2025 = 861 AF
- **Remaining Gap = 8,731 AF**



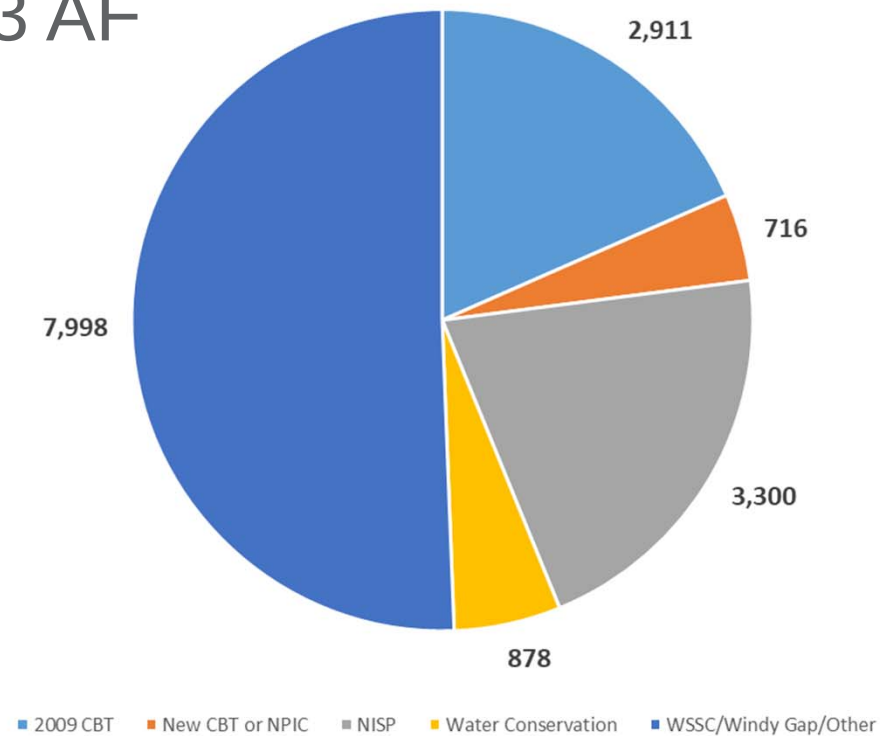
Meeting the Gap

- Recommended water rights acquisition:
 - CBT
 - NPIC
 - Water Supply & Storage Company (WSSC)
 - Windy Gap
- Future sources to be treated by North Weld at Soldier Canyon unless Windsor builds WTP



Target Water Rights Portfolio (AF)

- Total = 15,803 AF





Water Supply Costs

Water Supply	No. of Shares	Cost per share (\$)	Average Annual Yield per Share (ac-ft)	Firm Annual Yield per Share (ac-ft)	Cost per Firm Yield (\$/ac-ft)
NPIC	10,000	\$ 140,000.00	2.8	2	\$70,000.00
CBT	310,000	\$ 35,000.00	0.7	0.5	\$70,000.00
WSSC	600	\$ 950,000.00	65.2	45.6	\$20,833.33
Larimer and Weld	118	\$ 30,000.00	17	1.33	\$22,556.39
Windy Gap (Firming)	480	\$ 1,840,000.00	100	75	\$24,533.33
NISP	40,000	\$ 1,200,000,000.00	3300		\$30,000.00



Key Findings and Recommendations

- Alter Water Dedication Calculations (include surcharge and losses ~ 26%)
- Shift water dedication policy to 50% dedication and 50% cash-in-lieu (CIL) from 2010 – 2015
- Evaluate CIL price each year (set near CBT price)
- Maintain participation in NISP at 3,300 AF
- Initiate discussions with Windy Gap participants



Key Findings and Recommendations cont...

- Focus on water acquisition before raw water storage
- Begin accepting WSSC for dedication
- Pursue NPIC shares
- Budget funds to acquire new water
- Budget funds for water conservation
- Initiate adding future NWCWD tap to Windsor system
- Explore agreement with North Weld to change WSSC and replace return flow obligations



Key Findings and Recommendations cont...

- Connect Greeley Master Meter to Windsor's SCADA system
- Follow communication protocol between departments to manage quantity of water from wholesale providers
- Continue CBT carryover and rent additional supplies in summer or fall if available

Questions?
