

West Nile Virus in the Coachella Valley, CA 2005

The District resources include 33 full time and 5-10 seasonal staff (April to November) providing services to 2400 sq miles. The Field Operations budget for 2004/05 was over 1 million dollars.

In 2003, the District designated an additional \$250,000 for WNV to be allocated to additional equipment, control products, labor, and educational material. In 2005, an additional \$200,000 was received from DHS to enhance and expand mosquito control.



Surveillance Program

• SURVEILLANCE TOOLS

– Larval surveillance

– ID/Count -1339

– Mosquito trapping - 3000+ pools

– 56 CO₂- baited CDC

– 13 Gravid

– 9 Sentinel flocks

– Dead bird surveillance

– Wild bird surveillance



THE RESPONSE PLAN

The DHS/CVMVCD Response and Action Plan established in 2001, updated every year and supplemented with the Action Plan in April 2003

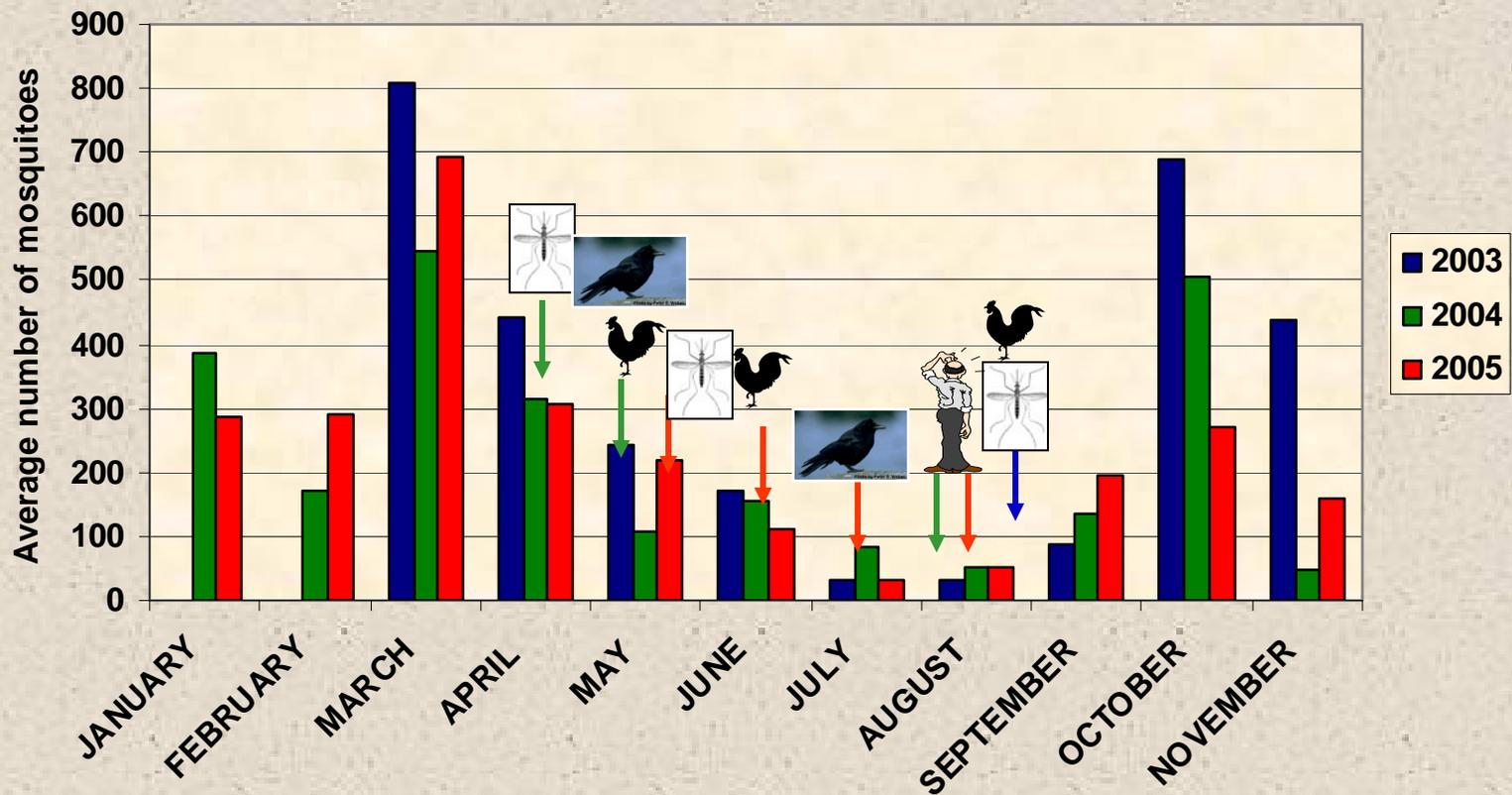
- According to the Response Plan, the Coachella Valley was in the state of Emergency Planning from June to the end of September 2005.

