



West Nile Virus Response in Santa Clara County

Santa Clara County Vector
Control District

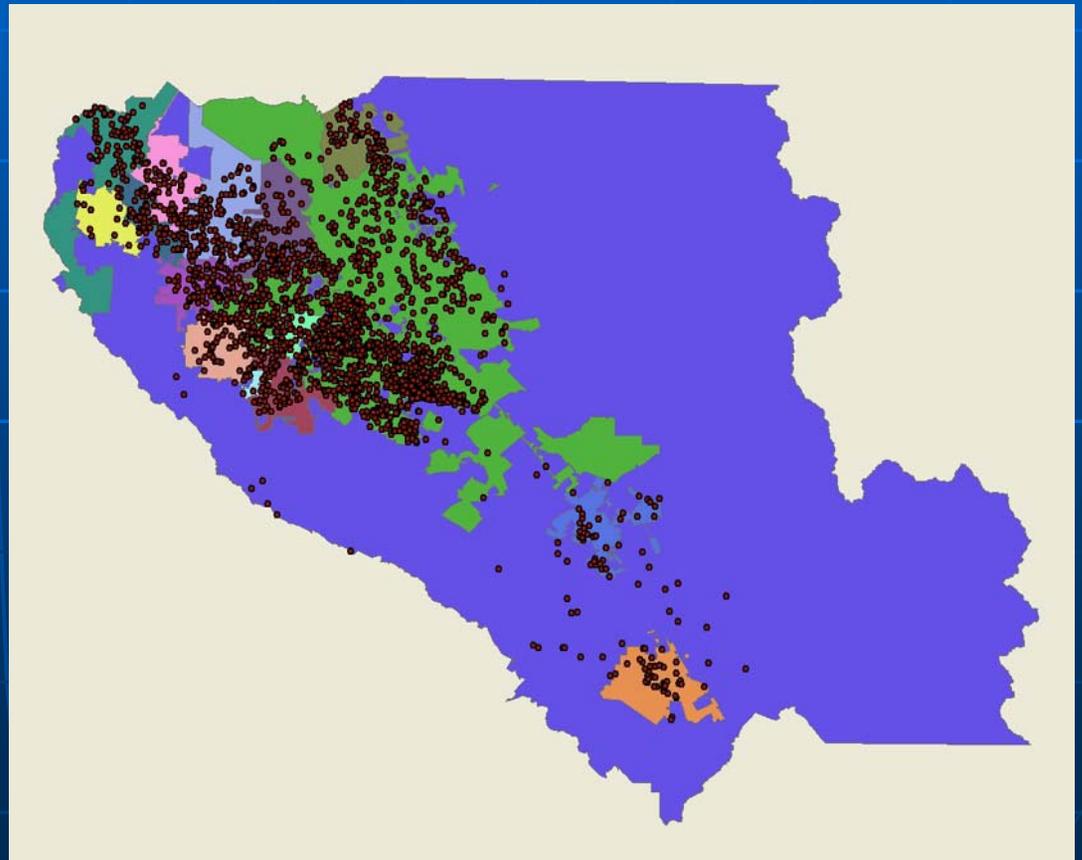
Noor S. Tietze, Ph.D.

