Storm Water Management Program Plan (SWMPP)
January 2023

City of Helena, Alabama
Individual Phase I – Municipal Separate Storm Sewer System (MS4) Permit

NPDES Permit No. ALS000012

Table of Contents

Appendices

1.0 Introduction

The Storm Water Management Program (SWMP) Plan is required by Part II of the Alabama Department of Environmental Management (ADEM) National Pollutant Discharge Elimination System (NPDES) Individual Permit ALS000012 for discharges from the City of Helena (City) municipal separate storm sewer system (MS4). The goal of the MS4 Storm Water Program is to reduce Non-Point Source (NPS) pollution, which occurs from rain runoff from various sites.

1.1 Permit History

In 1987, the EPA was required under Section 402 (p) of the Clean Water Act (N40CFR Part 112.26) to establish final regulations governing storm water discharge permit application requirements.

In 1996, the first five-year MS4 permit, NPDES Permit No. ALS000003, was issued to Shelby County and eight additional Co-Permittees, including the City of Helena. NPDES Permit ALS000003 covered all areas within the corporate boundaries of the City of Helena. In October 2001, a second five-year permit was issued and administratively extended through order of ADEM. Shelby County acted as lead permittee for the Shelby County Cahaba River Basin MS4 Permit from 1996 to 2015.

Upon expiration of the Shelby County MS4 Permit, ADEM required all of the previous Co-Permittees to apply for individual NPDES permits. ADEM determined that the City of Helena should have an Individual Phase I Permit. In March of 2015 the City met with ADEM to discuss the transition to an Individual Phase I Permit. The City of Helena received a draft NPDES permit on September 9, 2015. At this time the draft version of Individual NPDES Permit ALS000012 was filed under PUBLIC NOTICE - 605. Subsequently a 30-day comment period was held before ADEM issued the final permit. On December 4, 2015, ADEM made a final determination to issue the City of Helena an individual permit.

The initial Individual Phase I NPDES Permit No. ALS000012 for storm water discharges from the Helena MS4 was issued to the City of Helena with an effective date of January 1, 2016. The Phase I permit replaced coverage provided by NPDES Permit ALS000003 previously issued to the Shelby County Commission and Co-Permittees. Individual Permit ALS000012 now covers all areas within the corporate boundaries of the City of Helena located within the Cahaba River drainage basin. The initial Phase I permit expired on December 31, 2020.

ADEM issued a draft Individual Phase I NPDES Permit to the City of Helena on August 24, 2020 for public review and comment. Comments were received and addressed in January of 2021.

ADEM issued a new Individual Phase I NPDES Permit No. ALS000012 to the City of Helena with an effective date of February 1, 2021. The new permit replaces the coverage of the previous Phase I permit and added some additional permit requirements. The new Phase 1 will expire on January 31, 2026. A copy of the new individual Phase I NPDES Permit is included in Appendix B.

1.2 Helena MS4 Area

The Helena MS4 applies to the corporate boundaries of the City of Helena within the Cahaba River drainage basin. The Helena MS4 comprises approximately 21.5 square miles. A map outlining the approximate boundary of the Helena MS4 Area is included in Appendix A as Figure 1.

According to the 2020 Census, the City of Helena has a total population of 20,914, all of which are included within the Helena MS4 area.

2.0 SWMPP Development, Review, and Update

The City's SWMP is designed to implement the controls necessary to reduce pollutants to the MS4. The program is built around the ten minimum control measures listed below and wet weather monitoring and sampling of the Cahaba River and Buck Creek:

1) Storm Water Collection System Operations
2) Public Education and Public Involvement on Storm Water Impacts
3) Illicit Discharge and Elimination (IDDE)
4) Construction Site Storm Water Runoff Control
5) Post-Construction Storm Water Management in New Development and Re-Development
6) Spill Prevention and Response
7) Pollution Prevention/Good Housekeeping for Municipal Operations
8) Application of Pesticides, Herbicides, and Fertilizers (PHFs)
9) Oils, Toxics, and Household Hazardous Waste Control
10) Industrial Storm Water Runoff

Details of the City's work toward each of these measures are outlined in subsequent sections.

The SWMPP is in a continual state of review and revision as feedback is received from ADEM and the public; from monitoring results; and as new storm water management best practices are implemented. Updates to the SWMPP will be made at least annually and provided in the Annual Report. Modifications made outside of that cycle will be provided to ADEM separately.

2.1 Responsible Party

The City's Building, Planning, and Development Department is responsible for the coordination and implementation of the Storm Water Management Program Plan (SWMPP). Coordination between other City departments including the Utility, Fire, Public Works and Police Departments is important to the City's implementation of the SWMP.

2.2 Record Keeping

The SWMPP shall be retained for at least five (5) years after coverage under the Individual Phase I permit is terminated. The following records shall be maintained for at least three (3) years following termination of permit coverage:

- Records of all monitoring information
- Copies of all reports required by the permit
- Records required by the permit
- Records of all other data required by or used to demonstrate compliance with the permit

3.0 SWMP Elements

3.1 Storm Water Collection System Operations

The City owns and maintains two structural controls: a detention pond located at the end of Old Kendrick Road for the Laurel Woods Subdivision, and a retention pond at Joe Tucker Park. A map of the structural controls that are owned, operated and maintained by the City is provided as Figure 2 in Appendix A, and the inspection checklist is provided in Appendix F.

The following activities and practices implemented by the City are aimed at reducing NPS pollution from structural controls in the MS4:

Activity	Schedule	Measurable
Review and revise inspection SOP and form	As needed	Documents to be provided in Annual Report
Inventory/Map maintenance	Ongoing	Map to be provided in Annual Report
Inspect structural controls	Semi-annual	Inspection records/Number of inspections
Monitor for floatable	Monthly Maintenance	Inspection records
Repair of controls	As needed	Work records
Debris removal	As needed	Estimated quantity of material removed

Maintenance of the City's structural controls is currently performed by City Public Works Department crews. The City does not use contracted maintenance currently, but those records will be included if new contracts are put in place.

3.2 Public Education and Public Involvement

The City aims to provide the general public, business owners and contractors with the education and tools so that they can assist in reducing pollution in the MS4. This includes the dissemination of information to these groups aimed at reducing their pollution contribution, but also educating them on recognizing problems that should be reported. As individuals are made aware of issues related to storm water management, they become partners with the City in the implementation of this plan and the MS4 is benefitted.

The City will implement two of the following public involvement BMPs each year:

- Adopt-A-Stream Program
- Reforestation Programs
- Storm Drain Marking
- Stream Cleanup and Monitoring
- Wetlands Plantings

The City will implement two of the following public education BMPs each year:

- Distribute brochures or fact sheets
- Distribute recreation guides
- Event participation booth
- On line library of educational materials

Example materials are attached in Appendix D.

The following activities and practices implemented by the City are aimed at involving the public in reducing NPS pollution in the MS4:

Activity	Schedule	Measurable
Seek public input on SWMPP	Ongoing; annually seek input at City Council meeting and through posting on City website	Public meeting documentation
		Documentation of comments and responses
Distribute information to general public; flyers and pamphlets will be placed at many public locations, made available at City Hall and on posted the City's storm water management web page	Ongoing	Examples of materials

Activity	Schedule	Measurable
Distribute issue-specific information to targeted business-owners, contractors and developers ; provided as encountered and information/tools posted on the City's storm water management web page	Ongoing; initial upload and distribution in first year of permit	Examples of materials
Participate in the clean-up days put on by Renew our Rivers, the Cahaba River Society and other groups; assist in debris removal and provide educational materials at event	Annual or as scheduled (min 1/year)	Record of event and participation
Label storm inlets and post signs at public access points	Ongoing; inventory and labeling of storm drains continues. All storm drains on new developments will have "Dump No Waste/Drains to Waterways" or similar message on manhole covers or inlet labels.	Photos of labels and signs, and number of new labels and signs installed
Create/update page on City web site to house SWMPP, educational materials, etc.	Ongoing updates	Screenshots

3.3 Illicit Discharge Detection and Elimination

The City's program to detect and eliminate illicit discharges in the MS4 consists of several strategies aimed at establishing legal prohibitions and recourse, maintaining accurate outfall information, and regular screening of those outfalls for illicit discharges. The program is also closely coordinated with other SWMP elements, primarily through the education and involvement of the public. The current outfall locations map is shown as Figure 3 in Appendix A.

The 2004 EPA guidance manual for Illicit Discharge Detection and Elimination (IDDE) will be used as the protocol basis. The form used during inspections is provided in Appendix F.

If a suspected illicit discharge enters the City's MS4 boundary from an adjacent MS4, the City will notify the adjacent MS4s and the ADEM Water Division within 48 hours of observing the suspected illicit discharge. The Standard Operating Procedure for this action is found in Appendix E.

The public can report an illicit discharge by filling out a storm water issue form at City Hall or through the City Action Center page on the City's website.

The following activities and practices implemented by the City are aimed at reducing NPS pollution from illicit discharges in the MS4:

Activity	Schedule	Measurable
Mapping of major outfalls, waters of the State, and MS4-owned structural BMPs	Ongoing	Map provided in Figure 3 of Appendix A
Review, revise, and post to City website the City Storm Water Management ordinances	Annual, as revised	Ordinances provided in Appendix C Screenshot
Dry weather screening, tracing and eliminating illicit discharges	20% of major outfalls per year	List of inspected outfalls and any enforcement actions
Provide City of Helena staff training on IDDE	Annual	Training records
Solicit public reporting of suspected illicit discharges	Ongoing	Documentation of reports and actions; quantify in the annual report

3.4 Construction Site Storm Water Runoff Control

All applicable construction sites are required to obtain NPDES construction storm water permit coverage under ADEM general permit ALR10000. Additionally, all construction sites are also required by City ordinance to obtain a City of Helena Grading and Clearing Permit prior to commencement of land disturbing activities.

Applicants for a City permit for land disturbance and construction are required to submit plans for structural and non-structural storm water management BMPs for their site. These BMPs are reviewed and approved by a qualified professional prior to construction. Best Management Practices must incorporate structural and non-structural controls as described in the Alabama Soil and Water Conservation Committee (ASWCC) handbook.

Land clearing and construction sites in the MS4 area are monitored on a monthly basis by an ADEM Qualified Credentialed Inspector (QCI) to ensure compliance with the appropriate Best Management Practices, the site-specific storm water management plan, and/or the City's storm water management ordinance. On all residential and commercial building construction projects, City building inspectors perform a storm water inspection every time they are on site for other required inspections (framing, electrical, plumbing, etc.). Larger residential subdivision construction projects, which are commonly covered by individual NPDES Construction Storm Water permits, are also inspected routinely by City inspectors. The City has an agreement with an engineering consultant to inspect all large construction sites monthly by an ADEM Qualified Credentialed inspector (QCI).

The public can file a complaint by filling out a storm water issue form at City Hall or via the City Action Center page on the City's website.

The form used for inspections is attached in Appendix F.

The following activities and practices implemented by the City are aimed at reducing NPS pollution from construction activity in the MS4:

Activity	Schedule	Measurable
Review and revise City Storm Water Management ordinance, including Enforcement Response Plan	Annual	Ordinance provided in Appendix C
Update inspection and enforcement SOP/form	Complete	SOP provided in Appendix E Inspection forms provided in Appendix F
Conduct inspections of construction sites	Ongoing, during every visit to construction site. Monthly for large residential and commercial construction sites	Summary of inspection and enforcement actions
Staff training on inspections and enforcement	Annual	Training records
Provide relevant educational materials to operators	When project is initially permitted and as needed	Example materials

Post ordinance to website	Annual, as revised	Screenshot
Solicit public reporting of complaints	Ongoing	Documentation of complaints

3.5 Post-Construction Storm Water Management

The City's program to address the discharge of pollutants in post-construction storm water runoff is encompassed in the thorough plan reviews that take place during the permitting processes laid out in the City's Storm Water Management Ordinance and the City's Subdivision Regulations. The City Engineer reviews plans to ensure the requirements of City of Helena MS4 Permit Part II.B.5 are met, including:

- Minimize the amount of impervious surfaces;
- Preserve and protect ecologically sensitive areas that provide water quality benefits;
- Provide vegetated buffers along waterways and reduce discharges to surface waters from impervious surfaces such as parking lots;
- Implement policies to protect trees, native soils, and other vegetation;
- Minimize topsoil stripping and compacted soils, where feasible;
- Requiring landowners to develop and maintain best management practices aimed at maintaining pre-construction hydrology after construction; and
- Encouraging the use of Low Impact Development (LID) and green infrastructure.
- Requiring submittal and review of as-built plans of new developments to confirm that post-construction storm water measures were constructed as designed.

As-built certification is required within 120 days of completion of the project, along with evidence of provisions for long-term operation and maintenance. This may include:

- A signed statement accepting responsibility for maintenance until that responsibility is transferred to another party,
- Written conditions in the sales or lease agreement that require the assumption of responsibility,
- Written conditions in covenants or restrictions assigning responsibility to a homeowner's association,
- Other legally enforceable agreement that assigns permanent responsibility for maintenance.

As part of these maintenance agreements, post-construction BMP inspection reports are due to the City annually by October 31 for inspections performed by September 30 of a given year. The City will inspect the privately owned post-construction storm water structural controls on an annual basis.

A map of the private structural controls is shown in Figure 2 in Appendix A.

The following activities and practices implemented by the City are aimed at reducing NPS pollution from new residential and commercial development in the MS4:

Activity	Schedule	Measurable
Update and maintain the Post-construction Storm Water Management Program	Completed	Revised SWMPP
Privately-owned structural control inspections	Annual	Inspection records
Review and revise the Stormwater Management Post- Construction ordinance	Annual, as needed	Ordinance provided in Appendix C
Mapping of post-construction structural controls	Ongoing (currently up to date)	Map provided in Figure 2 of Appendix A
Post ordinance to website	Annual, as revised	Screenshot
Review design plans for compliance with City Post-Construction Storm Water ordinance	As submitted	Number of plan reviews
Review of as-builts of post-construction storm water BMPs	As submitted	Number of as-built reviews

3.6 Spill Response Program

The City works closely with the Helena Police and Fire Departments and the Shelby County Emergency Management Agency (EMA) to respond to, monitor and track any spills in the MS4. The County EMA and the Helena Fire Department are equipped and trained to provide environmental protection services.

In the event of a spill, the Helena Fire and Police Departments initially respond. For larger spills that could affect storm water quality, the City Building Official and the Shelby County EMA are notified and respond to coordinate efforts to address the impacts and track/map the spill. The City of Helena SOP regarding spills and spill response is attached in Appendix E.

The following activities and practices implemented by the City are aimed at reducing NPS pollution from spills of hazardous materials in the MS4:

Activity	Schedule	Measurable
Review/Revise formal Spill Prevention and Response Plan	Annual	Plans provided in Appendix E
Create/Revise Hazardous Material Contingency Plan	Annual	Provide plan in SWMPP Appendix
Track and map any spills that occur	As needed	Map and information to be provided in Annual Report
Train City of Helena staff on spill prevention and response	Annual	Training records

3.7 Pollution Prevention / Good Housekeeping

The City's in-house operations are also important to consider when minimizing pollution in the MS4. The City's program to monitor and prevent pollution from its own activities includes good housekeeping practices at City facilities, trash/junk removal, training, and inspections. SOPs covering City activities with the potential to harm storm water are attached in Appendix E.

The City Shop/Public Works facility and Wastewater Treatment Plant currently have their own NPDES permits, and their discharge potentials are regulated as part of those permits. The majority of the City's potential storm water pollution activities (e.g. fuel storage, etc.) occur at these facilities.

The removal of trash from the waterways and tributaries in the MS4 is a key priority that is addressed in the short term through partnerships with local organizations that hold clean-up days. The City supports and facilitates these events. The City provides trash receptacles at public events and parks to address pollution of waterways.

The following activities and practices implemented by the City are aimed at reducing NPS pollution from the City's operations:

Activity	Schedule	Measurable
Inventory/Map City facilities with pollutant discharge potential	Annual (currently up to date)	Map provided in Figure 4 of Appendix A
Provide additional trash receptacles and trash removal services for City events and storm water protection (e.g. Buck Creek Festival, 4th of July, First Fridays, etc.)	Ongoing	Estimated quantity of material removed
Provide trash and pet-waste receptacles and removal at the Helena Sports Complex and other City parks	Ongoing	Estimated quantity of material removed
Removal of trash from waterbodies by partnering with environmental groups on clean up days	Regular events and weekly pick up by City Public Works Department employee	Estimated quantity of material removed/manhours
Inspect City facilities for storm water management issues	Annual	Summary of inspection results; number of inspections
Review and revise SOPs for good housekeeping practices performed by the City	Annual	SOPs provided in Appendix E

Activity	Schedule	Measurable
Train staff on storm water management issues related to their jobs	Annual	Training records
Evaluate potential to retrofit controls with pollutant removal capabilities	Annual	Results

3.8 Application of Pesticides, Herbicides, and Fertilizers (PHFs)

The City limits its use of pesticides, herbicides, and fertilizers (PHFs) as much as possible. The City applies fertilizer and herbicide at City the following parks and ball fields when necessary.

- Helena Sports Complex - 110 Sports Complex Dr, Helena, AL 35080
- Cahaba Lily Park - 3200 Hwy 52, Helena, AL 35080
- Joe Tucker Park - 230 Tucker Rd, Helena, AL 35080
- Penhale Park – Penhale Park Road, Helena, AL 35080

Emerald Lawn (OTPS License #14059) is contracted to apply chemicals at the parks and ball fields.

The City's use and storage of PHFs is minimal, but the overall PHF program is assessed and inspected in coordination with the previous Municipal Operations/Good-housekeeping permit element.

The City also conducts mosquito spraying, as needed during the summer months, in order to address public health concerns. The City runs a mosquito fogger truck along all public streets and parks ten hours a week and areas are spayed every fourteen days.

The following activities and practices implemented by the City are aimed at reducing NPS pollution from PHFs in the MS4:

Activity	Schedule	Measurable
Inventory/map PHF application areas	Annual	Map provided in Figure 6 of Appendix A
Inventory stored PHFs and inspect storage facilities	Annual	Inspection results
Train staff in use, storage, and disposal of PHFs	Annual	Training records

3.9 Oils, Toxics, and Household Hazardous Waste Control

The City currently provides notice to citizens and businesses of opportunities to safely dispose of hazardous materials. Shelby County hosts an annual household hazardous waste collection day, and local businesses provide used oil collection services. The County hazardous waste collection days and locations where used oils and other automotive/marine fluids can be disposed of or recycled is advertised on the City's website and shown on the Storm Water Management page of the City's website.

The following activities and practices implemented by the City are aimed at reducing NPS pollution from hazardous materials in the MS4:

Activity	Schedule	Measurable
Promote local collections days in Shelby County and other nearby authorities	As scheduled	Estimated quantity of material collected (provided by Shelby County)
Inspect maintenance shops and equipment yards	Annual	Summary of inspection results
Staff training on waste control	Annual	Training records
Provide relevant educational materials to public via postings and website	Ongoing	Example materials; screenshot

3.10 Industrial and High-Risk Runoff

The City houses several businesses that may be considered high-risk sites and/or have the potential for pollutant contribution to the MS4. These sites are mapped on Figure 4 in Appendix A. Inspections will be performed annually using the form in Appendix F.

Sites inspected this year include:

- Helena Industrial Park
  - Alabama Bag
  - Florida Coastal Colors

There are no municipal waste landfills or treatment, storage, and disposal facility located in the MS4, but there are several industrial facilities in the MS4 that are covered by NDPES permits:

NPDES	Facility	Address
AL0001996	HELENA QUARRY	237 LIMESTONE DRIVE
AL0023116	HELENA WWTP	590 OLD TOWNE PLACE
AL0061603	HELENA TANK FARM	900 SHELBY COUNTY ROAD 52, E
ALG340370	HELENA TANK FARM	900 SHELBY COUNTY ROAD 52, E
ALG020005	HELENA ASPHALT PLANT	3110 HELENA ROAD

The following activities and practices implemented by the City are aimed at reducing NPS pollution from industrial sites located in the MS4:

Activity	Schedule	Measurable
Update inventory/map of industrial and high-risk facilities	Annual	Map provided in Figure 4 of Appendix A
Develop/Review and revise SOP/form for inspection of facilities	Annual/ongoing	SOPs provided in Appendix E
Collect copies of all NPDES permit information for facilities located in the City	Ongoing	Summary provided in Annual Report
Inspect facilities that are not covered by individual NPDES permit	Annual	Inspection records

4.0 Monitoring Programs

Monitoring locations for the Cahaba River and Buck Creek have been established for the Helena MS4. Monitoring of each waterbody will occur on a semi-annual basis as stated in Part III of the MS4 Permit, and the sampling procedures outlined in Part III of the NPDES MS4 Permit will be employed.

Samples from the Cahaba River will be taken from the location where the river crosses under Shelby County Road 52 (33°17'4.96"N, 86°52'57.15"W). The Buck Creek sampling point will be located where Buck Creek crosses under Alabama Highway 261 just below Buck Creek Dam (33°17'50.76"N, 86°50'35.97"W). See Figure 5 in Appendix A.

Grab samples will be collected from the Cahaba River and Buck Creek locations and analyzed for the following parameters at the frequencies shown:

Parameter	Frequency
E. Coli	Semi-annually
Total Nitrogen	Semi-annually
Total Phosphorus	Semi-annually
Total Suspended Solids	Semi-annually
Temperature	Semi-annually
pH/ORP	Semi-annually
Turbidity	Semi-annually
Conductivity	Semi-annually
Dissolved Oxygen	Semi-annually
Fecal Coliform	Semi-annually
Ammonia Nitrogen	Semi-annually
BOD	Semi-annually
COD	Semi-annually
Hardness	Semi-annually
Nitrate/Nitrite Nitrogen	Semi-annually
Oil and Grease	Semi-annually
Total Dissolved Solids	Semi-annually
Total Kjeldahl Nitrogen	Semi-annually

5.0 Agency Certification

I certify under penalty of law that this Storm Water Management Program and all attachments pertaining to the City of Helena Municipal Separate Storm Sewer System (MS4) were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment for knowing violations.

