



WATER AND SEWER BOARD REGULAR MEETING
October 14, 2020 – 6:30 a.m.

<https://windsorgov.zoom.us/j/98618682832>

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 Minutes
2. EONE Proposal, *Stephanie Thomas, Project Manager, Northern Engineering*

D. PRESENTATIONS AND DISCUSSION

1. MS4 Permit Information, *Janine Hegeman Stormwater Program Coordinator, Town of Windsor*

E. COMMUNICATIONS

1. Town of Windsor Outdoor Voluntary Water Reduction of Use

F. ADJOURN



WATER AND SEWER BOARD REGULAR MEETING
September 09, 2020 – 6:30 a.m.
Meeting via Zoom
Windsor, CO 80550

MINUTES

A. CALL TO ORDER

Board Chairperson Bielawski called the meeting to order at 6:31 a.m.

1. <u>Roll Call</u>	Chairperson	Greg Bielawski
	Vice-Chairperson	Carlos Medina
	Secretary	Janene Willey
	Youth Advisory Board Member	Hunter Rivera
		Darell Zimbelman
		Milt Tokunaga
		Milton Geiger
		(vacant)
	Town Board Liaison	Ken Bennett

Also present:	Director	John Thornhill
	Water Resources Administrator	Leif Lesoing
	Customer Service Manager	Mike Lucero
	Utility Billing Admin Specialist	Erin Porter

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

B. CONSENT CALENDAR

There were no items on the consent calendar.

C. BOARD ACTION

1. Minutes of August 12, 2020 Regular Meeting
Board Member Zimbelman moved to accept the minutes for the August 13, 2020 meeting; Board Secretary Willey seconded the motion. Motion carried unanimously.
2. Water and Sewer Board Bylaws Approval
The amendments under review to the bylaws of the Water and Sewer Board were previously discussed and debated during the August 12, 2020 Water and Sewer Board meeting.

Board Member Tokunaga moved to accept the amendments to the Water and Sewer Board Bylaws effective September 9, 2020, Board Secretary Willey seconded the motion. Motion carried unanimously

D. PRESENTATIONS AND DISCUSSION

1. Northern Integrated Supply Project (NISP) Update

Last week the Larimer County Commissioners had their final meeting for the County 1041 for NISP. The Commissioners voted 2 to 1 in favor of approval of the project. Mr. Lesoing thanked the Board because Windsor had the strongest showing of support out of any other municipality.

The next step anticipated is that Save the Poudre will file a lawsuit against the County Commissioners. To determine the next steps, we would have to wait for the Corps of Engineers record of decision, which will hopefully come in November.

Mr. Thornhill stated that the next big step is the court challenge to the 401 certification in November. The basis for this and any future challenges in court will be most likely on the process, not on the data.

E. COMMUNICATIONS

1. Open House for the expanded Public Services building

The open house for the expanded Public Services building will be on September 10, 2020 at 4:30 pm.

2. Advisory Board Interviews

Town Board Member Bennett stated he and Mayor Paul Rennemeyer conducted interviews the previous evening to fill vacant advisory board openings. Board Vice-Chairman Medina took part and was re-appointed to the board. There is still one vacancy on the Water and Sewer Board with no candidates currently.

3. Cameron Peak Fire

Mr. Bennett asked staff about the potential difficulties that would result from the Cameron Peak Fire. Mr. Lesoing stated that if the river is the only source for the water treatment plant, they would be able to treat most of it, but Horsetooth might be shut off for the sake of cost and keeping everything cleaner. Board Member Zimbelman stated that Northern may be closing Horsetooth Reservoir anyway for maintenance and infrastructure improvements.

Mr. Thornhill stated that after the High Park Fire in 2012, Fort Collins set up an early warning system to measure the load coming down the river above the treatment plants. They will know if the water quality isn't good enough, and they will shut off their river headgates and utilize water from Horsetooth. After the High Park Fire, this was routinely done until the flood in September 2013.

