

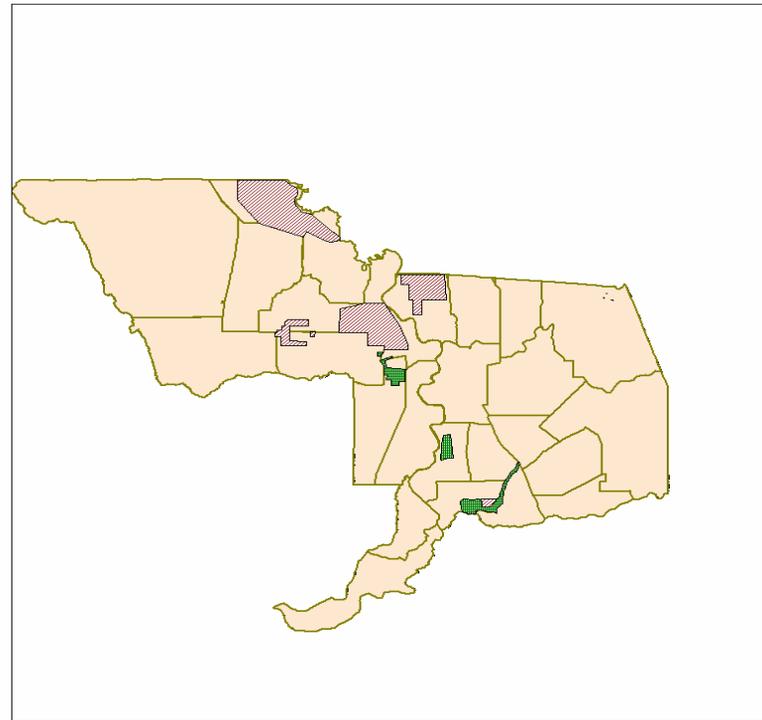


# West Nile Virus Surveillance and Control in the SYMVCD

David Brown, Manager  
Sacramento-Yolo Mosquito and  
Vector Control District

# Sacramento-Yolo District

- 14,000 identified larval sites
- ~600,000 acres in Agriculture (44,000 acres of rice)
- 40,000+ of wetland/wildlife habitat
- Half urban/half rural
- Larger sites agricultural/  
smaller sites urban