J. Brian Puckett, Mayor
City of Helena, Alabama

1-31-2023
Date

SWMPP Appendix A - Figures

Figure 1 – Helena MS4 Area

Figure 2 – City-Owned and Private Structural Controls

Figure 3 – Helena MS4 Major Outfall Locations and Inspections

Figure 4 – Industrial and Municipal Operation Sites

Figure 5 – Wet Weather Monitoring Sites

Figure 6 – PHF Application Map

FIGURE 1. HELENA MS4 AREA

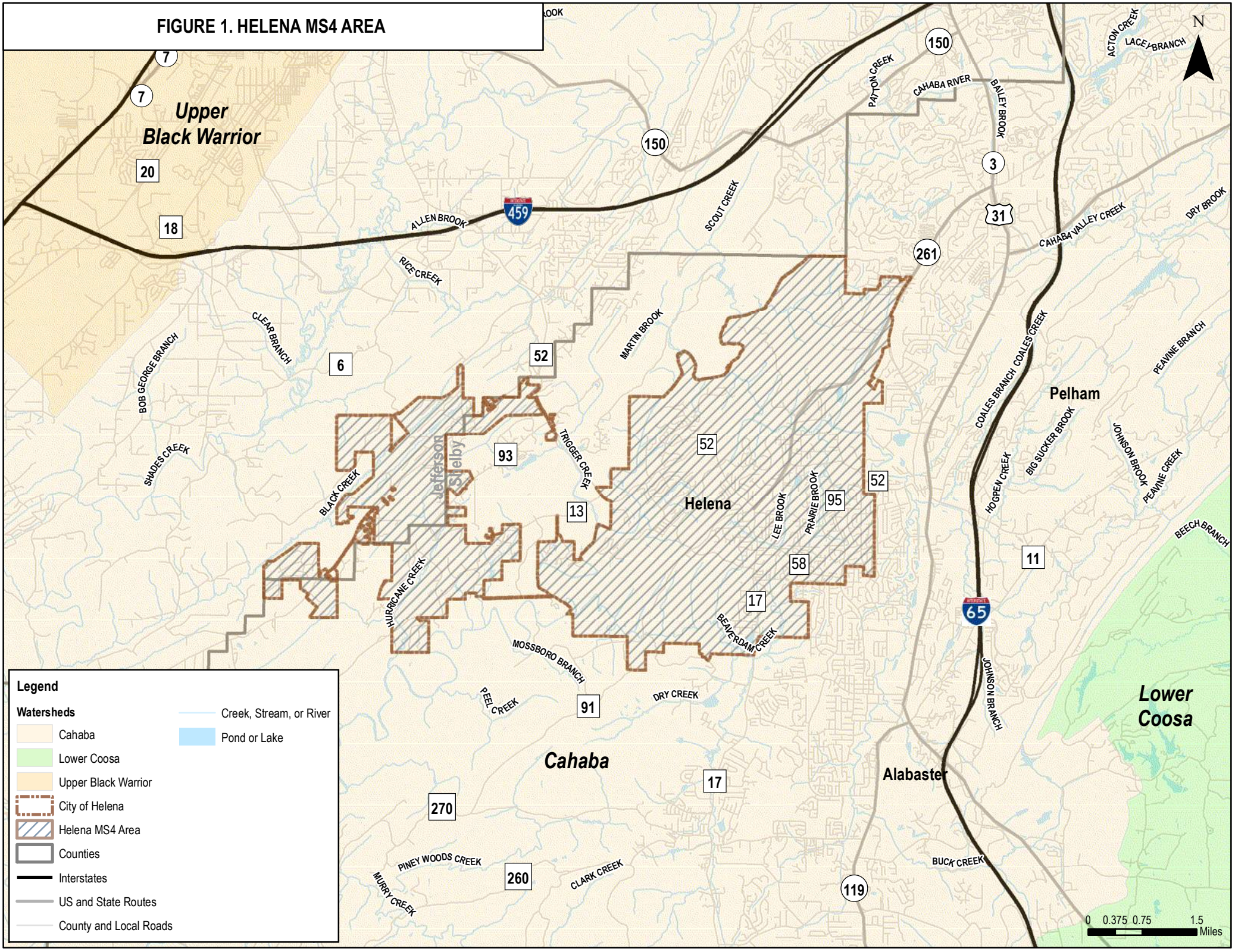


FIGURE 2. CITY-OWNED AND PRIVATE STRUCTURAL CONTROLS

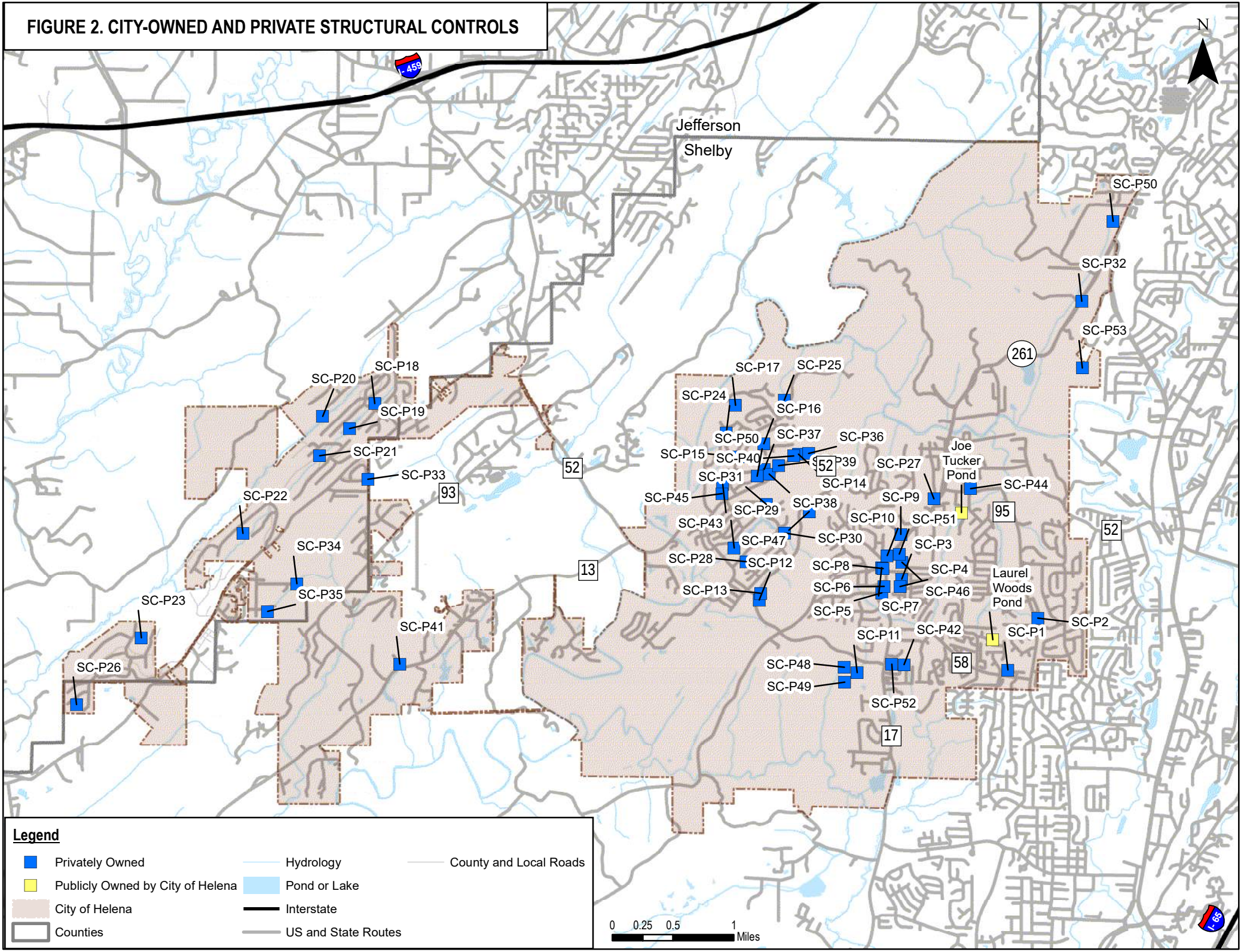


FIGURE 3. HELENA MS4 OUTFALL LOCATIONS

January 31, 2023

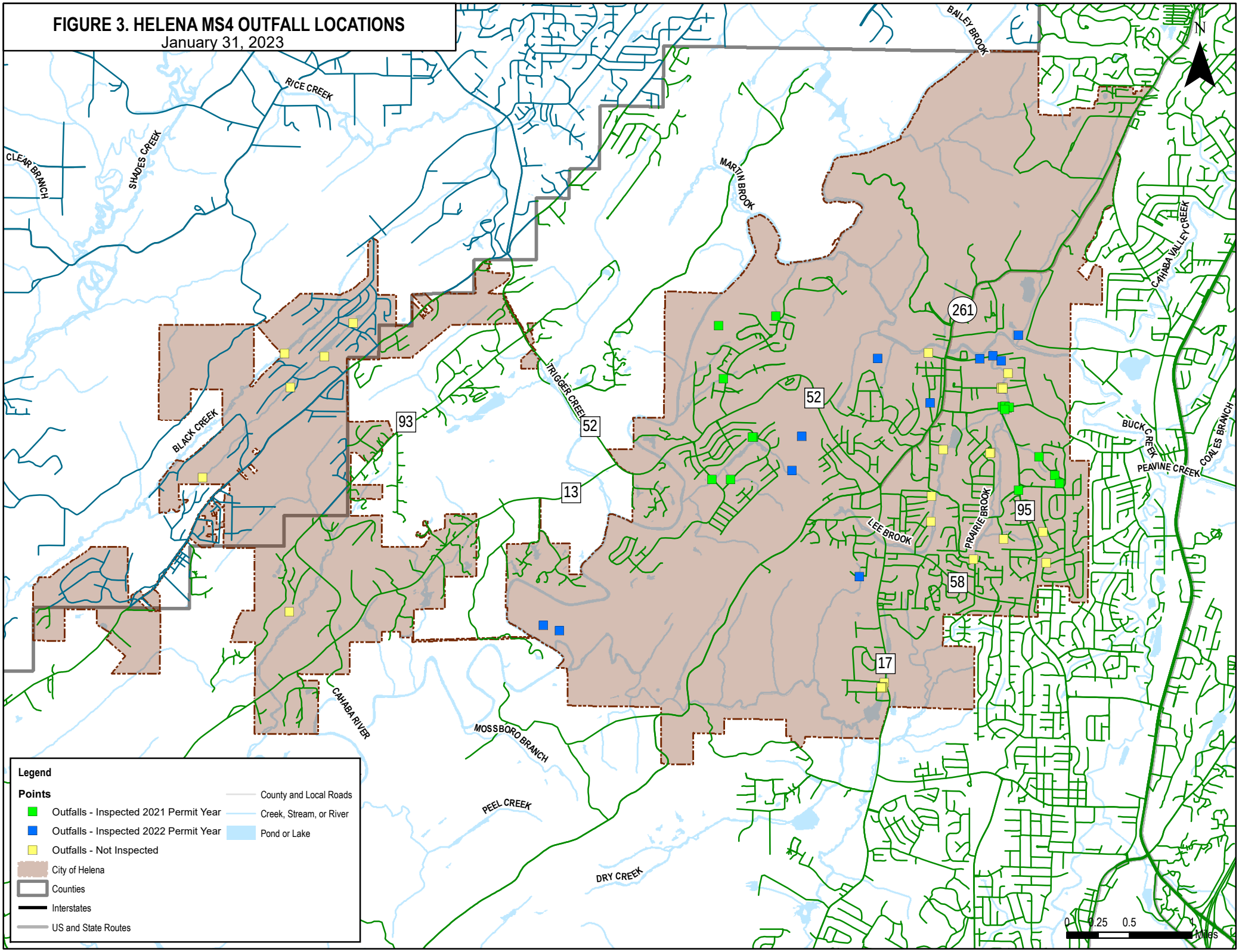


FIGURE 4. HELENA INDUSTRIAL INSPECTION SITES AND MUNICIPAL OPERATIONS

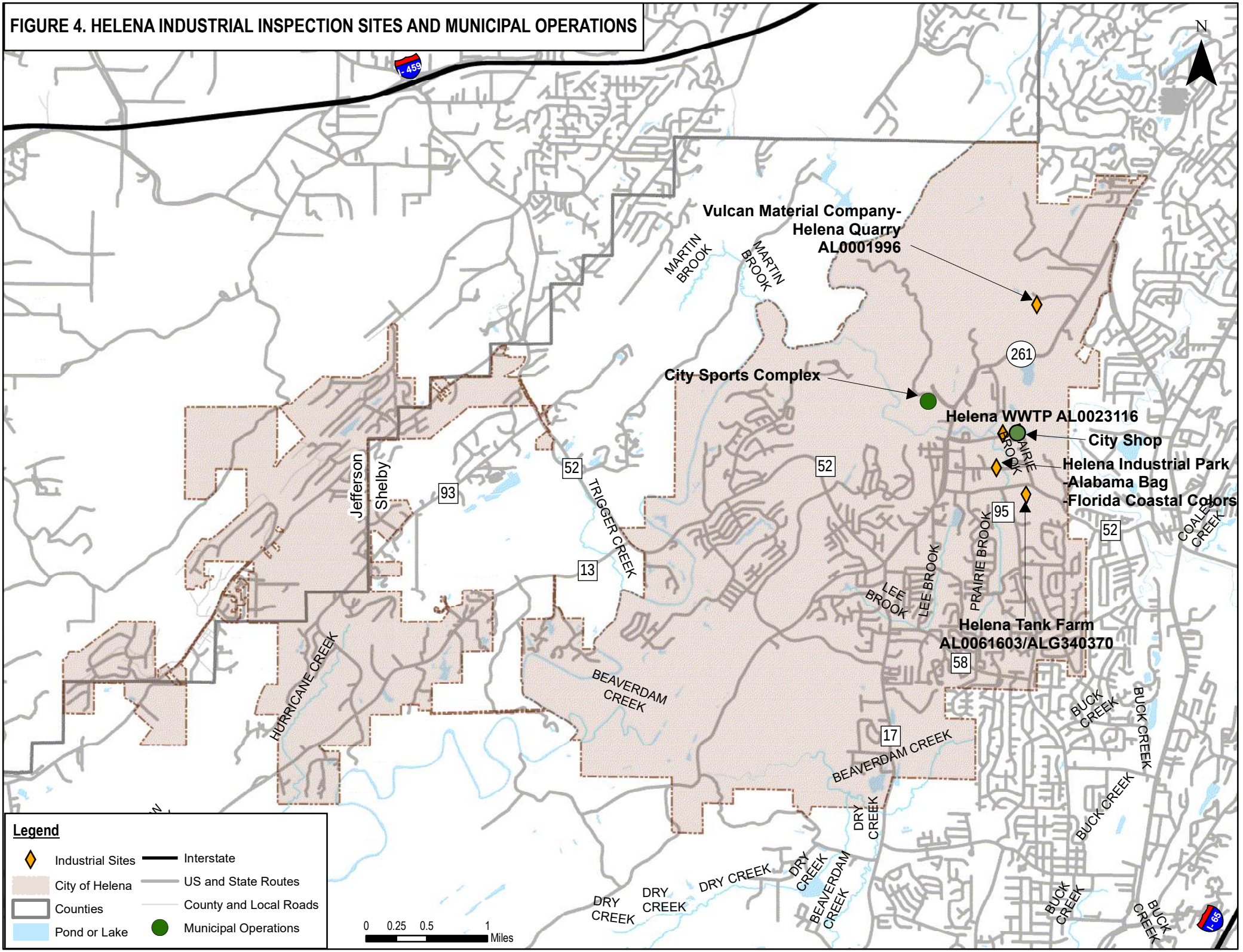


FIGURE 5. HELENA MS4 WET WEATHER MONITORING LOCATIONS

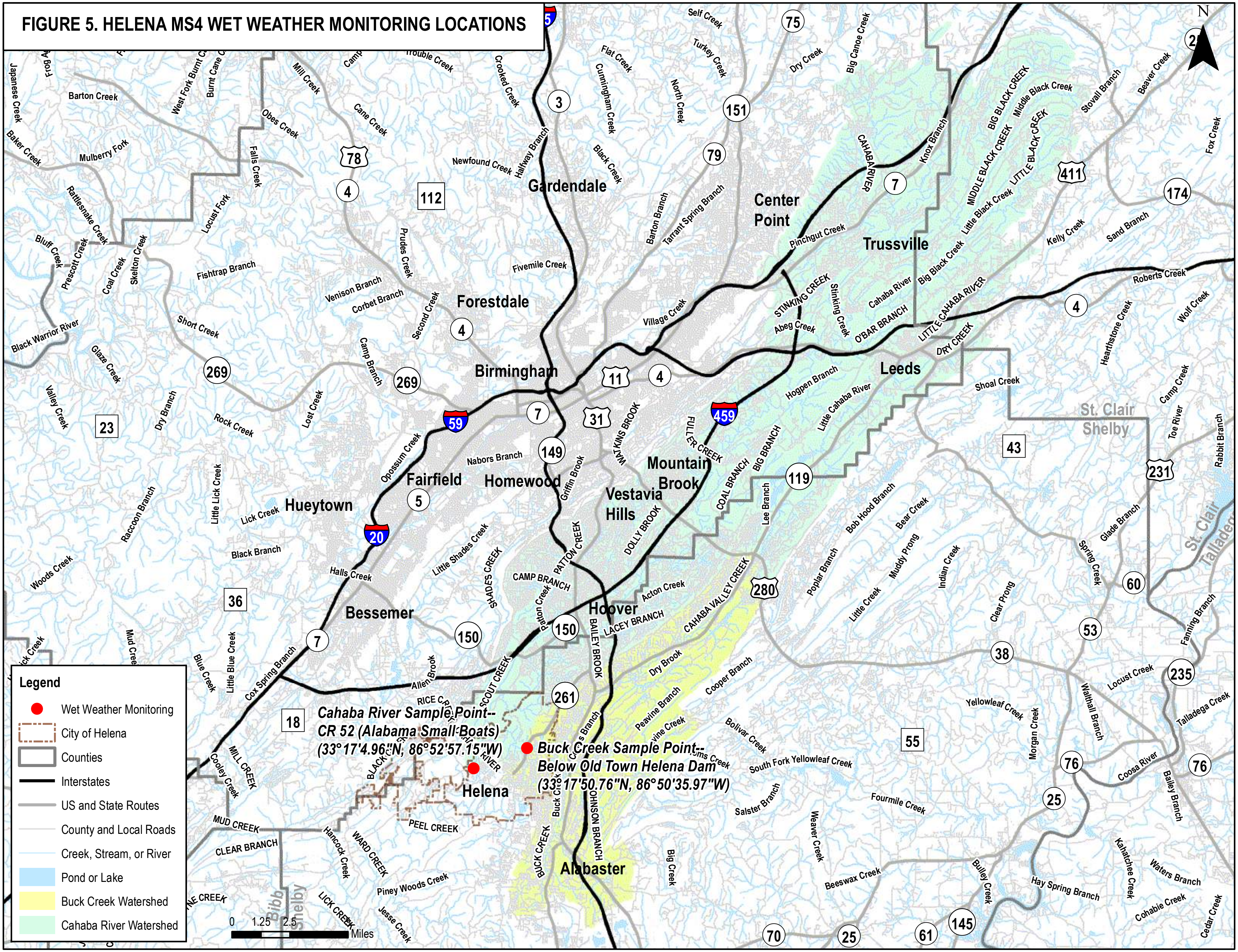


FIGURE 6: PHF APPLICATION

CITY OF HELENA

816 HWY. 52 E - PO BOX 613 - HELENA, ALABAMA 35080

- STREET NAMES
- MOSQUITO SPRAY AREA
- PHF APPLICATION AREA

HELENA SPORTS COMPLEX

CAHABA LILY PARK

JOE TUCKER PARK

PENHALE PARK

SWMPP Appendix B – MS4 Permit

LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov
1400 Coliseum Blvd. 36110-2400 ▪ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ▪ FAX (334) 271-7950

January 25, 2021

Certified Mail #9489 0090 0027 6204 8227 34

Honorable Mark R. Hall
Mayor, City of Helena
816 Highway 52 East
Helena, Alabama 35080

RE: City of Helena Phase I Municipal Separate Storm Sewer System (MS4)
NPDES Permit ALS000012
Shelby County (117)

Dear Mayor Hall:

The Alabama Department of Environmental Management has made a final determination to issue NPDES Permit No. ALS000012 to the City of Helena for discharges from its MS4. The NPDES Permit Number ALS000012 will be effective February 1, 2021 and expire January 31, 2026.

The Department notified the public of its tentative determination to issue NPDES Permit Number ALS000012 on August 24, 2020. Interested persons were provided the opportunity to submit comments on the Departments tentative decision through September 24, 2020. In accordance with ADEM Admin. Code r. 335-6-6-.21(7), a response to all comments received during the public comment period are provided with the enclosed permit.

The City is responsible for compliance with all provisions of the permit including, but not limited to, the performance of any monitoring, the submittal of any reports, and the preparation and implementation of any plans required by the permit.

If you have questions concerning this permit, please contact Melanie Ratcliffe either by email at melanie.ratcliffe@adem.alabama.gov or by phone at (334) 270-5616.

Sincerely,

James H. Carlson, Chief
Stormwater Management Branch
Water Division

JHC/mnr File: FPER/44178 Enclosures: Permit and Response to Comments

Cc: Mr. Michael Mitchell, Environmental Protection Agency (via email)
Mr. Chad Campbell, City of Helena (via email)

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)

Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1176
(251) 304-1189 (FAX)

ADEM
Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE:	CITY OF HELENA
AREA OF COVERAGE:	CORPORATE BOUNDARIES OF THE CITY OF HELENA WITHIN THE CAHABA RIVER DRAINAGE BASIN
PERMIT NUMBER:	ALS000012
RECEIVING WATERS:	WATERBODIES WITHIN THE CORPORATE BOUNDARIES OF CITY OF HELENA WITHIN THE CAHABA RIVER DRAINAGE BASIN

In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, ***Code of Alabama 1975****, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended,* ***Code of Alabama 1975****, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.*

ISSUANCE DATE: JANUARY 25, 2021

EFFECTIVE DATE: FEBRUARY 1, 2021

EXPIRATIONDATE: JANUARY 31, 2026

Jeffery W. Kitch

Alabama Department of Environmental Management

Table of Contents

Table of Contents (continued)

PART I Applicability

A. Permit Area

This permit applies to the corporate boundaries of the City of Helena within the Cahaba River drainage basin that are regulated by the Permittee and discharge to the Permittee's Municipal Separate Storm Sewer System (MS4).

B. Authorized Discharges

1. This permit authorizes all existing or new storm water point source discharges to waters of the State of Alabama from those portions of the (MS4s) owned or operated by the Permittee. Discharge of pollutants shall be reduced to the Maximum Extent Practicable (MEP), shall not cause, nor contribute to, violations of Alabama Water Quality Standards, and shall be in compliance with Total Maximum Daily Loads (TMDLs) where applicable.

2. This permit authorizes the following non-stormwater discharges provided that they do not cause or contribute to a violation of water quality standards and provided that they have been determined not to be substantial contributor pollutants by the Permittee or the Department:
    a. Water line flushing
    b. Landscape irrigation (not consisting of treated, or untreated wastewater unless authorized by the Department)
    c. Diverted stream flows
    d. Uncontaminated ground water infiltration
    e. Uncontaminated pumped groundwater
    f. Discharges from potable water sources
    g. Foundation and footing drains
    h. Air conditioning drains
    i. Irrigation water (not consisting of treated, or untreated, wastewater unless authorized by the Department
    j. Rising ground water
    k. Springs
    l. Water from crawl space pumps
    m. Lawn watering runoff
    n. Individual residential car washing, to include charitable carwashes
    o. Residual street wash water
    p. Discharge or flows from firefighting activities (including fire hydrant flushing)
    q. Flows from riparian habitats and wetlands
    r. Dechlorinated swimming pool discharges

C. Prohibited Discharges

The following discharges are not authorized by this permit:

1. Discharges that are mixed with sources of non-storm water, unless such non-storm water discharges are in compliance with a separate NPDES permit or where those dischargers have been determined not to represent significant sources of pollution, as identified by, and in compliance with, Part I.B.2;

2. Discharges of materials resulting from a spill, except emergency discharges required to prevent imminent threat to human health or to prevent severe property damage, provided reasonable and prudent measures have been taken to minimize the impact of the discharges; and

3. The discharge of sanitary wastewater through cross connections or other illicit discharges through the MS4 is prohibited.

PART II Storm Water Pollution Prevention & Management Program (SWMP)

A. Storm Water Management Program (SWMP)

1. The Permittee is required to develop, revise, implement, maintain and enforce a Storm Water Management Program (SWMP) which shall include controls necessary to reduce the discharge of pollutants from its MS4 consistent with Section 402(p)(3)(B) of the Clean Water Act and 40 CFR Part 122.26.These requirements shall be met by the development and implementation of a Storm Water Management Program Plan (SWMPP) which addresses the Best Management Practices (BMPs), control techniques and systems, design and engineering methods, public participation and education, monitoring, and other appropriate provisions designed to reduce the discharge of pollutants from the MS4 to the MEP, protect water quality, and satisfy appropriate water quality provisions of the Clean Water Act.

2. The Permittee shall provide and maintain adequate finance, staff, equipment, and support capabilities necessary to implement the SWMPP and comply with the requirements of this permit.

3. The SWMPP must address the minimum program elements referenced in Part II.B. to include the following:

    a. A map of the Permittee's MS4 jurisdictional boundaries;
    b. The BMPs that will be implemented for each program element;
    c. Low impact development (LID)/green infrastructure (GI) shall be considered where feasible. Information on LID/GI is available on the following websites: http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf and https://www.epa.gov/nps/urban-runoff-low-impact-development;
    d. The measurable goals for each of the program elements outlined in Part II.B.;
    e. The proposed schedule – including interim milestones, as appropriate, inspections, and the frequency of actions needed to fully implement each program element; and,
    f. The person and/or persons responsible for implementing or coordinating the BMPs for each separate program element.

4. The Permittee shall submit to the Department within nine (9) months of the effective date of this permit a revised SWMPP. Once the initial SWMPP is acknowledge by ADEM, activities and associated schedules outlined by the SWMPP or updates to the SWMPP are conditions of this permit.

5. Unless otherwise specified in this permit, the Permittee shall be in compliance with the conditions of this permit by the effective date.

B. Storm Water Program Elements and Requirements

1. **Storm Water Collection System Operations**

    a. Structural Controls

        i. For Permittee owned/maintained structural controls, the structural controls shall be operated in a manner to reduce the discharge of pollutants, to include inspection and maintenance, to the MEP.

ii. For Permittee owned/maintained structural controls, the Permittee shall include in the SWMPP and implement the following:

1. A map of the structural controls which should be updated as needed;
2. Inspection of existing and newly constructed structural controls on a semi-annual basis, at a minimum;
3. Implementation of standard operating procedures (SOPs) or inspection checklists for structural control inspections and maintenance procedures;
4. Stabilization and re-vegetation of eroded areas as needed; and
5. Monthly inspections for floatables, litter, sediment and debris, in structural controls, with removal as needed.

iii. The Permittee shall maintain an internal record keeping system to track the inventory of structural controls, inspections, and maintenance of the control structures.

iv. The Permittee shall report each year in the annual report the following information:

1. The number of inspections performed on structural controls, to include follow-up inspections. The inspection documentation (i.e. checklist) shall be made available upon request;
2. A detailed description of the maintenance activities performed on structural controls, as well as the frequency;
3. The estimated amount of floatable, litter, sediment and debris that was removed;
4. Copies of any contractual agreements for maintenance activities if not performed by the Permittee. The contractual agreement should specify maintenance activities performed and schedule; and
5. Updated structural controls map.

v. The Permittee shall provide in the annual report an analysis of the effectiveness of the Storm Water Collection Systems Operations program.

2. **Public Education and Public Involvement on Storm Water Impacts**

a. The Permittee must further develop, revise, and implement a public education and outreach program to inform the community about the impacts from storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff to the MEP. The Permittee shall continuously implement this program in the areas served by the MS4. Each year, the Permittee shall implement a minimum of four BMPs, with two BMPs emphasizing public education and two BMPs emphasizing public involvement.

b. The Permittee shall include in the SWMPP a list of potential BMPs that the Permittee may implement. Regarding public education and public involvement, the SWMPP must address the following information, at a minimum:

1. Seek and consider public input in the development and implementation of the SWMPP; and

2. Identify targeted pollutant sources the Permittee's public education program is intended to address.

3. Plans to specifically address the reduction and removal of litter, floatables and debris from entering the MS4, that may include, but is not limited to the following:

    a. Establish a program to support volunteer groups for labeling storm drain inlets with "no dumping" message; and
    b. Posting signs referencing local codes that prohibit littering and illegal dumping at designated public access points to open channels, creeks, and other relevant waterbodies;
    c. Participate in at least one activity each year that targets the removal of litter, floatables, and debris from the MS4 area as described in the SWMPP. Estimate the amount of litter, floatables, and debris is removed from the MS4 for each activity.

4. Inform and involve individuals and households about the steps they can take to reduce storm water pollution; and

5. Inform individuals and groups on how to participate in the storm water program (with activities such as, but not limited to, local stream and lake restoration activities, storm water stenciling, advisory councils, watershed associations or committees, participation on rate structures, stewardship programs, and environmental related activities). The target audiences and subject areas for the education program that are likely to have significant storm water impacts should include the following, at a minimum:

    i. General Public
        a. General impacts litter has on water bodies, how trash is delivered to streams via the MS4, and ways to reduce the litter;
        b. General impacts of storm water flow into surface water from impervious surface;
        c. Source control BMPs in areas of pet waste, vehicle maintenance, landscaping and rainwater reuse; and
        d. Impacts of illicit discharges and how to report them.

    ii. General Public and Businesses to include Home-based and Mobile Businesses
        a. BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials;
        b. Impacts of illicit discharges and how to report them.

    iii. Homeowners, Landscapers, and Property Managers
        a. BMPs for use and storage of pesticides, herbicides, and fertilizers.
        b. Storm water pond maintenance.
        c. General impacts of storm water into surface water from impervious surface.

    iv. Engineers, Contractors, and Developers
        a. Impacts of increased storm water flows into receiving water bodies;
        b. Technical standards for construction site sediment and erosion control;
        c. Storm water treatment and flow control BMPs; and
        d. Run-off reduction techniques and low impact development (LID)/green infrastructure (GI) practices that may include, but not limited to, site design, pervious pavement, alternative parking lot design, retention of forests and mature trees to assist in storm water treatment and flow control BMPS.

6. Evaluate the effectiveness of the public education program and the public involvement program.

c. The Permittee shall report each year in the annual report the following information:

1. A description of the activities used to involve groups and/or individuals in the development and implementation of the SWMPP;

2. A description of the individuals and groups targeted and how many groups and/or individuals participated. If exact participation is not readily quantifiable, then an estimation will be sufficient;
3. A description of the BMPs performed along with the quantity utilized (i.e. number of printed brochures, and the number distributed of newspapers copies, number of workshops hosted/attended, and the number of public service announcements, etc.);

4. Results of the evaluation of the effectiveness as required in Part II.B.2.b.6.

d. The current SWMPP and latest annual report should be posted on the Permittee's website.

3. **Illicit Discharge Detection and Elimination (IDDE)**

a. The Permittee shall implement an ongoing program to detect and eliminate illicit discharges and improper disposal into the MS4, to the Maximum Extent Practicable. The program shall include, at a minimum, the following:

1. The development and annual update of an MS4 map. An initial map shall be provided in the SWMPP with updates provided each year in the annual report. The map shall include, at a minimum, the following:

a. The latitude/longitude of all known major outfalls; and
b. The names of all waters of the State that receive discharges from these major outfalls; and,
c. Structural BMPs owned/maintained by the Permittee.

2. To the extent allowable under State law, an ordinance or other regulatory mechanism that effectively prohibits non-storm water discharges to the MS4. A copy of the IDDE ordinance or other regulatory mechanism location or a hyperlink to the location of the ordinance or other regulatory mechanism on the Permittee's website shall be included in the SWMPP. The ordinance or other regulatory mechanism shall:

a. Include escalating enforcement procedures and actions;
b. Require the removal of illicit discharges and the immediate cessation of improper disposal practices upon identification of responsible parties. Where the removal of illicit discharge within ten (10) working days is not possible, the ordinance shall require an expeditious schedule for removal of the discharge. In the interim, the ordinance shall require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4; and
c. Provide for the review of the IDDE ordinance and update as necessary.

3. A dry weather screening program designed to detect and address non-storm water discharges to the MS4. This program must address, at a minimum, dry weather

screening of twenty (20) percent of all major outfalls at least once per year with all (100 percent) major outfalls screened at least once per five years. Priority areas, as described by the Permittee in the SWMPP, will be dry weather screened on a more frequent schedule as outlined in the SWMPP. When determining priority areas, consider criteria such as, but not limited to, areas with older infrastructure, mixed-use areas, areas with a history of past illicit discharges, areas with on-site sewage disposal systems, or areas upstream of sensitive waterbodies. If any flow, from an unidentified source, is observed during the dry weather screening of a major outfall, then the Permittee shall follow the sampling protocol as outlined in the SWMPP and developed in accordance with EPA's guidance manual, *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments*, Center for Watershed Protection, October, 2004.

4. Procedures for tracing the source of a suspect illicit discharge as outlined in the SWMPP. At a minimum, these procedures will be followed to investigate portions of the MS4 that, based on the results of the field screening or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water;

5. Procedures for eliminating an illicit discharge as outlined in the SWMPP;

6. Procedures to notify ADEM of a suspect illicit discharge entering the Permittee's MS4 from an adjacent MS4 as outlined in the SWMPP;

7. A mechanism for the public to report illicit discharges discovered within the Permittee's MS4 and procedures for appropriate investigation of such reports;

8. A training program for appropriate personnel on identification, reporting, and corrective action of illicit discharges. The SWMPP must address, at a minimum, the frequency of training and identify the appropriate personnel by title to be trained during the permit cycle; and

9. The Permittee shall post on its website the ordinance or other regulatory mechanism as required by Part II.B.3.a.2 of this Permit.

b. The Permittee shall report each year in the annual report the following information:

1. Total number of major outfalls within the MS4, the number and location of outfalls observed during the dry weather screening of the current year to include any follow-up screenings and the number of outfalls observed in priority areas identified by the Permittee;

2. Updated MS4 map(s), if necessary;

3. Copies of the IDDE ordinance or other regulatory mechanism or provide a hyperlink for the ordinance or regulatory mechanism location on the Permittee's website; and,

4. The number of illicit discharges investigated, any associated sampling results, and the summary of corrective actions taken to include dates and timeframe of response.

4. **Construction Site Storm Water Runoff Control**

a. The Permittee shall further develop, revise, implement, and enforce an ongoing program to reduce, to the Maximum Extent Practicable, the pollutants in any storm water runoff to the MS4 from qualifying construction sites. The program shall include the following, at a minimum:

1. Procedures to require all applicable construction sites to obtain coverage under ADEM NPDES General Permit ALR10000 or other applicable NPDES permits;

2. To the extent allowed under State law, an ordinance or other regulatory mechanism to require effective erosion and sediment controls on qualifying construction sites, as well as sanctions to ensure compliance. The Permittee shall post on its website this ordinance or other regulatory mechanism;

3. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

4. Procedures for site plan review and approval to ensure the selection of effective erosion and sediment controls are consistent with the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas published by the Alabama Soil and Water Conservation Committee (hereinafter the "Alabama Handbook") and are appropriate for site conditions. Site plan review may be prioritized based on criteria outlined in the Permittee's SWMPP and may include, but is not limited to, size and location within priority watersheds. The plan review process shall also consider potential water quality impacts;

5. A mechanism for the public to report complaints regarding pollution discharges from construction sites;

6. Inspection of construction sites to verify use and proper maintenance of appropriate BMPs. Inspections of construction sites shall be performed in accordance with the frequency specified in the table below:

<table>
<tr><th>Site</th><th>Inspection Frequency</th></tr>
<tr><td>Priority Constructions Sites (Defined in Part V.AA.)</td><td rowspan="2">At a minimum, inspections must occur monthly</td></tr>
<tr><td>Other sites determined by the Permittee or Permitting Authority to be a significant threat to water quality*</td></tr>
<tr><td>All qualifying construction sites not meeting the criteria specified above.</td><td>At a minimum, inspections must occur every two months</td></tr>
<tr><td colspan="2">*In evaluating the threat to water quality, the following factors must be considered, if applicable: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; proximity to receiving waterbodies; non-storm water discharges; past record of non-compliance by the operators of the construction site; and other factors deemed relevant to the MS4.</td></tr>
</table>

7. Training for the Permittee's construction site inspection staff in the identification of appropriate construction Best Management Practices (Example: QCI training in accordance with ADEM Admin Code. r. 335-6-12 or the Alabama Construction Site General Permit);

8. Utilization of a construction site inspection checklist (paper and/or electronic);

9. Implementation of an enforcement response plan (ERP), which sets out the Permittee's potential responses to violations through progressively stricter responses as needed to achieve compliance. The ERP must include a system for tracking formal actions and ADEM referrals. Types of enforcement actions may include, but not limited to the following:

    a. Verbal Warnings—Verbal warnings are primarily consultative in nature and must specify the nature of the violation and required corrective action;
    b. Written Notices—Written Notices must stipulate the nature of the violation and the required corrective action, with deadlines for taking such action;
    c. Escalated Enforcement Measures—Citations, stop work orders, withholding plan approvals/authorizations, monetary penalties, or additional measures to address persistent non-compliance, repeat or escalating violations or incidents of major environmental harm; and

10. A program to make available a list of education and training materials and resources to construction site operators in the appropriate application and maintenance of erosion and sediment controls; and

11. The Permittee shall post on its website the ordinance or other regulatory mechanism required by Part II.B.4.a.2.

b. The Permittee shall include within the SWMPP the following information:

    1. A copy of the ordinance or other regulatory mechanism or a hyperlink for the ordinance or regulatory mechanism location on the Permittee's website as required by Part II.B.4.a.2;

    2. Procedures for site plan reviews required by Part II.B.4.a.4;

    3. A construction site inspection schedule meeting the requirements of Part II.B.4.a.6;

    4. A copy of the construction site inspection checklist and/or screenshot of electronic checklist as required by Part II.B.4.a.8;

    5. The ERP as required by Part II.B.4.a.9; and

    6. Procedures and schedule for making available a list of education and training materials and resources to construction site operators in the appropriate application and maintenance of erosion and sediment controls required by Part II.B.4.a.10.

c. The Permittee shall report each year in the annual report the following information:

1. A description of any completed or planned revisions to the ordinance or regulatory mechanism required by Part II.B.4.a.2. and include the most recent copy or a hyperlink to the most recent copy on the Permittee's website;

2. List of all active qualifying construction sites within the MS4 to include the inspections as required by Part II.B.4.a.6; and

3. A summary of the following:
    a. Number of construction site inspections;
    b. Number of formal enforcement actions and description of violation;
    c. Number of construction site runoff complaints received; and
    d. Number of staff trained.

d. The Permittee shall maintain the following information and make it available upon request:

    1. Documentation of all inspections conducted of construction sites. The inspection documentation shall include, at a minimum, the following:

        a. Facility type;
        b. Inspection date;
        c. Name and signature of inspector;
        d. Location of construction project;
        e. Owner/operator information (name, address, phone number, fax, and email);
        f. Description of the condition of storm water BMPs that may include, but not limited to, the quality of: vegetation and soils, inlet and outlet channels and structures, embankments, slopes, and safety benches; spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures; and
        g. Photographic documentation of all critical storm water BMP components.

    2. Documentation of enforcement actions taken at construction sites to include, at a minimum, the following:

        a. Name of owner/operator;
        b. Location of construction project;
        c. Description of violation;
        d. Required schedule for returning to compliance;
        e. Description of enforcement response used, including escalated responses if repeat violations occur;
        f. Accompanying documentation of enforcement responses (e.g., notices of non-compliance, notices of violations, etc.); and
        g. Any referrals to different Departments or Agencies.

    3. Records of public complaints including:

        a. Date, time, and description of the complaint;
        b. Location of subject construction sites; and
        c. Identification of any actions taken (e.g., inspections, enforcement, corrections). Identifying information must be sufficient to cross-reference inspection and enforcement records.

4. Educational and Training Documentation for Construction Site Operators

    a. List of education and training materials and resources

5. **Post-Construction Storm Water Management in New Development and Re-Development**

The Permittee must further develop, revise, and implement a program to address the discharge of pollutants in post-construction storm water runoff to the MS4 from qualifying new development and re-development. Post-Construction Stormwater Management refers to the activities that take place after construction occurs and includes structural and non-structural controls including low-impact development and green infrastructure practices to obtain permanent stormwater management over the life of the property's use. These post-construction controls should be considered during the initial site development planning phase.

a. The Permittee shall develop, update and implement project review and enforcement procedures for qualifying new development and redevelopment projects, to the Maximum Extent Practicable. Specifically, the Permittee shall:

    1. Require landowners and developers to, the MEP, implement systems of appropriate structural and/or non-structural BMPs designed to reduce the discharge of pollutants, which may include, but is not limited to, the following:

        a. Minimizing the amount of new impervious surfaces (roads, parking lots, roofs, etc.);
        b. Preserving and protecting ecologically sensitive areas that provide water quality benefits;
        c. Providing vegetated buffers along waterways, and reduce discharges to surface waters from impervious surfaces such as parking lots;
        d. Implementing policies to protect trees, native soils and other vegetation; and
        e. Minimizing topsoil stripping and compacted soils where feasible.

    2. Require landowners and developers to develop and maintain Best Management Practices to ensure, to the Maximum Extent Practicable, that post-construction runoff mimics pre-construction hydrology of the site. A 1.1-inch rainfall over a 24-hour period preceded by a 72-hour antecedent dry period shall be the basis for the design and implementation of post construction BMPs;

    3. Encourage landowners and developers to incorporate the use of low impact development (LID)/green infrastructure (GI) where feasible. Information on low impact development (LID)/green infrastructure (GI) is available on the following websites:
    http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf
    and http://www.epa.gov/nps/lid;

    4. To the extent allowed under State law, adopt or amend an ordinance or other regulatory mechanism to ensure the applicability and enforceability of post-construction BMPs at qualifying new development and redevelopment projects. The ordinance or regulatory mechanism shall be posted on the Permittee's website;

5. Require the submittal of a post-construction BMP plan, for review, as outlined in the SWMPP. The post-construction BMP plan review process may be integrated with the construction plan review process under Section II.B.4.a.4;

6. Require the submittal of 'as built' certification within 120 days of completion of project;
7. Perform and/or require the performance of annual, at a minimum, post-construction inspections to ensure that design standards are being met. The Permittee shall document its post-construction inspection. Such documentation shall include, at a minimum:

    a. Facility type
    b. Inspection date
    c. Name and signature of inspector
    d. Site location
    e. Owner information (name, address, phone number, fax, and email)
    f. Description of the storm water BMP condition that may include, but not limited to, the quality of: vegetation and soils, inlet and outlet channels and structures, embankments, slopes, and safety benches; spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures;
    g. Photographic documentation of all critical storm water BMP components;
    h. Specific maintenance items or violations that need to be corrected by the owner/operator of the storm water control or BMP; and
    i. Maintenance agreements for long-term BMP operations and maintenance.

8. The Permittee shall maintain or require the developer/ owner/operator to keep records of post-construction inspections, maintenance activities and make them available to the Department upon request and require corrective actions to poorly functioning or inadequately maintained post-construction BMPs;

9. The Permittee shall require and/or perform adequate long-term operation and maintenance of post-construction BMPs, including one or more of the following, as applicable:

    a. The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party; and/or
    b. Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; and/or
    c. Written conditions in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a homeowner's association, or other appropriate group, for maintenance of structural and treatment control management practices; and/or
    d. Any other legally enforceable agreement that assigns permanent responsibility for maintenance of structural or treatment control management practices.

b. The Permittee shall include within the SWMPP the following information:

1. Copies of the ordinance or other regulatory mechanism or hyperlink for the ordinance or regulatory mechanism location on the Permittee's website as required by Part.II.B.5.a.4

2. Procedures to develop, implement and enforce systems of appropriate structural and/or non-structural BMPs;

3. Procedures to develop, implement and enforce performance standards;
4. Procedures and schedule for development of LID/green infrastructure standards;

5. Procedures to ensure compliance with the ordinance or regulatory mechanism, including the sanctions and enforcement mechanisms the Permittee will use to ensure compliance;

6. Procedures for post-construction inspections, to include tracking and enforcement;

7. Procedures to ensure adequate long-term operation and maintenance of BMPs; and

8. Development of an inventory of post-construction structural controls. This inventory shall be updated annually, as needed.

c. The Permittee shall report each year in the annual report the following information:

1. A list of the post-construction structural controls installed and inspected during the permit year;

2. Updated inventory of post-construction structural controls;

3. Number of inspections performed on post-construction structural controls; and

4. Summary of enforcement actions.

6. **Spill Prevention and Response**

a. The Permittee shall further develop, revise, and implement a program to prevent, contain, and respond to spills that may discharge into the MS4. The Permittee must, at a minimum:

1. Investigate, respond, and conduct response actions or coordinate with other agencies that may provide response actions as outlined in the SWMPP;

2. Track spills, response, and cleanup activities for reportable spills that may discharge to the MS4;

3. Use GIS or acceptable mapping scheme to identify spill locations, locations for inspections, and chronic problem areas;

4. Implement a spill prevention/spill response plan;

5. Provide training annually, at a minimum, of appropriate personnel in spill prevention and response procedures and techniques to mitigate pollutant discharges from spills to the MS4;
6. Establish procedures to ensure that all spills can be promptly reported to appropriate authority; and

7. During the permit cycle, review any existing City Hazardous Material Contingency Plan and supplement wherever needed to address discharges to the MS4.

b. The Permittee shall include within the SWMPP the following information:

1. List of agencies that the Permittee may coordinate response actions with regarding spills as required by Part II.B.6.a.1

2. The spill prevention/spill response plan as required by Part II.B.6.a.4; and

3. Procedures to provide annual training, at a minimum, of personnel in spill prevention and response.

c. The Permittee shall report each year in the annual report the following information:

1. Summary of spills occurring during the reporting year, to include the following, at a minimum:
   a. Location;
   b. Spill Substance (i.e. fuel, oil, etc.);
   c. Photographs (Spill and After clean-up, if allowed); and
   d. Incident dates and time to resolution, including any enforcement actions taken and their result.

2. Documentation of employee training as required by Part II.B.6.a.5. shall be kept on file and available when requested by the Department:
   a. Description of the training curriculum or materials used; and
   b. Dated records of attendance.

7. **Pollution Prevention/Good Housekeeping for Municipal Operations**

a. The Permittee shall develop, revise, implement, and maintain a program that will prevent or reduce the discharge of pollutants in storm water run-off from municipal operations to the MEP. The program elements shall include, at a minimum, the following:

1. An inventory of all municipal facilities, including municipal facilities that have the potential to discharge pollutants via storm water runoff;

2. Develop and implement a short- and long-term strategy and program for the prevention and removal of trash from entering into the waterways and tributaries from the MS4 within the permitted area in such a manner as to

estimate the removal of trash per year, which shall be included in the annual report. If a BMP is determined to be ineffective or infeasible, then the BMP must be modified. This program should be outlined within the Permittee's SWMPP and must be updated, as necessary. This program shall address the following, at a minimum:

a. Arrangement for temporary protection of preventative measures to the catch basins, where feasible, and provide proper disposal of trash receptacles, clean-up of catch basins, as needed, and grounds of the event area within one business day subsequent to the event;
b. Direct removal of trash from waterbodies, public areas, and rights-of-way, if applicable;
c. Provide and maintain proper trash receptacles, especially within areas identified as high traffic/high trash generated areas and during special events to include timely trash removal;
d. Prevention through disposal alternatives; and
e. Prevention through waste reduction practices, additional enforcement, and/or initiatives.