Outline

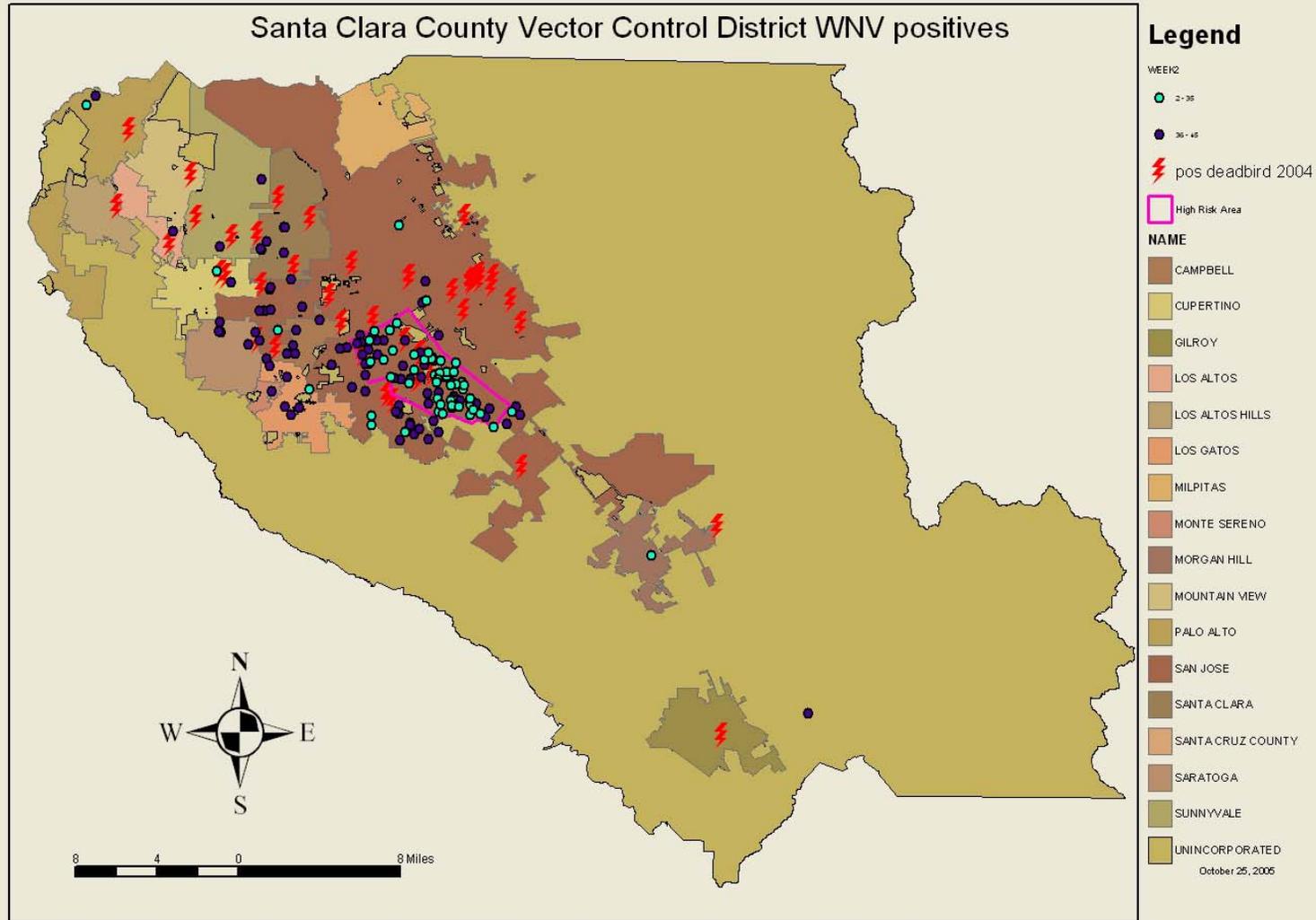
- Brief summary for Santa Clara Co.
- Challenges
- Issues
- Solutions
- Outstanding Issues
- discussion

