

Stormwater Management Program (SWMP)

Prepared for Compliance with Missouri Department of Natural Resources
Comprehensive General Permit MO-R04C (Draft 2026–2031)

Part 1. Permit Coverage and Applicability

1.1 Permit Coverage

The City of Nixa (the City) is authorized for coverage under the Missouri Department of Natural Resources (MDNR) Comprehensive General Permit for Phase II Municipal Separate Storm Sewer Systems (MS4), Permit No. MO-R04C. The City is the Continuing Authority for the regulated MS4 serving the City of Nixa, Missouri.

The permit coverage applies to all areas served by the City’s regulated MS4, including areas incorporated into or removed from the City’s jurisdictional boundary during the permit term and any expansion of the Urbanized Area (UA). Areas added to the MS4 service area shall be incorporated into this Stormwater Management Plan (SWMP) as required by the permit.

1.2 Applicability and MS4 Classification

The City owns and operates a regulated Small MS4 as defined in 10 CSR 20-6.200(D). The City is located within a U.S. Census–designated Urbanized Area and serves a population of approximately 26,352.

Based on population served and permit definitions, the City of Nixa is classified as a **Group B Traditional Small MS4** under Permit MO-R04C. All six Minimum Control Measures (MCMs) apply to the City.

1.3 Authorized Discharges

This permit authorizes the discharge of stormwater to waters of the state from the City’s regulated MS4, except as prohibited by permit restrictions. The permit also authorizes the discharge of certain non-stormwater discharges that are not determined by MDNR to be substantial contributors of pollutants, including but not limited to:

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising groundwater and springs

- Uncontaminated groundwater infiltration
- Foundation drains
- Air conditioning condensate
- Individual residential car washing
- Dechlorinated residential swimming pool discharges
- Discharges from emergency firefighting activities

The City shall prohibit all other non-stormwater discharges to the MS4 unless authorized under a separate NPDES permit.

Part 2. Stormwater Management Program Overview

2.1 Program Purpose and Standard

The City shall develop, implement, and enforce a Stormwater Management Program designed to reduce the discharge of pollutants from the MS4 to the **maximum extent practicable (MEP)** and to protect water quality in accordance with:

- Section 402(p)(3)(B) of the Clean Water Act
- 40 CFR 122.34
- Missouri Clean Water Law (Chapter 644 RSMo)
- 10 CSR 20-6.200
- Permit MO-R04C

The Stormwater Management Program shall utilize an **iterative and adaptive management approach**, allowing the City to modify Best Management Practices (BMPs) to improve effectiveness over time.

2.2 Stormwater Management Plan (SWMP)

The City shall maintain this written Stormwater Management Plan to document compliance with the permit requirements. The SWMP shall:

- Describe BMPs, schedules, procedures, and responsible parties for each MCM
- Be maintained electronically and updated as necessary
- Be reviewed at least annually
- Be updated within 90 days of permit renewal or as required by MDNR

The SWMP shall be made available upon request and may be posted on the city's website.

2.3 MS4 Description, Receiving Waters, and TMDL Considerations

The City of Nixa owns and operates a municipal separate storm sewer system (MS4) consisting of storm sewer pipes, inlets, culverts, open channels, detention facilities, and associated appurtenances that convey stormwater runoff to waters of the state.

Stormwater discharges from the City's regulated MS4 flow to receiving waters within the James River watershed, including local streams and tributaries within and downstream of the City limits. These receiving waters are identified on the City's MS4 map.

Some receiving waters may be listed as impaired under Section 303(d) of the Clean Water Act and may be subject to EPA-approved Total Maximum Daily Loads (TMDLs). Applicable pollutants of concern are addressed through implementation of the Minimum Control Measures described in this SWMP.

Part 3. Minimum Control Measures (MCMs)

MCM 1. Public Education and Outreach on Stormwater Impacts

3.1 Program Description

The City shall implement a public education and outreach program to inform residents and targeted audiences on the impacts of stormwater runoff and actions that can be taken to reduce pollutant discharges.

3.2 Target Audiences

As a Group B MS4, the City shall address:

- Residents within the MS4 service area; and
- At least **one additional target audience** per permit cycle, such as developers, businesses, contractors, schools, or homeowner associations.

Target audiences may be modified based on program evaluations and adaptive management.