4. Water Supply

Board Secretary Willey asked if there was any new information about the recent City of Aurora water purchase with Broe. Mr. Thornhill said there was no new information. He did state that the Town was still looking at purchasing farms around Windsor for non-potable water, but that the focus would probably be switching from the Whitney shares to New Cache shares. He also stated that staff would come back to the Board later once the idea has been fleshed out to discuss community buffers. There is a good property just east of Windsor which staff is looking at purchasing.

Mr. Thornhill stated that in December he and Town Manager Shane Hale will be part of a working group in December to talk about water issues and potential future actions in Northern Colorado.

5. Board Secretary Duties

There was discussion about the role and duties of the Board Secretary. The main discussion centered around the completion of meeting minutes. The Board discussed some, and agreed to table the discussion until after staff had determined the feasibility of access to files and recordings of the meetings.

F. ADJOURN

Board Member Zimbelman moved to adjourn the meeting at 7:09 am; Board Member Willey seconded the motion. Motion carried unanimously.

Submitted by:

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

Erin Porter, Utility Billing Administrative Specialist



NE

NORTHERN
ENGINEERING

Q-S



NORTHERN
ENGINEERING

Village East Subdivision 8th Filing

Town of Windsor

Location: NW Corner of WCR 21 and Highway 392

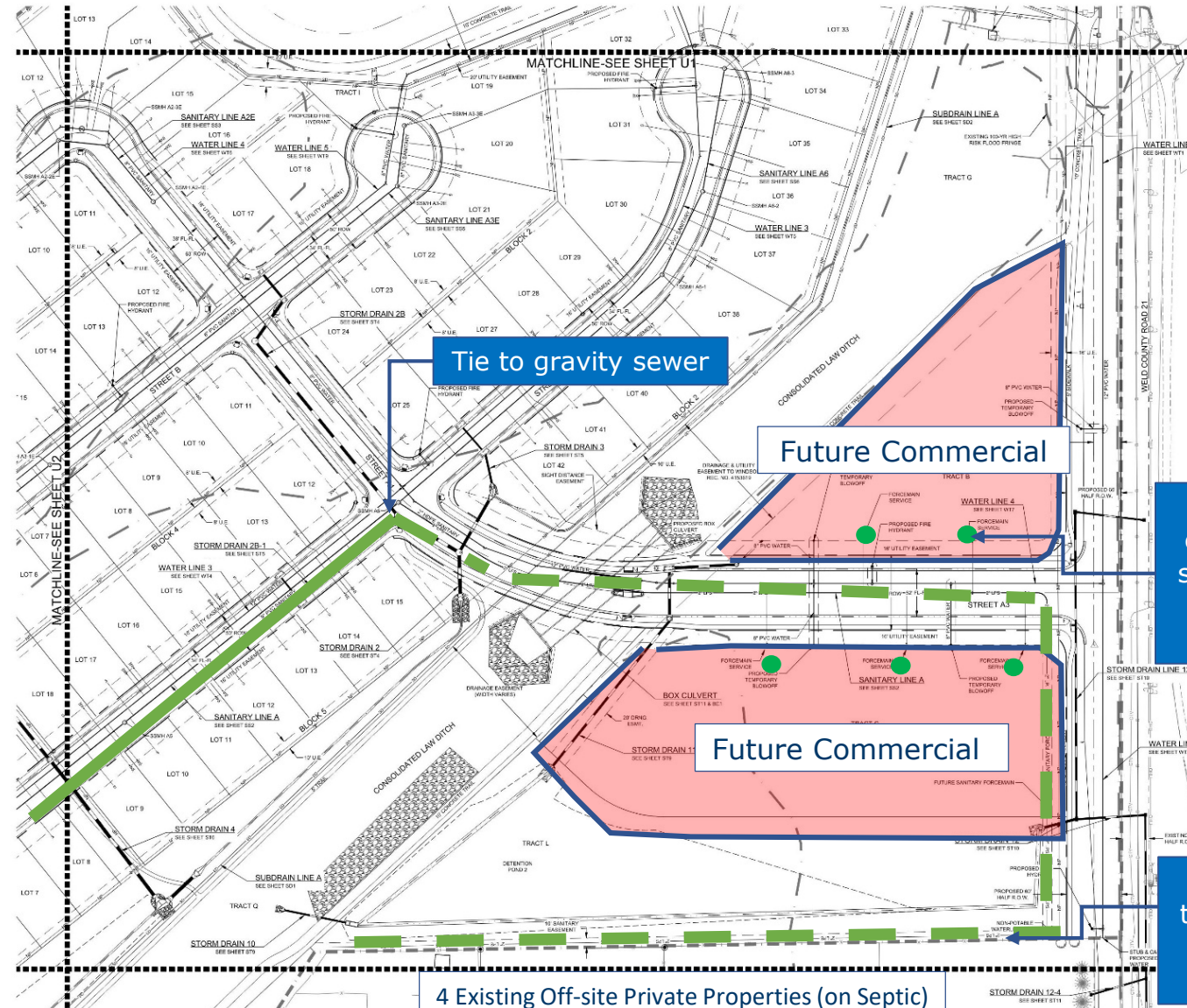
Low Pressure Sanitary Sewer – EONE System Proposal

