

# Identification and Quantification of Non-Functional Turf

Jazmine Molloy – Director of Product Development



## CALIFORNIA IN SEVERE DROUGHT CRISIS

Accepting current landscaping a problem: Need to reduce irrigated area

An executive order signed by California Governor Gavin Newsom on March 2022 banning irrigation of “non-functional” turf or grass on CII parcels.





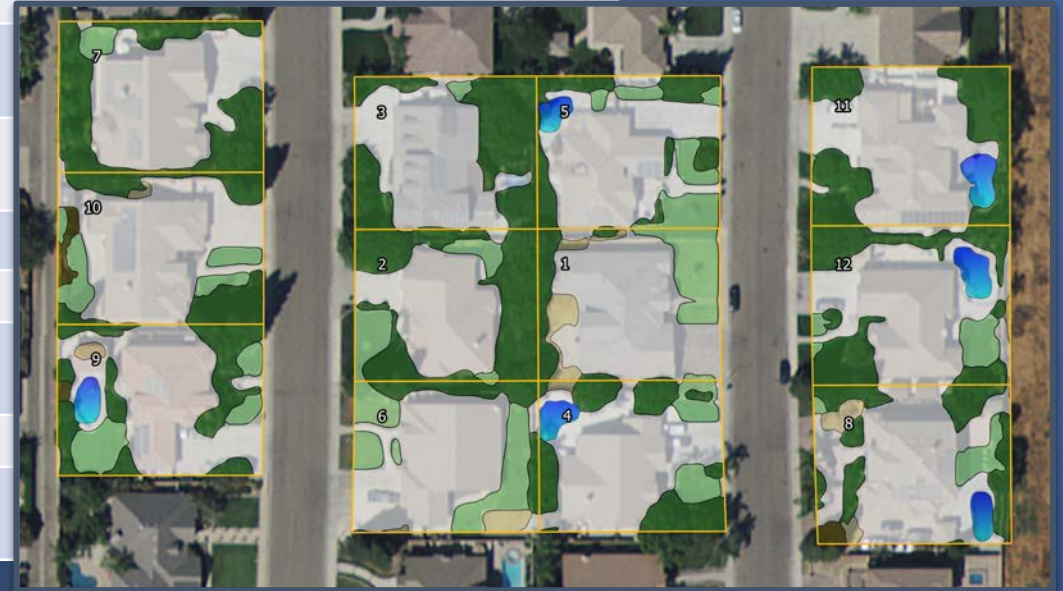
# Non-Functional Turf Workflow



# Land Use Classification Dataset [LUCD]

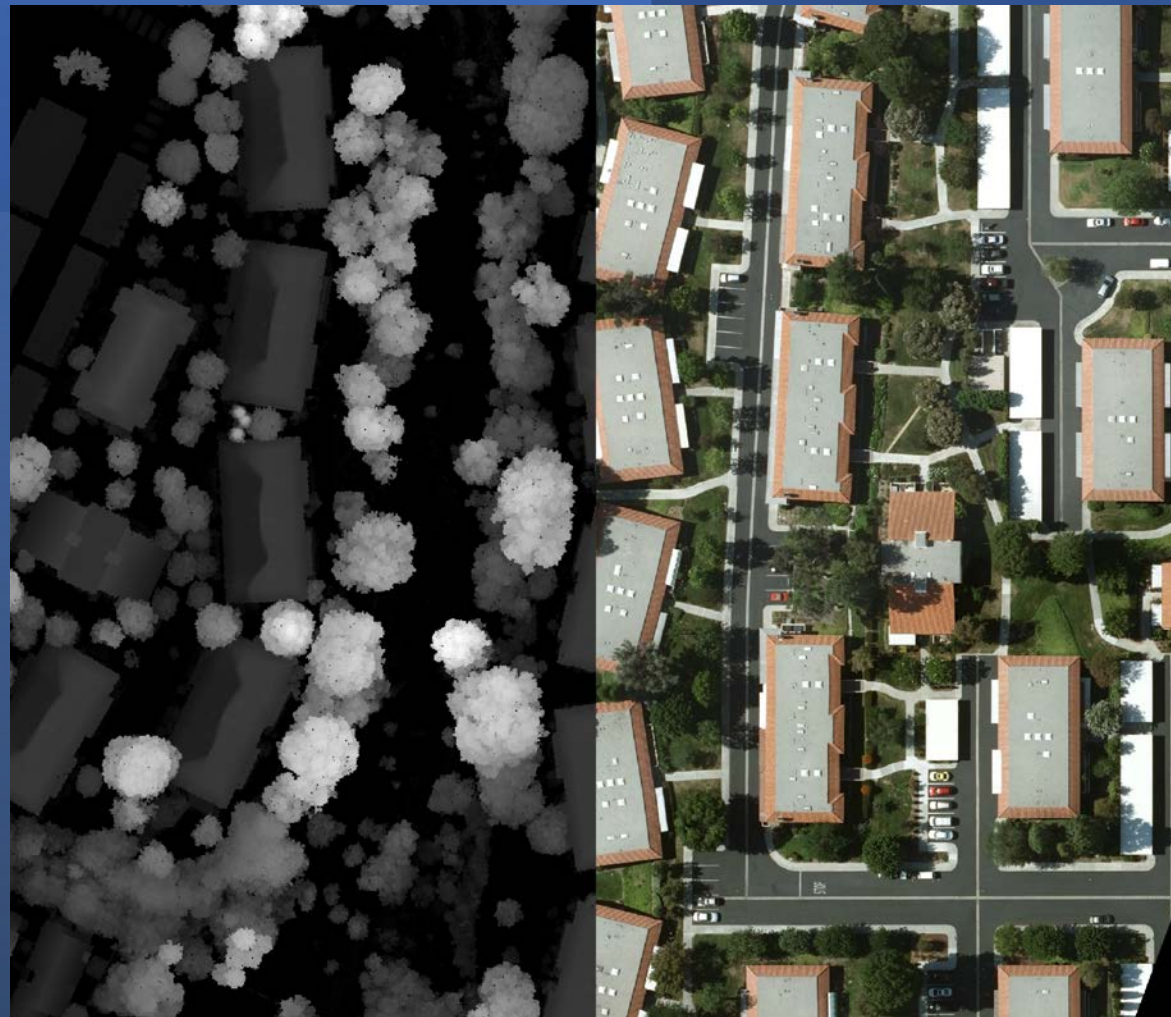
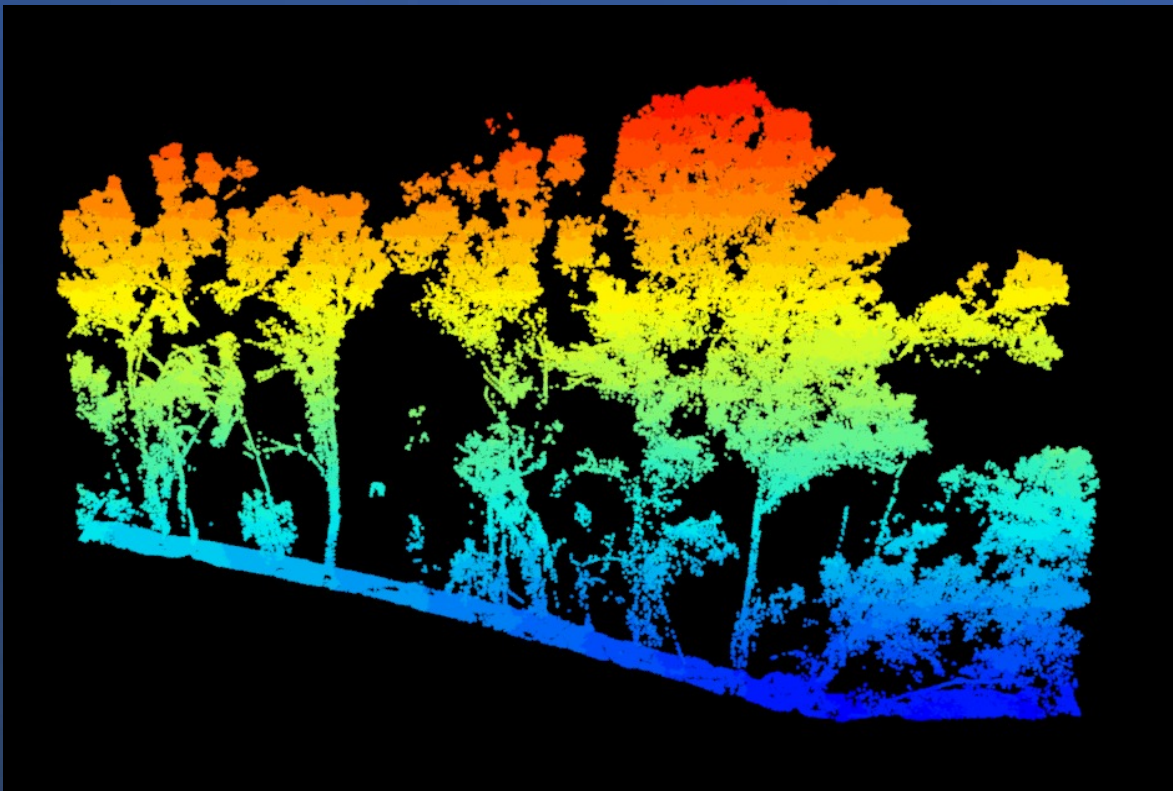
## LUCD Canopy Priority Classification System with Non-Functional Turf