- The highest MIR was recorded in July (12.7/1000- *Cx. quinquefasciatus*)



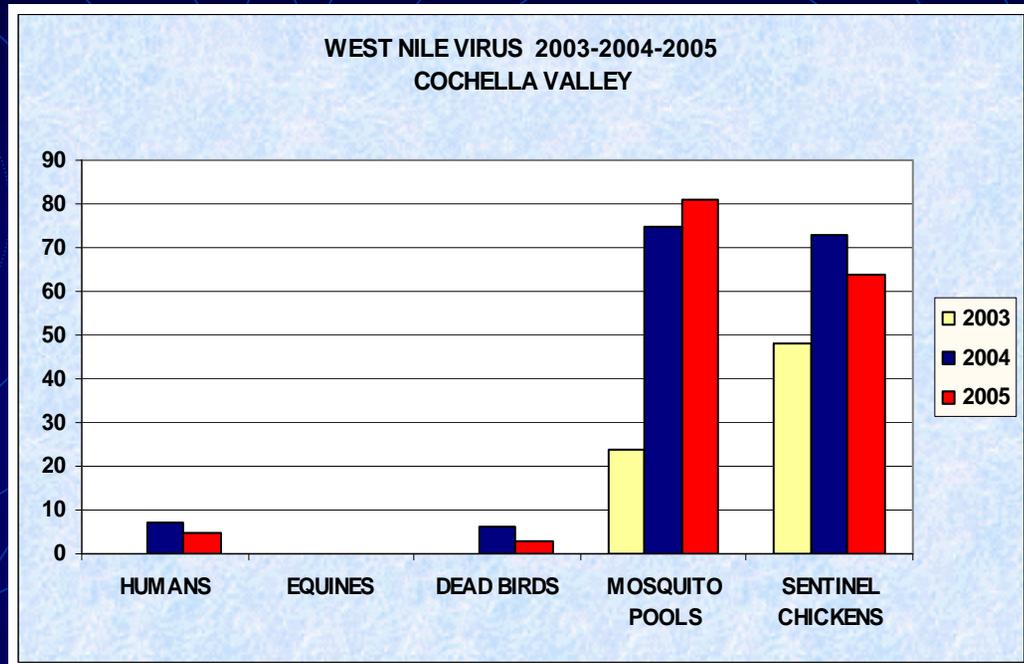
Mosquito Abundance and WNV Detection

Average number of mosquitoes per month in 2003, 2004 and 2005 in the Coachella Valley



WNV in Coachella Valley 2003-2004-2005

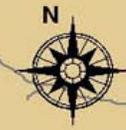
Detection of WNV in 2005 was mostly in urban areas in *Cx. quinquefasciatus* (65%) contrasting with (5%) in 2004.



