

UAS Infrastructure Inspection

Client

Washington Sanitary Sewer Commission (WSSC) Services UAS Missions, UAS Data Processing Location Baltimore, MD Germantown, MD **Date** 2019

UAS inspection of water/wastewater infrastructure

THE PROJECT

The Washington Sanitary Sewer Commission (WSSC) supplies fresh drinking water and is responsible for all wastewater from the District of Columbia and surrounding Montgomery and Prince George's Counties, Maryland. WSSC is currently among the largest water and wastewater utilities in the nation, with a network of nearly 5,768 miles of fresh water pipeline and over 5,578 miles of sewer pipeline. The service area spans nearly 1,000 square miles in Prince George's and Montgomery counties, and serves 1.8 million residents.

THE SCOPE

The project included infrastructure inspections of wastewater pipelines, manhole covers, earthen dam structures, and concrete emergency spillway structure utilizing unmanned aircraft systems (UAS). Our inspection captured orthographic imagery that will be used to compare future flights and identify any potential issues. A zoom camera was used to identify potential issues in pipelines and manholes, and a thermal imaging sensor was used to identify fractures within concrete structures. Majority of the inspections occurred within the flight restricted DC FRZ zone and required careful coordination with the TSA, FAA, and local law enforcement officers.

