



## Adams County 2021 MS4 Permit Annual Report Summary

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Adams County holds a Phase II Municipal Separate Storm Sewer System (MS4) Permit No. COR: 090041 issued by the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division. This is a statewide general permit for jurisdictions with population between 10,000 to 100,000 that grants permission to discharge untreated stormwater flows into waters of the United States. This permitting mechanism is designed to prevent stormwater runoff from washing harmful pollutants into local surface waters.

Under MS4 Permit regulations, Adams County has been mandated since 2003 to develop, implement and enforce the following six (6) Minimum Control Measures within unincorporated Adams County MS4 Permitted area:

1. Public Education and Outreach on Stormwater Impacts
2. Public Involvement/Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping for Municipal Operations

The MS4 Permit is not a technology-based permit, there is no specific numeric effluent limitation like Wastewater Treatment Plant discharges. Instead, the MS4 permit is regulated under a practice-based framework. This means that adequate best management practices are required to be implemented to the maximum extent practicable to minimize stormwater pollution.

The County is currently under the fourth renewal of the CDPS General Permit. The permit will be renewed again on 7/1/2026. No additional permit requirements are anticipated in the upcoming 5-year permit cycle.

The County is required to submit an annual MS4 Permit Report that identifies the accomplishments in accordance with the goals set forth under the 6 minimum control measure. The annual report is delivered on a standard State-issued form. Adams County's 2021 Annual Report is submitted to CDPHE by **March 10, 2022** by the Stormwater Administrator. In addition to the Annual Report, a summary has been created to about general program achievements.

The Stormwater Division has 3 full-time employees who are mainly responsible for the implementation of the Stormwater Program: 1 Stormwater Administrator and 2 Stormwater Inspectors.

Unincorporated Adams County owns and operates the public storm sewer system. To be able to discharge stormwater flows into the river, the County is required to comply with the terms and conditions of the MS4 permit (Municipal Separate Storm Sewer System) issued by CDPHE and required by the Clean Water Act. The specific permit requirements aim to reduce degradation of water quality and are applicable within the County's MS4 permitted area. This area is an urbanized area determined by the 2010 census data. As opposed to Wastewater Treatment Plants, which discharge sanitary sewer based on "numeric" effluent permit limitations, the MS4 permit is "practice" based and requires implementation of a series of administrative and structural best management practices to be able to operate and discharge from the system.

**MS4 Area in Numbers:**

(2021 data)

MS4 Permitted Area:	42 sq mi	(Urbanized Area)
Population in MS4:	72,000	(Urbanized Area)
Inlets in MS4:	2925 Inlets	(1646 public, 1279 private)
Manhole in MS4:	1703 MH	(1113 public, 590 private)
Pipes in MS4:	104 Miles	(66 public / 98 private) miles
Channels in MS4:	44 Miles	(10 public / 34 private) miles
Ponds in MS4:	476 Ponds	(20 public / 456 private)
Outfalls in MS4 into State Waters:	200	(including into irrigation ditches)

**2021 Highlights:**

- Stormwater Team assisted with the 2021 FEMA's Community Rating System that resulted in a 10% total discount for flood insurance policies. The County moved up the scale, from Category 9 (5%), to Category 8 (10%). PW's key role: Erosion Control Plan reviews, Drainage Report reviews, Channel & Pond Inspections, Drainage Requests from residents, etc.
- Multiple SW inspector staff changes in 2021. Significant time dedicated for training new inspectors. Adams County hired a consultant to cover construction stormwater inspection oversight between June-August 2021 and November-December 2021 gaps.
- Remote work due to Covid Pandemic continued from January 2021 to June 2021. Unlike 2020, there were no major impacts to the stormwater program in 2021.
- Self-inspection program was implemented in 2021 for the Post-Construction sites. Property owners were asked to inspect their own drainage facilities and report back to Adams County. Only 50% participation (30 sites total). System was implemented for the first time due to the lack of staff.
- Stormwater training was offered to several water & sanitation districts within the MS4 area. North Washington Water and Sanitation District attended the training.

