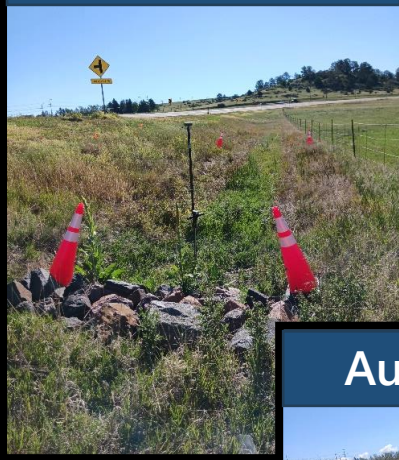


# CDOT Water Quality Swale Study



In 2023, CDOT continued its study to determine the effectiveness of subsoiling as a maintenance practice to reestablish adequate infiltration within permanent water quality swales. In 2022, CDOT subsoiled a swale within the Cherry Creek Basin and conducted infiltrator tests before and after for comparison.

August 2022



BEFORE

August 2023



AFTER

## RESULTS

Results after subsoiling showed a **123% increase in infiltration** over the initial baseline. CDOT conducted infiltrator tests in 2023 to determine how well the increased infiltration rates persisted over time. Unfortunately, heavy rains in May of 2023 caused a large amount of erosion and sediment deposition at the test site (see before and after pictures). Infiltrator test results in 2023 showed a decrease in infiltration below the initial base line. Since the rains in May of 2023 were well above average, CDOT plans to conduct this test at another site within the basin in 2024.