

Part C – STORMWATER MANAGEMENT PLAN REPORT PROGRESS AND COMPLIANCE

1. Describe the status of compliance with permit conditions for the permitted MS4.

Describing the status of compliance with permit conditions has proven to be a bit difficult, as we have yet to hear if our Stormwater Management Plan (as a whole) is in compliance with permit conditions. As of February 2019, we have not received any communication from MoDNR in reference to the findings of a review of our Stormwater Management Plan (deeming it in compliance or out of compliance with permit conditions) as submitted in March of 2018.

Background: The City of Nixa first submitted a revised Stormwater Management Plan (SWMP) for the permit cycle period of 2017 - 2021, to MoDNR, in March of 2017. On July 3, 2017 we received a letter and 18-page review checklist from MoDNR (Mr. Michael Abbott) stating that our SWMP (as submitted) was “insufficient” (out of compliance). So, we spent the next 9 months completely re-writing our SWMP to hopefully correct all the deficiencies outlined in Mr. Abbott’s review.

On December 29, 2017 we requested (via e-mail, see attached copy) and were granted (from Mr. Abbott) a 60-day extension from the original submittal deadline date of January 15, 2018 until March 15, 2018.

Fast-forward, 6 months later, on September 27, 2018, we had not heard back from MoDNR in regards to the review of the revised SWMP submitted in March of 2018. We sent an e-mail to Mr. Randy Sarver dated September 27, 2018 (see attached copy) to solicit information regarding the progress of this review. His reply was (in short) that he was no longer the State MS4 Coordinator, that he was forwarding our inquiry to a Ms. Stacia Bax. Ms. Bax responded to our inquiry that same day (see attached) stating that the MS4 responsibilities “have been split between two different sections” and not much progress in reviewing any SWMPs has been accomplished.

As explained to Ms. Bax, we are anxious to fully implement our SWMP and were just wondering when the checklist review of it might be completed... Continuing, we explained that we have already enacted and implemented several aspects of the plan. However, without some sort of approval for the direction each BMP is headed (i.e. in compliance with permit conditions), we hesitate to spend too much time and resources on a particular action until such time we are in receipt of a communication designating our SWMP either in compliance or out of compliance with the permit conditions, by MoDNR.

*With that in mind, below is our attempt to “**Describe the status of compliance with permit conditions**” by listing the achievements for each of BMP as developed for the required 6 Minimum Control Measures.*

*Additionally, each chapter contains our proposed changes. There is ~~struck~~ **through Red text** which is text that either has or will be stricken from this document. Additionally, there is **Blue text** that indicates a correction or change in the wording and/or content. A good number of the proposed changes are as result of the delayed review and are re-scheduling actions from year 2 (2018) to year 3 (2019), after we are (hopefully) in receipt of a communication approving our SWMP and these BMPs. Other changes are proposed because they are redundant and excessive.*

The City of Nixa’s 2017 – 2018 SWMP in its entirety and all referenced appendices are available for viewing on line at <https://www.nixa.com/departments/public-works/stormwater/stormwater-management-plan>.

Minimum Control Measure: Item 1

Public Education and Outreach

D. Program BMPs

#1. Storm Drain stenciling and Medallion application of storm drains with Tributary messages such as “No Dumping, Drains to River”: (4.2.1.1.3, 4.2.1.1.4)

Description: Storm Drain Stenciling and Medallion Program – Though the City in the past has stenciled a few hundred storm drains, we have discovered the paint does not last long. As the storm drain stencil paints fades the information is replaced with a 4” round aluminum medallion. These medallions not only have the “No Dumping, Drains to River” information, they also contain sequential numbering. The City will continue to install these storm drain medallions on existing and all new storm drains as those areas are mapped.

Measurable Goal: The City will install at a minimum 50 new storm drain markers annually, to help inform the public as to why they should not pour chemicals and other pollutants down the storm drain. This number will include medallions installed on newly constructed storm drain boxes and replacement of existing medallions that have gone missing or have been badly damaged.

The City will survey **3** **2** random neighborhoods annually ([starting in year 3, 2019](#)), either door to door or mass mailing, to learn how effective these storm drain markers are in helping to remind the residents about stormwater pollution.

Achievements:

2017:

This BMP (the practice of marking the storm system boxes by City Street Department staff) has been in place for a few years. With the exception of the most recent development projects in 2017 and 2018, by 2017 most all of the existing storm boxes in town have been stenciled or marked with a medallion.

2018:

Because most all of the existing boxes have been marked by 2017, and new boxes were just trickling in, it was not cost effective to send people out to apply one medallion here and one there. So, the application of these medallions was been suspended until such time there are enough to justify the expense of sending Street Department personnel out to work on these.

With the new development that has occurred in the last 2 years, the application of these medallions will resume in early 2019 (in the spring once winter weather is no longer a threat).

#2. Educational Programs for School-age Children. (4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4)

Description: Spring Watershed Festivals – These Spring Watershed Festivals are geared toward educating Middle School age children on the importance of doing their part to insure clean water here in SW Missouri and at home. These festivals not only reach out to the Middle School aged children in Nixa but in years past to the children in other surrounding area schools here in Christian Count such as Spokane, Clever, Billings, Ozark and Sparta.

Measurable Goal: The City will continue to play active role in these Spring Watershed Festivals annually. The City will record the number of children that attend these events each year of this permit cycle.

Achievements:

2017:

March 31, 2017 James River Basin Partnership held the annual Spring Watershed Festival at Summit Intermediate School, with approximately 198 students in attendance. Though the City of Nixa personnel were unable to participate directly as we have in past years, we continue to support the JRBP with monetary donations.

2018:

March 8, 2018, Milton Dickensheet (City of Nixa Water and Waste Water Superintendent) spoke to 6, 3rd grade classes, 160 students about drinking, the source of drinking water and the results of stormwater pollution. This took place at Century elementary school.

March 27, 2018, Nate Miller (Asst. public Works Inspector) and Danny Newell (Public works Inspector) assisted the James River Basin Partnership with the Spring Watershed Festival at Inman School. The Sum of the Parts lesson activity was taught, 220 kids all together.

October 11, 2018, The city of Nixa (Nate Miller and Danny Newell) spoke to a group of 5th and 6th graders at Summit Elementary School about the Water Cycle, stormwater pollution and what we can all do to help make it cleaner. 10 kids in this class.

October 11, 2018, The city of Nixa (Nate Miller and Danny Newell) spoke to a group of K-4th graders at John Thomas school of Discovery about the Water Cycle, Stormwater pollution, Where fish live, Why they need clean water to live and What we can all do to help keep our water cleaner. 10 kids in this class. We also utilized (with permission) a program from the South Carolina Department of Health and Environment called "A Fish's Wish".

October 16, 2018, Milton Dickensheet spoke to a group of 5th and 6th graders about the source of drinking water and the results of stormwater pollution and the importance of recycling. Summit School.

October 16, 2018 Milton Dickensheet spoke to a group of K-4th graders about the source of drinking water and the results of stormwater pollution and the importance of recycling. JTSD.

#3. Public SWMP Educational Workshop. (4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4)

Description: The City will conduct at least **1 2** Public SWMP educational Workshop annually each year of the permit starting in year **2 (2018) 3 (2019)**. The first one will be geared toward the Construction, Development, Engineering, Design professionals and Municipal Employees. The second workshop will be geared toward the Commercial/Industrial community within our city.

