West Nile Virus Activity
No West Nile Virus (WNV) activity has been detected in Santa Barbara County in 2014 to date. However, 8 dead birds and a sentinel chicken have already tested positive for the disease in other parts of California. Five of the dead birds were collected in Santa Clara County, two in Los Angeles County, and one in San Joaquin County. The sentinel chicken was from El Segundo, Los Angeles County and became infected sometime between bleedings on December 10, 2013 and January 2, 2014.

Statistics for California WNV activity can be found online at [www.westnile.ca.gov](http://www.westnile.ca.gov). National statistics for WNV can be found at the National Centers for Disease Control and Prevention website at [www.cdc.gov](http://www.cdc.gov).

Sentinel Chicken Flocks
The 2014 sentinel chicken bleeding season will begin the first week of April 2014. The District’s 5 flocks are all in place. The flocks are again located at the Carpinteria Sanitary District, the Goleta Sanitary District, the Mission Hills Community Services District, the City of Solvang Wastewater Treatment Plant, and the U.S. Forest Service Ranger Station on Paradise Road in the upper Santa Ynez Valley.

Samples of blood are collected from each chicken on strips of filter paper and dried overnight. They are then submitted to the California Department of Public Health Vector-Borne Disease Laboratory at Richmond, California where they are analyzed for antibodies to WNV and other mosquito-borne viruses.

Live Mosquito-Borne Virus Surveillance
Live Mosquito-Borne Virus Surveillance trapping has resumed. Surveys conducted during the month of March are shown in the table below.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>DATE</th>
<th>NUMBER of MOSQUITOES</th>
<th>NUMBER of TRAPS</th>
<th>MOSQUITOES PER TRAP NIGHT*</th>
<th>POOLS SUBMITTED</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCSB/Santa Barbara Airport Bluffs</td>
<td>3/10-11/14</td>
<td>55</td>
<td>13</td>
<td>4.2</td>
<td>4</td>
<td>Pending</td>
</tr>
<tr>
<td>El Estero Wastewater Plant, Santa Barbara</td>
<td>3/27-28/14</td>
<td>36</td>
<td>12</td>
<td>3.0</td>
<td>1</td>
<td>Pending</td>
</tr>
</tbody>
</table>

*Mosquitoes Per Trap Night = Number of Mosquitoes ÷ (Number of Traps x 1 Night)

This surveillance technique utilizes battery-powered traps that use dry ice as a source of carbon dioxide to attract adult female mosquitoes that are actively seeking a blood meal. The live female mosquitoes are taken into the District’s laboratory where they are anesthetized with triethylamine under the fume hood. They are then separated by species using a stereo zoom microscope and placed into “pools.” The pools (1 pool = up to 50 adult female mosquitoes of a single species collected at one place at one time) are stored in the District’s ultra-low temperature freezer at -70°C until they can be submitted to the U.C. Davis Center for Vector-Borne Diseases at Davis, California where they are analyzed for the presence of live mosquito-borne viruses including WNV.

West Nile Virus Dead Bird Submissions
The District did not submit any dead bird samples in March 2014.

The dead bird submission protocol has changed as of September 1, 2013. The California Animal Health and Food Safety Laboratory will no longer accept dead bird carcasses. Citizens can still report dead birds to the California Department of
Public Health’s (DPH) toll free West Nile Virus Dead Bird Hotline (1-877-968-2473 or 1-877-WNV-BIRD) or online at www.westnile.ca.gov. Local agencies will pick up the dead birds and collect samples via oral swabs that are transferred to RNase cards. The RNase cards are dried outdoors for at least two hours then mailed to the U.C. Davis Center for Vector-Borne Diseases where the samples will be analyzed for West Nile Virus.

CALIFORNIA SALT MARSH MOSQUITO (Aedes squamiger)
Adult Female

This mosquito species is univoltine (one generation per year) and is active primarily in winter and spring. Adult females are vicious and aggressive day and night biters and will fly several miles from breeding sources in search of a blood meal. However, they very rarely have been documented carrying West Nile Virus. Immature stages develop in shallow brackish and salt water pools in and around coastal estuaries. When these pools are flooded by winter rains or by very high tides, the larvae hatch from eggs that were laid on vegetation and on the ground the previous spring. Unusually high summer tides occasionally cause eggs to hatch during summer. Santa Barbara County breeding habitats of the California Salt Marsh Mosquito include the Carpinteria Salt Marsh, the Goleta Slough, and possibly the mouth of the Santa Ynez River.