	2003	2004	2005
HUMANS	0	7	5
EQUINES	0	0	0
DEAD BIRDS	0	6	3
MOSQUITO POOLS	24	75	80
SENTINEL CHICKENS	48	73	64



COACHELLA VALLEY

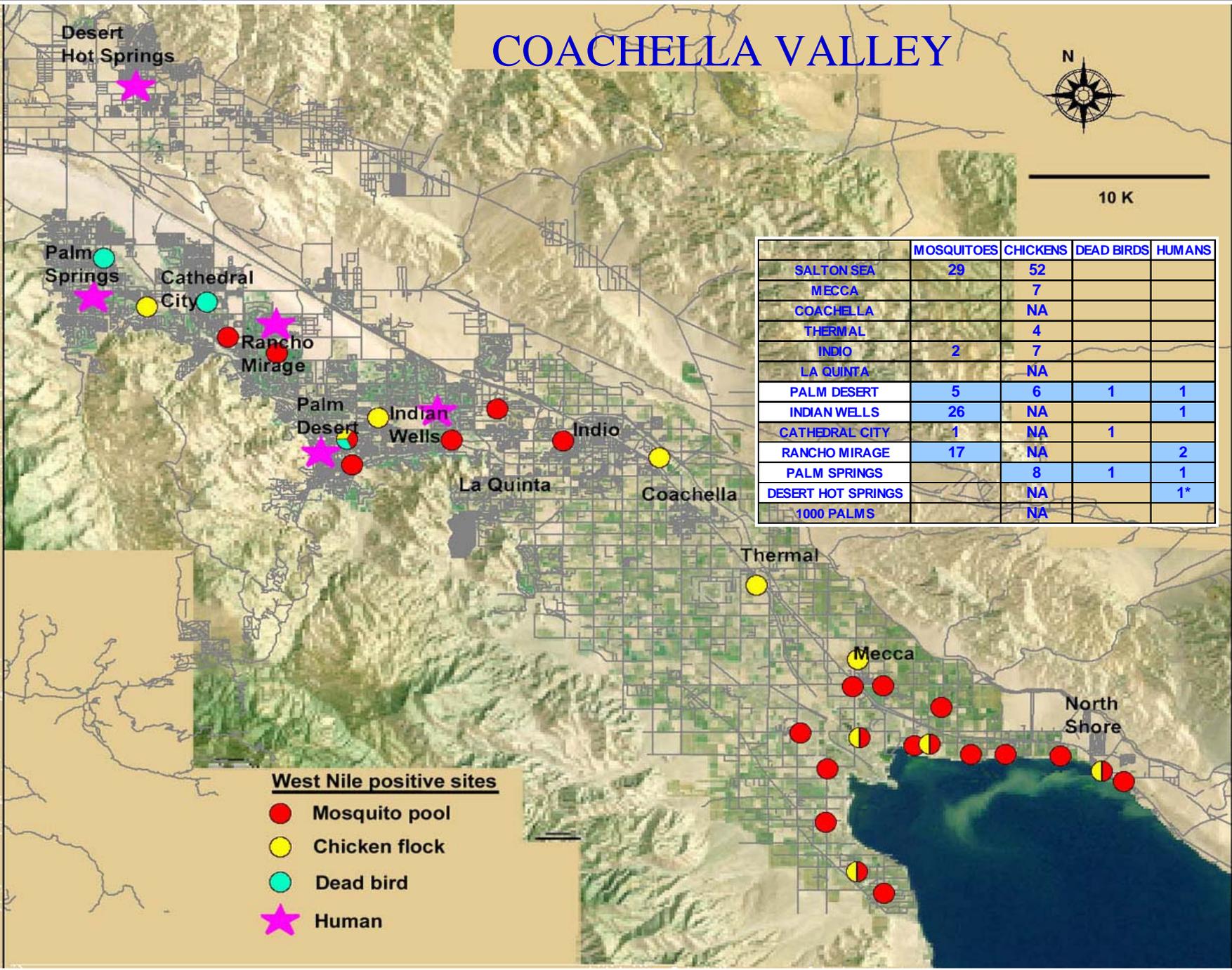


10 K

	MOSQUITOES	CHICKENS	DEAD BIRDS	HUMANS
SALTON SEA	29	52		
MECCA		7		
COACHELLA		NA		
THERMAL		4		
INDIO	2	7		
LA QUINTA		NA		
PALM DESERT	5	6	1	1
INDIAN WELLS	26	NA		1
CATHEDRAL CITY	1	NA	1	
RANCHO MIRAGE	17	NA		2
PALM SPRINGS		8	1	1
DESERT HOT SPRINGS		NA		1*
1000 PALMS		NA		

West Nile positive sites

- Mosquito pool
- Chicken flock
- Dead bird
- ★ Human



IMPORTANCE OF SURVEILLANCE TOOLS

- TRIGGER INTENSIVE PUBLIC OUTREACH PROGRAM
- QUALITY CONTROL ON LARVAL ABATEMENT
- MONITORING DISEASE DISTRIBUTION,
- MONITORING OF ADULT POPULATIONS OF MOSQUITOES.
- DIRECT OPERATIONAL INTENSITY AND MODIFICATIONS
- QUALITY CONTROL ON ADULT CONTROL



OUTREACH PROGRAM

MEDIA -

- TV PSA -**1230** airings on 3 network affiliates and cable network
- **30.000** brochures /mail & direct delivery
- **150** articles and **98** print ads in local newspapers
- **80** TV stories/interviews

PUBLIC RESPONSE and SERVICE REQUESTS

- In July, the District received one call from RC Environ. Hazard Spec. regarding probable exposure to a ground ULV application.
- Changes to follow:
 - Improve communication – cell phone on site
 - Larger warning signs
 - Earlier posting of the route

• Requests for Services

2005 = 1514 2004 = 1592

Fish request

2005 = 148 2004 = 231



MOSQUITO CONTROL



CONTROL EFFORTS IN 2005

- **LARVACIDING**

- **GROUND -1588 ac (1700)**

- Residential/Constructed wetland - 280 ac
- Agricultural - 672 ac
- Duck Clubs – 594
- Salton Sea marshes – 42 acres