These workshops will alternate between the 2 target groups every other year. ~~These workshops will be conducted in year 2 (2018) of the current permit cycle.~~ This training will include an overall outline of the City's MS4 SWMP and regulations as pertains to those vocational industries mentioned above.

Measurable Goal: Our goal is to help ensure that their processes and actions are in line with the City's MS4 regulations. The City will record the number of attendees, retain a copy of the outline of topics discussed, length of meeting for all public workshops.

An online survey (such as Survey Monkey) of all Public Workshops will be conducted, also in year **2 3** directly following the workshops, to help determine the success or failure of the workshop and help determine topics and agenda for the subsequent workshop.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

April 9, 2018, SWMP overview presentation to City Council

August 16, 2018, met with management of Nixa Mc Donald's in reference to power washing their parking. In attendance were Danny Newell, Nate Miller, Randy Bryant (head of operations) and 3 other management level employees that I did not retain the names of. We explained the importance of keeping our stormwater clean and how each business can help make a difference. By Friday 7-20-18 they had an oil absorbent boom in place. Though this was only a 25-minute meeting there were enough participants in attendance that we consider it a public educational workshop with immediate and lasting results.

Due to the cost and commitment of time and resources (personnel, printing of material, meeting facilities, etc.) the implementation of this BMP has been pushed back until such time the City is in receipt of review/approval from MoDNR of the revised SWMP that outlines this practice as a BMP.

#4. Event Participation with Educational Displays at Home Shows and Community Festivals. (4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4)

Description: The City participates every year in the local, Chamber of Commerce sponsored, Spring community exposition called Nixpo. The City provides a booth(s) staffed by City personnel. Available to attendees are informational handouts on a number of topics related to the City of Nixa including, the MS4 program and local stormwater issues.

Measurable Goals: The City will work to provide new informational Stormwater exhibits and materials for relevant public events such as Nixpo. The City will record a list of events attended, the amount of materials distributed at each event, and the approximate number of attendees at each event.

Achievements:**2017:**

Participated in the Chamber of Commerce sponsored, Spring community exposition called Nixpo at the Nixa High School.

2018:

Participation in the Chamber of Commerce sponsored, Spring community exposition called Nixpo at the Nixa High School on March 3, 2018, from 9:00 AM to 3:00 PM. It is estimated that 4500 people total attended this event.

The city sponsored a table/booth with general City of Nixa material and also made available 3 different stormwater pollution brochures (30) each (all of which were handed out). These brochures were all included in a folder type packet that were given away to attendees.

#5. Stormwater Brochures or Fact Sheets for General Public and Specific Audiences. (4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4)

Description: The City will continue to develop and distribute stormwater brochures targeted toward educating the target groups about stormwater requirements and BMPs to reduce negative impacts to stormwater.

These brochures/handouts will cover such topics as; “Solutions to Stormwater Pollution” geared toward the Residential, Commercial and Industrial communities, to inform them on actions they can take to help assure stormwater quality. Also, others may address such topics as Stormwater 101 and Construction Site BMP’s.

Measurable Goals: The City will provide and distribute these stormwater brochures. The brochure will be distributed at City community events, at City facilities and will be made available on line. The City will maintain a file copy of the brochure and review the information at least annually and update as necessary. The City will record the number of brochures distributed annually. An online survey (such as Survey Monkey) of all brochures/handouts will be conducted, in year 3 (2019), to help determine the success or failure of these brochures and if the public is actually reading them and understanding the MS4 program as a whole.

Achievements:

2017:

Due to the cost of developing and printing these brochures, the implementation of this BMP has been limited and pushed back until such time the City is in receipt of review/approval from MoDNR of the revised SWMP. There are brochures available for viewing and printing online at the City’s Stormwater section of the NIXA.COM website. The city has, does and will continue to utilize electronic media for this information.

2018:

Due to the cost of developing and printing these brochures, the implementation of this BMP has been pushed back until such time the City is in receipt of review/approval from MoDNR of the revised SWMP that outlines this practice as a BMP. There are brochures available for viewing and printing online at the City’s Stormwater section of the City’s website, nixa.com/stormwater. The city has, does and will continue to utilize electronic media for this information.

#6. Door Hangers (4.2.1.1.2, 4.2.1.1.4)

Description: The door hangers provide information on the damaging effects to rivers and streams that can occur from improperly disposing hazardous materials such as yard waste, oil, antifreeze and litter into City streets and storm drains.

Measurable Goals: City Public Works Street Department staff has in the past and will continue annually to distribute door hangers in areas where they discover unusually high concentrate of yard waste (mainly grass clippings) in the streets and storm drain system as a whole. The City will record the number of door hangers that are utilized annually.

The City will follow up on the areas where door hangers have been utilized to check compliance. Additionally, a letter may be sent to the home owner so as to further explain the need to keep pollutants out of the Stormwater system.

Achievements:**2017:**

Though the City has utilized these door hangers for a few years now, we have not reordered the number that have been placed each year. There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this practice as a BMP.

2018:

Due to the cost of developing and printing these door hangers, the implementation of this BMP has been limited and pushed back until such time the City is in receipt of review/approval from MoDNR of the revised SWMP that outlines using these Door Hangers as a BMP.

Because we already had a few of these door hangers, we were able to utilize approximately 30 to 40 throughout the spring and summer.

#7. Utility Billing Message (4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4)

Description: The city will develop and implement a Utility Billing Message to be inserted with or printed on, the monthly utility bill bi-annually (once in spring and once in fall). This message will target these utility customers with information concerning stormwater quality and the steps each person can take to improve and protect it.

Measurable Goals: The City will attach this utility Billing Message to all utility customer's bills; residential, commercial and industrial, bi-annually as stated above.

A Survey Monkey type survey of this BMP will be conducted in year 4 (2020), to see if the customers are actually reading these messages and/or are they helpful.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this practice as a BMP.

2018:

The City was able to utilize this BMP once in August of 2018. Due to the cost of developing and printing these Utility Billing Messages (on approximately 4500 utility bills monthly) the total implementation (twice per year) of this BMP has been pushed back until such time the City is in receipt of review/approval from MoDNR of the revised SWMP that outlines this practice as a BMP.

#8. Utilization of the City Website, Electronic and Social Media. (4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4)

Description: The City of Nixa is committed to Public Education and Outreach. We understand the trend is to utilize digital social media and even mass text messaging, so we intend to do just that.

The City will develop and implement a plan to reach thousands of our citizens at a time instead of just a few hundred here or there, where they live, on their phones, lap tops, tablets, etc. The Stormwater page of the City's website (www.nixa.com/publicworks/stormwater) contains a stormwater fact sheets, Solution to Stormwater Pollution flyers, a link to the James River Basin Partnership website and a link to the Stream Teams united "Be a part of the non-point source pollution solution" interactive website. This Stormwater page also contains a link to a fillable Service Request Form that among other things a citizen can report an Illicit Discharge.

The City's website and Facebook page (www.facebook/City of Nixa -Cross Roads of the Ozarks) will target not only the existing citizens of Nixa but also those interested in relocating to our community.

Measurable Goal: Our goal is to make available information on how to get involved, how to have your voice heard on stormwater issues and how to take ownership of our community's clean water in general, the Do's and Don'ts of stormwater. The City's website and Facebook page will also be listed on the printed brochures.

An online survey (such as Survey Monkey) will be conducted annually to see if our citizens are reading, understanding and utilizing the Stormwater Information that is available to them.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

A Stormwater fact Sheet, Solutions to Stormwater Pollution flyers, a link to "Be a part of the Non-point source pollution solution" website and a link to the James River Basin Partnership web site, are all posted on the City's Stormwater page of the City's website at <https://www.nixa.com/departments/public-works/stormwater>.

