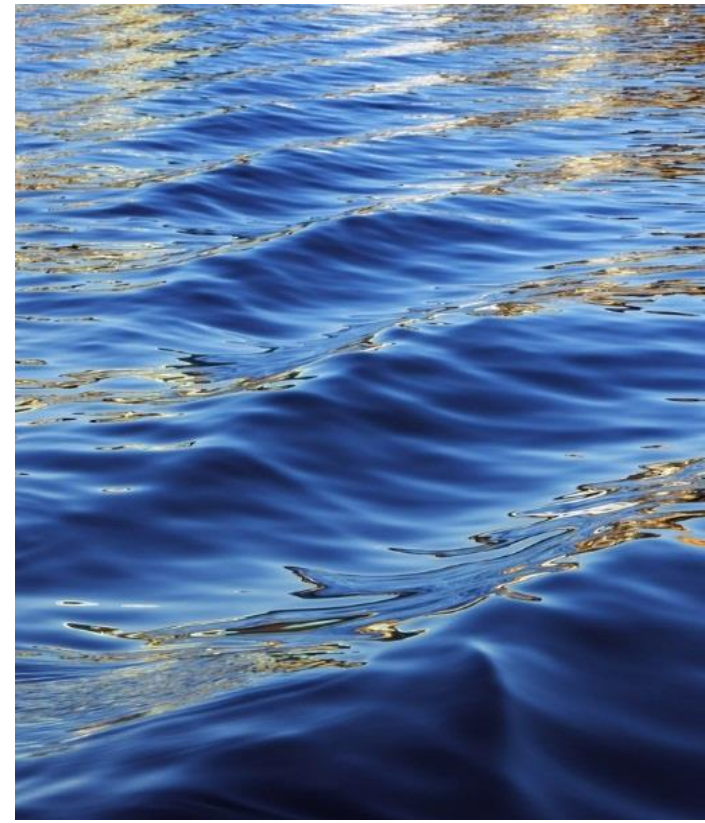




# Storm Water Management Plan

City Commission Mtg 12-22-20



# What You Need to Know About the City's Storm Water Permit NPDES Permit

- The City of Newton, Kansas is in the second year of their current Kansas Water Pollution Control Municipal Separate Storm Sewer System (MS4) Permit which provides authorization to discharge under the National Pollutant Discharge Elimination System (NPDES). This is referred to as the City's Storm Water NPDES permit.
- The current permit expires October 31, 2024 then a new permit will be issued to allow discharge of storm water into the waters of the United States.
- If we don't comply with the permit requirements, the City could face up to \$42,000 per day in fines.
- There are many parts to the City Storm Water NPDES Permit
- One part of the permit is the Storm Water Management Plan (SMP).



# PART I --Stormwater Management Program (SMP) Document Requirements

- A. Current Stormwater Management Program
- B. Updated Stormwater Management Program document
  1. Reduce the discharge of pollutants from the municipal separate storm sewer system (MS4) to the maximum extent practicable (MEP)
  2. Continue to implement the six minimum control measures as listed in PART I
  3. Satisfy the requirements of this permit, the CWA & Kansas surface water quality statutes & regulations
- C. Six Minimum Control Measures
  1. Public Education & Outreach
  2. Public Involvement/Participation
  3. Illicit Discharge Detection & Elimination
  4. Construction Site Stormwater Runoff Control
  5. Post-Construction Stormwater Management in New Development & Redevelopment Projects
  6. Pollution Prevention/Good Housekeeping for Municipal Operations
- D. Total Maximum Daily Load (TMDL) Regulated Pollutants
- E. Parties responsible for compliance with the SMP document
- F. Monitoring Requirements
- G. Reporting Requirements
- H. Modifications to BMPs and the Stormwater Management Program document



## Part II—Total Maximum Daily Load (TMDL) Best Management Practices & Surface Water Monitoring

- A. TMDL BMP Implementation Requirements
- B. Monitoring Requirements
- C. Monitoring Frequency & Periods Criteria (4 events/yr/site, 24-hr rain of  $\geq .25''$ , 7 sites)
- D. Parameters
- E. Adaptive Management
- F. Documentation of Stream Monitoring Locations

## Part III—Monitoring Industrial Stormwater Discharges

- Not applicable to Phase II Cities
- No action required at this time for monitoring Industrial Stormwater Discharges

## Part IV—Permit Compliance Activities & Schedules

Specific requirements for each year of the permit listed.

