

Town of Plainville
Discharge of Stormwater for Small
Municipal Separated Storm Sewer Systems
(MS4)
Annual Report
2016

January 13, 2017

Minimum Control Measures

Public Education and Outreach

Educational and outreach efforts provide a greater understanding of the importance of the impacts of improper use and disposal practices. Informed and knowledgeable citizens have a greater understanding and appreciation of how their actions impact the environment. This understanding and acceptance is essential to gain the public's interest, confidence and support to modify society's habits regarding their actions and how they impact the environment. Greater acceptance of greener practices is a byproduct of awareness how individual actions impact the environment.

The Town has undertaken various initiatives to develop and distribute materials. Various departments, commissions and agencies have worked together to dispense relevant information pertaining to greener practices. Universal brochures and fact sheets have been reviewed with governing land use commissions. The results of these reviews have generated modifications to regulations and ordinances and continually generate new review standards. Additionally, the Town supports groups and or individuals to organize efforts that address specific causes which directly or indirectly impact the environment and stormwater.

The measurable results of the Public Educational and outreach of the Stormwater Management Plan are as follows:

The Planning and Zoning Commission periodically reviews their Master Plan for Development and Conservation to ensure the Town's long term goals are consistent with sound environmental practices. Modifications are adopted as warranted. During the 2016 calendar

year no modifications were made related to environmental concerns. A copy of the Master Plan for Development and Conservation is posted on the Town's web site. The Planning and Zoning Commission along with its staff are preparing to initiate a comprehensive review and modification of the Master Plan. Environmental concerns related to low impact development and aquifer protection will be emphasized during the review and debate regarding the policies and goals adopted for future land use.

The Planning and Zoning Commission reviews all land use applications to determine consistency with the "Plainville Low Impact Development and Storm Water Management Design Manual". Additionally, Town staff regularly reviews with the Commission initiative techniques being developed and implemented. Revisions to the Low Impact Development Guidance Document were made to clarify and identify water quality standards. A copy of "Plainville Low Impact Development and Stormwater Management Design Manual" is posted on the Town's web site.

The Planning and Zoning Regulations are periodically reviewed to encourage "Smart Development Techniques". The Planning and Zoning Regulations are posted on the Town's web site.

The Town's Catch Basins were stenciled reminding individuals that dumping into the catch basins creates pollution and will harmful to the environment. The Town's Roadway Division maintains the stenciled markings when the catch basins are cleaned.

The Town through the Water Pollution Control Division and the Plainville Southington Health District continue the implementation of a program to inform grease generators to the importance of properly addressing grease byproducts consistent with DEP's FOG Regulations. New and problematic establishments are required to upgrade their collection systems for grease byproducts. Permits applications include documents explaining the FOG Regulations.

Continued discussions with commercial vehicle operators on the importance of promptly addressing spilled vehicle fluids. These discussions generally involve interaction between Town inspectors and a specific operator.

Provided instruction and advice to developers/builders regarding the importance of properly installing and maintaining erosion control devices. Most developments require periodical inspections by Town staff beginning with a preconstruction inspection.

Principles why the proper management of pet wastes are important was conveyed when appropriate during the public's interaction with the Animal Control Officer.

During the 2017 calendar year, the Town of Plainville will continue to provide public education and outreach as warranted in conformance with the Stormwater Management Plan. Efforts will be undertaken to provide services that would better inform the public. Inquiries will be addressed as warranted. The Town of Plainville in the upcoming calendar year will continue to address the public's need to be inform of pertinent stormwater management matters. Additionally, the Engineering Department will review the standards and recommended practices of the new MS4 permit requirements and modified the Public Education and Outreach goals and objectives as warranted.

Minimum Control Measure

Public Involvement and Participation

Public involvement and participation is essential in the development and implementation of the stormwater management plan. As the community becomes more actively engaged, the program should evolve into the community's policies and practices rather than mandates forced upon the town by others. Greater acceptance of greener practices is a byproduct of awareness how an individual's action impacts the surrounding world.

During the 2016 calendar year, the Town continued the practices and policies governing public involvement and participation elements of the Stormwater Management Plan as describe below. The Town has undertaken various initiatives to develop and continue the distribution of educational opportunities. Various departments, commissions and agencies have worked together to dispense relevant information pertaining to greener practices.

As an example: During the 2016 calendar year, the Planning and Zoning Commission conducted Public Hearings to consider revisions to their regulations. The adoption procedures involve public information sessions including opportunities for the public to present and voice facts and opinions. Special attention was given to include organizations and individuals who had a desire to contribute to the development and implementation of the revisions. Additionally, efforts were made to reach out and include the expertise of as many individuals and special interest groups that expressed interest in contributing to the effort.