3.3 Target Pollutants

For each target audience, the City shall identify at least one pollutant or pollutant source, which may include but is not limited to:

- Pet waste
- Restaurant Waste
- Grass clippings and leaf litter
- Fertilizer and pesticide application
- Litter and illegal dumping
- Sediment from construction activities
- Vehicle fluids and washing activities

3.4 Education and Outreach BMPs

Over each permit cycle, the City shall implement a minimum of **four (4)** education and outreach BMPs selected from those identified in Permit Table III. BMPs may include:

- Stormwater information maintained on the City’s website
- Social media outreach
- Storm drain marking
- Educational materials and targeted mailings
- Participation in regional stormwater education efforts

The City shall track BMP implementation and effectiveness using metrics such as distribution counts, website analytics, participation levels, or other appropriate measures.

3.5 Adaptive Management

The City shall review the Public Education and Outreach Program at least annually and modify BMPs as necessary to improve effectiveness. Changes shall be documented in the MS4 Stormwater Management Program Report.

MCM 2. Public Involvement and Participation

4.1 Program Description

The City shall provide opportunities for public involvement in the development, implementation, and oversight of the Stormwater Management Program.

4.2 Permit Renewal Participation

At the time of permit renewal, the City shall:

- Provide a minimum 30-day public notice period
- Make the SWMP or program description available for public review
- Hold a public informational meeting within the MS4 service area
- Provide a method for submitting public comments and respond to comments received

4.3 Ongoing Public Participation

The City provides a mechanism to report stormwater related concerns through its website and other communication channels. All inquiries shall be tracked and used to inform program priorities.

4.4 Governing Body Involvement

At least annually, a representative familiar with the Stormwater Management Program shall provide an update to the City's governing body regarding program status and compliance.

MCM 3. Illicit Discharge Detection and Elimination (IDDE)

5.1 Program Description

The City shall develop, implement, and enforce an Illicit Discharge Detection and Elimination (IDDE) Program designed to detect, investigate, and eliminate illicit discharges and illicit connections to the MS4 in a timely manner. The IDDE Program shall reduce pollutant discharges to the MS4 to the maximum extent practicable and comply with Permit MO-R04C requirements.

The City maintains a written Illicit Discharge Detection and Elimination procedure in a separate IDDE Plan to support implementation of this MCM.

5.2 Regulatory Authority

The City shall maintain and enforce legal authority to prohibit illicit discharges and connections to the MS4. This authority includes the ability to:

- Prohibit non-stormwater discharges except those specifically authorized by the permit;
- Require investigation and elimination of illicit discharges;
- Require corrective actions within established timelines;
- Enforce violations through notices, orders, fines, or other remedies allowed by law.

Relevant ordinances, resolutions, or codes shall be maintained and updated as necessary to support the IDDE Program.

5.3 Storm Sewer System Map and Inventory

The City maintains a map of its MS4, including MS4 infrastructure, outfalls, and receiving waters. This map is maintained in an electronic format and updated as infrastructure changes occur.

5.4 Outfall Screening and Priority Areas

The City shall conduct dry-weather screening of MS4 outfalls to identify potential illicit discharges. As a Group B MS4, the City shall screen a minimum of one-third (1/3) of all outfalls per permit cycle, such that all outfalls are screened at least once every three permit cycles, unless modified through adaptive management.

Outfall screening shall:

- Be conducted during dry weather conditions (no precipitation within the preceding 72 hours);
- Include visual observations, field notes, and photographic documentation where practicable;
- Document indicators such as flow presence, odor, color, turbidity, staining, floatables, and deposits.

The City shall prioritize outfalls located in higher-risk areas, including commercial, industrial, and older developed areas, as resources allow.

5.5 Dry-Weather Flow Investigation and Tracing

When dry-weather flows or other indicators of potential illicit discharges are identified, the City shall initiate an investigation to determine the source. Investigation methods may include:

- Field reconnaissance;
- Dye testing;
- Smoke testing;
- Review of plumbing records;
- Coordination with internal departments or external agencies.

The City shall document investigation activities and findings.

Additional procedures can be found in the City's IDDE Plan.

5.6 Illicit Discharge Response and Elimination

Upon confirmation of an illicit discharge or illicit connection, the City shall take appropriate action to eliminate the discharge, require corrective measures, and document actions taken. Procedures for investigation, elimination, and enforcement are maintained in the City's IDDE Plan.

5.7 Spill and Emergency Response

The City shall maintain procedures for responding to spills or illicit discharges, including coordination with emergency responders and appropriate state or federal agencies. Known or suspected discharges of hazardous substances shall be reported in accordance with applicable reporting requirements.

