



NPDES Permit # 78-12-0-00

2024 Annual Report

City of Carter Lake

950 E. Locust Street

Carter Lake, Iowa 51510

January 15, 2025

Alison Manz

DNR Field Services & Compliance Bureau

1401 Sunnyside Lane

Atlantic, Iowa 50022

(712) 243-1934

RE: NPDES MS4 Permit No. 78-12-0-00

Dear Ms. Mantz:

The City of Carter Lake is pleased to submit the 2024 Annual Report for the above NPDES permit issued July 1, 2021. This annual report summarizes the activities during the 12-month period of October 2023 to October 2024. The annual report is prepared by the Carter Lake City Clerk with assistance from City Engineer, Elizabeth Hunter of Snyder & Associates and the building inspection staff in conformance with the reporting requirements in the City's discharge permit. The current permit was approved and made effective July 1, 2021, and will expire on January 1, 2026.

Carter Lake is in Pottawattamie County with a current population of around 3,791 within an area of approximately 2.02 square miles.

RECEIVING WATERBODIES: Carter Lake and the Missouri River Lake.

The Missouri River at the point of discharge is a class A1, B(WW-1), HH and C stream. Class A1 streams are waters in which recreational or other uses result in prolonged and direct contact with the water. Class B(WW-1) streams are waters in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations. Class HH streams are waters in which fish are routinely harvested for human consumption. Class C streams are waters used as a raw water source of potable water.

Carter Lake is a class A1, B(LW) and HH lake. Class A1 lakes are waters in which recreational or other uses result in prolonged and direct contact with the water. Class B(LW) lakes are waters with physical and chemical characteristics suitable for maintaining a balanced aquatic community normally associated with lake-like conditions. Class HH lakes are waters in which fish are routinely harvested for human consumption or waters designated as a drinking water supply.

The permit authorizes the discharge of storm water from the municipal separate storm sewer system.

The six control measures as defined in our NPDES permit are:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Management
- Post-Construction Storm Water Management
- Pollution Prevention and Good Housekeeping

The objective of the City of Carter Lake's various storm water ordinances is to protect the taxpayer's health, safety and welfare through an economically viable storm water quality and quantity programs. We attempt to diminish threats to the public caused by runoff of excessive storm water and reducing possibilities of overloading of the storm sewer system. These ordinances provide regulations for subdivision layout and construction, regulations for excavating and grading, regulations for erosion control, and regulations for building construction. Before starting construction, applicants must submit preliminary plans and specifications to show compliance with the provisions set forth in these ordinances.

The City Ordinance Chapter 101 was enacted to provide guidance as well as govern the handling and treatment of stormwater within the boundaries of the city. A copy of Chapter 101 is attached.

Although it is difficult to list all the City's activities during this year 2024, this report attempts to identity some of our major activities. We have organized the report according to the outline developed in Part II of the permit:

A. Public Education and Outreach

- The city participated in several seminars held to provide training for City personnel. Training attended:
 - Annual Staff Pollution Prevention Training for Municipal Operations – April 2024
 - ISWEP ISTORM Conference – October 2024
 - ISWEP ISTORM Conference Tour – October 2024
 - ISWEP Virtual Member Meeting - December 2024
- We placed articles in the City's newsletter to provide information on improving

urban water quality.

- The city displays general informational brochures regarding control of storm water. Copies of handouts are available to contractors or citizens at our City Hall. Samples are:
 - Homeowners Guide: Winter Salt Use
 - Stormwater Wetlands
 - Permeable Pavers
 - Rain Gardens - Green Infrastructure for Stormwater management
 - Bioretention Cells
 - Rainwater Harvesting
 - Soil Quality Restoration (SQR) – Improving Soil Health
 - Construction Site Runoff Control
 - Drainage in Your Neighborhood
 - Minor Erosion and Sediment Control (Residential)
- The City of Carter Lake provides education and contact information for reporting problems and or concerns through the City’s web site. The web site of Carter Lake has undergone some redevelopment, and a new look is coming. Copies of the storm water information and ways to report nuisances are included in the City of Carter Lake’s Storm water page. The telephone HOTLINE number is (712) 347-6320.