Level 1	Level 2	Irrigation Status	Functional/Non-Functional
1. Impervious	Impervious	Not Irrigable	
2. Pools	Swimming pools/man made water features	Irrigated	
3. Irrigated	3.1 Turf grass/ground cover 3.2 Canopy/shrub	Irrigated Irrigated	1. Functional Turf 2. Non-Functional Turf
4. Irrigable not irrigated	4.1 Turf grass/ground cover 4.2 Canopy/shrub	Irrigable not irrigated Irrigable not irrigated	
5. Non irrigated vegetation	Undeveloped for the purposes of irrigation	Not Irrigable	
6. Undeveloped lands	Undeveloped Lands	Not Irrigable	
7. Horse Corrals	Horse Corrals	Irrigated	
8. Open Water	Other open natural water (rivers/ponds)	Not Irrigable	
9. Artificial Turf	Artificial Turf	Not Irrigable	
10. Agricultural Land	Agricultural Land (.25 acre mmu)	Irrigated	





# LiDAR - Elevation Data



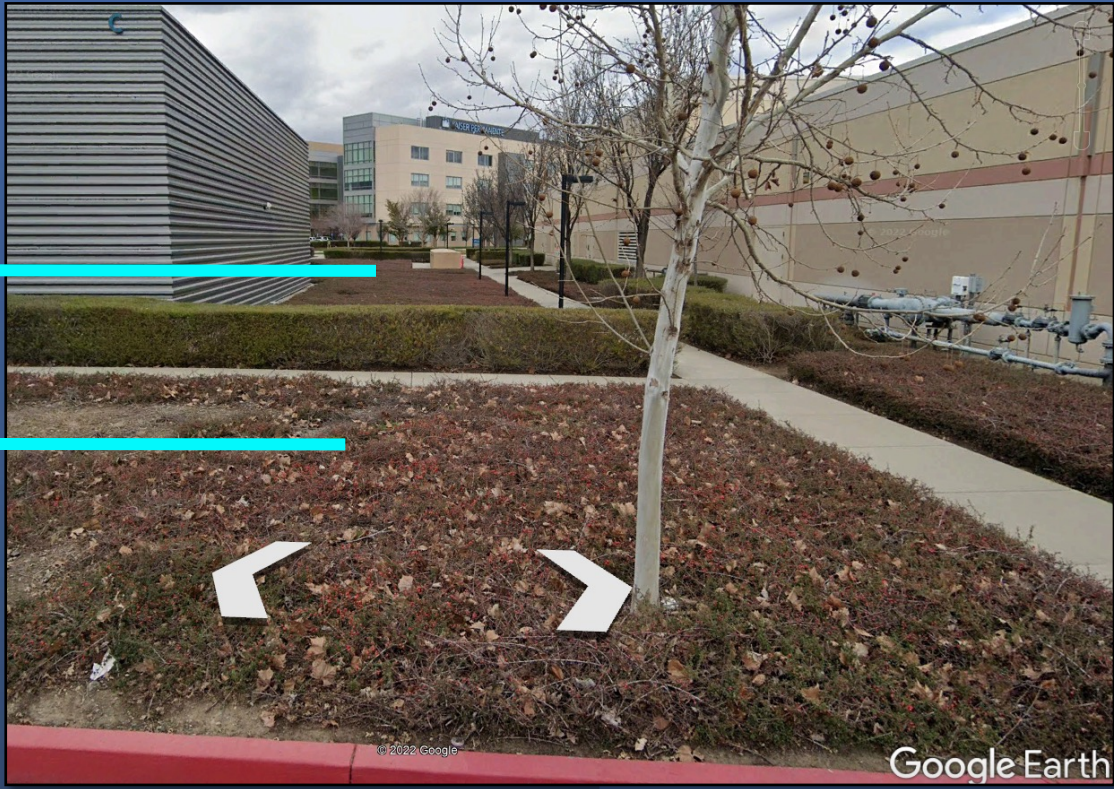


# Turf Or Not Turf



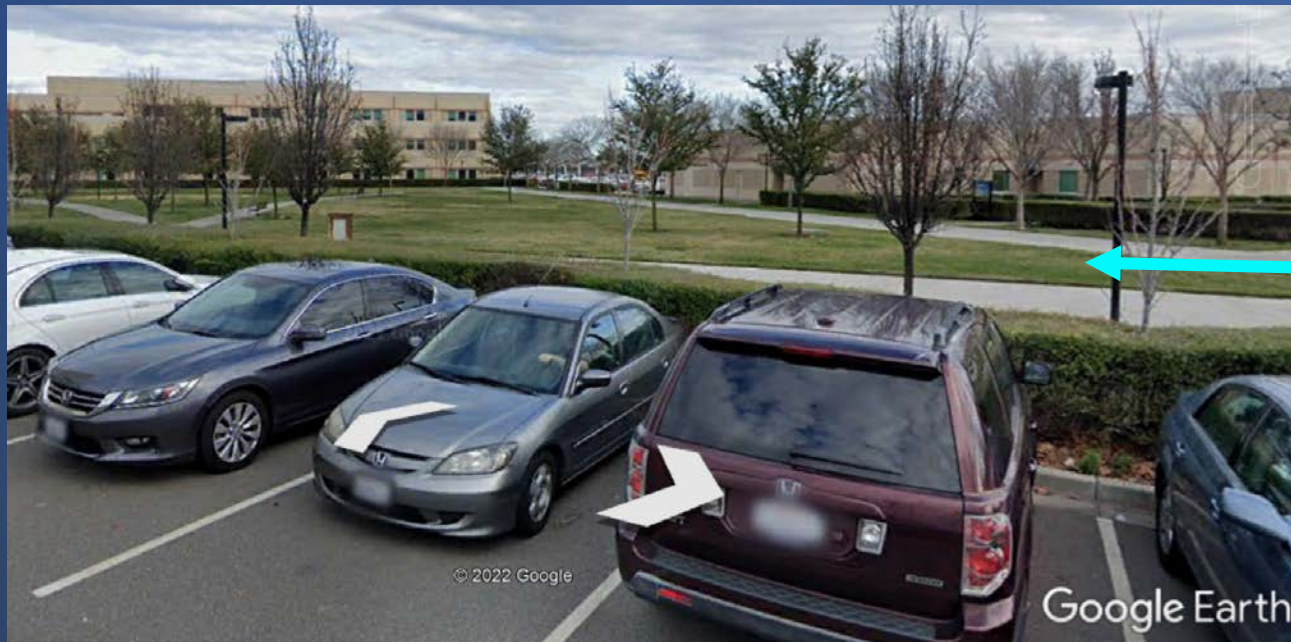


# Turf Or Not Turf



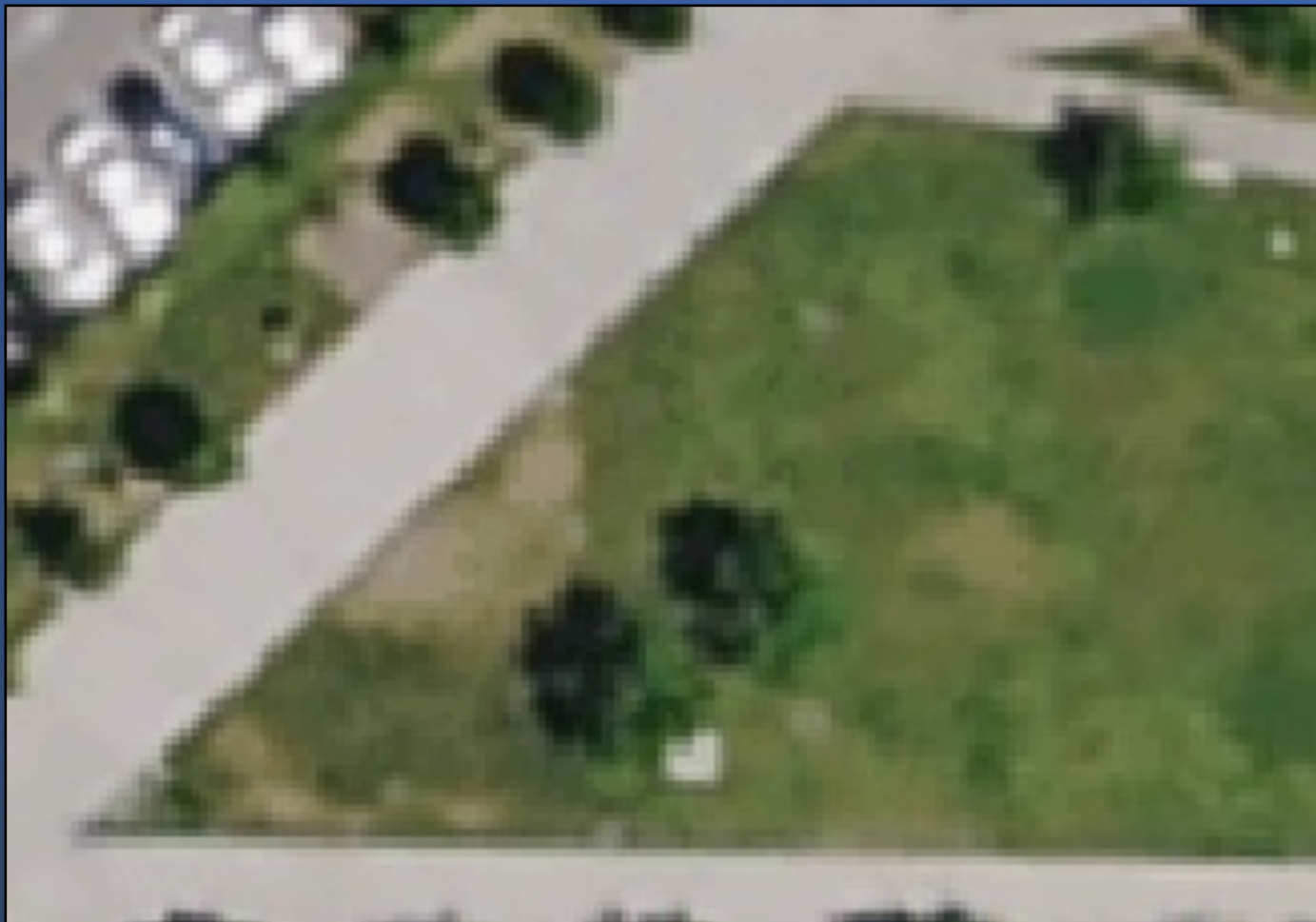


