

DEQ
MONTANA



Q1. Describe the aerial imagery your agency has and how it is made available

MT Dept. Of Environmental Quality

List the imagery:

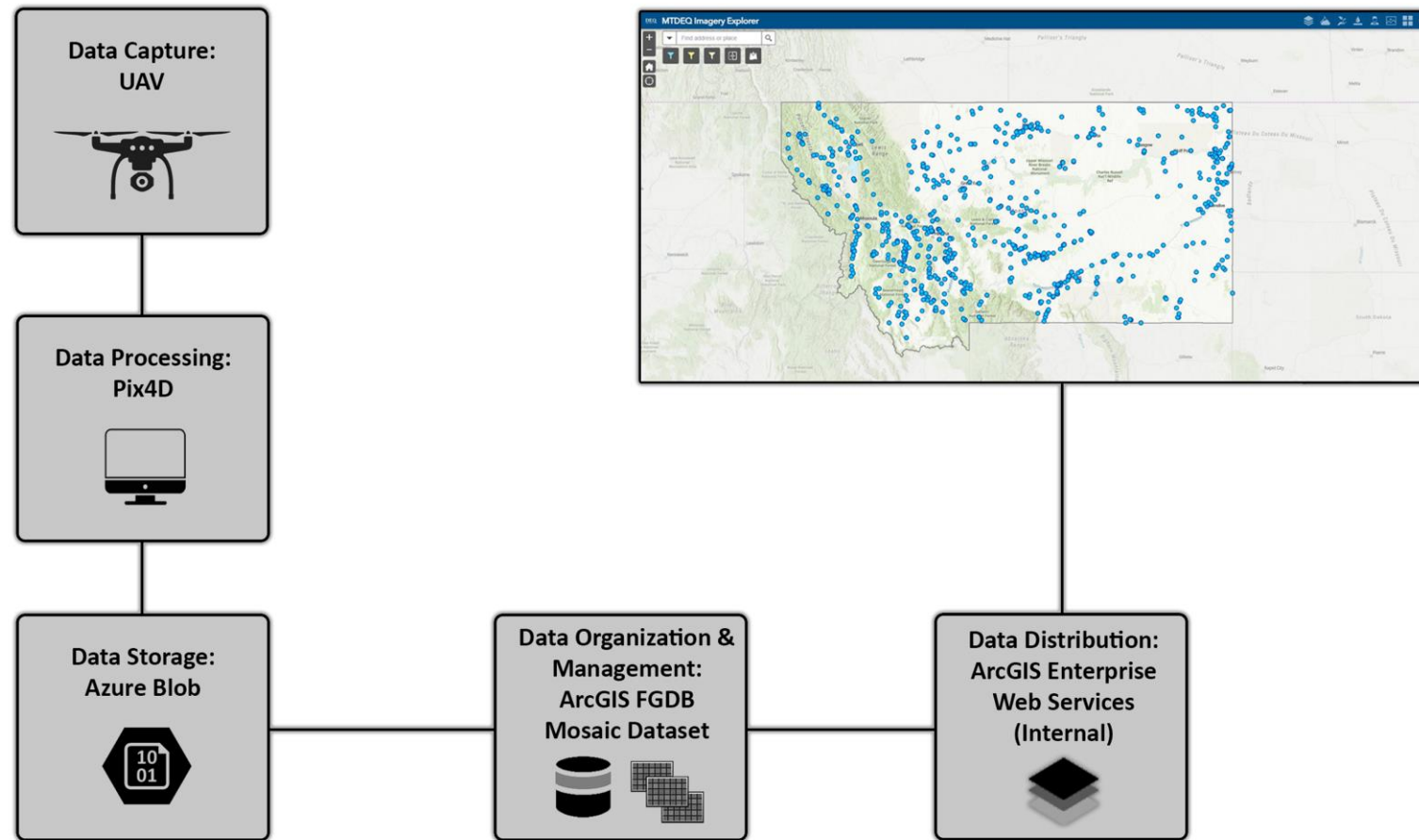
- DEQ image collection consists primarily of 4-band orthomosaics and DSMs captured "in house" with UAVs
- Collected for specific DEQ-permitted sites (such as open-cut mining permits)
- Resolution typically between 2 and 3 centimeters depending on UAV/camera
- Median footprint = ~60 acres
- ~250 flights in 2023



How is imagery made available:

- Imagery is made available to internal users of DEQ's Enterprise GIS via ArcGIS web services

Q1. (cont.) DEQ Imagery Management Workflow



Q2. What are your top 2 to 3 business uses for imagery?

Top business uses:

1. Permit Compliance

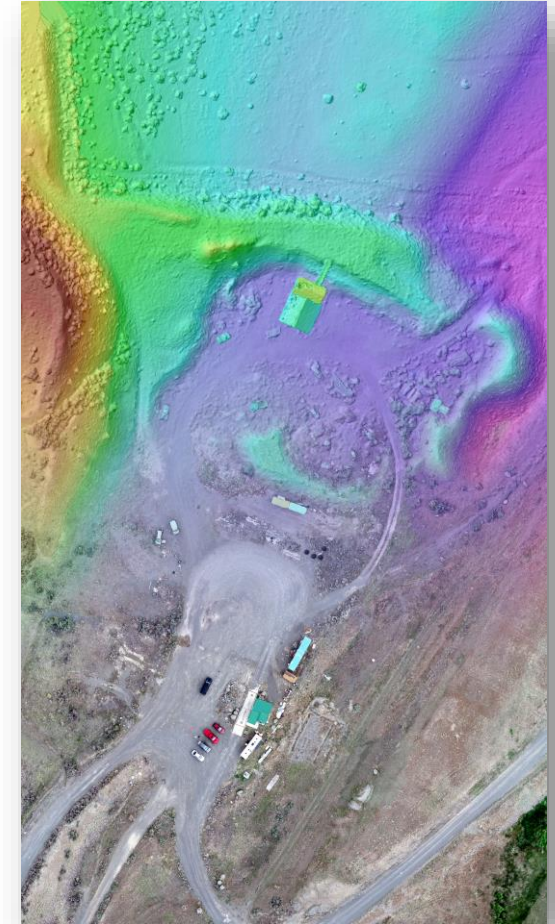
- Easy to identify and communicate permit violations

2. Change Detection

- Visualize how sites evolve over time

3. Inspection Efficiency

- Drastically reduces time needed to inspect sites, essentially can inspect 2x more sites during a typical inspection trip



Q3. What are your agency's challenges with imagery (top 2 to 3 pain points)?

1. Automation of workflow (specific to DEQ current process)
 - Workflow from collection through service creation still has a few "manual" steps, is a bit clunky, and only managed by a small group of people
2. Public Data vs Confidentiality Concerns
 - Figuring out the right balance between providing public access to data we collect vs concerns about confidentiality of sensitive data
3. "Filling the Gaps"
 - Finding readily available, high quality, and timely imagery in a State as big and as sparsely populated as MT is challenging

Q4. What would you want to see out of a state imagery program (your vision)?

- A publicly available State imagery data hub/portal where agencies provide access to image services
- Coordination among agencies where applicable to reduce duplicative collection efforts

Thank you!