2005 WNV Statistics

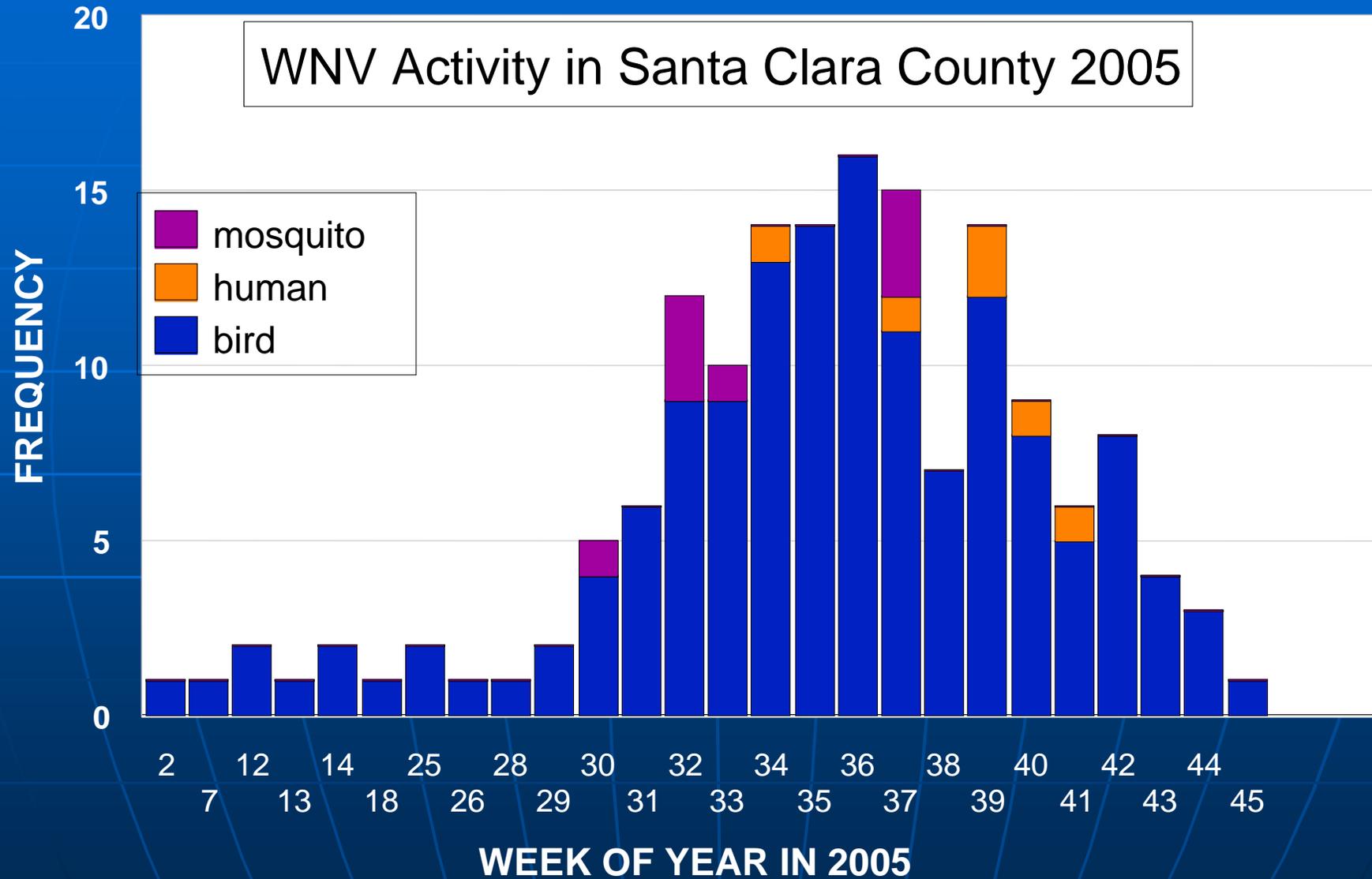
- 2,640 dead bird calls
- 145 positive birds
- >255 negatives
- 8 pos. mosquito pools
- 5 human cases
- 1 horse case
- 0 sentinel chickens



