



WATER AND SEWER BOARD SPECIAL MEETING
March 13, 2019 – 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 February 13, 2019 Minutes

D. PRESENTATIONS AND DISCUSSION

1. MS4 Illicit Discharge Detection and Elimination Training
2. Wastewater Presentation

E. COMMUNICATIONS

1. Staff
 - a. Bellvue Treatment Plant Tour—April 26th 8:30 am
 - b. Water Supply Update
2. Board
 - a. Tour of Windsor Wastewater Treatment plant - April 10
 - b. Brief Report on the Windsor Tree Symposium of Feb 23 (Willey, Bielawski, Bennett)
 - c. Planning for Weld County "Colorado Landscape Boot Camp" (Willey)
 - d. HOA Water Education (Tokunaga)
 - e. Additional ideas for Citizen Water Education activities

F. ADJOURN



WATER AND SEWER BOARD SPECIAL MEETING
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MINUTES

A. CALL TO ORDER

Board Vice Chairperson Medina called the meeting to order at 6:29 a.m.

1. Roll Call

Chairperson	Greg Bielawski (phone in)
Vice-Chairperson	Carlos Medina
Secretary	Julie Cline
	Darell Zimbelman (absent)
	Milt Tokunaga
	Milton Geiger
	Janene Willey
Town Board Liaison	Ken Bennett
Town of Severance PW Director	Brad Trujillo

Also present:

Director of Engineering	Dennis Wagner
Water Resources Manager	John Thornhill
Open Space and Trails Manager	Wade Willis
Administrative Services Director	Jessica Humphries
Utility Billing Admin Specialist	Erin Porter
Northern Water Colorado River Program Manager	Kyle Whitaker
Northern Water General Manager	Brad Wind
Clear Water Solutions	Steve Nguyen
CSU Weld County Extension Agent	Amy Lentz

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 additional items added to the agenda.

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 January 23, 2019 Regular Meeting

Board Member Willey moved to accept the minutes for the January 23, 2019 Meeting; Board Member Cline seconded the motion. Motion carried unanimously.

D. PRESENTATIONS AND DISCUSSION

1. Colorado River Matters – Northern Water Conservancy District Presentation

Brad Wind, General Manager, and Kyle Whitaker, Colorado River Program Manager, presented information relating to the current status, challenges and future of the Colorado River basin.

Mr. Whitaker first spoke about the history and background of the Colorado River Compact. The Undepleted Natural Flow at Lee Ferry when the Colorado River Compact was signed in 1922 was around 17 million acre feet (maf). The rolling 10 year average has peaks and valleys, but the long term average has settled around 14 maf of water.

The Colorado River Basin was split between the Upper Basin, comprising the states of Colorado, New Mexico, Utah and Wyoming, and the Lower Basin comprising the states of Arizona, California, and Nevada. Roughly 7.5 maf are designated to each basin, which is split by percentage. In 2007 a Hydraulic Determination was done which estimated that there was not 7.5 maf available for the upper basin states, more like 6.01 maf, which would allocate around 3 maf to Colorado. The current usage for Colorado is around 2.6 maf.

The lower states were split up similarly, but they can order water from Lake Mead, which is above all of their current demands. They get credit for return flows, and the last structure down on the Colorado River is the treaty obligation with Mexico, which receives 1.5 maf. With all the water taken from the River system, 17 maf is estimated water use, and the basin does not provide that on average.

There is a total inflow at Lake Mead of around 9maf. Lower Basin/Mexico deliveries and losses, as well as evaporation, leaves a deficit of around 1.2 maf

The Interim Guidelines of 2007 designed to address shortages in the lower basin control the levels of Lake Mead and Lake Powell, the intent of which is to keep the levels about the same. Currently of all the big reservoirs in the system, outside of Flaming Gorge, all reservoirs are at or below 50% full, with Lake Mead and Lake Powell around 40% full.

Lake Powell and Lake Mead have multiple years' worth of storage currently; however the level of Lake Powell is right now at about 82 feet above the intake. This is concerning to Northern Water because if the level drops to be even with the intake, there would be no power generation, which fund improvement programs which allow compliance with the Endangered Species Act. There are also concerns that if levels drop, there would not be enough pressure to allow for the releases of water required for the lower basin.

