

CITY OF ANKENY  
FISCAL YEAR 2024 ANNUAL REPORT  
NPDES PERMIT #77-09-0-08  
AUGUST 22, 2024

The City continues to implement the components of NPDES Permit No. 77-09-0-08. Please see the summary of data on pages 1 and 2, with detailed information on the following pages.

Summary of Data

1. Illicit discharge actions – 11
2. COSESCO permits – 24 permits for sites over 1 acre (\$20,900.00 in permit fees)
3. COSESCO permits – 551 permits for sites less than 1 acre (\$52,860.00 in permit fees)
4. Erosion and sediment control inspections – 1,396
5. NPDES Stormwater GP No. 2 – 121 permits for sites located within the City, 470 quarterly inspections
6. Issued stop work orders – 7
7. Outfall inspections – 212
8. Basin and wetland inspections – 214
9. Street sweeping removed approximately 335 tons of debris
10. Street sweeping occurred over 12,674 miles
11. Street sweeping cleaned 260 storm intakes
12. Conducted stream water quality monitoring – 144 times
13. Conducted biological and habitat assessments at 6 stream locations
14. Conducted education and outreach 22 times
15. Hosted or support 4 stream and watershed clean-up events
16. Reimbursed \$16,779.03 to residents for 49 private Stormwater Best Management Practices (BMPs)
17. Participated in Fourmile Creek Watershed Management Authority Meetings – 4
18. Investigated and responded to erosion and/or drainage complaints – 153
19. City operating budget for stormwater activities and administration - \$930,107.00
20. City operating budget for street sweeping - \$249,173.00
21. Stormwater utility fees collected - \$3,484,284.00
22. Capital Improvement Program projects that were under construction during the fiscal year include the following:
  - a. SE 3<sup>rd</sup> Street Utility Improvements
  - b. 2023 Annual Storm Sewer Repairs
  - c. 2024 Annual Storm Sewer Repairs
  - d. Rock Creek Greenway Native Vegetation
  - e. Vintage Business Park – North Lake Maintenance
  - f. 2024 Storm Culvert and Trail Repairs
  - g. 2024 Subdrain Repairs
  - h. 2024 Surface Restoration

23. Implemented recommendations from 2020 and 2022 native vegetation maintenance study to help maintain public native vegetation areas.
24. Continue monitoring and corrective action efforts at Prairie Trail wetlands to comply with Section 404 permit.
25. City staff is working with ISWEP to develop a fertilizer and pesticide management program tailored to fit and improve the City's current processes and data analysis to help track and manage the use of fertilizers and pesticides on public properties.

## PART II. STORM WATER POLLUTION PREVENTION & MANAGEMENT

### Public Education & Outreach on Storm Water Impacts

1. General Storm Water Education
  - a. Social Media Posts (Facebook, Twitter, blogs, etc.)
    - i. 2023-09-05 Pond Management Workshop
    - ii. 2023-09-14 How to Properly Drain a Pool, Spa, or Hot Tub
    - iii. 2023-11-11 Ankeny Leaf Collection Days
    - iv. 2023-11-24 The Rain Campaign, BMPs
    - v. 2023-11-29 The Rain Campaign, BMPs
    - vi. 2024-03-05 Carboard Recycling
    - vii. 2024-04-04 Lawncare Fertilization Tips
    - viii. 2024-04-06 Earth Day & Stream Clean Up Event
    - ix. 2024-04-11 Sawgrass Park Trash Pick Up Event
    - x. 2024-04-12 Earth Day & Stream Clean Up Event
    - xi. 2024-04-16 Earth Day & Stream Clean Up Event
    - xii. 2024-04-23 Earth Day
    - xiii. 2024-05-10 Host a Cleanup Event to Help Ankeny's Waterways blog post on DSMUSA Partnership website
    - xiv. 2024-05-17 Spring Cleanup and Tree & Branch Recycling
    - xv. 2024-05-29 Best Management Practices Reimbursement Program
  - b. Educational displays are located within the front lobby at the Public Services Building.
  - c. 2023-10-12 City staff gave a presentation on Maintenance of BMPs at the Iowa Floodplain and Stormwater Management Association Annual Conference
  - d. Winter City Guide with article about yard maintenance and fertilizer use.
  - e. 2023-12-04 Email to all home builders with active permits in Ankeny regarding winter construction and erosion control measures.
  - f. 2023-10-26 Letter to all construction site owners and/or contractors in Ankeny regarding winter erosion control for construction sites.
  - g. 2023-07-06 City staff had a booth at the All City Play Day to present information about the BMP Reimbursement program and how to prevent water pollution. City staff gave away useful information and had water related games for children to play. Approximately 3,000 people attended the event.
  - h. Spring City Guide with article about preventing water pollution.
2. Telephone Hotline Number
  - a. The City of Ankeny's stormwater hotline is listed on the City's website along with Polk County Dispatch, IDNR Field Office No. 5, and the IDNR Emergency Spill Hotline information. Calls made to Polk County Dispatch are sent to City staff as needed.
3. Stormwater Web Sites
  - a. The City of Ankeny maintains pages on the City of Ankeny's website containing pertinent information about the following topics:
    - i. Importance of Stormwater Management