# District Resources

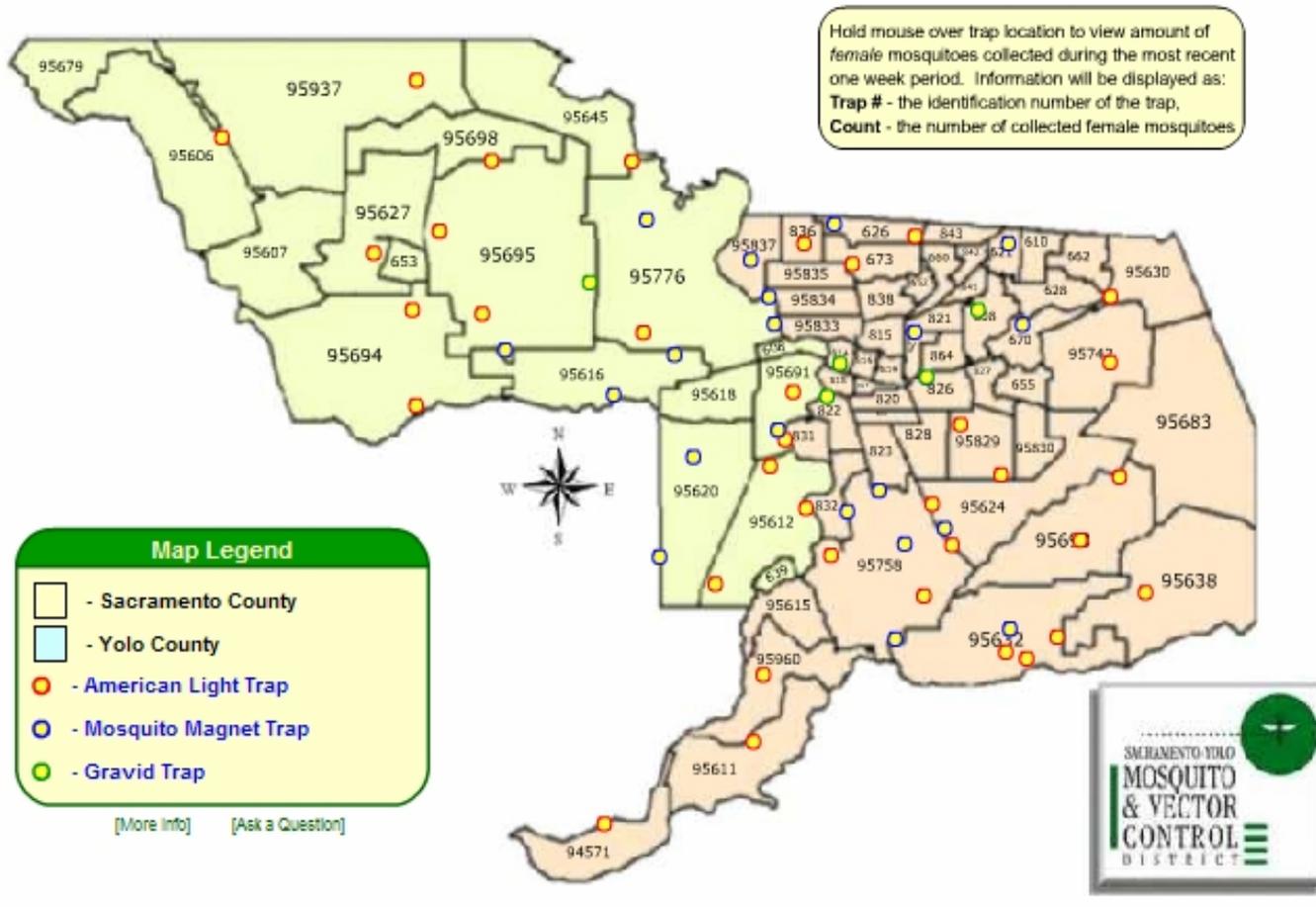
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- 55+ Employees
- \$7 million dollar budget
- Other vector control activities:
  - » Ticks
  - » Yellowjackets
  - » And other information as necessary

# Sacramento-Yolo District Surveillance

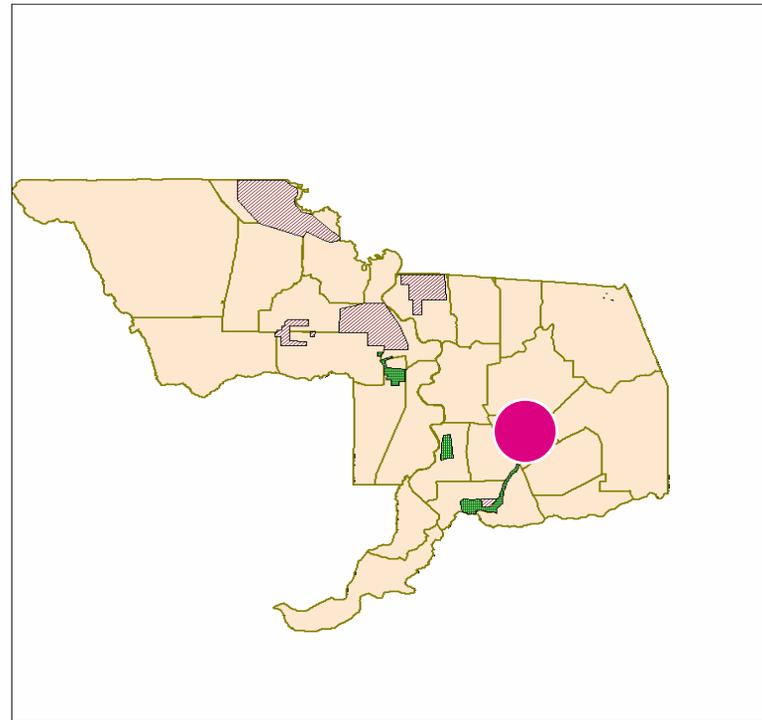
## Sac-Yolo MVCD Weekly Mosquito Trap Collections

right click map to zoom in or out ...