Windsor Water and Sewer Board Presentation October 14, 2020





Proposed EONE Network – Plan View



Tie to gravity sewer

Future Commercial

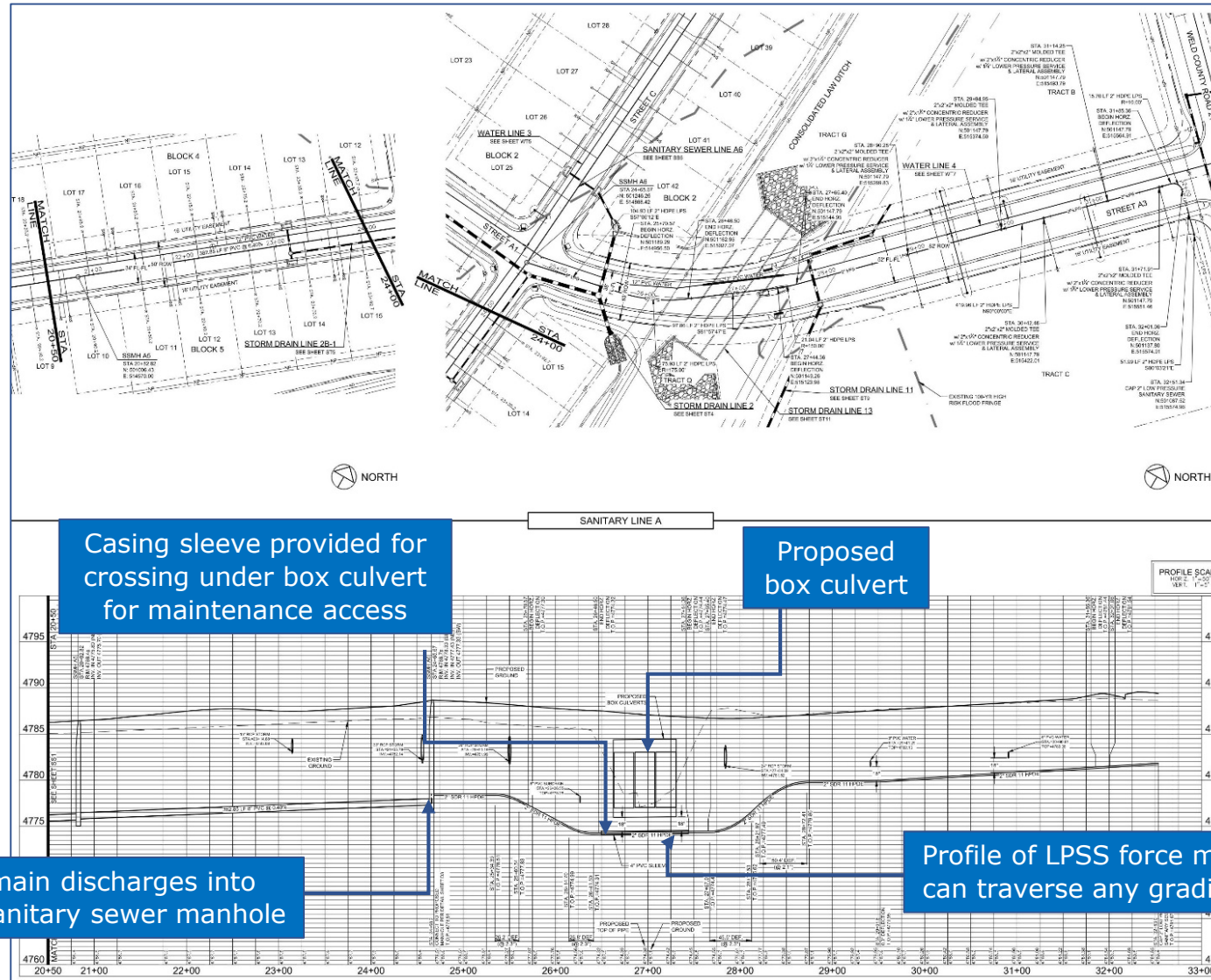
Service stub for future connection to LPSS. Curb stop provided (typ.) EONE grinder pump to be installed by future buyer

