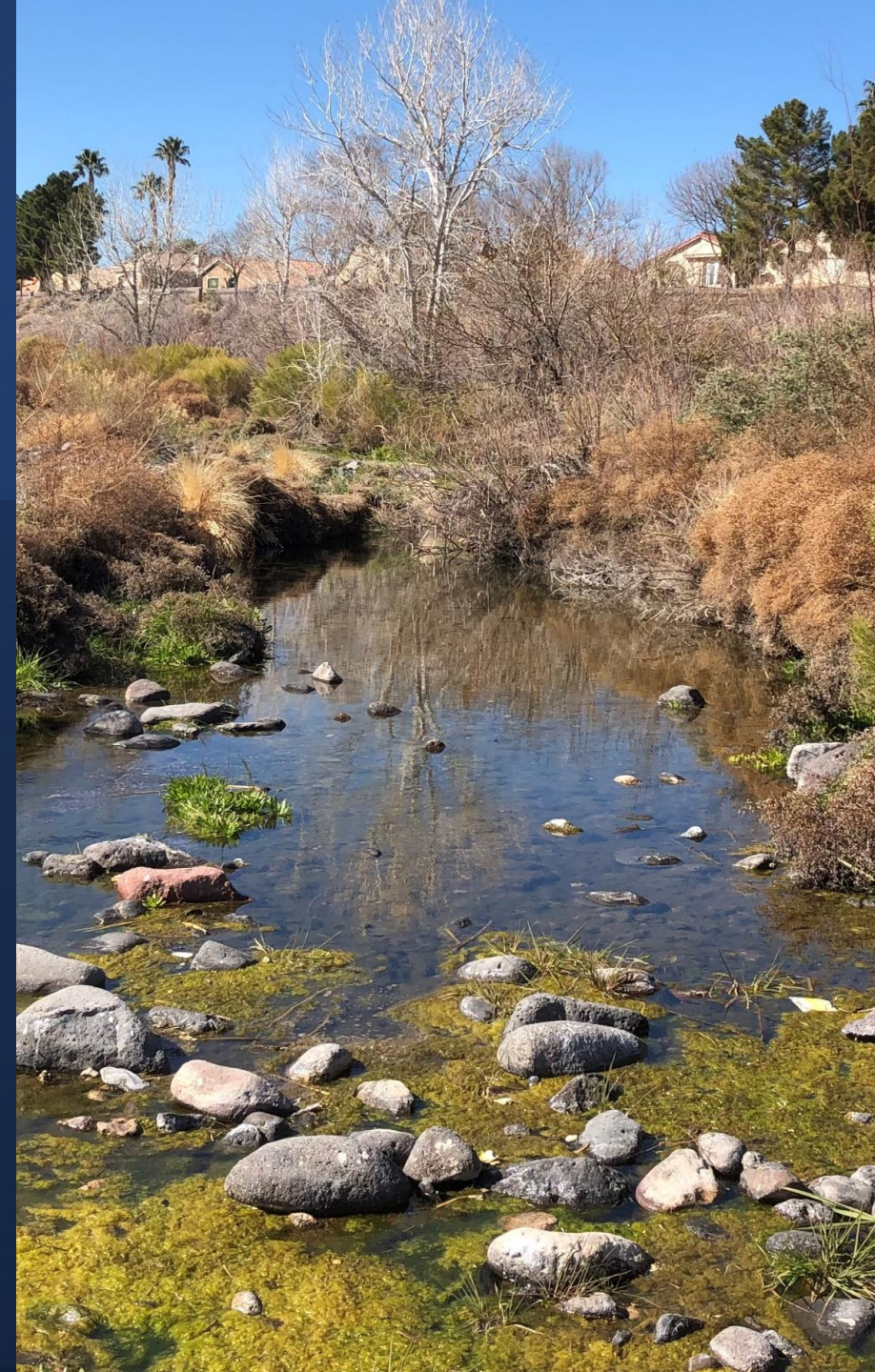


MOSQUITO DISEASE SURVEILLANCE, EDUCATION & PREVENTION

ENVIRONMENTAL HEALTH



ENVIRONMENTAL HEALTH: PROGRAM OBJECTIVES



Routine surveillance to determine species, abundance, and disease status



Counterpart notification for breeding site interventions (Code Enforcement, Parks & Recreation, Public Works)