- ii. Education & Outreach, Helpful Homeowner Habits, BMPs, and Additional Resources
- iii. Erosion Control, COSESCOs, Links for Permits
- iv. Illicit Discharges – specifically Examples, How to Prevent, and How to Report
- v. Post-Construction Stormwater Management, Information and Additional Resources
- vi. Reports and Studies
- vii. Stormwater BMP Reimbursement Program
- viii. New Residents – General Resources, Stormwater Management
- ix. Draining Your Pool/Spa

- b. Sediment and Erosion Control Checklist
  - i. The City of Ankeny has a standard checklist for Pollution Prevention Plan Review and site inspections that addresses sediment and erosion control measures.

#### Public Involvement & Participation

- 1. Stream Restoration Activities
  - a. 2024-04-20 The City of Ankeny hosted a stream and watershed clean up event with approximately 66 volunteers and 6 city staff members. The City of Ankeny also hosted a native tree giveaway on Earth Day. Approximately 100 native trees were distributed to residents.
  - b. City of Ankeny residents utilized trash bags provided by the City of Ankeny to pick up trash at private events on the following dates. City of Ankeny staff coordinated locations, led groups, and picked up and properly disposed of the full trash bags.
    - i. 2024-04-07 Sawgrass Park, approximately 20 people
    - ii. 2024-05-15 515 Group cleaned Ankeny Aquatic Center Native Vegetation, Vintage Park, and Promenade Park
    - iii. 2024-05-03 Ankeny High School Senior Day, approximately 50 high school seniors picked up trash in native vegetation and detention basin areas along SW Irvinedale Drive.
  - c. The BMP Reimbursement Program paid out \$16,779.03 for 35 rain barrels, 2 native plantings, and 12 soil quality restoration projects.
- 2. Stakeholders Group
  - a. The WISE group had low attendance in the last several years, with a significant reduction in attendance post-covid. The WISE group may be revised from the previous format in order to increase attendance; this effort is still in progress. The WISE Group did not meet in fiscal years 2023 or 2024.
  - b. The City of Ankeny is a member of the Fourmile Creek Watershed Management Authority (WMA). Meetings are held quarterly and are open to the public. City staff participated in the following WMA meetings.
    - i. 2023-07-27 Fourmile Creek WMA Quarterly Meeting
    - ii. 2023-10-26 Fourmile Creek WMA Quarterly Meeting
    - iii. 2024-01-25 Fourmile Creek WMA Quarterly Meeting
    - iv. 2024-04-25 Fourmile Creek WMA Quarterly Meeting
  - c. Public Notice Requirements – When implementing a public involvement and participation program, the City or host entity complies with all state and local public notice requirements.

