

Out for Blood

Standardizing Local Dengue Case Monitoring

January 28th, 2025
MVCAC 93rd Annual Conference

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San Gabriel Valley Mosquito and Vector Control District



For more SGV dengue information...

- Finding the Right Axis for Access
 - Gilbert Holguin
- Dengue in the Golden State
 - Antonio Bishop
- Buzzing into Action
 - Anais Medina Diaz
- Dengue in our Backyard
 - Jason Farned



Surveillance Results, Pasadena 2023

October 4th, 2023

through

November 15th, 2023

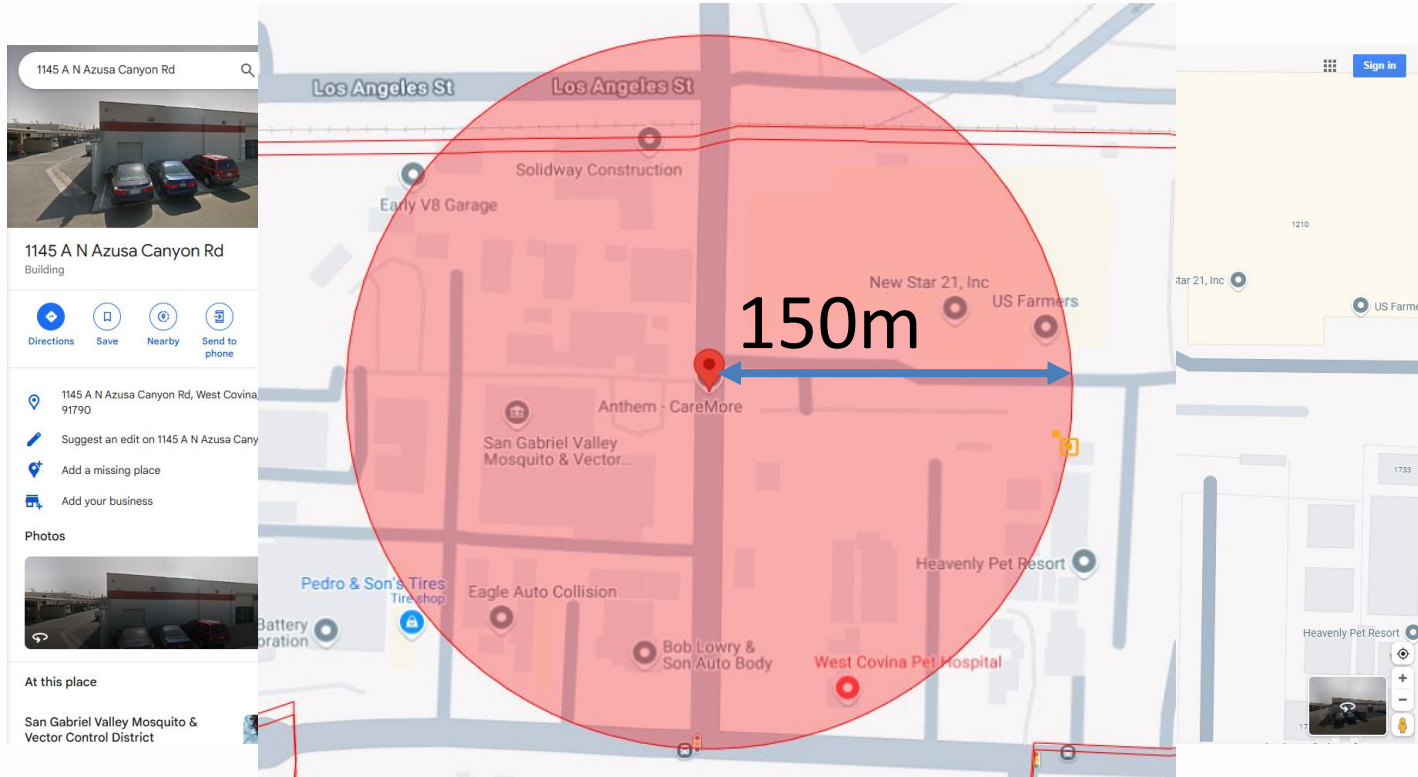
Traps Deployed	75
<i>Aedes</i> Samples Tested	140
Labor Hours	134
Investigation Cost	\$7,758
Local Cases Confirmed	2