03-09-18 Facebook post of public notice for SWMP public review period posted.

06-01-18 Facebook Stream team river clean up information and photos.

7-23-18 Facebook post added in reference to the Nixa Mc Donald's leading the way as a commercial business in an effort to keeping the stormwater cleaner.

Facebook post about Pharmaceutical take back program by police department.

Minimum Control Measure: Item 2

Public Involvement and Participation

D. Program BMPs

#1. Public Notice and Public Hearing for review of Stormwater Documents. (4.2.2.1.1, 4.2.2.1.2)

Description: To allow citizens to discuss various viewpoints and provide input concerning proposed Stormwater Management Plan policies such as BMPs and Measurable Goals.

Measurable Goals: The City will advertise for and conduct a public hearing to allow the public to review/comment on the proposed 2017-2021 Stormwater Management Plan. The hearing notice for this and all other subsequent hearings will be advertised 72 hours prior to the date and time of the public hearing. The public review period will last for 10 business days commencing the first business day after the hearing.

The City will advertise for and conduct these public hearings annually in years 2 – 5 of this permit cycle. The City will present a summary of progress, activities, and accomplishments with implementation of the SWMP, and will again provide opportunities for the public to provide feedback and input.

The City will record the number of attendees, their comments and suggestions from each public meeting. Once comments from the initial public hearing are compiled, City staff will take these comments under advisement toward updating the SWMP. This information also will be considered when setting the agenda of future hearing to be held annually (in March) for the remainder of this permit cycle.

~~An online and/or printed survey (such as Survey Monkey) will be made available to attendees following each public hearing. This will allow the City to evaluate the effectiveness of this BMP.~~

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

Public Notice and Public Hearing for review of Stormwater Documents was utilized in March of 2018 as the proposed SWMP was made available to the public for review and consideration prior to finalization and eventual shipment and submittal to MoDNR. It was published in the Christian County Headliner on March 7, 2018 and the same notice was posted outside city hall on a public announcement bulletin board on March 9, 2018.

#2. *Citizen Volunteer* Stormwater Advisory Committee. (4.2.2.1.3, 4.2.2.1.4 and 4.2.2.1.6)

Description: The City of Nixa will develop a panel of diverse individuals to make up a *Citizen Volunteer* Stormwater advisory committee. The City will solicit committee participation from all target groups that are potentially affected stakeholders as listed above in the “Target Groups” heading.

Measurable Goals: In **April August** of years 2 – 5 (2018 – 2021), the City will solicit volunteers to participate in the Stormwater committee. The City will maintain this Stormwater advisory committee annually throughout the permit term as long as there are enough volunteers to convene a viable committee.

An application process will be established. Interested individuals from all target groups will be able to either go on line to fill out the application or pick up a paper copy at Nixa City Hall or at either of the two Public Works Campuses. From these completed application, City staff will make recommendations to the Mayor for appointment to committee.

The City will record the number of attendees (whether committee member or general public), an outline of topics discussed, their comments and suggestions from each meeting. Once compiled, City staff will take these comments under advisement toward updating the SWMP and the Post-Construction Manual.

The participants of the Committee will be requested to serve a minimum of a **2 1**-year term. Any committee member wishing to remain on the committee from year to year past the **2 1**-year minimum will be allowed to do so. This committee will be limited to a maximum of 8 citizen volunteer members, and a maximum of 3 City staff committee members with one of those being a representative of Administration/Management. Should a citizen volunteer vacancy occur the City will advertise to solicit for new member(s) so as to maintain a full committee.

After the initial first year of meeting quarterly (2018), the goal is to meet bi-annually (no less than 2 times per year) for the remainder of this permit cycle (2019-2021).

Annually, each Stormwater committee member will be given the opportunity to complete an online and/or printed survey. This will allow the City to evaluate the effectiveness of this BMP.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

This volunteer citizen stormwater advisory committee was officially established in November of 2018 with the first meeting be on November 8, 2018.

A Public Notice advertising this public meeting was posted outside city hall on a public announcement bulletin board 72 hours prior to the start of this meeting,

#3. Storm Drain Medallion Program. (4.2.2.1.5)

Description: The City has switched from stenciling storm drains with paint that come off in a few short years (and is a stormwater pollutant) to the application of 4" round aluminum medallions.

These storm drain medallions are permanently attached with a mechanical fastener and construction adhesive. In the past, the storm drain marking has been done by the City Street Department personnel. However, the City sees this as a great opportunity to include school aged kids and participants from all of the Target Groups to be a part of what it takes to maintain a clean stormwater system and to take ownership of helping to protect it.

Measurable Goal: In year ~~2 (2018)~~ **3 (2019)** the City will develop a program by which volunteers from all target groups may participate in the installation of storm drain medallions and the inspection & cleaning of storm boxes. The city will install a minimum of 50 storm drain medallions annually.

This number will include medallions installed on newly constructed storm drain boxes and replacement of existing medallions that have gone missing or have been badly damaged. The City will annually track and record the number of volunteers, the number of storm drains cleaned, and the number of medallions installed. This information will allow the City to evaluate the effectiveness of this BMP.

Achievements:**2017:**

This BMP (the practice of marking the storm system boxes by City Street Department staff) has been in place for a few years, however, the inclusion of school aged kids and civic groups to assist with this BMP is totally new to Nixa.

With the exception of the most recent development projects in 2017 and 2018, by 2017 most all of the existing storm boxes in town have been stenciled or marked with a medallion.

2018:

Because most all of the existing boxes have been marked by 2017, and new boxes were just trickling in, it was not cost effective to send people out to apply one medallion here and one there. So, the application of these medallions was been suspended until such time there are enough to justify the expense of sending a two-man crew out to work on these. With the new development that has occurred in the last 2 years, the application of these medallions will resume in early 2019 (in the spring once winter weather is no longer a threat).

Not only are we just now (February 2019) to a point to justify the expense of sending a crew to resume the practice of applying these medallions, we have to date been unable to obtain permission from the Nixa School system (and parents) to allow students to participate in this activity.

#4. “Adopt A Street” Program. (4.2.2.1.5)

Description: The City will continue to encourage individuals from all target groups to not only police their own properties and neighborhoods, but to be a part of something larger, the Adopt-A-Street program. The City furnishes the trash bags, gloves, trash-pick-up-sticks, an acknowledgment sign for each adoption and picks up & disposes of all trash collected.

Measurable Goal: The City has already developed an Adopt-A-Street program and it is going quite well. The City will develop and distribute (see Chapter three, MCM #1 Education and Outreach for distribution methods) an informational brochure/handout. The distribution of this informational brochure will target not only the typical Adopt-A-Street groups, but will concentrating efforts to reach the Commercial and Industrial communities as well, to help expand this program.

The City will annually (in April) distribute this brochure/handout to encourage Adopt-A-Street participation. The City will annually record the number of total adoptions, the number of cleanup events held, the number of participants and the number of full trash bags collected. This information will allow the city to evaluate the effectiveness of this BMP.

Additional Information: The City conducts a city wide Cleanup day by which the local municipal trash contractor will take just about anything and everything that the residents of Nixa want to set out to the curb for disposal. This is a chance for the Nixa residents to rid their properties of accumulated junk, trash and other debris that may be contributing to stormwater pollution, with the exception of house hold and automotive chemicals. There is information at City facilities (and will be available online) as to where City residents can take household chemicals for disposal. This event his held annually about the 3rd week of May.