With the current issues that are facing the water future, there is some federal legislation in the works for Drought Contingency Plans that will allow for some flexibility in the upper basin states. This would include an emergency storage capacity of 500,000af under a new demand management program in Lake Powell and an increase in water conservation programs. All 7 states that are part of the current Colorado River Compact are part of the discussions.

2. Planning for Windsor Citizens' water education

a. Colorado Landscape Boot Camp

CSU Weld County Extension Agent Amy Lentz presented information on a program that is being run through CSU for new home owners, new gardeners and new residents of Colorado. There is a need for education for some of these residents, including basic lawn care, tree care and planting, and water wise plants. Classes are being offered for all three sections of the program.

These classes are being piloted in Berthoud, Wellington, and the Firestone/Frederick area. Ms. Lentz provided information on all three classes that have been development, and showed examples of folders that have been created to aid in these classes. The folders cost between \$10 and \$12 to create, and each location had a different way of managing costs.

Ms. Lentz stated that she was hoping to offer classes at the Community Recreation Center (CRC), and perhaps do some cross promotion with the Water and Sewer Board. The board discussed various options on how to offer classes such as recording and offering the class online. She stated that she could design courses for other subjects as well.

Ms. Lentz said the classes could happen at any time, however for data collection they wanted to get things in by May. Ms. Humphries said she would work with the CRC to check on available dates and times for classes.

The board discussed options on how to disseminate information included in the packet, including providing information at closing, having some fliers available at the front desk and providing downloadable links to interested citizens.

b. Windsor Tree Symposium

Board Member Willey presented information about the upcoming Windsor Tree Symposium offered by the Tree Board. The cost per person is \$5.00 per person and will be from 9am-12pm at the CRC. There will be presentations by Wendy Ball, Dr. Jim Klett, Dr. Alison O'Connor and Ken Kawamura. Board Member Willey and Board Chairman Bielawski will be at the event to talk with interested participants about the water component.

c. HOAs and Metro Districts

Board Member Tokunaga stated he was asked by Board Chairman Bielawski to address this issue. Mr. Tokunaga stated his Metro District met about 4 times a year, and he wanted to offer some education options to the local Metro Districts about consumptive usage and the impact of the landscaping and watering of the common areas

E. COMMUNICATIONS

1. Staff

a. Cash In Lieu Update

Mr. Thornhill stated that on Friday, February 15 the cash-in-lieu cost would go up to \$49,300/acre foot, and that staff is trying to keep up with the rising costs as much as possible.

b. Water Rates Resolution

The new increase of 3.29% will be effective on the 3/1/19 bill and the additional increase of 6.29% will be on the 4/1/19 bill.

c. Windsor Drought Management Plan

Mr. Thornhill stated the Town doesn't really have much of a Drought Management Plan as of yet, but due to the information provided by Northern Water the Town needs to put one in place. He has been working with a consultant, and the cost to put together a grant application for the CWCB would be around \$5,500, and if approved, the Town's cost would be between \$10,000-\$12,000 to develop the plan.

2. Board

a. MS4 Training – March 13

Janene Hageman will come in March 13 to do training during the regular meeting

b. Sewer and Wastewater Presentation – TBD

At the present time there is no set date for this presentation.

c. Tour of Windsor Wastewater Treatment Plant – April 10

A tour of the Greeley Bellevue Treatment Plant is also in the works.

Town Board Liaison/Mayor Pro Tem Bennett presented information on a book that he had read as part of the Water Leader class called *Oil and Water: An Oilman's Quest to Save the Source of America's Most Endangered River* by Stephen Grace.

G. ADJOURN

Board Member Cline moved to adjourn the meeting at 8:18 am; Board Members Tokunaga and Willey seconded the motion. Motion carried unanimously.

Submitted by:



Erin Porter, Utility Billing Administrative Specialist

WHAT'S WRONG WITH THIS PICTURE ?