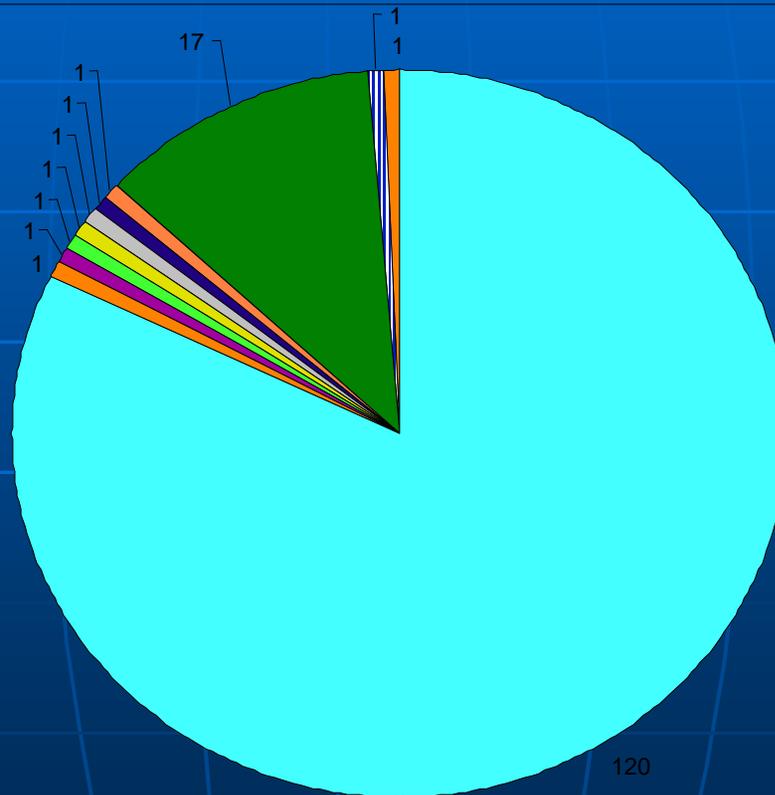
Geographical Summary – Santa Clara County