Achievements:

2017:

This BMP has been in place for several years and proves to be a very valuable tool for the public to get involved with cleaning up stormwater pollution. In 2017 there were 13 existing and/or new street adoptions for a total of 19.78 lane miles of streets adopted. This resulted in 14 documented separate street cleanup events with several hundred pounds of trash and debris removed from our streets and stormwater system.

2018:

This BMP has been in place for several years and proves to be a very valuable tool for the public to get involved with cleaning up stormwater pollution. In 2018 there were 14 existing and/or new street adoptions for a total of 21.28 lane miles of streets adopted. This resulted in 11 documented separate street cleanup events with several hundred pounds of trash and debris removed from our streets and stormwater system.

#5. Stream Team Clean-ups. (4.2.2.1.5)

Description: The City will continue to participate in the Missouri Department of Natural Resources program as team number #282, City of Nixa employees, by conducting river cleanup events of our two major local waterways. See addendum MCM #1-3, example of "Form your own stream Team" brochure.

Measurable Goal: The City will continue to conduct at least 2 stream cleanups per year and dispose of the refuse collected. These cleanup events most generally take place on the lower end of the Finley River and the lower end of the James River.

After each cleanup event the City will record the number of volunteers and the amount of trash & debris collected (in pounds). The City will also record and track the amount of tires, barrels and other debris typically collected during these events. Annually this information will be compiled and used to determine the effective of this BMP in comparison to the amount and types of trash collected in years past.

Though the City of Nixa Stream Team activities are limited to City employees (due to liability concerns), the City will provide public service type announcements of their team events by posting photos and a brief description of the types and amounts of trash and debris collected on the City's website, Facebook and other social media outlets.

The City will continue to encourage individuals and organizations from the "Target Groups" to form their own Stream Teams, though the City realizes that there is no real way to track or measure this part of BMP #5.

Achievements:

2017:

This BMP has been in place for several years and proves to be a very valuable tool for helping to keep our local streams and water ways clean. The first of 2 river cleanup events was completed on June 22, 2017 on a 5-mile section of the Finley River by 11 City of Nixa employee volunteers. The second river cleanup event was completed on September 10, 2017 of a 6-mile section of the Finley River by 10 City of Nixa employee volunteers.

2018:

This BMP has been in place for several years and proves to be a very valuable tool for helping to keep our local streams and water ways clean. These first of 2 river cleanup events was completed on June 1, 2018 on a 5-mile section of the Finley River by 13 City of Nixa employee volunteers. The second river cleanup event was completed on September 14, 2018 of a 6-mile section of the Finley River by 13 City of Nixa employee volunteers.

#6. Rain Barrel Rebate Program.

Description: A program by which the residents of Nixa may receive a one-time rebate as a direct reimbursement to them, at a rate of fifty cents per gallon. This rebate is based upon their rain collection systems capacity. For example, a 100-gallon system would yield a \$50.00 rebate after installation of the collection system. To qualify, systems must hold a minimum of 50 gallons.

The maximum rebate per property is \$300.00. This Rain Barrel Rebate Program is in cooperation with the James River Basin Partnership, to whom the City has paid one third of the total funds available for this reimbursement program.

Measurable Goal: The City will annually record and track information obtained from the James River Basin Partnership, as to how many residents of Nixa participate in this program and the capacity of their rain collection systems. This information will be compiled and used to determine the effective of this BMP from year to year, for each year that the City helps fund this program.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

These Rain Barrel Rebate Program fliers are available at the Public Works Department, City Hall and online at jamesriverbasinpartnership.org. Additionally, they have been handed out at the 2018 Nixapo.

Minimum Control Measure: Item 3

Illicit Discharge Detection and Elimination

F. Program BMPs

Though the vast majority of the BMP's that fulfil the permit requirements of MCM #3 will be contained within the IDDE Manual, listed below are just a few BMP's that the City will either continue to do or implement in 2018, so as to enhance the IDDE manual once completed and implemented. Most if not all of these listed BMP's will be incorporated into the IDDE manual.

#1. Stormwater System and Outfall Map (4.2.3.1.1, 4.2.3.1.5)

Description: This Stormwater - Outfall map contains the elements required within this MCM which are; location of all outfalls, the names and locations of all waters of the United States that receive discharges from those outfalls. This map also reflects the entire City of Nixa Stormwater system including basins & outlet weir structures, inlet boxes, trickle channels (types, sizes and locations), pipes (type, size and location), etc.

This map has been developed entirely with boots on the ground or stream. Every attribute and field data point, whether it is an inlet box, concrete trickle channel, basin and weir structure, pipe, etc., has been collected using our Trimble Geo7X, with a Zepher 2 external antenna. Details for every attribute (size of pipe or box, type of material constructed of, etc.) is also collected in the field and input into the Trimble.

Then, the GPS pathfinder transfers this information to an ESRI shapefile that we then add to the stormwater - outfall mapping system. All newly installed stormwater data that is unable to be seen from the surface (underground) is obtained from as built and manually mapped into the GIS system.

Measurable Goals: As new stormwater infrastructure is installed and/or upgraded and as additional outfalls are discovered, the City will continue to add this information and update the Stormwater - Outfall Map system. The City will continue to utilize Trimble GPS unit described above to gather the GPS points. This GPS information along with a set of construction plans are then turned over to the City's Mapping Tech so as to update the maps. The City will annually post an updated version of the Stormwater-Outfall Map on the City's website. This Stormwater mapping is all maintained by the City's GIS Technician.

Achievements:**2017:**

This BMP has been in place for a number of years now. The City will continue to update this map as new stormwater infrastructure is added.

2018:

This BMP has been in place for a number of years now. The City will continue to update this map as new stormwater infrastructure is added.

#2. Development and Implementation of Illicit Discharge Detection and Elimination (IDDE) Plan (4.2.3.1.1, 4.2.3.1.2, 4.2.3.1.3, 4.2.3.1.4, 4.2.3.1.5, 4.2.3.1.6, 4.2.3.1.7, 4.2.3.1.8, 4.2.3.1.9, 4.2.3.1.10)

Description: The City is in the process of developing an IDDE Manual, This IDDE Manual will serve as a procedure manual for all of, but not limited to the following;

1. Procedures for locating priority areas including areas with higher probability of illicit connections or ambient sampling to locate impacted reaches.
2. Procedures for tracing the source of an illicit discharge, including the specific technique to detect the location of the source.
3. Procedures for removing the source of the illicit discharge.

This manual will serve as a guide for developing an illicit discharge detection and elimination (IDDE) programs as required by the MS4 Phase II Storm Water program.

Measurable Goals: The City is in the process of developing this manual and it currently is in a rough draft form. The City will have this IDDE Manual completed by March 15, 2018. Once this manual is complete the City will allow for the appropriate public notice and review period to obtain citizen input. The City will start training the appropriate staff as to content, required actions and proper procedures. The City's goal is to have all appropriate staff trained by the end of 2018 so as to implement this IDDE manual in full force January of 2019.

Review and update the IDDE manual: In year 5 of this permit cycle (2021) a complete review of this document will be conducted. This review will be completed by the volunteer stormwater Committee and City staff. Staff will identify items that need to be replaced or modified (items that have not worked as well as intended) and draft those changes. This review will be completed with the anticipation of the subsequent permit cycle and permit renewal.