Community education on breeding, biting, and disease prevention



No coordinated mosquito abatement across Clark County

SURVEILLANCE

Routine Sentinel sites

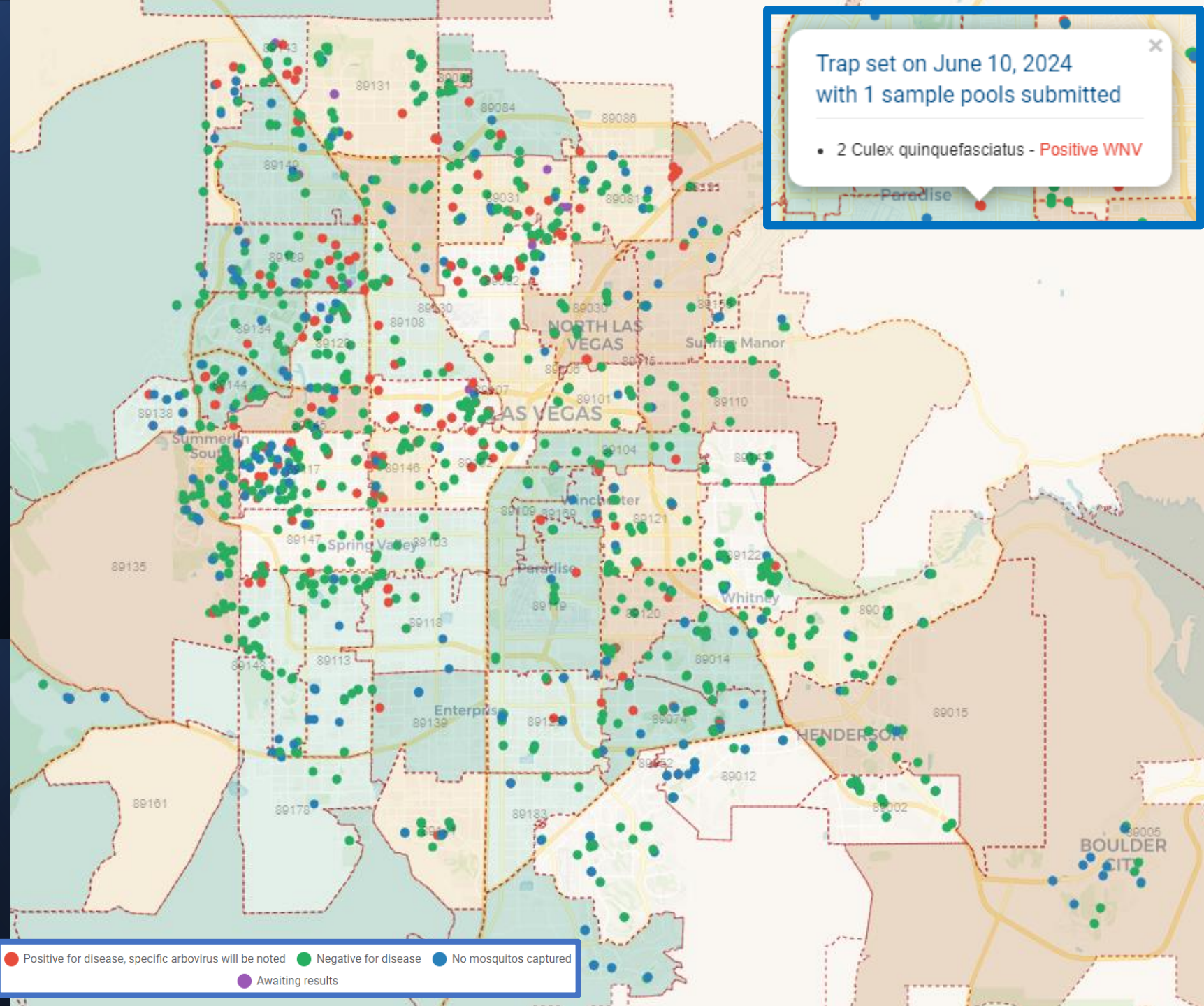
- Wetlands
- Washes
- Parks
- Bird Preserves