3. A Standard Operating Procedures (SOP) detailing good housekeeping practices to be employed at appropriate municipal facilities and during municipal operations that may include, but not limited to, the following:

a. Equipment washing;
b. Street sweeping;
c. Maintenance of municipal roads owned, operated, or under the responsibility of the Permittee;
d. Storage and disposal of chemicals and waste materials;
e. Vegetation control, cutting, removal, and disposal of the cuttings;
f. Vehicle fleets/equipment maintenance and repair;
g. External Building maintenance; and
h. Materials storage facilities and storage yards.

4. A program for inspecting municipal facilities at a minimum of annually, to include municipal maintenance shops and equipment yards, for good housekeeping practices, including BMPs. The program shall include checklists and procedures for correcting noted deficiencies;

5. A training program for municipal facility staff in good housekeeping practices as outlined in the SOP developed pursuant to Part II.B.7.a.(3). The training shall be provided to municipal facility staff at a minimum of annually; and

6. The Permittee shall assess the water quality impacts for those flood management projects owned, operated, or the responsibility of the Permittee. The feasibility of retrofitting existing structural control devised to provide additional pollutant removal from the storm water shall be evaluated.

b. The Permittee shall include within the SWMPP the following information:

1. The inventory of municipal facilities required by Part II.B.7.a.(1);

2. Schedule for developing the SOP for good housekeeping practices required by Part II.B.7.a.(3);

3. An inspection plan and schedule (frequency), including checklists and any other materials needed to comply with Part II.B.7.a.(4); and

4. A description of the training program and training schedule, including frequency, required by Part II.B.7.a.(5).

c. The Permittee shall report each year in the annual report the following information:

1. Any updates to the municipal facility inventory;

2. An estimated amount of floatable material collected from the MS4 as required by Part II.B.7.a.(2);

3. Any updates to the inspection plan;

4. Any updates to the SOPs of good housekeeping practices; and

5. Summary of inspection reports of municipal facilities.

6. Results of the evaluation of the effectiveness of the Pollution Prevention/Good Housekeeping program.

d. The Permittee shall maintain the following information and make it available upon request:

1. Records of inspections and corrective actions, if any; and

2. Training records including the dates of each training activities and names of personnel in attendance.

8. **Application of Pesticide, Herbicide, and Fertilizers (PHFs)**

a. For the *Application of Pesticide, Herbicide, and Fertilizers* (PHFs), the Permittee shall implement controls to reduce, to the MEP, the discharge of pollutants from the MS4 related to the storage and application of PHFs applied by employees or contractors, to public rights of way, parks, and other public property. The Permittee shall implement programs to encourage the reduction of the discharge of pollutants related to application and distribution of PHFs. For those controls implemented, the Permittee will obtain coverage and maintain compliance with ADEM NPDES Pesticide General Permit ALG870000, if applicable, or other applicable NPDES permits. In addition, the Permittee shall address priorities within the SWMPP to include the following, at a minimum:

1. Identify all areas known to receive high applications of PHFs, develop a program to detect improper usage, and prioritize problem areas;

2. Require evidence of proper certification and licensing for all applicators contracted to apply pesticides or herbicides on municipal property; require that applicators contracted to apply fertilizer are qualified in utilizing proper nutrient management practices;

3. Maintain an inventory of on-hand PHFs with information about the formulations of various products, including how to recognize the chemical constituents from the label,

their respective uses, directions and precautions for applicators that explain if products should be diluted, mixed or only used alone, and, proper storage of products;

4. Equipment use and maintenance;

5. Training in safe use, storage and disposal of PHFs;

6. Annual inspection and monitoring of facilities where PHFs are stored; and

7. Record keeping.

b. The Permittee shall report each year in the annual report the following information:

1. The areas within the MS4 jurisdiction that received high applications of PHFs;

2. A list of personnel certified and trained on proper PHF application;

3. An inventory list of on-hand PHFs; and

4. Inspections of the facilities where PHFs are stored.

9. **Oils, Toxics, and Household Hazardous Waste Control**

a. The Permittee shall prohibit to the MEP the discharge or disposal of used motor vehicle fluids and household hazardous wastes into the MS4. Specific activities to be completed under this item are:

1. Make available material educating the public about used oil facility locations, hotline numbers, and alternatives to toxic materials;

2. Annual, at a minimum, inspections of municipal maintenance shops and equipment yards;

3. Advertise the location of used oil collection facilities; and

4. Provide employee training, at a minimum of annually, on spill prevention at all municipal facilities where oils or toxic materials are used.

b. The Permittee shall include within the SWMPP the following information:

1. Procedures to further develop, revise, implement, and enforce a program for oils, toxics, and household hazardous waste control to include educational information and employee training.

c. The Permittee shall report each year in the annual report the following information:

1. Oils, Toxics, and Household Hazardous Waste Control training materials
    a. Inspection reports of municipal maintenance shops and equipment yards; and
    b. Employee training workshops
        i. Dated attendance sheet; and
        ii. Training presentations.

10. **Industrial Storm Water Runoff**

a. The Permittee shall implement a program to inspect, monitor and control pollutants in storm water runoff to the MS4 from municipal waste landfills, hazardous waste treatment, storage, disposal and recovery facilities, and industrial facilities and high-risk commercial facilities. Facilities to be addressed under this program include: facilities that have reported under the requirements of the Emergency Planning and Community Right to Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge that the Permittee determines is contributing substantial pollutants loading to the MS4 ("high risk facilities"). The program must provide for, at a minimum:

1. Annual, at a minimum, inspections of municipal waste landfills, hazardous waste treatment, storage, disposal (TSD) and recovery facilities;

2. Annual, at a minimum, inspections of EPCRA Title III, Section 313 facilities that do not have an NPDES permit issued by Department as outlined in the SWMPP;

3. During the permit term, inspections of industrial facilities and high-risk commercial facilities that do not have an NPDES permit issued by the Department as outlined in the SWMPP, and

4. Data collected by a NPDES permitted facility to satisfy the monitoring requirements of an NPDES, State, land application or local pretreatment discharge permit may be used to satisfy Part II.B.10.a of this Permit. The Permittee may require the industrial facility to conduct self-monitoring to satisfy this requirement, if necessary.

b. The Permittee shall include in the SWMPP a list of all municipal waste landfills, hazardous waste treatment, storage, disposal and recovery facilities, high risk commercial facilities, and industrial facilities, both NPDES permitted and Emergency Planning and Community Right to Know Act (EPCRA) Title III, Section 313 facilities, within the MS4.

c. The Permittee shall include in the annual report a list of the industrial facilities and high-risk commercial facilities inspected and any corrective actions taken, if applicable.

C. Legal Authority

To the extent allowed under State law, the Permittee must annually review and revise, as necessary, its relevant ordinances or other regulatory mechanisms, or adopt any new ordinances that provide it with adequate legal authority to control pollutant discharges into and from its MS4, and to implement and enforce its SWMPP. To be considered adequate, this legal authority must, at a minimum, authorize the Permittee to:

1. Prohibit non-storm water discharges unless such storm water discharges are in compliance with a separate NPDES permit, or determined by the Department not to be a significant contributor of pollutants to waters of the State;

2. Prohibit and eliminate illicit connections to the MS4. Illicit connections include pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4;

3. Control the discharge of spills, and prohibit dumping or disposal of materials other than storm water into the MS4;

4. Require operators of construction sites and industrial and commercial facilities to minimize the discharge of pollutants to the MS4 to the Maximum Extent Practicable through the installation, implementation, and maintenance of appropriate controls, including installation, implementation and long-term maintenance of post construction controls;

5. Request information to determine compliance with ordinances or other regulatory mechanism;

6. Enter private property for the purpose of inspecting and monitoring at reasonable times any facilities, equipment, practices, or operations for active or potential polluted storm water discharges to the MS4;

7. Promptly require that dischargers cease and desist discharging and/or clean-up and abate a discharge;

8. Levy citations or administrative fines against responsible parties to include but not limited to non-compliant construction sites;

9. Require recovery and remediation costs from responsible parties; and

10. Provide the authority to enter into interagency agreements with other entities for the purpose of controlling the contribution of pollutants to the Maximum Extent Practicable from one MS4 to another MS4.

D. SWMPP Plan Review and Modification

1. The Permittee shall submit to the Department within nine months of the effective date of this permit a revised SWMPP. The Permittee shall implement plans to seek and consider public input in the development, revision, and implementation of this SWMPP, as required by Part II.B.2.b.1. Thereafter, the Permittee shall perform an annual review, at a minimum, of the current SWMPP and must modify the SWMPP, as necessary, to maintain compliance with the permit. Any modifications to the SWMPP shall be submitted to the Department.

2. The Permittee may modify the SWMPP at any time during the life of the permit. Any modifications must be submitted to the Department at the time of the modification and shall be included in the subsequent Annual Report. Modifications made to the SWMPP may include, but are not limited to, the replacement of ineffective or infeasible BMPs or the addition of components, controls and requirements.

3. The Permittee shall implement the SWMPP on all new areas added to their municipal separate storm sewer system (or for which they become responsible for implementation of storm water quality controls) as soon as practicable. Implementation of the program in any new area shall consider the plans of the SWMPP of the previous MS4 ownership, if any.

E. Impaired Waters and Total Maximum Daily Loads (TMDLs)

1. The Permittee must determine whether the discharge from any part of the MS4 contributes directly or indirectly to a waterbody that is included on the latest §303(d) list or designated by the Department as impaired or is included in an EPA-approved or EPA-established TMDL.

2. If the Permittee's MS4 discharges to a waterbody included on the latest §303(d) or designated by the Department as impaired, it must demonstrate the discharges, as controlled by the Permittee, do not cause or contribute to the impairment. The SWMPP must detail the BMPs that are being utilized to control discharges of pollutants associated with the impairment. If existing BMPs are not sufficient to achieve this demonstration, the Permittee must, within six (6) months following the publication of the latest final §303(d) list, Department designation, or the effective date of this permit, submit a revised SWMPP detailing new or modified BMPs. The SWMPP must be revised as directed by the Department and the new or modified BMPs must be implemented within one year from the publication of the latest final §303(d) list or Department designation.

3. Permittees discharging from MS4s into waters with EPA-Approved TMDLs and/or EPA-Established TMDLs

    a. The Permittee must determine whether its MS4 discharges to a waterbody for which a Total Maximum Daily Load (TMDL) has been established or approved by EPA. If an MS4 discharges into a water body with an EPA approved or established TMDL, then the SWMPP must include BMPs targeted to meet the assumptions and requirements of the TMDL. If additional BMPs will be necessary to meet the requirements of the TMDL, the SWMPP must include a schedule for installation and/or implementation of such BMPs. A monitoring component to assess the effectiveness of the BMPs in achieving the TMDL requirements must also be included in the SWMPP. Monitoring can entail a number of activities including, but not limited to outfall monitoring, in-stream monitoring, and/or modeling. Monitoring data, along with an analysis of this data, shall be included in the Annual Report.

    b. If, during this permit cycle, a TMDL is approved by EPA or a TMDL is established by EPA for any waterbody into which an MS4 discharges, the Permittee must review the applicable TMDL to see if it includes requirements for control of storm water discharges from the MS4.

        1. If it is found that the Permittee must implement specific allocations of the TMDL, it must assess whether the assumptions and requirements of the TMDL are being met through implementation of existing BMPs or if additional BMPs are necessary. The SWMPP must include BMPs targeted to meet the assumptions and requirements of the TMDL.

        2. If existing BMPs are not sufficient, the Permittee must, within six (6) months following the approval or establishment of the TMDL by EPA, submit a revised SWMPP detailing new or modified BMPs to be utilized along with a schedule of installation and/or implementation of such BMPs. Any new or modified BMPs must be implemented within one year, unless an alternate date is approved by the Department, from the establishment or approval of the TMDL

by EPA. A monitoring component to assess the effectiveness of the BMPs in achieving the TMDL requirements must also be included in the SWMPP. Monitoring can entail a number of activities including, but not limited to: outfall monitoring, in-stream monitoring, and/or modeling. Monitoring data, along with an analysis of this data, shall be included in the Annual Report.

F. Responsibilities of Permittee

If the Permittee is relying on another entity to satisfy one or more requirements of this permit, then the Permittee must note that fact in the SWMPP. The Permittee remains responsible for compliance with the permit and reliance on another entity will not be a defense or justification for non-compliance if the entity fails to implement the permit requirements.

PART III Monitoring and Reporting

The Permittee shall implement a monitoring program to provide data necessary to assess the effectiveness and adequacy of BMPs implemented under the SWMPP. The quality of the streams receiving MS4 discharges shall continue to be monitored to assess the water quality of the streams and to identify potential water quality impairments. This shall be accomplished by the following:

A. Monitoring Locations

1. Proposed monitoring locations and descriptions of their respective characteristics shall be described in the SWPPP with actual locations described in the annual report.

Waterbody	Frequency
Buck Creek	Semi-Annually
Cahaba River	Semi-Annually

2. In addition to the requirements in Part III.A.1., if a waterbody (not listed in Part III.A.1) within the MS4 jurisdiction is listed on the latest final §303(d) list, or otherwise designated impaired by the Department, or for which a TMDL is approved or established by EPA, during this permit cycle, then the Permittee must revise its monitoring program to include monitoring that addresses the impairment or TMDL. Any revisions to the monitoring program shall be documented in the SWMPP and Annual Report. In addition, the permit may be modified by the Department to establish the additional or revised monitoring locations.

B. Monitoring Parameters and Frequency

1. Grab samples shall be collected at least semi-annually at each instream monitoring station and analyzed for the following parameters:

    a. E. Coli;
    b. Fecal Coliform;
    c. Total Nitrogen (TN) (mg/l);
    d. Total Phosphorus (mg/l);

e. Total Suspended Solids (TSS) (mg/l);
f. Temperature;
g. pH/ORP;
h. Turbidity (NTU);
i. Conductivity;
j. Dissolved Oxygen (mg/l);
k. Ammonia Nitrogen (NH_3-N) (mg/l);
l. Biochemical Oxygen Demand (BOD) (mg/l);
m. Chemical Oxygen Demand (COD) (mg/l);
n. Hardness as $CaCO_3$ (mg/l);
o. Nitrate plus Nitrite Nitrogen (NO_3+NO_2-N) (mg/l);
p. Oil and Grease (mg/l);
q. Total Dissolved Solids (TDS) (mg/l);
r. Total Kjeldahl Nitrogen (TKN) (mg/l); and

2. The Permittee must include in the instream monitoring program any additional parameters attributed with the latest final §303(d) list or otherwise designated by the Department as impaired or are included in an EPA-approved or EPA-established TMDL.

C. Sample Type, Collection and Analysis

1. Grab samples taken within the first two hours of discharge shall be used for the analysis;

2. Grab samples shall be collected resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1-inch rainfall) storm event;

3. Analysis and collection of grab samples shall be done in accordance with the methods specified at 40 CFR Part 136. Where an approved 40 CFR Part 136 does not exist, then a Department approved alternative method may be used;

4. If the Permittee is unable to collect water quality data at an instream monitoring station due to equipment malfunction, maintenance, and/or damage, the Permittee must include a description of why water quality data could not be collected, including available documentation in the Annual Report;

5. If the Permittee is unable to collect grab samples due to adverse conditions, the Permittee shall submit a description of why samples could not be collected, including available documentation of the event. An adverse climatic condition which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.); and

6. Monitoring results must be reported with the subsequent Annual Report and shall include the following monitoring information:

   a. The date, latitude/longitude of location, and time of sampling;
   b. The name(s) of the individual(s) who performed the sampling;
   c. The date(s) analysis was performed;
   d. The name(s) of individual(s) who performed the analysis;
   e. The analytical techniques or methods used; and
   f. The results of such analysis.

PART IV Annual Reporting Requirements

1. The Permittee shall submit to the Department an annual report no later than January 31 of each year. If the Permittee is submitting a hardcopy of the annual report, an electronic copy shall also be submitted. The annual report shall cover the previous fiscal year beginning October 1 through September 30, and annually thereafter.

2. On or after December 21, 2023, all annual reports shall be submitted to the Department electronically in a prescribed manner acceptable to the Department.

3. The Permittee shall sign and certify the annual report in accordance with Part V.M.

4. The annual report shall include the following information, at a minimum, and in addition to those requirements referenced in Part II.B and Part III:

    a. A list of contacts and responsible parties (e.g.: agency, name, phone number, address, & email address) who had input to and are responsible for the preparation of the annual report.

    b. An overall evaluation of the storm water management program developments and progress for the following:
        1. Major findings such as water quality improvements or degradation;
        2. Major accomplishments;
        3. Overall program strengths/weaknesses;
        4. Future direction of the program;
        5. The Permittee(s) will make an overall determination of the effectiveness of the SWMPP taking into account water quality/watershed improvements; and
        6. Required actions that were not performed, and reasons why the actions were not accomplished.

    c. The annual report will include a narrative report of all program elements referenced in Part II.B of this permit. The activities concerning a program element shall be discussed as follows:

        1. Program element activities completed and in progress;
        2. General discussion of element. Explanation for all element activities that have not been fully implemented or completed. Results of activities shall be summarized and discussed (e.g.: maintenance caused by inspection, pollutants detected by monitoring, investigations as a result of dry and wet weather screening, number and nature of enforcement item, education activities/participation);
        3. Status of program element with compliance, implementation, and augmentation schedules in Part II of the permit;
        4. Assessment of controls; and
        5. Discussion of proposed element revisions.

    d. The annual report shall contain a monitoring section which discusses the progress and results of the monitoring programs required under Part III of the permit and shall include, at a minimum, the following information.

        1. Status of implementation of the monitoring program;
        2. Map(s) showing the monitoring station locations, latitude/longitude, and narrative site descriptions, including watershed size;

3. Raw data, results, methods of evaluating the data, graphical summaries of the data, and an explanation/discussion of the data for each component of the monitoring program;
4. An analysis of the results of each monitoring program component;
5. A comparison of the reporting year's data to the previous five years of data to establish a trend analysis to determine the relative health of the receiving water;
6. All monitoring reports and supporting data shall be submitted in hardcopy and/or electronically in a format deemed acceptable to the Department concurrently with the submission of the Annual Report; Failure to provide this data in a format appropriate to the Department for review shall be a violation of this permit; and
7. The interpretation of the analytical data, required by Part III.B.1-2 of the Permit, for determinacy of meeting water quality standards.

e. Provide the status of the implementation and proposed changes to the SWMPP to include assessment of controls and specific improvements or degradation to water quality;

f. Provide a summary of inspections and enforcement actions for regulatory program. Enforcement actions should include a corrective actions summary;

g. Implementation status of the public education programs; and

h. Status of expenditures and budget for the past fiscal year and the next fiscal year for the Permittee's program. The analysis shall indicate budgets and funding sources.

PART V Standard and General Permit Conditions

A. Certification and Signature of Reports

All reports required by the permit and other information requested by the Director shall be signed and certified in accordance with Part V.M. of this permit.

B. Submittals

All documents required to be submitted to the Department by this permit, shall be addressed to:

Alabama Department of Environmental Management
Stormwater Management Branch, Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463

Certified and Registered Mail shall be addressed to:

Alabama Department of Environmental Management
Stormwater Management Branch, Water Division
1400 Coliseum Blvd
Montgomery, Alabama 36110-2059

C. Retention of Records

The Permittee shall retain the storm water quality management program developed in accordance with Part II of this permit until at least five (5) years after coverage under this permit terminates. The Permittee shall retain all records of all monitoring information, copies of all reports required by this permit, and records required by this permit, and records of all other data required by or used to demonstrate compliance with this permit, until at least three years after coverage under this permit terminates. This period may be explicitly modified by alternative provisions of this permit or extended by request of the Director at any time.

D. Duty to Comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

E. Civil and Criminal Liability

1. Tampering

   Any person, who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under this permit shall, upon conviction, be subject to penalties as provided by AWPCA.

2. False Statements

   Any person knowingly makes any false statement, representation, or certification in any record or other documentation submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance, shall, upon conviction, be punished as provided by AWPCA.

3. Relief from Liability

   Nothing in this permit shall be construed to relieve the Permittee(s) of civil and criminal liability under AWPCA or FWPCA for non-compliance with any term or condition of this permit.

F. Duty to Reapply

1. If the Permittee intends to continue an activity regulated by this permit beyond the expiration of this permit, the Permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days prior to expiration of this permit.

2. Failure of the Permittee to apply for re-issuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code, Rule 335-6-6.-06, and should the permit not be re-issued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

G. Need to Halt or Reduce an Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

H. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human or the environment.

I. Bypass

a. Any bypass as defined in 40 CFR 122.41(m) is prohibited except as provided in Part V.I.b. and c.

b. A bypass is not prohibited if:

(1) It does not cause any applicable discharge limitation, if specified in this Permit, to be exceeded;

(2) The discharge resulting from such bypass enters the same receiving water as the discharge from the permitted outfall, if applicable;

(3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system, if applicable; and

(4) The Permittee monitors the discharge resulting from such bypass at a frequency, at least daily, sufficient to prove compliance with the discharge limitations, if specified in this Permit.

c. A bypass is not prohibited and need not meet the discharge limitations, if specified in this Permit, if:

(1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the Permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days, if possible, prior to the anticipated bypass or within 24 hours of an unanticipated bypass, the Permittee is granted such authorization, and Permittee complies with any conditions imposed by the Director to minimize any adverse impact to waters resulting from the bypass.

d. The Permittee has the burden of establishing that each of the conditions of Parts V.I.b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in Part V.I.a. and an exemption, where applicable, from the discharge limitations, if specified in this Permit.

J. Upset

a. Except as provided in Part V.I.b. and c., a discharge which results from an upset as defined in 40 CFR 122.41(n) need not meet the applicable discharge limitations, if specified in this Permit, if:

(1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director; and

(2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, design drawings, construction certification, maintenance records, weir flow measurements, dated photographs, rain gauge measurements, or other relevant evidence, demonstrating that:

(i) An upset occurred;

(ii) The Permittee can identify the specific cause(s) of the upset;

(iii) The Permittee's treatment facility was being properly operated at the time of the upset; and

(iv) The Permittee promptly took all reasonable steps to minimize any adverse impact to waters resulting from the upset.

b. The Permittee has the burden of establishing that each of the conditions of Part V.J.a. has been met to qualify for an exemption from the discharge limitations, if specified in this Permit.

K. Duty to Provide Information

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, suspending, or revoking this permit in whole or in part, or to determine compliance with this permit. The Permittee shall also furnish to the Director upon request copies of records required to be kept by this permit.

L. Other Information

If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

M. Signatory Requirements

All reports and forms to be submitted by this permit, AWPCA and the Department's rules and regulations, shall be signed by a "responsible official" of the Permittee, as defined in ADEM Administrative Code, Rule 335-6-6-.09, or a "duly authorized representative" of such official,

as defined by ADEM Administrative Code, Rule 335-6-6-.09, and shall bear the following certification:

"I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

N. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under Section 311 of FWPCA.

O. Property and Other Rights

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of Federal, State, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the State of Alabama.

P. Severability

The provision of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit shall not be affected thereby.

Q. Compliance with Statutes and Rules

This permit is issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter that are applicable to this permit are hereby made a part of this permit.
This permit does not authorize the non-compliance with or violation of any laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws.

R. Proper Operations and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a Permittee only when necessary to achieve compliance with conditions of the permit.

S. Monitoring Records

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. The Permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of reports required by this permit, and records of all data used to complete the application of this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended at the request of the Director at any time.

T. Monitoring Methods

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless other test procedures have been specified in this permit.

U. Right of Entry and Inspection

The Permittee shall allow the Director or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon any of the permittee's premises where a regulated facility or activity or point source is located or in which any records must be maintained under conditions of this permit;

2. Have access to and copy, at reasonable times, any records required to be maintained by the terms and conditions of this permit;

3. Inspect, at reasonable times, any point source, any monitoring equipment or practices being maintained to comply with this permit, or any treatment or control or systems being maintained to comply with this permit; and

4. Sample or monitor, at reasonable times, for the purposes of determining permit compliance or as otherwise authorized by AWPCA, any substances or parameters at any location.

V. Additional Monitoring by the Permittee

If the Permittee monitors more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the monitoring report. Such increased monitoring frequency shall also be indicated on the monitoring report.

W. Permit Modification and Revocation

1. This permit may be modified or revoked or reissued, in whole or in part, during its term for cause including but not limited to, the following:

    a. If cause for termination under Part V.W.3., of this permit exists, the Director may choose to revoke or re-issue this permit instead of terminating the permit;

    b. If a request to transfer this permit has been received, the Director may decide to revoke and re-issue or to modify the permit; or

    c. If modification or revocation and re-issuance is requested by the Permittee and cause exists, the Director may grant the request.

2. This permit may be modified during its term for cause, including but not limited to:

    a. If cause for termination under Part V.W.3., of this permit exists, the Director may choose to modify this permit instead of terminating this permit;

    b. The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;

    c. Errors in calculation of discharge limitation or typographical or clerical errors were made;

d. To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or judicial decision after the permit was issued;

e. To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permit may be modified to change compliance schedules;

f. To incorporate an applicable Section 307(a) of FWPCA toxic effluent standard or prohibition;

g. When required by the re-opener conditions in this permit;

h. Upon failure of the State to notify, as required by Section 402(b)(3) of FWPCA, another State whose water may be affected by a discharge permitted by this permit;

i. When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions;

j. When requested by the Permittee and the Director determines that the modification has cause and will not result in a violation of federal or State law, rules, or regulations;

k. To add a new Permittee who is the owner or operator of a portion of the Municipal Separate Storm Sewer System; or

l. To change portions of the Storm Water Quality Management Program that is considered permit conditions.

3. This permit may be terminated during its term for cause, including but not limited to, the following:

   a. Violation of any term or condition of this permit;

   b. The Permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance or the Permittee's misrepresentation of any relevant facts at any time;

   c. Materially false or inaccurate statements or information in the permit application or the permit;

   d. The Permittee's discharge threatens human life or welfare or the maintenance or water quality standards; or

   e. Any other cause allowed by ADEM Administrative Code, Rule 335-6-6.

4. This permit may be suspended during its term for cause, including but not limited to, the reasons for termination listed above.

5. The filing of a request by the Permittee for modification, suspension or revocation of this permit, in whole or in part, does not stay any permit term condition.

X. Termination of Coverage for a Single Permittee

Permit Coverage may be terminated, in accordance with the provision of 30 CFR 122.64 and 124.5, for a single Permittee without terminating coverage for other Permittees.

Y. Modification of Storm Water Management Program

Only those portions of the Storm Water Management Program specifically required as permit conditions shall be subject to modification requirements of 40 CFR 124.5. Replacement of an ineffective or infeasible BMP implementing a required component of the Storm Water Management Program with an alternate BMP expected to achieve the goals of the ineffective or infeasible BMP shall be considered a minor modification to the SWMPP and not modification to the Permit.

Z. Changes in Monitoring Outfalls

This permit is issued on a system-wide basis in accordance with CWA §402(p)(3)(i) and authorizes discharges from all portions of the MS4. Since all outfalls are authorized, changes in monitoring outfalls, other than those with specific numeric effluent limitations, shall be considered minor modifications to the permit and will be made in accordance with the procedures at 40 CFR 122.63.

AA. Definitions

1. "Alabama Handbook" means the July 2018 edition of the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas, Alabama Soil and Water Conservation Committee (ASWCC) published at the time the permit is effective.

2. "Arithmetic Mean" means the summation of the individual values of any set values divided by the number of individual values.

3. "AWPCA" means Code of Alabama 1975, Title 22, the Alabama Water Pollution Control Act, as amended.

4. "Best Management Practices" (BMPs) means activities, prohibitions of practices, maintenance procedures, and other management practices implemented to prevent or reduce the discharge of pollutants to waters of the State. BMPs also include treatment systems, operating procedures, and practices to control facility runoff, spillage or leaks, sludge or water disposal, or drainage from raw material storage.

5. "Control Measure" as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.

6. "CWA" or "The Act" means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

7. "Department" means the Alabama Department of Environmental Management or an authorized representative.

8. "Discharge", when used without a qualifier, refers to "discharge of a pollutant" as defined as ADEM Administrative Code 335-6-6-.02(m).

9. "Flood Management Project" means a project that will alter, modify or change the base flood elevation of a 1% annual chance flood event.

10. "Flow-weighted composite sample" means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge at the time of sampling.

11. "Green Infrastructure" refers to systems and practices that use or mimic natural processes to infiltrate, evapotranspiration (the return of water to the atmosphere either through evaporation or by plants), or reuse stormwater or runoff on the site where it is generated.

12. "Hydrology" refers to the physical characteristics of storm water discharge, including the magnitude, duration, frequency, and timing of discharge.

13. "Illicit connection" means any man-made conveyance connecting a non-storm water discharge directly to a municipal separate storm sewer system.

14. "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit.

15. "Industrial Land Use" means land utilized in connection with manufacturing, processing, or raw materials storage at facilities identified under Alabama State Law.

16. "Infiltration" means water other than wastewater that enters a sewer system, including foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.

17. "Landfill" means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

18. "Large" municipal separate storm sewer system means all municipal separate storm sewers that are either: (i) located in an incorporated place (city) with a population of 250,000 or more as determined by the latest decennial census; or (ii) located in counties (these counties are listed in Appendix H of 40 CFR Part 122, except municipal storm sewers that are located in the incorporated places, townships or towns within such counties; or (iii) owned or operated by a municipality other than those described in Part V.AA.19.(i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system; or (iv) the Director may designate as a large municipal separate storm sewer system, municipal separate sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in Part V.19.(i), (ii), or (iii).

19. "Low Impact Development" (LID) is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product.

20. "Major outfall" is the point(s) where the MS4 discharges to a water of the State from (1) a pipe (or closed conveyance) system with a cross-sectional area equal to or greater than 7.07 square feet (e.g., if a single circular pipe system, an inside diameter of 36 inches or greater),(2) a single conveyance other than a pipe, such as an open channel ditch, which is associated with a drainage area of more than 50 acres,(3) a pipe (or closed conveyance) system draining "industrial land use" with a cross-sectional area equal to or greater than 0.79 square feet (e.g., if a single circular pipe system, an inside diameter of 12 inches or greater),(4) or a single conveyance other than a pipe, such as an open channel ditch, which is associated with an "industrial land use" drainage area of more than 2 acres; For the purpose of this permit, outfalls of the "double barrel" type,

whose combined cross-sectional area is greater than 7.07 square feet, equivalent to a single circular pipe outfall with an inside diameter of 36 inches or greater, are also considered major outfalls.

21. "MEP" is an acronym for "Maximum Extent Practicable," the technology-based discharge standards and controls necessary for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by CWA Section 402(p). These standards and controls may consist of a combination of Best Management Practices, control techniques, system design and engineering methods, and such other provisions for the reduction of pollutants discharged from a MS4 as described in the storm water management system.

22. "Medium" municipal separate storm sewer system means all municipal separate storm sewers that are either: (i) located in an incorporated place (city) with a population of 100,000 or more but less than 250,000 as determined by the latest decennial census; or (ii) located in counties (these counties are listed in Appendix I of 40 CFR Part 122), except municipal storm sewers that are located in the incorporated places, townships or towns within such counties; or (iii) owned or operated by a municipality other than those described in Parts V.AA.23.(i) and (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system; or (iv) the Director may designate as a medium municipal separate storm sewer system, municipal storm sewers located within the boundaries of a region defined by a stormwater management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems as described in Parts VAA.23.(i), (ii), or (iii).

23. "MS4" is an acronym for "Municipal Separate Storm Sewer System" and is used to refer to either a large, medium, or small municipal separate storm sewer system. The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities.

24. "Municipal Separate Storm System" is defined at 40 CFR Part 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined in ADEM Administrative Code 335-6-6-.02(nn).

25. "Permittee" means each individual co-applicant for an NPDES permit who is only responsible for permit conditions relating to the discharge that they own or operate.

26. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

27. "Priority Construction Site" means any qualifying construction site in an area where the MS4 discharges to a waterbody which is listed on the most recently approved 303(d) list of impaired waters for turbidity, siltation, or sedimentation, any waterbody for which a TMDL has been finalized or approved by EPA for turbidity, siltation or sedimentation, any waterbody assigned the Outstanding Alabama Water use classification in accordance with ADEM Admin. Code r.

335-6-10-.09, and any waterbody assigned a special designation in accordance with 335-6-10-.10.

28. "Qualifying Construction Site" means any construction activity that results in a total land disturbance of one or more acres and activities that disturb less than one acre but are part of a larger common plan of development or sale that would disturb one or more acres. Qualifying construction sites do not include land disturbance conducted by entities under the jurisdiction and supervision of the Alabama Public Service Commission.

29. "Qualifying New Development and Redevelopment" means any site where construction commenced on or after January 1, 2017 that results from the disturbance of one acre or more of land or the disturbance of less than one acre of land if part of a larger common plan of development or sale that is greater than one acre. Qualifying new development and redevelopment does not include the following:

    a. Land disturbances conducted by entities under the jurisdiction and supervision of the Alabama Public Service Commission; or
    b. An existing development that has been constructed or approved prior to January 1, 2017.

30. "Storm water" is defined at 40 CFR Part 122.26(b)(13) and means storm water runoff, snow melt runoff, and surface runoff and drainage.

31. "Structural Controls" means an engineered BMP constructed with rigid walls and/or weirs and piped drainage that utilize active or passive treatment and/or mechanical systems for the purpose of treating storm water runoff.

32. "Structural Flood Control" means structural measures that control the 1% annual chance floodwaters by construction of barriers, storage areas or by modifying/redirecting channels.

RESPONSE TO COMMENTS
January 2021

City of Helena
Proposed Reissuance of NPDES Permit No. ALS000012
Shelby County

The proposed issuance of National Pollutant Discharge Elimination System (NPDES) Permit ALS000012, to the City of Helena for discharges from its MS4, was placed on Public Notice on August 24, 2020. This document addresses comments received from the Cahaba River Society (CRS). The Department reviewed all comments and provides a summary of the comments, as well as the Department's responses, below.

CRS Comment (1): At Part II Storm Water Pollution Prevention & Management Program (SWMP) A. Storm Water Management Program (SWMP): To the end of paragraph 1. was added "protect water quality, and satisfy appropriate water quality provisions of the Clean Water Act." That addition should help clarify the intent of the permit.

