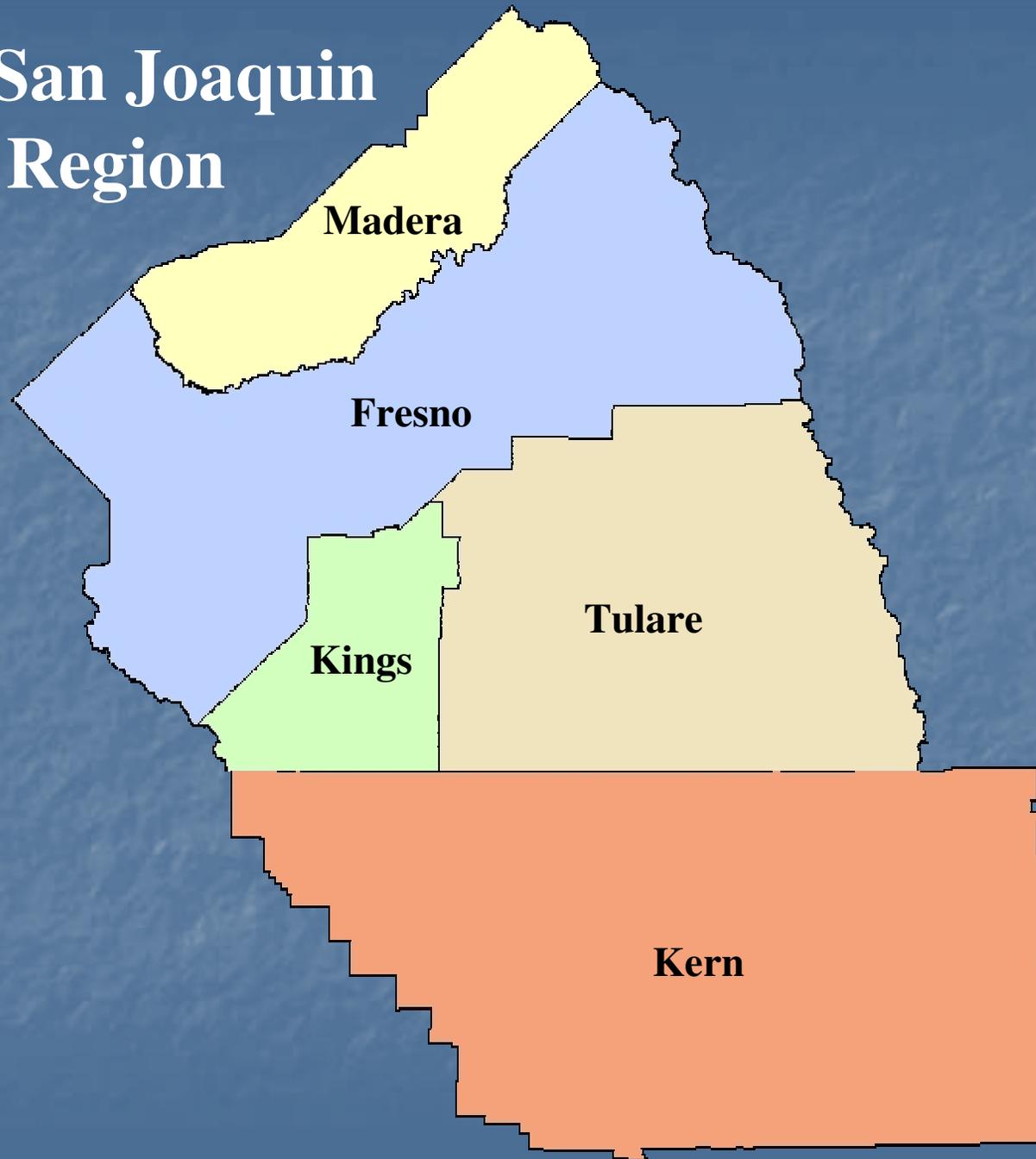


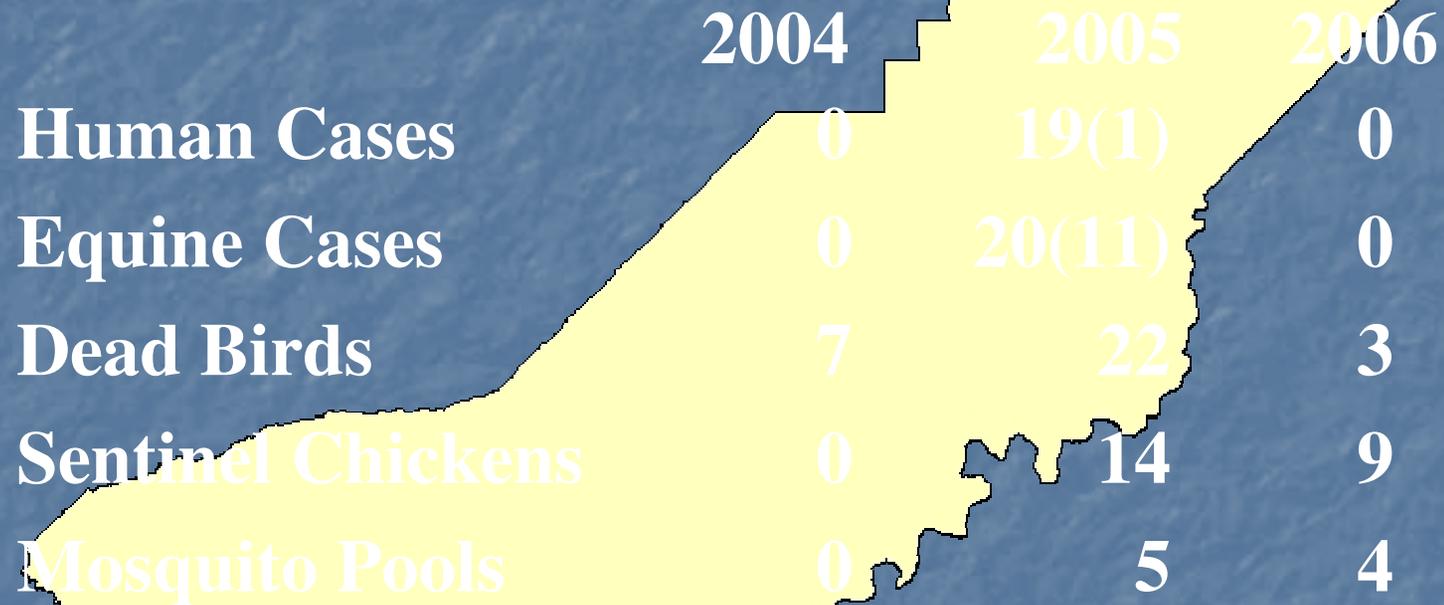
WNV in the Heart of California South San Joaquin Valley