## Part V—Reporting

- A. Submit calendar year annual report to KDHE by February 28<sup>th</sup> of each year.
- B. Report information & monitoring results gathered in compliance with Part II TMDL BMP & Surface Water Monitoring in compliance with the eDMR reporting requirement.

# Some Updated Storm Water Management Document Details

- The permit and the new SMP must meet the new EPA requirements of the Remand Rule that was finalized in January of 2017. It requires that the permit include requirements in clear, specific, and measurable terms. Tables of Best Management Practices (BMPs) must be listed along with point values, and the permittee must implement sufficient BMPs to achieve minimum point requirements for each year beginning in 2021. The Remand Rule was published on December 9, 2016 in the Federal Register, Vol. 81, No. 237 beginning on page 89320.
- In order for the State of Kansas to be in compliance with the Remand Rule, they had to require that our permit requirements are enforceable and must provide a set of performance expectations and schedules readily understood by the permittee, the public, and the permitting authority alike. KDHE tried to provide flexibility to the local agencies by establishing a point system and a list of BMPs, tasks, and other conditions with point values that could be tallied to demonstrate compliance with the total point requirement system for each of the Six Minimum Control Measures and TMDL BMPs.
- The next slides show the BMPs selected for City of Newton permit compliance.

# 1. Public Education and Outreach

BMP SUMMARY	MEASURABLE GOAL	IMPLEMENTATION TIME SCHEDULE	POINTS	COMMENTS	2021	2022	2023	2024
Distribute educational materials addressing various pertinent stormwater public education topics.	Number of all flyers, brochures, catalog mailings, handouts or e-mails distributed in a year shall equal or exceed the most recent U.S. Census Bureau decennial housing units value for the permit area. The applicable U.S. Census Housing units value shall be documented, and the number of flyers, brochures, or e-mails distributed shall also be documented. This information and copies of the flyers, brochures, or e-mails shall be retained on file.	Either flyer, brochures, catalog mailings, handouts, or e-mails are to be distributed in at least two separate batches, ideally in separate seasons (either winter, spring, summer or fall). However, the required number of flyers, brochures, or e-mails must be distributed in a single calendar year and the points can be claimed for that year.	2 Points may be claimed in a year in which the required number of flyers, brochures, catalog mailings, handouts, or e-mails are distributed.		2	2	2	2
Post the municipality's MS4 permit and SMP document on either the stormwater web page or the municipal web page.	The two documents must be posted for at least six months of the year to claim one point.	Months for which the posting occurs must be within the year for which points are claimed. No "carryover" of months from one year to the next.	1 Point may be claimed for posting each year (minimum of at least 6 months).	Post on City Website	1	1	1	1
Provide either a stormwater telephone hotline or web based text message method for public report of illicit discharges.	Respond to all reported complaints within 10 days and, if found valid, resolve or establish a schedule for resolution within 20 days. Actual resolution may take more than 20 days, but the schedule for resolution must be finalized and the efforts to implement resolution must begin within 20 days following receipt of complaint. Document complaints and response / resolution process for all complaints received in the year.  Resolution of an illicit discharge can include, but is not limited to; elimination of the discharge; on-site treatment to allow discharge to the MS4 (normally requires an NPDES permit); redirecting the discharge to a location that the discharge is not considered illicit, i.e., sanitary sewer or to holding tanks to allow the waste to be hauled off for appropriate treatment, reuse/recycle or disposal.	The hotline / reporting system must be available to the public for at least six months in the year to claim the points.	2 Points may be claimed in a year the hotline / reporting system is maintained and available. An additional point may be claimed for each illicit discharge resolved in the year up to a limit of 2 additional points per year. One point allowed per illicit discharge resolved.	Hotline & Accela	2	2	2	2
Adopt a public education program to reduce littering.	Install and/or maintain signs to discourage littering. Signs are to be located in areas where littering has been a problem.	Credit can be claimed for any year in which signs are installed and in place for greater than six months or in cases where signs have previously been installed in any year where signs remain posted for the full year.	1 Point may be claimed for the year when signs are posted for six months or more, or 1 point may be claimed in subsequent years where the signs				1	1
Create a stormwater information brochure to provide to the public at public meetings and/or hearings.	Have multiple copies of the brochure available during at least 10 meetings or hearings open to the public during the year. Provide the brochures to the public at no charge.	The brochure shall address stormwater topics of concern.	1 Point may be claimed in any year the brochures are made available to the public at meetings and/or hearings as required.				1	1
Operate an adopt a street program to utilize public volunteers to clean street right-of-way	The volunteers shall clean at least a two-mile segment of street, either a single street or multiple streets, either within the permit area or adjacent to the permit area.	The street ROW shall be cleaned at least once per year. Points may be claimed for any year in which cleaning has occurred.	1 point may be claimed in any year at least two miles of street ROW is cleaned by volunteers				1	1
<b>Total Points Required</b>					<b>4</b>	<b>4</b>	<b>7</b>	<b>7</b>
<b>Total Points Planned</b>					<b>5</b>	<b>5</b>	<b>8</b>	<b>8</b>