Achievements:**2017:**

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

Development of this IDDE Plan is complete however, implementation of this BMP has been pushed back until such time the City is in receipt of review/approval from MoDNR of the revised SWMP that outlines this practice as a BMP, as it is very involved.

#3. Cure In Place Pipe. (C.I.P.P.) (4.2.3.1.5)

Description: Professional installation of a single/continuous (cut to length for the particular pipe run distance) piece of resin impregnated fiberglass flexible pipe (tube) material. This material is kept and stored in a refrigerated truck until such time it is installed. This fiberglass pipe material is inside out until it is blown down the length of the pipe section (between two manholes) at which time it is inverted as installed. Once in place, the length of pipe is filled with steam for a calculated length of time per run. The steam is the catalyst that triggers the resin to set up creating what is essentially a schedule 40 pipe in side of the existing older host pipe.

Measurable Goals: To reduce manhole over flows due to Inflow and Infiltration (I & I) within the sanitary sewer. This CIPP completely seals off any cracks/holes in the host pipe that would allow I and I to overwhelm the sanitary sewer system causing manhole overflows. The City will continue to conduct CIPP projects annually, in priority areas, as yearly budgets allow. The City has and will continue to record and track the amount, location and probable cause of each manhole overflow as they happen. The City will continue to take appropriate action to not only clean up the overflow, but to prevent a reoccurrence. The City will review this information annually which will allow the City to evaluate the effectiveness of this BMP by comparing the number of overflows in any given year to the previous year totals.

Achievements:**2017:**

The City contracted to have approximately 5440' of old sanitary sewer pipe slip lined with Cure in Place Pipe.

2018:

The City did not budget any funds for slip lining of sanitary sewer pipe this budget year. However, we look to resume this practice in 2019.

#4. Pressure Washing and Impervious Surface Cleaning. (4.2.3.1.3)

Description: The City has developed a Pressure Washing and Impervious Surface Cleaning policy to be distributed to all commercial and Industrial facilities within the City. This policy outlines the Do's and Don'ts of pressure cleaning structures, equipment and parking lots. This policy is in final draft development and has not been implemented.

Measurable Goal: In year 2 (2018) the city will complete the final draft and implement the policy by notification of these effected target groups mentioned above. Our goal is to not only stop the activity of discharging contaminated wash water into the City's stormwater system, but to also educate these entities so they fully understand why they should discontinue this practice. The City will record and track the number and locations of violations that are discovered or reported. The City will use this information annually (2019 – 2021) to evaluate the effectiveness of this BMP.

Furthermore, by recording and tracking the number and locations of all pressure washing violations, the City will be able to use that information to either add a particular area to, or remove from, the priority list.

Achievements:**2017:**

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

Development of this BMP is complete however, we have not fully implemented it due to the cost of printing and other resources, until such time the city is in receipt of a review/approval of the SWMP that outlines using this as a BMP.

However, we have been in contact with the commercial business that have been in violation of this regulation in the past. Having educated management and staff they are now on board with what needs to be done and why we need to protect our stormwater resources.

#5. IDDE Onsite Annual Inspections of: Commercial and Industrial Properties, City Owned Public Facilities and Stormwater Outfalls. (4.2.3.1.3, 4.2.3.1.4, 4.2.3.1.5, 4.2.3.1.6)

Description: Inspections of Commercial & Industrial properties, City owned & operated public facilities and Stormwater Outfalls. These inspections are completed specifically for the discovery of any Illicit Discharge including any onsite sewage discharge that might be present.

Measurable Goal: In past years the City has actually inspected all: 46 City owned public facilities, 730+ Commercial and Industrial properties and all 52 Outfall locations annually, though our Measurable Goals were to inspect half in each category. Now that the MS4 permit requirements have gotten so involved, our actual likely obtainable goal will be to inspect the 50% of each category yearly throughout this permit cycle.

Priority areas will be inspected more frequently as to insure that any illicit discharges are discovered as early as possible. The City will record and track the number of discharges found and eliminated annually to evaluate the effectiveness of this BMP.

Achievements:

2017:

This BMP has been in place for several years and the City will continue the practice of onsite inspections as it is the best way to discover any real discharges. There were 745 Commercial and Industrial Properties inspected with 16 violations found; 52 Outfalls inspected with 0 violations found; 44 City owned and operated public facilities inspected with 0 violations found.

2018:

This BMP has been in place for several years and the City will continue the practice of onsite inspections as it is the best way to discover any real discharges. There were 745 Commercial and Industrial Properties inspected with 8 violations found. The majority of these inspections done toward the end of the 2018 calendar year so we are still in the process of notifying the violators and resolving the issues; 52 Outfalls inspected with 0 violations found; 44 City owned and operated public facilities inspected with 1 violation found.

#6. Employee Training (4.2.3.1.3, 4.2.3.1.5, 4.2.3.1.6)

Description: Continue IDDE training program to educate City personnel on the identification of illicit discharges and procedures for reporting observations to appropriate personnel.

Measurable Goals: The City will identify appropriate personnel to be trained, develop additional/current training materials to compliment the material the City already has. The City will continue to provide these IDDE training opportunities to appropriate City staff at a minimum of once annually through the duration of this permit cycle (2018-2021). The City will annually record and track the number of appropriate personnel that attend these training sessions to help evaluate the effectiveness of this BMP.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

This employee training is tied to the Employee Stormwater committee meetings. This committee consists of 11 employees from the various city departments. They are given handouts to take back to their department or building and share with all the other employees. With over 125 city employees it would be very difficult to arrange enough meeting times and space to allow every employee to attend a training meeting in person.

#7. Stormwater Sample Monitoring (4.2.3.1.5)

Description: The City has entered into contractual agreement with OEWRI (Ozarks Environmental and Water Resource Institute) to collect stream samples, monitor and run laboratory analysis on first flush samples from 3 of the City's outfalls.

These three outfall sample sites have permanently installed sample collection equipment so samples are collected and annualized year round, no less than once every quarter.

Measurable Goal: To use the analytical data revied from OEWRI on each sample that have been processed to determine benchmarks or limits, and figure out what they are and to be familiar with those numbers.

To create a chart, and enter all data by date along with the applicable benchmark values, so as to keep tabs on how we're doing all year long, each year of the permit cycle. At the end of each contract cycle the City takes bids from a number of qualified Lab Service organization so as to continue this stormwater sample analyses program.

Achievements:

2017:

See attached laboratory testing results spread sheets for number of samples tested, and the results thereof.

2018:

See attached laboratory testing results spread sheets for number of samples tested, and the results thereof.

Minimum Control Measure: Item 4

Construction Site Stormwater Runoff Control

D. Program BMPs

#1. Land Disturbance, Illicit Discharge and Erosion Control, Stormwater Ordinance (4.2.4.1.1, 4.2.4.1.1.1, 4.2.4.1.2)

Description: The City currently has such an enforcement mechanism in place. This ordinance (among other things) requires development construction site operators to implement and maintain effective erosion and sediment control BMPs on their project, throughout duration of their project.

Measurable Goal: To effectively minimize erosion and discharge of sediment and other stormwater pollutants by application and maintenance of development construction site Best Management Practices (BMPs).

Though the City has had in place a “Land Disturbance, Illicit Discharge & Erosion Control Ordinance” since 2009, this ordinance needs to be revised. In year 2 (2018) City staff will review this ordinance in its entirety, to update and remove any out dated information and; to bring its requirements in line with current permit regulations. City staff will conduct a public hearing and advertise for a public review period (to consider public input) prior to taking this revised ordinance to City Council for approval and adoption.