Future Commercial

2" LPSS to be installed to provide for future tie-in of existing homes to sanitary sewer network

4 Existing Off-site Private Properties (on Septic)

Proposed EONE Network – Profile View



EONE System Calculation

PRELIMINARY PRESSURE SEWER - PIPE SIZING AND BRANCH ANALYSIS Village East, CO

Prepared By:
M. Crowley

June 10, 2020

Zone Number	Connects to Zone	Number of Pumps in Zone	Accum Pumps in Zone	Gals/day per Pump	Max Flow Per Pump (gpm)	Max Sim Ops	Max Flow (GPM)	Pipe Size (inches)	Max Velocity (FPS)	Length of Main this Zone	Friction Loss Factor (ft/100 ft)	Friction Loss This Zone	Accum Friction Loss (feet)	Max Main Elevation	Minimum Pump Elevation	Static Head (feet)	Total Dynamic Head (ft)
This spreadsheet was calculated using pipe diameters for: SDR11HDPE										Friction loss calculations were based on a Constant for inside roughness "C" of: 150							
1.00	2.00	4	4	249	11.00	3	33.00	2.00	3.57	1,175.00	2.52	29.60	44.08	4,790.00	4,779.00	11.00	55.08
2.00	3.00	3	7	1241	11.00	3	33.00	2.00	3.57	180.00	2.52	4.53	14.48	4,788.00	4,787.00	1.00	15.48
3.00	3.00	2	9	1286	11.00	3	33.00	2.00	3.57	395.00	2.52	9.95	9.95	4,787.00	4,787.00	0.00	9.95

PRELIMINARY PRESSURE SEWER - ACCUMULATED RETENTION TIME(HR) Village East, CO

Prepared By:
M. Crowley

June 10, 2020

Zone Number	Connects to Zone	Accumulated Total of Pumps this Zone	Pipe Size (inches)	Gallons per 100 lineal feet	Length of Zone	Capacity of Zone	Average Daily Flow	Average Fluid Changes per Day	Average Retention Time (Hr)	Accumulated Retention Time (Hr)
This spreadsheet was calculated using pipe diameters for: SDR11HDPE								Gals per Day per Dwelling 200		
1.00	2.00	4	2.00	15.40	1,175.00	180.98	996	5.50	4.36	4.70
2.00	3.00	7	2.00	15.40	180.00	27.73	4,719	170.21	0.14	0.34
3.00	3.00	9	2.00	15.40	395.00	60.84	7,291	119.84	0.20	0.20