Local Boards and Commissions have authority including the following duties: the operation and maintenance of the infrastructure, jurisdiction related to land use practices, enforcement of soil erosion control, operation of parks and recreation activities and other institutional operators have offered and continue to be afforded the opportunity to contribute toward efforts to properly manage water resources. Local Boards and Commissions including elected officials, decision makers, Town Department Heads, Economic Development Agency, Operational Staff and citizens contributed to the effort to develop and implement the Stormwater Management Plan. Public Informational Meetings were held to address water quality issues at Paderewski Park Pond. The outcome was the establishment of a group called Friends of Paderewski Park Pond. The goal of this group is to monitor and advise Town policy makers on the health of the pond. The group has met regularly and is currently coordinating efforts to develop policies and practices which are intended to preserve the ecological features of an urban pond. Additional undertakings have been proactive actions to enhance the water quality of the pond as deemed appropriate, provided operational advice to improve maintenance practices which may impact the pond. One accomplishment of the Friends of Paderewski Park was to commission a study to determine the general health of the resource. The findings of this study were presented to the Town Council and Conservation Commission. The public had an opportunity to comment on the findings.

Other groups such as State Agencies, Environmental Groups, Trade Organizations, private individuals, (Developers, Facility Owners, Environmental Activists, Educators, and Neighborhood Leaders), were invited to attend informational meetings as warranted.

Local support of the Stormwater Management Plan has involved efforts by various groups to clean-up the community, change the public's attitudes and modify the public's practices regarding environmental issues. (I.e. River Clean-ups, Plainville Freedom Lawn Initiative and support of Capital Upgrades to Town Facilities, Conservation Subcommittee Friends of Paderewski Park Pond).

Policy Makers, (Elected Officials), have determined the establishment of a citizen panel or Oversight Committee specific to the Stormwater Plan remains unwarranted. It is their belief the existing committees and commissions provide enough oversight and safeguards. Appropriate Town staff has been assigned to coordinate and implement the existing objectives outlined in the Stormwater Management Plan.

During the 2017 calendar year, the Town of Plainville will continue to maintain practices, policies and regulations that are consistent with the Storm water Management Plan. Additionally, the Engineering Department will review the standards and recommended practices of the new MS4 permit requirements and modified the Public Involvement and Participation goals and objectives as warranted.

MINIMUM CONTROL MEASURE

ILLICIT DISCHARGE DETECTION AND ELIMINATION

Illicit discharge identification and elimination represents an important element of preventing and eliminating the harmful impacts of point source pollutants. The Stormwater Management Plan addresses the potential adverse effects of illicit discharges on the environment. Illicit discharges are defined as non-storm flows from water line flushing, landscaping irrigation overflow, diverted stream flows, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, springs, water sump pumps, footing drains, lawn watering, individual residential car washing, dechlorinated swimming pool discharge and firefighting activities.

The measurable results of the Illicit Discharge Detection and Elimination element during the duration of the Stormwater Permit are as follows:

The Town of Plainville reviewed, maintained and revised accordingly the Master Drainage Utility Maps to identify each discharge and associated watershed. Additionally, each discharge has been field located by coordinates, photographed, numbered, logged and inspected. The inspection notes include recommendations to the Roadway Department to incorporate improvements and a maintenance schedule.

Field personnel were briefed on the identification of illicit discharges and their potential adverse effects. Periodic discussions with staff were conducted to introduce new topics or retrain employees.

A Permit system was developed and implemented to control connections to the Town's Drainage system. Property Owners are required to secure a permit from the Engineering Department before any

connection to the drainage system is granted. The application process requires a description of the type of discharge, estimated volume, construction methods and construction plan. All connections are inspected during the installation. No permits were issued during the 2016 calendar year. Permitting such connection remains an important element to reduce flooding and the corresponding damages on private property especially in residential zones.

Plainville's urban setting and preexisting dense development make it extremely difficult to eliminate entirely all connections to the public drainage. Most of these connections are identified as illicit discharges as defined above. Presently, no agency, (local, state or federal), has provided a workable solution which can eliminate connections without developing new issues of equal or greater consequences. The developed permit system appears to be the only workable solution at this time.

Connection to the public drainage system in some cases is the only solution to prevent flooding or health related issues caused by runoff and or standing water. The most problematic situation is addressing footing and yard drains. Without a connection to some type of public drainage system, many property owners would suffer great hardships and losses. Additionally, these connections commonly avoid conflicts between property owners. The concerns regarding illicit discharges are not specifically the water but the contaminants that may be present in the discharged water and the limited ability to control these substances. The definition of illicit discharges and the conditions placed on the Town by the General Permit do not provide a reasonably workable solution to avoid the connection to the public storm water system of these discharges.