Steve Mulligan
Consolidated MAD

South San Joaquin Valley Region



Madera County WNV Activity

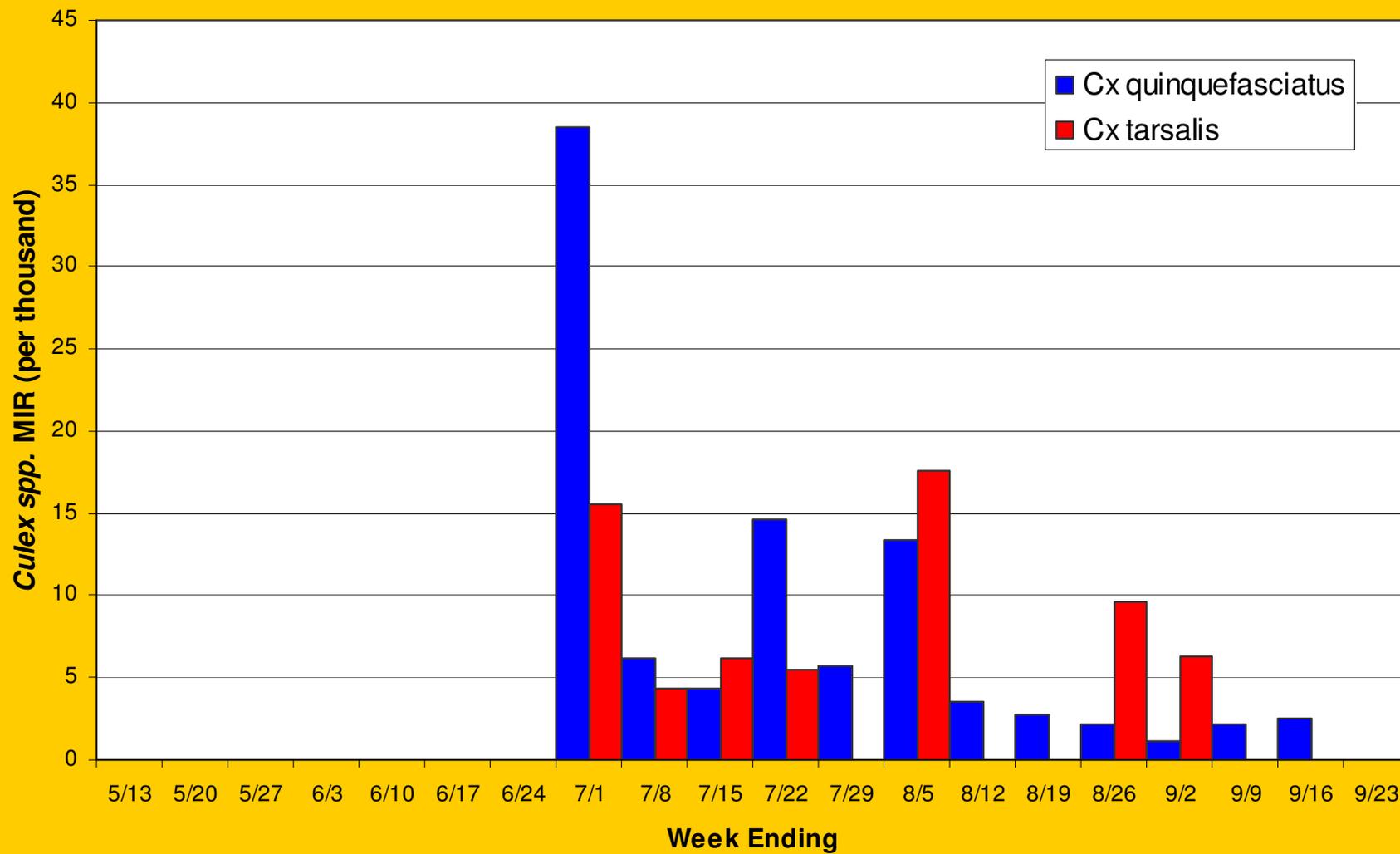


	2004	2005	2006
Human Cases	0	19(1)	0
Equine Cases	0	20(11)	0
Dead Birds	7	22	3
Sentinel Chickens	0	14	9
Mosquito Pools	0	5	4