Pros and Cons

Pros:

1. Lower upfront cost versus traditional lift station
2. Allows smaller developments to develop even in adverse sewer conditions
3. Each user owns and maintains their own pump (PRO to Town)
4. Only shared infrastructure is mainline LPSS
5. System allows buildout over time
6. EONE provides options for simplex/duplex pumps. Duplex pumps add an additional level of redundancy
7. Proven reliability

Cons:

1. Needs HOA to maintain LPSS mainline
 - a. This is no different than a traditional lift station
2. Each user owns and maintains their own pump (CON to owner)
3. Some municipalities have less experience with these systems



NORTHERN
ENGINEERING

Questions





MEMORANDUM

Date: October 14, 2020
For: October 14, 2020 Water and Sewer Board Meeting
To: Water and Sewer Board
From: Doug Roth, Civil Engineer
Re: Consideration of EONE Force Main Sewer System
Item #: TBD

Background / Discussion

Village East Subdivision Eighth Filing is currently under development review. The proposed subdivision is located north of SH 392 and west of WCR 21 and abuts the existing Village East Subdivision along its northwestern boundary. Village East Eighth Filing is bisected by the Consolidated Law Ditch with residential development west of the ditch and commercial development east of the ditch.

The Consolidated Law Ditch located in Village East Eighth Filing was previously deepened and oversized to also serve as a flood control channel. The work was part of the Law Floodplain Residential Flood Risk Reduction Project completed in 2016.

It is not possible to gravity drain sanitary sewer under the oversized Consolidated Law Ditch due to the depth of the existing sewer interceptor west of the ditch. Therefore, the commercial development portion of Village East Eighth Filing located on the east side of the Consolidated Law Ditch must be serviced by pumped sewer.

The applicant has propose serving the commercial portion of the development with EONE sewage grinder lift pumps. Each business would have an individual EONE pump connected to a common force main. The common force main is proposed to discharge to the gravity sewer system located on the west side of the Consolidated Law Ditch.

Financial Impact

No financial impact to the Town beyond typical development is anticipated. The proposed EONE pumping systems and associated force main are proposed to be maintained by the metro district associated with the development.

Relationship to Strategic Plan

Infrastructure, quality of life and safety are Strategic Plan priorities. Providing reliable sewer infrastructure supports Strategic Plan priorities.

Recommendation

Staff recommends that the proposed EONE system be considered for approval contingent upon agreement that the force main, EONE pumps and all associated appurtenances be owned and maintained by the metro district serving the subdivision.

Attachments

Presentation to be provided by applicant's representative.



MS4 PROGRAM STATUS

October 2020 Water & Sewer Board



STATUS

- Municipal Code Section 13 Article 5 Stormwater Quality – IN FORCE
- Program Description Document (PDD) – document with links to Permit required info
- Must be updated to reflect current implementation
- Must be presentable to the CDPHE or EPA within 10 days of a request, and available to the public upon request

COMPLETED for ALL Programs



STATUS: Programs and Process

- **Five** pollution prevention programs in place and PDDs completed:
 - 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*
- File system set up on O drive for tracking documentation and fast turnaround for EPA/State/resident requests for information



STATUS: Public Education and Outreach

- Compliance schedule: *Complete by July 2018*
 - Actual completion of PDD December 2018
- Program elements are reportable in 2019 Annual Report to CDPHE
- *In Progress:*
 - PDD section updates in progress
 - Communications plan refinement started with Nicole Towne in Communications
 - New opportunities continue to develop, such as HOA management training, signage and Eastman Park River Experience