# WNV in Sacramento-Yolo

- July 22 notified of 4 positive birds (of 779 reported by that date-95 tested)
- Submitted between July 7-14
- All were in rural community of Wilton
- Implemented District Disease Response Plan



# Final Totals for West Nile Virus Surveillance

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- Humans = 3
- Horses = 83
- Dead Birds = 152
- Mosquito Pools = 21
- Sentinel Chickens = 16

# District WNV Response Plan

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- 4 Indicator Levels
  - » No virus activity
  - » Virus in mosquitoes
  - » Virus in sentinel chickens or other animals
  - » Virus in humans
- Incorporates the California State Mosquito-Borne Virus Surveillance and Response Plan as Addendum

# District WNV Response Plan

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- Level Three - Virus in sentinel chickens or other animals
  - » Management Response
  - » Laboratory Response
  - » Field/Control Response

# Management Response

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- Notify Public Health Officials
  - » Notify Board of Directors
  - » County Health Officers
  - » Agricultural Commissioners
  - » Prepare Media Announcement

# Laboratory Response

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- Determine Scope of Virus Activity
  - » EVS traps and Gravid Traps targeting appropriate vectors
  - » Intensify mosquito pool collections
  - » Concentrate efforts in high risk sites (parks, outdoor events, etc...)
  - » Begin bleeding sentinel chickens on a weekly basis

# Field Response

- Immediate treatment of all known active larval sources with one square mile of site, concentrating on appropriate vectors
- Determine need to conduct adult mosquito control activity based on Laboratory surveillance results
- Design aerosol routes if *tarsalis* are in sufficient numbers ( $\geq 10$  per trap night in light trap or  $\geq 100$  per trap night in mosquito magnet or EVS)

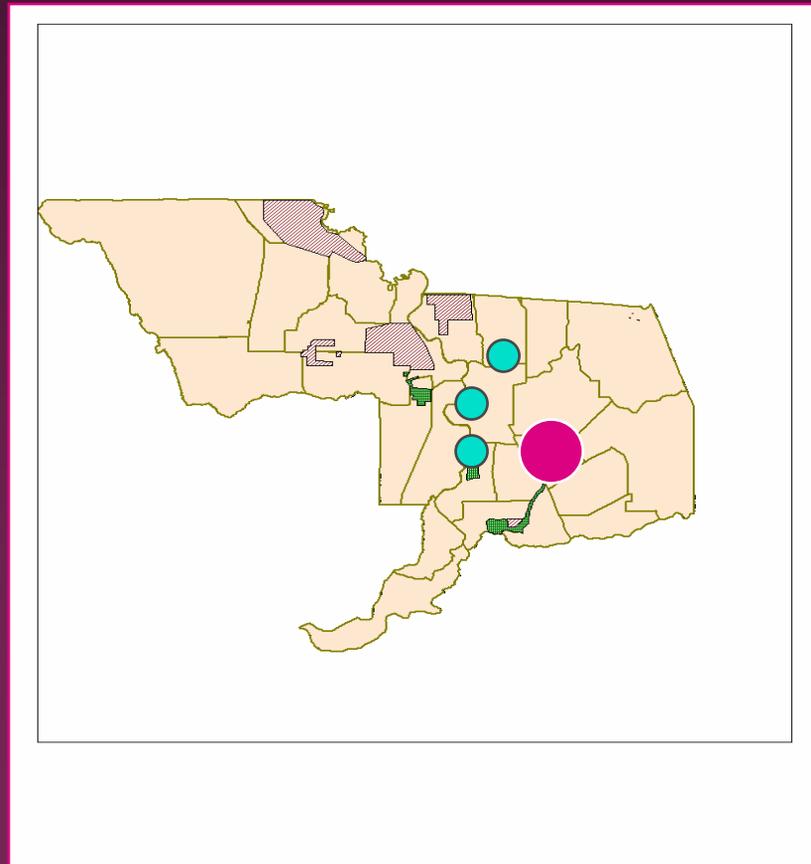
# Outcomes and Results

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- No localized urban adulticiding conducted
- Intensified adulticiding in agricultural settings
- Over 80 horse cases in Sac County (Many in Wilton)
- Three human cases (none where localized birds were found).

# WNV in Sacramento-Yolo

- Red dot =  
Preponderance of  
birds
- Blue dots human  
cases



# Questions?

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- What should larval threshold be?
  - » (0.1/ dip?)
- What should adult mosquito count threshold be?
  - » (25 or less in EVS traps in rice fields )
- Urban thresholds?
- Other questions?