The Town has worked diligently with its residents and staff to report evidence of pollution, trace the pollution to its source, enforce the appropriate rules or regulation and eliminate the source of the contaminants.

Educational materials were made available to business owners and the general community outlining the permit system and reasons why the elimination of illicit discharges is important.

Goals not achieved during the duration of the permit and the 2016 calendar year were the establishment of an Ordinance prohibiting what is defined as illicit discharge. The circumstance of densely developed community make the prohibition of certain illicit discharges impractical. Property owners situated in densely developed residential areas do not have any alternatives to discharge footing drains, water sump pumps, dechlorinated swimming pool discharges, gutter leaders and the like other than the Town's drainage system. Overland flow is not an option because of flooding, winter icing and health issues. The permit system was established to identify specific locations and provide controls if issues arise.

Discharge to the sanitary sewer system is not allowed by State Regulations. Another possible solution would be the relaxing of regulations governing the types of discharge to the sanitary sewer.

Without some change to the requirements of the MS4 Illicit Discharges or relief to permit discharges to the sanitary sewer, it will be impractical to achieve elimination of Illicit Discharges in existing dense urban development. In future developments, the adoption of revised Planning and Zoning Regulations will more effectively manage and address runoff and ground water, thus, it is believed future runoff and ground water issue will be eliminated.

During the 2017 calendar year, the Town of Plainville will continue to maintain practices, policies and regulations that are consistent with the Storm water Management Plan. Additionally, the Engineering Department will review the standards and recommended practices of the new MS4 permit requirements and modified the Illicit Discharge Detection and Elimination goals and objectives as warranted.

Minimum Control Measure

Construction Site Runoff Control

Construction activities by their nature have the potential to produce circumstances that create unintended adverse impacts to the environment. The Town has developed and implemented various practices and procedures consistent with generally accepted BMPs to minimize these impacts

The Planning and Zoning Commission has developed practices that increase the number of redundant measures required to control the impacts of construction activities. Erosion and Sediment Control measures and proper storage and use of construction chemicals and products are addressed in the current revised regulations and standard practices. The practice of closely reviewing the Erosion Control Plan and construction sequences of projects is seen as a critical element of the application process by the Planning and Zoning Commission. The Commission has directed staff to concentrate efforts on patterned problematic issues such as equipment maintenance and refueling and water way protection. Review considerations and inspection practices are consistent with the guidelines set forth in Connecticut Guidelines for Soil Erosion and Sediment Control dated 2002.

Other agencies such as the Wetland and Conservation Commission are consulted as warranted and have presented review comments which have assisted staff and the Planning and Zoning Commission in making prudent decisions regarding the protection of the environment.

An example of the increased redundancies, revised regulations and standard practices supported by the Town's land use Commissions are requirements in the erosion control regulation to install silt fences back-upped by hay bales. Additionally, runoff from construction sites must pass through a detention area before discharging off site.

A routine requirement of land use approvals is to require inspections before construction activities begin. Additional inspections occur as part of other inspections. Availability of staff precludes periodical routine inspections specifically for construction site runoff control on most projects; however, special attention is given to sites where past problems have occurred or a special concern was noted. Inspection notes are generated summarizing the current conditions, observed circumstances which present problems, conversations with responsible parties, instructions and enforcement actions.

Enforcement actions have been standardized to include the following procedure: The owner/responsible party is immediately notified verbally, a written order is issued and delivered,

remediation plan is ordered, developed and implemented for immediate and long term solutions, and follow-up inspections occur until the problem and damage is resolved.

The public is encourage to offer comments during the review period. Plans are available for review in the Planning Office or with the Department of Technical Services. Oral and/or written comments are accepted by staff and the Commissions. Under certain circumstances, public hearings afford the public an opportunity to directly address the Commissions. Additionally, the public is encourage to report any circumstance resulting from construction activities that they believe is a hazard to the environment. Each inquiry is investigated and appropriate action is taken.

Actions undertaken include inspection and enforcement construction activities, receipt of public comments related to construction activities and reconsideration of practice and regulations regarding the control of runoff from construction activities.

During the 2017 calendar year, the Town of Plainville will continue to maintain practices, policies and regulations that are consistent with the Storm water Management Plan. Additionally, the Engineering Department will review the standards and recommended practices of the new MS4 permit requirements and modified the Construction Site Runoff Control goals and objectives as warranted.

Minimum Control Measures

Post Construction Runoff Control

Regulations and Ordinances were initiated to develop practices which governor the amount and quality of storm water discharges from developed projects. These regulations and ordinances including low impact development principals. All new developments or redevelopments implement elements that reduce the volume of runoff and enhance the quality of runoff. Town staff performs inspections as warranted.