## 2. Public Involvement/Participation

BMP SUMMARY	MEASURABLE GOAL	IMPLEMENTATION TIME SCHEDULE	POINTS	COMMENTS	2021	2022	2023	2024
Hold park or stream bank clean-up events for public volunteers to aid municipal staff in removing trash, debris, or pollutant sources from the selected clean-up area.	Clean an area which must be equal to or greater than one acre or alternately at least 200 yards of streambank.	At least one such clean-up activity must occur in the year for which points are claimed.	3 Points may be claimed each year this BMP is implemented in compliance with the specified requirements.	Measure streambank	3	3	3	3
Provide a monetary donation to a scholarship fund for students pursuing a degree in an environmental program which would qualify them to work in a field which can result in water pollution control.	A \$500 contribution in a year is the minimum acceptable amount to achieve this goal.	The donation must be made in the year the points are claimed.	2 Points may be claimed each year this BMP goal is achieved.		2	2	2	2
Establish a program to employ (either paid or unpaid) high school or college age environmental interns in an environmental related program including but not limited to either the wastewater utility,SWU, potable water utility or solid waste utility.	The intern must receive the same environmental related training a new full-time employee would receive, within the first six months of the full-time employee's employment, during their internship.	The internship must last at least 8 weeks in the year when points are claimed.	2 Points may be claimed each year this BMP goal is achieved per intern.				2	2
				<b>Total Points Required</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>6</b>
				<b>Total Points Planned</b>	<b>5</b>	<b>5</b>	<b>7</b>	<b>7</b>



### 3. Illicit Discharge Detection and Elimination

BMP SUMMARY	MEASURABLE GOAL	IMPLEMENTATION TIME SCHEDULE	POINTS	COMMENTS	2021	2022	2023	2024
Inspect by televising pipelines or direct visualization of open channel drainage, 2% of the MS4 system within the permit area all conducted within a 12-month period to aid in identifying illicit discharges as well as evaluate the condition of the storm sewer lines/drainage channels/ditches. If in a 12-month period 10% of the MS4 system is inspected a higher point value maybe claimed.	Generate a summary report of the inspection including the number of linear feet televised, number of linear feet visually inspected, condition comments, illicit discharges identified and the results of efforts to eliminate illicit discharges, e.g. discharge line disconnectd & redirected to the sanitary sewer or discharge practice terminated.	The inspection process can occur in a single calendar year or may be conducted over a period extending from one year into the succeeding year. Points may be claimed in the year when the televised and/or visul inspection of this portion of the MS4 system (either 2% or 10%) is completed.	3 Points may be claimed for inspection of 2% of the MS4 system, alternately if 10% of the MS4 system is inspected 5 points may be claimed.		3	3	3	3
Inspect, 5% of the MS4 system stormwater inlets and/or outfalls within the permit area all conducted within a 12-month period to aid in identifying illicit discharges. If in a 12-month period 15% of the MS4 system inlets and/or outfalls are inspected a higher point value may be claimed in the year the required percentage of inspections are completed.	Generate a summary report of the inspection including the number of inlets and/or outfalls visually inspected, condition comments, illicit discharges identified and the results of efforts to eliminate illicit discharges, e.g., discharge line disconnected and redirected to the sanitary sewer or discharge practice terminated.	The inspection process can occur in a single calendar year or may be conducted over a period extending from one year into the succeeding year. Points may be claimed in the year when the televised and/or visual inspection of this portion of the MS4 system (either 2% or 15%) is completed.	3 points may be claimed for inspection of 2% of the MS4 system in the year the required percentage of inlets and/or outfalls are finally inspected, alternately if 15% of the MS4 system is inspectd 5 points may be claimed.		3	3	5	5
					<b>5</b>	<b>5</b>	<b>7</b>	<b>7</b>
					<b>6</b>	<b>6</b>	<b>8</b>	<b>8</b>

