

UTAH DAM SAFETY INTEGRATES DRONE TECHNOLOGY

The advent of light commercial drones is creating and changing many industries. Utah Division of Water Rights Dam Safety section acquired a drone, licensed two employees as drone pilots, and is integrating drone technology into their program to evaluate, inspect, and monitor dams in the state. Drone implementation not only improves state oversight of dams, but increases staff's safety while onsite.

- **Evaluation:** Drones provide the ability to quickly generate digital terrain data that can be used to analyze and evaluate existing dams. Accurate terrain information, collected through drone technology, can replace low resolution or outdated data improving results and conclusions.



- **Inspection & Monitoring:**

Drones capture imagery from aerial perspectives allowing dam safety staff to better assess the condition of a dam and track changes over time through photo and video records. With the ability to track and monitor changes, response to deteriorating conditions can be expedited.

- **Inspectors' Safety:** Currently, dam safety inspectors are limited to observations made from ground locations. This may lead them to risk their safety attempting to access better vantage points. Drones improve inspection by accessing difficult locations without endangering inspectors' safety. Additionally, they create a record of the inspection through photos and video.



Drones are creating new industries and transforming others; their potential continues to be discovered as they are utilized in new ways. Utah Dam Safety is excited to be on the forefront of this emerging technology, integrating drones into our program to improve the evaluation, monitoring, inspection, and safety of dams in Utah.