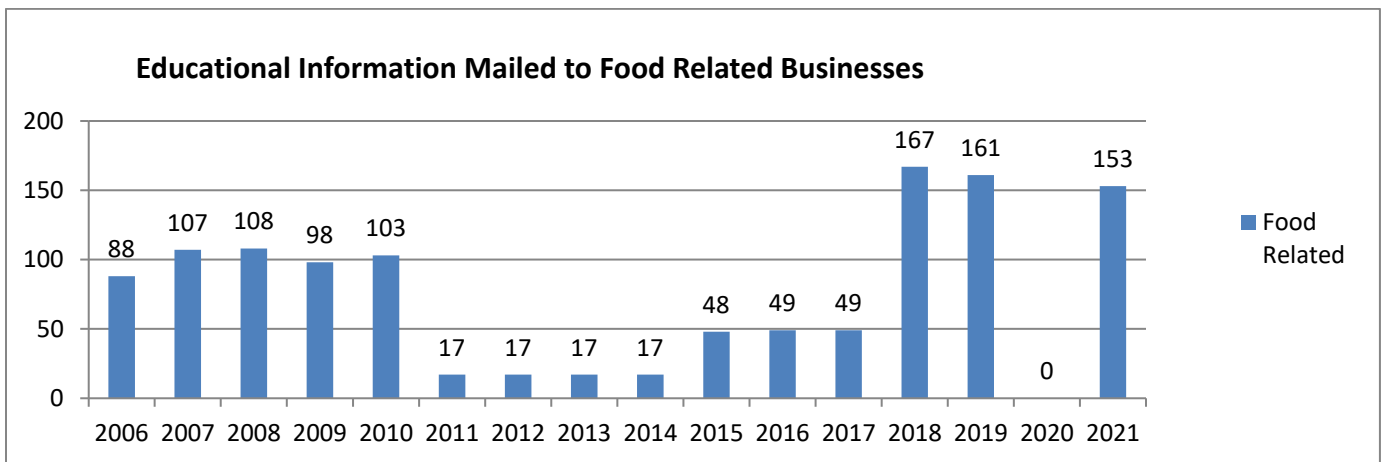
# Educational Program

The Educational Program consists of brochures distribution, signs along streams, “Dump no Waste” markers for storm inlets, “Dump No Waste” storm manhole covers, contracted classes provided to schools by Denver Zoo, booths at public events, website updates, watershed associations memberships, partnerships in research studies, etc. The program has consistently been supporting the following events:

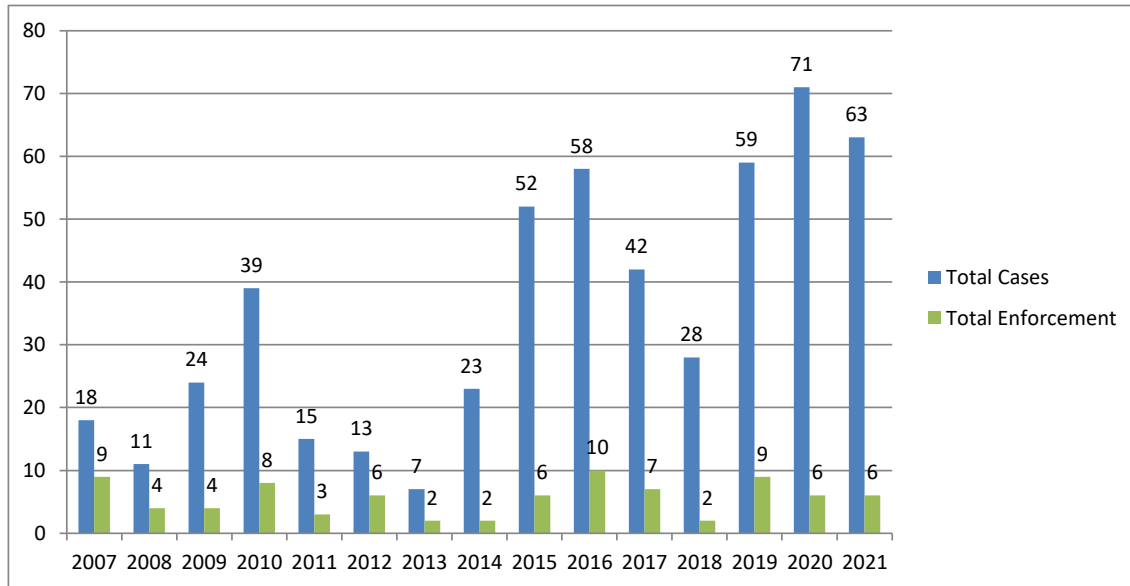
- 1) **Adams County Fair Kid’s day**
- 2) **Annual Barr Lake Clean-up**
- 3) Westminster/Thornton/Northglenn Water Festival (cancelled 2021)
- 4) Adams County - Bring your Kid to Work (cancelled 2021)
- 5) Denver Zoo’s water quality classes to 5<sup>th</sup> graders. (cancelled 2021)

The only events held in 2021 were “Adams County Fair Kid’s Day” and “Barr Lake Clean-up” event. All other events were cancelled due to covid. Adams County is proud to have been participating the annual Colorado Stormwater Council (CSC) state-wide educational campaign (from Southern Colorado-Pueblo to Northern Colorado-Ft Collins). This team effort allowed 80+ jurisdictions to send a unified message, increase length of campaign and platforms, as well as share resources. Adams County led the first Spanish radio campaign in 2021 on behalf of CSC.