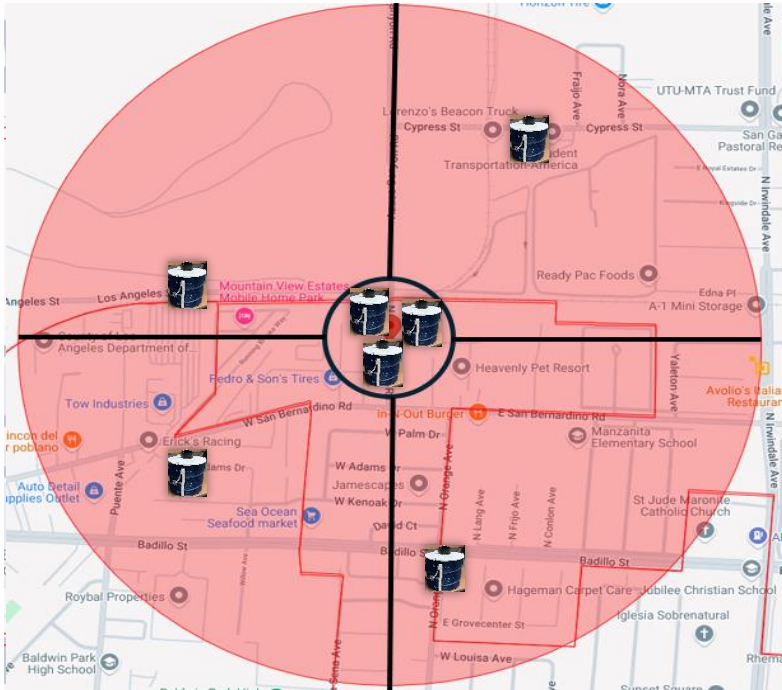
SGV <i>Aedes</i> -related Case Results	2023	2024 September 5th - November 12th
Local Cases	2	11

SGV <i>Aedes</i> -related Case Results	2023	2024 September 5th - November 12th
Local Cases	2	11
Target Areas	1	7