- **AERIAL -901 ac (478)**

- Salton Sea – 449 ac
- Constructed wetland – 46.4 ac
- Duck Clubs – 406 ac

- **ADULTICIDING**

- **GROUND (URBAN/RURAL)**

- 8480 ac
 - PYRENONE 25-5®
 - MAY 24 - OCT. 6 (34 nights)
 - 53 GAL

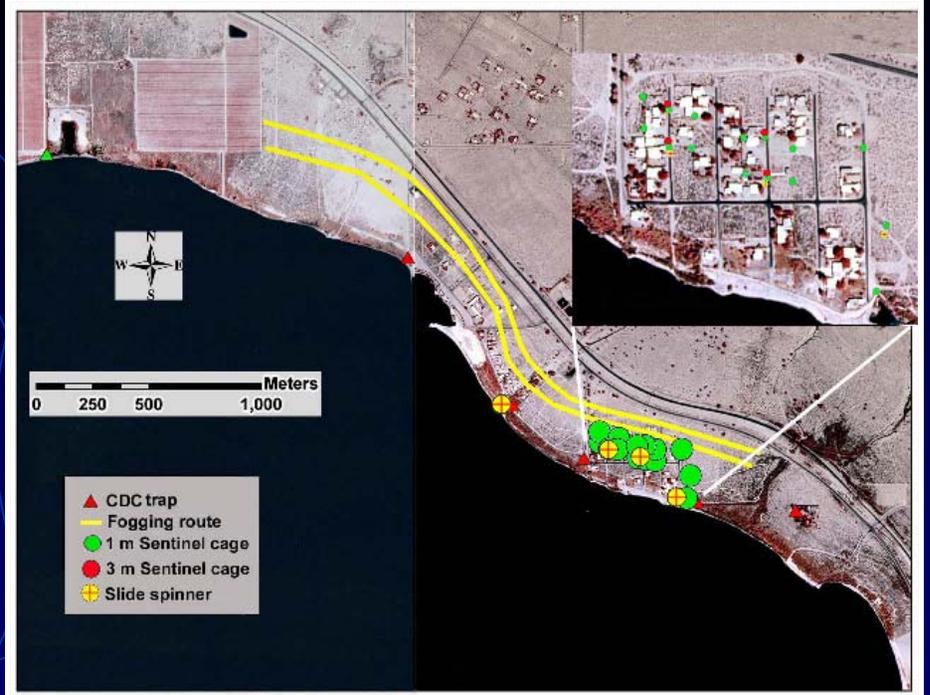
- **AERIAL (RURAL/SUBURBAN)**

- 6360 ac
 - PYRENONE 25-5® + OIL
 - MARCH 17 - SEPT. 16
 - 12 FLIGHTS /4 APP.
 - 43 GAL OF PRODUCT OR 127.3 GAL OF MIXTURE





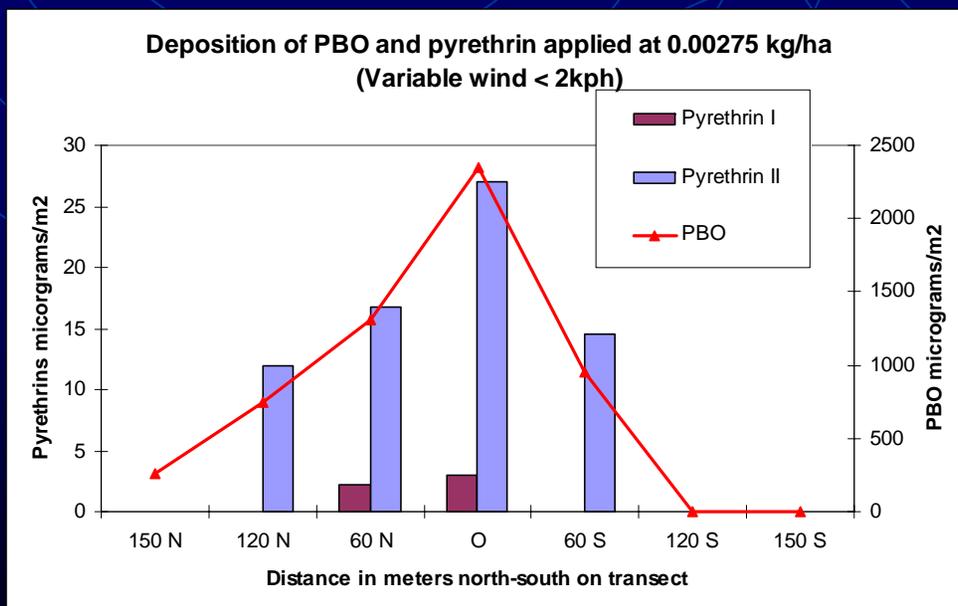
NORTH SHORE AERIAL ULV



2005 WNV Workshop



AERIAL ULV EVALUATION



2006 ?

- Historical data and Risk assessment will continue to be the basic guidelines for planning surveillance, public outreach, prevention and control programs in the Coachella Valley.
- Additional staff for surveillance and control for next season in urban areas.
- Introducing barrier treatment and combining it with ground ULV in urban areas to reduce adult abundance and increase the possibility for interruption of virus transmission.
- Purchasing equipment and products for barrier treatment.