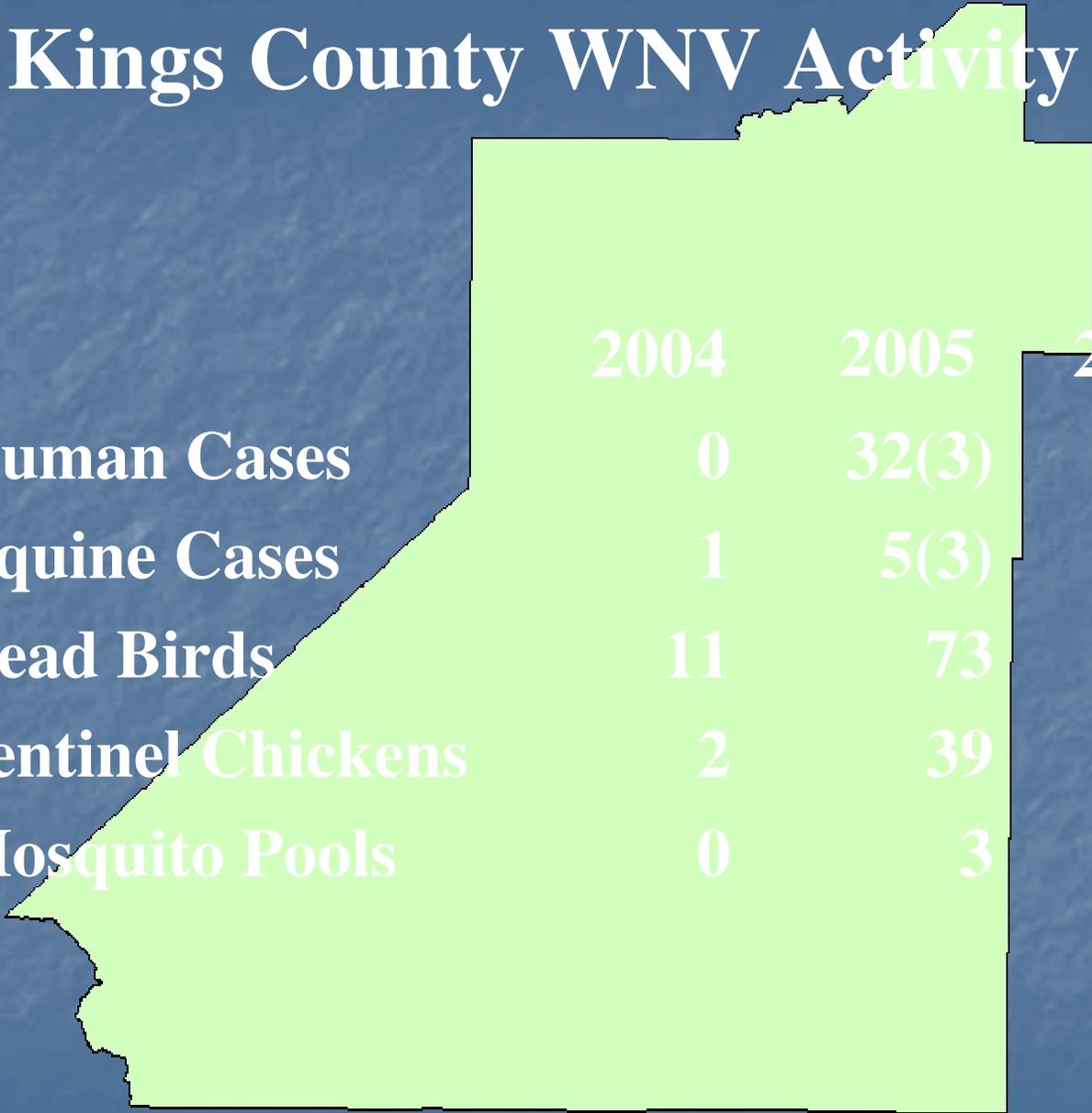
Fresno County WNV Activity

	2004	2005	2006
Human Cases	15	68(2)	11
Equine Cases	21(6)	33(12)	5(4)
Dead Birds	116	97	72
Sentinel Chickens	25	85	37
Mosquito Pools	14	71	41

MIR 2006



Kings County WNV Activity



	2004	2005	2006
Human Cases	0	32(3)	1