Procedures for spill and emergency response are maintained in the City's Illicit Discharge Detection and Elimination (IDDE) Plan and Spill Prevention and General Response Plan.

5.8 Public Reporting and Education

The City shall provide a publicly accessible mechanism for reporting suspected illicit discharges or connections. Reports may be received via phone, email, online forms, or other methods. All reports shall be logged, investigated, and tracked.

Public education related to illicit discharges shall be coordinated with MCM 1 activities.

5.9 Training

The City shall provide IDDE-related training to employees whose job functions may involve identification, investigation, or response to illicit discharges. Training shall occur at least once per permit cycle and may be incorporated into broader stormwater or safety training programs.

5.10 Recordkeeping and Adaptive Management

The City shall maintain records documenting:

- Outfall inventories and screening results;
- Investigations and corrective actions;
- Enforcement activities; and
- Training completion.

The City shall review the IDDE Program periodically and modify it as necessary using an adaptive management approach. Program changes shall be documented in the City's Annual MS4 Stormwater Management Program Report.

MCM 4. Construction Site Stormwater Runoff Control

6.1 Program Description

The City shall develop, implement, and enforce a Construction Site Stormwater Runoff Control Program to reduce pollutants in stormwater runoff from construction activities that result in land disturbance of one (1) acre or more, including smaller sites that are part of a larger common plan of development or sale. The program shall ensure compliance with Permit MO-R04C and applicable state and local requirements.

6.2 Regulatory Authority

The City shall maintain and enforce legal authority to control stormwater discharges from construction sites. This authority shall allow the City to:

- Require erosion and sediment control measures at construction sites;
- Review and approve construction plans for stormwater compliance;
- Conduct inspections of active construction sites;
- Require corrective actions and establish compliance timelines;
- Enforce violations through notices, stop-work orders, fines, or other remedies authorized by law.

Relevant ordinances and procedures shall be maintained and updated as necessary to support the Construction Site Program.

6.3 Construction Site Inventory and Tracking

The City shall maintain an inventory of active construction sites subject to the Construction Site Stormwater Runoff Control Program. The inventory shall be maintained in an electronic format and shall include, at a minimum:

- Project name and location;
- Operator or responsible party contact information;
- Estimated disturbed acreage;
- Permit coverage status under the state land disturbance permit;
- Inspection dates and compliance status.

The inventory shall be updated as sites become active or are stabilized.

6.4 Plan Review and Permitting

The City shall require submission and review of erosion and sediment control plans or stormwater pollution prevention plans (SWPPPs), as applicable, prior to land disturbance. Plan review shall evaluate whether proposed BMPs are adequate to control erosion, sediment, and other pollutants.

Construction activities shall not commence until applicable approvals are obtained and permit coverage is verified.

6.5 Site Inspections

The City shall conduct routine inspections of construction sites to verify compliance with approved plans and permit requirements. As a Group B MS4, the City shall inspect a minimum of **ten percent (10%)** of active construction sites annually, or as otherwise required by Permit MO-R04C.

Inspections may include:

- Review of installed erosion and sediment control BMPs;
- Assessment of site conditions and discharge points;
- Documentation of deficiencies and corrective actions;
- Follow-up inspections as necessary to confirm compliance.

Inspection frequency and prioritization may be adjusted based on site size, proximity to receiving waters, complaint history, or compliance history.

6.6 Enforcement and Corrective Actions

When deficiencies or violations are identified, the City shall notify the responsible party and require corrective actions within a reasonable timeframe. Enforcement responses may include verbal warnings, written notices, stop-work orders, or other actions consistent with City authority.

Sites presenting an immediate threat to water quality may require immediate corrective measures.

6.7 Public Reporting and Coordination

The City shall provide a mechanism for receiving public complaints related to construction site stormwater issues. Complaints shall be logged, investigated, and addressed in a timely manner.

The City may coordinate with MDNR or other agencies as necessary regarding construction site compliance.

6.8 Training

The City shall provide training for staff responsible for construction site plan review, inspections, or enforcement. Training shall occur at least once per permit cycle and may be incorporated into broader stormwater or professional development programs.

6.9 Recordkeeping and Adaptive Management

The City shall maintain records documenting:

- Construction site inventories;
- Plan reviews and approvals;
- Inspection findings and corrective actions;
- Enforcement activities;
- Training completion.

The Construction Site Stormwater Runoff Control Program shall be reviewed at least annually and modified as necessary using an adaptive management approach. Program changes shall be documented in the MS4 Stormwater Management Program Report.