# Turf Or Not Turf



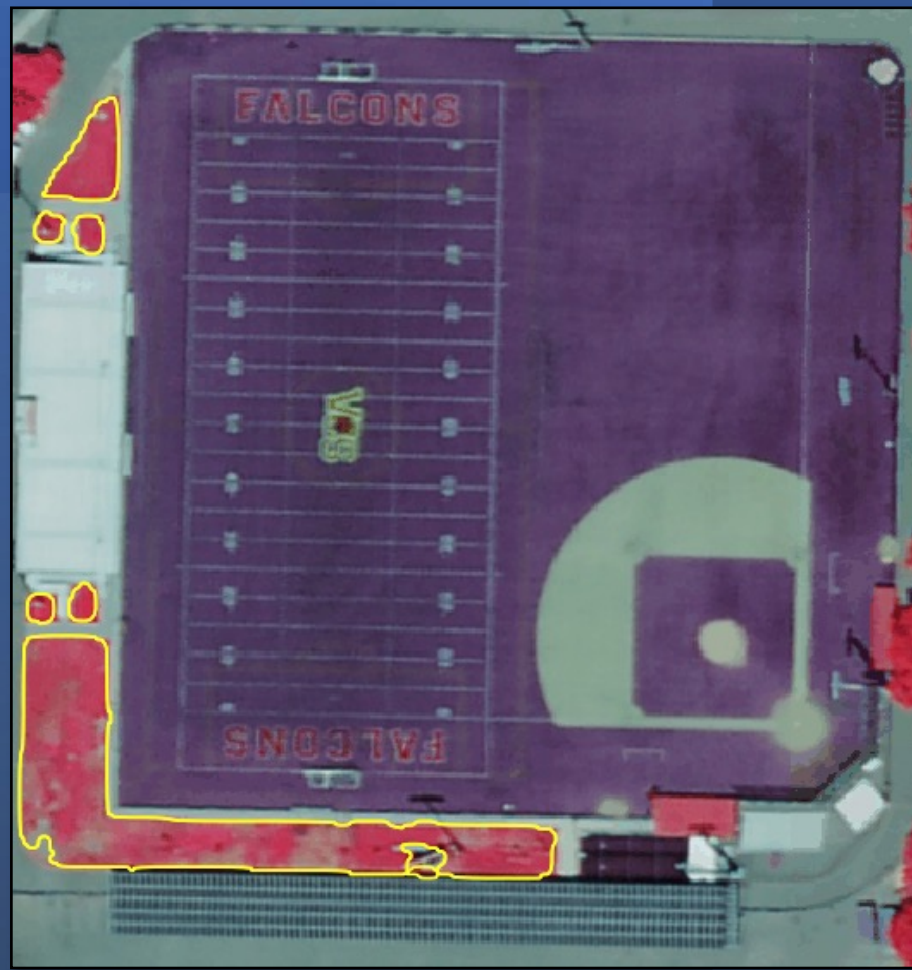


# Use Of Context, Texture, Shadows





# Near Infrared & Artificial Turf





# Land Use: Non-Functional



Non-Functional Turf



# Functional Vs. Non-Functional





# Functional Vs. Non-Functional





# Functional Vs. Non-Functional



Non-Functional Turf



