

Town of Erie – Air Quality Monitoring Update

Erie Town Council

May 20, 2025

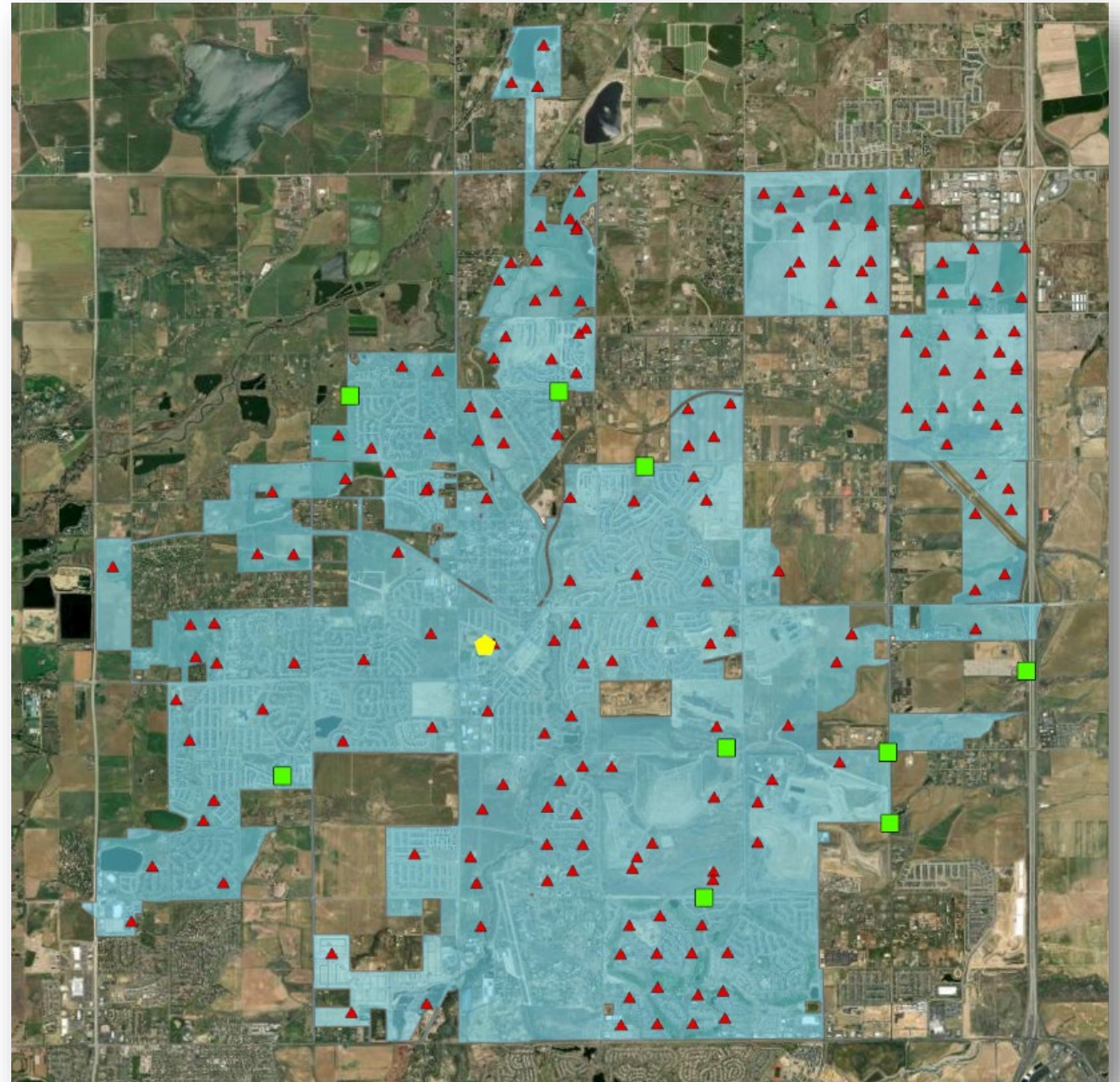
David Frank, Director of Environmental Services

Agenda

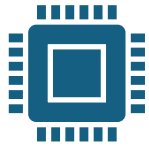
1. General Overview of the Air Quality Monitoring Network
2. Presentation from BoulderAIR
3. Presentation from Ajax Analytics
4. Budget Impacts
5. Questions and Discussion

Air Quality Monitoring

- BoulderAIR
- Ajax/CSU



BoulderAIR



Equipment in Service

- One real-time monitoring station located at ECC
- Part of Front Range Monitoring network – Five (5) total stations



Data Collected

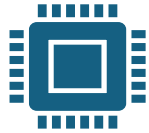
- Volatile Organic Compounds (VOCs), Particulate Matter (PM), Methane (CH₄), Ozone (O₃) and meteorological data