#### Illicit Discharge Detection & Elimination

- 1. Illicit Discharge Prohibition Ordinance

- a. City of Ankeny Code Chapter 105 Illicit Discharge to Storm Sewer System
- b. The following illicit discharges were found and addressed on the dates indicated below.
  - i. August 23, 2023 - A contractor spilled frac material from a directional drilling construction project when transferring the material from the frac tank to a tanker. The material made it into the storm sewer and was subsequently removed from the storm sewer before it made it to a downstream pond.
  - ii. October 31, 2023 - A sanitary sewer overflow at a fat, oil, and grease interceptor at a commercial facility caused fat, oil, grease, and sanitary material to overflow into a parking lot. The Des Moines WRA, City of Ankeny Wastewater and Stormwater staff responded to ensure the responsible party undertook the cleanup effort. No materials entered the storm sewer or ditch.
  - iii. November 2, 2023 - City staff found a minor amount of sediment flowing into a public pond associated with flushing a new water main as part of the construction process. City staff notified the contractor who then worked to flush the water main in a non-erosive manner.
  - iv. November 8, 2023 - City staff found a minor fish kill in a public pond associated with disinfecting and flushing a new water main. City staff notified the contractor and the Iowa DNR Field Office No. 5. IDNR staff visited the site. No spill number was issued.
  - v. November 29, 2023 - City staff found what appeared to be a minor amount of fuel near a storm sewer flared end section. There was no obvious source, and it didn't appear to be migrating. Follow up visits did not indicate any repeat issue.
  - vi. January 25, 2024 - City staff found a very blue private pond while conducting field work. City staff took samples which were sent to the State Hygienic Lab. City staff also contacted the property management company to get additional information. Based on lab results and discussions with the property management it seemed to be an untimely application of pond dye and/or algae control material.
  - vii. March 29, 2024 - Stormwater staff were informed by other City staff of a greasy material on a parking lot. The material appeared to be coming from the fat, oil, and grease separator. City staff worked with the Des Moines WRA to determine the material was not coming from the separator, but instead was coming from the backdoor of a restaurant. It appeared that the wastewater from cleaning the restaurant was either leaking out the door or being dumped out the door, running across the parking lot, and into a ditch. No material was found in the downstream storm sewer or waterway. The material in the ditch was managed, and city staff discussed how to properly dispose of the cleaning wastewater with the restaurant owner and manager.
  - viii. May 14, 2024 - Grass clippings were noted as being blown into the street in the 2200 block of NW 43<sup>rd</sup> Street. City staff placed notices/door hangers on nearby residential homes in the general area.
  - ix. May 20, 2024 - City staff found what appeared to be fat in an inlet protection device (IPD) during a routine construction inspection. Discussions with nearby residents determined it was household food grade fat/oil material. City staff asked the resident to properly dispose of the material in the future. Once the IPD was removed it was found to have prevented any fat from getting into the storm sewer.

- x. June 19, 2024 - City staff found a minor fish kill at a private pond associated with disinfecting and flushing a new water main. City staff notified the contractor and the Iowa DNR Field Office No. 5. IDNR staff visited the site. No spill number was issued.
- xi. June 27, 2024 - City staff found fat, oil, and grease in a parking lot and in a private storm intake during a construction inspection of a restaurant site. It appeared that the wastewater from cleaning the restaurant was either leaking out the door or being dumped out the door, running across the parking lot, and into a private storm intake. City staff documented the findings and spoke with the restaurant manager on how to properly dispose of cleaning wastewater. No fat, oil, or grease was found downstream at the outlet to the storm sewer for the site.

2. Illicit Discharge Detection & Elimination Program

- a. Program to inspect outfalls during dry weather occurs in the summer and fall with records kept at the Public Service Building. A total of 212 outfalls were inspected.

#### Construction Site Storm Water Runoff Control

- 1. Construction Site Runoff Control Ordinance
  - a. City of Ankeny Code Chapter 169 Construction Site Erosion & Sediment Control was updated in 2020 to clarify requirements, documents, and fee structure.
- 2. Construction Site Review & Inspection Program
  - a. City of Ankeny requires site plans, SWPPPs, and approval prior to issuance of any permits for construction sites. This program requires compliance with IDNR's GP No. 2.
  - b. A total of 575 COSESCO permits were issued in fiscal year 2024.
- 3. Financial Assurance for Erosion Control
  - a. City of Ankeny requires land developers to provide a bond or letter of credit for erosion control for each subdivision where a NPDES stormwater permit is required.

#### Post-Construction Storm Water Management

- 1. Post-Construction Site Runoff Control Policy Ordinance
  - a. The City of Ankeny requires stormwater detention for commercial and multi-family developments. The City also requires detention for single-family residential developments, per SUDAS standards.
- 2. Site Plan Review of Post-Construction Runoff Controls
  - a. The City of Ankeny has a process to review and accept post-construction runoff controls for all construction sites where a NPDES stormwater permit is required.
- 3. Inspection of Runoff Control Devices
  - a. A portion of the stormwater control devices and structures are inspected annually through the City's basin inspection program, and Stormwater Management Facility Maintenance Covenants and Easements. A total of 17 public basins and wetlands were inspected by City staff, and a total of 197 private basins were inspected as required by the stormwater management facility maintenance covenants and easements.
- 4. Watershed Assessment Program
  - a. The City of Ankeny has a Stormwater Management Study & Master Plan that was started in 2017 and partially approved in 2021. This is utilized to direct Capital Improvement Program (CIP) projects to reduce flooding and erosion, and improve water quality and habitat in watersheds.