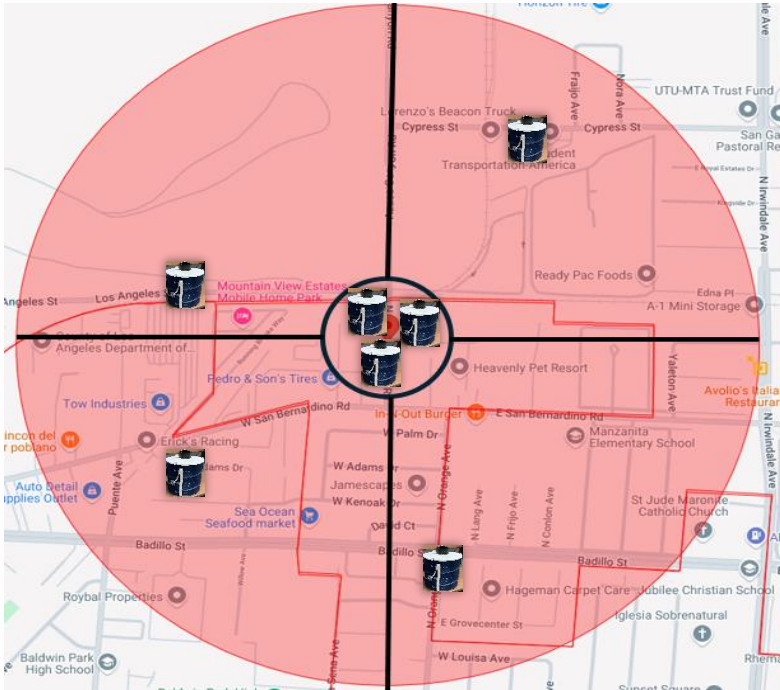
Target Area



Target Area, Surveillance

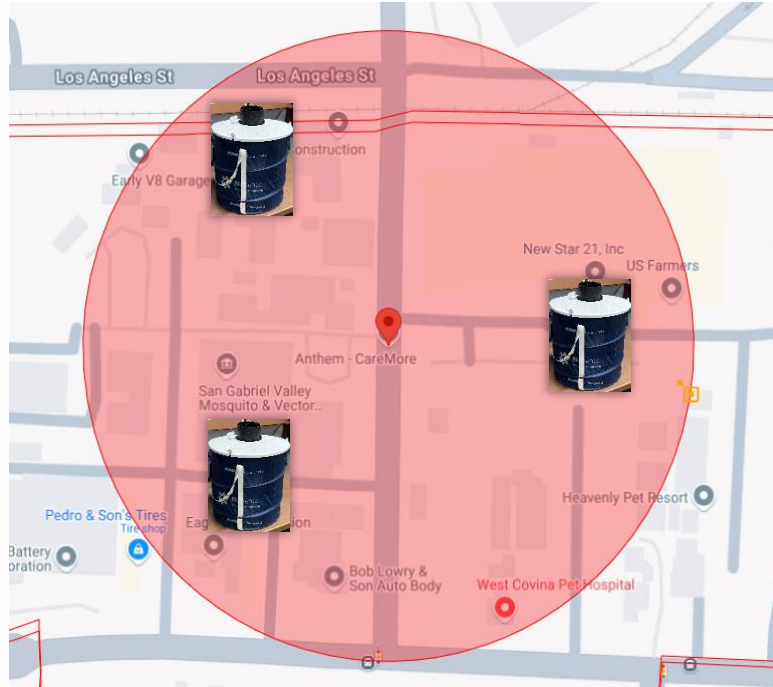


Target Area, Surveillance



- Three traps minimum
 - 150 meters
- Seven for pre and post truck mounted ULV application
 - 800 meters, 0.5 miles
- Testing all female *Aedes aegypti*

Target Area, Units and Success



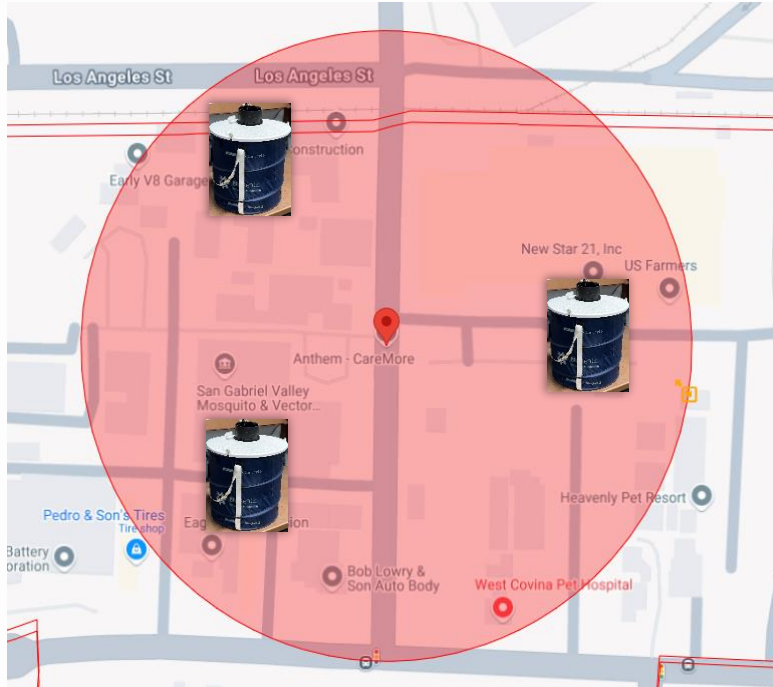
- Average female *Aedes aegypti*

avg_mosq

- Goal of interventions:

2 avg_mosqs for
2 consecutive weeks

Target Area, Duration and Reactivation



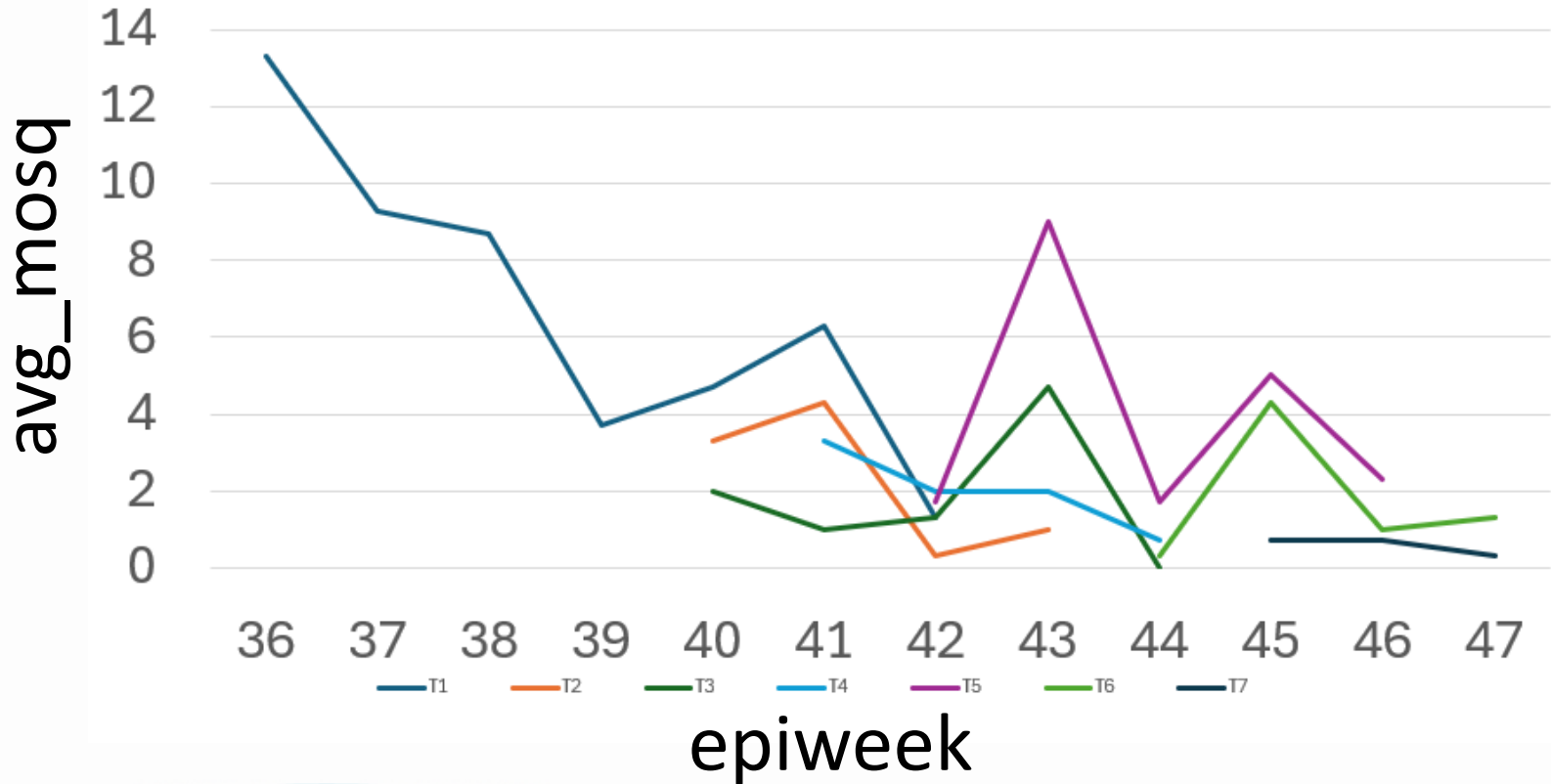
Duration

- 45-day window of surveillance
- OR
- 2 consecutive weeks of 2 avg_mosq

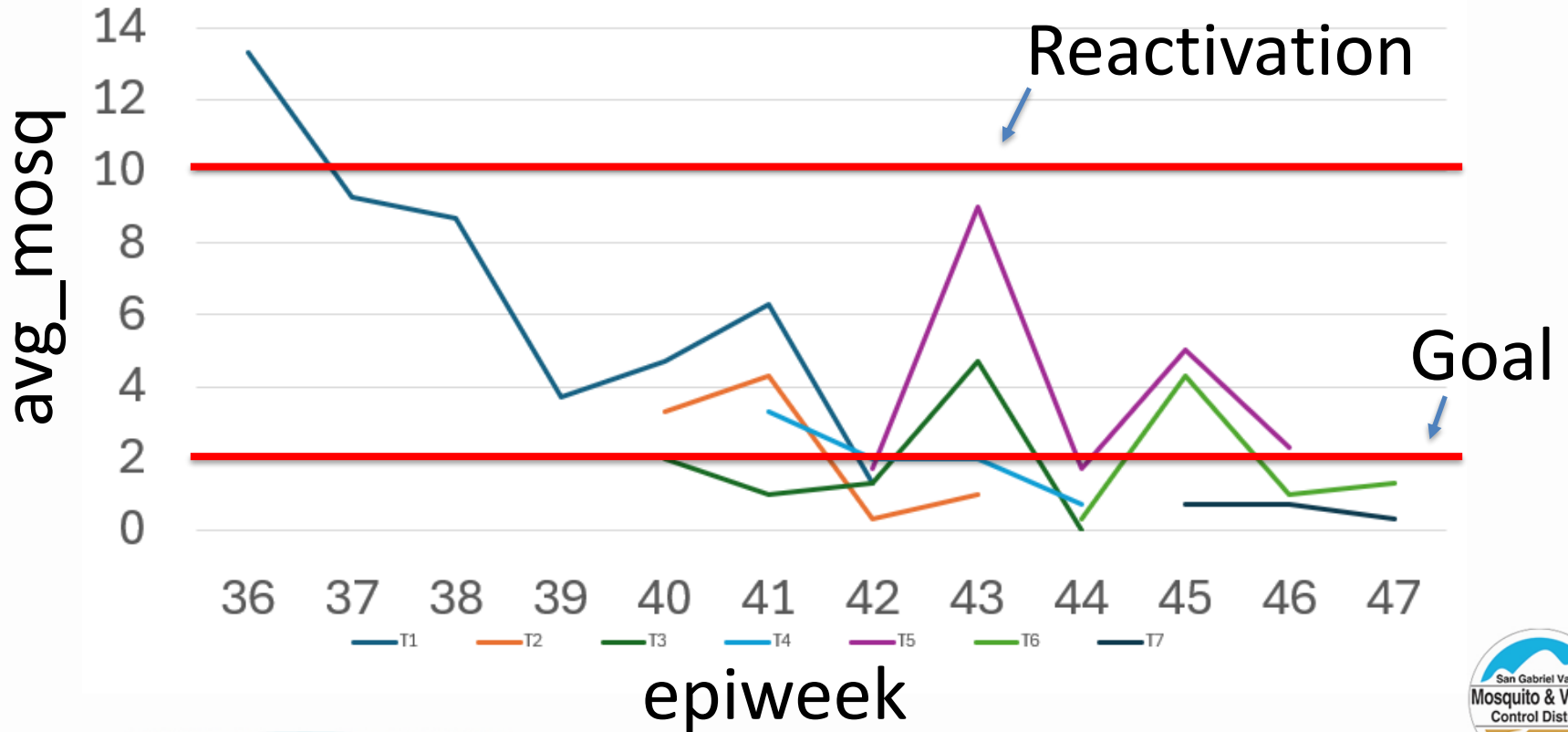
Reactivation

- Virus positive mosquito sample
- OR
- ≥ 10 avg_mosq

Average female *Aedes aegypti* collections per trap
by Target Area



Average female *Aedes aegypti* collections per trap
by Target Area



Simultaneous Priorities

- All current Target Areas trapped weekly
- All District wide surveillance was maintained
- All relevant travel cases investigated in a 2-week window
- Maintained a consistent testing schedule



