Storm water Pipeline Asset Management

The objective of this research is to develop a condition rating system for the storm water pipelines. Condition rating is a crucial aspect of any asset management program. Presently, no standardized condition rating system exists for storm water systems. As a result, utilities have developed different rating systems to meet their program objectives, detail, and needs. Many storm water departments adopted NASCO’s PACP while few others use a “Good-Poor-Failed” rating, 1-5 scale, 0-5 scale, and 1-10 scale to rate their storm sewers. The utilities that adopted NASCO’s PACP base scales largely blended them with additional in-house scales which were based on the asset type (inlets, laterals, etc.) or the method of inspection (CCTV etc.). It is important to note that the scales that ranged greater than 1-5 were aligned with condition rating scales of highway departments used with pavement structures. There are several indicators that can be used to determine the condition of a pipe as seen in Figure 1. The indicators appropriate to storm sewers would be used to develop a rating system that would help utilities determine the condition of pipeline and prioritize their rehabilitation works.

![Figure 1: Indicators of Pipe Condition](image)