Data Implementation

- Data is available to public and for scientific uses
- Data is utilized by other local governments

Ajax/CSU



Equipment in Service

- Nine real-time monitoring stations
- One “mobile” station to respond to events (ex. Irregular operations)



Data Collected

- Total Volatile Organic Compounds (TVOCs), Particulate Matter (PM), Nitrogen Oxides (NOx) and meteorological data
- Automatically triggered summa canisters
- Continuous 7-day duration, whole-air canister samples (Collected at four sites)



Data Implementation

- Quarterly reports posted to public facing website
- All data made available through Ajax dashboard

Air Quality Monitoring Costs and Budget Impacts

Current 2025 Budget has allocated a total of \$498,587 for the Air Quality Monitoring Program

Existing contracts for Jan-June monitoring totaled \$405,251

- \$113,620 for BoulderAIR Station at ECC (~1% increase from 2024)

- \$291,631 for 10 Ajax Stations and associated work (~17% increase from 2024)

\$93,336 remaining for the second half of the year without additional appropriation

BoulderAIR

Costs of the existing program (real-time monitoring station at ECC Ballfields)

- \$224,734 in 2024 (12 months of monitoring)
- \$113,620 first half of 2025 (6 months)

Ajax/CSU

Costs of the existing program (10 triggered suma canister stations with 4 collecting weekly samples)

- \$495,854 in 2024 (12 months of monitoring)
- \$291,631 first half of 2025 (6 months)

Total

Costs of the existing program

- \$XXX in 2024 (12 months of monitoring)
- \$XXXX first half of 2025 (6 months)

Options for Council's Consideration

Option 1 – Continue the existing program - unchanged

- 2025 Budget impact of \$405,251 (\$405K needing to be appropriated in Second Supplemental)
- 2026 Budget impact of ~\$835,000
- Provides near real-time air quality data to residents
- Continued focus on impacts from multiple specific sources & individual oil and gas locations
- Would provide independent monitoring of the Draco Pad in pre-production
- Great flexibility to relocate Ajax stations when known maintenance activities are planned
- Complete continuity with existing data
- Very large fiscal impact

Options for Council's Consideration

Option 2 – Eliminate existing BoulderAIR station and continue Ajax Suma Canister network unchanged

- 10 stations placed across the Town of Erie
- 2025 Budget impact of \$294,888 (\$201K needing to be appropriated in Second Supplemental)
- 2026 Budget impact of ~\$575,533
- Would provide independent monitoring of the Draco Pad in pre-production
- Broadly focused monitoring of existing oil and gas locations, landfill, other emission sources
- Able to relocate stations when known maintenance activities are planned
- Would not provide near real-time air quality data to residents
- Some continuity with existing data
- Large fiscal impact

Options for Council's Consideration

Option 3 – Eliminate existing BoulderAIR station and continue a reduced Ajax Suma Canister network

- 5 stations placed strategically near known emission sources
- 2025 Budget impact of \$198,168 (\$105K needing to be appropriated in Second Supplemental)
- 2026 Budget impact of \$396,336
- Would provide independent monitoring of the Draco Pad in pre-production
- Provides focused monitoring of specific sources or individual oil and gas locations
- Would not provide near real-time air quality data to residents
- Limited ability to relocate stations when known maintenance activities are planned
- Some continuity with existing data
- Moderate fiscal impact

Options for Council's Consideration

Option 4 – Eliminate all Suma Canister Stations and continue the existing BoulderAIR station

- 2025 Budget impact of \$113,620 (\$20K needing to be appropriated in Second Supplemental)
- 2026 Budget impact of ~\$226,958
- Provides near real-time air quality data to residents
- Does not focus on impacts from specific sources or individual oil and gas locations
- Would not provide independent monitoring of the Draco Pad in pre-production
- No ability to relocate stations when known maintenance activities are planned
- Some continuity with existing data
- Low fiscal impact

Options for Council's Consideration

Option 5 – Eliminate all existing stations and add BoulderAIR operated Suma Canister network

- 5 stations placed strategically near known emission sources
- 2025 Budget impact of \$102,438 (\$10K needing to be appropriated in Second Supplemental)
- 2026 Budget impact of \$204,875
- Would provide independent monitoring of the Draco Pad in pre-production
- Provides focused monitoring of specific sources or individual oil and gas locations
- Would not provide near real-time air quality data to residents
- Limited ability to relocate stations when known maintenance activities are planned
- Likely learning curve and trial-and-error, first effort by BoulderAIR with type of network
- Loss of continuity with existing data
- Lowest fiscal impact

Questions & Discussion