ADEM Response (1): Comment noted.

CRS Comment (2): At 3., item "c. Low impact development (LID)/green infrastructure (GI) shall be considered where feasible." This is followed by two links to LID/GI information. This addition should be helpful and encouraged.

ADEM Response (2): Comment noted.

CRS Comment (3): At 4., addition of a requirement to submit a revised SWMPP within 9 months of the effective date of this permit is helpful. Helena appears to update their SWMPP annually. However, this permit does not specify the revision frequency. Perhaps an annual revision requirement could be included here.

ADEM Response (3): The draft permit requires the permittee to annually review the SWMPP and to modify (or revise) the SWMPP as necessary as required in Part II., D. 1 and 2 SWMPP Plan Review and Modification of the permit. No modifications to the draft permit were made.

CRS Comment (4): At Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 1. Storm Water Collection System Operations. The addition at a. i. "to include inspections and maintenance" is an improvement. The addition at a. ii. 5. "Monthly inspections for..." is an improvement. The addition at iv. 2. "A detailed description of..." is an improvement.

ADEM Response (4): Comment noted.

CRS Comment (5): At Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 2. Public Education and Public Involvement on Storm Water Impacts. Paragraph a. includes a new sentence that adds quantifiable measures that would further the objectives of this component of the Permit. We agree that it is helpful to include objective, quantifiable activities.

ADEM Response (5): Comment noted.

CRS Comment (6): Paragraph b. of the same section, under number 3., adds a new subsection c. that requires the City to "Participate in at least one activity each year that targets the removal of litter, floatables, and debris from the MS4 area as described in the SWMPP. Estimate the amount of litter, floatables, and debris is (sic) removed from the MS4 for each activity." In recent years, Helena has organized a stream clean-up, so they are already able to fulfill this requirement.

ADEM Response (6): Comment noted.

CRS Comment (7): Also, at Paragraph b. of the same section, under number 4, we appreciate the removal of "Plans to...". This will have the effect of moving the City beyond planning to inform individuals and households to achieving just that, if they haven't already undertaken these activities. Helena appears to be very capable of achieving this requirement.

ADEM Response (7): Comment noted.

CRS Comment (8): Also, at Paragraph b. of the same section, under number 5, ADEM has added to subparagraph "i. General Public paragraph a. "..., how trash is delivered to streams via the MS4." The Cahaba River Society has posted three short videos on "How does litter end up in your river?"3 . The City is welcome to link to those if that would be helpful.

ADEM Response (8): The Department encourages the Cahaba River Society to reach out to the City of Helena regarding linking the short videos to the City's website.

CRS Comment (9): We noted there are other improvements in this section on Public Education. We presume that the removal of part b. 7., which is a requirement to "Organize and participate in activities that target the removal of litter, floatables, and debris from area waterways." was because this requirement was 'relocated' to paragraph b. 3. c.

ADEM Response (9): Yes, the requirement was relocated as noted in the comment. No changes were made to the draft permit in response to the comment.

CRS Comment (10): At Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 3. Illicit Discharge Detection and Elimination (IDDE), there is new language requiring a copy of Helena's IDDE Ordinance or a URL link to it be included in their SWMPP. Helena does not have a separate ordinance addressing illicit discharges. However, a section of the City's Stormwater Ordinance does focus on IDDE.

ADEM Response (10): Comment noted.

CRS Comment (11): At Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 4. Construction Site Storm Water Runoff Control, a. 9., the enforcement response plan language in the previous version of this permit included the following, which has been removed in this version:

d. Enforcement tracking for formal actions and ADEM referrals

We assume this refers to tracking of the City's enforcement actions. That tracking is important and should continue to occur. This requirement should not be removed from the permit. What is ADEM's justification for removing such as important requirement, which seems necessary for ADEM and the public to assess the effectiveness of the City's stormwater program and permit compliance?

ADEM Response (11): The requirement in Part II.B.4.a.9.d. "Enforcement tracking for formal actions and ADEM referrals" was relocated to the paragraph in Part II.B.4.a.9 that states "Implementation of an enforcement response plan (ERP), which sets out the Permittee's potential responses to violations through progressively stricter responses as needed to achieve compliance. The ERP must include a system for tracking formal actions and ADEM referrals. Types of enforcement actions may include, but not limited to the following:" No changes were made to the draft permit in response to the comment.

CRS Comment (12): At Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 4. Construction Site Storm Water Runoff Control, b. 1., a new requirement for the City to post either a copy of their ordinance or a hyperlink to it on the City's website and include that in their SWMPP. This is a helpful requirement from our perspective.

ADEM Response (12): Comment noted.

CRS Comment (13): Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 4. Construction Site Storm Water Runoff Control, b. 3. adds a requirement to include a construction site inspection schedule that meets the requirements of Part II. B. 4. a. 6. We support the inclusion of that requirement.

ADEM Response (13): Comment noted.

CRS Comment (14): Perhaps the most effective requirement added to this draft is that sentence added to the end of the first paragraph at Part II. B. 5.: "These post-construction controls should be considered

during the initial site development planning phase." It is vitally important for the City to review and approve the post-construction management plan early in the development approval process. So much so that we suggest the word "should" be changed to "must".

ADEM Response (14): No changes were made to the draft permit in response to the comment.

CRS Comment (15): At Part II. B. 6. a., an item 7. Is added that requires the City to "...review any existing Hazardous Material Contingency Plan and supplement wherever needed to address discharges to the MS4" during the new permit cycle. We support adding that requirement.

ADEM Response (15): Comment noted.

CRS Comment (16): At Part II. B. 6. b., there is a new requirement to include a "List of agencies that the Permittee may coordinate response actions with regarding spills as required by Part II. B. 6. a. 1." In the SWMPP. We support adding that requirement.

ADEM Response (16): Comment noted.

CRS Comment (17): At Part II. B. 7. a., the permit writer has removed items 3) and 4) that were in the 2015 permit. These seemed to be appropriate things to do to reduce the amount of trash being discharged to our streams from MS4s. Why were those items removed from the new draft permit?

ADEM Response (17):

In the 2015 permit at Part II.B.7. a.3. and 4. states the following:

3. Require the following measures to be implemented in the public right of way for any event or wherever it is anticipated that substantial quantities of trash or litter may generated:

    a. Arrangement for temporary protection of preventative measures to the catch basins, where feasible, and
    b. Provide proper disposal of trash receptacles, clean-up of catch basins, as needed, and grounds of the event area within one business day subsequent to the event.

4. Ensure that trash receptacles, or similar trash capturing devices are provided and maintained in areas identified as high trash generated areas;

In the draft permit, Part II.B.7. a.2. will be updated to the following to address the CRS comments:

2. Develop and implement a short and long term strategy and program for the prevention and removal of trash from entering into the waterways and tributaries from the MS4 within the permitted area in such a manner as to estimate the removal of trash per year, which shall be included in the annual report. If a BMP is determined to be ineffective or infeasible, then the BMP must be modified. This program should be outlined within the Permittee's SWMPP and must be updated, as necessary. This program shall address the following, at a minimum:

a. Arrangement for temporary protection of preventative measures to the catch basins, where feasible, and provide proper disposal of trash receptacles, clean-up of catch basins, as needed, and grounds of the event area within one business day subsequent to the event;
b. Direct removal of trash from waterbodies, public areas, and rights-of-way, if applicable;
c. Provide and maintain proper trash receptacles, especially within areas identified as high traffic/high trash generated areas and during special events to include timely trash removal;
d. Prevention through disposal alternatives; and
e. Prevention through waste reduction practices, additional enforcement, and/or initiatives.

CRS Comment (18): At Part II. B. 7. c., an item 6. has been added that requires the Permittee to include the results of the evaluation of the effectiveness of the Pollution Prevention/Good Housekeeping program. We support this requirement and note that the requirement is not accompanied with any suggestions for metrics by which that program may be evaluated.

ADEM Response (18): The City of Helena has the responsibility to determine the metrics for their program. Comment noted.

CRS Comment (19): At Part II. B. 8. b., there are four new requirements regarding reporting on the use of pesticides, herbicides, and fertilizers in the annual report. We support those reporting requirements.

ADEM Response (19): Comment noted.

CRS Comment (20): At Part II. B. 9. a., there is a new requirement for at least an annual inspection of municipal facilities regarding the management of used motor vehicle fluids and household hazardous wastes. We support the requirement of those inspections.

ADEM Response (20): Comment noted.

CRS Comment (21): At Part II. B. 10. a., there is a new requirement for conducting at least an annual inspection of Industrial facilities that discharge stormwater to the MS4 that also report under the requirements of the Emergency Planning and Community Right to Know Act and which do not have an NPDES permit that are determined by the Permittee to contribute "...substantial pollutants (sic) loading to the MS4 ("high risk facilities")." We support adding this requirement.

ADEM Response (21): Comment noted.

CRS Comment (22): At Part II. D., the Permittee is required to submit a copy of their SWMPP should that be modified during the life of the permit. This submission is required at the time of the modification and as a component of the SWMPP. We support that addition to the permit.

ADEM Response (22): Comment noted.

CRS Comment (23): At Part II. E. 1., the Permittee is required to "determine whether a discharge from any part of the MS4 contributes directly or indirectly to a waterbody that is included on the latest §303(d) list or designated by the Department as impaired or is included in an EPA-approved or EPA-established TMDL." This language clarifies the intent of this section and we support its inclusion.

ADEM Response (23): Comment noted.

CRS Comment (24): At Part III. B. 1. k., there is a duplication of E. coli in the list of parameters to be monitored.

ADEM Response (24): The duplication of the parameter E. Coli in Part III.B.1.k. will be removed.

CRS Comment (25): At Part III. B. 2., the Permit has been altered to allow the Permittee to not sample. Under what circumstances does ADEM contemplate relieving the Permittee of this responsibility? Have those circumstances occurred before? How often? Generally, we oppose reductions in monitoring activity.

ADEM Response (25): The language in Part III.B.2. 'Unless authorized by the Department not to sample' will be removed from the draft permit.

CRS Comment (26): At Part III. B. 4., a requirement to describe why water quality data could not be collected upon those occasions when that occurs. That description is to be included in the City's Annual Report. We support this requirement.

ADEM Response (26): Comment noted.

CRS Comment (27): At Part III. B. 6., the Permit now requires a complete description of the circumstances of sample collection. It is important that all the information required here be included in the Annual Report. We support this requirement.

ADEM Response (27): Comment noted.

CRS Comment (28): Inclusion of definitions and clarifications about Bypass and Upset events at Part V. I. and J. are helpful. We support the inclusion of this change.

ADEM Response (28): Comment noted.

CRS Comment (29): The amendments to Part V. AA. Definitions are helpful. The list of terms included is reasonably comprehensive. We note that the definition of 'Hydrology' is similar to that used in most MS4 Permits that have been adopted up to now. We suspect there is an important difference in the way some engineers interpret the meaning of the magnitude of hydrological change. Changes in the magnitude of stormwater discharge should include both the magnitude of the rate of discharge (which is what we believe most civil engineers consider to be the meaning) and the magnitude of the total volume of that discharge (which, we believe is a characteristic of hydrology that some civil engineer dismiss as unimportant). The Cahaba Sediment and Habitat Alteration TMDL is clear about the significance of urbanization as a source or cause of increased sedimentation in the Cahaba basin. The associated increases in imperviousness that come with urbanization result in increased rates and volumes of stormwater runoff. Both of these factors contribute to in-stream erosion.

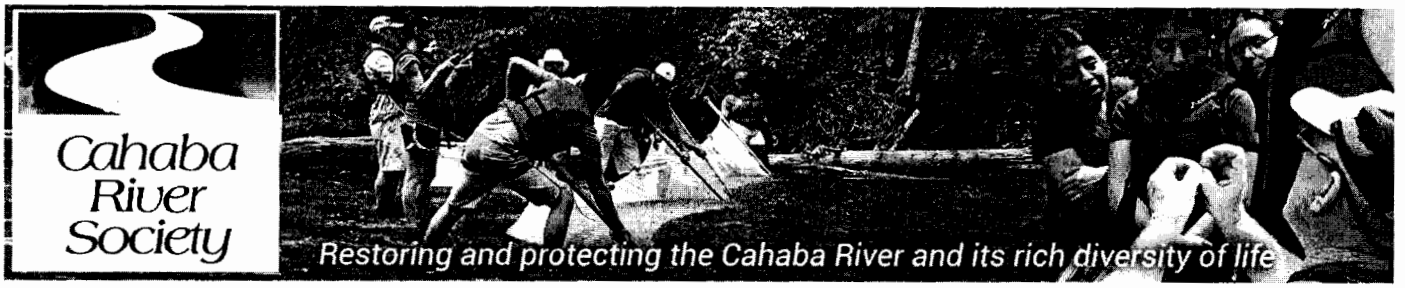
We suggest that as these MS4 Permits are updated, ADEM clarify this point by using the following definition of 'hydrology':

"Hydrology" refers to the physical characteristics of storm water discharge, including the magnitude of the rate of discharge, the magnitude of the total volume of discharge, as well as the duration, frequency, and timing of the discharge

ADEM Response (29): The Department believes that the definition of hydrology provides the Permittee with an understanding of what must be performed to comply with Part II.B.5 of the draft permit. Additionally, the definition used in the draft permit is consistent with the other recently issued MS4 Phase I Permits. No changes were made to the draft permit in response to this comment.

CRS Comment (30): Also, in the Definitions section, the inclusion of "Qualifying New Development and Redevelopment" is a helpful addition

ADEM Response (30): Comment noted.



September 23rd, 2020

Jeffery W. Kitchens, Chief
ADEM-Water Division
1400 Coliseum Blvd.
Montgomery, AL 36110-2400

Email via: water-permits@adem.alabama.gov

Regarding: Reissuance of ALS000012 for the City of Helena, AL

The Cahaba River Society (CRS) is a 501c3 organization with a mission to restore and protect the Cahaba River watershed and its rich diversity of life. The diverse lives depending on the Cahaba include the people of central Alabama who rely on the river as well as its globally-significant diversity of freshwater wildlife. We see our mission as being aligned with ADEM's mission to assure for all citizens of the State a safe, healthful, and productive environment[1].

This opportunity to review Helena's MS4 Permit is appreciated. There is a general expectation that renewal of Permits regulating pollutant discharge from MS4s will respond to the current state of stormwater management technology, to the degree of compliance currently being achieved, to established TMDLs, and to whether or not the goals of applicable TMDLs are being achieved.

The proposed changes in this new DRAFT Permit were frequently improvements from our perspective. We will address those individually below. We summarize our concerns regarding the City of Helena's stormwater program that might be addressed with the MS4 Permit here and go into greater detail below:

- We urge ADEM to require the City to make the post-construction ordinance available via the City's website and/or a URL link to it in their SWMPP.
- The City has not established authority to issue a 'stop work order' for construction activities, although it did establish that authority in its post-construction program.
- As per an inquiry from Glenda Dean, Helena responded in October of 2016 that the City did not collect a stormwater fee. This makes it more difficult to evaluate whether adequate resources are available for the program.

We are attaching a recent letter to Mr. Jimbo Carlson that describes some questions and concerns we have about improvements in the post-construction standard and

[1] From ADEM's website landing page, accessed September 17th, 2020.

weaknesses in the ordinances that are intended to help municipalities implement the MS4 Permit. We hope you will consider that letter as applies to this MS4 Permit renewal as well.

Having not found a copy of Helena's Post-Construction Ordinance on their website, I requested and quickly received a copy of Helena's Subdivision Regulations from Chad Campbell. His rapid response was much appreciated. That rapid response notwithstanding, we appreciate that ADEM has required Helena to post that ordinance or a link to it on the City's website[2].

While Helena's post-construction ordinance has established its authority to issue a stop-work order, it has not established that authority for construction phase activities. We point out that it is a bit ironic to have stop-work powers for the post-development phase (when construction activity has largely ceased) and no such authority when construction work is ongoing (when a stop-work order might actually have some compliance impact). This is important because other municipalities have emphasized the effectiveness stop-work orders have in halting pollution events. Stop work authority also may be needed to prevent poor installation of post-construction BMP' that would not function properly. We urge ADEM to encourage or require the City to amend their stormwater management ordinance to include authority to issue stop-work orders.

Helena's Stormwater Ordinance does not allow violations to continue, but this may not create an effective deterrent. Authority to issue a stop-work order is a deterrent that, in the experience of other municipalities, motivates developers to address stormwater violations quickly.

Helena does not assess a specific stormwater fee. This makes it difficult to evaluate how much of the City's resources are actually used are focused stormwater management. We urge ADEM to request or require the City to document how much it currently invests in their stormwater program. We see a financial description of the program to be a fundamentally important indicator of whether or not it is receiving adequate resources. This type of information should be available in the City's SWMPP.

We will identify the changes we found to the 2015 final permit ALS000012 and follow that with our comments.

At **Part II Storm Water Pollution Prevention & Management Program (SWMP) A. Storm Water Management Program (SWMP)**: To the end of paragraph 1. was added "protect water quality, and satisfy appropriate water quality provisions of the Clean Water Act." That addition should help clarify the intent of the permit.

At 3., item "c. Low impact development (LID)/green infrastructure (GI) shall be considered where feasible." This is followed by two links to LID/GI information. This addition should be helpful and encouraged.

At 4., addition of a requirement to submit a revised SWMPP within 9 months of the effective date of this permit is helpful. Helena appears to update their SWMPP annually. However, this permit does not specify the revision frequency. Perhaps an annual revision requirement could be included here.

---

[2] This requirement is located at **Part II B. 4. a. 2.** and reiterated at **Part II B. 4. b. 1.**

At **Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 1. Storm Water Collection System Operations.** The addition at a. i. "to include inspections and maintenance" is an improvement. The addition at a. ii. 5. "Monthly inspections for..." is an improvement. The addition at iv. 2. "A detailed description of..." is an improvement.

At **Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 2. Public Education and Public Involvement on Storm Water Impacts.** Paragraph a. includes a new sentence that adds quantifiable measures that would further the objectives of this component of the Permit. We agree that it is helpful to include objective, quantifiable activities.

Paragraph b. of the same section, under number 3., adds a new subsection c. that requires the City to *"Participate in at least one activity each year that targets the removal of litter, floatables, and debris from the MS4 area as described in the SWMPP. Estimate the amount of litter, floatables, and debris is (sic) removed from the MS4 for each activity."* In recent years, Helena has organized a stream clean-up, so they are already able to fulfill this requirement.

Also at Paragraph b. of the same section, under number 4, we appreciate the removal of "Plans to ..". This will have the effect of moving the City beyond planning to inform individuals and households to achieving just that, if they haven't already undertaken these activities. Helena appears to be very capable of achieving this requirement.

Also at Paragraph b. of the same section, under number 5, ADEM has added to subparagraph "i. General Public paragraph a. *"..., how trash is delivered to streams via the MS4."* The Cahaba River Society has posted three short videos on "How does litter end up in your river?"[3]. The City is welcome to link to those if that would be helpful.

We noted there are other improvements in this section on Public Education. We presume that the removal of part b. 7., which is a requirement to "Organize and participate in activities that target the removal of litter, floatables, and debris from area waterways." was because this requirement was 'relocated' to paragraph b. 3. c.

At **Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 3. Illicit Discharge Detection and Elimination (IDDE)**, there is new language requiring a copy of Helena's IDDE Ordinance or a URL link to it be included in their SWMPP. Helena does not have a separate ordinance addressing illicit discharges. However, a section of the City's Stormwater Ordinance does focus on IDDE.

At **Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 4. Construction Site Storm Water Runoff Control, a. 9.**, the enforcement response plan language in the previous version of this permit included the following, which has been removed in this version:

d. Enforcement tracking for formal actions and ADEM referrals

[3] Available at https://cahabariversociety.org/virtuallearning#Fight_Pollution

We assume this refers to tracking of the City's enforcement actions. That tracking is important and should continue to occur. ***This requirement should not be removed from the permit.*** What is ADEM's justification for removing such as important requirement, which seems necessary for ADEM and the public to assess the effectiveness of the City's stormwater program and permit compliance?

At **Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 4. Construction Site Storm Water Runoff Control, b. 1.,** a new requirement for the City to post either a copy of their ordinance or a hyperlink to it on the City's website and include that in their SWMPP. This is a helpful requirement from our perspective.

Part II Storm Water Pollution Prevention & Management Program (SWMP) B. Storm Water Program Elements and Requirements 4. Construction Site Storm Water Runoff Control, b. 3. adds a requirement to include a construction site inspection schedule that meets the requirements of **Part II. B. 4. a. 6**. We support the inclusion of that requirement.

Perhaps the most effective requirement added to this draft is that sentence added to the end of the first paragraph at **Part II. B. 5.:** *"These post-construction controls should be considered during the initial site development planning phase."* It is vitally important for the City to review and approve the post-construction management plan early in the development approval process. So much so that we suggest the word "should" be changed to "must".

At **Part II. B. 6. a.,** an item 7. Is added that requires the City to "...review any existing Hazardous Material Contingency Plan and supplement wherever needed to address discharges to the MS4" during the new permit cycle. We support adding that requirement.

At **Part II. B. 6. b.,** there is a new requirement to include a "List of agencies that the Permittee may coordinate response actions with regarding spills as required by Part II. B. 6. a. 1." In the SWMPP. We support adding that requirement.

At **Part II. B. 7. a.,** the permit writer has removed items 3) and 4) that were in the 2015 permit. These seemed to be appropriate things to do to reduce the amount of trash being discharged to our streams from MS4s. Why were those items removed from the new draft permit?

At **Part II. B. 7. c.,** an item 6. has been added that requires the Permittee to include the results of the evaluation of the effectiveness of the Pollution Prevention/Good Housekeeping program. We support this requirement and note that the requirement is not accompanied with any suggestions for metrics by which that program may be evaluated.

At **Part II. B. 8. b.,** there are four new requirements regarding reporting on the use of pesticides, herbicides, and fertilizers in the annual report. We support those reporting requirements.

At **Part II. B. 9. a.,** there is a new requirement for at least an annual inspection of municipal facilities regarding the management of used motor vehicle fluids and household hazardous wastes. We support the requirement of those inspections.

At **Part II. B. 10. a.**, there is a new requirement for conducting at least an annual inspection of Industrial facilities that discharge stormwater to the MS4 that also report under the requirements of the Emergency Planning and Community Right to Know Act and which do not have an NPDES permit that are determined by the Permittee to contribute "...substantial pollutants (sic) loading to the MS4 ("high risk facilities")." We support adding this requirement.

At **Part II. D.**, the Permittee is required to submit a copy of their SWMPP should that be modified during the life of the permit. This submission is required at the time of the modification and as a component of the SWMPP. We support that addition to the permit.
At **Part II. E. 1.**, the Permittee is required to "determine whether a discharge from any part of the MS4 contributes directly or indirectly to a waterbody that is included on the latest §303(d) list or designated by the Department as impaired or is included in an EPA-approved or EPA-established TMDL." This language clarifies the intent of this section and we support its inclusion.

At **Part III. B. 1. k.**, there is a duplication of *E. coli* in the list of parameters to be monitored.

At **Part III. B. 2.**, the Permit has been altered to allow the Permittee to not sample. Under what circumstances does ADEM contemplate relieving the Permittee of this responsibility? Have those circumstances occurred before? How often? Generally, we oppose reductions in monitoring activity.

At **Part III. B. 4.**, a requirement to describe why water quality data could not be collected upon those occasions when that occurs. That description is to be included in the City's Annual Report. We support this requirement.

At **Part III. B. 6.**, the Permit now requires a complete description of the circumstances of sample collection. It is important that all the information required here be included in the Annual Report. We support this requirement.

Inclusion of definitions and clarifications about Bypass and Upset events at **Part V. I.** and **J.** are helpful. We support the inclusion of this change.

The amendments to **Part V. AA. Definitions** are helpful. The list of terms included is reasonably comprehensive. We note that the definition of 'Hydrology' is similar to that used in most MS4 Permits that have been adopted up to now. We suspect there is an important difference in the way some engineers interpret the meaning of the magnitude of hydrological change. Changes in the magnitude of stormwater discharge should include both the magnitude of the rate of discharge (which is what we believe most civil engineers consider to be the meaning) and the magnitude of the total volume of that discharge (which, we believe is a characteristic of hydrology that some civil engineer dismiss as unimportant). The Cahaba Sediment and Habitat Alteration TMDL is clear about the significance of urbanization as a source or cause of increased sedimentation in the Cahaba basin. The associated increases in imperviousness that come with urbanization result in increased rates and volumes of stormwater runoff. Both of these factors contribute to in-stream erosion.

We suggest that as these MS4 Permits are updated, ADEM clarify this point by using the following definition of 'hydrology':

"Hydrology" refers to the physical characteristics of storm water discharge, including the magnitude of the rate of discharge, the magnitude of the total volume of discharge, as well as the duration, frequency, and timing of the discharge.

Also in the Definitions section, the inclusion of "Qualifying New Development and Redevelopment" is a helpful addition.

Conclusion

Thank you for slogging through six pages of what many people might consider 'administrivia'. We know this work is important and we appreciate the commitment of ADEM's stormwater staff. Generally, we see most of the proposed changes to the Permit as being helpful improvements. Several of our comments questioning the justification for removing language and asking for added language are, we believe, very significant to ensure an effective stormwater program that ensures Helena is doing its part to achieve water quality improvement goals.

Thank you for your thoughtful consideration of these comments.

Sincerely,

Randall C. Haddock

Randall C. Haddock
Field Director

Cc Jimbo Carlson, Chief of the Stormwater Management Branch
Cammie Ashmore, Stormwater Management
Chad Campbell, Building Inspections

USPS Tracking®

FAQs >

Track Another Package +

Tracking Number: 9489009000276204822734

Remove X

Your item was delivered to an individual at the address at 10:53 am on January 29, 2021 in HELENA, AL 35080.

Delivered

January 29, 2021 at 10:53 am
Delivered, Left with Individual
HELENA, AL 35080

Get Updates

Feedback

Text & Email Updates

Tracking History

Product Information

See Less

Can't find what you're looking for?

Go to our FAQs section to find answers to your tracking questions.

SWMPP Appendix C – City Storm Water Ordinances

ORDINANCE NO. 841-16

AN ORDINANCE TO ESTABLISH STORM WATER MANAGEMENT AND WATER QUALITY CONTROLS, PROGRAMS, REGULATIONS, PROHIBITIONS, AND PENALTIES FOR THE CITY OF HELENA, ALABAMA

WHEREAS, uncontrolled storm water drainage and discharge may have a significant, adverse impact on the health, safety, and general welfare of the City of Helena and the quality of life of its citizens by carrying pollutants into the receiving community waters; and

WHEREAS, the City of Helena is required by federal law, particularly 33 U.S.C. ¶ 1342 (P) and 40 CFR ¶122226, to obtain a National Pollutant Discharge Elimination System (NPDES) permit from the Alabama Department of Environmental Management for storm water discharges from the Municipal Separate Storm Sewer System (MS4). The NPDES permit requires the City to impose controls to reduce the discharge of pollutants in storm water to the maximum extent practicable using management practices, control techniques and system design and engineering methods, and such other provisions which are determined to be appropriate for the control of such pollutants.

NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL

OF THE CITY OF HELENA, ALABAMA:

That the following ordinance is hereby adopted and enacted and shall be implemented to address storm water drainage and discharge in those areas specifically designated by NPDES Permit ALS000012 from the Alabama Department of Environmental Management and all other areas of the City of Helena.

INDEX

DIVISION 1. GENERALLY

Sec. 01-001. Authority.

The Alabama Department of Environmental Management pursuant to the authority delegated to it under the Clean Water Act, 33 U.S.C. Section 1251, *et seq.*, has required the City of Helena to obtain a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharges from the Municipal Separate Storm Sewer System (MS4), effective January 1, 2016. Therefore, the City is subject to the federal storm water laws, as presented in 33 U.S.C. ¶ 1342 (P) and 40 CFR ¶122.26, and as such, is required to adopt local storm water management ordinances. Act No. 95-775, Legislature of Alabama - § 11-89C-1 - 14, Code of Alabama 1975, and other provisions thereof, grants the authority to adopt such ordinances to the governing bodies of all Class 1 municipalities within the state and to the county governing bodies in which the Class 1 municipalities are located and to the governing bodies of all municipalities located within those counties, and where any such municipality is also located partially within an adjoining county, then to the governing body of such adjoining county and to which governing bodies are specifically designated by ADEM pursuant to the authority delegated to it under the Clean Water Act, 33 U.S.C. Section 1251, *et seq.*

Sec. 01-002. Purpose.

(a) It is the purpose of this ordinance to protect, maintain, and enhance the environment of the City of Helena and the short-term and long-term public health, safety, and general welfare of the citizens of the City of Helena by controlling discharges of pollutants to the MS4 and to maintain and improve the quality of the community waters into which the storm water outfalls flow, including, without limitation, the lakes, streams, ponds, wetlands, sinkholes, and groundwater of the City of Helena. This ordinance prohibits the discharge of non-storm water into the MS4 and the community waters and provides enforcement procedures and penalties to ensure compliance.

(b) It is further the purpose of this ordinance to enable the City of Helena to comply with the National Pollutant Discharge Elimination System (NPDES) permit and applicable regulations (40 CFR ¶ 122.26) for storm water discharges.

Sec. 01-003. Definitions.

For the purpose of this ordinance- the following terms, phrases and words and their derivatives, shall have the meaning given herein:

"Accidental Discharge" shall mean a discharge prohibited by this article into the "Community Waters" or to the "Waters of the State" which occurs by chance and without

planning or consideration prior to occurrence.

"Alabama Department of Environmental Management" or "ADEM" shall mean the State of Alabama regulatory agency which administers and enforces those laws governing storm water in the State of Alabama.

"Applicant" shall mean any person, firm or corporation required by this ordinance to obtain a City of Helena Storm Water Discharge Permit.

"Best Management Practices" or "BMPs" shall mean schedules of activities, prohibitions or practices, maintenance procedures and other management practices to prevent or reduce the discharge of pollutants to the municipal separate storm sewer system. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Clean Water Act" shall mean the Federal Water Pollution Control Act, as amended, codified at 33 U.S.C. ¶1251, *et seq.,* and regulations promulgated thereunder.

"Community Waters" shall mean any or all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells and other bodies of surface or subsurface water, natural or artificial lying within or forming a part of the boundaries of the City of Helena or the waters into which the City of Helena Municipal Separate Storm Sewer System outfalls flow.

"City" shall mean the City of Helena, Alabama.

"Discharge" shall mean the addition of any substance to the municipal separate storm sewer system.

"Environmental Protection Agency" or "EPA" shall mean the federal regulatory agency which administers those laws governing storm water in the United States of America.

"Erosion" shall mean wearing away of the lands by running water, winds, or waves.

"Illicit Discharge" shall mean a discharge to the municipal separate storm sewer system or to the community waters that is not composed entirely of storm water, except discharges pursuant to an NPDES permit and other allowable discharges dictated by this ordinance.

"Industrial Facility" shall mean a business or businesses engaged in industrial production, manufacturing or service which may or may not have raw materials stored on site, produce excessive dust or other industrial by-products, or, in the opinion of the City of Helena Environmental Office, or other agency or department designated and authorized by the City of Helena, may pose a threat of contamination to the MS4 or to the community waters.

These facilities are typically located in areas which are zoned as M-1 or M-2, in those portions of the City regulated by zoning laws.

"Manager" shall mean the person, or his or her duly authorized representative, designated by the City Council to supervise the operations of the City's storm water management program and who is charged with certain duties and responsibilities by this ordinance.

"Municipal Separate Storm Sewer System" or "MS4" shall mean a conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, easements, swales, ditches, man-made channels or storm drains) carrying storm water runoff which is directly or indirectly discharged into the Cahaba River drainage basin upstream of Big Piney Woods Creek, and which are owned, operated or maintained by the City. Privately-owned storm water conveyances may be included in this definition at the City's discretion in order to prevent contamination of the public portion of the MS4.

"National Pollutant Discharge Elimination System" or "NPDES" permit shall mean a permit issued pursuant to Section 402 of the Clean Water Act (33 U.S.C. ¶ 1342).

"Notice of Intent" or "NOI" shall mean a written notice by a discharger to the Director of ADEM, that the person wishes his or her discharge to be authorized under a general storm water discharge permit authorized by state law or regulation.

"Person" shall mean any individual, partnership, copartnership, firm, syndicate, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents or assigns. The masculine gender shall include the feminine and the singular shall include the plural where indicated in text.

"Pollutants" shall mean any substance deemed by the Manager to be a threat to human health or the environment, including, but not limited to: dredged soil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, domestic and agricultural waste.

"Pollution" shall mean a condition created by the presence of harmful or objectionable material in water.

"Sanitary Sewer" shall mean a sewer that carries liquid and water-carried wastes from residences, commercial buildings, industrial plants and institutions, together with minor quantities of ground, storm and surface waters that are not admitted intentionally.

"Sediment" shall mean the organic or inorganic solid material settled from suspension in a liquid.

"Significant Spills" shall mean spills which include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (see 40 CFR 302.4).

"Storm Water" shall mean runoff associated with a rain event, snow melt runoff, and surface runoff and drainage.

"Storm Water Management" shall mean the collection, conveyance, storage, treatment and disposal of storm water runoff in a manner to meet the objectives of this ordinance and its terms, including, but not limited to, measures that control the increased volume and rate of storm water runoff and water quality impacts caused by manmade changes to the land.

"Storm Water Management Program" shall mean the program developed by the City of Helena pursuant to NPDES Permit ALS000012 to control the flow of pollutants into the MS4.

"Toxic Pollutants" shall mean any pollutant or combination of pollutants listed as toxic in 40 CFR Part 40I promulgated by the Administrator of the Environmental Protection Agency under the provisions of 33 U.S.C. ¶ 1317.

"Variance" shall mean the modification of the minimum storm water management requirements contained in this ordinance and the Storm Water Management Program for specific circumstances where strict adherence of the requirements would result in unnecessary hardship as limited by the terms of the permit, and not fulfill the intent of this ordinance.

"Wastewater" shall mean the spent water of a community. It may be a combination of liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions, together with any groundwater, surface water and storm water that may be present. Also, called sanitary sewage.

"Water Quality" shall mean those characteristics of storm water runoff that relate to the physical, chemical, biological, or radiological integrity of water.

"Water Quantity" shall mean those characteristics of storm water runoff that relate to the rate and volume of the storm water runoff.

"Wetland" shall mean lands that are inundated or saturated with water to the extent that the soil will support vegetation typically adapted to saturated soil conditions. The lands may or may not be saturated at all times.

Sec. 01-004. Severability.

If any section, sub-section, phrase, clause or provision of this ordinance be declared invalid by a court of competent jurisdiction, the same shall not affect the validity of the ordinance as a whole or any part or portion thereof other than the part declared to be involved.

Sec. 01-005. Effective Date.

This ordinance shall take effect upon its adoption or otherwise as provided by law.