Achievements:

2017:

This ordinance has been in place for several years.

2018:

This ordinance has been in place for several years. That said, we are in the process of updating this ordinance to include the Post Construction permit requirements also.

#2 Pre-Development Review Team (4.2.4.1.3)

Description: The City has created a Pre-development team that meets once a week **(as needed)** to discuss preliminary information on prospective new developments. This meeting is conducted by the City’s Planning and Development Director and the team is made up of the City’s: P & D Director, Street Department Superintendent, Water-Wastewater Superintendent, Electric Department Superintendent, Director of Public Works and Public Works Inspector (MS4 Coordinator).

The Nixa Fire Protection District has a standing invitation to send a representative to participate as part of this pre-development team, though they have played a more active role in years past than they are currently.

Measurable Goals: At this meeting, preliminary information is presented to the Team to solicit initial concerns/comments. This process helps to identify potential issues (stormwater or other) prior to the final draft of construction documents. This process also helps to stream line the plan review process once the construction documents are submitted to the City for review.

Achievements:

2017:

Though this practice has been in place for years it was not considered a stormwater BMP until the revised SWMP. There was no recordation of this as a BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

This BMP has been fully implemented. There were a total of 7 Pre-development meetings held where new developments were discussed.

#3. Pre-Construction Meetings (4.2.4.1.3)

Description: These meetings are generally conducted a few days to a month prior to the start of construction. It is a final opportunity to discuss as a group, concerns and expectations that each party might have. By discussing these concerns in this type of setting, each entity present can participate in the discussion and/or at least note what was said. Stormwater concerns and expectations are discussed at these meetings, specifically advising the owner and contractor that strict adherence to the Sediment and Erosion control plan and permit requirements is crucial.

Generally, in attendance are: representatives from the Electric Department, Street Department, Water-Wastewater Department, Director of Planning & Development and Public Works Inspector (MS4 Coordinator), the project owner or their designee, representatives of the construction firm building the project, and personnel from the Engineering firm of record.

Measurable Goals: The intent is to as much as possible, eliminate confusion, conflict and disagreements (that tend to stall progress on projects) on the construction site once ground is broken, by discussing stormwater concerns and expectations ahead of time.

The City will continue to hold these Pre-Construction meetings for every new project, and will record the number of attendees and the party they represent. Though this is not exactly a “Measurable Goal” we feel it is very much an effective BMP.

Achievements:

2017:

Though this practice has been in place for years it was not considered a stormwater BMP until the revised SWMP. There was no recordation of this as a BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

This BMP has been fully implemented. There were a total of 4 Pre-construction meetings held. See attached corresponding sign in sheets.

#4 Development and Commercial Plan Review Process (4.2.4.1.3)

Description: This Plan Review process helps to expedite the plan review process for local developments. The Planning and Zoning Department receives construction documents and delivers them to the Public Works Inspector, who in turns distributes them to the individual departments for review. One copy of construction documents is sent to the City’s contracted stormwater engineering firm for review. They review the stormwater system as a whole, design criteria; pipe size, capacity of basins, discharge rates, etc.

All plans are also reviewed to ensure that proposed construction activities at sites of one acre and greater, including construction activities at sites that are part of a larger common plan of development meet the appropriate stormwater requirements including permit coverage under MODNR, the SWPPP, and appropriate BMPs.

Measurable Goals: The City will continue this Development (and Commercial) plan Review process. The City will record and track the number plans and SWPPP’s reviewed.

Achievements:**2017:**

Though this practice has been in place for years it was not considered a stormwater BMP until the revised SWMP. There was no recordation of this as a BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

This Development and commercial plan review process has been implemented for years. In 2018 there were 6 commercial projects reviewed and 13 development plans reviewed. Even if it's additional phase to an existing development, it is included in this number as it is reviewed separately from previous phases.

#5. Site Inspections and Enforcement (4.2.4.1.5, 4.2.4.1.5.1)

Description: The City will continue to conduct development and construction site inspections and enforcement. The purpose of these inspections is to assure that the construction site operators are complying with the regulations set forth in the LDP, SWPPP and other approved construction documents.

These inspections include but are not limited to site perimeter protection, inlet protection, vehicle tracking pad, track out deposited onto City streets or any construction site waste that may cause adverse impacts to water quality, such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste. These inspections are conducted on all active (developments under construction, not yet released for home building) and non-active (no construction or building activities) sites that have a current Land Disturbance Permit.

The active sites are prioritized and are all inspected daily as the site Inspector makes rounds. These inspections include but are not limited to: installation and maintenance of stormwater BMPs, and installation of all other development infrastructure. The inspection results/concerns are noted in an electronic data base file for that project daily. Any stormwater issues that are discovered are passed on to the project superintendent or foreman that day, to be addressed within 48 hours.

In addition to these inspections listed above, that are completed by the Public Works Inspectors, the City Building Inspectors also help with the enforcement of Sediment and Erosion control regulations (silt soxx, silt fence, construction entrance, track out, curb inlet soxx, etc.) on the individual building lots and adjacent streets as the homes are being constructed.

These inspectors are at or near a majority of active building sites within the City on a very regular basis and are able to keep a close eye on these BMPs. With that, they are key to helping the City achieve its goals in the reduction of sediment and erosion. Sediment and Erosion control is required to be installed at the start of each building project and is to be maintained in an effective condition throughout the duration until the site is stabilized to the maximum extent practicable.

Non-Active development sites are inspected once annually, more often if complaints are received. A copy of the inspection results is typically mailed to the owner of record with required corrective actions noted.

A final inspection will be completed, assuring all required development stormwater BMPs are in place and functioning properly, prior to release of final plat. The development BMPs are inspected periodically to ensure continued compliance.

Once a building permit is acquired, the builder is required to install stormwater BMPs on that site, and they are inspected by the City Building Inspectors along with called inspections.

Measurable Goals: The City will document the number of inspections completed and any follow-up activities including enforcement will be documented and maintained by the City. It is our goal that employees responsible for conducting site inspections will be trained annually and the City will record all training events and number of attendees.

Achievements:

2017:

This BMP has been in place for a number of years. 32 active/inactive construction sites with current Land Disturbance Permits inspections were conducted. New developments that are currently under construction are not included in this number as there is an inspector on site every work day until such time the new development's final plat is filed and lot are released for sale.

2018:

This BMP has been in place for a number of years. 37 active/inactive construction sites with current Land Disturbance Permits inspections were conducted. New developments that are currently under construction are not included in this number as there is an inspector on site every work day until such time the new development's final plat is filed and lot are released for sale.

#6. Construction Operator Weekly BMP Site Inspections (4.2.4.1.5.1)

Description: According to the MODNR Land Disturbance Permit the Permittee or his/her appointee is required to complete a weekly inspection report of the BMPs and outfalls on their development site. “When practicable, the receiving stream shall also be inspected for 50 feet downstream of the outfall”. They are required to record these inspection reports and make them available on site for review.

Construction site operators are required to complete at a minimum once weekly and within 48 hours of a rain fall event of .5” or greater and retain on site for periodic review by City inspector or other stormwater Environmental Agency.

Development construction sites are required to have a job trailer for storage of all substance that should not be stored outdoors, filter ring around the porta johns, concrete washout areas, trash dumpster (covered) and designate areas for equipment and material storage areas. These items are all required to be shown on the construction plans (Sediment and Erosion Control sheet) and are verified as part of the plan review process.