Visual Observation Training

MS4 / Illicit Discharge Detection and Elimination Program

Town of Windsor Engineering Department

Janine Hegeman

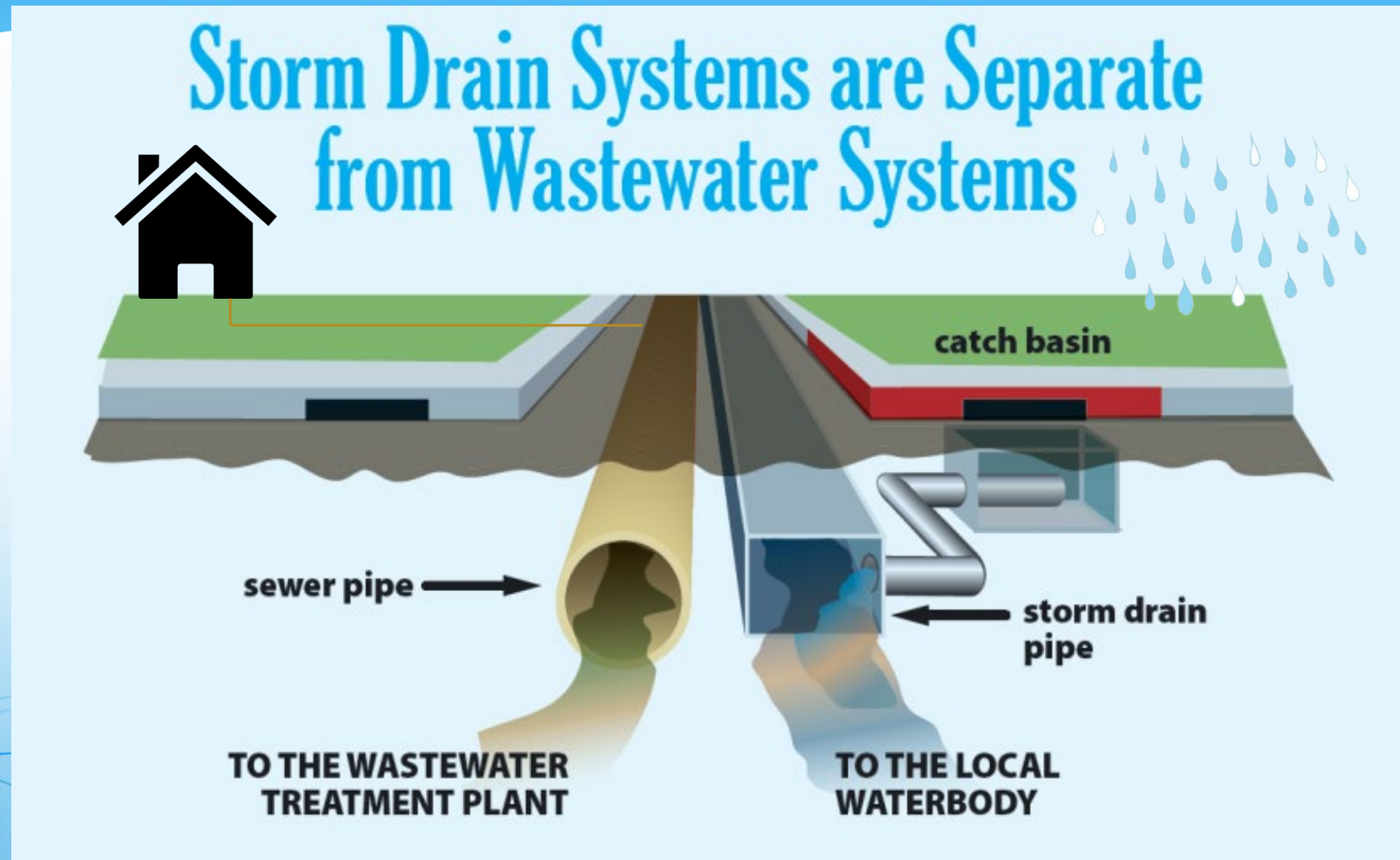
Stormwater Program Coordinator

Objectives

After this training, you should know:

- What the Municipal Separate Storm Sewer System is
- How the storm sewer is different from the sanitary sewer
- What stormwater is
- How it can be a problem
- Where stormwater discharges to in Windsor
- How increased urbanization affects stormwater
- What an illicit discharge is
- What is not an illicit discharge
- Who can cause an illicit discharge
- How to spot an illicit discharge vs. a potential discharge
- How to report an illicit discharge if you observe one

