

Briefing on Cannabis Odor Abatement Plan Compliance Monitoring in Santa Barbara County

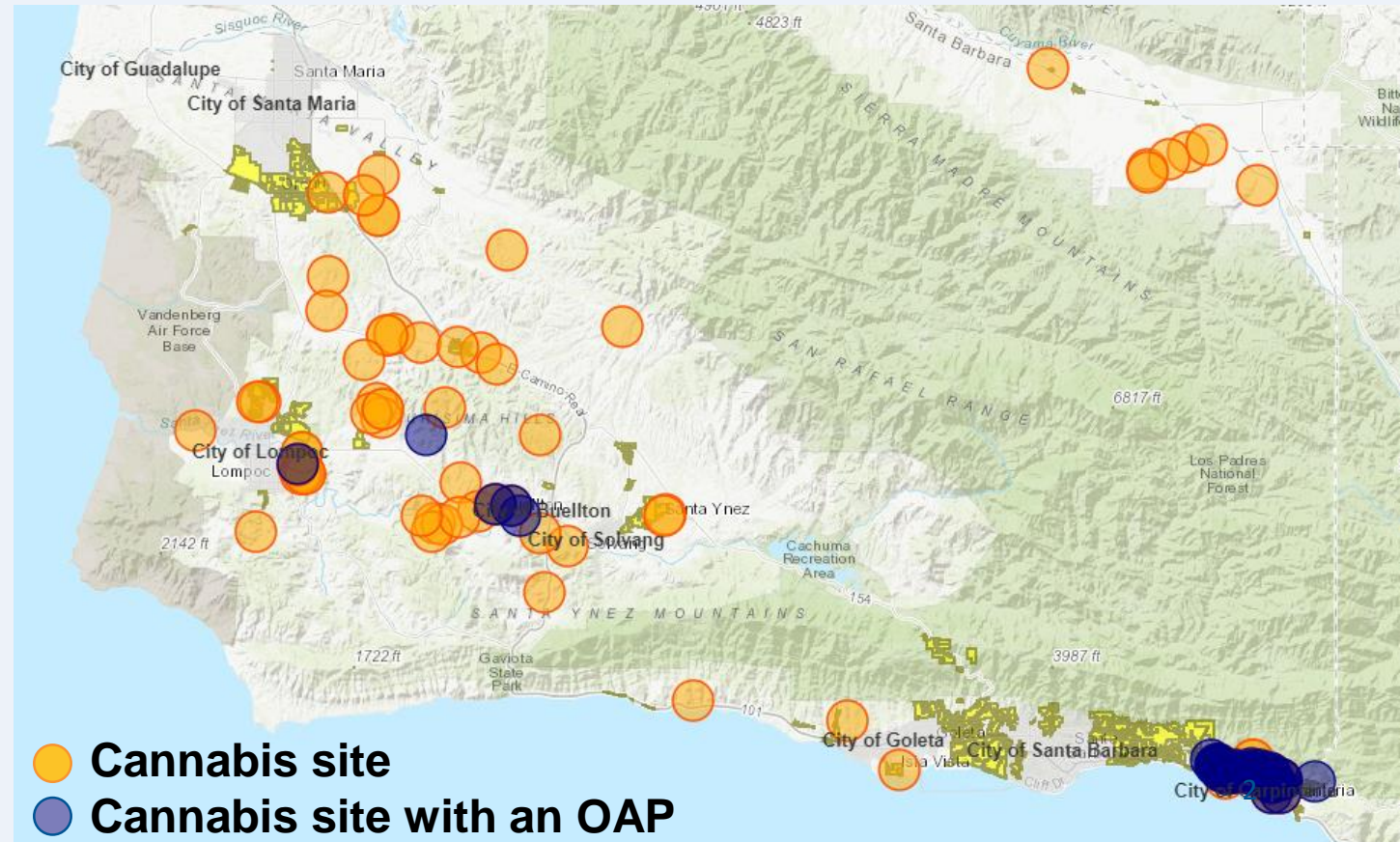
Board of Supervisors
April 23, 2024



County of Santa Barbara
County Executive Office and Planning & Development

Background

- 108 approved cannabis sites
- 32 cannabis sites are required to implement an OAP
 - 5 in inland area
 - All 27 sites in Coastal Zone



OAP Requirements

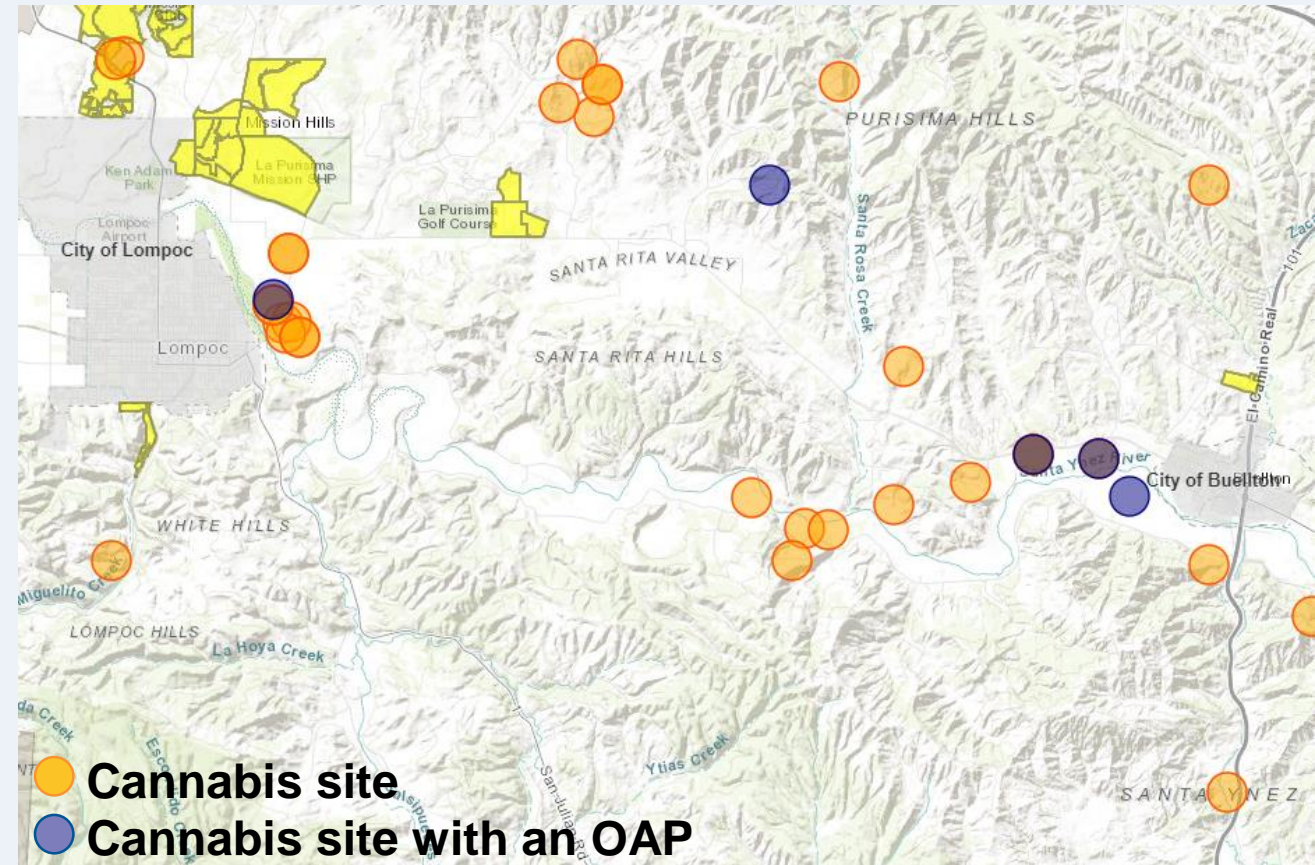
Land Use and Development Code (LUDC) and Coastal Zoning Ordinance (CZO) require OAPs to:

1. Prevent odors from being experienced in residential zones
2. Include response protocol for odor complaints
3. Include best available control technologies (BACT) and methods to mitigate odor, certified by a professional engineer/industrial hygienist

Corrective actions shall be implemented if P&D receives 3 verified complaints in any 365-day period.

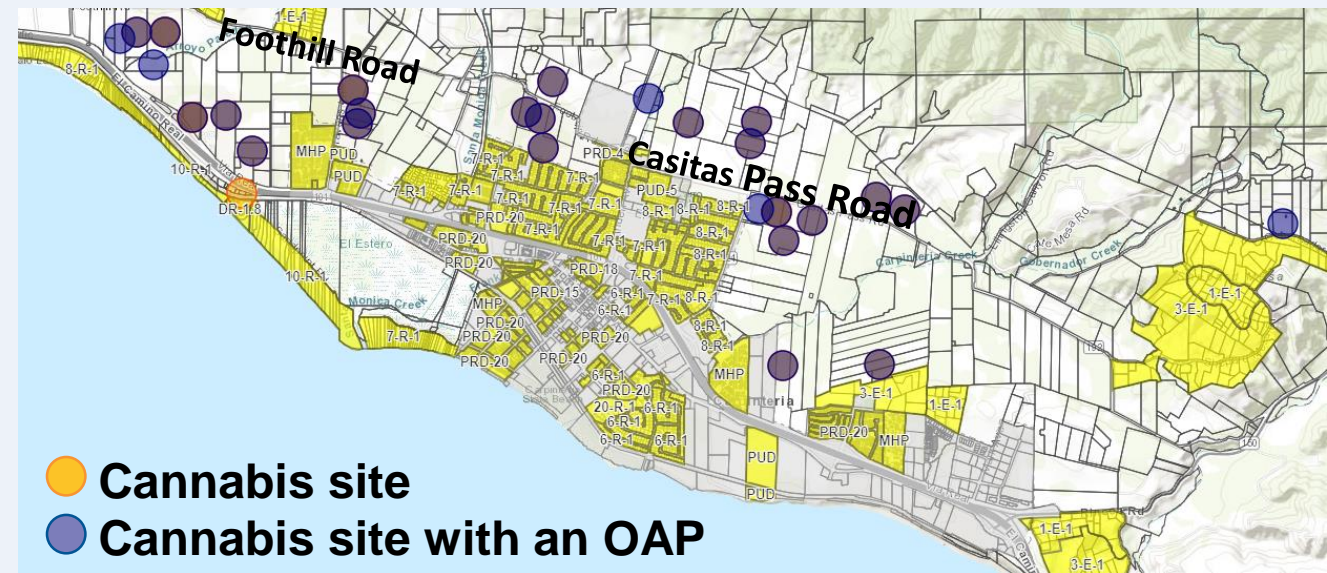
Technologies and Methods in Inland OAPs

- 5 sites with cultivation:
 - 4 sites include vapor phase
 - 1 site includes aromatic landscaping
- 3 sites with processing:
 - All 3 use carbon filtration in processing facility
- 2 OAPs include a tiered response to cannabis odor complaints



Technologies and Methods in Coastal OAPs

- 25 sites with cultivation:
 - 22 sites include vapor phase or misting
 - 12 sites include carbon filtration, photocatalytic oxidation, molecular scrubbers in greenhouses
- 17 sites with processing and/or manufacturing:
 - All 17 use carbon filtration, photocatalytic oxidation, molecular scrubbers in processing facility
- 11 OAPs include a tiered response to cannabis odor complaints



Model OAP

Private agreement outlines

- Level 1 Response – Initial Assessment & Corrective Actions
- Level 2 Response – Diagnostic Assessment & Corrective Actions
- Level 3 Response – Analytical Assessment & Corrective Actions
- Level 4 Response – Comprehensive BACT Analysis & Corrective Actions

10 sites incorporate components of this Model OAP

- No sites have been required to reevaluate or install new BACT based on these levels

Odor Abatement Implementation & Monitoring Condition of Approval

- Five OAP inspections shall be conducted
 - 1 upon installation of the odor control system
 - 4 quarterly thereafter for one year
- County shall retain a professional engineer or certified industrial hygienist, at the applicant's expense, to certify that the odor control system is installed and operating as specified in the OAP

Geosyntec Consultants

- Contract authorized from November 2022 to November 2025, including:
 - Inspecting, testing, and monitoring odor control systems
 - Assessing proposed changes to OAPs
 - Training P&D staff to use Nasal Ranger

OAP Inspections

- OAP inspections conducted by P&D staff and Geosyntec
- 46 inspections to date
 - 21 operating sites in Carpinteria
 - 2 operating sites in Buellton
- All 23 currently-active cannabis operations with OAPs (inland area and Coastal Zone) have been subject to at least one OAP inspection

OAP Inspection Results

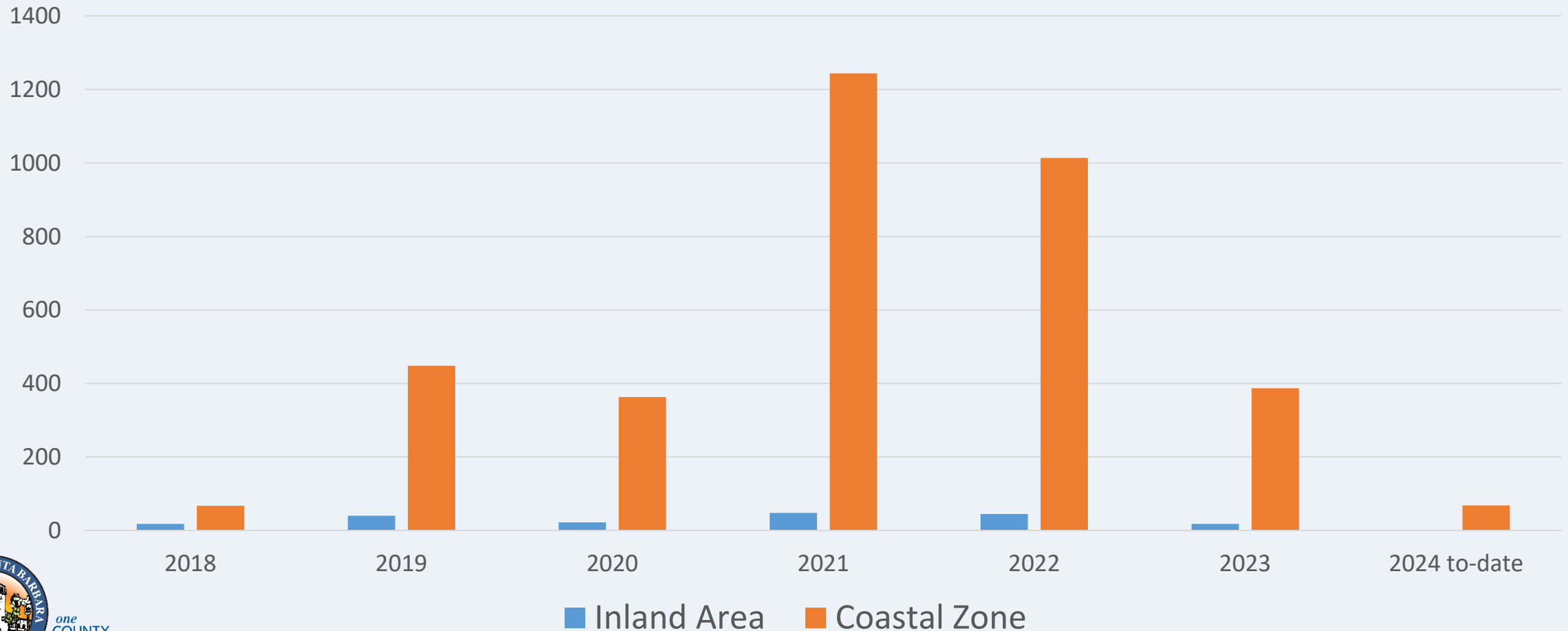
- All sites operating odor control systems
- Most are generally operating in compliance with OAPs
- Where deviations from OAP occur, P&D follows up to ensure compliance
- One Notice of Violation has been sent

Operator-Initiated Changes to OAPs

- 14 sites have submitted revised OAPs
 - 4 voluntary
 - 10 required as a result of an inspection or condition of approval
- Changes include:
 - Additional technology (e.g., additional vapor phase unit/tote or additional carbon units)
 - Modified maintenance procedures
 - Change to fan or filter type/size
 - New technology

Cannabis Odor Complaints

Cannabis Odor Complaints Filed with Santa Barbara County



Cannabis Odor Complaints



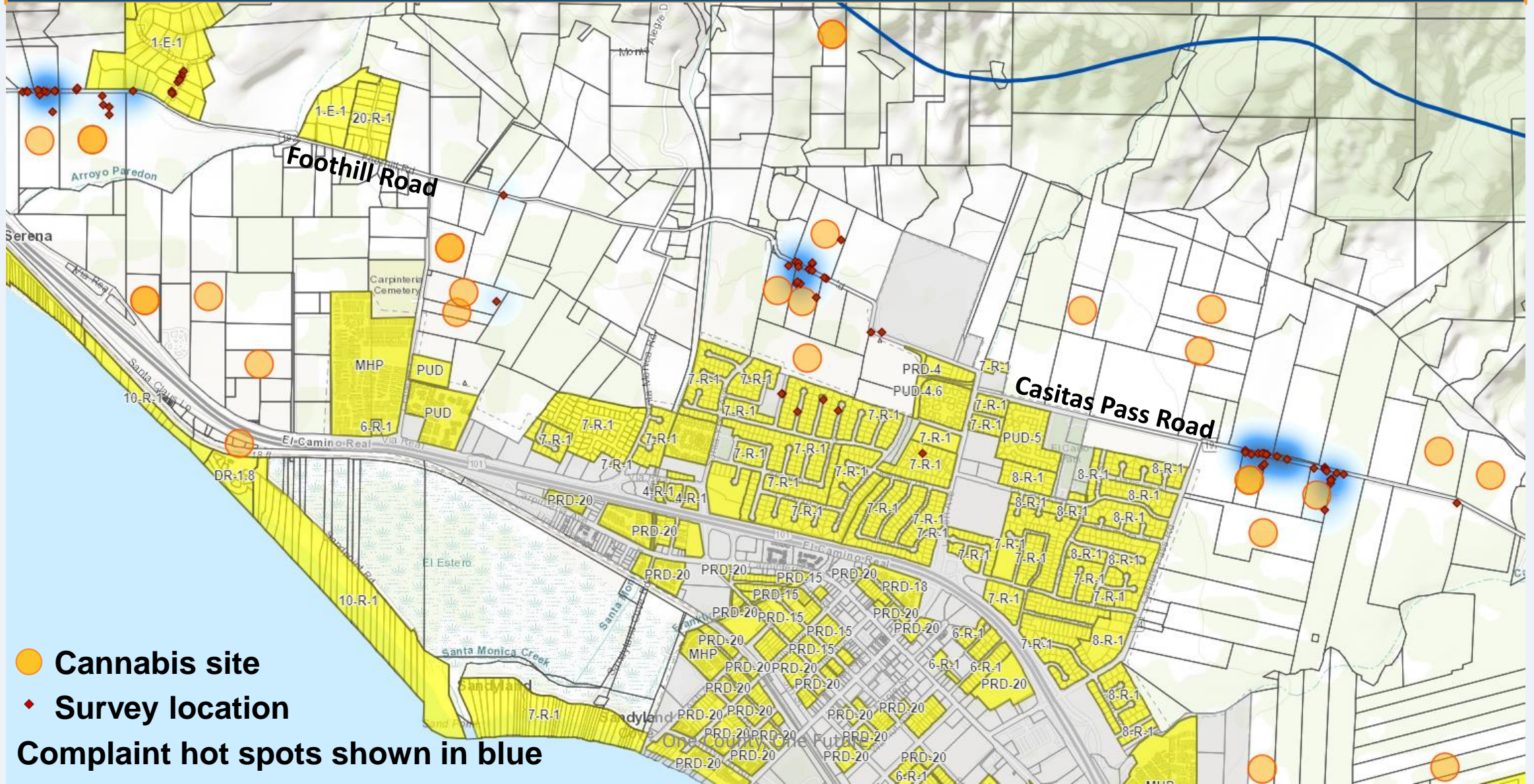
Nasal Ranger

- Nasal Ranger is a field olfactometer that uses Dilution to Threshold (D/T) to describe the intensity of odor

Odor Units D/T	Intensity
60	Exceptionally Strong
30	Very Strong
15	Strong
7	Noticeable
4	Faint
2	Very Faint
0	No Odor



Nasal Ranger Surveys



Nasal Ranger Surveys

- Odor detected consistently in three areas:
 - 3500 block of Foothill Road: highest measurement of 15 D/T (Strong)
 - 4400/4500 block of Foothill Road: highest measurement of 4 D/T (Faint)
 - 5600/5700 block of Casitas Pass Road: highest measurement of 30 D/T (Very Strong)
- Overall, odor readings at the above surveyed locations mostly ranged between null (No Odor) and 4 D/T (Faint)

Staffing for Permits and Enforcement

- P&D Development Review staff process cannabis applications
- P&D Enforcement and Compliance staff review cannabis operations for compliance with approved permits
 - Business License inspections
 - Permit compliance inspections
 - OAP inspections
 - Coordination with Geosyntec
- P&D Building and Safety staff process building permits for structural and odor control technology components

Power Supply/Capacity for Carpinteria Grows

- Carbon systems and photocatalytic oxidation require 480-volt power
- Availability of 480-volt service varies
- If available, SCE may need to install transformers (~\$30,000-\$50,000)
- On-site infrastructure upgrades may be financially/physically prohibitive
- Level of existing power availability is unclear or unknown