Measurable Goals: The City will require each construction site operator to submit copies of all weekly site inspections to the City for record retention.

Achievements:**2017:**

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

This BMP was initiated on all new developments beginning in 2018 and is currently a requirement that is discussed at length all preconstruction meetings. A one page, easy to fill out form, is provided by the city so there is no reason a project superintendent not to fill out and submit to us.

#7. Construction Site BMP Manual for Land Disturbance Activities.

Description: The City currently is developing a Construction Site BMP manual for Land Disturbance Activities. Once implemented, the City will make this manual available to developers, builders, contractors, engineers and the general public. Annually, the City will review this manual and update if necessary, based on permit programmatic requirement changes, new ordinances or other requirements adopted by the City.

Measurable Goals: The City will require all stormwater BMPs to be constructed to these standards. The City will record the number of manuals that are distributed annually. If practicable, the City will make a push annually to distribute more manuals than the previous year. This Manual will be part of the information covered in MCM #1, BMP #3- Public SWMP Educational Workshops.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

Though this manual has been developed however, due to the cost of printing and other expenses, the implementation of this BMP has been pushed back until such time the City is in receipt of review/approval from MoDNR of our SWMP outlining this as a BMP.

Minimum Control Measure: Item 5

Post-Construction Stormwater Management in New Development and Redevelopment

E. Program BMPs

#1. *Citizen* Stormwater Advisory Committee (4.2.5.1.2, 4.2.5.1.3, also see MCM #2, BMP #2)

Description: The City of Nixa will develop a panel of diverse individuals to make up a Stormwater advisory committee. The City will solicit committee participation from all target groups that are potentially affected stakeholders as listed above in the “Target Groups” heading in Chapter 4 MCM #2.

Measurable Goals: In January of years 2 – 5 (2018 – 2021), the City will solicit volunteers to participate in the Stormwater committee. The City will maintain this Stormwater advisory committee annually throughout the permit term as long as there are enough volunteers to convene a viable committee.

An application process will be established. Interested individuals from all target groups will be able to either go on line to fill out the application or pick up a paper copy at Nixa City Hall or at either of the two Public Works Campuses. From these completed applications, City staff will make recommendations to City Council for appointment to committee.

The City will record the number of attendees (whether committee member or general public), an outline of topics discussed, their comments and suggestions from each meeting. Once compiled, City staff will take these comments under advisement toward updating the SWMP and the Post-Construction Plan.

The participants of the Committee will be requested to meet quarterly for one year after which the City will advertise for new committee members within the target groups. Any committee member wishing to remain on the committee from year to year will be allowed to do so.

After the initial first year of meeting quarterly (2018), the goal is to meet bi-annually (no less than 2 times per year) for the remainder of this permit cycle (2019-2021).

Annually, each Stormwater committee member will be given the opportunity to complete an online and/or printed survey. This will allow the City to evaluate the effectiveness of this BMP.

Achievements:**2017:**

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

This Citizen volunteer stormwater advisory committee was officially established in November of 2018 with the first meeting be on November 8, 2018.

#2: Post-Construction Stormwater Management Ordinance (4.2.5.1.1, 4.2.5.1.2, 4.2.5.1.3, 4.2.5.1.4, 4.2.5.1.5)

Description: The City will develop and implement this ordinance to address Post-Construction stormwater runoff from new development and redevelopment projects, as well as sanctions and penalties associated with non-compliance, to the extent allowable under State or local law.

Measurable Goal: In year 2 (2018) coverage under this permit, City staff with the assistance of the Stormwater Advisory committee will finalize a first draft standalone Post-Construction Stormwater Management Ordinance. The intent of this ordinance will be to meet the requirements of this permit. This draft ordinance will be submitted to City council for review, direction and/or approval, with an anticipated implementation date of January 2019.

Achievements:**2017:**

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

We have had a stormwater ordinance in place for several years. The new section to address this Post Construction requirement has been developed and is currently under review by City management pending recommendation to City Council for approval and implementation.

#3: Low Impact Development. (4.2.5.1.3)

Description: In year 4 (2020) the City will research the possibility of developing and implementing measures to encourage and expand the use of Low Impact Development (LID) in new and redevelopment. These measures will also include encouragement of retrofitting LID into existing development Post-Construction stormwater BMP's.

Measurable Goal: Develop, adopt and implement an ordinance consistent with LID practices and repeal sections of existing ordinances that conflict with LID practices.

Achievements:**2017:**

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

Our current Land Development Codes that regulate the design and construction of developments, planning and zoning is silent on the issue of LID. That said, LID is not prohibited and will be encouraged until such time these codes do address it.

#4: Post-Construction Stormwater Management Plan (4.2.5.1.2, 4.2.5.1.3, 4.2.5.1.4, 4.2.5.1.5) (see BMP #1)

Description: Develop and implement a Post-Construction Stormwater Management Plan that outlines required periodic inspections of all post-construction stormwater BMPs; create an inventory list; record and track names of the responsible parties of all qualified projects.

Measurable Goal: In year ~~2 (2018)~~ **3 (2019)** the Committee (along with City staff) will strive to develop an outline for the City's Post-Construction Stormwater Regulation Manual. The Committee will release a draft manual for public review and comment in late ~~2018~~ **2019**.

Once all public comments have been considered, City staff will present the final draft to City Council for approval, with an anticipated implementation date of January ~~2019~~ **2020**. The City will review and update this Post-construction Stormwater management Plan annually to evaluate the effectiveness of this BMP.

The City will create an inventory list of qualifying Post-Construction BMPs. This inventory shall include:

- a. All Post-Construction BMPs that are installed to meet requirements of the NPDES Permits for stormwater discharges associated with construction activities where the projects preliminary plat was filed after January 15, 2017.
- b. The exact location of the Post Construction Stormwater Management (PCSM) BMP (e.g., street address, GPS coordinates);
- c. Information (e.g., name, address, phone number(s)) for BMP owner and entity responsible for BMP Operation and Maintenance (O&M), if different from BMP owner;
- d. The type of BMP and the year it was installed;
- e. Maintenance required for the BMP type.
- f. The actual inspection/maintenance activities for each BMP;
- g. An assessment by the permittee if proper maintenance occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements
Along with this inventory, the City will develop maps, inspection procedures, enforcement procedures, and a tracking system to ensure that the requirements of the BMP are met.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

Though this BMP has been developed, implementation of it has been pushed back until such time the City is in receipt of review/approval from MoDNR of the revised SWMP outlining this as a BMP.

#5: Home Owners Association (HOA) Involvement (4.2.5.1.2, 4.2.5.1.3)

Description: Develop and implement a program by which members of the City's Home Owners Associations participate in the inspection of the stormwater post-construction BMPs in their neighborhood.

Measurable Goal: Starting in year 2 (2018) and continuing in each year of permit cycle, utilizing a series of face to face semi-annual meetings and/or e-mail correspondence, the City hopes to encourage the various HOAs situated around the different and diverse neighborhoods across the city, to get involved as a group, to help with the inspection and oversight of the post construction BMPs where they live. This BMP will work hand in hand with MCM 2 BMP#3, Storm Drain Medallion Program and MCM 2 BMP #4 Adopt-A-Street program.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

Though this BMP has been developed, implementation of it has been pushed back until such time the City is in receipt of review/approval from MoDNR of the revised SWMP outlining this as a BMP.