Sanitary Sewer vs. Storm Sewer



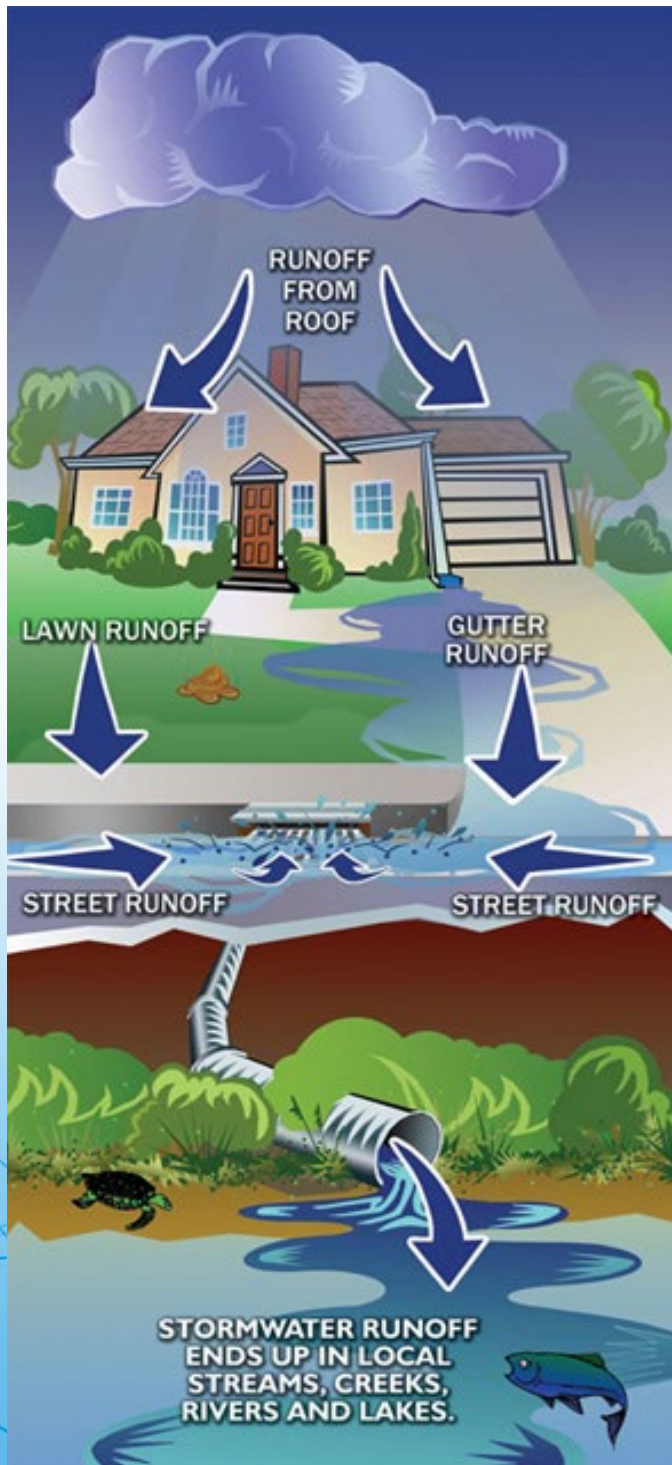
Sanitary Sewer System / **Wastewater**

Storm Sewer System / **Stormwater**

What is Stormwater?