- b. City of Ankeny staff and two volunteers monitor water quality at six sites twice per month. These sites are located on Fourmile Creek, Saylor Creek, and Rock Creek. The monitoring is completed as part of the Polk County Conservation Water Quality Monitoring program. Sampling parameters include pH, dissolved oxygen, chloride, temperature, nitrate, nitrite, phosphate, and transparency.
- c. City of Ankeny staff conduct an annual biological and habitat assessment of streams at the six locations utilized for the bi-monthly water quality sampling.

#### Pollution Prevention/Good Housekeeping

- 1. Operation & Maintenance of MS4
  - a. Street sweeping operations take place primarily from April through November. Streets and parking lots are swept according to the annual master sweeping schedule. Intakes/catch basins are also cleaned during the street sweeping operations.
  - b. The City's Public Works Operations Manager updated the Street Sweeping Standard Operating Procedures (SOP) in 2021.
  - c. The Public Works Department continues to work on improving efficient use of road salt & brine applications during storm and ice events.
- 2. Pesticide and Fertilizer Management Program
  - a. The City of Ankeny hires private contractors for the majority of the pesticide and fertilizer applications on public properties. Only phosphorus-free fertilizer is used at City Parks. In addition, no pesticide or fertilizer applications are allowed within 40 feet of a water body.
  - b. As recommended by IDNR staff during the June 15, 2023 review and site visit, City staff are working with ISWEP to develop a fertilizer and pesticide management program tailored to fit and improve the City's current processes and data analysis to help track and manage the use of fertilizers and pesticides on public properties. At this time, we have a 31-page draft document and a significant amount of the 2023 data entered into a spreadsheet for tracking purposes. City staff will continue working to develop the program.
  - c. Licensed City staff who apply weed and pesticide control products use the pesticide application forms required by IDALS in order to track chemicals used, purpose, application rates, and quantities. One City facility encompassing 115 acres utilizes a proprietary tracking system that considers ambient temperatures and rainfall to help reduce the usage of pesticides and fertilizers.
  - d. City staff perform prescribed burns of native vegetation areas where and when possible to reduce weed growth and use of chemicals in these areas. Eighteen locations were managed with prescribed burns in the 2024 fiscal year.
- 3. Training Program for Municipal Employees
  - a. City employees attended the following training courses.
    - i. ISWEP - Are Your Ponds Serving their Water Quality Function?
    - ii. ISWEP - Ag and Urban Prairie Strips
    - iii. CWP stormwater standards in the US
    - iv. Iowa Floodplain and Stormwater Management Association Annual Conference – City staff presented at this conference
    - v. ACPA Engineering Ethics with Trygve Hoff, P.E., ENV SP
    - vi. Adapting to Changes in Concrete Materials & Mixtures, CP Tech Center
    - vii. Contech - hydrodynamic separators

- viii. Presto Geosystems – Geoweb
- ix. CTP Information Exchange: FEMA 2D Modeling Integrated Planning Team
- x. IA DOT Culvert & Bridge Backwater Program Workshop
- xi. ISWEP Design of Multi-stage outlets (Anthony Harbaugh w/ Shive Hattery)
- xii. CTP - Planning for Flood Resilience
- xiii. CTP Webinar: Base Level Engineering – Using the data for Floodplain Management
- xiv. ISWEP's Lunch and Learn: ISWMM Updates
- xv. IStorm 2023
- xvi. Iowa Water Conference 2023

b. City staff also recertified or renewed the following certifications and licenses.

- i. ICIMSP – Iowa Certification for Inspection & Maintenance of Stormwater Practices
- ii. CISEC – Certified Inspector of Sediment & Erosion Controls
- iii. Professional Engineer – Iowa
- iv. Engineer Intern – Iowa
- v. Certified Floodplain Manager
- vi. Certified Professional in Erosion and Sediment Control
- vii. ICCSPPPI – Iowa Certified Construction Site Pollution Prevention Inspector & Installer
- viii. Inspection and Maintenance of SW BMP Certification

c. City staff worked with ISWEP to create a training video for City employees that walks through annual inspections of City facilities. The training video focuses on good housekeeping and pollution prevention measures with a specific focus on salt storage, vehicle operation and maintenance spill kits, and illicit discharge detention and prevention.

#### City Facilities BMPs

1. The City of Ankeny assesses BMPs at City facilities that are designed to reduce pollutant loading in stormwater and maintain these facilities on an as-needed basis or annually depending on the site conditions and easement requirements.
2. The City maintains approximately 195 acres of native vegetation and several constructed wetlands.
3. The City of Ankeny constructs new BMPs at City facilities when practical and economical.
4. The City stores road salt inside a closed building, and brine tanks are located within a containment area to prohibit accidental discharges to the storm sewer system.

Respectfully submitted,

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