

National Pollutant Discharge Elimination System MS4 Permit No. NE0133671

Annual Report Summary September 1, 2021 – August 31, 2022

City of Lincoln, Nebraska



“Water pollution affects every one of us. Picking up a piece of trash or two a day can bring significant benefits to the environment. Your efforts can help reduce surface water pollution, improve the aquatic habitats, improve stream aesthetics, and provide for more sustainable streams.”

Message sent via LTU social media on 8-22-22

Image created by JD Stempson.

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Reporting Requirements Summary

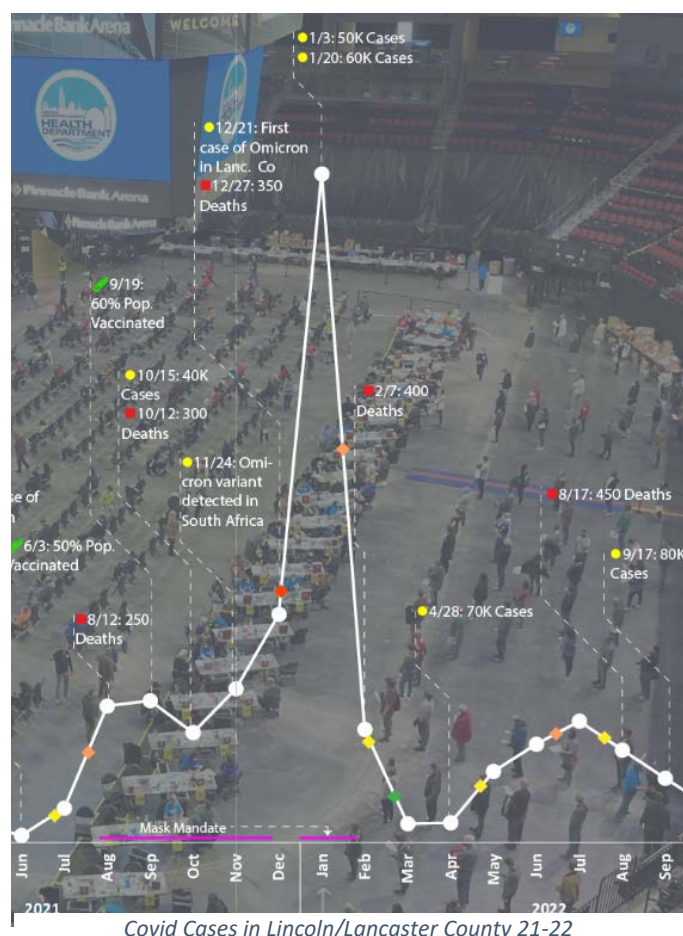
The City of Lincoln is required by federal law to comply with the provisions of the Federal Clean Water Act. In Nebraska, the U.S. Environmental Protection Agency has given the Nebraska Department of Environment and Energy (NDEE) the authority to implement the conditions of the Clean Water Act and the responsibility to ensure municipalities in Nebraska are compliant.

The City of Lincoln complies with these mandated regulations through a State-issued National Pollutant Discharge Elimination System (NPDES permit). On October 2, 2018, the City was re-issued an NPDES permit by the State of Nebraska, allowing municipal stormwater discharges to local waterways and lakes effective November 1, 2018 – October 31, 2023.



NPDES Permit

This is a summary of the City's efforts reported to the NDEE for the period beginning 9/1/21 to 8/31/22. The reporting period is reflective of the new permit, signed on October 2nd, 2018, by the Water Permits Division Administrator.



Duty to Re-Apply – As allowed in the NPDES permit, the annual report for year four can be utilized as a reapplication for the City's MS4 Permit No. NE0133671. The city has chosen to reapply as part of this year's annual report submittal to the State.

Note: The City's fiscal year, which ended August 31, 2022, is slightly different than the NPDES permit year 2022, which ends December 31, 2022.

COVID-19 Pandemic:

The COVID-19 pandemic continued to impact NPDES permit requirements. Social media was restricted to health issues regarding COVID in late 2021 and early 2022 due to the new variants Delta and Omicron, which caused a huge spike in local cases.

Public events were cancelled, and staffing continued to be limited due to facility closures, social distancing, and quarantine requirements.

Due to restrictions, overall permit numbers were again dramatically lower than in previous years. The permit analytics show abnormally low or non-existent attendance and/or participation. This is not indicative of non-compliance, it is, however, an unfortunate result of the pandemic and may skew future permit analysis.

Events and attendance numbers continue to remain substantially lower in early 2023 and will impact next year's annual findings. Staff will continue to monitor restrictions/guidelines and make recommended modifications/adjustments as necessary.

The following is a list of programs the city has implemented to comply with the State's requirements for Lincoln's municipal stormwater NPDES permit.

Each program (numbered 1-8) contains a link to an EPA website to provide a summarized description of the requirements.

The items listed below are non-inclusive of all efforts made by the city in the 2021-22 fiscal year.