During the 2017 calendar year, the Town of Plainville will continue to maintain practices, policies and regulations that are consistent with the Storm water Management Plan. Additionally, the Engineering Department will review the standards and recommended practices of the new MS4 permit requirements and modified the Post Construction Runoff Control goals and objectives as warranted.

Minimum Control Measures

Pollution Prevention/Good Housekeeping

Implementing procedures and policies that prevent and or minimize pollutants coming in contact with storm water runoff is important to maximize the quality of the storm water. Municipal functions and activities can affect storm water quality. The consideration of eliminating water pollution needs to be integrated into operational functions. Instituting best management practices including pertinent

employee training, inspection procedures, maintenance schedules and operational functions are important in the reduction and/or elimination of pollutant discharges from municipal facilities such as roadways, parking areas, maintenance facilities, parks and grounds, storage complexes and waste handling locations.

The Town has undertaken various initiatives to reduce or eliminate pollutant discharges. The measurable results of the Pollution Prevention/Good Housekeeping elements of the Storm Water Management Plan during the past calendar year are the following:

Practices, methods and materials used have been reviewed and modified when warranted, thus reducing the potential for pollutant discharges. Practices such as the elimination of the grit component used for snow/ice control has vastly reduced the amount of sediment washed into the drainage system and ultimately into the receiving water. Operations such as street sweeping and catch basin cleaning can be completed in a more timely fashion after the snowmelt because the volume of material needing to be collected is vastly less.

Modifications to fleet maintenance practices include inspections of vehicles for fluid leaks. These routines inspections are completed during periodical scheduled maintenance. Drivers have been instructed to look out for fluid spots when moving the vehicle from their overnight parking spaces and report them to the fleet maintenance division. Fleet maintenance practices have been modified to recycle materials when appropriate. Additionally, all maintenance functions are completed inside the garage. Modified practices have also included the use of less toxic fluids when practical.

Building maintenance practices have been changed to avoid the use of toxic materials. Additionally, control structures such as grease traps and grit separators have been installed to avoid the introduction of floatable and or settable materials. These control structures are routinely inspected and cleaned when warranted.

Landscaping practices are reviewed to determine the appropriate applications of fertilizers and pesticides. The Town has adopted management practices to apply nutrients and pesticides at the appropriate times and amounts, Integrated Nutrient and Pesticide Management Program. Additionally, fertilizer and pesticide applications have been eliminated at certain sensitive locations as deemed appropriate.

Storm water drainage structures at each facility are managed in a similar manner as drainage structures located on the roadways. Structures are regularly inspected and cleaned when warranted. Materials removed from the structures are disposed of in an appropriate manner. The structures are cleaned of debris twice a year, (spring and fall).

A program was developed to sweep all streets at least once a year as soon as possible after snowmelt. Additionally, a program was developed and implemented to inspect areas known to require more sweeping. These areas are swept more periodically, as warranted. A sand/salt deicing mixture has been replaced with an all salt practice, thus, vastly reducing the volume of grit on the roadways which could discharge into the waterways. Each street and public parking area was swept in the spring.

A program was developed, instituted and reviewed periodically to ensure each catch basin and outlet is inspected in a timely manner depending upon historical records of past problems. Catch basins sumps are cleaned generally once every other year. Catch basin known to collect large volumes of debris are

clean yearly or more frequently as required. Drainage outlets are repaired and cleaned as warranted based on inspections and a priority system. Each catch basin was inspected and clean as warranted.

During the 2017 calendar year, the Town of Plainville intends to continue practices and policies which are consistent with best management practices avoiding the introduction of pollutant to storm water consistent with the guidelines of the MS4 permit. Additionally, the Engineering Department will review the standards and recommended practices of the new MS4 permit requirements and modified the Pollution Prevention/ Good Housekeeping goals and objectives as warranted.

Monitoring

During the past calendar year, the Town of Plainville sampled six (6) locations two (2) from each of the basic representation uses, industrial, commercial and residential as required by the MS4 permit. Sampling was completed October 27, 2016. The results of the testing were sent to the Connecticut Department of Energy and Environmental Protection. The results were similar to past years. Testing will continue on a yearly basis for the duration of the permit.

During the upcoming calendar year new monitoring requirements will be initiated as the result of a new General Permit, the Town of Plainville will evaluate and develop new sampling locations consistent with the new requirements. The results of any and all future samples will be forwarded to the Connecticut Department of Energy and Environmental Protection in a timely manner prior to the end of the calendar year.

Respectively Submitted By:

A handwritten signature in black ink, appearing to read "John R. Bossi".

John R. Bossi
Director of Technical Services

January 13, 2017