Functional Turf

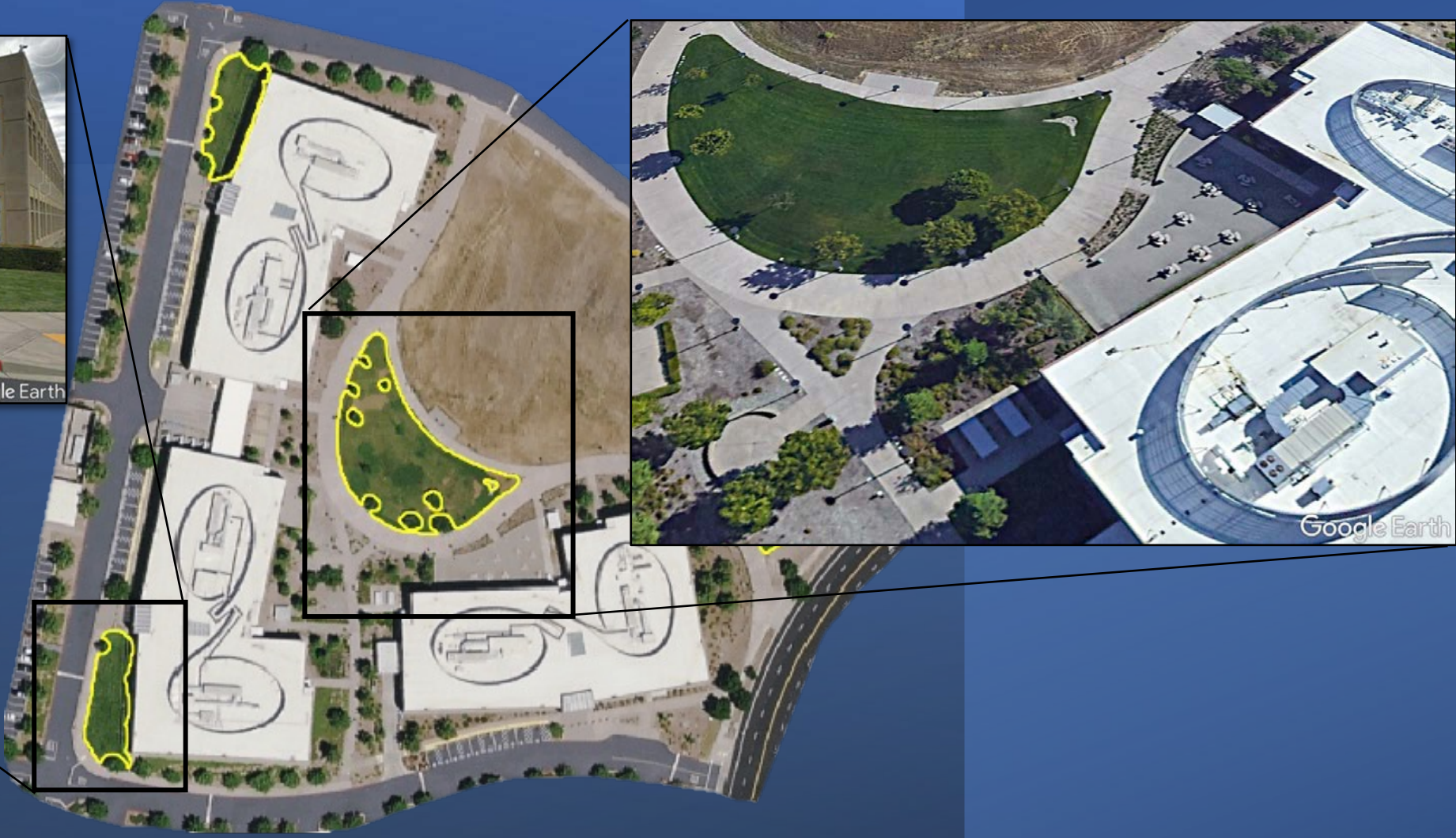


# Functional Vs. Non-Functional





# Functional Vs. Non-Functional





# Functional Vs. Non-Functional



Non-Functional Turf



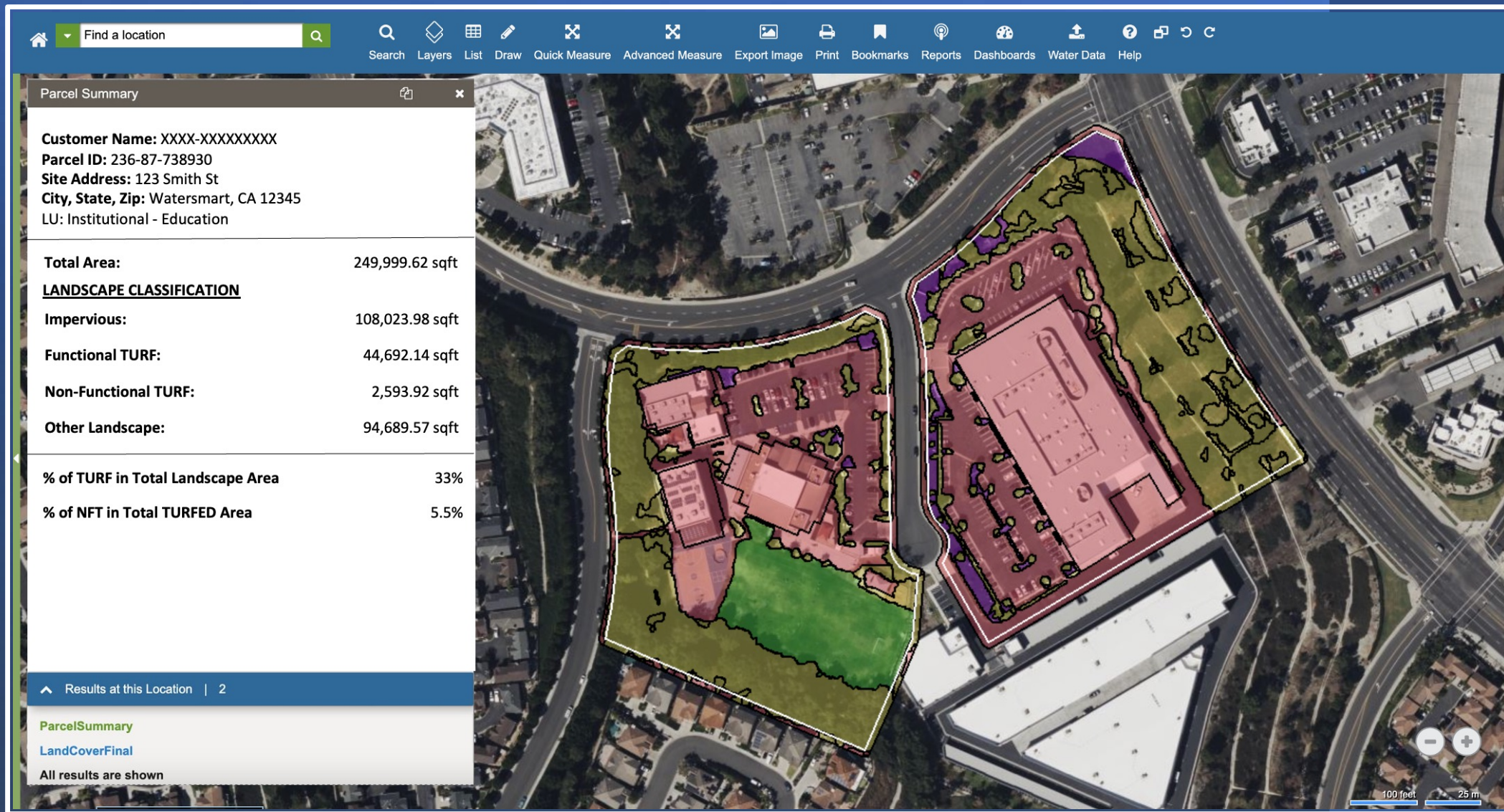
Functional Turf



# Using Technology to Make Sense of the Data

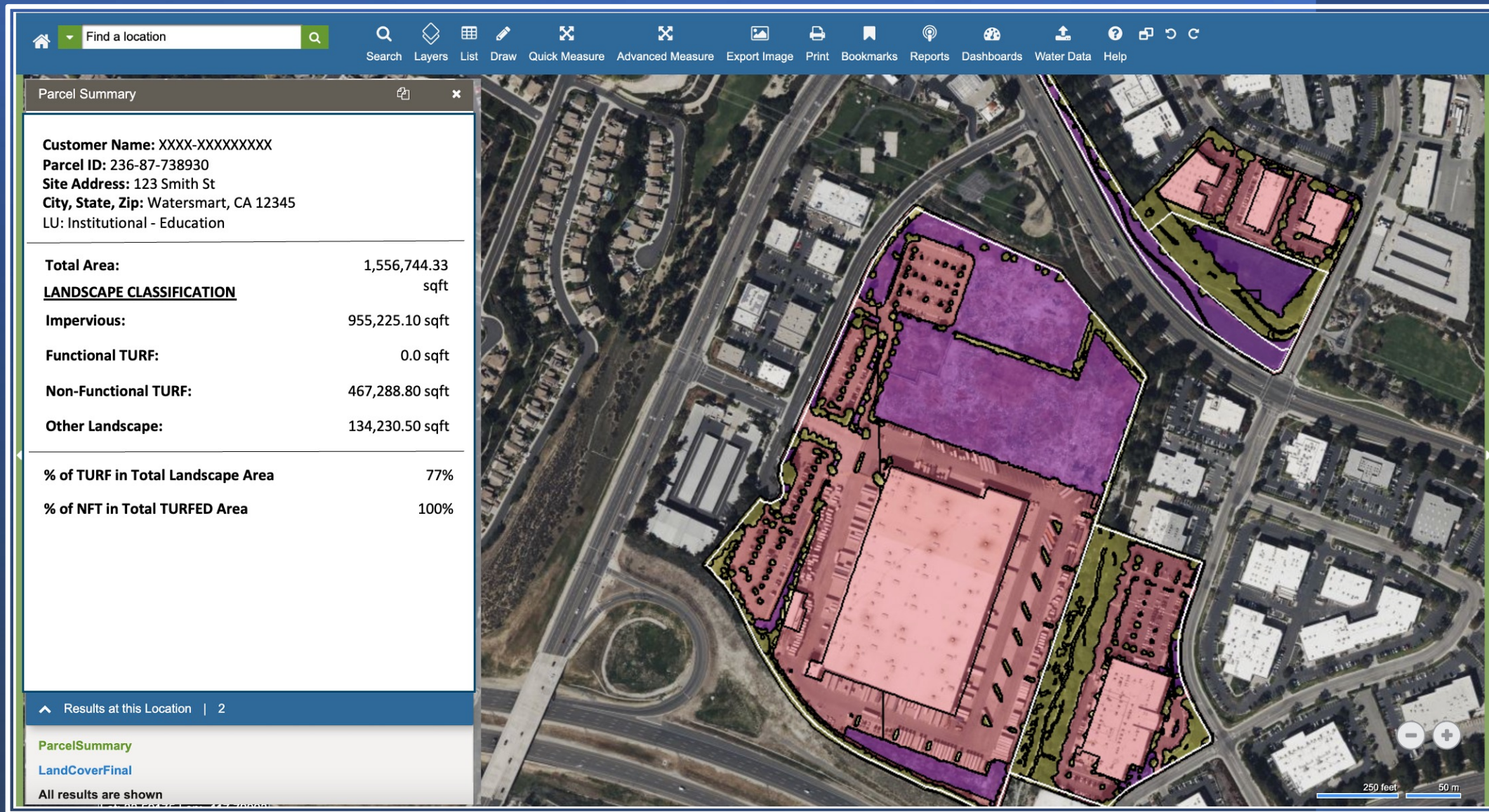