1. Public Education and Outreach



Pioneers Park Nature Center

Watershed Management and Solid Waste teamed up and had two booths at the Spring Expo (Home Show) the weekend of February 11, 2022. The event was well attended with approximately 600 attendees. Staff interactions were made up of various topics including, but not limited to recycling, composting, trash pickup and only rain in the drain activities.

In this permit year, the Parks and Recreation Department provided several programs for elementary school students and the general public which described positive and negative impacts humans have on the environment. Overall attendance on the outdoor trails, outdoor exhibits and various onsite programs/scouts and events consisted of 169,335 students and their adult leaders.



Joint Watershed/Recycling/Health Booth at Home & Garden Show in Lincoln NE



Kids Corner Event included planting native wildflowers using compost made available by Solid Waste

Additionally, a kid's corner education activity was conducted at the same event by the Watershed and Solid Waste educator to actively involve kids interested in environmental impact.

The City made 1,350 cubic yards of compost available free to the public, previously "LinGro," now referred to as "Earthfuel" Compost.



Finished compost can be used as a soil amendment rich in plant nutrients

The city requires a "No Dumping – Drains to Creek" design imprint into all new precast concrete top sections of storm drains and manhole covers. The goal of the Storm Water Awareness Program is to prevent anything other than clean water from entering storm drains. Volunteers are also recruited to mark storm drains with a "No Dumping - Drains to Creek" message. During the year, 202 storm drains were marked through the SWAP (Stormwater Awareness Program).

2. Public Participation and Involvement

The City of Lincoln implemented an online "SeeClickFix" program called UPLNK for citizens to report issues of concern. One of the items is "Mud in the Street Due to Construction."

Complaints of mud in the street are generally in direct correlation with local construction.

Inspectors verify the address of the complaint against the map of large and small permitted sites. If it correlates with a permitted site, it is not only followed up in UPLNK, but also addressed through the proper enforcement procedures of the INOI or NOI permit. This system not only helps ensure Citizen concerns are addressed but also site concerns are followed up in a timely manner. See UPLNK Mud in the Street items are to be *acknowledged* within 24 hours and *addressed* within ten days. For this permit term staff followed up on 69 Mud in the Street complaints.



Mud in Street Complaint in Lincoln NE

Removing trash from and adjacent to our local streams meets not only the public engagement permit requirement, but also qualifies as a water quality improvement.

Watershed enlists local citizens to remove trash from our streams/creeks/waterways. We continually add new streams into the Adopt a Stream program, which correlates the upward trend in volunteer numbers. This year 318 volunteers took part in 36 Adopt A Stream clean up events and removed a total of 10,505 pounds of trash from our local water bodies.

The City put on a program to accept recyclable materials at various locations. Six thousand seven hundred fifty-nine tons of recyclable materials were collected through the City/County Consumer Recyclables Collection Sites in Fiscal Year 2021-22. Items included: newspapers, paper, cardboard, glass, tin and aluminum cans. This program was associated with the City of Lincoln's Waste Reduction and Recycling Program



Take glass to a public recycling collection site or ask your collector for a specific list of accepted items.

Lincoln's Recycle Program Encourages Citizens to "Recycle Right"



Rain Garden/Cost Share Project in Lincoln, NE

A Sustainable Landscape Cost Share Program is offered by the Watershed Management Division. This program offers a rebate of up to \$2000 to Lincoln property owners for approved rain scaping projects. The program reimburses participants 50 percent of qualifying expenses related to these projects. The goal of the program is to improve water quality, reduce runoff, and facilitate infiltration.

The Lincoln Public Schools and area schools provide curriculum for recycling and ecology-based classes. Garbology is an ecology-based program that includes water quality components. The classes were provided to 3,000-4,500 public and private elementary students.



Garbology presentation to LPS kindergarten class

Watershed Management annually attends Uncle Sam Jam for the July 4th Celebration. This year's event was held on July 3, 2022.

To educate the public on clean waterways, Watershed Management and Keep Lincoln and Lancaster County Beautiful work together to publish online social media campaigns to promote proper disposal of fireworks debris.



Uncle Sam Jam Clean Up Campaign

Watershed Management held the annual Oak Lake cleanup on July 5, 2021, to collect leftover debris from the Uncle Sam Jam Celebration.

3. Illicit Discharge/Disposal

In Summer-Fall seasons of 2021-22 the dry weather team monitored 51 outfall sites in Lincoln (including one revisit from 2021). A total of sixteen samples were collected at sites that were found to have flow to detect potential illicit and illegal connections to the storm drain system. Monitoring locations shown in Figure 1.



The Lincoln Fire Department's Hazardous Materials (HazMat) team responded to numerous calls to conduct spill containment for hazardous materials spills. The Health Department conducts investigations and enforcement for HazMat responses as appropriate (some locations are shown on Figure 2).

The Lincoln Lancaster County Health Department investigated 82 reports of illicit discharges, with 52 of those being immediate responses by LLCHD's HazMat Emergency

Response Team due to reports as having actual water impact or the potential to impact water. Of the 52 complaint reports that indicated actual water impact, 17 were verified.