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

7.1 Program Description

The City shall develop, implement, and enforce a Post-Construction Stormwater Management Program to address stormwater runoff from new development and redevelopment projects that disturb one (1) acre or more, including projects that disturb less than one (1) acre but are part of a larger common plan of development or sale. The program shall ensure that stormwater controls are properly designed, installed, operated, and maintained to protect water quality in accordance with Permit MO-R04C.

7.2 Regulatory Authority

The City shall maintain and enforce legal authority to require post-construction stormwater controls for applicable development and redevelopment projects. This authority shall allow the City to:

- Establish stormwater design standards;
- Require long-term operation and maintenance (O&M) of stormwater BMPs;
- Require access for inspection of post-construction BMPs;
- Enforce compliance through notices, orders, or other remedies authorized by law.

Applicable ordinances, standards, and procedures shall be maintained and updated as necessary to support the Post-Construction Program.

7.3 Stormwater Design Standards and BMP Selection

The City shall require the use of permanent stormwater BMPs that are designed to reduce pollutant loads and manage runoff volumes from post-construction conditions. Acceptable BMPs may include structural, non-structural, and green infrastructure practices consistent with City standards and accepted engineering practices.

BMP selection shall consider site conditions, land use, soil characteristics, drainage patterns, and long-term maintenance feasibility.

7.4 Plan Review and Approval

The City shall review post-construction stormwater management plans as part of the development review process. Plan review shall verify that proposed BMPs meet applicable design standards and provide for long-term operation and maintenance.

Projects shall not receive final approval until post-construction stormwater requirements are satisfied.

7.5 Operation and Maintenance Responsibilities

The City shall require identification of the party responsible for operation and maintenance of post-construction BMPs. Responsibility may be assigned to the City, a private owner, a homeowners' association, or other legal entity, as applicable.

The City shall require documentation of O&M responsibilities through recorded agreements, covenants, or other enforceable mechanisms, where applicable.

7.6 Inventory and Tracking of Post-Construction BMPs

The City shall maintain an inventory of post-construction stormwater BMPs installed within the MS4. The inventory shall be maintained in an electronic format and shall include, at a minimum:

- BMP type and location;

- Responsible party for O&M;
- Installation or approval date;
- Inspection history and compliance status.

The inventory shall be updated as new BMPs are approved or modified.

7.7 Inspections and Compliance

The City shall conduct inspections of post-construction BMPs to verify proper operation and maintenance. As a Group B MS4, the City shall inspect a minimum of **ten percent (10%)** of post-construction BMPs annually, or as otherwise required by Permit MO-R04C.

Inspections may be prioritized based on BMP type, age, location, complaint history, or compliance history.

7.8 Enforcement and Corrective Actions

When deficiencies are identified, the City shall notify the responsible party and require corrective actions within a reasonable timeframe. Enforcement actions may be taken as necessary to ensure compliance with post-construction requirements.

7.9 Training

The City shall provide training for staff involved in post-construction plan review, inspections, or enforcement. Training shall occur at least once per permit cycle and may be incorporated into broader stormwater or professional development programs.

7.10 Recordkeeping and Adaptive Management

The City shall maintain records documenting:

- Post-construction BMP inventories;
- Plan reviews and approvals;
- Inspection findings and corrective actions;
- Enforcement activities;
- Training completion.

The Post-Construction Stormwater Management Program shall be reviewed at least annually and modified as necessary using an adaptive management approach. Program changes shall be documented in the MS4 Stormwater Management Program Report.

MCM 6. Pollution Prevention and Good Housekeeping for Municipal Operations

8.1 Program Description

The City shall develop, implement, and maintain a Pollution Prevention and Good Housekeeping Program to reduce pollutant discharges from municipal operations and

facilities to the MS4. The program shall address municipal activities that have the potential to impact stormwater quality and shall be implemented in accordance with Permit MO-R04C.

8.2 Municipal Operations and Facility Inventory

The City shall maintain an inventory of municipal operations and facilities that may contribute pollutants to stormwater runoff. The inventory shall be maintained in an electronic format and may include, but is not limited to:

- Municipal buildings and maintenance facilities;
- Public works yards and storage areas;
- Fleet maintenance and fueling areas;
- Parks, recreation facilities, and open spaces;
- Street and right-of-way maintenance activities.

The inventory shall be updated as facilities or operations change.