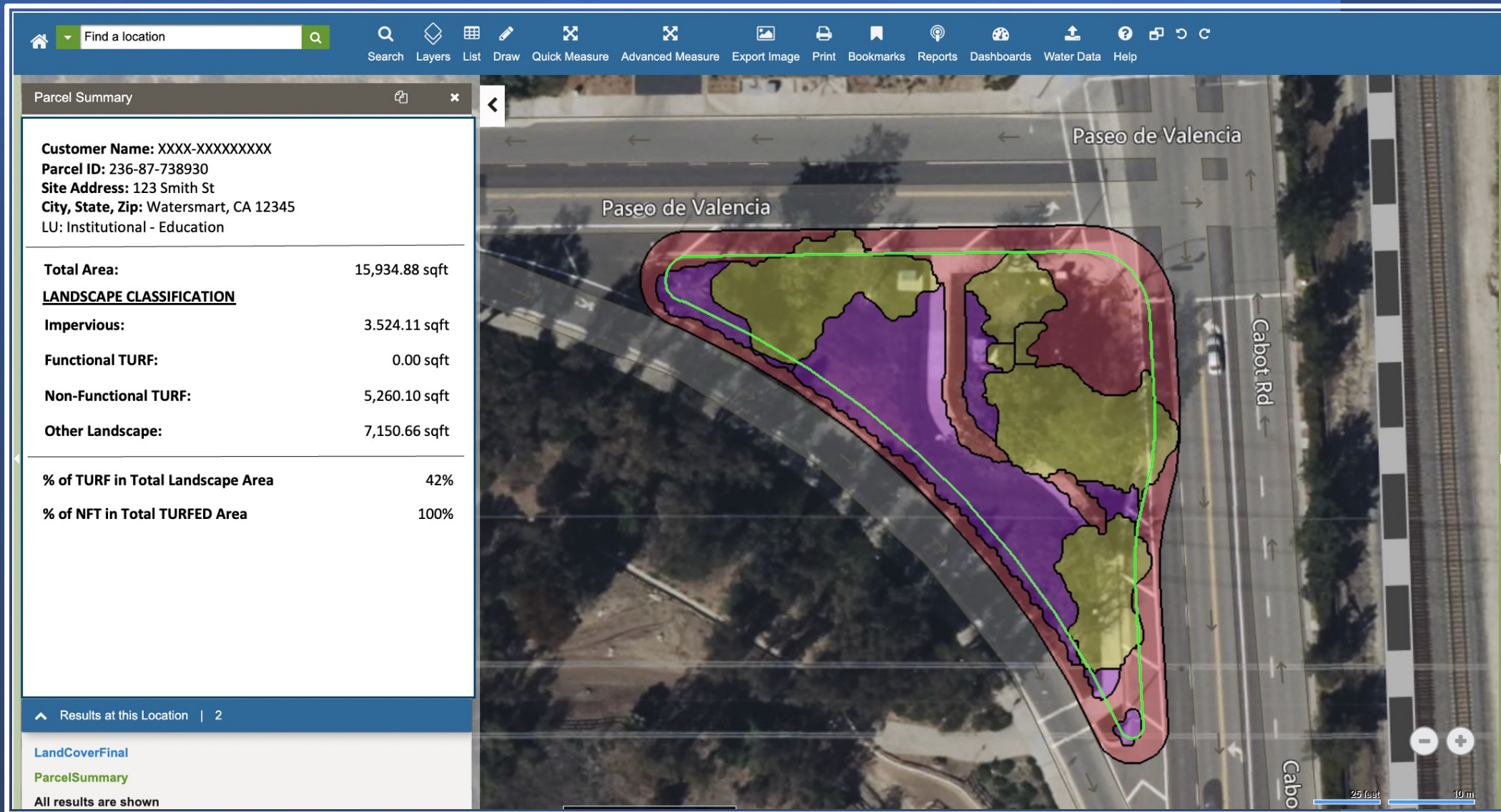
# Further Analysis That Inform Programs





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# Thank you! QUESTIONS?

Jazmine Molloy – Director of Product Development

[jmolloy@eagleaerial.com](mailto:jmolloy@eagleaerial.com)

714.754.7670