Equine Cases	1	5(3)	0
Dead Birds	11	73	13
Sentinel Chickens	2	39	25
Mosquito Pools	0	3	34

Tulare County WNV Activity

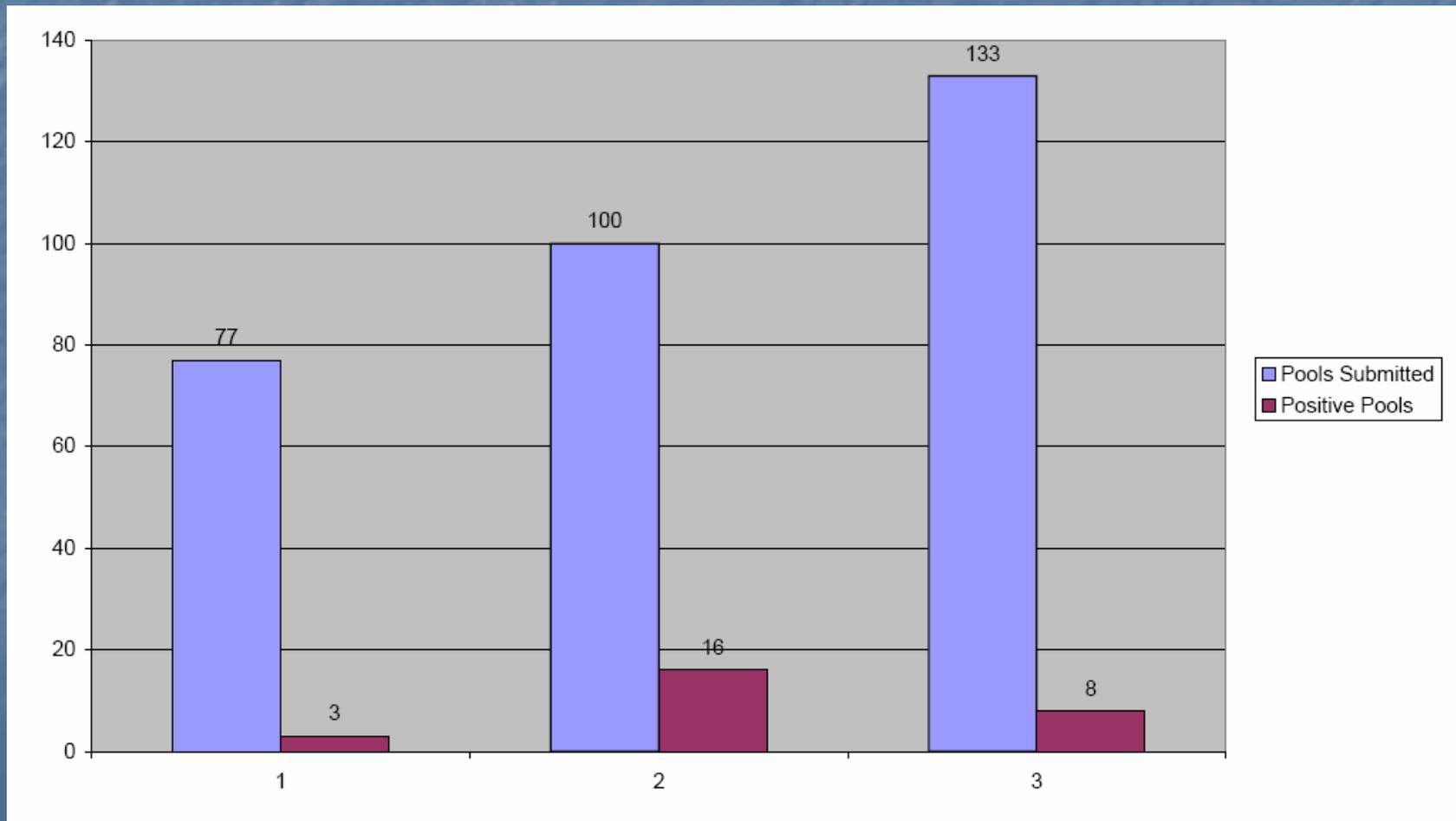
	2004	2005	2006
Human Cases	3	60(1)	6
Equine Cases	13(5)	22(9)	2(2)
Dead Birds	48	226	14
Sentinel Chickens	11	71	27
Mosquito Pools	3	16	8