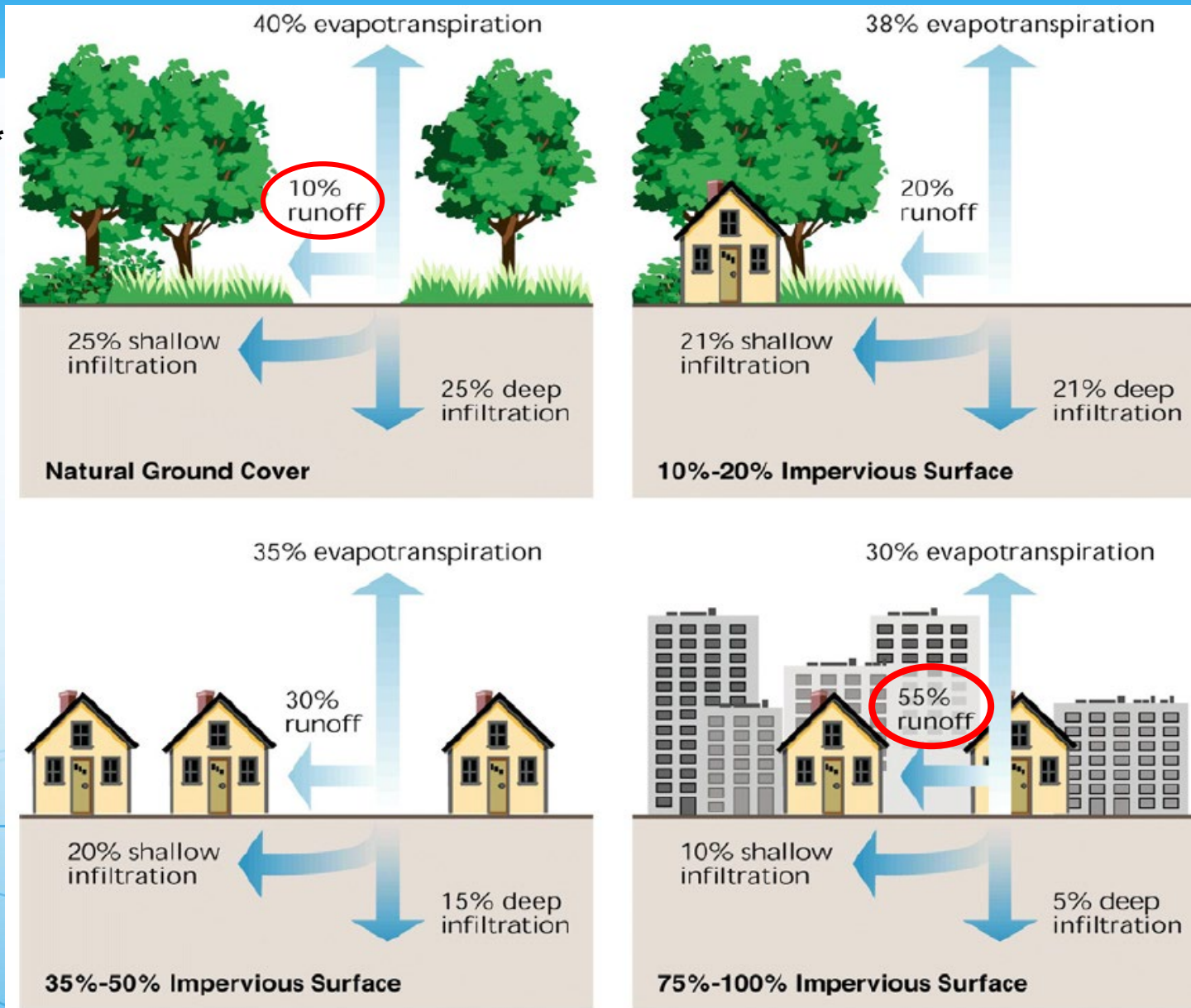
Stormwater is **runoff** from rain or snowmelt that enters the “Municipal Separate Storm Sewer System” or **MS4**

It easily picks up almost anything in its path, discharging it to the Cache la Poudre River



Stormwater and Urbanization

****LOW
POTENTIAL****
for an Illicit
Discharge



****HIGH
POTENTIAL****
for an Illicit
Discharge

What is an Illicit Discharge?

* MS4 Permit definition:

“Any discharge to an MS4 that is not composed entirely of stormwater, except discharges authorized by a CDPS or NPDES permit, and discharges resulting from fire fighting activities.”

Includes mud, petroleum products, trash, and more.

Intentional and unintentional. The Town must prevent these discharges to protect water quality and remain in Compliance with it's State-issued MS4 permit.

There are some exceptions...

What is NOT an ILLICIT DISCHARGE?

- Waterline flushing
- Landscape irrigation or lawn watering
- Irrigation return flows
- Diverted stream flows
- Rising groundwater
- Uncontaminated groundwater infiltration to stormdrains
- Uncontaminated pumped groundwater
- Roof drain discharge
- Foundation or footing drain discharge
- Crawl space pump discharge
- Air conditioning condensation
- Flow from a natural spring
- Charitable fundraising carwashes classified as a Low-Risk Discharge by the Director in accordance with official guidance issued by the State of Colorado Department of Health and Environment
- Individual residential car washing
- Natural riparian habitat or wetland flows
- Swimming pools (dechlorinated, less than 0.05 ppm chlorine)
- Agricultural stormwater runoff
- Water incidental to street sweeping (includes associated sidewalks and medians)
- Dye testing in accordance with the manufacturer recommendations
- Any non-stormwater discharge permitted in accordance with CDPHE's current policies and guidance regarding low risk discharges, provided that such discharge is in full compliance with all requirements of such policies and guidance and all other applicable orders, laws and regulations.
- Stormwater runoff with incidental pollutants

Where do Illicit Discharges happen?