Secs. 01-006 - - 01-008. Reserved.

DIVISION 2. APPLICATIONS AND PERMITS FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Sec. 01-009. Existing facilities required to obtain permit.

(a) All existing industrial facilities, service stations, convenience stores with gasoline pumps, vehicular repair shops and vehicular parts repair shops which discharge storm water directly or indirectly into the municipal separate storm sewer system and which do not have current NPDES permits issued by ADEM authorizing the discharge of storm water, are required to apply for and obtain a City of Helena Storm Water Discharge Permit.
on or before the dates set forth in the following schedule:

All other existing commercial facilities located in the City of Helena, and which do not have current NPDES storm water permits, are not required to apply for a City of Helena Storm Water Discharge Permit. However, these facilities shall comply with Divisions 5 and 6 of this ordinance.

(b) Permit application forms may be acquired from the Manager. Upon receipt of the application, the Manager will evaluate the information provided and either deny a permit to the applicant or issue the applicant a City of Helena Storm Water Discharge Permit. An approved permit may require the facility or commercial establishment to implement additional structural and non-structural Best Management Practices to reduce or eliminate the

potential to discharge pollutants. If the application is denied, the Manager shall

notify the applicant of deficiencies and allow thirty (30) days for the application to be revised and resubmitted. If the noted deficiencies are not corrected within thirty (30) days and/or the permit is not resubmitted, any discharge of storm water after that date into the municipal separate storm sewer system shall be unlawful. Once issued, a permit shall be valid for five (5) years, unless sooner revoked for violations of permit conditions, changes in applicable law, or other good cause.

(c) The application for a City of Helena Storm Water Discharge Permit for an existing facility or commercial establishment shall include, at a minimum, the following information:

(l) description and type of facility and the nature of work performed;

(2) a description of significant materials that are currently, or were formerly, treated, stored or disposed outside the facility or commercial establishment; materials management practices currently used to minimize contact of these materials with storm water runoff; and a description of any treatment the storm water receives prior to discharge;

(3) the name of contact person for permit compliance, including job title, facility address and telephone number;

(4) a description of ways the facility or commercial establishment plans to implement programs to reduce the discharge of pollutants through storm water flow; and

(5) any other information deemed necessary by the Manager to effectively evaluate the potential for contamination of the MS4 by storm water runoff.

Sec. 01-010. Existing facilities required to have an NPDES permit.

(a) All existing industrial facilities, service stations, convenience stores with gasoline pumps, vehicular repair shops and vehicular parts repair shops which discharge storm water directly or indirectly into the municipal separate storm sewer system and which have current NPDES permits issued by ADEM authorizing the discharge of storm water are required to submit to the Manager a copy of the Notice of Intent (NOI) and-ADEM's subsequent letter of verification of coverage under the NPDES General Permit.. If the facility has an individual NPDES storm water discharge permit, a copy of the permit, in its entirety, shall be submitted to the Manager.

(b) Upon expiration and renewal of the existing NPDES permit, the facility shall be required to submit a copy of the new NOI and coverage verification, or individual

NPDES permit, to the Manager within thirty (30) days.

(c) The NOI or NPDES permit shall be accompanied by the name of the contact person for permit compliance, including his or her job title and the telephone number.

Sec. 01-011. New facility permits.

(a) All new industrial facilities, service stations, convenience stores with gasoline pumps, vehicular repair shops and vehicular parts repair shops which discharge storm water directly or indirectly into the municipal separate storm sewer system, and which do not require an NPDES permit issued by ADEM authorizing the discharge of storm water, are required to apply for a City of Helena Storm Water Discharge Permit prior to construction. This permit shall be required in addition to any permit required by ADEM for storm water discharges associated with construction activity and any other permit required by this ordinance for land clearing activities. All other new commercial facilities located in the City of Helena, and which do not require an NPDES storm water permit, are not required to apply for a City of Helena Storm Water Discharge Permit. However, these facilities shall comply with Divisions 5 and 6 of this ordinance.

(b) Permit application forms may be acquired from the Manager. Completed application forms are to be returned to the Manager. Upon receipt of the application, the Manager will evaluate the information provided and either deny a permit to the applicant or issue the applicant a City of Helena Storm Water Discharge Permit. An approved permit may require the facility to implement additional structural and non-structural Best Management Practices to reduce or eliminate the potential to discharge pollutants. If the application is denied, the Manager shall notify the applicant of deficiencies and allow thirty (30) days for the application to be revised and resubmitted. If the noted deficiencies are not corrected within thirty (30) days and/or the permit is not resubmitted, any discharge of storm water after that date into the municipal separate storm sewer system shall be unlawful. Once issued, a permit shall be valid for five (5) years, unless sooner revoked for violations of permit conditions, changes in applicable law, or other good cause.

(c) The application for a City of Helena Storm Water Discharge Permit for a new facility shall include, at a minimum, the same information as that required for an existing facility.

Sec. 01-012. New facilities required to have an NPDES permit.

(a) All new industrial facilities, service stations, convenience stores with gasoline pumps, vehicular repair shops and vehicular parts repair shops which discharge storm water directly or indirectly into the municipal separate storm sewer system, and which require an NPDES permit issued by ADEM authorizing the discharge of storm water are required to submit to the Manager a copy of the Notice of Intent (NOI) and ADEM's

subsequent letter of verification of coverage under the NPDES General Permit. If the facility requires an individual NPDES permit, a copy of the permit, in its entirety, shall be submitted to the Manger. In addition, any permit required by ADEM for storm water discharges associated with land clearing and construction activities shall be submitted to the Manager prior to construction.

(b) Upon expiration and renewal of the NPDES permit, the facility will be required to submit a copy of the new NPDES permit to the Manager within thirty (30) days.

(c) The NPDES permit shall be accompanied by the name of the contact person for permit compliance, including his or her job title, and the telephone number.

Sec. 01-013. Permit application fees.

(a) Each application for the issuance of a City of Helena Storm Water Discharge Permit for an existing industrial or commercial facility shall be accompanied by a non-refundable fee of one hundred dollars ($100.00) plus fifteen dollars per acre ($15.00/acre).

(b) Each application for the issuance of a City of Helena Storm Water Discharge Permit for a new industrial or commercial facility shall be accompanied by a non-refundable fee of one hundred dollars ($100.00) plus fifteen dollars per acre ($15.00/acre) and any such additional fees for land disturbance or construction activities as may be required per this ordinance.

Secs. 01-014 - - 01-018. Reserved.

DIVISION 3. APPLICATIONS AND PERMITS FOR LAND DISTURBANCE AND CONSTRUCTION ACTIVITIES

Sec. 01-019. Land disturbance and construction activities required to have a permit.

(a) All land disturbance and construction activities which discharge storm water directly or indirectly into the municipal separate storm sewer system will require a City of Helena Storm Water Discharge Permit prior to the commencement of the land disturbance or construction. It shall be unlawful for any person to conduct, or permit to be conducted, any land disturbing activity upon land owned or controlled by them without a permit issued under this ordinance if more than one (1) acre is disturbed and if the discharge flows into the MS4. For purposes of this ordinance the phrase "land disturbing activity" is defined as follows:

Land disturbing activity is any change which may result in soil erosion from

water and wind and the movement of sediments, directly or indirectly, into the community waters, including, but not limited to, clearing, dredging, grading, excavating and filling of land, except that the term shall not include the following:

(1) such minor land disturbing activities as home gardens, individual home landscaping, home repairs, home maintenance work and other related activities which result in minor soil erosion;

(2) the construction of single-family residences when built separately on lots within a subdivision which has a current City of Helena Storm Water Discharge Permit issued pursuant to this ordinance, provided that excavation is limited to trenches for the foundation, basements, utility service and sewer connections, and minor grading for driveways, yard areas and sidewalks;

(3) individual utility service and sewer connections for single- or two-family residences;

(4) construction, installation or maintenance of electrical, telephone and cable television lines and poles, provided these activities do not pose a significant threat of contamination to community waters; and

(5) installation, maintenance and repair of any underground public utility lines when such activity occurs on an existing hard-surface road, street or sidewalk, provided the activity is confined to the area of the road, street or sidewalk which is hard-surfaced.

These activities may be undertaken without a permit; however, the persons conducting these excluded activities shall remain responsible for otherwise conducting those activities in accordance with the provisions of this ordinance and other applicable laws.

(b) Permit application forms may be acquired from the Manager beginning April 1, 1999. Completed application forms are to be returned to the Manager. Upon receipt of the application, the Manager will evaluate the information provided and either deny a permit to the applicant or issue the applicant a City of Helena Storm Water Discharge Permit. An approved permit may require the applicant to implement additional structural and non-structural Best Management Practices to reduce or eliminate the

potential to discharge pollutants. If the application is denied, the Manager shall notify the applicant of deficiencies and allow the application to be revised and resubmitted. It shall be unlawful to commence land disturbance or construction activities as described in this Section prior to the issuance of a City of Helena Storm Water Discharge Permit. Once issued, a permit shall be valid for two (2) years, unless sooner revoked for violations of permit conditions, changes in applicable law, or other good cause. Upon project completion, the applicant shall notify the Manager and request termination of permit coverage. The Manager shall grant termination within thirty (30) days unless it is determined that the applicant has failed to meet the requirements of this ordinance, particularly those regarding proper soil stabilization.

(c) The application for a Storm Water Discharge Permit for land disturbance and construction activities shall include, at a minimum, the following information:

(1) name and telephone number of applicant;

(2) business or residence address of applicant;

(3) name and address of owner of subject property;

(4) address and legal description of subject property;

(5) name and address of the contractor and any subcontractors who shall perform the land disturbing activity and who shall implement and maintain the Best Management Practices;

(6) the nature, extent and purpose of the land disturbing activity including the size of the area for which the permit shall be applicable and a schedule for the starting and completion dates of the land disturbing activity;

(7) plans or a description of specific Best Management Practices that will be used to control the discharge of storm water runoff from the site, the extent of which shall be commensurate with the size of the project, severity of site conditions, and the potential for contamination of community waters; and

(8) any other information deemed necessary by the Manager to effectively evaluate the potential for contamination of the MS4 by storm water runoff.

(d) All applicable construction sites must obtain coverage under ADEM NPDES General Permit ALR100000 or other applicable permits.

Sec. 01-020. General requirements for land disturbance activities.

No land disturbing activity shall be conducted within the City of Helena except in such manner that:

(a) Stripping of vegetation, regrading and other development activities shall be conducted so as to minimize erosion. Clearing and grubbing must be held to the minimum necessary for grading and equipment operation. Construction shall be sequenced to minimize the exposure time of cleared surface area.

(b) Property owners shall be responsible upon completion of land disturbing activities to leave slopes so that they will not erode, through such methods as revegetation, mulching, rip-rapping, or shotcrete/guniting. Regardless of the method used, the objective shall be to leave the site as erosion-free and maintenance-free as practicable.

(c) Whenever feasible, natural vegetation shall be retained, protected and supplemented, especially adjacent to natural drainage ways. If feasible, natural streams flowing to and through the site shall be maintained in their natural channel and provided with a vegetative buffer zone.

(d) Permanent or temporary soil stabilization must be applied to disturbed areas to the extent feasible within seven (7) days on areas that will remain unfinished for more than thirty (30) calendar days. Permanent soil stabilization with perennial vegetation shall be applied as soon as practicable after final grading is completed on any portion of the site. Soil stabilization refers to measures which protect soil from the erosive forces of wind, raindrop impact and flowing water, and includes the growing of grass, sod, application of straw, mulch, fabric mats, and the early application of gravel base on areas to be paved.

(e) A permanent vegetative cover shall be established on disturbed areas not otherwise permanently stabilized.

(f) To the extent necessary, sediment in runoff water shall be trapped by the use of sediment basins, silt traps or similar measures until the disturbed area is stabilized.

(g) Erosion and sediment control measures must be in place and functional before earth moving operations begin and must be constructed and maintained throughout the construction period as necessary. Temporary measures may be removed at the beginning of the work day but shall be replaced at the end of the workday.

(h) Structural controls shall be designed and maintained as required to prevent pollution. All surface water flowing toward the construction area shall, to the extent practicable, be diverted by using berms, channels, or sediment traps as necessary. Erosion and

sediment control measures shall be designed according to the size and slope of disturbed and/or drainage areas to effectively detain runoff and trap sediment.

(i) All control measures shall be consistent with the *Alabama Handbook for Erosion Control, Sediment Control and Storm Water Management on Construction Sites and Urban Areas* published by the Alabama Soil and Water Conservation Committee and shall be checked and repaired as necessary to prevent the contamination of community waters.

(j) The storm water runoff from the site shall contain no floating scum or oil, shall not cause an objectionable color contrast in the receiving water, and shall not contain any materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock wildlife, plant life, or fish and aquatic life in the receiving stream.

Sec. 01-021. Land disturbance and construction activities required to have an NPDES permit.

(a) If an NPDES permit is required, a copy of the Notice of Intent (NOI) shall be submitted to the Manager with the City of Helena Storm Water Discharge Permit application. A copy of ADEM's verification of coverage shall also be submitted when available.

(b) If the current NPDES permit should expire during land clearing or construction, a copy of the new NOI and ADEM's subsequent verification of coverage shall be submitted to the Manager.

(c) The NOI shall be accompanied by the name of the contact person for NPDES permit compliance, including job title, site and office addresses and telephone numbers.

(d) The Manager shall notify ADEM if a construction site requiring an NPDES permit that does not have such permit is discovered.

Sec. 01-022. Permit application fees.

Each application for the issuance of a City of Helena Storm Water Discharge Permit for land disturbance and construction activities shall be accompanied by a non-refundable fee of one hundred dollars ($100.00) plus fifteen dollars per acre ($15.00/acre).

Secs. 01-023 - - 01-027. Reserved.

DIVISION 4. GENERAL PERMIT REQUIREMENTS

Sec. 01-028. Availability of permit.

An approved copy of the City of Helena Storm Water Discharge Permit shall be stored in the

office of the designated contact person and at the permitted site or facility and shall be made available for review at any time by the Manager, or his or her representative.

Sec. 01-029. Transfer of permit.

A City of Helena Storm Water Discharge Permit may be transferred only upon the filing of an amendment to the permit application or an amended or restated application containing all changes from the original application providing there are no changes in the operation of the industrial or commercial facility or construction site which may affect the quantity or quality of the storm water runoff. If there are to be any changes in the operation of the facility or construction site which may affect the quantity or quality of storm water runoff, then the new owner or operator shall reapply for a City of Helena Storm Water Discharge Permit prior to the beginning of operation of the facility or construction activities. The filing of an amended or restated application shall be treated as an interim permit allowing the continued operation of the facility or construction site pending review of the application by the Manager, which shall remain in force until the application shall be approved or denied by the Manager.

Sec. 01-030. Signatory requirements.

(a) All applications and correspondence required by this ordinance to be submitted to the Manager shall be signed as follows:

(1) Corporation: by a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation.

(2) Partnership or sole proprietorship: by a general partner or the proprietor.

(3) Municipality, State, Federal, or other public facility: by either a principal executive officer or the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

(b) Any person signing any application or correspondence required by this article shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision and that have personally examined and am familiar with the information therein. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information,

including the possibility of fine and civil penalty."

Secs. 01-031- - 01-035. Reserved.

DIVISION 5. MONITORING AND INSPECTION

Sec. 01-036. Monitoring.

The Manager shall periodically monitor the quantity of and the concentration of pollutants in storm water discharges from the industrial and commercial facilities and construction sites permitted pursuant to this ordinance and from any other facilities or sites the Manager deems a potential source of contamination to the community waters, including those facilities and sites which hold current NPDES permits.

Sec. 01-037. Detections of illicit connections and improper disposal.

(a) The Manager, or his or her duly authorized representatives, shall take appropriate steps to detect and eliminate illicit connections to the municipal separate storm sewer system.

(b) The Manager, or his or her duly authorized representative, shall take appropriate steps to detect and eliminate improper discharges to the municipal separate storm sewer system.

Sec.01-038. Inspections.

(a) The Manager, or his or her designee, bearing proper credentials and identification, may enter and inspect all properties for regular periodic inspections, investigations, monitoring, observation, measurement, enforcement, sampling and testing, to effectuate the provisions of this ordinance and the City of Helena Storm Water Management Program. The Manager, or his or her designee, shall duly notify the owner of said property or the representative on site and the inspection shall be conducted at reasonable times.

(b) Upon refusal by any property owner to permit an inspector to enter or continue an inspection, the inspector shall terminate the inspection or confine the inspection to areas concerning which no objection is raised. The inspector shall immediately report the refusal and the grounds to the Manager. The Manager may seek appropriate compulsory process.

(c) In the event the Manager, or his or her designee, reasonably believes that discharges from the property into the MS4 or the community waters may cause an imminent and substantial threat to human health or the environment, the inspection may take place

at any time and without notice the owner of the property or a representative on site. The inspector shall present proper credentials upon reasonable request by the owner or representative.

(d) At any time during the conduct of an inspection or at such other times as the Manager, or his or her designee, may request information from an owner or representative, the owner or representative may identify areas of the facility or establishment, material or processes which contain or which might reveal a trade secret. If the Manager, or his or her designee, has no clear or convincing reason to question such identification, the inspection report shall note that trade secret information has been omitted. To the extent practicable, the Manager shall protect all information which is designated as a trade secret by the owner or their representative.

(e) In the event a substantial pollutant loading to the community waters exists, the Manager will take the following steps:

(1) Field Inspection to verify possible source of pollution, when needed.

(2) Additional sampling to verify possible source of pollution, if needed.

(3) Informing the owner and/or operator of the facility or site found to be the source of the problem and working with them to determine appropriate corrective actions.

(4) Following up with the owner and/or operator to determine the status of corrective actions.

(5) Enforcement procedures shall be as provided in Division 6 of this ordinance, if needed.

(6) If the source of the pollutant discharge is from an adjacent jurisdiction's MS4, the Manager will notify the adjacent jurisdiction and ADEM by phone and email.

Secs. 01-039 - - 01-043. Reserved.

DIVISION 6. ENFORCEMENT AND ABATEMENT

Sec.01-044. Unauthorized discharge a public nuisance.

Discharge of storm water in any manner in violation of this ordinance or of any condition of a permit issued pursuant to this ordinance is hereby declared a public nuisance and shall be

corrected or abated.

Sec. 01-045. Allowable non-storm water discharges.

The following direct or indirect discharges into the MS4 or the community waters are allowable under the terms of this ordinance unless determined by the Manager to be a source of contamination to the MS4 or the community waters:

(1) waterline and fire hydrant flushings;

(2) landscape irrigation;

(3) rising ground waters;

(4) uncontaminated ground water;

(5) uncontaminated water from foundation and footing drains;

(6) air conditioning condensation;

(7) discharges from springs;

(8) water from crawl space pumps;

(9) lawn watering;

(10) individual residential car washing;

(11) flews from riparian habitats and wetlands;

(12) dechlorinated swimming pool and hot tub discharges;

(13) street wash water; and

(14) discharges from fire-fighting activities.

Sec. 01-046. Illicit discharge and illegal dumping.

The following direct or indirect discharges into the MS4 or the community waters and direct or indirect discharges therein or thereto caused by or resulting from the following activities, practices and/or conditions are prohibited and shall be unlawful:

(1) non-storm water discharges, except pursuant to a storm water discharge permit issued by ADEM or Section 01-045 of this ordinance;

(2) chlorinated swimming pool or hot tub discharge;

(3) discharge of any polluted household wastewater, such as, but not limited to, laundry washwater and dishwater, except to a sanitary sewer or septic system;

(4) leaking sanitary sewers and connections, which shall have remained uncorrected for seven (7) days or more;

(5) leaking water lines which shall have remained uncorrected for seven (7) days or more;

(6) commercial, industrial or public vehicle wash discharge;

(7) garbage or sanitary waste disposal;

(8) animal carcasses or animal fecal waste;

(9) sewage dumping or dumping of sewage sludge;

(10) dredged or spoil material;

(11) solid or chemical waste such as oils, antifreeze, paint, paint thinners, solvents, gasoline/diesel; and

(12) wrecked or discarded vehicles or equipment.

Sec. 01-047. Accidental discharges.

(a) In the event of any discharge of a hazardous substance in amounts which could cause a threat to public drinking supplies, a "significant spill" or any other discharge which could constitute a threat to human health or the environment, the owner or operator of the facility shall give verbal notice to the Storm Water Manager and ADEM as soon as practicable, but in no event later than the close of business on the day the accidental discharge occurs or the day the discharger becomes aware of the circumstances. A written report must be provided by the discharger within five days of the time the discharger becomes aware of the circumstances, unless this requirement is waived by the Manager for good cause shown on a case-by-case basis, containing the following particulars: (1) a description of the discharge, (2) the exact dates and times of discharge, (3) the amount (may be estimated) of discharge, and (4) steps being taken to eliminate and prevent recurrence of the discharge.

(b) The discharger shall take all reasonable steps to stop the discharge and minimize any adverse impact to the community waters, including such accelerated or additional monitoring as necessary to determine the nature and impact of the discharge. It shall not be a defense for the discharger in an enforcement action that it would have been necessary to halt or reduce the business or activity of the facility in order to maintain water quality and minimize any adverse impact that the discharge may cause.

(c) It shall be unlawful for any person to fail to comply with the provisions of

this section.

Sec. 01-048. NPDES permits issued by ADEM.

(a) Compliance with the conditions, limitations and restrictions set forth in an individual or general NPDES storm water discharge permit issued by ADEM shall be deemed compliance with the terms of this ordinance, excluding the requirements of Sections 01-010, 01-012, 01-021 and 01-047. However, all NPDES permit holders are subject to enforcement action under the terms of this ordinance for continued substantial violation of the NPDES permit, as determined by the Manager.

The following procedure shall be used for NPDES permit holders:

(1) ADEM will provide the Manager with access to the NPDES storm water permits for any property within the City's MS4 area.

(2) The Manager will notify ADEM and the permit holder in writing when it has been determined that the NPDES permit holder is causing a continuing substantial pollutant load to the community waters.

(3) The Manager will rely on ADEM to regulate and take enforcement action in accordance with the requirements of the permit holder's NPDES permit.

(4) The City will still regulate and enforce the City's Storm Water Discharge Permit, subject to the restrictions in Section 01-048(b).

(b) No enforcement action shall be taken by the City against any person for violation of the terms of this ordinance if any of the following occur:

(1) ADEM has issued a notice of violation with respect to the same alleged violation and is proceeding with enforcement action;

(2) ADEM has issued an administrative order with respect to the same alleged violation and is proceeding with enforcement action; or

(3) ADEM has commenced and is proceeding with enforcement action or has completed any other type of administrative or civil action with respect to the same alleged violation.

(4) The same alleged violation shall mean specific deficiencies on a specific date(s).

(c) Any determination or resolution with respect to an alleged violation made by ADEM shall be final, and such alleged violation shall not be made the subject of any additional enforcement action by the City, provided, however, that enforcement action may be pursued by the City for other, continued or continuing violations.

Sec. 01-049. Administrative enforcement remedies.

(a) Notification of Violation: Whenever the Manager finds that any applicant or any person discharging storm water has violated or is violating this ordinance or a City of Helena Storm Water Discharge Permit or order issued hereunder, the Manager or his or her agent may serve upon said discharger written notice of the violation. Within 24 hours of the receipt date of this notice, an explanation of the violation and a plan and schedule for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the Manager. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation. Within 48 hours, the illicit discharge must be removed. Where the removal of the discharge is not possible within this time, the operator of the illicit discharge must take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4.

(b) Consent Orders: The Manager is hereby empowered to enter into consent orders, assurances of voluntary compliance or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the discharger to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraph (d) below.

(c) Show Cause Hearing: The Manager may order any person who causes or contributes to violation of this ordinance or Storm Water Discharge Permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing. Such notice may be served on any principal executive, general partner or corporate officer.

(d) Compliance Order: When the Manager finds that any person has violated or continues to violate this ordinance or a City of Helena Storm Water Discharge Permit or order issued hereunder, he or she may issue an order to the violator, directing that, following a specified time period, adequate structures and devices be installed or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of

devices, self-monitoring and management practices.

(e) Cease and Desist Orders: When the Manager finds that any person has violated or continues to violate this ordinance or a City of Helena Storm Water Discharge Permit or order issued hereunder, the Manager may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

(1) comply forthwith; or

(2) take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge.

Sec. 01-050. Unlawful acts-misdemeanor.

It shall be unlawful for any person to:

(a) violate any provision of this ordinance;

(b) violate the provisions of any permit issued pursuant to this ordinance;

(c) fail or refuse to comply with any lawful notice to abate, issued by the Manager, which has not been appealed to the City Council within the time specified by such notice; or

(d) violate any lawful order of the City Council within the time allowed by such order.

Said persons shall be guilty of a misdemeanor, and each day of such violation, failure or refusal to comply shall be deemed a separate offense and punishable accordingly. Any person found to be in violation of the provisions of this ordinance shall be punished by a fine of not less than twenty-five dollars ($25.00) nor more than five hundred dollars ($500.00) for each offense.

Sec.01-051. Civil penalty.

(a) Any person who performs any of the following acts or omissions shall be subject to a civil penalty of up to five thousand dollars ($5,000.00) per day each day during which the act or omission continues or occurs:

(1) fails to obtain any permit required by this ordinance;

(2) violates the terms or conditions of a permit issued pursuant to a

pretreatment program;

(3) violates a final determination or order of the City Council;

or

(4) violates any provisions of this ordinance.

(b) Any civil penalty shall be assessed in the following manner:

(1) The Manager may issue an assessment against any person responsible for the violation;

(2) Any person against whom an assessment has been issued may secure a review of such assessment by filing with the Manager a written petition setting forth the grounds and reasons for his or her objections and asking for a hearing in the matter involved before the City Council and if a petition for review of the assessment is not filed within thirty (30) days after the date the assessment is served, the violator shall be deemed to have consented to the assessment and it shall become final;

(3) Whenever any assessment has become final because of a person's failure to appeal the Manager's assessment, the Manager may apply to the appropriate court for a judgement and seek execution of such judgement, and the court, in such proceedings, shall treat a failure to appeal such assessment as a confession of judgement in the amount of the assessment;

(4) In assessing the civil penalty, the Manager may consider the following factors:

(i) whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;

(ii) damages to the City, including compensation for the damage or destruction of public storm water facilities, and also including any penalties, costs and attorneys' fees incurred by the City as a result of the illegal activity, as well as the expenses involved in enforcing this ordinance and the costs involved in rectifying any damages;

(iii) cause of the discharge or violation;

(iv) the severity of the discharge and its effects upon public storm water facilities and upon the quality and quantity of the receiving waters;

(v) effectiveness of action taken by the violator to cease the violation;

(vi) the technical and economic reasonableness of reducing or eliminating the discharge; and

(vii) the economic benefit gained by the violator.

(c) The City Council may establish, by regulation, a schedule of the amount of civil penalty which can be assessed by the Manager for certain specific violations or categories of violations.

Sec. 01-052. Judicial proceedings and relief.

(a) The Manager may initiate proceedings in any court of competent jurisdiction against any person who has or is about to:

(1) violate the provisions of this ordinance;

(2) violate the provisions of any permit issued pursuant to this ordinance;

(3) fail or refuse to comply with any lawful order issued by the Manager, which has not been timely appealed to the City Council, within the time allowed by this ordinance; or

(4) violates any lawful order of the City Council within the time allowed by such order.

(b) Any person who shall commit any act or fail to perform any act declared unlawful under this ordinance shall be guilty of a misdemeanor, and each day of such violation or failure shall be deemed a separate offense and punishable accordingly.

(c) The Manager, with the consent of the City Council of the City of Helena, may also initiate civil proceedings in any court of competent jurisdiction seeking monetary damages for any damages caused to publicly owned storm water facilities by any person, and to seek injunctive or other equitable relief to enforce compliance with the provisions of this ordinance or to force compliance with any lawful orders of the Manager or the City Council.

Sec. 01-053. Disposition of permit fees, damage payments and penalties.

All permit fees collected pursuant to this ordinance, all damages collected under the provisions of Section 01-050 and civil penalties collected under Section 01-051, following adjustment for the expenses incurred in making such collections, shall be allocated and appropriated to the City of Helena for the administration of its storm water management programs.

Secs. 01-054 -- 01-058. Reserved.

DIVISION 7. CITY COUNCIL DUTIES AND POWERS; VARIANCES & HEARINGS

Sec. 01-059 – 01-060. Reserved.

Sec. 01-061. General duties of the City Council related to this ordinance.

In addition to any other duty or responsibility otherwise conferred upon the City Council (Council) by this chapter, the City Council shall have the duty and power as follows:

(a) To recommend from time to time amendments or modifications of the provisions of this ordinance;

(b) To hold hearings upon appeals from orders or actions of the Manager as may be provided under any provision of this chapter;

(c) To hold hearings related to the suspension, revocation or modification of a City of Helena Storm Water Discharge Permit and issue appropriate orders relating thereto;

(d) To hold such other hearings as may be required in the administration of this chapter and to make such determinations and issue such orders as may be necessary to effectuate the purposes of this ordinance;

(e) To request assistance from any officer, agent or employee of the City of Helena and to

obtain such information or other assistance as the City Council might need;

(f) The City Council, acting through its President or duly appointed agent, shall have the power to issue subpoenas requiring attendance and testimony of witnesses and the production of documentary evidence relevant to any matter properly heard by the Council; and

(g) The Council President or President pro -tem shall be authorized to administer oaths to those persons giving testimony before the Council.

Sec. 01-062. Variances.

(a) The City Council may grant a variance from the requirements of this ordinance providing to do so would not result in the violation of any state or federal law or regulation and exceptional circumstances applicable to the site exist such that strict adherence to the provisions of this ordinance will result in unnecessary hardship and will not result in a condition contrary to the intent of the ordinance.

(b) A written petition for a variance shall be required and shall state the specific variance sought and the reasons, with supporting data, why a variance should be granted. The request shall include all information necessary to evaluate the proposed variance. The petition shall be filed with the Manager.

(c) The Manager shall conduct a review of the request for a variance within ten (10) working days after receipt and may either support the petition or may object to the petition. If the Manager objects to the variance, he or she shall state the reasons therefor.

(d) Once the Manager's review is complete or the ten (10) days for review have expired, the petition shall be subject to Council action at the next regularly scheduled meeting or at a special meeting called at the discretion of the Council President.

Sec.01-063. Meetings; quorum.

(a) The City Council may hold such special meetings as the Council may find necessary to hear and decide upon matters related to this ordinance.

(b) Three (3) members of the City Council shall constitute a quorum, but a lesser number may adjourn a meeting from day to day. Any substantive action of the Council shall require three (3) votes, but a majority of the quorum may decide any procedural matter.

Sec. 01-064. Hearing Procedure; judicial review.

(a) When to be held: The City Council shall schedule an adjudicatory hearing to resolve disputed questions of fact and law whenever provided by any provision of this ordinance.

(b) Record of hearing: At any such hearing, all testimony presented shall be under oath or upon solemn affirmation in lieu of oath. The City Council shall make a record of such hearing, but the same need not be a verbatim record. Any party coming before the Council shall have the right to have such hearing recorded stenographically, but in such event the record need not be transcribed unless any party seeks judicial review of the order or action of the Council as herein provided and in such event the parties seeking such judicial review shall pay for the transcription and provide the Council with the original of the transcript so that it may be certified to the court.

(c) Subpoenas: The City Council President may issue or cause to be issued subpoenas requiring attendance and testimony of witnesses or the production of evidence, or both. A request for issuance of a subpoena shall be made by lodging with the Council President at least ten (10) days prior to the scheduled hearing date a written request for a subpoena setting forth the name and address of the party to be subpoenaed and identifying any evidence to be produced. Upon endorsement of a subpoena by the Council President or their duly appointed agent, the same shall be delivered to the Sheriff of Shelby County for service by any officer of the County, if the witness resides in the County. If the witness does not reside in the County, the Council President shall issue or cause to be issued a written request that the witness attend the hearing.

(d) Depositions: Upon agreement of all parties, the testimony of any person may be taken by deposition or written interrogatories. Unless otherwise agreed, the deposition shall be taken in a manner consistent with state regulations, with the City Council President to rule on such matters as would require a ruling by the court under such rules.

(e) Hearing procedure: The party at such hearing bearing the affirmative burden of proof

shall first call his or her witnesses, to be followed by witnesses called by other parties, to be followed by any witnesses which the City Council may desire to call. Rebuttal witnesses shall be called in the same order. The Council President shall rule on any evidentiary questions arising during such hearing and shall make such other rulings as may be necessary or advisable to facilitate an orderly hearing, subject to approval of the Council. The Council, the Manager, or his or her representative, and all parties shall have the right to examine any witness. The Council shall not be bound by or limited to rules of evidence applicable to legal proceedings.

(f) Appeal to City Council of Manager's order: Any person aggrieved by any order or determination of the Manager may appeal said order or determination to the City Council and have such order or determination reviewed by the Council under the provisions of this section. A written notice of appeal shall be filed with the Manager and with the City Council President, and such notice shall set forth with particularity the action or inaction the Manager complained of and the relief sought by the person filing said appeal. A special meeting of the City Council may be called by the Council President upon the filing of such appeal, and the Council may, in its discretion, suspend the operation of the order or determination of the Manager until such time as the Council has acted upon the appeal.

(g) Absence of City Council President: The City Council President Pro-Tempore shall possess all the authority delegated to the Council President by this section when acting in his or her absence or in his or her stead.

(h) Review of City Council's decision: Any person aggrieved by any final order of determination of the City Council hereunder may within fifteen (15) thereafter appeal therefrom to the Circuit Court of Shelby County or other court within Shelby County having jurisdiction by filing with the Council a written notice of appeal specifying the judgment or decision from which appeal is taken. In case of such appeal, the Council shall cause a transcript of all the proceedings in the cause to be certified to the court to which the appeal is taken and the cause in such court shall be tried do novo.

ORDINANCE NUMBER 859-18

AN ORDINANCE ESTABLISHING POST-CONSTRUCTION BEST MANAGEMENT PRACTICES FOR PERMANENT STORMWATER CONTROL STRUCTURES FOR THE CITY OF HELENA, ALABAMA

STORMWATER MANAGEMENT POST-CONSTRUCTION ORDINANCE

WHEREAS, the City of Helena operates under the requirements of the Alabama Department of Environmental Management (ADEM) National Pollutant Discharge Elimination System (NPDES) Permit; and

WHEREAS, this permit authorizes stormwater discharges from regulated small municipal separate storm sewer systems (MS4); and

WHEREAS, the City of Helena must be compliant with the ADEM NPDES Permit by developing, implementing, and enforcing a program to address post- construction stormwater management; and

WHEREAS, the City of Helena finds it necessary to enact an ordinance to address and enforce post-construction stormwater management standards on Qualifying Sites to prevent or minimize water quality impacts and ensure that the volume and velocity of pre-construction stormwater runoff is not significantly exceeded for the life of the property's use to the maximum extent practical (MEP).

NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HELENA, ALABAMA, AS FOLLOWS:

Section 1
DEFINITIONS

For the purposes of this ordinance, the following words and terms shall have the meaning assigned to them in this section:

Best Management Practices - (herein abbreviated as "BMP") - activities, prohibitions of practices, maintenance procedures and management practices designed to prevent or reduce the pollution of waters to the MS4. Best Management Practices also include treatment requirements, operating procedures and practices to control facility site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage and construction sites.

Green Infrastructure – a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services.

Hydrology – Hydrology refers to the physical characteristics of storm water discharge, including the magnitude, duration, frequency, rate of change, and timing of discharge.

Low Impact Development – Low Impact Development (LID) emphasizes conservation and use of on-site natural features and other features to protect water quality and reduce stormwater runoff. This approach minimizes the project's impervious surface and loss of natural open space and implements engineered, small-scale hydrologic controls aiming to replicate the pre-development hydrologic regime of watersheds through infiltration, filtering, storing, evaporating, and detaining stormwater runoff close to its source.

Non-structural BMPs - Non-structural BMPs may include but not be limited to the following: preservation of open spaces and vegetation, establishment of conservation easements, establishment of buffers along streams and other waters, maintenance of vegetation, BMP inspection and maintenance, planning for future development or redevelopment.

Qualifying Site - Qualifying Site is any new development site or redevelopment site that results in a total land disturbance of one or more acres and sites that disturb less than one acre but are a part of a larger common development or sale that would disturb one or more acres.

Structural BMPs - Structural BMPs may include, but not be limited to the following: detention/ retention devices, check dams, drainage swales, lined ditches, infiltration basins, porous pavement, outlet protection, velocity dissipation devices, slope protection, constructed wetlands, rain gardens, catch basin inserts, vegetated filter strips, and rain barrels.

Section 2
ADMINISTRATION

The City's Stormwater Manager or his or her duly authorized representative who is a qualified credentialed professional or who has had sufficient experience dealing with BMP design to enable them to enforce the provisions of this ordinance, including any individual or agency contracted to provide such service, shall be responsible, on behalf of the City, to enforce the provisions of this ordinance.

Section 3
POST-CONSTRUCTION BMP DESIGN

Section 3.1 Design Intent and Standards

(a) The post-construction BMPs for qualifying sites, which may include a combination of structural BMPs and/or non-structural BMPs including low impact development and green infrastructure practices, must be designed to reduce the discharge of pollutants and ensure that the volume and velocity of pre-construction stormwater runoff is not significantly exceeded and water quality is not adversely affected, to the maximum extent practicable, over the life of the property's use. These BMPs may include, but not be limited to:

i. Minimize the amount if impervious surfaces and/or increase the use of more pervious surfaces such as permeable pavers, permeable pavements, reinforced turf, etc.;
ii. Preserve and protect ecologically sensitive areas that provide water quality benefits;
iii. Provided vegetated buffers along waterways and reduce discharges to surface waters from pervious surfaces such as parking lots;
iv. Implement policies to protect trees, native soils and other vegetation; and
v. Minimize topsoil stripping and compacted soils where feasible.

(b) Landowners and developers are encouraged to incorporate the use of low impact development (LID) and green infrastructure where feasible. Refer to Section 3.2 for references on low impact development.

(c) Landowners and developers must develop and maintain best management practices to ensure, to the maximum extent practicable, that post-construction runoff mimics pre-construction hydrology of the site. A 1.1 inch rainfall over a 24-hour period preceded by a 72-hour antecedent dry period shall be the basis for the design and implementation of post- construction water quality BMPs.

(d) For controlling and minimizing runoff volume, peak flow rate and outlet velocity, two criteria shall be checked:

1. The post-development flows must be equal or less than the pre-development flows at the outfall point of the development.
2. No more than a 1% increase in flows will be allowed at a point downstream where the site area is approximately 10% of the drainage basin area (i.e. 10% downstream analysis). The 10% analysis point shall be the point downstream where the site drainage area is approximately 10% of the overall drainage basin area. If the outfall point of the development is approximately 10% or less of the overall drainage basin area, then the outfall point of the development will be the 10% analysis point.

   For the 10% downstream analysis, the design engineer shall:

   a. Identify all affected existing structures between lower limit of site and 10% percent analysis point and determine the impacts to these existing structures;
   b. Provide an overall pre-development vs. post-development description and analysis;
   c. Describe and show on a topographic map all existing culverts, obstructions or improvements, existing and potential erosion problems, and any known existing drainage complaints between the downstream property line and the 10% analysis point;

d. Provide pre-development vs. post-development hydrograph comparisons for the one-, two-, five-, ten- 25- 50- and 100-year storms for 10% analysis point;
e. Provide a detailed written description of the first 500 feet downstream of the site including at least one photograph looking downstream with some object included in the photograph for scale;
f. If the 10% downstream analysis indicates that adverse impacts are expected, provide storm water detention/retention in basin(s) for the one-, two-, five-, ten-, 25-, 50- and 100-year storm event. A 1-percent increase may be allowable if no existing adverse conditions exist.

(e) Where detention or retention ponds are used to reduce peak flows and/or velocities, these ponds shall have the following design criteria:

1. The base design storm for detention pond design shall be the 25-year, 24-hour storm. The two-, five-, ten-, 50- and 100-year storm events shall also be checked to determine if there are any adverse impacts for these storms.
2. All ponds must have at least 12 inches of freeboard based on the 100-year storm.
3. The emergency spillway shall be designed to convey the 100-year storm. The overflow spillway shall be sodded, paved or riprapped as required to prevent erosion. In lieu of a spillway, an overflow, designed to convey the 100-year storm, may incorporated into the outlet control structure.
4. All designs should consider the ultimate saturation of the development and tributary.
5. A low flow ditch/swale with a minimum slope of 1% for grass or 0.5% if paved shall be included in the bottom of the pond to the outfall structure.
6. The outlet control structure shall have a trash rack(s) with a maximum opening of four inches.
7. If the height of the sides of the pond/dam are above 10', additional stability analysis may be required.
8. The City may require that ponds be enclosed with a minimum five-foot-tall black, vinyl coated chain link fence with at least one four-foot wide access gate and one 10' wide gate for maintenance vehicle access. Factors in determining the need for fencing may include the size of the pond, the depth of the water in the pond, the location of the pond on the site, type and density of adjacent development (residential, commercial, institutional, etc.). In areas highly visible from public right-of-way, the City may require that the pond be screened from view with landscape planting. The developer or engineer should coordinate with the City to determine the need for fencing or landscaping around detention ponds.
9. The design engineer shall submit a no-adverse impacts letter.
10. Any requests for deviations from these detention pond requirements shall be filed with the City Building Official in the form of a variance request and shall be accompanied by technical engineering data concerning the unusual conditions, hardships, and proposed deviations.

(f) Downstream watercourses and receiving conveyances shall be analyzed to determine post-construction 25-year flow channel velocities and stability of the channel bottom and sides. If the stability of the existing channel bottom and/or sides are not stable, detention, channel improvements/protection or other best management practices (BMPs) may be required. The design engineer shall submit calculations showing peak flows, flow depths, flow velocity, channel stability and existing and/or proposed channel cross section and channel lining for review in the storm water management/drainage design

report submitted as part of the plan review process.

Section 3.2 Design References

(a) By reference in this Section, the City adopts the following as design references to meet the design standards:
   1. The latest version of the *Alabama Handbook for Erosion Control, Sedimentation Control and Stormwater Management on Construction Sites and Urban Areas, Volumes 1 and 2.*
   2. The latest version of the *Low Impact Development Handbook for the State of Alabama.*
   3. Any storm water design manual approved by the City that meets the design requirement of this ordinance.

Section 4
APPLICATION REQUIREMENTS

As part of the Storm Water Discharge Permit application, all Qualifying Sites shall include the following components:

Section 4.1 Post-Construction BMP Design and Construction

(a) Procedures and strategies of the structural BMPs and/or non-structural BMPs that meet the design standards for Qualifying Sites found in Section 3 of this ordinance will be submitted to the City for review and approval. A post-construction BMP plan shall be part of the construction plans for Qualifying Sites and submitted to the City for review and approval as an integral part of the site-plan approval process.

(b) The person or entity that will be responsible for the long-term operation and maintenance of the post-construction BMPs shall be shown in the post-construction BMP plans and in a note on the subdivision or development plat.

(c) Submittal to the City of a certified as-built of the BMPs and a letter of substantial compliance from the design engineer are required prior to approval of the final subdivision plat or within 30 days after completion of construction, whichever is sooner.

Section 4.2 Post-Construction BMP Inspection Plan

(a) The developer/owner/operator of the post-construction BMPs noted in Section 4.1(b) shall perform an inspection by the BMPs at least once per year to ensure that design standards are being met. Inspection reports including corrective actions for poorly functioning BMPs and routine maintenance records for BMPs shall be submitted to the City on an annual basis prior to September 30. The City will make these inspections available to ADEM upon request. The minimum documentation requirements for inspections are as follows:
   1. Site name, location, and address
   2. Site owner and responsible party/operator information (name, address, phone number, fax, and email)
   3. Inspection date(s)
   4. Facility type
   5. Description of the type and location of the BMPs that must be inspected and the condition of BMP's needed to ensure proper functioning. Description of the existing storm water BMP condition may include the quality of: vegetation and

soils, inlet and outlet channels and structures, embankments, slopes, and safety benches; permeable paving; spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures;

6. Photographic documentation of all critical storm water BMP components;
7. Specific maintenance items or corrective actions needed by the owner/operator of the storm water control or BMP;
8. Name and signature of qualified inspector
9. Maintenance agreements for long-term BMP operations and maintenance.

Section 4.3 Post-Construction BMP Operation and Maintenance Plan

(a) The landowner or developer shall develop a Post-Construction BMP Operation and Maintenance Plan which shall be submitted to the City for review and approval as part of the as-built plans submittal and approval process. The plan shall identify the necessary recurring maintenance and operational activities and schedule of those activities necessary to ensure that the BMPs continue to meet the original design intent and standards of this ordinance. The Operation and Maintenance Plan shall also designate the party that is responsible and funding mechanism necessary to carry out the Plan.

(b) One or more of the following shall be required (as determined by the City) to establish the responsible party for long-term operation and maintenance. The document(s) shall be provided to the City for review. Upon approval, an executed copy shall be put on file in the Building, Planning and Development Department:

1. The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party.
2. Written conditions in the sales or lease agreement that require the buyer or lessee/tenant to assume responsibility for maintenance.
3. Written conditions in project conditions, covenants, and restrictions for residential properties assigning maintenance responsibilities to a home/property owner's association or other appropriate group, for maintenance of structural and treatment control management practices.
4. Any other legally enforceable agreement that assigns permanent responsibility for maintenance of structural or treatment control management practices to a person or entity.

Section 5
ENFORCEMENT AND ABATEMENT

In the event that the BMPs do not meet the design, operation, or maintenance standards required by this ordinance, the City shall notify, in writing, the party responsible for the operation and maintenance of the BMPs. Upon receipt of that notice, the responsible party shall have 14 calendar days, or such additional time as the City shall determine to be reasonably necessary to complete the action, to make to address deficiencies, perform maintenance and repairs of the BMPs in an approved manner. In the event that corrective action is not undertaken within that time, the City may correct the violation of the design standards, operation, or maintenance by performing all necessary work to place the BMPs in proper working condition. The cost of any corrective action by the City under this Section shall be billed to the responsible party. If the responsible party refuses to pay the bill, the City is entitled to bring an action against the responsible party to pay, file a lien against the property, or both. Costs shall include interest, collection fees, and reasonable attorney fees.

The City shall also have the authority to issue a Stop Work Order on any other components of the development to ensure that the BMPs are properly installed and maintained.

Section 6
MISCELLANEOUS

Section 6.1 Notices.

(a) Whenever the City is required or permitted to give a notice to any party, such notice must be in writing. Such notice or document may be delivered by personal delivery, certified mail (return receipt requested), registered mail (return receipt requested) or a generally recognized carrier, to the address of such party which is in the records of the City or is otherwise known to the City.

Section 6.2 References.

(a) Whenever a Section is referred to in this ordinance, unless the context clearly indicates the contrary, such reference shall be to a section of this ordinance.

Section 6.3 Severability.

(a) The provisions of this ordinance are severable. If any part of this ordinance is determined by a court of law to be invalid, unenforceable or unconstitutional, such determination shall not affect any other part of this ordinance.

Section 6.4 Captions.

(a) The captions of Sections and sections are for the purpose of reference only, and such captions shall not affect the meaning of any provision of this ordinance.

Section 6.5 Ultimate Responsibility.

(a) The standards set forth herein and promulgated pursuant to this ordinance are minimum standards. Therefore, this ordinance does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

Section 6.6 Effective Date.

This Ordinance Number 859-18 shall be published/posted as required by Alabama Law and shall become effective on October 1, 2018.

ORDINANCE 859-18 DONE, ORDERED, ADOPTED and APPROVED this the 24th day of September, 2018.

[SEAL]

ATTEST:

Amanda C. Traywick, City Clerk

Mark R. Hall, Mayor

Leigh Hulsey, Council Member

absent
Mike Jones, Council Member

Alice Lobell, Council Member

absent
Laura Joseph, Council Member

Harold Woodman, Council Member

City of Helena
Supplement to Section 4.05 (Storm Water Drainage and Grading) of the Subdivision Regulations - Storm Drainage Requirements
Revised June 21, 2017 – Pending Approval

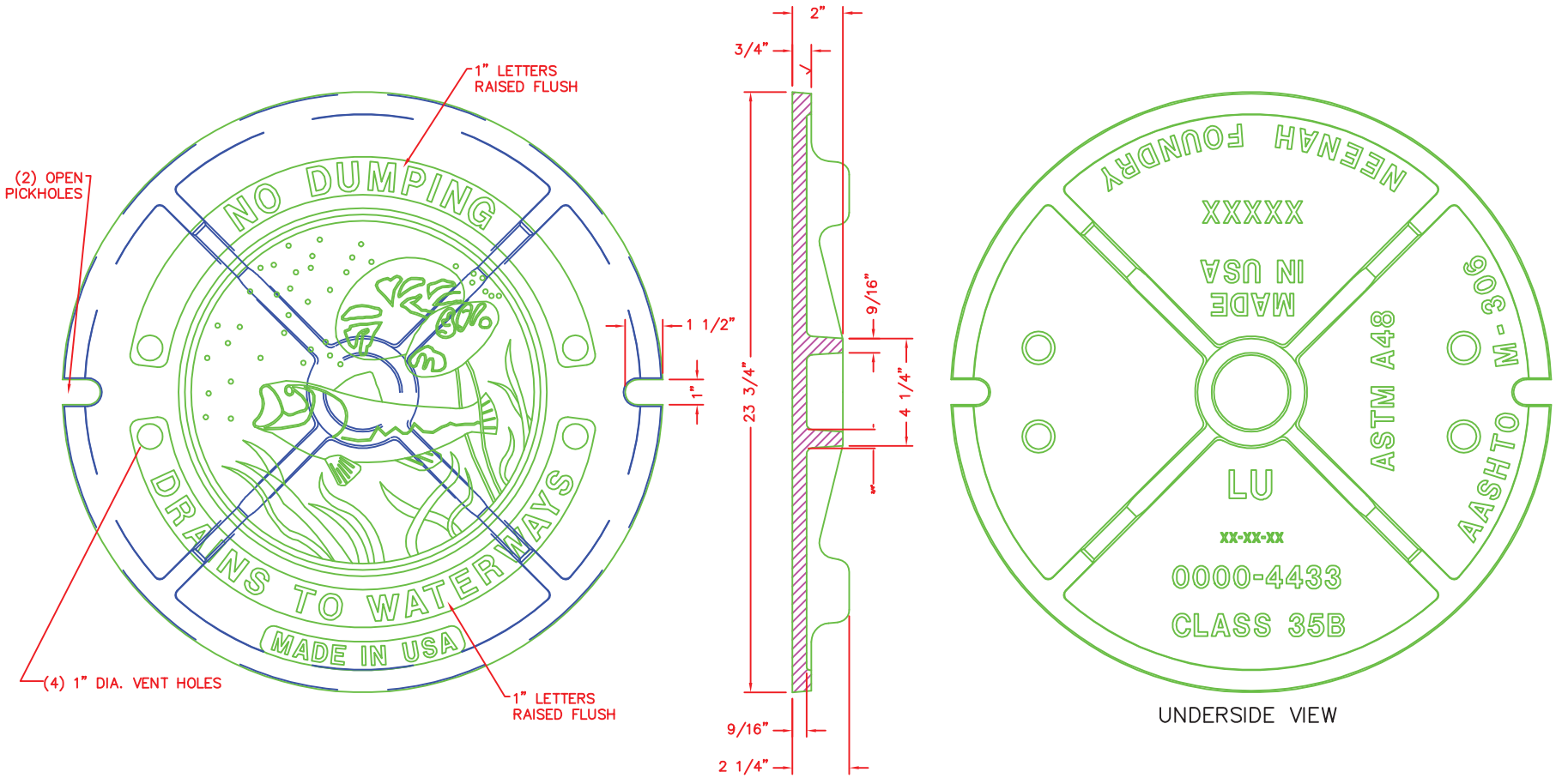
1. Two criteria shall be checked:
    a. The post-development flows must be equal or less than the pre-development flows at the outfall point of the development.
    b. No more than a 1% increase in flows will be allowed at the outfall point or at a point downstream where the site area is approximately 10% of the drainage basin area (i.e. 10% downstream analysis)
        i. The 10% analysis point shall be the point downstream where the site drainage area is approximately 10% of the overall drainage basin area. If the outfall point of the development is approximately 10% or less of the overall drainage basin area, then the outfall point of the development will be the 10% analysis point.
        ii. Identify all affected existing structures between lower limit of site and 10% percent analysis point and determine the impacts to these existing structures;
        iii. Pre-development vs. post-development analysis;
        iv. Describe and show on a topographic map all culverts, obstructions, existing and potential erosion problems, existing improvements, and any known existing drainage complaints between the downstream property line and the 10% analysis point;
        v. Pre-development vs. post-development hydrograph comparisons for the one-, two-, five-, ten- 25- 50- and 100-year storms for 10% analysis point
        vi. A detailed written description of the first 500 feet downstream of the site; at least one photograph looking downstream with some object included in the photograph for scale shall be included;
        vii. If the 10% downstream analysis indicates that adverse impacts are expected, provide storm water detention in basin(s) for the one-, two-, five-, ten-, 25-, 50- and 100-year storm event. A 1-percent increase may be allowable if no existing adverse conditions exist.

2. Detention pond design criteria
    a. The base design storm for detention pond design shall be the 25-year, 24-hour storm. The two-, five-, ten-, 50- and 100-year storm events shall also be checked to determine if there are any adverse impacts for these storms.
    b. All ponds must have at least 12 inches of freeboard based on the 100-year storm.
    c. The emergency spillway shall be designed to convey the 100-year storm. The overflow spillway shall be sodded, paved or riprapped as required to prevent erosion. In lieu of a spillway, the overflow, designed to convey the 100-year storm, may incorporated into the outlet control structure.
    d. All designs should consider the ultimate saturation of the development and tributary.
    e. A low flow ditch/swale with a minimum slope of 1% for grass or 0.5% if paved shall be included in the bottom of the pond to the outfall structure.
    f. The outlet control structure shall have a trash rack(s) with a maximum opening of four inches.

g. If the height of the sides of the pond/dam are above 10', additional stability analysis may be required.
h. The City may require that ponds be enclosed with a minimum five-foot-tall black, vinyl coated chain link fence with at least one four-foot wide access gate and one 10' wide gate for maintenance vehicle access. Factors in determining the need for fencing may include the size of the pond, the depth of the water in the pond, the location of the pond on the site, type of development (residential, commercial, institutional, etc.). In areas highly visible from public right-of-way, the City may require that the pond be screened from view with landscape planting. The developer or engineer should coordinate with the City to determine the need for fencing or landscaping around detention ponds.
i. The design engineer shall submit a no-adverse impacts letter.
j. Any requests for deviations from these detention pond requirements shall be filed with the City Building Official in the form of a variance request and shall be accompanied by technical engineering data concerning the unusual conditions and proposed deviations.

3. Analyze downstream watercourses and receiving conveyances to determine 25-year flow channel velocities and stability of the channel bottom and sides. If the stability of the existing channel bottom and/or sides are not stable, detention, channel improvements/protection or other countermeasures may be required. Provide calculations with cross-section, depth of flow and velocity in channel.

Example of Manhole Cover Required for New Developments



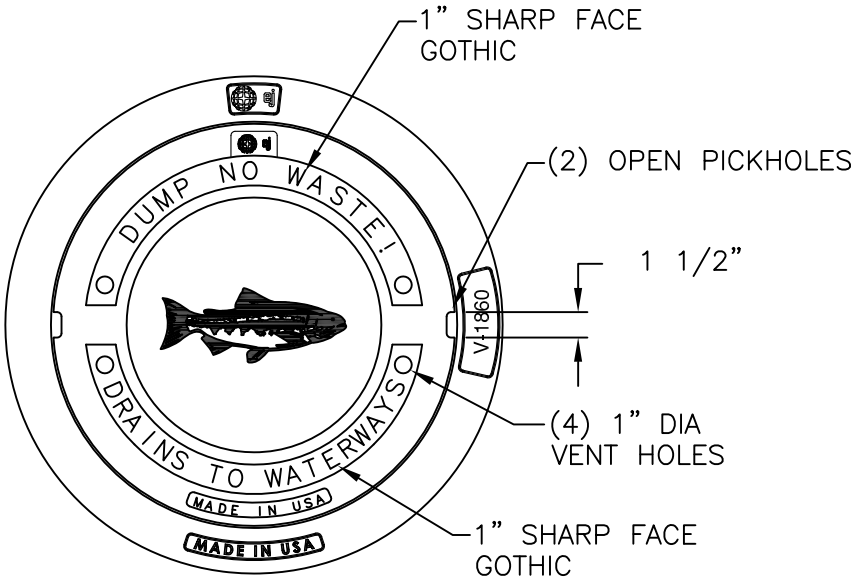
UNDERSIDE VIEW

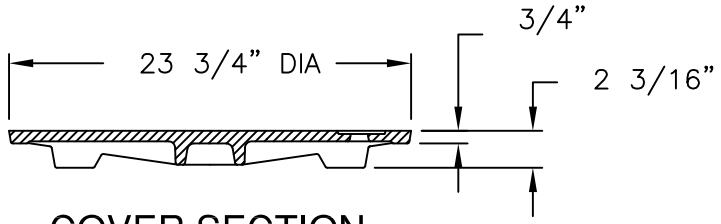
MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT UNLESS SPECIFIED ON PURCHASE ORDER
WEIGHT: 56#

DR. KRH	SCALE 1/4"=1"	TITLE: R-DFGEORGIA VENTED LID w/ LOGO	
CH.			
APP.	NEENAH FOUNDRY		
DATE 11/26/2013	NEENAH WISCONSIN 54956 PHONE 800-558-5075	NF-00004433	B
www.neenahfoundry.com	LINCOLN, NEBRASKA 68529 PHONE 800-234-7466		

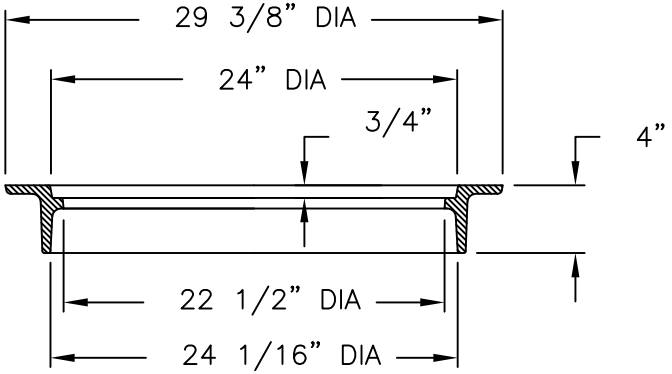
CAD DWG. REF: 00004433.DWG- 1

V1860FR V1860CV Assembly





COVER SECTION



FRAME SECTION

Product Number

41860003

Design Features

-Materials
  Frame
    Gray Iron (CL35B)
  Cover
    Gray Iron (CL35B)

-Design Load
  Heavy Duty
-Open Area
  n/a
-Coating
  Undipped
-√Designates Machined Surface

Certification

- ASTM A48
-
-
-Country of Origin: USA

Major Components

41860010
41860066

Drawing Revision

10/13/2008 Designer: GAD
07/28/2016 Revised By: DVD

Disclaimer

Weights (lbs./kg) dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

Contact

800 626 4653
ejco.com

SWMPP Appendix D – Public Outreach

WORK ORDER/COMPLAINT
CITY OF HELENA

REPORTED TO: _____

NAME OF HOMEOWNER: _____

ADDRESS: _____

TELEPHONE NUMBER: _____

LOCATION OF PROBLEM:

PROBLEM:

_____

_____

_____

_____

PLEASE CONTACT THEM WHEN YOU DECIDE WHAT TO DO.

STEPS TAKEN TO RESOLVE
ISSUE_____

_____

_____

_____

GIVEN TO: MAYOR PUCKETT

DEJAY JONES

JASON POE

BRIAN HINDS

What is Low Impact Development (LID)?

Ever wish you could simultaneously lower your site infrastructure costs, protect the environment, and increase your project's marketability? With LID techniques, you can. LID is an ecologically friendly approach to site development and storm water management that aims to mitigate development impacts to land, water, and air. The approach emphasizes the integration of site design and planning techniques that conserve the natural systems and hydrologic functions of a site.

Source: Prince George's County DER

Residential Lot with Bioretention

Somerset Development
Prince George's County, MD

LID Benefits

In addition to the practice just making good sense, LID techniques can offer many benefits to a variety of stakeholders.

Developers

- Reduce land clearing and grading costs
- Potentially reduce infrastructure costs (streets, curbs, gutters, sidewalks)
- Reduce storm water management costs
- Potentially reduce impact fees and increase lot yield
- Increase lot and community marketability

Municipalities

- Protect regional flora and fauna
- Balance growth needs with environmental protection
- Reduces municipal infrastructure and utility maintenance costs (streets, curbs, gutters, sidewalks, storm sewer)
- Increase collaborative public/private partnerships

Environment

- Preserve integrity of ecological and biological systems
- Protect site and regional water quality by reducing sediment, nutrient, and toxic loads to water bodies
- Reduce impacts to local terrestrial and aquatic plants and animals
- Preserve trees and natural vegetation

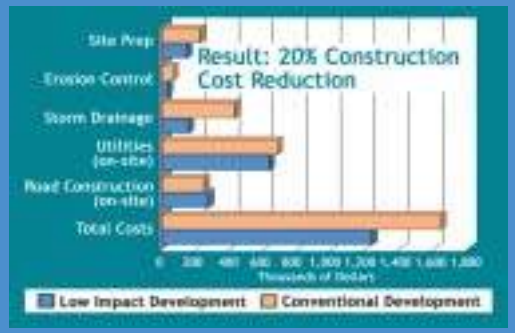
Cover Photo: R. Arendt

Case Study

Kensington Estates is a conventional development on 24 acres consisting of 103 single-family homes in Pierce County, WA. A study was conducted to redesign the site using a new state storm water model and to illustrate the full range of LID practices and technologies available to developers.

Overall, the redesigned LID site could have:

- Resulted in construction cost savings of over 20%;
- Preserved 62% of the site in open space;
- Maintained the project density of 103 lots;
- Reduced the size of storm pond structures and eliminated catchments and piped storm conveyances; and
- Achieved "zero" effective impervious surfaces.



Cost Comparison: LID vs. Conventional Development

For More Information

- Low Impact Development Center
  http://www.lowimpactdevelopment.org
- Prince George's County, Maryland
  http://www.goprincegeorgescounty.com
- NAHB Research Center Toolbase Services
  http://www.toolbase.org
- U.S. EPA
  http://www.epa.gov/owow/nps/urban.html

NAHB RESEARCH CENTER

*Assumes paving costs of $15/sq. yd.

Printed on recycled paper with soy ink

Builder's Guide to Low Impact Development

Would you be interested in saving upwards of $70,000* per mile in street infrastructure costs by eliminating one lane of on-street parking on residential streets?

Did you know that communities designed to maximize open space and preserve mature vegetation are highly marketable and command higher lot prices?

Are you aware that most homeowners perceive Low Impact Development practices, such as bioretention, as favorable since such practices are viewed as additional builder landscaping?

Did you know that by reducing impervious surfaces, disconnecting runoff pathways, and using on-site infiltration techniques, you can reduce or eliminate the need for costly storm water ponds?

LID Site Planning and Design Concepts

Successful LID projects simultaneously reduce land development and infrastructure costs while protecting a property's natural resources and functions. During the development process, the designer, developer, and reviewing agency should work together to identify solutions that integrate the following concepts:

- Preserve Open Space and Minimize Land Disturbance;
- Protect and Incorporate Natural Systems (wetlands, stream/wildlife corridors, mature forests) as Design Elements;
- Utilize Neo-Traditional Street and Lot Layouts and Designs; and
- Decentralize and Micromanage Storm Water at its Source Using LID Storm Water Management Practices.

LID and Storm Water Management

LID aims to mimic natural hydrology and processes by using small-scale, decentralized practices that infiltrate, evaporate, and transpire rainwater. Specifically, LID aims to:

- Minimize impervious surfaces;
- Disconnect hydrologic elements (roofs, downspouts, parking areas);
- Maintain/increase flow paths and times; and
- Utilize decentralized treatment practices.

Bioretention Areas
Storm water directed to these shallow topographic depressions in the landscape is filtered, stored, and infiltrated into the ground using specialized vegetation and engineered soils.

Grassed Swales
Water moving through these systems is slowed, filtered, and percolated into the ground. These systems can act as low cost alternatives to curbs, gutters, and pipes.

Source: Low Impact Development Center

LID Lot Level Source Controls

Preserve Open Space and Minimize Land Disturbance

Source: Bielinski Homes

Community Open Space

Bielinski Homes
Waukesha, WI

Decentralize and Micromanage Storm Water at its Source using LID Storm Water Management Practices

Source: Low Impact Development Center

Grassed Swales

Somerset Development
Prince George's County, MD

From Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks, by Randall G. Arendt. Copyright (©) 1996 by Island Press. Reprinted by permission of Island Press, Washington, D.C. and Covelo, CA.

Protect and Incorporate Natural Systems as Design Elements

Source: Applied Ecological Services, Inc.

Wetland System

Prairie Crossing
Grayslake, IL

Utilize Neo-Traditional Street and Lot Layouts and Designs

Source: DPZ & Co.

Bowman Park

Vermillion Community
Vermillion, NC

STORMWATER
THE BOOK

CITY OF HELENA
18 77
ALABAMA

WHERE DOES ALL THE WATER GO?

Whenever it rains or snows, water runs off the land and into our storm drain system. The storm drain system is made up of gutters, storm drains (the holes in the curb) and pipes. The water that runs off the land is called stormwater. The storm drain system carries the stormwater to local waterways. The water that runs off into the storm drain system never passes through a water treatment plant, so anything the stormwater picks up, or is placed in it along the way, will be carried UNTREATED to the nearest waterway.

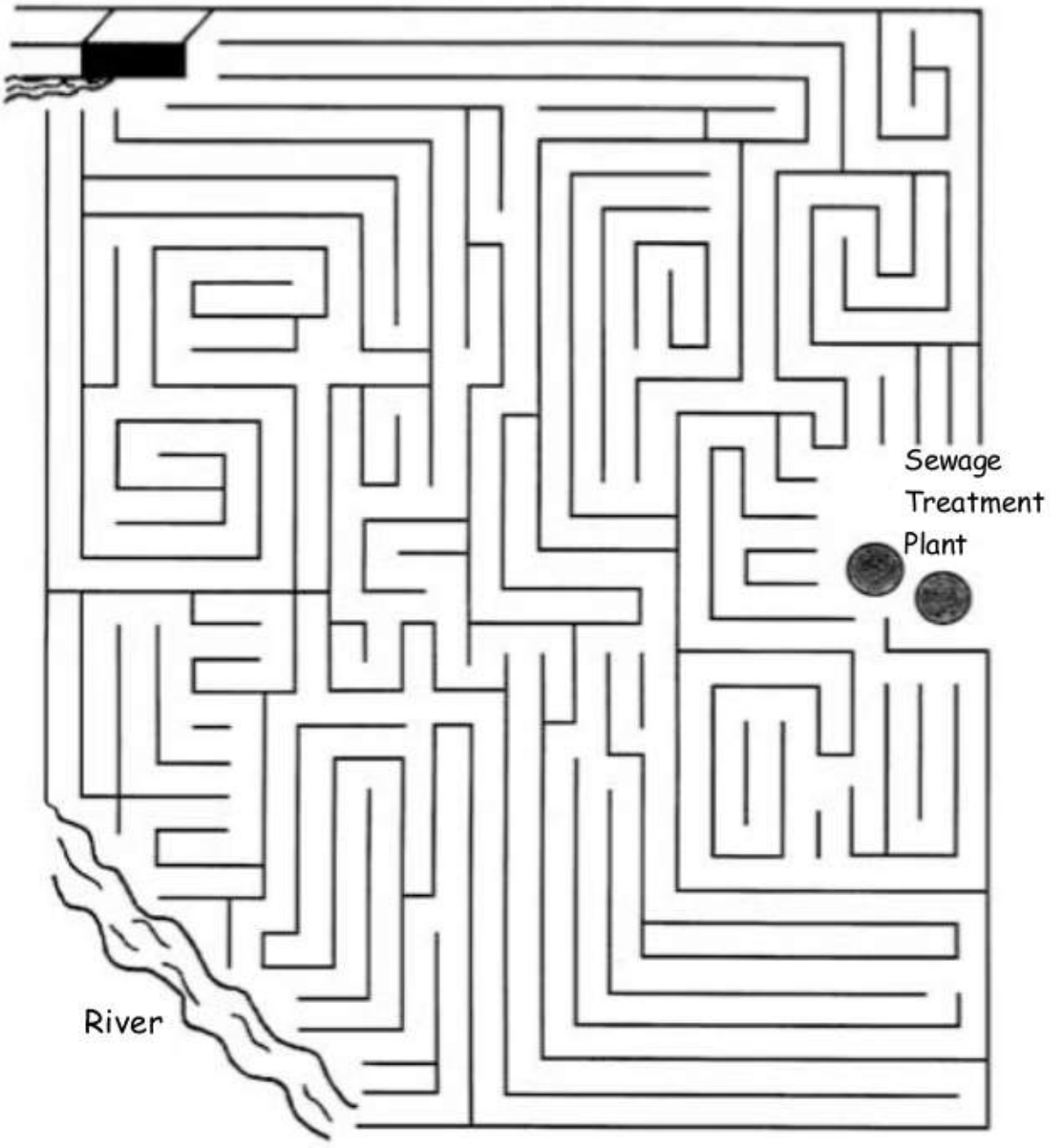
WHO LIVES IN A WATERSHED?

A watershed is the land that water flows across or under on its way to a stream river, lake, or ocean. Water runs to the lowest point in the watershed.

At the bottom of the page, list the animals in this picture that live in a watershed.

THE A-MAZING STORMWATER STORY

Everyone knows that water flows. But who knows where the water goes? Follow the gutter water through the storm drain system to find out.



Does gutter water go to the sewage treatment plant or to the river?_____

STORMWATER POLLUTION

The untreated water in the storm drain system can carry pollutants to nearby waterways. Things that are put on the ground can be washed into our storm drains by rain or overwatering our yards. When carried by stormwater, pollutants, such as motor oil and antifreeze from cars, fertilizers and pesticides on our lawns and gardens, pet waste, paint, trash, and soap can end up in the waterways, making the animals that live there very sick. Even things like soil and leaves can be pollutants -- they clog storm drains and choke up our waterways. Sometimes, people who don't know that stormwater isn't treated dump or deliberately wash pollutants directly into the storm drains. Of course, you, Croaker and Stormy know where all these pollutants go.

FIND THE POLLUTANTS

S	P	A	I	N	T	N	O	I	S	H	S	E
V	N	F	L	S	H	K	I	E	W	E	S	R
Y	E	T	S	G	O	M	D	V	D	A	L	E
P	D	C	I	S	E	I	O	I	J	E	P	Z
E	I	D	Q	U	O	P	C	O	U	Z	A	I
T	P	Z	B	I	R	I	N	X	C	E	Q	L
W	O	A	T	D	T	I	L	E	R	E	S	I
A	E	R	W	S	R	S	T	M	O	R	C	T
S	M	S	E	V	A	E	L	T	R	F	J	R
T	S	P	A	K	S	J	F	L	O	I	D	E
E	O	T	O	S	H	E	L	S	F	T	X	F
R	Z	N	F	A	D	V	P	E	O	N	T	C
A	V	I	N	J	Y	L	E	W	C	A	K	I
L	M	O	T	O	R	O	I	L	K	U	P	S

Stormy has found many pollutants in the stream in which he lives. All of these pollutants were carried to the stream in the stormwater and are mentioned on page 4. Can you find the stormwater pollutants in the box above? Some words may be backwards. When you find them, write the words in the space provided.

1) _____ 6) _____

2) _____ 7) _____

3) _____ 8) _____

4) _____ 9) _____

5) _____ 10) _____

FROM YOUR HOME TO OURS

Pollution in our neighborhood can travel to local streams and rivers through the storm drain system. Below is a list of steps in this polluting process, but the steps are out of order. Write out the steps on the lines provided in the order that they would normally occur, with number one being the first step and number five being the last step.

The storm drain carries the polluted stormwater to the stream.

1. _____

Paint and other pollutants are left outside.

2. _____

Fish and other animals that live in the stream get sick and might die.

3. _____

Rain water washes over the pollutants and carries them into the street.

4. _____

Polluted rain water flows down the street and into the storm drain.

5. _____

WATER POLLUTION AFFECTS...

Unscramble the words below to find out who is harmed by water pollution.

HIFS _____

SRBDI _____

LEEPOP _____

USKDC _____

GOFRS _____

LMNAISA _____

OYU _____

NLTAPS _____

GUSB _____

YREVNOEE _____

HELPING TO KEEP GUTTERS CLEAN

There are lots of ways you can help prevent stormwater pollution and keep your water (and our home!) clean. You can help by: 1) placing litter in trash cans and recycling materials, such as aluminum, paper, and plastic bottles; 2) picking up pet waste and putting it in the trash; 3) washing the family car in an area that doesn't run off to a storm drain, such as your lawn or the car wash; 4) watering the lawn for shorter periods of time so that water doesn't run off; and; 5) rake or sweep up grass, leaves and twigs from your yard, rather than hosing it away or using a leaf blower. The plant material you collect can be used to make compost.

You can get your parents to help too! Tell them that things like paint, antifreeze and chemical cleaners need to be taken to a household hazardous waste collection facility. Also, ask them to repair any leaks their cars have and to recycle used motor oil and filters.

LEND A HELPING HAND

To help prevent stormwater pollution, Stormy puts recyclables in the recycle bin and litter in the trash can.

Write the appropriate words from the recycle bin in the blanks to find out what else you can do to prevent pollution.

1. _____ the driveway instead of hosing debris into the street.

2. _____ pet waste and put it in the trash rather than leave it lying on the ground.

3. _____ run off, water the lawn for shorter periods of time.

4. Ask your parents to _____ used motor oil.

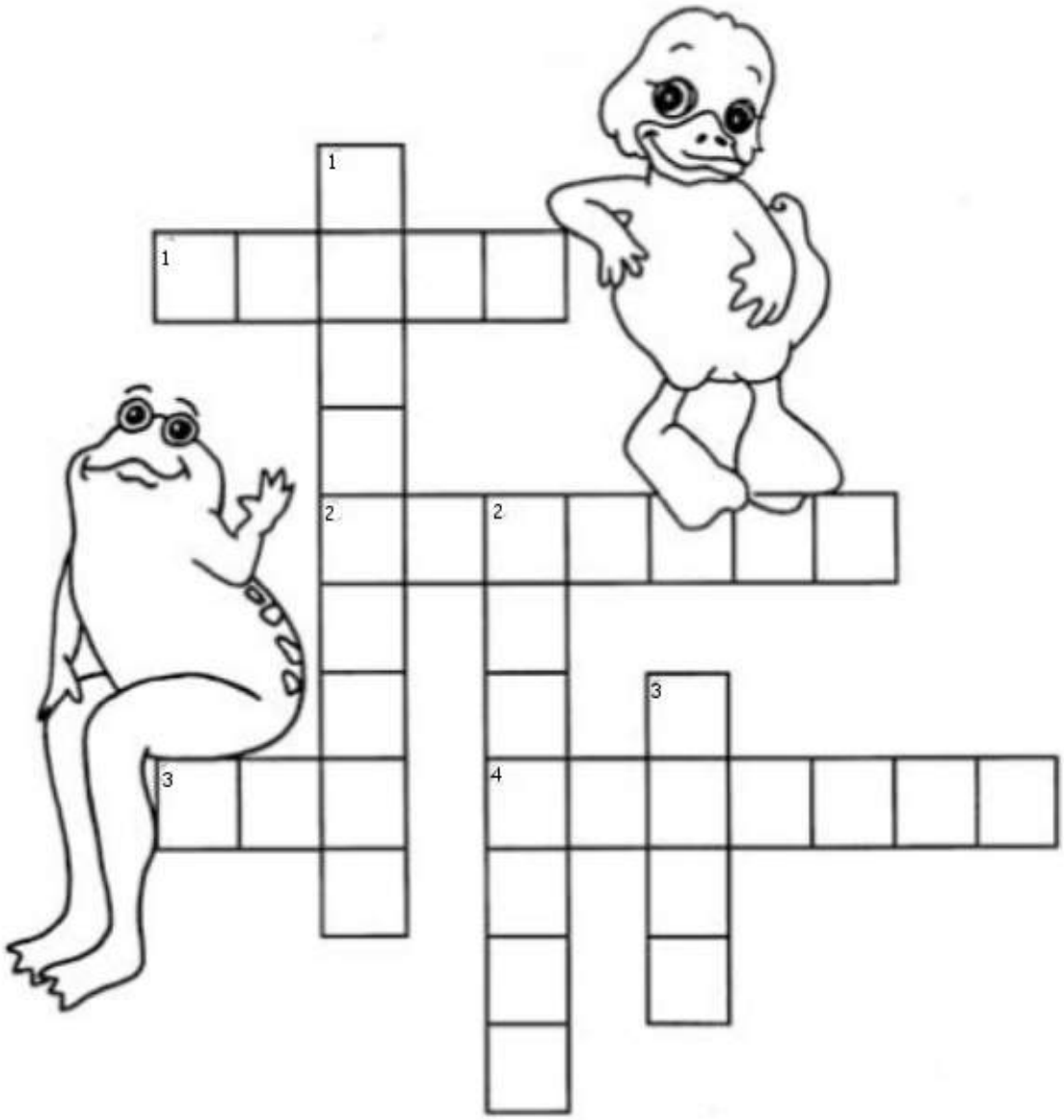
5. _____ the car on the lawn or at the car wash, so soap, dirt and oil don't end up in the storm drain.

6. _____ by composting yard debris, such as grass clippings, leaves and twigs, and use the compost in your garden.

7. _____ Your parents that left over paint and antifreeze need to be taken to a house-hold hazardous waste collection facility.

CLEAN WATER CROSSWORD

Decide what words belong in the boxes by reading the clues.



ACROSS

1. The place litter and pet waste belongs.

2. What you should do with used motor oil and filters.

3. Who can help prevent stormwater pollution?

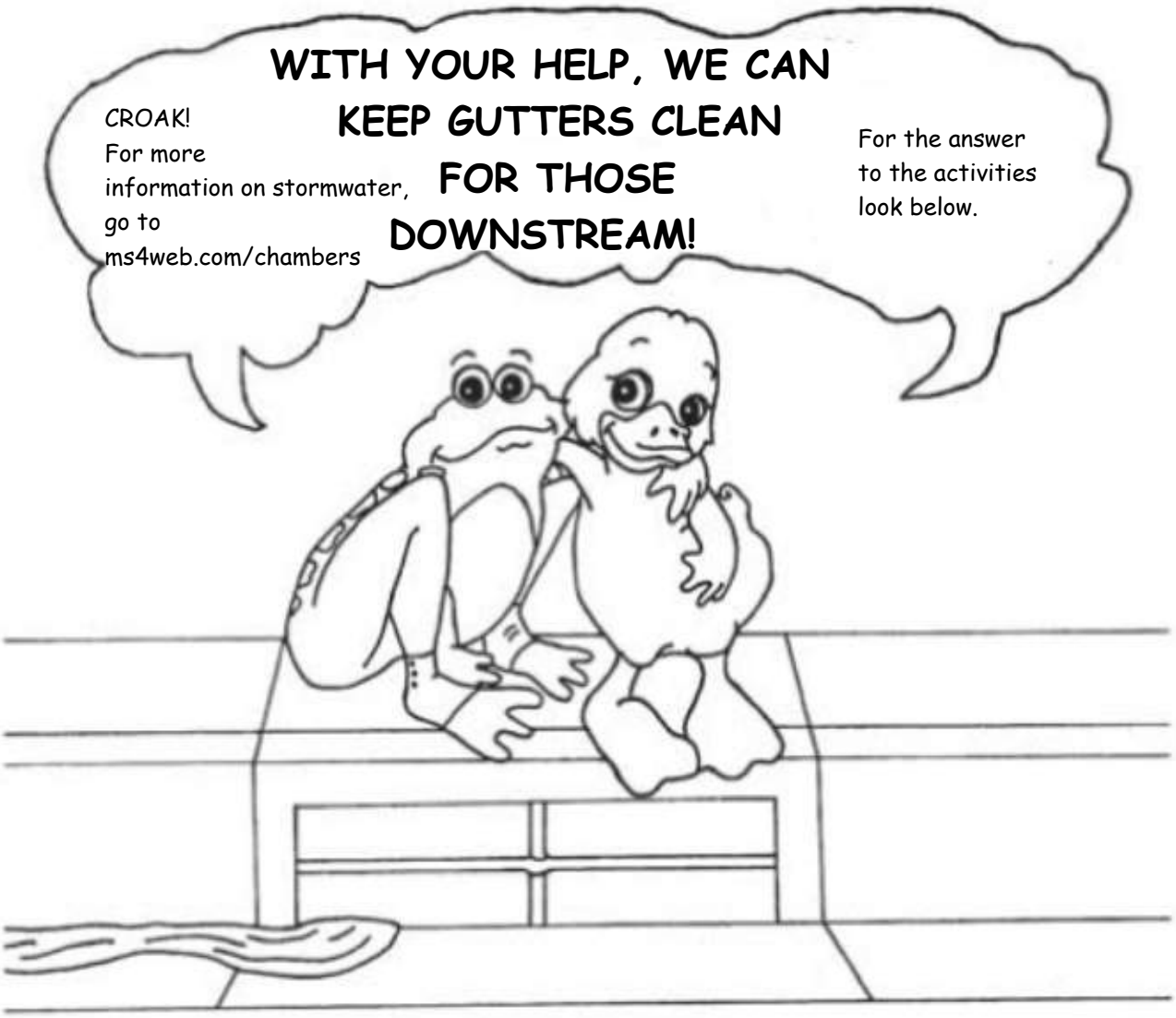
4. You can recycle _____ bottles.

DOWN

1. Left over paint, antifreeze and household cleaners are _____ wastes, and should be taken to a collection facility.

2. You can make it out of yard clippings.

3. Where, at home, you can wash the car without having soap, dirt and oil flowing to the storm drain.



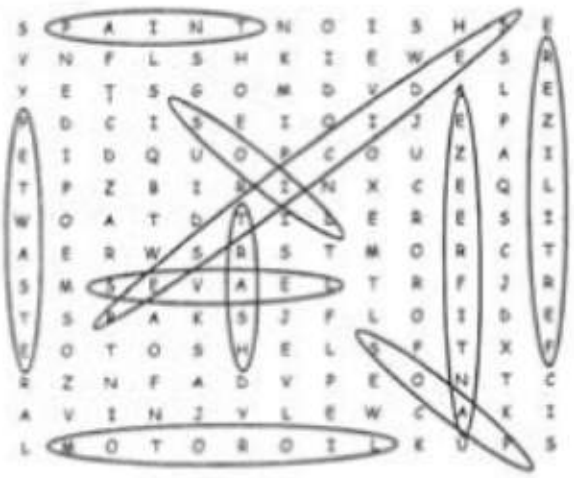
Page 2

Everyone lives in a watershed, so you should have listed all of the animals (people included!).

Page 3

The stormwater goes straight to the river, it does not go to the water treatment plant to be cleaned.

Page 5



PAINT
PETWASTE
PESTICIDES
SOIL
TRASH
LEAVES
MOTOROIL
SOAP
ANTIFREEZE
FERTILIZER

Page 6

1)paint and other pollutants are left outside. 2) Rain water washes over the pollutants and carries them in to the street. 3)Polluted rain water flows down the street and into the storm drain. 4) The storm drain carries the polluted stormwater to the stream. 5) Fish and other animals that live in the stream get sick and might die.

Page 7

Fish, Birds, People, Ducks, Frogs, Animals, You, Plants, Bugs, Everyone

Page 9

1) Sweep, 2) Pick up, 3) Prevent, 4) Recycle, 5) Wash, 6) Reduce Waste, 7) Tell

Page 10

Across: 1) Trash, 2) Recycle, 3) You, 4) Plastic

Down: 1) Hazardous, 2) Compost, 3) Lawn

LAWN TODAY

HERE TOMORROW

Many things you put on your yard end up in the water near you.

Learn more about storm water issues affecting our City at www.cityofhelena.org

CITY OF HELENA 18 77 ALABAMA


IF YOU THINK
PICKING UP
DOG POOP IS
UNPLEASANT,
TRY SWIMMING IN IT.
Pet Waste Pollutes Our Rivers,
Lakes & Streams
CITY OF HELENA
18
77
ALABAMA
WWW.CITYOFHELENA.ORG

Stormwater and the **Construction Industry**

Protect Natural Features

Bad

Good

- Minimize clearing.
- Minimize the amount of exposed soil.
- Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
- Protect streams, stream buffers, wild woodlands, wetlands, or other sensitive areas from any disturbance or construction activity by fencing or otherwise clearly marking these areas.

Construction Phasing

Bad

Good

- Sequence construction activities so that the soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Install key sediment control practices before site grading begins.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the land has been graded to its final contour.

Vegetative Buffers

Bad

Good

- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by mowing or replanting periodically to ensure their effectiveness.

Silt Fencing

Bad

Good

- Inspect and maintain silt fences after each rainstorm.
- Make sure the bottom of the silt fence is buried in the ground.
- Securely attach the material to the stakes.
- Don't place silt fences in the middle of a waterway or use them as a check dam.
- Make sure stormwater is not flowing around the silt fence.

Maintain your BMPs!

www.epa.gov/npdes/menuofbmps

Site Stabilization

Bad

Good

- Vegetate, mulch, or otherwise stabilize all exposed areas as soon as land alterations have been completed.

Construction Entrances

Bad

Good

- Remove mud and dirt from the tires of construction vehicles before they enter a paved roadway.
- Properly size entrance BMPs for all anticipated vehicles.
- Make sure that the construction entrance does not become buried in soil.

Slopes

Bad

Good

- Rough grade or terrace slopes.
- Break up long slopes with sediment barriers, or under drain, or divert stormwater away from slopes.

Dirt Stockpiles

Bad

Good

- Cover or seed all dirt stockpiles.

Storm Drain Inlet Protection

Bad

Good

- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the rock size is appropriate (usually 1 to 2 inches in diameter).
- If you use inlet filters, maintain them regularly.

Contact name and agency
Contact phone and e-mail

Stormwater and the Construction Industry

Planning and Implementing Erosion and Sediment Control Practices

The construction industry is a critical participant in the nation's efforts to protect streams, rivers, lakes, wetlands, and oceans. Through the use of best management practices (BMPs), construction site operators are the key defense against erosion and sedimentation.

As stormwater flows over a construction site, it picks up pollutants like sediment, debris, and chemicals. High volumes of stormwater can also cause stream bank erosion, and destroy downstream aquatic habitat. Preventing soil erosion and sedimentation is an important responsibility at all construction sites.

In addition to the environmental impact, uncontrolled erosion can have a significant financial impact on a construction project. It costs money and time to repair gullies, replace vegetation, clean sediment-clogged storm drains, replace poorly installed BMPs, and mitigate damage to other people's property or to natural resources.

Best Management Practice (BMP)
A BMP is a method used to prevent or control stormwater runoff and the discharge of pollutants, including sediment, into local waterbodies. Silt fences, inlet protection, and site-stabilization techniques are typical BMPs on a construction site.

Operator
An operator is someone who has control over and the ability to modify construction plans and specifications (e.g. owner, general contractor)

or

Someone who has control over the day-to-day operations at a site (e.g., owner, general contractor) that are necessary to ensure compliance with the permit requirements. It is the responsibility of a construction site owner or operator to contain stormwater runoff and prevent erosion during **all** stages of a project.

There may be more than one person at a site who meets these definitions and must apply for permit coverage. (States may have different definitions of the term "operator.")

So what's being done about polluted runoff?

The Clean Water Act includes the National Pollutant Discharge Elimination System (NPDES) permitting program. As of January 2003, 44 states and territories are authorized to issue NPDES stormwater permits. If your state isn't authorized to operate the NPDES stormwater permit program, EPA issues the permits. Permits vary from state to state, so contact your state or EPA for specific information. Your permitting authority has specific information on your state's NPDES stormwater permit program. In general, construction permits require construction operators to do all of the following:

- Develop and implement a stormwater pollution prevention plan
- Submit a permit application or notice of intent (NOI)
- Comply with the permit, including maintaining BMPs and inspecting the site

Under the NPDES program, construction activities that disturb 1 or more acres are required to obtain stormwater permit coverage. States have different names for the plans that construction operators must develop, such as

- Stormwater pollution prevention plan
- Erosion and sediment control plan
- Erosion control and stormwater management plan
- Stormwater management plan
- Water pollution control plan
- Pollution prevention plan

This document uses the term "*Plan*."

I think I need a permit... Where do I start?

All land-disturbing activities, including clearing, grading, and excavation, that disturb **1 or more acres** are required to be covered under a state or EPA-issued NPDES construction stormwater permit **prior to land disturbance**. Permit requirements vary by state. Begin by researching the specific requirements in your state. You might already be subject to local erosion and sediment control requirements, but that doesn't release you from the requirements of the NPDES program at the state or EPA level. Although you must comply with both sets of requirements, in most cases they have been designed to be complementary. Contact your permitting authority to find out exactly what you need to do. A good place to start your search is the Construction Industry Compliance Assistance web site at http://www.envcap.org/cica.

The NPDES permit requirements include small construction activities that are part of a larger common plan of development or sale, such as a single lot within a larger subdivision. For developments with multiple operators, all operators must have permit coverage for their individual parts of the larger development, no matter how large or small each operation happens to be. When there are multiple operators at one site, they're encouraged to develop and share one comprehensive Plan and obtain permit coverage as co-permitees.

The **owner or operator** of the construction site is responsible for complying with the requirements of the permit. Responsibilities include developing a Plan, obtaining permit coverage, implementing BMPs, and stabilizing the site at the end of the construction activity.

Construction sites that discharge unpermitted stormwater are in violation of the Clean Water Act and may be subject to fines of up to $27,500 a day per violation.

Determine your eligibility

All construction activity that disturbs 1 or more acres of land, as well as activity that disturbs less than 1 acre but is part of a larger common plan of development, must obtain permit coverage.

Read and understand your stormwater permit requirements

Get a copy of the permit for construction activities and a permit application (or notice of intent form) from your state or EPA permitting authority.

Develop a Plan

Most states do not require you to submit your Plan. However, you do need to keep the Plan on site. If that's impractical, you may post a notice that tells where the Plan is kept so it can be accessed by the permitting authority and other interested parties.

You'll need to post a copy of your completed application on site. Put it in a place where the public can see it so they'll know your site is covered by an NPDES permit!

Apply for permit coverage

Once you understand your permit requirements and have developed a Plan, you can submit a stormwater permit application (or notice of intent) to your permitting authority. This must be done before beginning any land disturbance on the site. Some states require a few days of lead time, so check with your permitting authority. Once you've submitted the application, you must satisfy the conditions of the permit.

Implement the Plan

Be prepared to implement the BMPs in your Plan before construction begins. Ensure that BMPs are properly maintained, and upgrade and repair them as necessary.

Developing and Implementing a Plan

You must have a Plan that includes erosion and sediment control and pollution prevention BMPs. These Plans require

- Advance planning and training to ensure proper implementation of the BMPs
- Erosion and sediment control BMPs in place until the area is permanently stabilized
- Pollution prevention BMPs to keep the construction site "clean"
- Regular inspection of the construction site to ensure proper installation and maintenance of BMPs

Fortunately, the practices and measures that must be included in your Plan are already part of the standard operating procedures at many construction sites.

Six steps are associated with developing and implementing a stormwater Plan. There's a wealth of information available on developing pollution prevention plans. Please contact your permitting authority for help in finding additional guidance materials, or visit www.epa.gov/npdes/stormwater. A sample construction plan is available at www.epa.gov/npdes/pubs/sample_swppp.pdf.

1. Site Evaluation and Design Development

- **Collect site information**
- **Develop site plan design**
- **Prepare pollution prevention site map**

The first step in preparing a Plan is to define the characteristics of the site and the type of construction that will occur. This involves collecting site information, identifying natural features that should be protected, developing a site plan design, describing the nature of the construction activity, and preparing a pollution prevention site map.

2. Assessment

- **Measure the site area**
- **Determine the drainage areas**
- **Calculate the runoff coefficient**

The next step is assessing the impact the project will have on stormwater runoff. Determine the drainage areas and estimate the runoff amounts and velocities. For more information on calculating the runoff coefficient, go to www.epa.gov/npdes/pubs/chap02_conguide.pdf, page 11.

3. Control Selection and Plan Design

- **Review and incorporate state or local requirements**
- **Select erosion and sediment controls**
- **Select other controls**
- **Select stormwater management controls**
- **Indicate the location of controls on the site map**
- **Prepare an inspection and maintenance plan**
- **Coordinate controls with construction activity**
- **Prepare sequence of major activities**

In the third step you'll actually document your procedures to prevent and control polluted stormwater runoff. You must delineate areas that will not be disturbed, including critical natural areas like streamside areas, floodplains, and trees. You must also identify the measures (or BMPs) you'll use to protect these areas.

Phasing your project to minimize the amount of exposed soil at any given time is a highly effective way to prevent erosion. Erosion control measures designed to prevent soil from being mobilized include diversions to route stormwater away from exposed soils and stabilization with vegetation, mulch, and geotextiles. Sedimentation control measures designed to remove sediment from stormwater or prevent it from leaving the site include silt fences, sediment traps, and diversions.

You'll need to select erosion and sediment controls—including stabilization measures for protecting disturbed areas and structural controls for diverting run-off and removing sediment—that are appropriate for your particular site. The appropriateness of the control measures will depend on several factors, but will be influenced most directly by the site characteristics. Some stabilization measures you might consider are temporary seeding, permanent seeding, and mulching. Structural control measures include earth dikes, silt fences, and sediment traps. No single BMP will meet all of the erosion and sedimentation control needs of a construction site. A combination of BMPs is necessary. For more information on the types of BMPs appropriate for your construction site, see the BMP fact sheet series available at www.epa.gov/npdes/menuofbmps.

Soil erosion control tips...

- Design the site to infiltrate stormwater into the ground and to keep it out of storm drains. Eliminate or minimize the use of stormwater collection and conveyance systems while maximizing the use of stormwater infiltration and bioretention techniques.
- Minimize the amount of exposed soil on site.
  - To the extent possible, plan the project in stages to minimize the amount of area that is bare and subject to erosion. The less soil exposed, the easier and cheaper it will be to control erosion.
  - Vegetate disturbed areas with permanent or temporary seeding immediately upon reaching final grade.
  - Vegetate or cover stockpiles that will not be used immediately.
- Reduce the velocity of stormwater both onto and away from the project area.
  - Interceptors, diversions, vegetated buffers, and check dams are a few of the BMPs that can be used to slow down stormwater as it travels across and away from the project site.
  - Diversion measures can also be used to direct flow away from exposed areas toward stable portions of the site.
  - Silt fences and other types of perimeter filters should never be used to reduce the velocity of runoff.
- Protect defined channels immediately with measures adequate to handle the storm flows expected.
  - Sod, geotextile, natural fiber, riprap, or other stabilization measures should be used to allow the channels to carry water without causing erosion. Use softer measures like geotextile or vegetation where possible to prevent downstream impacts.
- Keep sediment on site.
  - Place aggregate or stone at construction site vehicle exits to accommodate at least two tire revolutions of large construction vehicles. Much of the dirt on the tires will fall off before the vehicle gets to the street.
  - Regular street sweeping at the construction entrance will prevent dirt from entering storm drains. Do not hose paved areas.
  - Sediment traps and basins are temporary structures and should be used in conjunction with other measures to reduce the amount of erosion.
- Maintaining all BMPs is critical to ensure their effectiveness during the life of the project.
  - Regularly remove collected sediment from silt fences, berms, traps, and other BMPs.
  - Ensure that geotextiles and mulch remain in place until vegetation is well established.
  - Maintain fences that protect sensitive areas, silt fences, diversion structures, and other BMPs.

Other BMPs and Activities to Control Polluted Runoff

You'll need to select other controls to address potential pollutant sources on your site. Construction materials, debris, trash, fuel, paint, and stockpiles become pollution sources when it rains. Basic pollution prevention practices can significantly reduce the amount of pollution leaving construction sites. The following are some simple practices that should be included in the Plan and implemented on site:

- Keep potential sources of pollution out of the rain as practicable (e.g., inside a building, covered with plastic or tarps, or sealed tightly in a leak-proof container).
- Clearly identify a protected, lined area for concrete truck washouts. This area should be located away from streams, storm drain inlets, or ditches and should be cleaned out periodically.
- Park, refuel, and maintain vehicles and equipment in one area of the site to minimize the area exposed to possible spills and fuel storage. This area should be well away from streams, storm drain inlets, or ditches. Keep spill kits close by and clean up any spills or leaks immediately, including spills on pavement or earthen surfaces.
- Practice good housekeeping. Keep the construction site free of litter, construction debris, and leaking containers. Keep all waste in one area to minimize cleaning.
- Never hose down paved surfaces to clean dust, debris, or trash. This water could wash directly into storm drains or streams. Sweep up materials and dispose of them in the trash. Never bury trash or debris!
- Dispose of hazardous materials properly.

4. Certification and Notification

- **Certify the Plan**
- **Submit permit application or notice of intent**

Once the Plan has been developed, an authorized representative must sign it. Now is the time to submit the permit application or notice of intent. Your permit might require that the Plan be kept on site, so be sure to keep it available for the staff implementing the Plan.

Erosion and sedimentation control practices are only as good as their installation and maintenance.

5. Implementing and Maintaining a Plan

- **Implement controls**
- **Inspect and maintain controls**
- **Update/change the Plan**
- **Report releases of hazardous materials**

A Plan describes the practices and activities you'll use to prevent stormwater contamination and meet the NPDES permit requirements. Make sure that the Plan is implemented and that the Plan is updated as necessary to reflect changes on the site.

Erosion and sedimentation control practices are only as good as their installation and maintenance. Train the contractors that will install the BMPs and inspect immediately to ensure that the BMPs have been installed correctly.

Regularly inspect the BMPs (especially before and after rain events) and perform any necessary repairs or maintenance immediately. Many BMPs are designed to handle a limited amount of sediment. If not maintained, they'll become ineffective and a source of sediment pollution.

It's also important to keep records of BMP installation, implementation, and maintenance. Keep track of major grading activities that occur on the site, when construction activities cease (temporarily or permanently), and when a site is temporarily or permanently stabilized.

If construction plans change at any time, or if more appropriate BMPs are chosen for the site, update the Plan accordingly.

6. Completing the Project: Final Stabilization and Termination of the Permit

- **Final stabilization**
- **Notice of Termination**
- **Record retention**

Many states and EPA require a Notice of Termination (NOT) or other notification signifying that the construction activity is completed. An NOT is required when

- Final stabilization has been achieved on all portions of the site for which the permittee is responsible.
- Another operator has assumed control over all areas of the site that have not been finally stabilized. That operator would need to submit a new permit application to the permitting authority.
- For residential construction only, temporary stabilization of a lot has been completed prior to transference of ownership to the homeowner, with the homeowner being made aware of the need to perform final stabilization.

Permittees must keep a copy of their permit application and their Plan for at least 3 years following final stabilization. This period may be longer depending on state and local requirements.

Preconstruction Checklist

- A site description, including
  - Nature of the activity
  - Intended sequence of major construction activities
  - Total area of the site
  - Existing soil type and rainfall runoff data
  - A site map with:
    - Drainage patterns
    - Approximate slopes after major grading
    - Area of soil disturbance
    - Outline of areas which will not be disturbed
    - Location of major structural and nonstructural soil erosion controls
    - Areas where stabilization practices are expected to occur
    - Surface waters
    - Stormwater discharge locations
  - Name of the receiving water(s)
- A description of controls:
  - Erosion and sediment controls, including
    - Stabilization practices for all areas disturbed by construction
    - Structural practices for all drainage/discharge locations
  - Stormwater management controls, including
    - Measures used to control pollutants occurring in stormwater discharges after construction activities are complete
    - Velocity dissipation devices to provide nonerosive flow conditions from the discharge point along the length of any outfall channel
  - Other controls, including
    - Waste disposal practices that prevent discharge of solid materials
    - Measures to minimize offset tracking of sediments by construction vehicles
    - Measures to ensure compliance with state or local waste disposal, sanitary sewer, or septic system regulations
  - Description of the timing during the construction when measures will be implemented
- State or local requirements incorporated into the Plan
- Inspection and maintenance procedures for control measures identified in the Plan
- Contractor certification and Plan certification

Implementation Checklist

- Maintain records of construction activities, including
  - Dates when major grading activities occur
  - Dates when construction activities temporarily cease on the site or a portion of the site
  - Dates when construction activities permanently cease on the site or a portion of the site
  - Dates when stabilization measures are completed on the site
- Prepare inspection reports summarizing
  - Name of person conducting BMP inspections
  - Qualifications of person conducting BMP inspections
  - BMPs/areas inspected
  - Observed conditions
  - Necessary changes to the Plan
- Report releases of reportable quantities of oil or hazardous materials
  - Notify the National Response Center at 800-424-8802 immediately
  - Report releases to your permitting authority immediately, or as specified in your permit. You must also provide a written report within 14 days.
  - Modify the Plan to include
    - The date of release
    - Circumstances leading to the release
    - Steps taken to prevent reoccurrence of the release
- Modify Plan as necessary
  - Incorporate requests of the permitting authority to bring the Plan into compliance
  - Address changes in design, construction operation, or maintenance that affect the potential for discharge of pollutants

An ounce of prevention is worth a pound of cure! It's far more efficient and cost-effective to prevent pollution than it is to try to correct problems later. Installing and maintaining simple BMPs and pollution prevention techniques on site can greatly reduce the potential for stormwater pollution and can also save you money!

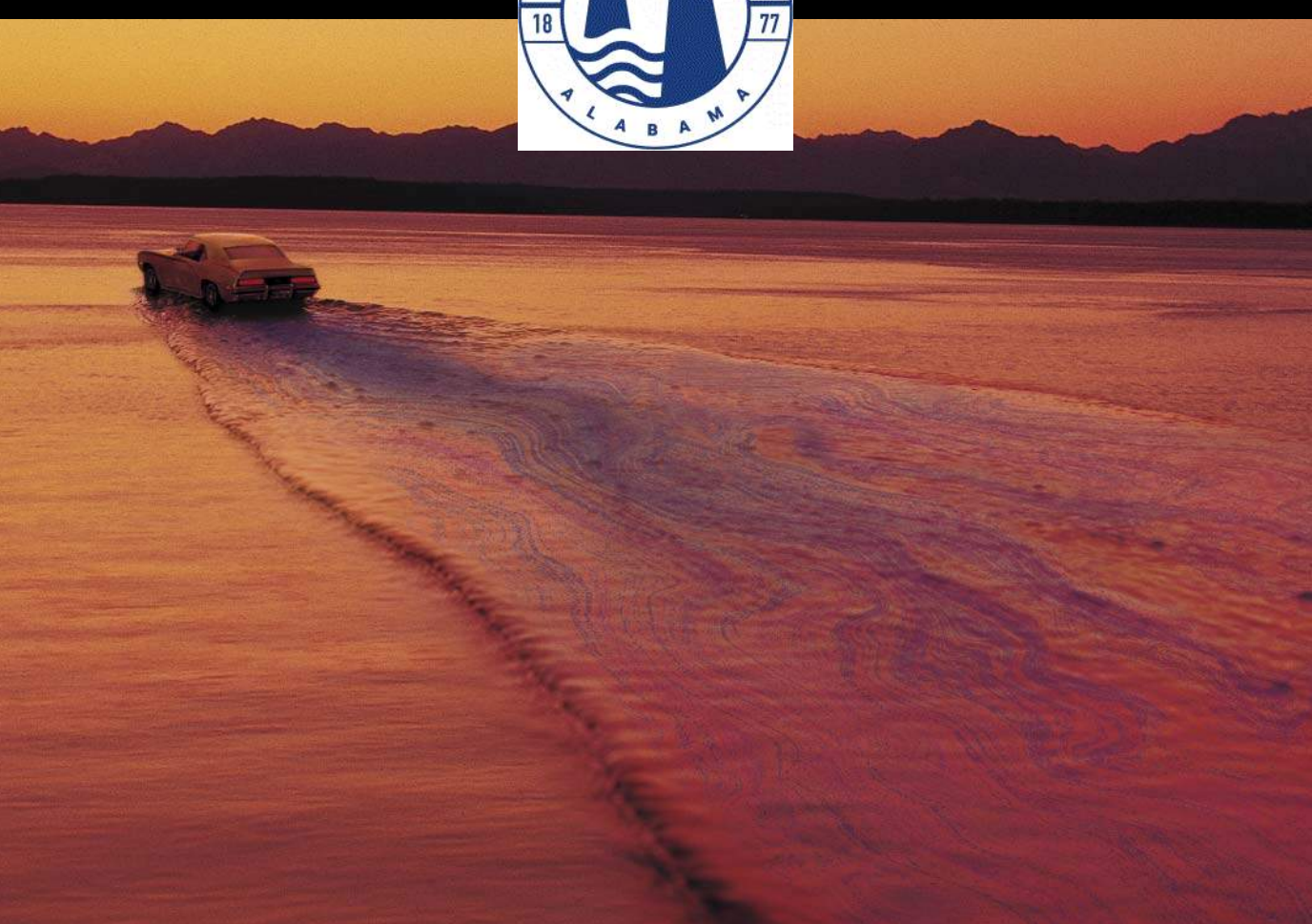
Contact name and agency
Contact phone and e-mail

Visit www.epa.gov/npdes/stormwater for more information.