COSTS: Estimated \$600 annually



STATUS: Public Education and Outreach

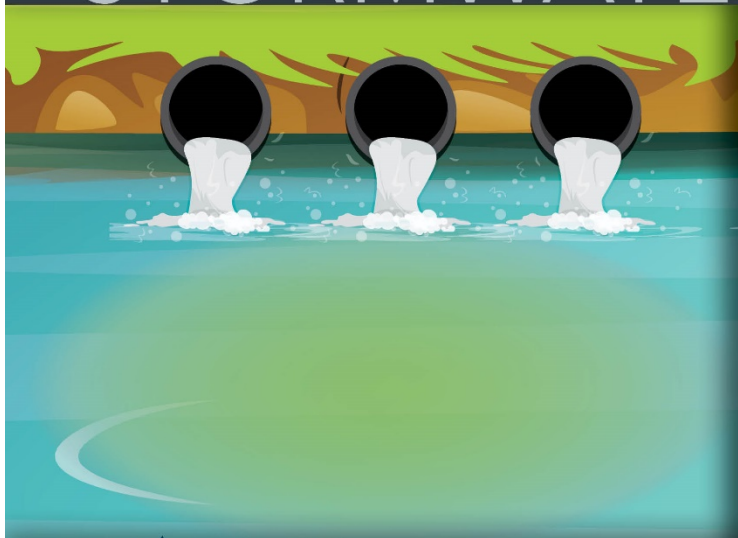
2020 RESULTS (to date)

- Facebook post on nutrients in stormwater 8-17-20: **2,190** people reached
- Facebook post on “Back to the River” 2-25-20: **2,792** people reached
- Stormwater/nutrients slides currently running on the Town’s television station
- “Windsor Matters” newsletter and e-newsletter July 2020 “Don’t Trash Windsor” message sent to **12,500+** homes
- Fall leaf cleanup mailer 9-20 sent to **12,500+** homes
- Stormwater webpage: no information – Google Analytics disconnected from the webpage earlier this year



STATUS: Public Education and Outreach

STORMWATER MATTERS



Follow fertilizer package recommendations.
Excessive fertilizer can contribute to polluted rivers and algae growth in lakes.



Windsorgov.com/Stormwater



STATUS: IDDE Program

- Compliance schedule: PDD *Completed July 2019*
- Program elements are reportable in 2020 Annual Report to CDPHE

Completed:

- Regulatory Mechanism & Exemptions (Municipal Code) in place, TWO emergency clean up companies are under contract
- Storm sewer system map in WING, construction inspectors are starting to upload new storm sewer data into GIS; GIS hired a new tech to help with mapping

In progress:

- Identification of Priority Areas – will continue to track, proposing a request for emergency plans from local businesses – on hold due to COVID-19
- Training – Refresher due for Engineering, Parks, Public Works and W&S Board
- PDD section updates needed
- Working out procedures with PD and FD – not completed
- 8 ID reports to date