B. Public Involvement and Participation

- A Storm Water Advisory Committee has been organized and is meeting on a quarterly basis. The committee currently has 5 members and is made up of a former mayor/local citizen, contractors, an engineer and members of the Maintenance Department. The committee will continue to review the City’s ordinances and procedures that include the storm water regulations. Updated ordinances will be adopted by the City Council.
- The City’s storm sewer intake labeling program continues each year. A program was developed to label all storm sewer intakes. All storm sewer intakes have been identified and mapped, and the drains have been labeled. Carter Lake Maintenance periodically will check the inlet markings for legibility. “No Dumping” placards have been installed on all drains and they have been marked for ongoing compliance. The labels are an excellent warning to help prevent hazardous material for entering the lake. Storm Drain Labeling. New labels have been ordered for installation in spring 2025.

C. Illicit Discharge and Elimination

- Review and update of the illicit discharge ordinance will be conducted by the Storm Water Advisory Committee and amended by the City Council.
- The City of Carter Lake has started to work on adding more information to complete storm sewer map in our GIS system. Pipes, intakes, outlets, and drain tiles will be mapped. Storm sewers constructed in new subdivisions are added to the map as they are accepted into the system. New detention basin will also be added to the file as constructed and certified.
- All eight storm water release locations are inspected for illicit discharges during dry weather seasons. All eight locations did not have any running water.
- The Maintenance Department, and City Hall, can be notified of any reported illicit discharge.

D. Construction Site Storm Water Runoff Control

- Construction site runoff control is monitored throughout the project by the building inspectors on staff as part of their normal duties.
- Projects of proper size are required to have a Storm Water General Permit #2 and follow the requirements of that permit. On smaller projects within the City, the site plans are reviewed, and best management practices (BMP) are required for erosion control before the permit is issued.
- City Engineer staff members inspect capital improvement projects – improvements were made to the water systems and minor work on the sewer system. Commercial sites and single-family dwellings are inspected by the Building Inspectors. We have two sites that require SWPPP inspections for active construction sites that hold a General Permit #2 from IDNR.
 - Prairie Flower Casino Expansion – a third-party inspector manages these and provides copies of the reports to the Building Inspectors office
 - Carter Lake Force Main Replacement - this is a City of Omaha project and managed by Omaha City Engineering department and JEO.
- The sites are monitored during construction recorded:
 - Active construction sites are visited often usually done weekly as part of other normal duties by staff. Pollution prevention facilities are reviewed to monitor if they are operating properly. If not, permit holders are notified to take corrective action.

- The City Inspector had one commercial development that required erosion control plans with required SWPPP associated with construction activity.
- There are no residential developments that require erosion control plans with SWPPP associated with construction activity.

E. Post-construction Stormwater Management

The storm water committee will review the post-construction ordinance.

The city monitors construction projects for restoration and erosion control applications.

- Currently we have 2 open GP-2 permits as listed above.
- A City map is being developed in the GIS system to locate all privately owned detention facilities.
- The Storm Water Advisory Committee will meet quarterly during the upcoming fiscal year. Meeting minutes will be found on the city website. The committee will review options for new topsoil regulations to be included in the updated construction specifications. The city has adopted the Iowa SUDAS Specifications. The Committee will review the current ordinances and plan to provide recommendations for amendments.

F. Pollution prevention/Good housekeeping

- The City's storm sewer system is monitored and maintained by the Carter Lake Maintenance Department. Costs associated with storm water repairs by either staff or contractors will be tracked. These costs can include education, design, maintenance and operating supplies. A cost summary is attached.
- During the previous year, no new storm sewer and drain tile have been installed, or upgraded by new subdivisions
- The City has hires a private contractor to sweep the streets of Carter Lake at least quarterly for \$6,500 per quarter.
- Maintenance department employees attend training in the spring to review what to watch for to reduce or prevent pollutants from entering the storm water.
- Maintenance staff who are responsible for handling, applied pesticides or fertilizer are provided the proper training in methods of storage, application, and disposal of these materials. In the spring of 2025 staff will be attending training for additional certifications.

G. Contacts for the City of Carter Lake
Jackie Carl, City Clerk
(712)347-6320
Jackie.Carl@carterlake-ia.gov

Thank you for this opportunity and if you have any questions, please feel free to contact us.

Sincerely,

Jackie Carl, City Clerk
City of Carter Lake
Carter Lake, Iowa 51510

2024 STORMWATER REPORT APPENDIX