Seasonal Distribution of WNV



WNV positive birds

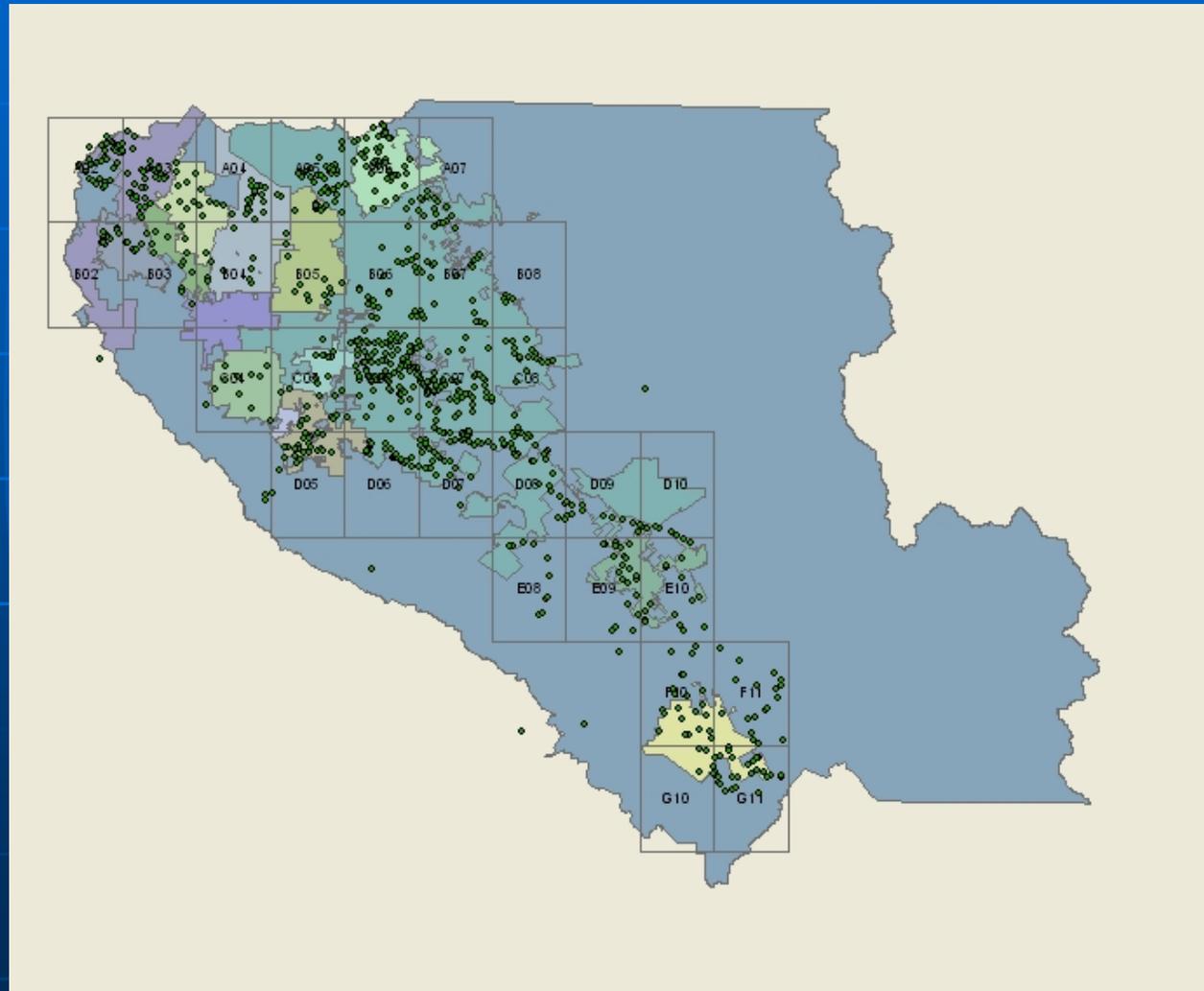


EVS Trapping Scheme

30 quadrants defined and sampled monthly

Assisted operational mosquito control

Located WNV positive mosquitoes



2005 Issues and Challenges

- Budget woes
- Concurrent reassessment process
 - Increased number of calls
- Frozen positions (4) and no summer help (4)
- Continued full-vector program
- Adulticiding decisions
- Need for 'backyard' surveillance

Workload challenge

- Increased awareness of services
- Media-induced calls
- Assessment mailer to entire county