#### 4. Construction Site Stormwater Runoff Control

BMP SUMMARY	MEASURABLE GOAL	IMPLEMENTATION TIME SCHEDULE	POINTS	COMMENTS	2021	2022	2023	2024
Implement a requirement for a Soil Erosion and Sediment Control (SESC) Plan for any land disturbance sites which are either equal to or greater than one acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	Enact a regulatory ordinance, or other enforceable measure that requires an SESC Plan for all developments disturbing sites which are either equal to or greater than one acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	Points may be claimed in the year the ordinance / enforceable requirement first becomes effective, and for each full calendar year thereafter for which the ordinance / enforceable requirement remains effective.	3 Points may be claimed in the year the ordinance initially becomes effective, and 2 points may be claimed for each successive year thereafter for which the ordinance remains effective.	Currently in place	2	2	2	2
Develop and adopt a design manual for erosion and sediment control BMPs which are required to be used on sites which will be disturbed and are either equal to or greater than one acre or construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	Require implementation of BMPs in compliance with the design manual on all sites which meet the disturbed area standard as specified in the BMP Summary.	Points may be claimed for the year which the manual is initially adopted and implemented, and a reduced number of points may be claimed for subsequent years in which the manual remains implemented.	3 Points may be claimed in the year the manual is initially implemented, and 2 points may be claimed for each successive year the manual remains effective.	Currently in place	2	2	2	2
Develop written procedures for inspection of construction sites. Develop a Stormwater Construction Site Inspection Guide for use by municipal inspectors.	The procedures document must address the administrative aspects associated with required inspections of construction sites, the issuance of inspection reports, notices of violations, and enforcement actions. The Inspection Guide must provide inspectors guidance on how to conduct a construction site stormwater inspection, the required procedures, and guidance on acceptable conditions of various BMPs employed on such sites, enforcement actions and/or reference of cases for enforcement by other municipal staff, guidance on photo log of the inspection and inspection checklists for use by the inspector.	Development of the written procedures and the Inspection Guide can occur in any year. Initial implementation can allow points to be claimed in that year and continued implementation can allow points to be claimed in subsequent years.	3 Points may be claimed in the year of initial development, 2 points may be claimed for each successive year the written procedures and inspection guide continue to be utilized.			3	2	2
Acquire or develop a software tracking system to track inspections and related tasks.	The tracking system must allow for scheduling inspections and follow-up activities such as re-inspections, mailing notices or reports, etc.	A point can be claimed in the initial year the software tracking system is implemented and each year thereafter it is utilized.	1 Point may be claimed for any year the software is initially utilized and 1 point may be claimed for each successive year the software is utilized.		1	1	1	1
<b>Total Points Required</b>					<b>4</b>	<b>4</b>	<b>6</b>	<b>6</b>
<b>Total Points Planned</b>					<b>5</b>	<b>8</b>	<b>7</b>	<b>7</b>