Unique Sites

- Citizen Complaints

Web Site Information

- Updated Mapping



DISEASE TRANSMISSION



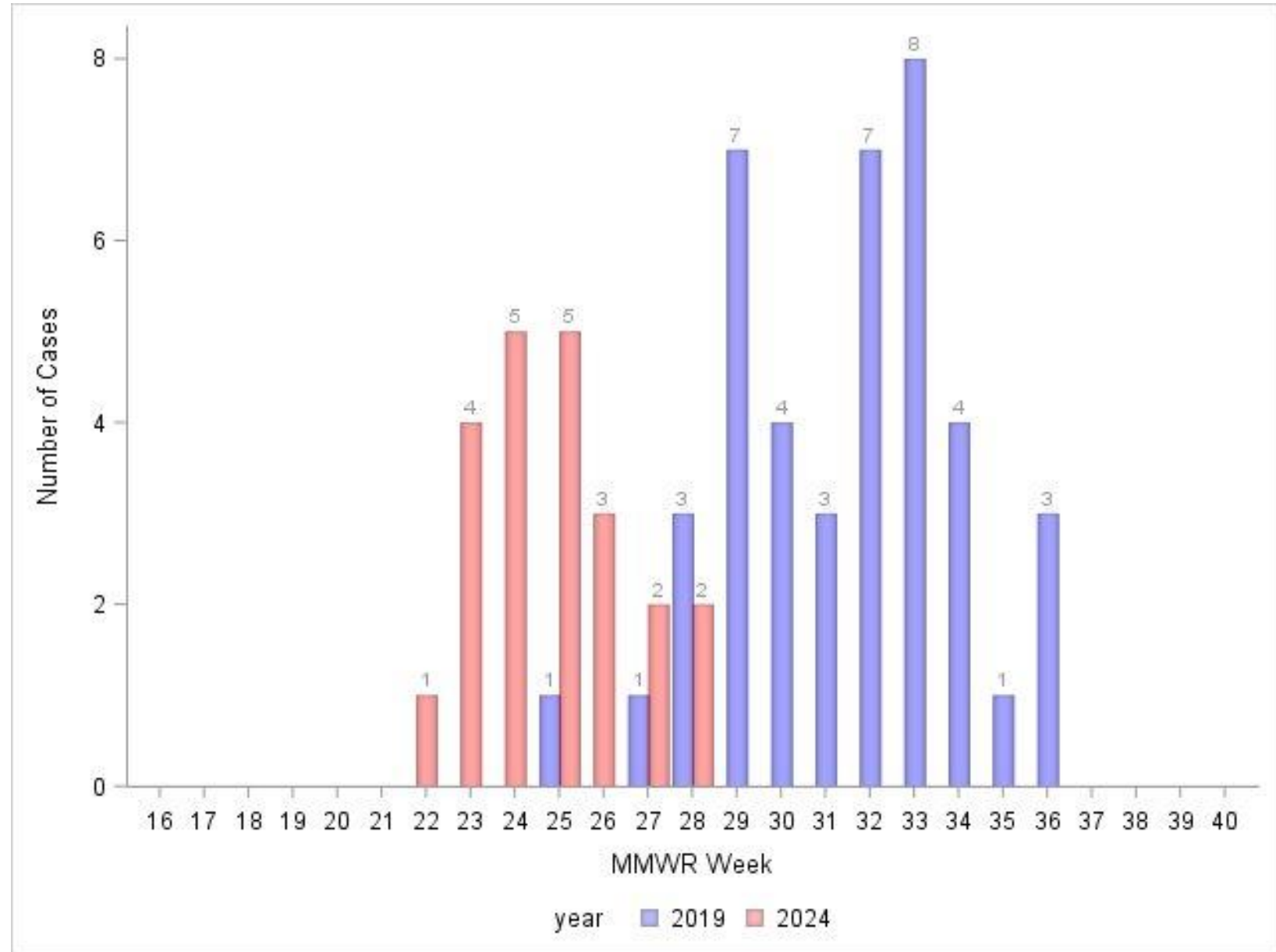
- ***Culex* species – Drivers of disease:**
- **West Nile Virus, St. Louis Encephalitis**
- **Most common and widespread mosquito**
- **Primarily feed on birds / Dusk and Dawn**
- **Breed in abandoned pools, wash channels, culverts**
- **Can fly up to a mile**

	Traps Set	Mosquitoes Trapped	Submission Vials	WNV + Mosquito Vials	SLEV + Mosquito Vials	Zip codes with WNV	Reported Human WNV cases
2022	3,246	43,516	3,280	0	0	0	0
2023	3,701	68,634	3,149	27 (1%)	0	13	2
2024 *	2,188	39,070	2,476	384 (15%)	21 (1%)	46	26

* As of 8/15/24

COMPARISON OF WNV ACTIVITY: 2019 vs. 2024

- **2019:** Most cases were identified later in the mosquito season
- **2024:** Cases are being identified earlier in the season
- **Trend:** Shift in case distribution, with earlier detection of cases in 2024 compared to 2019



NUISANCE BITING



- *Aedes aegypti* – Drivers of nuisance calls
- Aggressive, daytime and relentless biter (ankles)
- Primarily feed on people
- Breed in small water sources – tires, planters, buckets
- Short flight range (50 – 100 meters)
- Spread Dengue and Yellow Fever

	Citizen complaints	Number of <i>Aedes aegypti</i> trapped*	Zip Codes with Aedes Identified
2021	34	138	6
2022	101	618	12
2023	739	7,409	43
2024*	440	1,807	47

* Female counts only

** As of 8/15/24

**LONG TERM:
COMMUNITY
IMPORTANCE**

- No single coordinated mosquito abatement across Clark County
- Mosquito disease has proven unpredictable over 20 years of surveillance in Clark County
- *Aedes aegypti* will continue to expand and entrench itself – calls for service will increase
- The community needs a consistent and organized Integrated Mosquito Management Plan / Mosquito Abatement District
- Develop emergency abatement responses: WNV, Dengue, Zika