**Drone & Cyber Risk Workshop – April 5, 2019**
**8:30am - 2:00pm**
**Middlesex County UA**

**Morning Session: 9:00am - 11:45am**
**ACUA Drone Presentation**
The use of Drones in every industry is becoming more common as technology continues to advance. Wastewater and Solid Waste facilities are no exception to this trend. The Atlantic County Utilities Authority (ACUA) began to implement the use of drones in 2016 at both their Solid Waste Complex and Wastewater Treatment Facilities. As the Federal Aviation Administration (FAA) began to create regulations for the operation of commercial Unmanned Aircraft Systems (UAS) the ACUA encountered some unique challenges.  The requirements of CFR 14 Part 107 for commercial pilots and operation of UAS's within certain classified airspace were all part of the process in developing the drone program. Once the program was developed and as the drone technology began to be utilized the ACUA continued to find new applications that were previously considered. The program started as a means gather high resolution aerial images of potential dumping sites quickly transformed into much more efficient way to obtain highly detailed topography maps, infrared mapping of buried assets and document as-built information of newly constructed infrastructure.

**PVSC Drone "Unmanned Aerial Vehicle" Program and Geographic Information Systems**
PVSC has identified a need to initiate a drone program to supplement operations from various departments.  Although the need is apparent, flying is easier said than done. There are constraints that is limiting PVSC from initiating its program. This includes acquiring waiver(s) specifically within the airspace around its Newark treatment plant which is located less than a mile from Newark-Liberty International Airport. With that said, this presentation will focus on the following;
(A)Potential integration with PVSC's Enterprise GIS
(B)Supplement data related to inspections of various assets; including the Plant and critical buildings, Robbins Reef, main line assets, refined aerial mosaics and much more.
(C)Development of 3D views of the Newark Plant and other assets, and developing DEM and contours for engineering use, etc.
We will also show-case how PVSC uses Skyward to gain near-real-time waiver for inspections outside the Newark Plant.

**Afternoon Session: 12:30pm - 2:00pm**

**Water Sector Security & Resiliency Best Practices**
This presentation will review the water and wastewater sector security best practices and resiliency guidelines, including 2017 and 2018 updates, developed by the New Jersey Water Sector Security Working Group (WSSWG), a subcommittee of the Infrastructure Advisory Council (IAC), and it will include an overview of the IAC and the WSSWG. The speaker will also review threats, recent and noteworthy events and how to do vulnerability assessments. Attendees will also learn about facets of

emergency response. The speaker will review issues the WSSWG has identified as possible subjects for future best practices guidelines. The speaker will also provide recommendations for how attendees can become involved in the State's efforts to promote water/wastewater utility infrastructure security.

**Leveraging Today's Technologies to Mitigate Your Cyber Risks**
Attendees will gain insight into the gamut of cyber threat actors, trends and scope impacting the water/utility sector today.  Through an interactive practicum, they will then discover how to think about, identify, and prioritize an organization's or company's cyber risks to effectively apply limited resources to put a tailored Cyber Risk Plan in place to mitigate those risks, leveraging best of breed methods, frameworks and technologies. Topics to be covered include:
- Stop Cyber Threats in Their Tracks:
- Identifying and Addressing Your Cyber Risks:
- Put a Cyber Risk Plan in Place Today: