



DATOC

Data Analysis and Tactical Operations Center

Update for CPDPC Joint Science & Operations Subcommittees

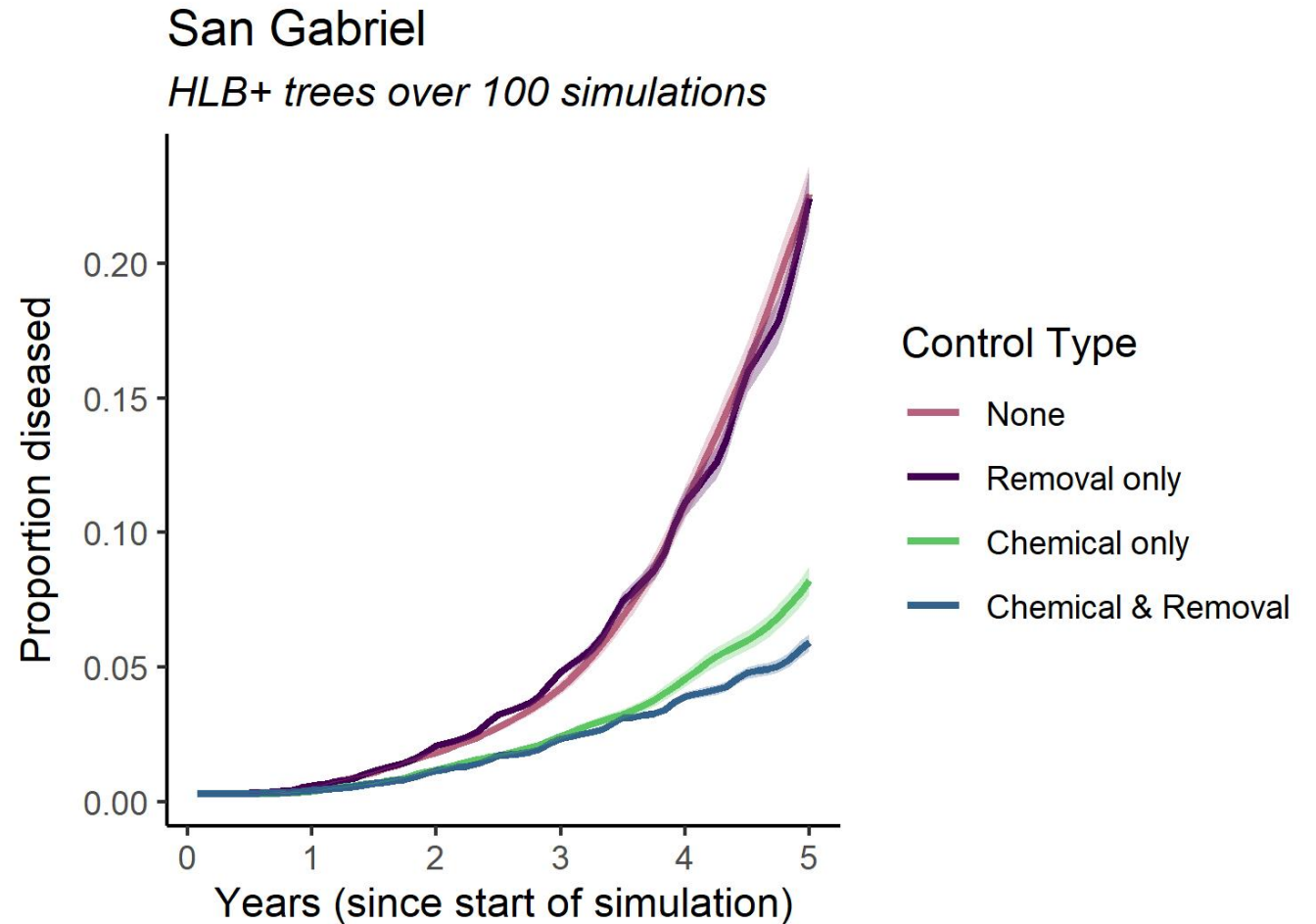
Neil McRoberts

July 8, 2020

datoc@citrusresearch.org

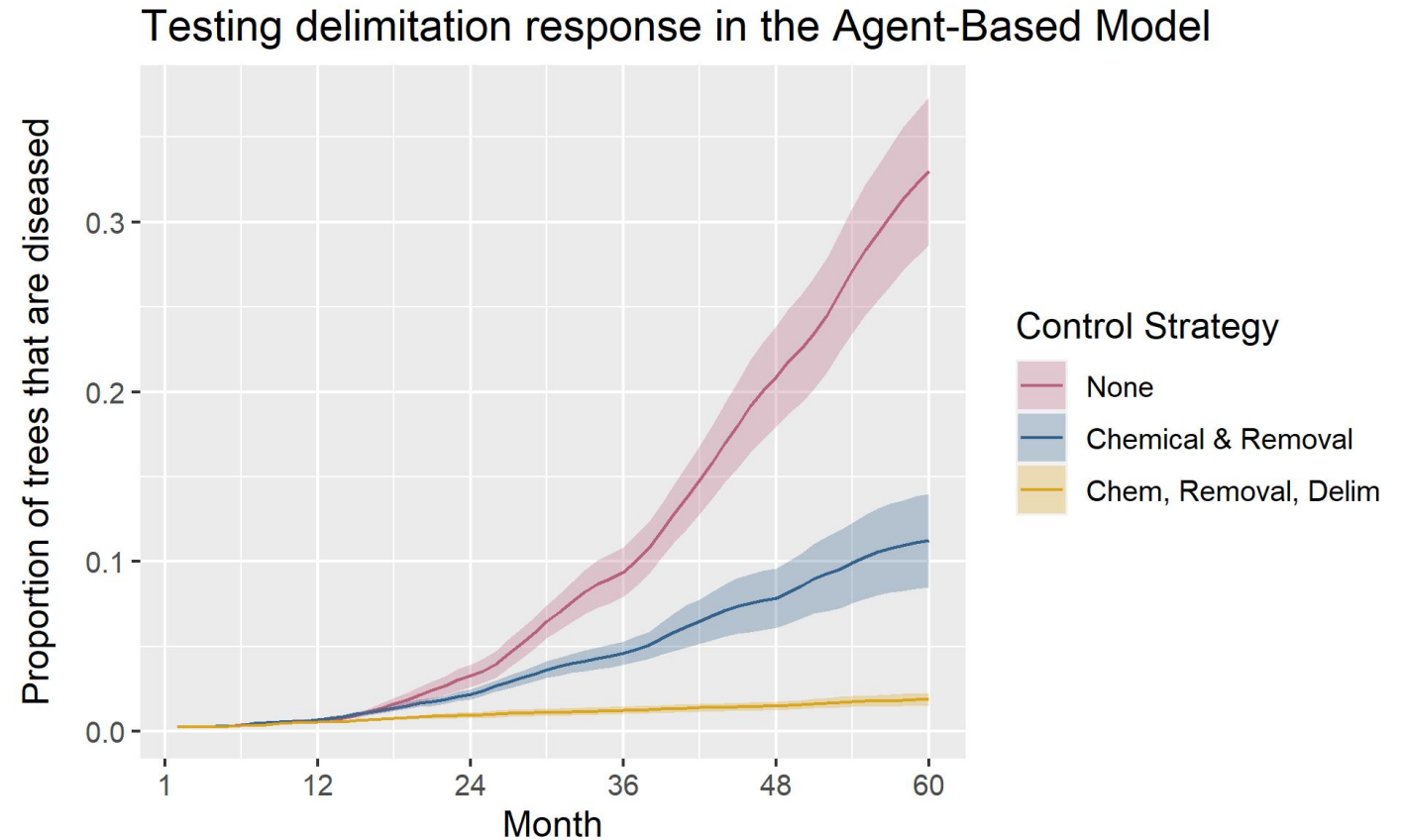
Effectiveness of HLB+ tree removal

- Previous modeling work implies that removing HLB+ trees had some benefit compared to doing nothing



Effectiveness of HLB+ tree removal

- Agent-based model added functionality to implement a **delimitation** strategy: responding to HLB+ trees detected by survey
- Preliminary work underway; modeled scenarios (e.g control strategies) will be refined
- Figure here represents average \pm se of 5 replicated simulations for each strategy



None: No control strategy implemented

Chemical & Removal: risk-based survey 2x/year & HLB+ trees are removed, citrus is treated with once with insecticide in Jan/Feb

Chem, Removal, Delim: same as Chemical & Removal, but with 100% survey & spray of properties in a 400m radius around an HLB+ tree

Regulatory Working Group Update

CPDPC – OPERATIONS / SCIENCE SUBCOMMITTEE MEETING

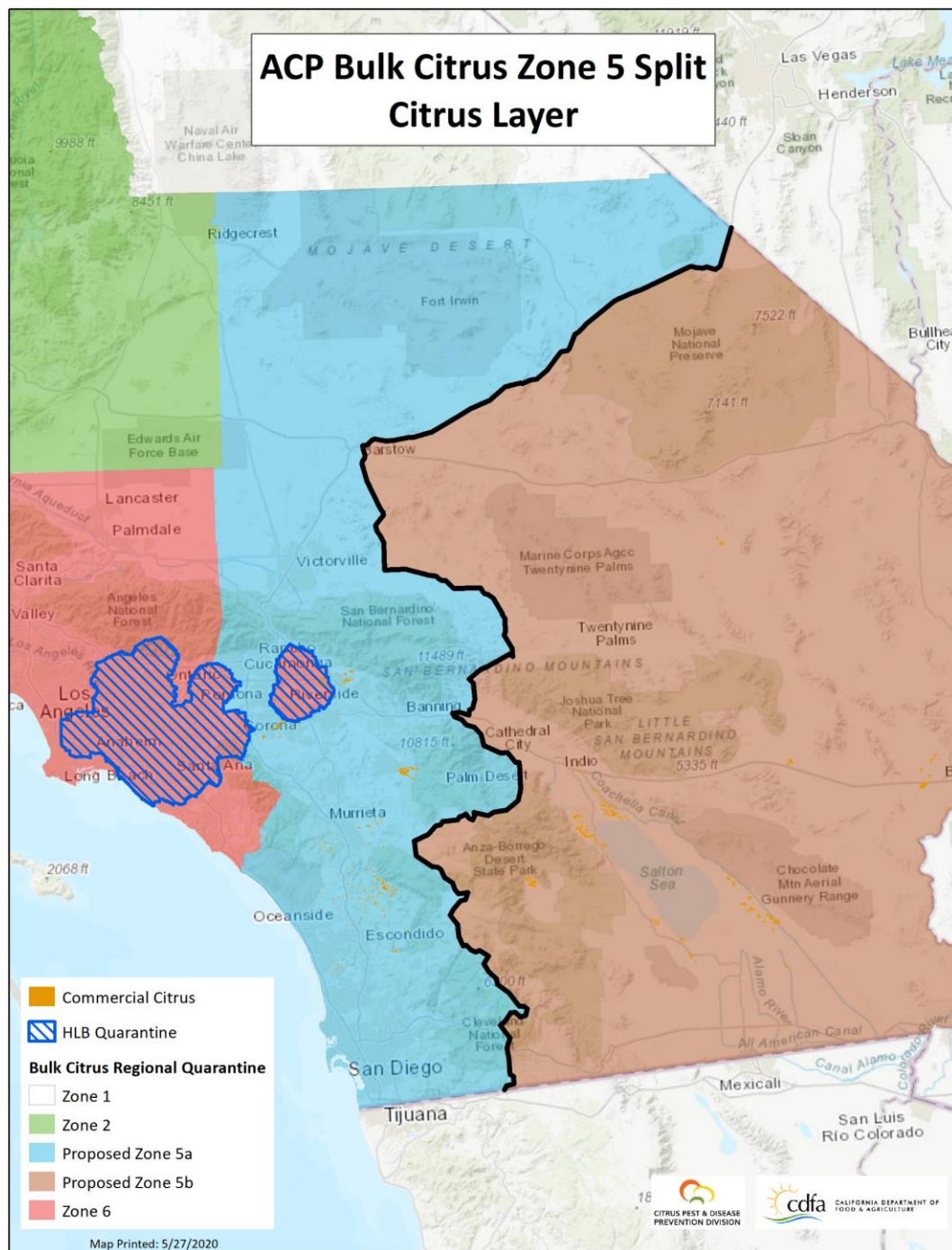
JULY 8, 2020

Working Group Tasks

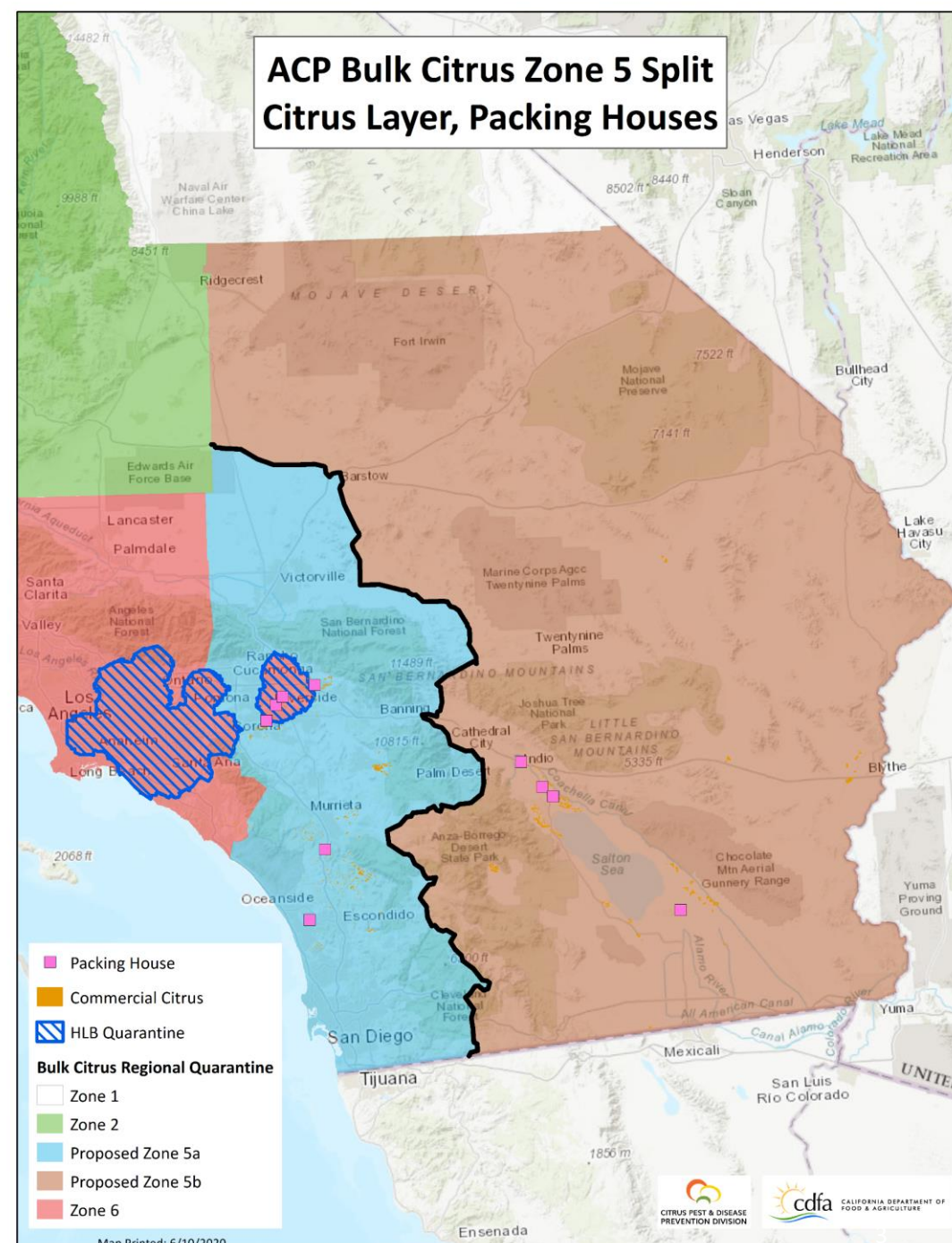
Evaluate data and justification for splitting ACP Bulk Citrus Zone 5

Evaluate a QC permit to ship fruit into the HLB quarantine

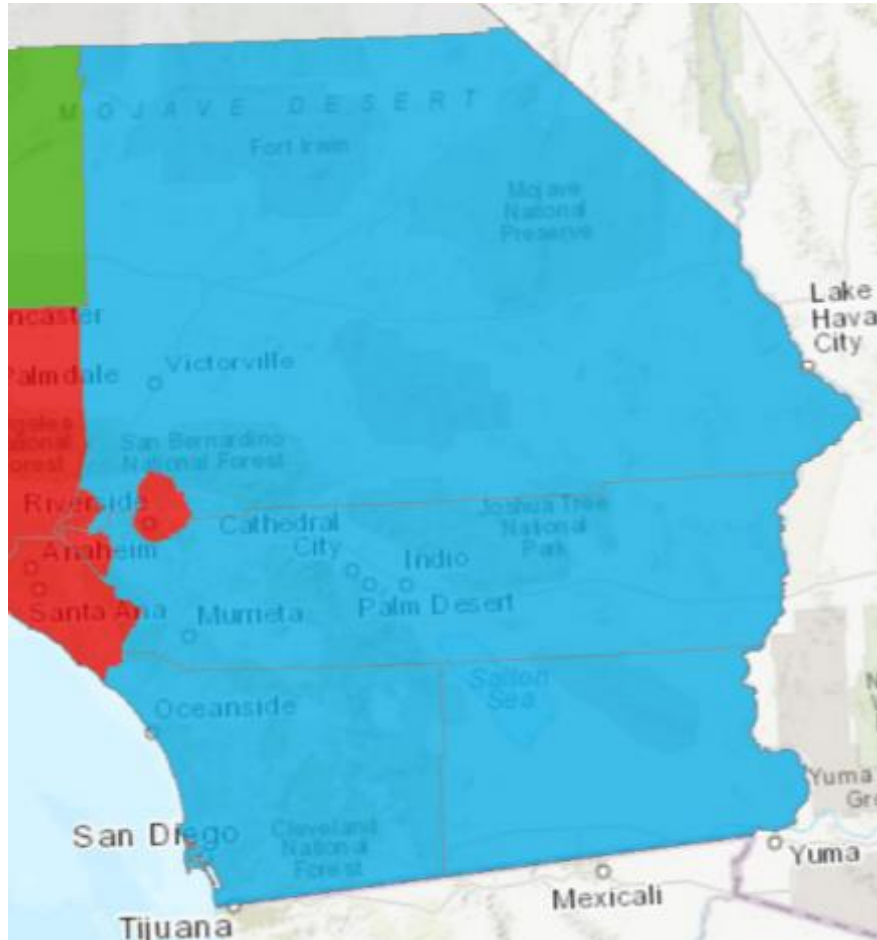
ACP Bulk Citrus Zone 5 Split Citrus Layer



ACP Bulk Citrus Zone 5 Split Citrus Layer, Packing Houses



Revised Proposal

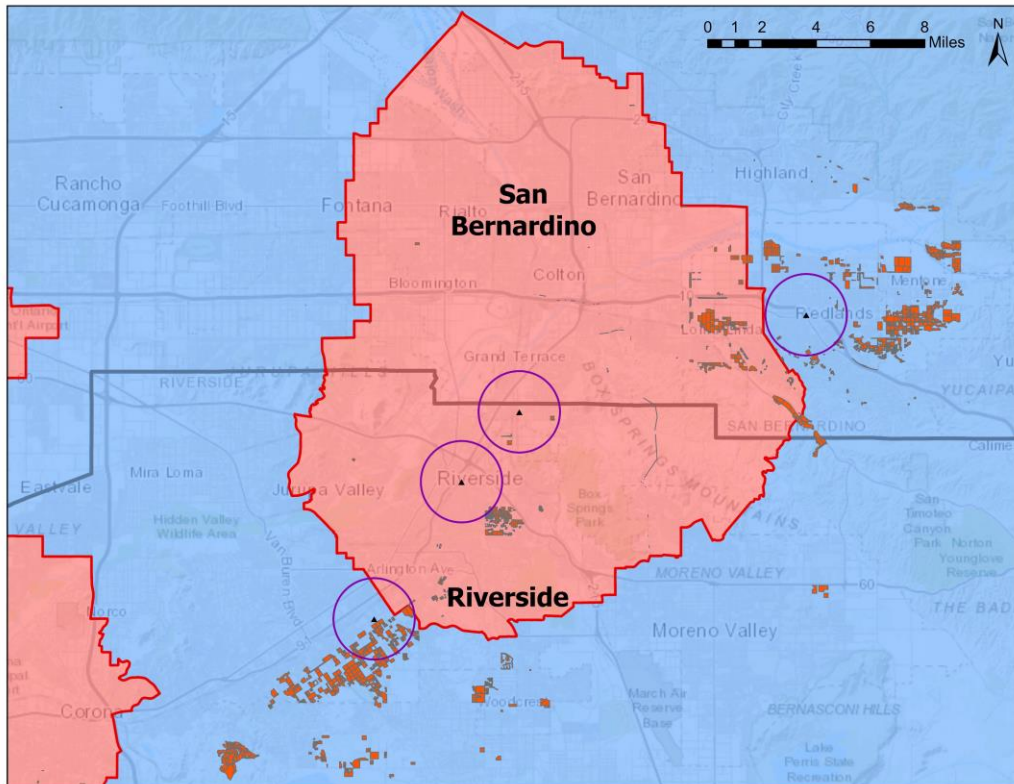


Keep current Zone 5 intact

Create systematic response to isolated HLB detections

Issue a permit to move fruit into an HLB quarantine (modified QC 1486)

Permit Systematic Approach



Only the surrounding zone may ship fruit into an HLBQ without mitigation.

- Tarping
- Pre-shipment notification

Only Zone 5 may ship into the Riverside/SB HLBQ

Similar permit would be issued for future isolated HLBQ with packinghouses

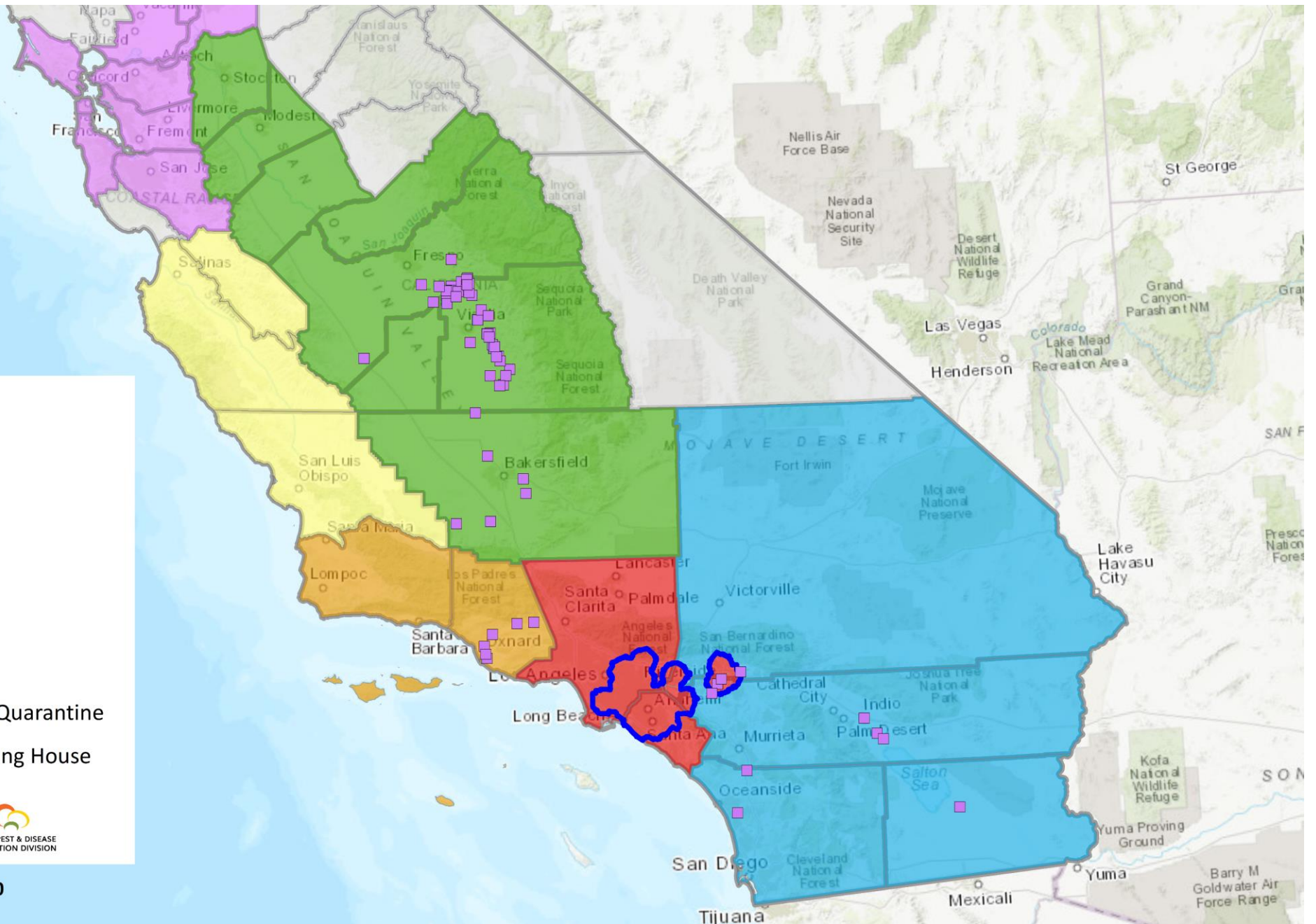
Bulk Citrus Regional Quarantine

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5
- Zone 6
- Zone 7

- HLB Quarantine
- Packing House






Map Printed 7/1/2020



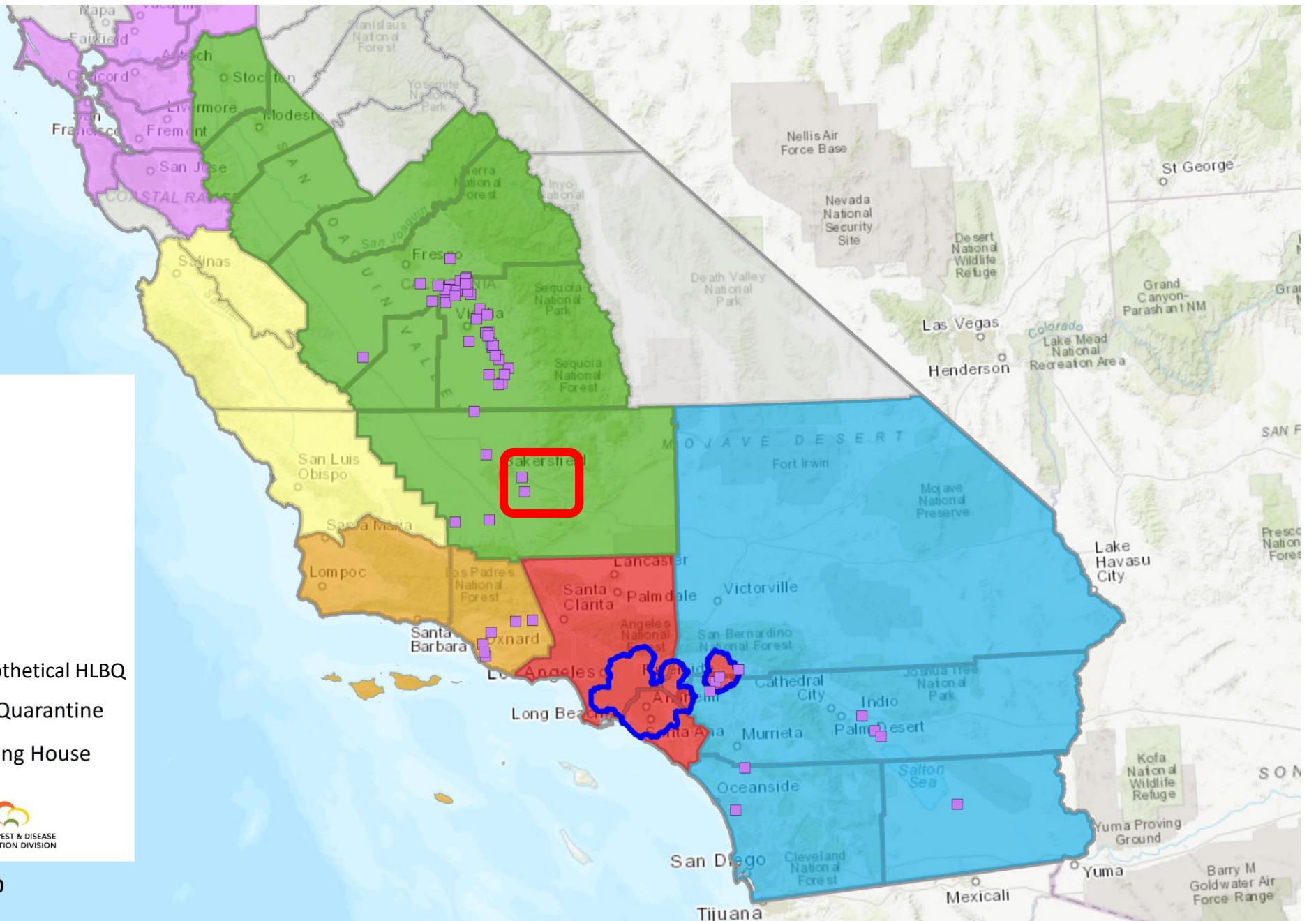
Bulk Citrus Regional Quarantine

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5
- Zone 6
- Zone 7

-  Hypothetical HLBQ
-  HLB Quarantine
-  Packing House



Map Printed 7/1/2020



Systematic Approach

ADVANTAGES

Reduces unintended consequence of revoking QC 1486

Does not require splitting Zone 5

Reduces required inspections and program cost

Approach applies to future HLBQ areas

DISADVANTAGES

Potentially adding more ACP to HLBQ area

Discussion

Presented by: Keith Okasaki

Email contact: Keith.Okasaki@cdfa.ca.gov

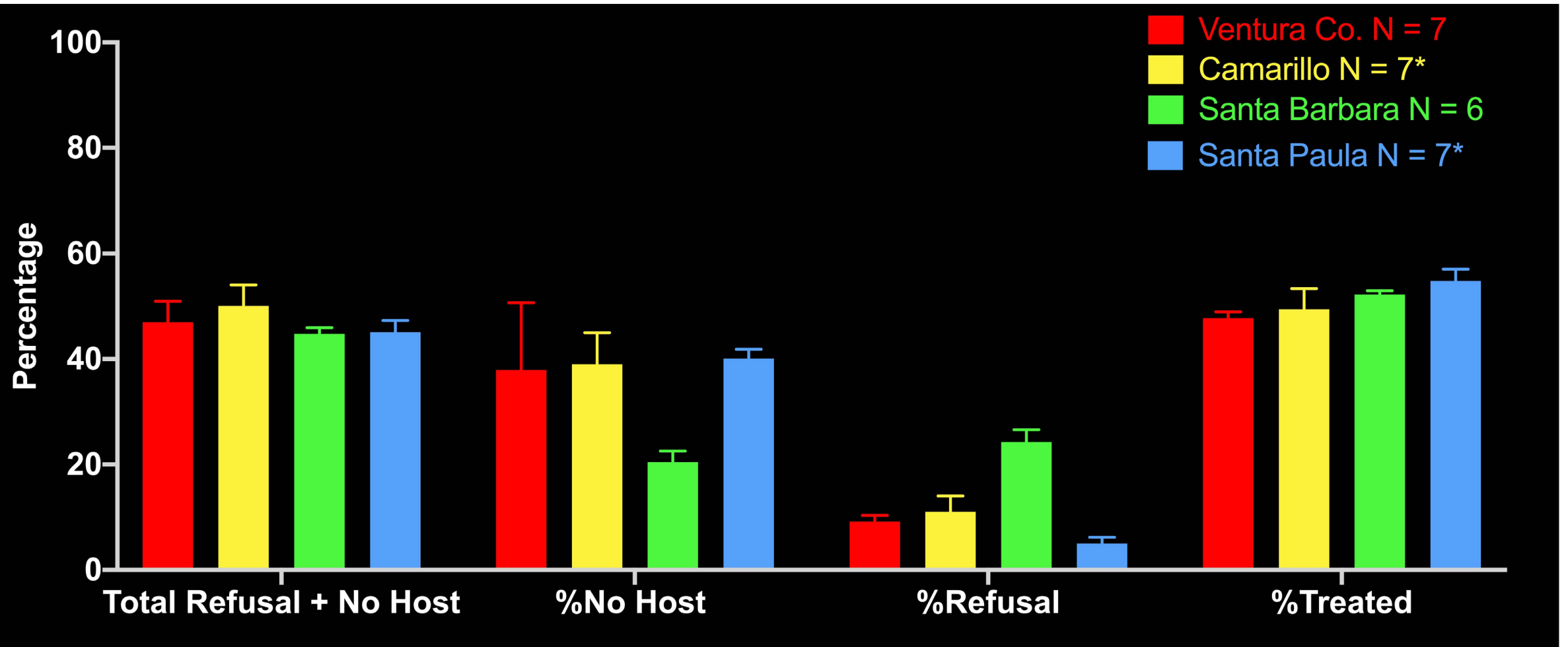
Should the buffer treatments
be reduced from 400m?

Issues inhibiting success of border sprays

- Residential Acceptance/Availability
- Timeliness of applications
- Acceptance * Distance
- Tree identity

Residential Acceptance/Availability

- Data provided by Anmol Joshi at CDFA
- Provided with data for the following areas: Ventura, Ojai, Camarillo, San Diego, UCR, San Bernardino, Santa Paula, Santa Barbara, Imperial, Hemet, Coachella
 - Total properties considered, Total properties treated, No-Contact, Refusal
 - Chose locations with 4 or more data points
 - Provided for Winter and Fall treatments
 - 2016, 2017, 2018, 2019
- Separated into Coastal Areas and Inland



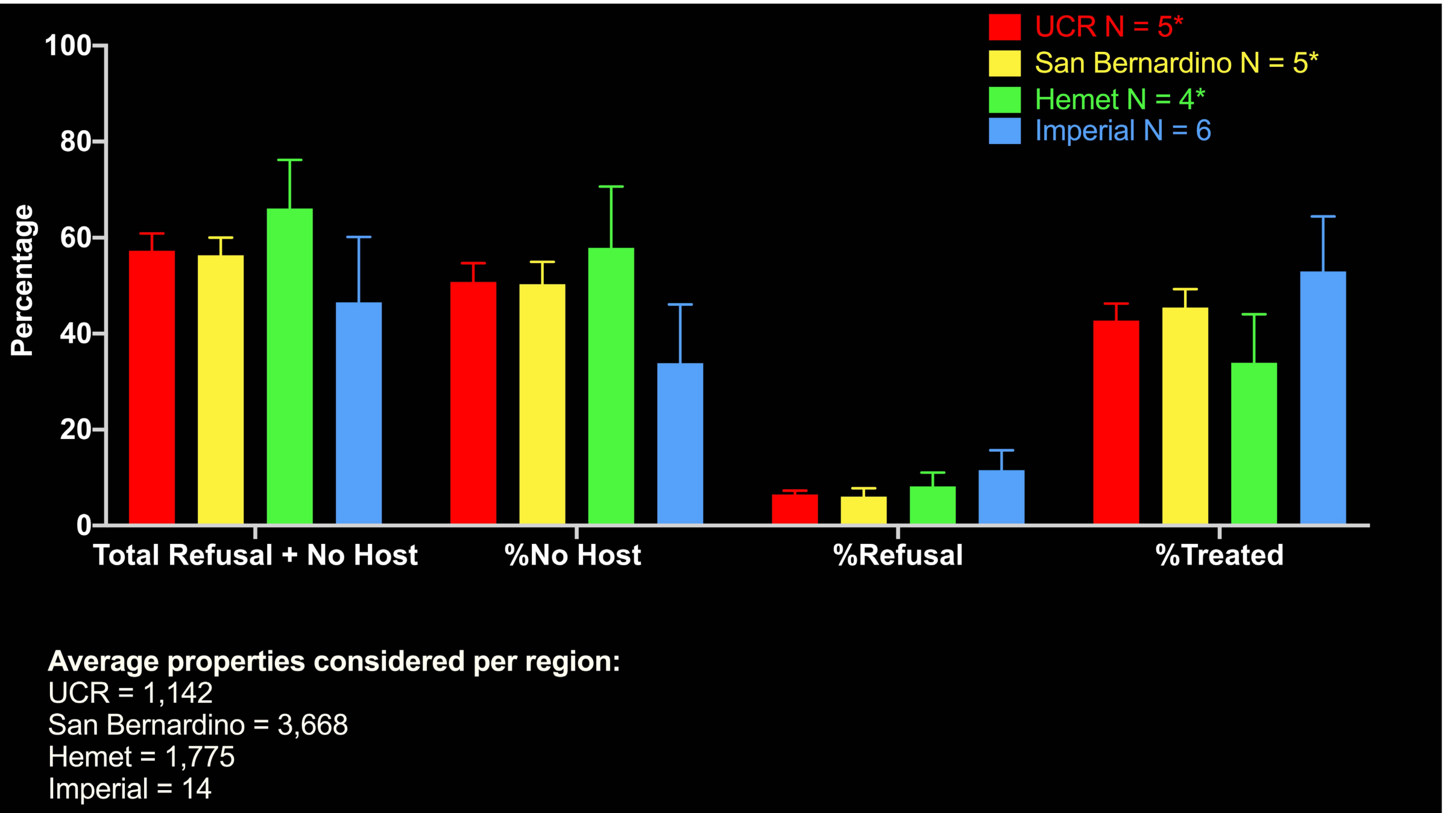
Average properties considered per region:

Ventura = 8, 432

Camarillo = 1,097

Santa Barbara = 3,381

Santa Paula = 1,350



Trends

- Refusals usually under 20%
- Treatments are only going onto < 60% of properties
- No contact with host more influential than outright refusal

Timeliness of applications & distance

- Insecticide treatments are going to cause adult ACP to move
- Movement will likely be to nearest citrus tree, which could be grove
- Highly problematic in regions where systemic insecticide is not an option
- Setamou mark recapture study (not yet published, conversation on 9 June 2020) suggests that ACP are mostly coming from residential that is 100ft away from the grove

Tree identity

- CDFA is unable to provide this data in digital form
- Critical to risk assessment as lemons can host more ACP/year
- In CA, conservatively, we should assume it is mostly/all lemons

Recommendation

- **Reduce the distance of border treatments to 100-200 meters**
- **Two-week treatment window**
- **Critical to address the first 100ft first**
- **Critical to address the amount of no contact with owners since this is contributing to the lack of treatments more than refusals**