Partial Solution: **reduce dead bird service requests by only responding to corvids and raptors**

Chronology of events (2005):

- April-May - identified high risk zone
- July 6 – physicians alert
- Aug. 22 - meeting with directors of public health and agriculture and submitted WNV response plan
- Aug. 25 – Promist sprayers delivered
- Aug. 30 - conducted community meeting
- Sept. 1 - adulticide treatments
- Sept. 7, 21 and 29 human cases reported in San Jose

Communicating the need fog

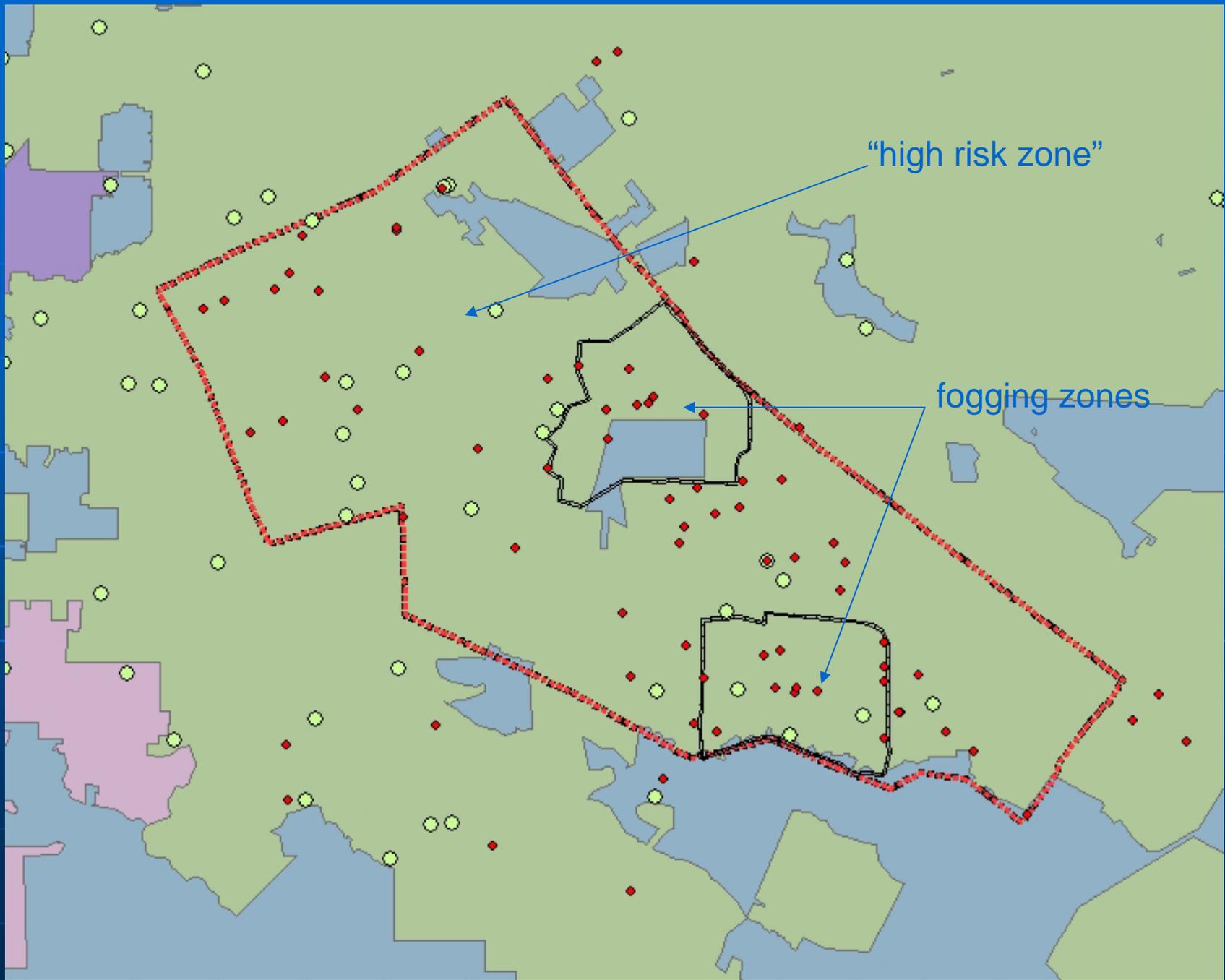
Dependent district bureaucracy:

District Manager → DEH Director → Ag Dept Director → County Exec.

Decision made to spray 0.5 mile radius zones (25 miles of streets) around positive mosquito sites as opposed to the entire 'high risk zone' (397 miles of streets) as defined by pos. birds.

This conservative decision was based, in part, on the novelty of community-wide ground adulticiding to both the district and the public.

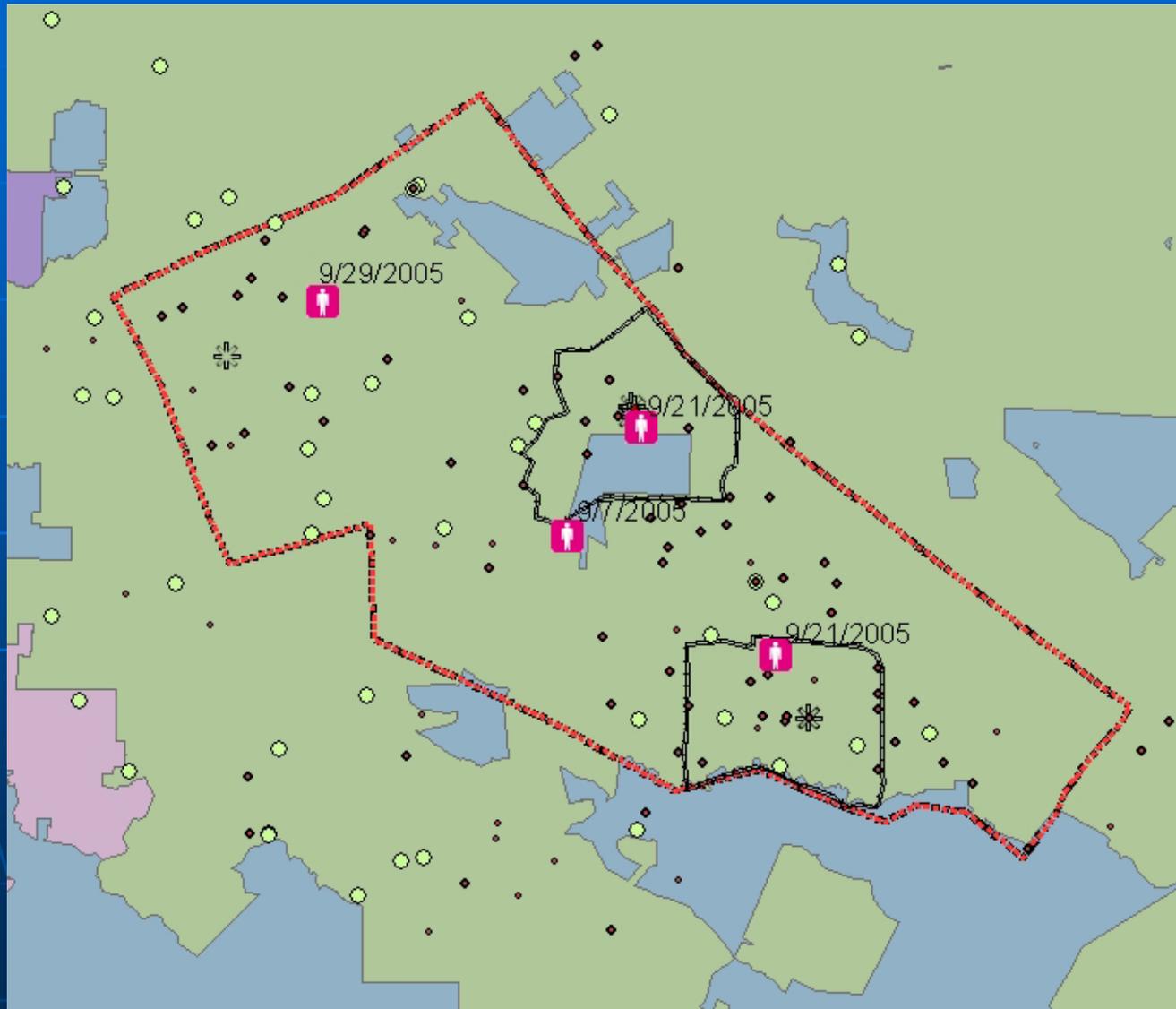




"high risk zone"