Successes

- Operators are generally compliant with OAPs
 - Some are modifying OAPs/operations to correct deviations found during OAP inspections
- P&D and Geosyntec are collecting D/T odor data using a Nasal Ranger
- Number of odor complaints has decreased
- Formerly legal non-conforming sites have approved entitlements, allowing monitoring compliance with OAPs
- The code requires BACT and allows the County to require corrective actions (i.e., additional/new BACT)

Challenges

- Private agreements are separate from County regulations
- Tiered responses have not been triggered
- Operators are resistant to install new technologies due to installation cost, lack of electrical capacity, and possible appeal of revised permits
- Staff is unable to verify odor complaints
- Identifying source of odor is challenging due to temperature, structures, wind, and proximity to other operations
- Residential zone threshold is difficult to enforce

Key Issues

- County can require modifications to odor control if an operation creates odor within a residential zone
- Difficult to verify complaints
- Current threshold, that odor is experienced in residential zone, is difficult to enforce
- Another standard/threshold would assist with enforcement and potential technological upgrades (e.g. D/T)

Potential Next Steps

1. Study power supply in Carpinteria area to determine feasibility of technologies.
2. Amend the land use development codes to:
 - a. Require use of specific odor control technology (photocatalytic oxidizers, carbon systems) or equivalent, where appropriate;
 - b. Require quarterly OAP inspections during the first year of operation and annual OAP inspections thereafter.
3. Research feasibility of a threshold (e.g., D/T) to determine compliance with OAPs and identify when corrective action is appropriate.
4. If a specific technology is identified for odor control, staff recommends additional research of existing odor control technologies.