Mosquito Pools Submitted vs. Positive

'04

'05

'06



Kern County WNV Activity

	2004	2005	2006
Human Cases	60(1)	68	49
Equine Cases	47(20)	26(7)	3
Dead Birds	87	44	24
Sentinel Chickens	101	111	95
Mosquito Pools	214	235	231

MLEs Kern MVCD/AFSB - 2006

	Cx tarsalis	Cx quinq.	Ae melanimon
April	0	0	0
May	0	0	0
June	1.2	0.7	0
July	14.2	17.0	0
August	8.7	12.7	0
September	0.8	4.8	0.7
October	0	0	0
November	0	0	1.8

WEE by Mosquito Species and type of trap

Mosquito Species	WEE Pools from CO2 traps	WEE Pools from Gravid traps
Culex quinq	1	0
Culex tarsalis	17	0
Aedes melanimon	0	0

WN Control Efforts and Strategies

- IPM based mosquito control programs
 - Continued focus on larval control
 - Source reduction/legal abatement increased
 - Public education – backyard sources
- Routine treatment of every larval source
 - Intensified surveys for new sources
- Purchase of new, specialized equipment





Adulticide Activities and Limitations

- Aerial and ground-based ULV applications
 - Proximity to mosquito sources
 - Accessibility
 - Meteorological conditions
 - Where and when to spray?
- Barrier applications

Relationships with Local Health Departments

- Mixed response: county by county
- Non- cooperation
- Increased cooperation and collaboration
 - Information sharing
 - Public education – media releases
 - Source abatement

WNV: What Happens Now?

Critical Issues in Central Valley

- Meteorological Impacts: wet year/dry year
 - Excess water – recharge
- Expansion of created wetlands
 - Do feds care about impact of mosquitoes?
- Agricultural issues and irrigation practices
 - Use of wastewater for irrigation
 - Corn and high water use crops
 - Non-tillage management



Critical Issues in Central Valley Continued

- Central Valley is ideal arbovirus incubator
 - High summer temperatures, perfect vectors
- Surveillance programs
 - Can districts afford expanded programs?
- Dead bird program and Dycast
 - Did it help, will it continue?

Critical Issues in Central Continued

- State funds for mosquito control
 - Well received and well used
 - Going, going, gone
- Expanding services into un-served areas
- No State Public Health Biologist in the South San Joaquin Valley Region