## 5. Post-Construction Stormwater Management in New Development and Redevelopment Projects

BMP SUMMARY	MEASURABLE GOAL	IMPLEMENTATION TIME SCHEDULE	POINTS	COMMENTS	2021	2022	2023	2024
<p>Develop and adopt a custom design manual for Post-Construction Stormwater Management which specifies various structural BMPs which are required for new development and re-development construction sites which are greater than one acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.</p> <p>Alternately, adopt and implement the APWA 5600 Stormwater Design Criteria and the MARC/APWA BMP Manual.</p>	<p>The custom design manual shall impose requirements to achieve at least one of the following standards:</p> <ul style="list-style-type: none"> <li>*Capture, at least, the first 0.5 inches of precipitation on the development/redevelopment site and utilize methods to prevent discharge off-site, including but not limited to:                             <ul style="list-style-type: none"> <li>•retain onsite</li> <li>•infiltrate</li> <li>•evaporate</li> <li>•transpire, or</li> <li>•beneficially reuse</li> </ul> </li> <li>*Through implementation of appropriate BMP(s) reduce the peak stormwater flow rate to a value equal to or less than the rate which would be experienced on the site prior to the development/re-development project based upon modeling a standard storm event, e.g. 1.0 inch - 6-hour event assuming saturated soil conditions.</li> <li>*Other sizing or detention standards generally accepted by design engineers as adequate for the permittee's local.</li> </ul> <p>As an alternative to a custom design manual the APWA 5600 Stormwater Design Criteria and the MARC/APWA BMP Manual may be adopted and implemented.</p>	<p>Development of the design manual can occur in any year. Initial implementation can allow points to be claimed in that year and continued implementation can allow points to be claimed in subsequent years.</p>	<p>4 points may be claimed in the year of initial implementation of a custom design manual - alternately 6 points may be claimed in the year of initial implementation of the APWA 5600 stormwater design criteria and the MARC/APWA BMP Manual, 3 points may be claimed for each successive year compliance with the custom design manual is required/implemented. Alternately 5 points may be claimed in each successive year the implementation of the APWA 5600 stormwater design criteria and the MARC/APWA BMP Manual is required/implemented.</p>		3	3	3	3
<p>Develop and implement a program for inspection of known privately owned structural BMP's which includes providing the owner of the BMP's an inspection report which specifies needed maintenance to ensure long-term operation of the BMP's.</p>	<p>The program shall require inspection of at least 10% of the known privately owned structural BMP's on an annual basis. Identified maintenance activities shall be completed in the same year of inspection or a written plan for completion of the necessary maintenance shall be completed in the same year of inspection with the objective for completion of the maintenance activity within 18 months.</p>	<p>The program shall be developed and implemented within a single year.</p>	<p>3 points may be claimed in the year the program is initially developed and implemented, 2 points may be claimed for each successive year the program continues to be implemented.</p>	<p>Already doing, need to develop written program.</p>	3	2	2	2
<p>Implement a program to encourage residential owners to install stormwater BMPs, including but not limited to, native trees, native flower gardens, rain gardens, rain barrels, pervious surfaces, and vegetated swales.</p>	<p>A program which results in installation of such BMPs on 1% of the residential parcels in a year will allow two points to be claimed for that year. In a year when installation of such BMPs on 5% of the residential parcels occurs, a larger number of points may be claimed.</p>	<p>The number of residential parcels improved to qualify for points must occur in a single calendar year.</p>	<p>2 Points may be claimed in a year BMPs are installed on 1% of the residential parcels, 4 points may be claimed in a year BMPs are installed on 5% of the residential parcels.</p>		2	2	2	2
<b>Total Points Required</b>					<b>5</b>	<b>5</b>	<b>7</b>	<b>7</b>
<b>Total Points Planned</b>					<b>8</b>	<b>7</b>	<b>7</b>	<b>7</b>

## 6. Pollution Prevention/Good Housekeeping for Municipal Operations

BMP SUMMARY	MEASURABLE GOAL	IMPLEMENTATION TIME SCHEDULE	POINTS	COMMENTS	2021	2022	2023	2024	
Develop a guidance document for municipal staff or third-party contractors which apply pesticides. The guidance shall require any municipal staff, who apply restricted use pesticides, to have a commercial applicator certification from the Kansas Department of Agriculture if required by that department.	Require staff which apply pesticides to use such pesticides in compliance with the guidance document. The guidance document must require use of pesticides in compliance with the label instructions.	The guidance document must be finalized and implemented in the year which points are initially claimed.	2 Points may be claimed in the year the guidance document is finalized and implemented, 1 point may be claimed for each successive year the guidance document continues to be implemented.		2	1	1	1	
Implement a program, with guidance to municipal staff or third-party contractors, to ensure any municipal vehicle or other mechanical equipment washing is conducted in a manner which ensures the wash water is disposed of in the sanitary sewer or otherwise received proper treatment prior to discharge to the environment.	Maintain proper wash facilities for municipal staff to wash vehicles and/or equipment or implement a program which includes guidance to municipal staff to take vehicles and/or equipment to commercial wash facilities, either of which ensures the wash water is conveyed to the sanitary sewer, or otherwise receives proper treatment prior to discharge to the environment, and not discharged untreated to the MS4 or directly to the environment.	The guidance document must be finalized and implemented in the year which points are initially claimed.	2 Points may be claimed in the year the guidance document is finalized and implemented, 1 point may be claimed for each successive year the guidance document continues to be implemented.	Already exists, be sure SOP reflects requirement needs	2	1	1	1	
Implement a program for street sweeping in which the street sweepings are collected and disposed of properly or recycled/reused if possible.	All paved streets which can be swept shall be listed in the schedule for street sweeping. A log shall be maintained listing the street segment which are swept and, dates of the sweeping and where the street sweepings are disposed or where the material was sent to be recycled and/or reused.	At least 10% of the streets which are listed in the street sweeping schedule must be swept at least once a year to claim points for the year. In years when street sweeping equipment is purchased for use by the permittee additional points may be claimed.	3 Points may be claimed in the year at least 10% of the listed streets are swept and street sweeping equipment is purchased, 2 points may be claimed for each year at least 10% of the listed streets are swept.	Doing now, make sure records comply.	2	2	2	2	
Develop, implement and keep updated an online storm sewer map accessible to the public.	Map shall cover the entire MS4 within the permit area and include all the MS4 lines both pipe and open drainage (i.e. ditches) and shall also illustrate all impaired waterways (i.e. 303 (d) listed and TMDL listed streams/rivers) with an indication of the listed impairment.	For each year in which the map is posted online points may be claimed. In the first year the map is posted it must be posted for at least six months for points to be claimed.	3 Points may be claimed in the first year, 2 points may be claimed for each year thereafter for which the map remains posted.		3	2	2	2	
					<b>Total Points Required</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>6</b>
					<b>Total Points Planned</b>	<b>9</b>	<b>6</b>	<b>6</b>	<b>6</b>