STATUS: IDDE Program

2020 RESULTS (to date)

8
reports

Illicit Discharge Investigations 2020							
Date Reported/Identified	Response Date	Location	Responsible Party	Source/Nature	Resolution/Elimination	Enforcement Actions	Follow up
1/13/2020	1/14/2020	7135 Royal Country Down Drive, Windsor CO	Unknown	Petroleum product	Town of Windsor Public Works staff applied absorbent material, cleaned up and properly disposed of the clean up materials	NONE	N/A did not reach storm drain
1/13/2020	1/13/2020	Cherry Blossom Drive and Summerlyn Court, Windsor CO	Unknown	Petroleum product	Windsor/Severance FD applied absorbent material, cleaned up and properly disposed of the clean up materials	NONE	N/A did not reach storm drain
2/26/2020	2/26/2020	5360 Promontory Circle, Windsor CO	Pure Pressure Cleaning	Hydraulic fluid	Citizen called Public Services to complain about the responsible party power washing driveways stained with hydraulic fluid into a stormdrain, and they then called me. Upon investigation, this was unfounded; no sheen was observed at the inlet or outfall, and control measures were used.	NONE	No follow up
4/6/2020	4/6/2020	Shirttail Peak Dr. and Boxwood Dr. Windsor, CO	Darren Mann, Midian Homes	Sediment and debris from Construction; lack of implementation of control measures at a construction site		YES - a CDPS permit was not found on the CDPHE list of current permits -notified Shannon Kime, CDPHE and a Compliance advisory initiated. TOW Letter of Non-Compliance issued 8-28-20.	Midian submitted a GESCP application and a SWMP on 4-22-20. Returned for revision 4-28-20. GESCP completed, and minor revisions to SWMP requested 5-14-20. Winter Farm/Midian Homes will be inspected by the Town of Windsor for MS4 compliance until permit closeout.
4/14/2020	4/15/2020	7260 Crossroads Blvd., Windsor CO	Wagner Equipment Company 18000 Smith Road Aurora, CO 80011-3511 Mike Quirk, Facilities Department	Sediment track out from Rental equipment storage lot	No communication was received in the time allowed in the NOV; a visit to Wagner Rents was made on May 22, 2020. Met with Joe L. Smith Branch Manager. A communication problem (incorrect email address) was determined, and a compliance plan was developed.	Notice of Violation sent 4-22-20; other complaints have been made regarding this property tracking out onto streets.	N/A did not reach storm drain
7/10/2020	7/10/2020	5834 to 5390 Crooked Stick Drive Windsor CO	Gallegos Sanitation, 1941 Heath Pkwy, Unit 2, Fort Collins CO 80524	Unknown fluid emitted from trash trucks staining street and flow line	Tom Clock from Gallegos explained their clean up procedures. Another call was received on this same location on 7-13-20; sorbent wittes had been properly placed by the clean up company; no discharge.	NONE	N/A did not reach storm drain
7/30/2020	7/30/2020	1769 Merlin Lane, Windsor CO	Daniel Morse, home owner	Sediment discharge from unstabilized stockpile	Slopes leveled, soil amendments added, seeded and blanketed.	NONE	Continuing reconnaissance
8/17/2020	8/17/2020	Crop Row Drive and Iron Wheel Drive, Windsor, CO	Ram Waste Systems, 570 Bueno Drive, Fort Collins CO 80525	Unknown fluid emitted from trash trucks staining street and flow line	Fluid determined to be decomposing organic material.	NONE	N/A did not reach storm drain



STATUS: Construction Sites Program

Compliance Schedule: PDD *Complete July 1, 2019*

- Program elements are reportable in 2020 Annual Report to CDPHE
- *In Progress:*
 - Site plan, development agreement review
 - Pre-construction meetings all on-site with COVID-19 social distancing
 - Site inspections done with phone app
 - Trainin Safebuilt inspector to assist with single lot inspections
 - PDD section updates needed
 - Development of Construction Sites training underway
 - 2020 receipts to date (Permit and Reinspection fees) - \$24,865



STATUS: Construction Sites Program

2020 RESULTS (to date)

- Construction Sites permitted– 49 (14-single lot, 1-CIP, 11-2019 and 12-2020 GESCP, 11 in stabilization)
- 8 projects fully stabilized and completed (since program inception)
- 450+ inspections completed, 48 operator compliance inspections accepted
- 6 Overlapping MS4 agreements in place
- 2 sites under investigation by CDPHE; both for construction w/o a permit
- 13 CDPHE ROW only inspections
- Developed Dirt Hauling operation registration process to better handle complaints
- Developed a GESCP Modification form to ensure continuity of coverage when a site is developed and sold