fogging zones

Human Cases in San Jose Area*



*single case in Palo Alto (8/18/05) not shown

Public Outreach

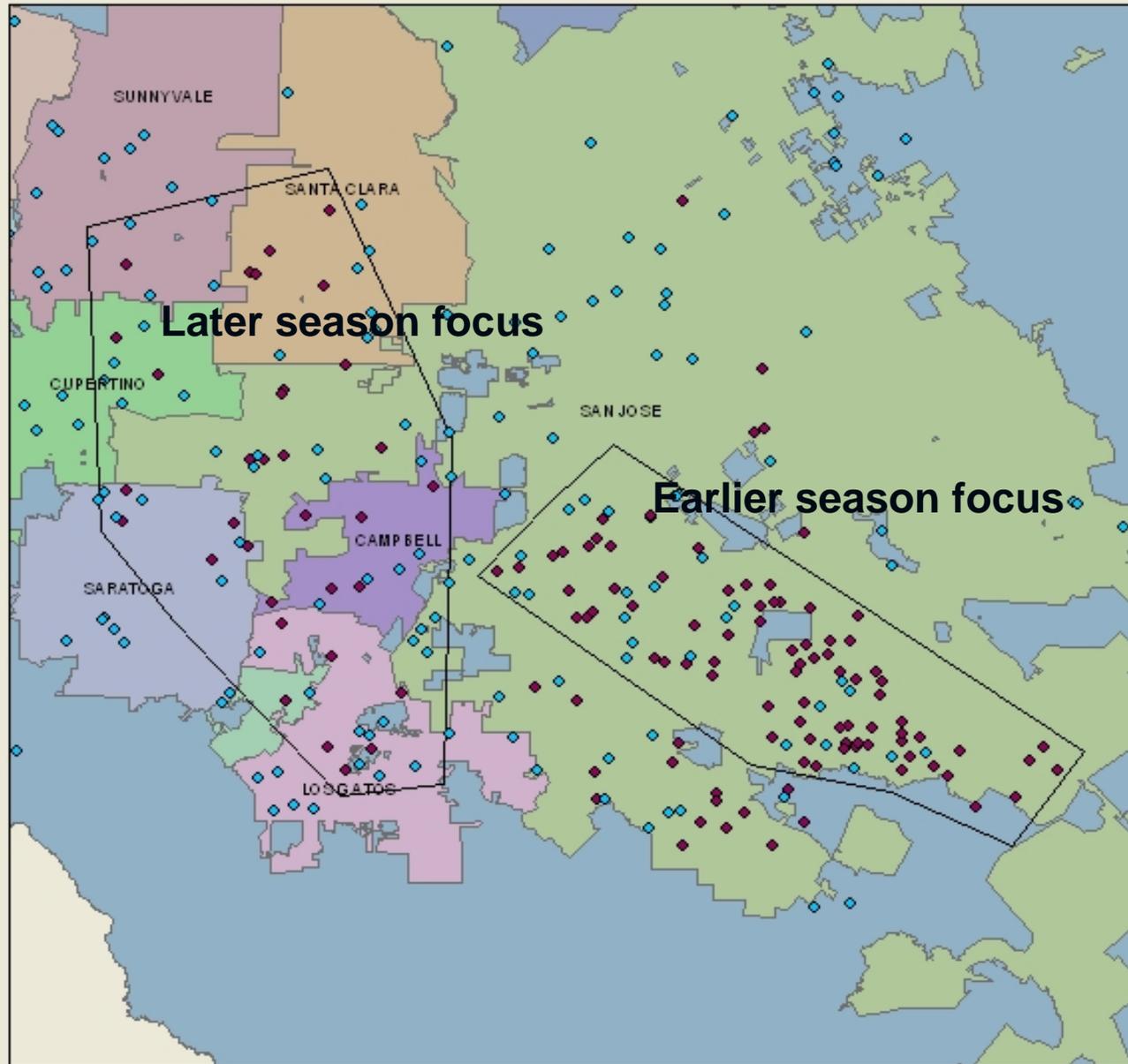
- 36 WNV presentations for community service and homeowner groups
- 5 displays at local health fairs
- Community meeting regarding the fogging, over 100 residents attended, along with several media
- 177 media interviews (TV & radio) which include in-studio talk shows (TV & radio)
- 3 months of radio ads on 2 local English news stations, 1 Asian station & 1 Spanish station- these were paid for by the County Health & Hospital

The Mercury News
MercuryNews.com

Public Outreach (cont.)



- Hundreds of requests for brochures and information
- Five articles written for neighborhood newsletters
- Approx. 2,000 Door knob hangers distributed, with over 1700 done by neighborhood associations
- Neighborhood Notice to “high risk zone” – 40,796 mailers
- Neighborhood Notice via e-mail from local Neighborhood associations out in May
- Visited Senior Centers in high risk zone – provided brochures
- WNV alert card (July) Fogging mailer out in Sept. - 6,935 mailers



Legend

- ◆ negative birds
- ◆ positive birds

Earlier season wnv focus:

Wks 22-38 avg=32

3.07 pos. birds/mi²

75% birds infected

Later season wnv focus:

Wks 30-42 avg=38

0.78 pos birds/mi²

42% birds infected

Operational Issues

- 'backyard' surveillance -
 - mailer to each pool parcel- poor response
 - aerial surveillance- not approved
 - Real estate Assoc. collaboration?
- defining WNV foci
 - based on positive birds
 - based on positive mosquitoes
- utility of sentinel chickens for WNV surveillance

Other Questions and Suggestions

- Legally, what authority does the county commissioner of agriculture have over use of public health pesticides? For example, could the commissioner require inspection of adulticide operations or refuse to let them take place?
- The RP algorithm was useful to us in justifying the use of adulticides.
- The state needs to be aware that as the outside experts, they have additional authority with local government. For the most part, this works to everyone's benefit. Dycast may be an example of a problem. County authorities may view Dycast results as having more weight than our own mapping of virus-infected birds, mosquitoes and people.
- The use of adulticides and residuals is a perpetual challenge in terms of public relations, but the state could help assure both the county government and the public that these are legitimate and useful tools in management of WNV transmission.
- Another aspect of emergency response that could use attention is mass distribution of repellents.
- Could the state put together a package of actions to be taken by senior centers located with foci of WNV transmission?

Predicting 2006