**Part II - Total Maximum Daily Load (TMDL) Best Management Practices and Surface Water Monitoring.**

**A. TMDL BMP Implementation Requirements**

	<b>BMP SUMMARY</b>	<b>MEASURABLE GOAL</b>	<b>IMPLEMENTATION TIME SCHEDULE</b>	<b>POINTS</b>	<b>COMMENTS</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
1	Install pet waste stations which include a glove/bag dispenser with signage and waste can to encourage pet waste disposal at either parks, trails, rest areas or other public land owned by permittee.	At least one pet waste station shall be installed at the selected park, trail, rest area or other public land. The station(s) shall include signage which encourages proper pet waste disposal/cleanup and waste can.	In the year the measurable goal requirements is implemented the point may be claimed and for each year thereafter the pet waste stations remain in use.	1 Point may be claimed for each subsequent year the measurable goal requirements remain in effect.		1	1	1	1
4	Enact a stream buffer ordinance, resolution, or other enforceable requirement to impose stream buffer standards.	The enactment of stream buffer standards must include enforcement capability. Consider use of the EPA stream buffer model ordinance or similar such requirement.	The year the ordinance, resolution or other enforceable requirement is enacted points may be claimed. Also, points may be claimed for subsequent years the ordinance, resolution or other enforceable requirement remains in effect.	8 Points may be claimed for the year in which the ordinance, resolution or other enforceable requirement is enacted, 2 points may be claimed for each subsequent year it remains in effect.	Already in place	2	2	2	2
5	Develop a pet waste brochure or flyer document to educate the public about animal waste contamination of stormwater. The document encourages pet owners to pick up their pet's waste. Alternately, post the document on social media or the municipal website.	The brochure or flyers are to be posted in various public buildings and distributed to the public throughout the year. In the year the number of documents shall equal or exceed the most recent U.S. Census Bureau decennial housing units value for the permit area. The applicable U.S. Census housing units value shall be documented, and the number of documents distributed shall also be documented. This information and copies of the documents shall be retained on file. Documents posted to social media or the website shall have the page copies and printed to retain on file.	The documents may be distributed in any fashion and at any time throughout the year. Documents posted on website(s) shall be posted for at least six months in the year. Documents posted on social media shall be posted six times within the year points are claimed.	1 Point may be claimed in the year in which the required number of brochures and/or flyers are distributed, documents posted on social media or the website must be posted for at least as specified.		1	1	1	1
7	Inspect 10% of all known MS4 outfalls for dry weather discharges either annually or twice per year to identify potential illicit discharges.	Complete inspection of known MS4 outfalls either annually or twice per year during dry weather periods. If dry weather discharge is found follow-up with investigation to determine if a portion or all the discharge is illicit. Document the findings and initiate efforts to eliminate any identified illicit discharges.	The inspections must be conducted either annually or twice per year they must be seasonal within the same calendar year (winter, spring, summer, and fall). Points can be claimed for that year. In addition, if an illicit discharge is detected and eliminated in association with this inspection program additional points may be claimed in the year detected or in the year the discharge is eliminated.	3 Points may be claimed for annual inspection as required by this BMP, 5 points may be claimed for these inspections completed twice in a year, and if an illicit discharge is detected and eliminated. The 2 additional points may be claimed, only once, either in the year detected or in the year the illicit discharge is eliminated.		3	3	3	3
<b>Total Points Required</b>						<b>4</b>	<b>4</b>	<b>6</b>	<b>6</b>
<b>Total Points Planned</b>						<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>



Any Questions?