Local Transmission Comparisons 23/24

October 4th, 2023
through
November 7th, 2023

September 5th, 2024
through
November 12th, 2024

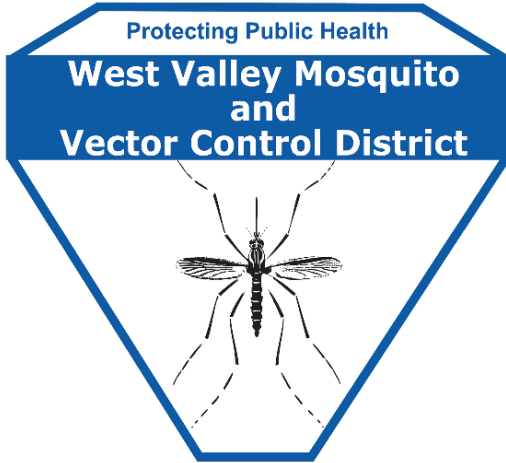
Traps Deployed	75	139
<i>Aedes</i> Samples Tested	140	112
Labor Hours	134	123
Investigation Cost	\$7,758	\$7,296
Local Cases Confirmed	2	11
Target Areas	1	7

Next Steps

- Goal critique - 2 and 10 avg mosq
- “Out for blood”
 - Collection and testing blood fed females
 - “Larval ecology of invasive *Aedes notoscriptus* in the San Gabriel Valley, California”
- Strength of collaborations



Acknowledgments





THANK YOU

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