## **SMART**COVER



# AURORA, COLORADO OPTIMIZES INSTANT INFRASTRUCTURE FOR SEWER EXPANSION PLANS

#### THE CHALLENGE

Aurora, Colorado is a growing city with approximately 375,000 residents, which represents only about half of the projected population that will require utility services in the future.

Therefore, the Aurora Water Department staff constantly needs to be able to balance meeting today's water and sewer capacity requirements with forward planning to assure cost-effective upgrades and expansion to meet future population requirements.

This planning process requires flexible collection of data from manholes throughout the system.

In 2015, Aurora Water undertook a comprehensive analysis to determine system-wide flow and capacity requirements by using 46 flow meters deployed at backbone lines and major interceptor points. The Phase 1 analysis provided overall baseline data. However, the Phase 2 planning process needed more granular and flexible data collection methods without confined space entry.

"SmartCover enables us to get more granular on targeting manholes for analysis while avoiding the hassles of confined space entry."

- James DeHerrera, P.E., Project Engineer, City of Aurora

#### THE SOLUTION

In the Summer of 2018, Aurora Water purchased SmartCover units for enhancing their ability to quickly target and analyze specific manholes, without confined space entry restrictions or extensive calibration requirements.

#### THE RESULTS

According to James DeHerrara, PE, Project Engineer at Aurora Water, "SmartCover enables us to get more granular on targeting manholes for analysis while avoiding the hassles of confined space entry. The SmartCover software doesn't require taking separate measurments for calibration so we can immediately collect useful data whenever we redeploy the units to new locations."

### INNOVATIVE REDEPLOYMENT METHODS ENABLE QUICK SET-UP AT EACH SITE

PRE-MOUNTING SMARTCOVERS TO MANHOLE COVERS ALLOWS FOR FAST CHANGE-OVER

The engineering and field staff at Aurora Water also came up with an innovative approach for enabling very rapid re-deployment of SmartCover units between different manhole sites.

As shown below, pre-mounting SmartCovers to manhole covers before they are deployed to the target locations makes it much faster and safer to conduct swap outs of monitoring units in the field.

FLEXIBLE ANALYSIS IMPROVES CAPITAL PLANNING COSTS

The bottom line benefits include:

- Faster data collection at more sites
- Flexibility for changing locations
- Safer field change-over conditions
- Ability to quickly analyze target sites
- Better granularity of data collection
- Lower overall costs of planning

"Field staff can do it all from above ground and spend less time exposed in busy roadways."

- James DeHerrera PE





SMARTCOVER

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