

DRONES AND YOUR ENVIRONMENTAL DATA: WHY YOU SHOULD CONSIDER TAKING TO THE SKY

If you haven't heard of or seen the power of drones for yourself yet, now might be the time. The use of drones to collect and use environmental data is revolutionizing the industry as their use expands into surveying and mapping, inspections, 3D modeling, and a variety of other remote sensing purposes. Practicality, safety, and affordability over traditional data collection solutions makes drone technology an increasingly popular choice for environmental data gathering at project sites across the country.

Is Drone Technology Right for Your Project or Site?

Unmanned Aerial Systems (UAS) technology uses drones, a human pilot, and sophisticated data communication systems to generate high-definition video and photographic imagery. The aerial data and imagery you get through UAS can supplement, enhance, or replace previous environmental data collection and inspection processes. However, the data itself isn't the final product. UAS technology provides a unique visual representation and advanced data analyses to allow you to make informed decisions for your project or site.

Additionally, because it is unmanned, UAS technology allows for quicker, safer, and more cost-effective data acquisition than traditional methods. UAS data is also typically more detailed than data obtained manually or with other manned aircraft. The high-quality output from drone footage integrates with GIS and CADD design software to expedite data use.

How to Get Started with UAS

Trihydro is licensed by the <u>Federal Aviation Administration (FAA)</u> to conduct commercial aerial data collection with drones and adheres to flight operation guidelines based on strict safety, privacy, and ethical standards. Our licensed pilots can perform commercial aerial data acquisition for applications including (but not limited to):

- Volumetric Surveying
- Aerial Inspection and Inventory
- Topographic Mapping

- **Infrastructure Monitoring**
- **Stream Channel and Flood Plain Mapping Analysis**
- Reservoir and Dam Mapping and Analysis
- **Vegetation Monitoring**
- **Wildfire Hazard Analysis**
- Wildlife/Fisheries and Livestock Surveys
- Cultural Resources/Archaeological Data Collection

Click here to view a video demo or visit FAA's website for more information about UAS.

Want to Learn More?

Trihydro's Brad Pekas, P.E., P.G., will be presenting about UAS technologies at the Florida Environmental Permitting School Conference, held in Marco Island, Florida this July 17 through July 20. His presentation will provide a detailed overview about UAS sensors and applications and will also review updates on FAA regulations.

Can't make it? Contact Brad at bpekas@trihydro.com or 904-513-9748.