EPA
United States Environmental Protection Agency
EPA 833-H-03-001
April 2003
Recycled/Recyclable
Printed with vegetable-based ink on paper that contains a minimum of 50% post-consumer fiber content processed chlorine-free.

THE YEAR OF CLEAN WATER
Celebrating a Commitment

WHEN YOUR CAR'S LEAKING OIL ON THE STREET, REMEMBER IT'S NOT JUST LEAKING OIL ON THE STREET.



Leaking oil goes from car to street. And is washed from the street into the storm drain and into our lakes, streams and Puget Sound. Now imagine the number of cars in the area and you can imagine the amount of oil that finds its way from leaky gaskets into our water. So please, fix oil leaks.

A cooperative venture between the Puget Sound Action Team, Department of Ecology, King County and the cities of Bellevue, Seattle and Tacoma.

CLEAN WATER IS IMPORTANT TO ALL OF US

It's up to all of us to make it happen. In recent years sources of water pollution like industrial wastes from factories have been greatly reduced. Now, more than 60 percent of water pollution comes from things like cars leaking oil, fertilizers from farms and gardens, and failing septic tanks. All these sources add up to a big pollution problem. But each of us can do small things to help clean up our water too—and that adds up to a pollution solution!

Why do we need clean water?

Having clean water is of primary importance for our health and economy. Clean water provides recreation, commercial opportunities, fish habitat, drinking water and adds beauty to our landscape. All of us benefit from clean water—and all of us have a role in getting and keeping our lakes, rivers, marine and ground waters clean.

What's the problem with motor oil?

Oil does not dissolve in water. It lasts a long time and sticks to everything from beach sand to bird feathers. Oil and other petroleum products are toxic to people, wildlife and plants. One pint of oil can make a slick larger than a football field. Oil that leaks from our cars onto roads and driveways is washed into storm drains, and then usually flows directly to a lake or stream. Used motor oil is the largest single source of oil pollution in our lakes, streams and rivers. Americans spill 180 million gallons of used oil each year into our waters. This is 16 times the amount spilled by the Exxon Valdez in Alaska.

This information is brought to you by the Water Quality Consortium, a group of public agencies working together to reduce nonpoint water pollution through education.

Partially funded by a Centennial Clean Water Fund grant from Washington State Department of Ecology.

CLEAN WATER TIP:

How can you use and change your motor oil and help keep our waters clean?

Stop drips. Check for oil leaks regularly and fix them promptly. Keep your car tuned to reduce oil use.

Use ground cloths or drip pans beneath your vehicle if you have leaks or are doing engine work. Clean up spills immediately. Collect all used oil in containers with tight fitting lids. Do not mix different engine fluids.

Never dispose of oil or other engine fluids down the storm drain, on the ground or into a ditch.

Recycle used motor oil. Many auto supply stores and gas stations will accept used oil.

Buy recycled (re-refined) motor oil to use in your car.

To find out more about where you can take used oil for recycling, call the Department of Ecology's 1-800-RECYCLE

[Place your logo, address and phone number here]

WHEN YOU'RE WASHING YOUR CAR IN THE DRIVEWAY, REMEMBER YOU'RE NOT JUST WASHING YOUR CAR IN THE DRIVEWAY.

All the soap, scum, and oily grit runs along the curb. Then into the storm drain and directly into our lakes, streams and Puget Sound. And that causes pollution, which is unhealthy for fish. So how do you avoid this whole mess? Easy. Wash your car on grass or gravel instead of the street. Or better yet, take it to a car wash where the water gets treated and recycled.

CLEAN WATER IS IMPORTANT TO ALL OF US

It's up to all of us to make it happen. In recent years sources of water pollution like industrial wastes from factories have been greatly reduced. Now, more than 60 percent of water pollution comes from things like cars leaking oil, fertilizers from farms and gardens, and failing septic tanks. All these sources add up to a big pollution problem. But each of us can do small things to help clean up our water too—and that adds up to a pollution solution!

Why do we need clean water?

Having clean water is of primary importance for our health and economy. Clean water provides recreation, commercial opportunities, fish habitat, drinking water and adds beauty to our landscape. All of us benefit from clean water—and all of us have a role in getting and keeping our lakes, rivers, marine and ground waters clean.

What's the problem with car washing?

There's no problem with washing your car. It's just how and where you do it. Most soap contains phosphates and other chemicals that harm fish and water quality. The soap, together with the dirt and oil washed from your car, flows into nearby storm drains which run directly into lakes, rivers or marine waters. The phosphates from the soap can cause excess algae to grow. Algae look bad, smell bad, and harm water quality. As algae decay, the process uses up oxygen in the water that fish need.

This information is brought to you by the Water Quality Consortium, a group of public agencies working together to reduce nonpoint water pollution through education.

Partially funded by a Centennial Clean Water Fund grant from Washington State Department of Ecology.

CLEAN WATER TIP:

How can you wash your car and help keep our waters clean?

Use soap sparingly. Use a hose nozzle with a trigger to save water.

Pour your bucket of soapy water down the sink when you're done, not in the street. Or wash your car on a grassy area so the ground can filter the water naturally.

Best of all, take your car to a commercial car wash, especially if you plan to clean the engine or the bottom of your car. Most car washes re-use wash water several times before sending it to the sewer system for treatment.

To find out more about the impacts from washing your vehicle and what you can do to prevent water pollution, call the number in your community listed below.

[Place your logo, address and phone number here]

WHEN YOU'RE FERTILIZING THE LAWN,

REMEMBER YOU'RE NOT JUST

FERTILIZING THE LAWN.

You fertilize the lawn. Then it rains. The rain washes the fertilizer along the curb, into the storm drain, and directly into our lakes, streams and Puget Sound. This causes algae to grow, which uses up oxygen that fish need to survive. So if you fertilize, please follow directions and use sparingly.

CLEAN WATER IS IMPORTANT TO ALL OF US

It's up to all of us to make it happen. In recent years sources of water pollution like industrial wastes from factories have been greatly reduced. Now, more than 60 percent of water pollution comes from things like cars leaking oil, fertilizers from farms and gardens, and failing septic tanks. All these sources add up to a big pollution problem. But each of us can do small things to help clean up our water too—and that adds up to a pollution solution!

Why do we need clean water?

Having clean water is of primary importance for our health and economy. Clean water provides recreation, commercial opportunities, fish habitat, drinking water and adds beauty to our landscape. All of us benefit from clean water—and all of us have a role in getting and keeping our lakes, rivers, marine and ground waters clean.

What's the problem with fertilizer?

Fertilizer isn't a problem if it's used carefully. If you use too much fertilizer or apply it at the wrong time, it can easily wash off your lawn or garden into storm drains and then flow untreated into lakes or streams. Just like in your garden, fertilizer in lakes and streams makes plants grow. In water bodies, extra fertilizer can mean extra algae and aquatic plant growth. Too much algae harms water quality and makes boating, fishing and swimming unpleasant. As algae decay, they use up oxygen in the water that fish and other wildlife need.

This information is brought to you by the Water Quality Consortium, a group of public agencies working together to reduce nonpoint water pollution through education.

Partially funded by a Centennial Clean Water Fund grant from Washington State Department of Ecology.

CLEAN WATER TIP:

How can you fertilize and help keep our waters clean?

Use fertilizers sparingly. Many plants do not need as much fertilizer or need it as often as you might think.

Don't fertilize before a rain storm.

Consider using organic fertilizers; they release nutrients more slowly.

Use commercially available compost or make your own using garden waste. Mixing compost with your soil means your plants will need less chemical fertilizer and puts your waste to good use. Commercial compost and soil amendments may be available from your solid waste or wastewater utility as well as your local garden store.

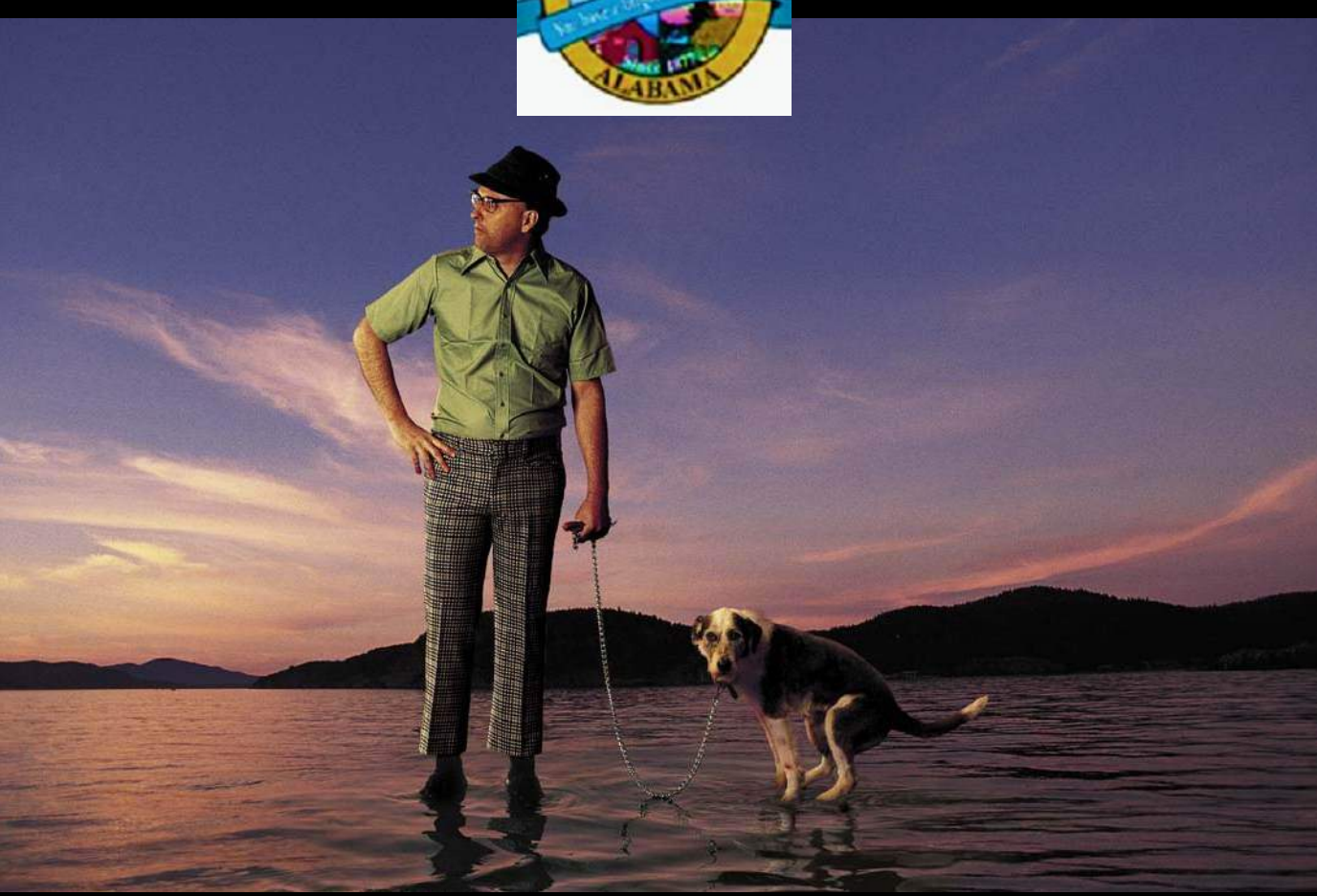
For more information on fertilizing alternatives and composting, call your County Extension's Master Gardeners program or the number in your community listed below.

[Place your logo, address and phone number here]

WHEN YOUR PET GOES ON THE LAWN,

REMEMBER IT DOESN'T JUST

GO ON THE LAWN.



When our pets leave those little surprises, rain washes all that pet waste and bacteria into our storm drains. And then pollutes our waterways. So what to do? Simple. Dispose of it properly (preferably in the toilet). Then that little surprise gets treated like it should.

CLEAN WATER IS IMPORTANT TO ALL OF US

It's up to all of us to make it happen. In recent years sources of water pollution like industrial wastes from factories have been greatly reduced. Now, more than 60 percent of water pollution comes from things like cars leaking oil, fertilizers from farms and gardens, and failing septic tanks. All these sources add up to a big pollution problem. But each of us can do small things to help clean up our water too—and that adds up to a pollution solution!

Why do we need clean water?

Having clean water is of primary importance for our health and economy. Clean water provides recreation, commercial opportunities, fish habitat, drinking water and adds beauty to our landscape. All of us benefit from clean water—and all of us have a role in getting and keeping our lakes, rivers, marine and ground waters clean.

What's the problem with pet waste?

It's a health risk to pets and people, especially children. It's a nuisance in our neighborhoods. Pet waste is full of bacteria that can make people sick. If it's washed into the storm drain and ends up in a lake, stream or marine water, the bacteria ends up in shellfish. People who eat those shellfish can get very sick. The waste produced by Seattle's dogs and cats is about what a city the size of Renton or Kennewick—about 50,000 people—would produce. Unless people take care of it, the waste enters our water with no treatment.

This information is brought to you by the Water Quality Consortium, a group of public agencies working together to reduce nonpoint water pollution through education.

Partially funded by a Centennial Clean Water Fund grant from Washington State Department of Ecology.

CLEAN WATER TIP:

How can you get rid of pet waste and help keep our waters clean?

Here are some options.

Scoop it up and flush it down the toilet. That's best because then your community sewage treatment plant or your septic system treats the pet waste.

Seal the waste in a plastic bag and throw it in the garbage. (This is legal in most areas, but check local laws.)

Bury small quantities in your yard where it can decompose slowly. Dig a hole one foot deep. Put three to four inches of waste at the bottom of the hole. Cover the waste with at least eight inches of soil. Bury the waste in several different locations in your yard and keep it away from vegetable gardens.

To find out more about the problems of pet waste and what you can do to prevent water pollution, call the number of your local community listed below.

[Place your logo, address and phone number here]

SWMPP Appendix E – Standard Operating Procedures

City of Helena

Storm Water Management
Standard Operating Procedures

January 2023

TABLE OF CONTENTS

BUILDINGS – DUMPSTERS AND GARBAGE

Purpose:
To reduce pollution of storm water from improper handling of garbage.

Procedure:

1. Preparation
    a. Train employees on proper trash disposal.
    b. Locate dumpsters in easily-observable locations that are convenient to access.
    c. Provide recycle bins.
    d. Locate dumpsters and trash containers such that runoff does not directly enter the storm water system.

2. Process
    a. Inspect dumpsters and trash containers for leaks regularly.
    b. Use bins with lids and without drain holes

3. Clean-up
    a. Remove any trash around any overfilled dumpsters or bins.
    b. Replace any leaking containers.
    c. Wash bins, as needed, in area away from storm water inlets or conveyances.

BUILDINGS – PARKING LOTS

Purpose:
To reduce pollution of storm water from parking lot runoff.

Procedure:

1. Preparation
    a. Restrict parking in areas to be swept prior to sweeping.
    b. Perform regular maintenance on City-owned vehicles to reduce the amount of fluids and fuels that leak onto the lots.

2. Process and Clean-up
    a. Hand-sweep parking lot gutters of accumulated soil and debris.
    b. Pick up litter from parking lots and dispose of with solid waste.

CHEMICAL APPLICATION – PESTICIDES, HERBICIDES, FERTILIZERS

Purpose:
To reduce pollution of storm water resulting from pesticide, herbicide, and fertilizer application.

Procedure:

1. Preparation
    a. Ensure all applicators are properly licensed and trained.
    b. Calibrate spreading equipment.
    c. Locate areas that can be managed without the use of chemical application.
    d. Do not apply chemicals if heavy rain or high winds are expected.
    e. Choose the least toxic products that achieve desired results.

2. Process
    a. Follow manufacturer's recommendations for application methods and rates.
    b. Do not mix chemicals near storm drains or water bodies.
    c. Employ techniques to reduce overspray or spray drift.
    d. Spot treat areas as much as possible instead of widespread application.

3. Clean-up
    a. Clean up any spilled chemicals immediately, following manufacturer's directions and/or MSDS.
    b. Sweep any solid chemicals off sidewalks and pavement before applying irrigation.

4. Documentation
    a. Maintain records or training and/or licenses for contracted applicators.
    b. Maintain MSDS for all chemical stored or applied.

CHEMICAL STORAGE – PESTICIDES, HERBICIDES, FERTILIZERS

Purpose:
To reduce the pollution of storm water by properly storing and disposing of pesticides, herbicides, and fertilizers.

Procedure:

1. Preparation
    a. Provide covered, enclosed storage areas that are impervious to storm water, preferably locked cabinets.
    b. Purchase only chemicals needed and purchase close to the time needed to reduce storage time.
    c. Assess need for all chemicals and consider alternative management methods.

2. Process
    a. Store chemicals in suitable areas only, to prevent unauthorized access and prevent contact with storm water.
    b. Conduct annual review of chemicals to assess usefulness of stores; dispose of unneeded chemicals.

3. Clean-up
    a. Clean up any spilled chemicals immediately, following manufacturer's directions and/or MSDS.

4. Documentation
    a. Maintain MSDS for all chemicals stored.

MATERIAL STORAGE AND SCRAP

Purpose:
To reduce the pollution of storm water by properly storing spare parts and other materials.

Procedure:

1. Preparation
    a. Identify areas for parts storage that are not connected to the storm water system.
    b. Provide organization system to neatly store parts.
    c. Assess the need for parts/materials and only store items that are useful; properly dispose of items that are not useful.

2. Process
    a. Store parts indoors or under cover whenever possible.
    b. Monitor storage areas for leaks.
    c. Clean parts of any petroleum-based residues prior to storage.
    d. Utilize drip pans or absorbent pads for any leaking parts.

3. Clean-up
    a. Immediately clean up spills using dry absorbent materials (e.g. kitty litter, sawdust, etc.), and sweep up dry material to be disposed of in trash.
    b. Replenish spill kits with any materials used during cleaning.

PET WASTE

Purpose:
To reduce pollution of storm water from bacteria contained in pet waste.

Procedure:

1. Preparation
    a. In public areas, provide pet waste bags for owners to utilize in collecting and disposing of their pet's waste.
    b. At City facilities, locate pet kennels such that runoff will not enter the storm water system.

2. Process/Clean-up
    a. Collect any pet waste from parks and in City kennels and dispose of properly.
    b. Do not hose down kennels to clean.
    c. Keep kennels stocked with clean absorbent material, and dispose of with solid waste.

SAND AND AGGREGATE STOCKPILING

Purpose:
To prevent the transport pollutants into storm water through the proper design and maintenance of storage piles.

Procedure:

1. Process
    a. Keep area free of general debris and hazards.
    b. Keep piles consolidated on pad impervious to stored material, using side walls where possible.
    c. Locate piles in concentrated location, and away from storm water conveyances.
    d. Cover piles where possible.
    e. Route any drainage from piles to area secondary containment or retaining area.

2. Clean-up
    a. Sweep up loading areas and track-out areas to prevent migration of materials.

3. Documentation
    a. Inspect stockpile areas at least once per year and maintain records for MS4 permit compliance.

SPILL CLEAN-UP AND RESPONSE

Purpose:
The reduce pollution of storm water by responding properly to spills.

Procedure:

1. Preparation
    a. Ensure all employees are trained in spill response procedures and equipment.
    b. Fit petroleum and chemical storage containers with secondary containment where appropriate.
    c. Seal floors with paint to prevent absorption of spills.
    d. Keep a spill kit in areas where spills may occur.

2. Process and Clean-up
    a. Stop the source of the spill and contain liquids, if safe to do so.
    b. If the spill is large or a threat to public safety, call 911.
    c. Cover the spill with absorbent material such as kitty litter, sawdust, or oil absorbent pads.
    d. Deploy containment booms if spill could potentially reach a storm drain inlet or water body.
    e. Never wash spill into a storm drain or water body.
    f. Replenish any supplies used in the clean-up of spills.

3. Documentation
    a. If petroleum spill is greater than 5 gallons, report to ADEM.
    b. Notify The Strom Water Manager of spill and clean-up activities.
    c. If the spill resulted in a potential impact to surface or ground water, record the location, substance, quantity, measures taken, and photographic evidence of the spill and clean-up.

VEHICLE AND EQUIPMENT FUELING

Purpose:
To reduce pollution of storm water resulting from the fueling of City-owned vehicles and equipment.

Procedure:

1. Preparation
    a. Train employees on proper methods to reduce spills and spill clean-up techniques.
    b. Ensure spill kits are present in areas of work and are fully stocked.
    c. Fueling nozzles should be equipped with automatic shutoff.

2. Process
    a. Shut off the engine.
    b. Fill tank carefully to minimize drips and do not overfill.
    c. Fill fuel tanks at central location equipped with storm water protections. Mobile fueling should be minimized.
    d. When fueling small equipment, do so away from storm drains and water bodies.

3. Clean-up
    a. Immediately clean up spills using dry absorbent materials (e.g. kitty litter, sawdust, etc.), and sweep up dry material to be disposed of in trash.
    b. Replenish spill kits with any materials used during cleaning.

VEHICLE AND EQUIPMENT STORAGE

Purpose:
To reduce pollution of storm water caused by the storage of City-owned vehicles and equipment.

Procedure:

1. Preparation
    a. Assess the need for the equipment and consider disposal instead of storage.
    b. Provide covered storage area whenever possible.
    c. Locate storage area away from any storm water inlets or conveyances.

2. Process
    a. Remove all fluids and fuels from vehicles to prevent leaks.
    b. If fluids must remain, provide drip pans to catch leaks.
    c. Inspect regularly for spills.

3. Clean-up
    a. Clean up any spills as soon as they are noticed and address source.
    b. Utilize dry absorbent materials (e.g. kitty litter, sawdust, etc.) and sweep up materials for proper disposal.
    c. Replenish any materials used in the cleaning of spills.

VEHICLE AND EQUIPMENT WASHING

Purpose:
To reduce pollution of storm water resulting from the washing of City-owned vehicles and equipment.

Procedure:

1. Preparation
    a. Provide designated area for vehicle and equipment washing. Area should have drainage or infiltration system that is not connected to the storm water system.
    b. Connect washing-area drainage to sanitary system wherever possible.
    c. Utilize biodegradable, phosphate-free, water-based cleaners only.

2. Process
    a. Minimize water and soap usage when washing.
    b. Use hoses with automatic shutoff nozzles.

3. Clean-up
    a. Clean solids from washing areas as they accumulate.

VEHICLE MAINTENANCE

Purpose:
To reduce pollution of storm water resulting from the maintenance of City-owned vehicles.

Procedure:

1. Preparation
    a. Train employees on proper methods to reduce spills and spill clean-up techniques.
    b. Ensure spill kits are present in areas of work and are fully stocked.

2. Process
    a. Perform maintenance under a canopy or inside shop building.
    b. When filling vehicles with fuel or fluids, utilize automatic shutoffs and/or ensure reservoirs are not overtopped.
    c. Utilize drip pans and absorbent pads to catch any dripping fluids.

3. Clean-up
    a. Immediately clean up spills using dry absorbent materials (e.g. kitty litter, sawdust, etc.), and sweep up dry material to be disposed of in trash.
    b. Replenish spill kits with any materials used during cleaning.

NOTIFICATION OF AN ILLCIT DISCHARGE FROM AND ADJACENT MS4

Purpose:
To notify ADEM and an adjacent MS4 in the event of an illicit discharge coming from the adjacent MS4.

Procedure:

Notify the responsible MS4 and ADEM which should include the following information:

1. Location of the suspect illicit discharge, including latitude and longitude, if known

2. Type of illicit discharge, if known

3. Estimated quantity or flow rate, if known

4. Origin or suspected origin of the suspect illicit discharge, if known

5. Date and time the suspect illicit discharge was observed

6. Description of affected media, including the name of the receiving waterbody, if known

7. Corrective actions being taken within the Helena MS4, if any

Contact Information

ADEM
PH: (334) 271-7974

City of Pelham
PH: (205)620-6411

City of Alabaster
PH: (205) 664-6800

Jefferson County
PH: (205) 325-5321

City of Hoover
PH: (205) 739-6888

Shelby County
PH: (205) 669-3737

REVIEW OF WATER QUALITY MONITORING TEST RESULTS

Purpose:
To review results of water quality monitoring.

Procedure:

Upon receipt of lab results the data should be reviewed to identify any increases or decreases in the water quality. The follow steps shall be taken to identify such results:

1. Compare results with previous test results and note any increases or decreases for each test parameter.
2. Retest the same location to determine if the increased parameter is still present.
3. If parameter is high after retesting, check for possible illicit discharges.
4. Test at the upstream boundary to determine if the abnormal parameter is caused outside of the Helena MS4 area.
5. If parameter is originating from outside of the Helena MS4 area, notify the adjacent MS4 and ADEM. (See SOP for notifying adjacent MS4)

SWMPP Appendix F – Inspection Checklist Forms

Date:
Time:
Inspector

Development/Construction Site: NPDES Permit ___ Yes ___ No

Developer/Contractor/Permit Holder:

Location:

	Condition Assessment	Maintenance Required?	Comments/Considerations
Sediment Control Structures			
Sediment Trap	Good Fair Poor	Yes/No	
Silt Curtains	Good Fair Poor	Yes/No	
Detention/Sedimentation Basin	Good Fair Poor	Yes/No	
Inlet Protection	Good Fair Poor	Yes/No	
Mulch/Soil Stabilization	Good Fair Poor	Yes/No	
Discharge Protection	Good Fair Poor	Yes/No	
Other: _____	Good Fair Poor	Yes/No	
Hay Bales	Good Fair Poor	Yes/No	
Hay Bales	Good Fair Poor	Yes/No	
Silt Fence	Good Fair Poor	Yes/No	
Stabilized Construction Access	Good Fair Poor	Yes/No	
Mulching	Good Fair Poor	Yes/No	
Seeding and Mulching	Good Fair Poor	Yes/No	
Chemical Stabilization	Good Fair Poor	Yes/No	
Other: _____	Good Fair Poor	Yes/No	
Rock Check	Good Fair Poor	Yes/No	
Silt Fence Check	Good Fair Poor	Yes/No	
Bale Check	Good Fair Poor	Yes/No	
Chemical Stabilization	Good Fair Poor	Yes/No	
Rip Rap	Good Fair Poor	Yes/No	
Chemical Stabilization	Good Fair Poor	Yes/No	
Other: _____	Good Fair Poor	Yes/No	
Other: _____	Good Fair Poor	Yes/No	
Silt Fence	Good Fair Poor	Yes/No	
Hay Bales	Good Fair Poor	Yes/No	
Silt Fence	Good Fair Poor	Yes/No	
Inlet Barriers	Good Fair Poor	Yes/No	
Curb Inlet Protection	Good Fair Poor	Yes/No	
Other Prefabricated Measures	Good Fair Poor	Yes/No	
Posting of Permits	Good Fair Poor	Yes/No	
Buffer Areas Marked/Maintained	Good Fair Poor	Yes/No	
Construction Limits Marked	Good Fair Poor	Yes/No	

INDUSTRIAL STORMWATER INSPECTION REPORT

FACILITY NAME:	INSPECTION TIME: DATE:

WEATHER INFORMATION:

- Description of Weather Conditions (e.g., sunny, cloudy, raining, etc.):

  _____

  _____

- Was stormwater (e.g., runoff from rain) flowing at outfalls during the inspection: ☐ **Yes** ☐ **No** ☐ **Comments:**

  _____

  _____

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION

Vehicle/Equipment Areas:	**Yes**	**No**	**NA**	**Findings and Remedial Action Documentation:**
Equipment cleaning: Check NA if not performed on-site. Skip section.				
Is equipment washed and/or cleaned only in designated areas?				
• Observe washing: Is all wash water captured and properly disposed of?				
Equipment fueling: Check NA if not performed on-site. Skip section.				
• Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills?				
• Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater?				
• Are structures in place to prevent precipitation from accumulating in containment areas?				
○ If not, is there any water or other fluids accumulated within the containment area?				

Equipment maintenance:	Yes	No	NA	Findings and Remedial Action Documentation:
• Are maintenance tools, equipment and materials stored under shelter, elevated and covered? • Are all drums and containers of fluids stored with proper cover and containment? • Are exteriors of containers kept outside free of deposits? • Are any vehicles and/or equipment leaking fluids? Identify leaking equipment. • Is there evidence of leaks or spills since last inspection? Identify and address. • Are materials, equipment, and activities located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)? Add any additional site-specific BMPs: _____ _____ _____ _____				

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION				
Good Housekeeping BMPs:	**Yes**	**No**	**NA**	**Findings and Remedial Action Documentation:**
1. Are paved surfaces free of accumulated dust/sediment and debris? • Date of last quarterly vacuum/sweep _____ • Are there areas of erosion or sediment/dust sources that discharge to storm drains? 2. Are all waste receptacles located outdoors: • In good condition? • Not leaking contaminants? • Closed when is not being accessed? • External surfaces and area free of excessive contaminant buildup? 3. Are the following areas free of accumulated dust/sediment, debris, contaminants, and/or spills/leaks of fluids? • External dock areas • Pallet, bin, and drum storage areas • Maintenance shop(s) • Equipment staging areas (loaders, tractors, trailers, forklifts, etc) • Around bag-house(s) • Around bone yards • Other areas of industrial activity: _____ _____ _____ _____ _____ _____ _____ _____				

Spill Response and Equipment: Are spill kits available, in the following locations? • Fueling stations • Transfer and mobile fueling units • Vehicle and equipment maintenance areas Do the spill kits contain all the permit required items? • Oil absorbents capable of absorbing 15 gallons of fuel. • A storm drain plug or cover kit. • A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity. • A non-metallic shovel. • Two five-gallon buckets with lids. Are contaminated absorbent materials properly disposed of?	**Yes**	**No**	**NA**	**Findings and Remedial Action Documentation:**
I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BEST MANAGEMENT PRACTICES EVALUATION				
General Material Storage Areas: • Are damaged materials stored inside a building or another type of storm resistance shelter? • Are all uncontained material piles stored in a manner that does not allow discharge of impacted stormwater? • Are scrap metal bins covered? • Are outdoor containers covered?	**Yes**	**No**	**NA**	**Findings and Remedial Action Documentation:**
Stormwater BMPs and Treatment Structures: Visually inspect all stormwater BMPs and treatment structures devices, discharge areas infiltration and outfalls shown on the Site Map. • Are BMPs and treatment structures in good repair and operational? • Are BMPs and treatment structures free from debris buildup that may impair function? • The permit requires Permittees to clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe. Based on this, do catch basins need to be cleaned? • Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?	**Yes**	**No**	**NA**	**Findings and Remedial Action Documentation:**
Observation of Stormwater Discharges: • Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? • Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater and is not allowed to comingle with stormwater or enter storm drains. Is process water comingling with stormwater or entering storm drains? • Illicit discharges include domestic wastewater, noncontact cooling water, or process wastewater (including leachate). Were any illicit discharges observed during the inspection?	**Yes**	**No**	**NA**	**Findings and Remedial Action Documentation:**

II. CORRECTIVE ACTION AND SWPPP MODIFICATIONS DESCRIPTIONS: Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs.

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.): Last 24 hours:	Last 48 hours:	
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	

Land Use in Drainage Area (Check all that apply):

☐ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☐ No	***If No, Skip to Section 5***			
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	_____' _____"	Ft, In	Tape measure
	Measured length	_____' _____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Sample Self Inspection Checklist

STRUCTURAL INTEGRITY

Yes No N/A
Does the facility show signs of settling, cracking, bulging, misalignment, or other structural deterioration?

Yes No N/A
Do embankments, emergency spillways, side slopes, or inlet/outlet structures show signs of excessive erosion or slumping?

Yes No N/A
Is the outlet pipe damaged or otherwise not functioning properly?

Yes No N/A
Do impoundment and inlet areas show erosion, low spots, or lack of stabilization?

Yes No N/A
Are trees or saplings present on the embankment?

Yes No N/A
Are animal burrows present?

Yes No N/A
Are contributing areas unstabilized with evidence of erosion?

Yes No N/A
Do grassed areas require mowing and/or are clippings building up?

WORKING CONDITIONS

Yes No N/A
Does the depth of sediment or other factors suggest a loss of storage volume?

Yes No N/A
Is there standing water in inappropriate areas, such as on filters or cartridges after a dry period?

Yes No N/A
Is there an accumulation of floating debris and/or trash?

OTHER INSPECTION ITEMS

Yes No N/A
Is there evidence of encroachments or improper use of impounded areas?

Yes No N/A
Are there signs of vandalism?

Yes No N/A
Do the fence, gate, lock, or other safety devices need repair?

Yes No N/A
Is there excessive algae growth, or has one type of vegetation taken over the facility?

Yes No N/A
Is there evidence of oil, grease, or other automotive fluids entering and clogging the facility?

Yes No N/A
In rain gardens, is there evidence of soil erosion, does mulch cover the entire area, are specified number and types of plants still in place, or is there evidence of disease or plant stress from inadequate or too much watering?

OTHER OBSERVATIONS

_____

_____

_____

_____

A yes answer to any of these items should result in corrective action or a call to a professional inspector.

NOTE: The intent of the checklist is to provide a general sense of the areas of concern and issues that should be considered when inspecting a stormwater facility. A local government contact may provide a more comprehensive checklist for a specific type of facility.