8.3 Written Procedures and BMPs

The City shall develop and implement written procedures and BMPs for municipal operations that address stormwater pollution prevention and good housekeeping practices. BMPs may include:

- Proper storage and handling of materials;
- Spill prevention and response procedures;
- Vehicle and equipment maintenance practices;
- Street sweeping and debris management;
- Waste handling and disposal practices;
- Snow and ice control practices, where applicable.

Written procedures supporting this MCM are maintained in the City's Pollution Prevention and Good Housekeeping Operations and Maintenance (O&M) Plan and other applicable supporting documents.

Written procedures shall be reviewed and updated as necessary to maintain effectiveness.

8.4 Training

The City shall provide training to employees whose job duties may impact stormwater quality. Training shall address pollution prevention practices relevant to each employee's responsibilities and shall occur at least once per permit cycle.

Training may be provided through in-house sessions, external courses, or online resources and may be integrated into existing safety or operational training programs.

8.5 Inspections and Maintenance

The City shall conduct periodic inspections of municipal facilities and operations to evaluate compliance with pollution prevention and good housekeeping practices. Inspections may be conducted by City staff or designees and may be prioritized based on facility type, activities conducted, or potential risk to water quality.

Deficiencies identified during inspections shall be documented and corrective actions implemented within a reasonable timeframe.

8.6 Spill Prevention and Response

The City shall maintain procedures for preventing, reporting, and responding to spills and leaks from municipal operations. Employees shall be trained to recognize and report spills promptly.

Spills that pose a threat to water quality or public health shall be reported and addressed in accordance with applicable local, state, and federal requirements.

8.7 Recordkeeping and Adaptive Management

The City shall maintain records documenting:

- Municipal facility and operations inventories;
- Written procedures and BMPs;
- Training completion;
- Inspection findings and corrective actions;
- Spill response activities, as applicable.

The Pollution Prevention and Good Housekeeping Program shall be reviewed at least annually and modified as necessary using an adaptive management approach. Program changes shall be documented in the MS4 Stormwater Management Program Report.

Part 4. Monitoring, Reporting, Recordkeeping, and Program Evaluation

9.1 Monitoring

The City shall conduct monitoring activities as required by Permit MO-R04C, if applicable. Unless otherwise required by MDNR, the permit does not require routine stormwater sampling for the City's MS4. Monitoring activities may include observational monitoring, inspections, and data collection conducted as part of the Minimum Control Measures.

If monitoring is required due to water quality concerns, enforcement actions, or future permit modifications, the City shall comply with all applicable requirements.

9.2 Annual Reporting

The City shall prepare and submit an annual MS4 Stormwater Management Program Report to MDNR in accordance with Permit MO-R04C. The report shall summarize activities conducted during the reporting period and document compliance with permit requirements.

The annual report shall include, at a minimum:

- Status of each Minimum Control Measure;
- Summary of BMP implementation and effectiveness;
- Description of inspections, investigations, and enforcement actions;
- Summary of training conducted;
- Description of program modifications implemented through adaptive management.

9.3 Recordkeeping

The City shall maintain records sufficient to demonstrate compliance with Permit MO-R04C for a minimum of five (5) years or for the duration required by the permit, whichever is longer. Records may be maintained electronically and shall be made available to MDNR upon request.

Records shall include, but are not limited to:

- Stormwater Management Plan updates;
- Inspection and investigation records;
- Enforcement documentation;
- Training records;
- Annual MS4 reports;
- Public complaints and responses.

9.4 Total Maximum Daily Loads (TMDLs)

If a Total Maximum Daily Load (TMDL) is approved by the U.S. Environmental Protection Agency for a pollutant of concern in a receiving water of the City's MS4, the City shall comply with applicable permit requirements related to the TMDL.

The City shall review applicable TMDLs and implement BMPs consistent with permit requirements using an adaptive management approach. The City is not required to develop a separate TMDL implementation plan unless specifically required by MDNR.

9.5 Program Evaluation and Adaptive Management

The City shall evaluate the effectiveness of the Stormwater Management Program at least annually. The evaluation shall consider program implementation, compliance status, resource allocation, and opportunities for improvement.

Based on the evaluation, the City may modify BMPs, schedules, or procedures as necessary to improve program effectiveness. Changes shall be documented in the annual MS4 Stormwater Management Program Report.

9.6 Responsible Official and Certification

The City shall designate a responsible official to oversee implementation of the Stormwater Management Program and to certify annual reports and permit-related submittals in accordance with applicable requirements.