

Evolution of WVCA's Drone Fleet Usage



NASCA
October 2026



2022 to (April) 2026 Timeline



- Almost all our drone work was to capture videography and photography of dams, farms and streams for promotional and informational purposes.



April Staff Training



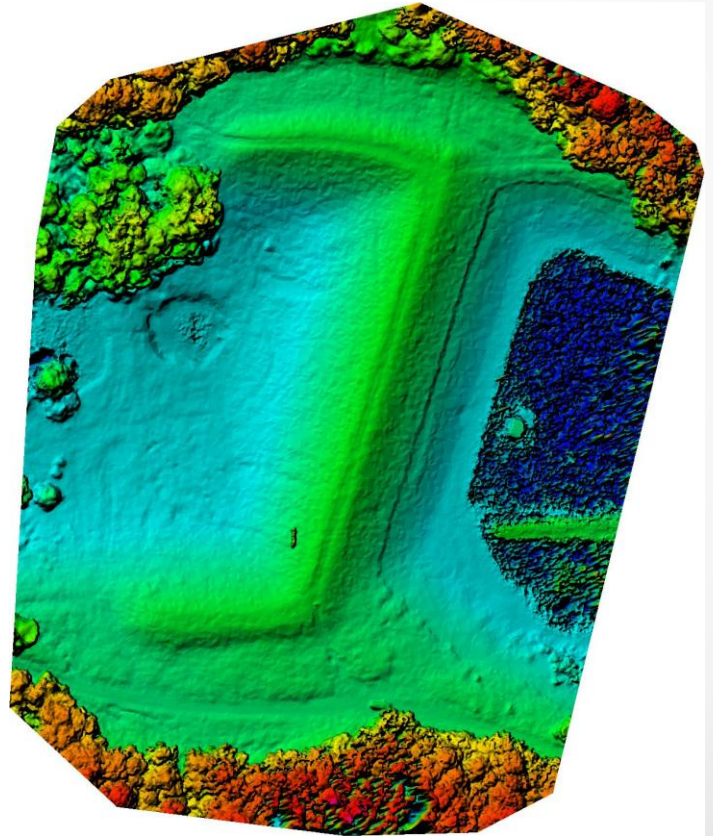
FAA Part 107 Certified Pilots

- On June 1, the West Virginia Conservation Agency had ONE certified drone pilot.
- Yet Ben and Hunter got the ball rolling, and now the Agency has SEVEN certified pilots!
- We're now able to use the drones for more than just videography and photography purposes, which was always the long-term goal.



Drone Usage So Far

- We have used drones to 3D-model some of our flood control dams.



3D Modeling

- This allows us to look for new depressions, bulges, and similar warning signs.



Construction Mapping

- We have used drones to map construction projects, providing valuable documentation and quality assurance.
- [BC 15 7/14/26 on Maps Made Easy](#)



Dam Inspections

- Drones are being used to assist with periodic dam inspections.



Dam Inspections continued

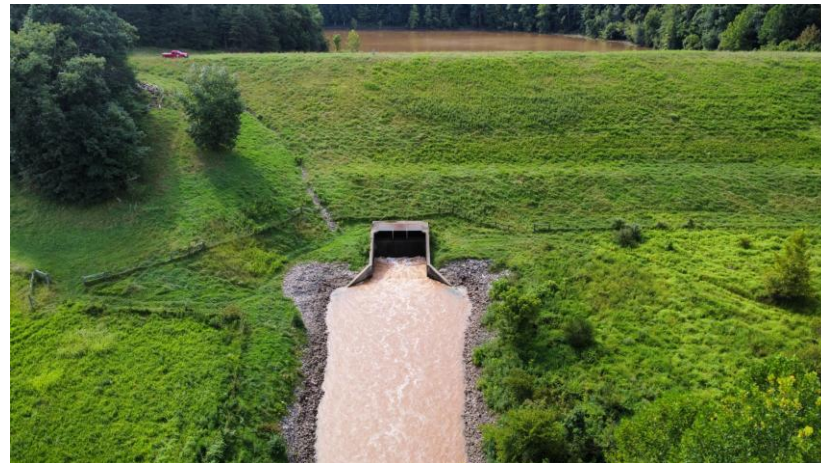
- **Riser Inspection**

- Concrete Condition
- Ladder
- Trash Racks
- Stem/Guides
- Pedestals
- Manhole
- Hand Wheel
- Debris Load
- Blockages



Dam Inspections continued

- **Embankment and ASW**
 - Vegetative change on US/DS slopes
- **Outlet Works**
 - Used to inspect areas with difficult access
- **Future Use**
 - LiDAR scans to compare potential settlement or movement over time



Other Future Uses

- Agricultural planning
- AgEP verification and documentation
- Contractor efficiency
- Stream blockage ID
- Stream restoration doc.
- High water dam access
- Document completed projects that may include 319 or the Chesapeake Bay.
- GIS Imagery



Warm Springs 7 Modeling



- Before, during and post-rehab 3D models of Warm Springs No. 7 are planned for the dam's rehabilitation.



Questions?