- * 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
- * Auto Recyclers
- * Beverages and Brewing
- * Construction Vehicle Washouts
- * Distribution Centers
- * Food Processing
- * Garbage Truck Washouts
- * Metal Plating Operations
- * Paper and Wood Products manufacturing
- * Petroleum Storage
- * Printing facilities
- * Cemeteries
- * Churches
- * **Construction**
- * Corporate Campuses
- * Fire & Police Departments
- * Hospitals
- * **Municipal Facilities**
- * Museums
- * Schools
- * Universities
- * Residential –Single Family and Apartments

What's Wrong With This Picture?



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What's Wrong With this Picture?



What's Wrong With This Picture?



Silt fencing is not intended for, or capable of, managing concentrated flow

What's Wrong With This Picture?



What's Wrong With This Picture?



What's Wrong With This Picture?



What's Wrong With This Picture?



What's Wrong With This Picture?



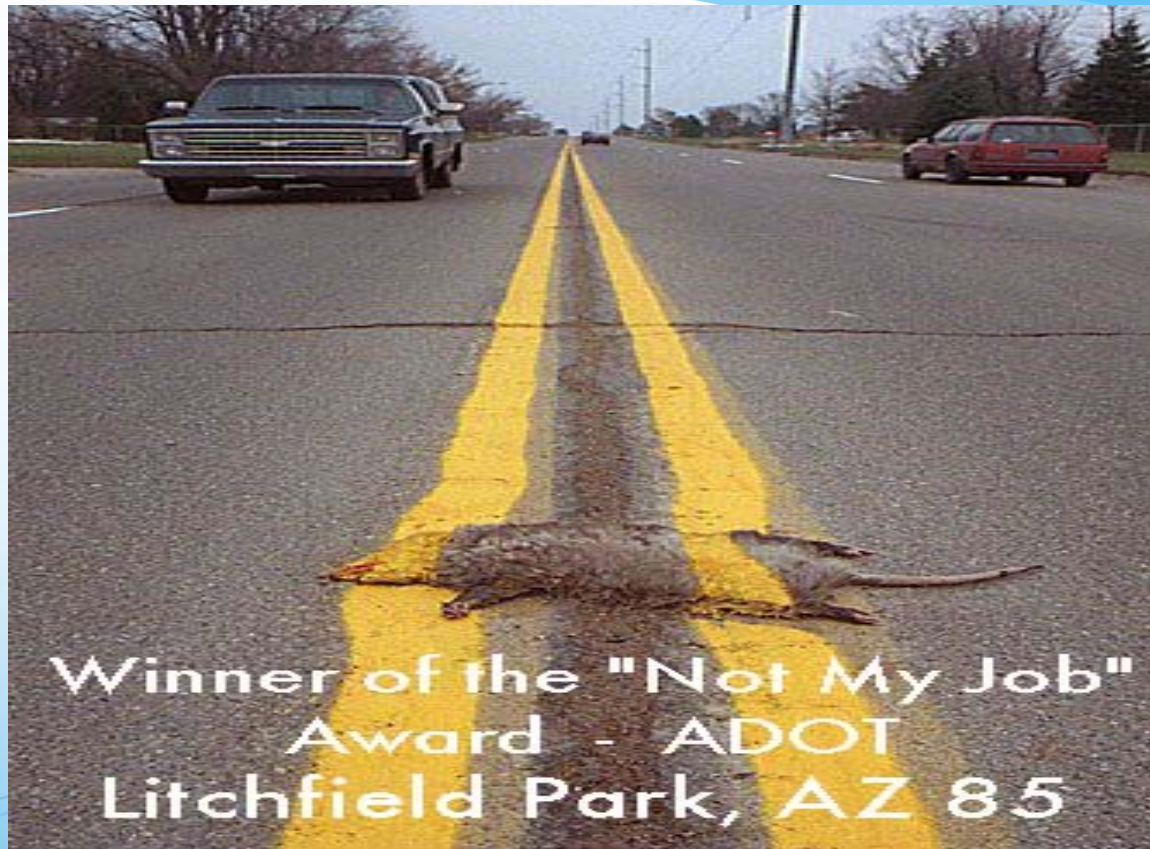
What's Wrong With This Picture?



What's Wrong With This Picture?



Protecting Stormwater Quality is Everyone's Job



Town employees and community members are the principal stewards of our water quality!

Call 970-674-2490 if you see, or strongly suspect, an illicit discharge

Thank you!