The County is required to provide educational information about stormwater pollution prevention practices for food related businesses since 2018. Based on the mailing data provided by TCHD, **153** restaurants, school kitchens and supermarkets in the MS4 area were targeted. This industry has been identified as the businesses with highest stormwater pollutants potential. Information has been provided in English and Spanish. Below is the chart of educational information distributed by year to food related businesses. Note 2020 mailing was cancelled due to covid:

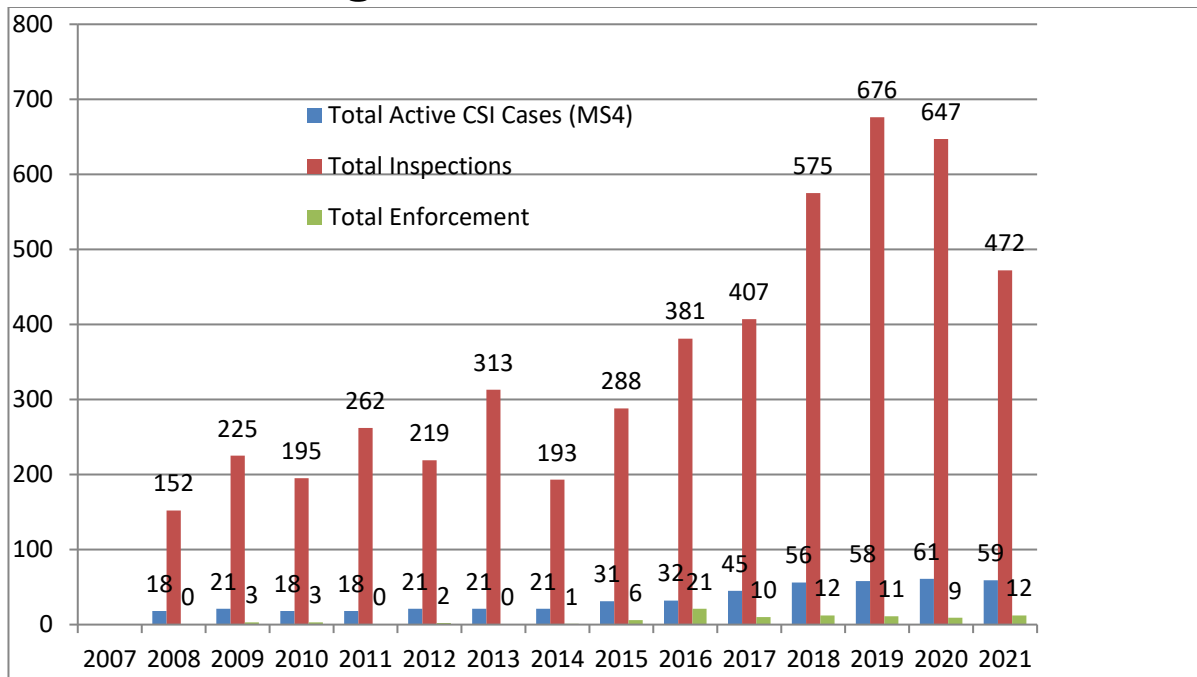


# Illicit Discharge Program



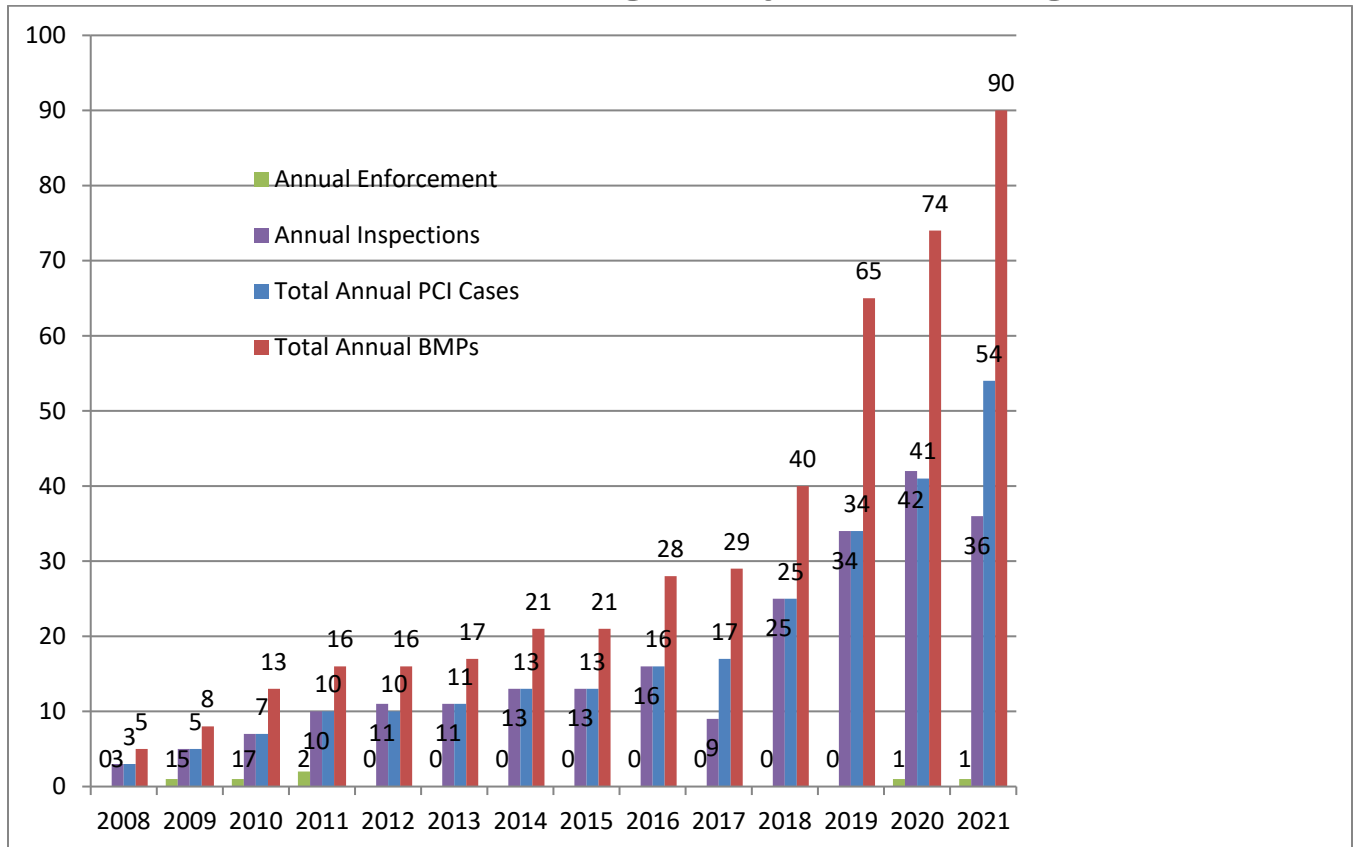
The Stormwater Division responds to illicit discharge complaints trying to find the right balance between education and enforcement actions to comply with Ordinance 11 and Adams County Development Standards and Regulations Chapter 9-05. This program is required in the MS4 permitted area, and the County chose to also implement the program outside the MS4 area to protect water quality and the environment for our whole community county-wide.

# Construction Program



Sediment is the #1 pollutant of our streams and lakes according to EPA. Erosion impact from construction sites is 8 times higher than agricultural practices. Erosion during construction releases sediments which can easily bond and act as a carrier of other toxic pollutants when it rains or snows. EPA and CDPHE have established stringent programs for construction sites disturbing 1 or more acres. The County's role is to oversee these projects in a regular monthly basis with the intent to assist contractors and prevent issues, as opposed to the EPA/CDPHE role which targets large enforcement cases.