Examples of illicit discharges include vehicles leaking fuel, oil, or other fluids; paint washed out of brushes or rollers at the curb; grease discharges from restaurants; grey water or wastewater discharges; antifreeze and other chemicals spilled, dumped, poured or power washed into the storm drain system; and garbage junk and litter. LLCHD (and Lincoln Fire and Rescue) actions minimize the contamination of water. Responsible parties are required to clean up the illicit discharge. If no responsible party is identified, LLCHD's response contractor conducts the cleanup. (Some locations are shown on Figure 2).



Illicit Discharge entering Storm Drain

4. Construction Site Stormwater Programs

The Watershed Management Division maintains a database for tracking permits for construction site activity. All of the inspections conducted by Watershed Management were logged in a database and mapped (see Figure 3).

Construction site permits and inspections are keeping pace with the growth of the city. Most sites require multiple inspections throughout the life of the project; thus, the inspection numbers are higher than the permits issued.



Failed Silt Fence Inspection

For the permit period 9-1-2021 through 8-31-2022 there were 3,949 inspections of small sites (under an acre) and 760 inspections of large sites (an acre or greater).

In addition to on-site education, annual training is provided to

contractors apprising them of permit requirements, and changes to the same. Information regarding the annual training is available online at Lincoln.ne.gov keyword sediment.



Training is provided to site contractors and developers

5. Post Construction Runoff Control



One hundred forty-four Retention/Detention Ponds sites were inspected 204 times to assess their functionality with regard to reducing pollutants from stormwater run-off and flood control (locations shown on Figure 8). Additionally, 81 Post Construction BMP sites were inspected and 41 new Post Construction Best Management Practice (BMP) applications were reviewed by staff.

6. Pollution Prevention and Good Housekeeping

Residential Streets (11,135 lane miles) were cleaned with street sweepers three times per year on a rotating schedule of locations. All arterial streets were cleaned with street sweepers at a rate of typically once every two weeks (8,574 curb miles).

All business districts were cleaned with street sweepers, typically once every four days (741 business district lane miles).

The combined street sweeping of all types of streets listed above produced 3,365.5 tons of landfill material. This material would have ended up in local streams, creeks and retention ponds if not collected by street sweepers.

Downtown Lincoln Association also conducted sweeping of the sidewalks in the downtown business district, targeting those areas known for abundant trash accumulation. Approximately 1,425 cubic yards of debris/trash is collected annually.



DLA Mini Sweeper

City crews inspected manholes, inlets, and piped storm drainage systems to ensure that the city storm drain system is in good repair and that no sanitary lines connect to them.

In this permit term, 9,795 linear feet of storm drainpipe was improved/replaced with the following storm drain improvement projects: Forest Lake, Rokeby from Friedman to 84th, Folsom from Old Cheney to Palm Canyon, Holdrege from 87th to Cedar Cove, Holdrege at 104th, 70th & A, West A from SW 23rd to SW 5th and A from 89th to 93rd. Additional information regarding these improvement projects and other Watershed Management projects can be found on the City of Lincoln Watershed Management website at lincoln.ne.gov/WatershedProjects.



Proper Storage of Chemicals is an Integral Part of Municipal Inspections

In this permit term, the Health Department conducted inspections at 22 municipal facilities that are required to be inspected under EPA's "Good Housekeeping" program. (see [Figure 6](#)).

7. Industrial and Related Facilities

One hundred three industrial facilities were inspected for compliance with State of Nebraska issued NPDES permits. One of the Mayor's Performance Indicators for Water Quality is to assure that at least 90% of industries pose minimal risk of illicit discharge to the stormwater system. In FY21-22, 95% of the facilities posed minimal risk of illicit discharge. For the past four years, this performance indicator has been achieved. (see [Figure 7](#)).

8. Monitoring Program

The State approved Best Management Practice (BMP) monitoring for our wet weather monitoring for this permit term. This year was the fourth year of a five-year permit. Overall data analysis will be provided in year five.



Automatic Sampler at P Street

BMP sites selected for BMP monitoring include Planters at the Municipal Service Center; Tyrrell Park Regional Bioretention Area; Tyrrell Park – Permeable Paver Cul-de-Sac; 11th Street Streetscape – 11th & G Bioretention Cell; and the P Street Streetscape – P Street & Centennial Mall Bioretention Cell.



P Street - Outflow Sampling Location

Figures

- [Figure 1 - Dry Weather Monitoring Locations](#)
- [Figure 2 - Illicit Discharge Complaints/Response Locations](#)
- [Figure 3 - Erosion and Sediment Control Complaints/Response Locations](#)
- [Figure 4 - Grading Inspection Locations](#)
- [Figure 5 - Basin Inspection Locations](#)
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- [Figure 7 - Industrial Facility Inspection Locations](#)
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- [Figure 9 - Cost Share Projects](#)
- [Figure 10 - Cost Share Rain Gardens 2007 - 2022](#)
- [Figure 11 - Illicit Discharge Complaints/Response Locations on State of NE / UNL Property](#)