Sec. 13-5-10 - Intent.

The intent of this Article is to regulate nonstormwater discharges to the storm drainage system and subsequent receiving waters as required by federal and state law in order to protect and enhance the water quality of the Town's watercourses, water bodies and wetlands in a manner consistent with the Clean Water Act. The objectives of this Article are:

- (a) To regulate and reduce, to the maximum extent practicable (MEP), the introduction of pollutants to the municipal separate storm sewer system (MS4);
- (b) To prohibit illicit connections and discharges to the MS4;
- (c) To provide for inspection and monitoring procedures necessary to ensure compliance with this Article;
- (d) To reduce pollutants in stormwater discharges from construction activity by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land;
- (e) To require the construction of permanent stormwater runoff controls with development to reduce, to the maximum extent practicable, the deterioration of water quality; and
- (f) To promote public awareness of the hazards involved in the improper discharge of pollutants into the storm drainage system.

Sec. 13-5-30. - Applicability of this Article.

This Article shall apply to all water entering the storm drainage system generated on any developed and undeveloped lands unless explicitly exempted by this Article.

Sec. 13-5-70. - Threatened discharges.

- (a) Generally. It is unlawful to cause materials to be deposited in such a manner or location as to constitute a threatened discharge into MS4 or waters of the state. Pollutants that are no longer contained in a pipe, tank or other container are considered to be threatened discharges unless they are actively being cleaned up.

Illicit discharge: Any direct or indirect release of pollutants to the storm drainage system, except as exempted in sub-§ 13-5-50 (b) of this Article.

Threatened discharge: A condition creating a substantial probability of harm, which makes it reasonably necessary to take immediate action to prevent, reduce or mitigate damage to persons, property or natural resources.

Receiving water: Any water of the State of Colorado that receives a stormwater discharge from an MS4, including all watercourses, even if they are usually dry, and irrigation ditches that receive municipal stormwater. *Receiving water* also includes storm sewer systems owned by other entities.

Watercourse: A channel, natural depression, slough, artificial channel, gulch, arroyo, stream, creek, pond, reservoir or lake, including major drainageways, in which stormwater runoff and floodwater flow, whether regularly or infrequently.

Sec. 13-5-50. - Illicit discharge prohibited; exemptions.

(a) Illicit discharges enumerated. 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.

(b) Exemptions. The following discharges, when not otherwise enumerated as illicit above, are exempt from the discharge prohibitions established by this article:

- (1) Waterline flushing or other potable water sources , landscape irrigation or lawn watering, irrigation return flows, diverted stream flows, rising groundwater, uncontaminated groundwater infiltration to stormdrains, uncontaminated pumped groundwater , roof drains, foundation or footing drains, crawl space pumps, air conditioning condensation, springs, charitable fundraising carwashes classified as a Low-Risk Discharge by the Director in accordance with official guidance issued by the State of Colorado Department of Health and Environment, individual residential car washing, natural riparian habitat or wetland flows, swimming pools (if dechlorinated, less than 0.05 ppm chlorine).
- (2) Agricultural stormwater runoff.
- (2) Flows from emergency firefighting activities and water incidental to street sweeping (includes associated sidewalks and medians).
- (3) Any non-stormwater discharge permitted under an NPDES or CDPS permit.
- (4) Any non-stormwater discharge permitted in accordance with CDPHE's current policies and guidance regarding low risk discharges, provided that such discharge is in full compliance

with all requirements of such policies and guidance and all other applicable orders, laws and regulations.

(5) Dye testing in accordance with the manufacturer recommendations.

(6) Stormwater runoff with incidental pollutants.

Sec. 13-5-60. - Illicit connections prohibited.

(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.

Sec. 13-5-70. - Potential discharges.

(a) Generally. It is unlawful to cause materials to be deposited in such a manner or location as to constitute a threatened discharge into MS4 or waters of the state. Pollutants that are no longer contained in a pipe, tank or other container are considered to be potential discharges unless they are actively being cleaned up.

(b) Materials storage. Materials including, but not limited to, stockpiles used in construction and landscaping activities shall be stored to reduce, to the maximum extent practicable, the potential discharge and release of pollutants.

(c) Pesticides, herbicides and fertilizers. Pesticides, herbicides and fertilizers shall be applied in accordance with manufacturer recommendations and applicable laws. Pesticides, herbicides and fertilizers shall be stored in a manner to prevent potential discharge and release to the MS4.

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