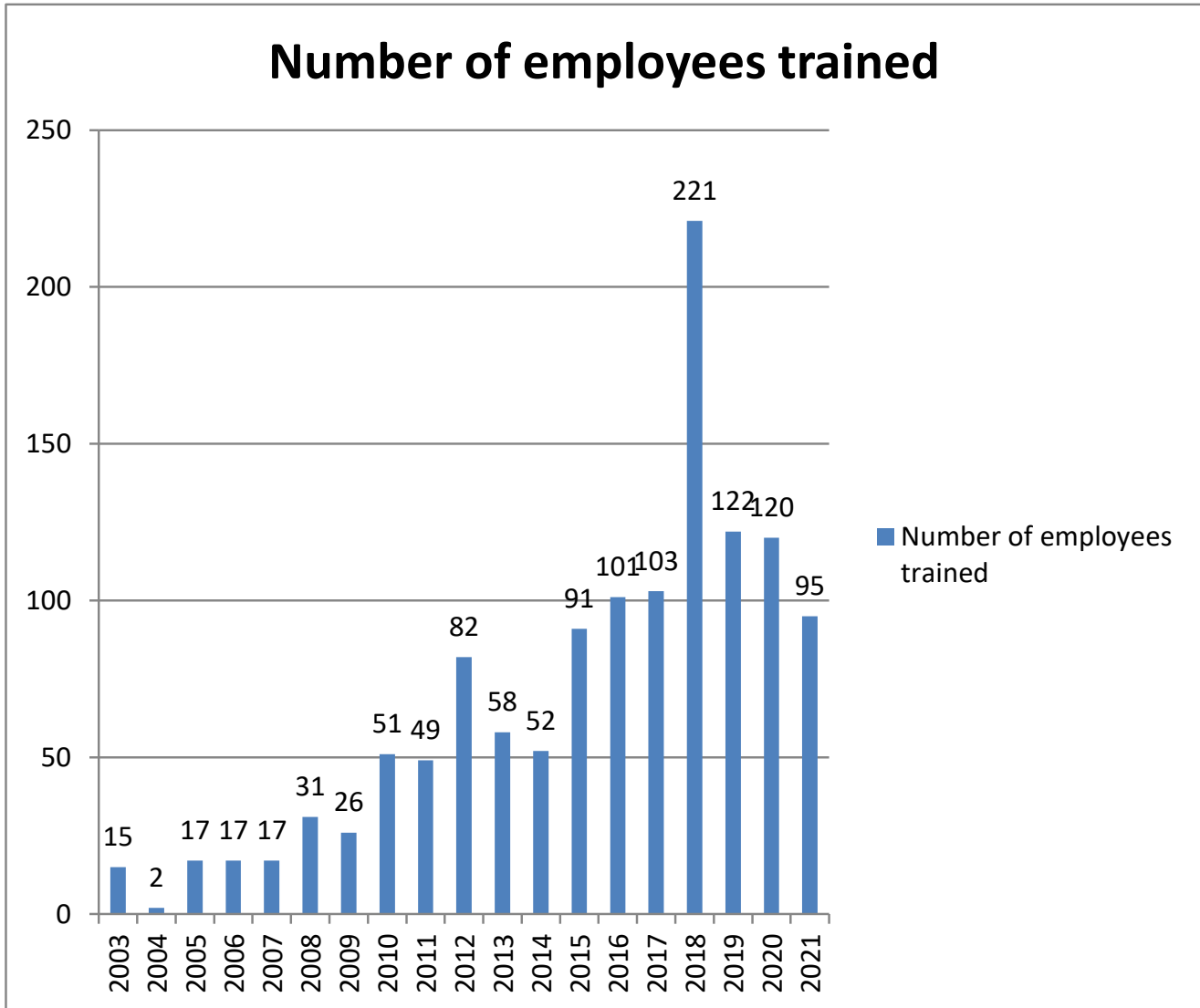
## Post-Construction Drainage Inspection Program



Since 2008, development projects in the MS4 area which disturbed 1 or more acres have been required to provide water quality treatment. As of 2021, 90 water quality drainage structures have been installed in private/public areas as part of this program. The structures are within 54 development sites in the MS4 area. The County is required to inspect each pond once every 5 years to ensure property owners (private and public) perform long-term maintenance of these structures. The County strives to inspect all applicable water quality drainage facilities annually, but in 2021 only 17 sites were inspected by the county, 20 property owners performed a self-inspection due to lack of staff.

Water quality is typically achieved by the installation of ponds, but the industry is moving towards **Green Infrastructure (GI)**. Rain gardens, sand filters, green roofs, pervious pavers, etc. are new environmentally friendly GI which promotes groundwater infiltration and reduces run-off volume mimicking nature.

# House-Keeping Program



Annual stormwater pollution prevention training was provided to county employees that work in the field. Face-to-face presentations resumed in 2021 after covid remove training. The 2018 peak was when the Sheriff Department was trained. Fleet and Facilities were unable to attend, fewer participation from Operations, no Engineers trained.

**New in 2021:** 8 employees from North Washington and Sanitation District were trained.