Minimum Control Measure: Item 6

Pollution Prevention/Good Housekeeping for Municipal Operations

D. Program BMPs

#1 Municipal Operation and Maintenance (O & M) Plan (4.2.6.1.1, 4.2.6.1.2)

Description: In year 2 (2018) of this permit cycle, the City will finalize the development of a Municipal Operations and Maintenance Plan. This O&M Plan will be evaluated annually for effectiveness by the O & M Plan committee. In year 5 (2021) this entire plan will be reviewed and updated as a result of the information obtained from the annual evaluations.

Measurable Goals: To prevent chemicals, sediment, solid or hazardous waste from leaving our municipal operations facilities and becoming stormwater pollution. The City will record and track all O & M inspections completed, potential pollution issues discovered and corrective actions taken. Any facilities deemed a hotspot as result of information gathered from these inspections, will be inspected more frequent so as to eliminate any chance of potential discharges. This inspection data will be reviewed annually and will be used to help evaluate the effectiveness of this BMP.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

Though this Municipal Operation and Maintenance Plan has been developed it has not been fully implemented. However, the City has chosen to move forward with this BMP even though we have not received approval from MoDNR in reference to the direction of this BMP.

The city has had an IDDE inspection process in place for several years where by we inspect all City owned/operated facilities for any illicit discharges, potential of real. This program has now been expanded to include more comprehensive inspections, program aspects and training. Training of employees on this program (and other SWMP elements) were conducted 3 times in 2018, through the Employee Volunteer Stormwater Committee.

#2 City of Nixa Employee ~~Volunteer~~ Stormwater ~~Operation & Maintenance (O & M) Plan~~ Committee (4.2.6.1.1)

Description: In year 2 (2018) of the current permit cycle, the City will assemble an O & M Plan committee made up entirely of city staff. This committee will review the draft O & M Plan for alteration and/or revisions prior to finalization and implementation of the Plan. This committee will meet quarterly in year 2 until the O & M Plan is finalized.

Once that is achieved, this committee will meet no less than 2 times a year for the remainder of this permit cycle. This committee will continue to meet to review the Plan for effectiveness and these meeting will also serve as the continuous employee training program for this plan.

Measurable Goal: To staff this committee with at least one staff member representative from all City municipal facilities effected by this plan, so as to permit them to have a voice in the policy and to help train everyone else at their facility or department on the O & M Plan. The City will record the number and names of attendees, what review items were discussed, what was decided and what actions were taken.

Achievements:

2017:

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

This committee was convened in August of 2018 with 11 city employees from the various city wide departments, and met once monthly through November. This committee will re-convene in 2019 to discuss additional elements of the SWMP.

#3. Municipal Operation Facilities Inspections (4.2.6.1.3)

Description: Inspections of City owned & operated public municipal operation facilities. These inspections are completed specifically for the discovery of any Illicit Discharge including any onsite sewage discharge that might be present.

Measurable Goal: In past years the City has actually inspected all: 46 City owned public Municipal Operation facilities annually. Now that the MS4 permit requirements have gotten so involved, our actual likely obtainable goal will be to inspect 50% annually. Priority areas will be inspected more frequently as to insure that any illicit discharges are discovered as early as possible.

The City will record and track all inspections completed including the number of discharges found and eliminated annually to evaluate the effectiveness of this BMP.

Achievements:

2017:

The city has had an IDDE inspection process in place for several years where by we inspect all City owned/operated facilities for any illicit discharges, potential of real. In 2017 all 44 facilities were inspected with no illicit discharges discovered.

2018:

The city has had an IDDE inspection process in place for several years where by we inspect all City owned/operated facilities for any illicit discharges, potential of real. In 2018 all 44 facilities were inspected with no illicit discharges discovered.

#4 Hazardous Materials Management

Description: The City will develop and maintain a hazardous materials management program that minimizes the impact to water quality through the proper storage, use, and disposal of chemicals and bulk materials throughout the City. In year 2 (2018) the City will finalize and implement a Spill Prevention and General Response Plan.

Measurable Goals: Annually, the City will evaluate the status and effectiveness of the Spill Prevention and General Response Plan. As part of the Spill Prevention Plan, the City will compile a list of hazardous materials purchased, where and how it is stored, how much is on hand and how that material is utilized by the City. If applicable and feasible, the City will conduct research on less toxic alternatives and ensure that proper handling/storage methods are practiced. The City will re-evaluate the effectiveness of this BMP in year 5 (2021) for effectiveness and will make any changes and/or updates at that time.

In years 3 - 5 (2019 – 2021) the City will complete an example BMP (such as a secondary containment berm) on select city property with documentation of each major step submitted to local media, social media, etc. This will allow citizens to follow steps taken and understand why these BMPs are being implemented. This will also work closely with MCM #1, MCM #2, MCM #3.

Achievements:**2017:**

There was no recordation of this BMP achievement in 2017 as we were still in the process of revising and developing our SWMP which would eventually outline this BMP.

2018:

Though this BMP has been developed, implementation of it has been pushed back until such time the City is in receipt of review/approval from MoDNR of the revised SWMP outlining this as a BMP.

2. Provide information regarding the progress toward achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable to the MS4. *See attached laboratory testing results summary sheets as provided by OEWRI (Ozarks Environmental and Water Resources Institute)*

3. If another governmental entity implements any best management practices or minimum control measures, please provide the following:

a. name of government entity: *N/A*

b. Name of the primary contact for the government entity: *N/A*

c. Contact information (address, city, zip code, state and phone number): *N/A*

d. specific best management practices or minimum control measures being implemented by the government entity: *N/A*

4. Provide a summary of any stormwater activities and known construction that will be covered under the authority of the MS4 permit that are scheduled to begin during the next reporting period.

The City really has no way to accurately speculate what, or how many projects requiring a Land Disturbance Permit will be submitted for review and eventual construction within the 2019 and 2020 permit reporting period. As of January 30, 2019 there is nothing on the horizon that would be considered reportable within this requirement.

5. Provide a description of any changes to the stormwater management plan report, best management practices, measurable goals, and the iterative process that have occurred during the covered reporting period.

Throughout this document there is ~~struck through Red text~~ which is text that either has or will be stricken from this document. Additionally, there is **Blue text** that indicates a correction or change in the wording and/or content. Most all of the changes are re-scheduling actions from year 2 (2018) to year 3 (1019), after we are (hopefully) in receipt of a communication approving our SWMP and these BMPs.

6. Provide a list of best management practices that were evaluated during the covered reporting period, and provide information on how the best management practice was determined effective.

No best management practices have been evaluated for effectiveness during the covered reporting period. Once we receive confirmation from MoDNR that our revised SWMP is “sufficient” we will implement all aspects to the plan and move forward with evaluating the BMPs.

As described on page 1 of this report, throughout the duration from March 15, 2018 to February 2019, the City has implemented several aspects of the revised SWMP. However, because of the delay in receiving a final review and approval from MoDNR, we have not implemented this SWMP in full. We feel it would be unproductive to try and evaluate the effectiveness of BMPs that may or may not be deemed “sufficient” and could quite possibly be a waste of time and resources for the City. So, to date, no best management practices have been evaluated for effectiveness during the covered reporting period.

a. If any best management practices were determined to be ineffective, provide a summary on how the ineffective best management practice was resolved. See comments above.

7. If any water samples were collected and analyzed during the covered reporting period by the permitted MS4 or on behalf of the permitted MS4, please complete Part D – Water Sample(s) Analysis.

See attached laboratory testing results summary sheets as provided by OEWR.