STATUS: Post-Construction Program

Compliance Schedule: PDD *Completed July 1, 2020*

- Program elements are reportable in 2021 Annual Report to CDPHE
- *In Progress:*
 - Reviewing all submitted plans for Post-Construction program elements
 - Windsor's Drainage Criteria Manual update COMPLETED July 1, 2020 – contains guidance for consultants designing water quality structures for projects in design after July 1, 2020
 - Reminders to refer to the update sent with all reviews
 - Training for engineers and consultants included in the Construction Sites training
 - Inspections of post-construction stormwater management structures per the MS4 permit requirements to begin as soon as the first one in the design review queue is constructed and functional

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



STATUS: Municipal Operations Program

Compliance Schedule: PDD (RCP) *Completed July 1, 2020; Completed by July 1, 2021 Bulk Fuel Storage*

- Program elements (PDD only) are reportable in 2020 Annual Report to CDPHE
- New decant facility (street sweeper and vehicle wash area) installed; bulk fuel storage upgrade completed at Public Services campus
- Completed RCPs with aerial photos to outline specific activity areas in the facilities
- SOPs: 21 Standard operating procedures – each a 1-2 page document that outlines how to handle a product or conduct an activity in a manner that will prevent Stormwater Pollution
- Completed a crosswalk with all the facilities and the activities/SOPs in place at them to create the Runoff Control Plans (RCPs) for each municipal facility

In Progress:

- Inspection template set up in inspection software on phone
- Annual inspections of facilities to begin November/December 2020.
- On-line training underway for Public Services employees who will implement/impact the program 85% completed



STATUS: Municipal Operations Program

Municipal Facilities O&M SOPs																					
LEGEND																					
Public Works																					
Parks																					
Recreation and Culture																					
Under Construction / Change of Ownership/Other																					
Trails																					
SOP	Building Maintenance	Fertilizer, Herbicide, and Pesticide Application	Heavy Equipment and Vehicle Maintenance	Outdoor Material Storage	Salt and Sand Storage	Snow and Ice Control	Spill Prevention and Response	Parking Lot Maintenance	Power Washing	Street Sweeper Cleaning and Waste Disposal	Street Sweeping	Vehicle Fueling	Large Outdoor Festivals and Events	Parks and Open Space Maintenance	Hydrant Maintenance Testing/Potable Water Discharge	Street, Curb, and Gutter Replacement and Construction	Utility and Storm Sewer Maintenance	Water Line Breaks	New Construction Activities	Bridge Cleaning	Employee Training
SOP #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
SITE - name, address																					
Public Works/Parks Facility, 922 N.15th St., Windsor CO		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x
Town Hall, 301 Walnut St., Windsor		x	x			x	x	x													x
Art & Heritage Center, 116 N. 5th St., Windsor CO																					
Community Recreation Center, 250 N. 11th St., Windsor CO		x	x	x	x	x	x	x	x		x			x					x		x
Chimney Park Pool, 421 Chimney Park Dr. Windsor CO		x	x			x	x	x	x					x					x		x
Governor's Farm ROW			x			x	x							x							x
Greeley Canal Trail			x			x	x							x							x
Oxbow Natural Area			x				x							x							x
Poudre Natural Area, 1050 Larch Dr., Windsor CO			x				x							x							x
Riverbend Natural Area, 525 Parkwood Dr., Windsor, CO			x				x							x							x
Kyger, 7301 N. County Rd. 1, Windsor, CO			x			x	x							x							x
BROE, Highway 257 to Kodak Bridge, Windsor CO			x			x	x							x							x
Boardwalk Community Park, Windsor Lake, 250 N.11th St., Windsor, CO		x	x			x	x	x	x		x		x	x	x	x					x
Park, 7025 Eastman Park Dr., Windsor, CO		x	x			x	x	x	x				x	x	x						x
Eastman South - Treasure Island Community Garden, 1560 7th St., Windsor, CO			x			x	x	x	x				x	x	x						x



And the MS4 permit is up for renewal in 2021!

Questions?

Janine Hegeman
Stormwater Program
Coordinator
jhegeman@windsorgov.com
970-674-2490

