

Green Swimming Pools and West Nile Virus

Information for Real Estate Managers

The California Department of Public Health (CDPH) requests that real estate managers or other individuals who regularly access unoccupied and for-sale homes report any “green” pools to their local mosquito and vector control agency. Such assistance will help reduce the risk of West Nile virus (WNV) transmission because “green” swimming pools can breed thousands of potentially disease-carrying mosquitoes. You can also assist by distributing our one page flyer “Wanted: Green Pools” (call 916-552-9730 or download at <http://www.westnile.ca.gov/resources.php>). The information below will allow you to answer common questions on this topic.

What is considered “standing water” around a home?

Any water that stands for a minimum of seven days around a home is designated as “standing water.” Many places can hold water that can become stagnant and breed mosquitoes. Common sources include: trash cans, bird baths, boats, aquariums, hot tubs, wading pools, and swimming pools.



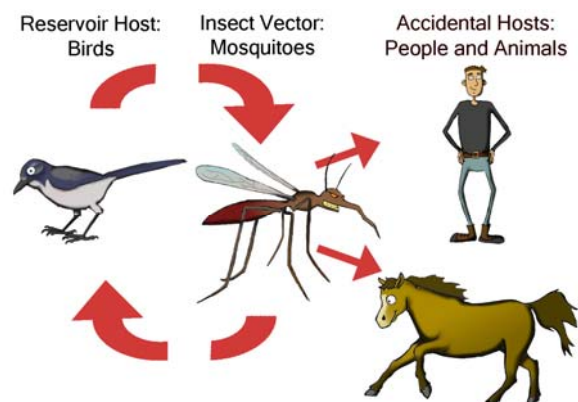
What is a “green” pool?

A “green” pool has abundant organic matter or bacterial growth, often with leaves or other debris, resulting in green to blackish-colored water. These pools are not properly maintained with filtration and chemicals and are generally neglected by the property owner.

Why are these standing water sources (including green pools) a problem?

Standing water is a source for mosquito production. Mosquitoes can carry and transmit WNV.

Two species of mosquitoes abundant in this type of habitat are the most important carriers and transmitters of WNV. These mosquitoes commonly lay eggs in green swimming pools. The eggs hatch and emerge as flying, biting adults in as little as 7-10 days. A single green pool can produce millions of potentially WNV infected mosquitoes over the course of a summer!



Adult female mosquitoes search for a blood meal which is needed to produce eggs, and the species of mosquito involved in WNV transmission frequently feed on birds. When the female mosquito takes a blood meal from a WNV infected bird, it becomes infected with the virus, and can transmit the virus when it takes another blood meal – possibly to a person, horse, or bird.

Why the publicity and focus on green pools?

The publicity will help mosquito and vector control agencies find the problem pools by promoting recognition of the problem and encouraging reporting of green pools to local agencies.

The increase in unoccupied and foreclosed homes has resulted in more green pools. These important sources of mosquito production are difficult for mosquito and vector control personnel to locate because they are in privately-owned backyards.

What should I do if I identify a green pool?

Call your local mosquito and vector control agency. Green pools can be reported anonymously. You can find your local agency on the California WNV website (www.westnile.ca.gov) on the right side under “locate your local mosquito and vector control agency” or by calling 1-877-968-2473 (1-877-WNV-BIRD). The agency will take your information and follow-up to address the problem. Your assistance will help reduce the number of vector mosquitoes in a neighborhood!

If there is no local mosquito and vector control agency, contact your local environmental health department or your local health department to report the problem.

What if I am responsible for a green pool or other standing water source around a home?

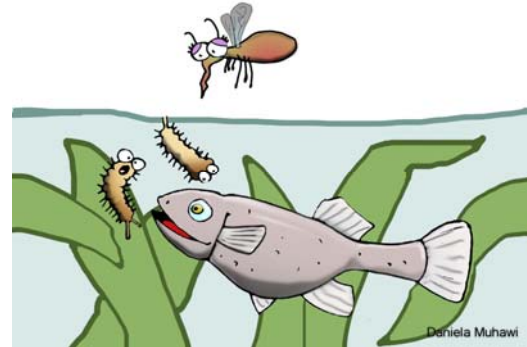
The following actions are recommended:

- Dump and turn over small standing water sources (like trash cans and bird baths) to prevent collection of water.
- Inform the local mosquito and vector control agency about the pool.

Take the actions listed below to reduce mosquito production if there is no local mosquito and vector control program in your area.

- Restore the pool’s filtration system and apply chemical treatments that will eliminate algae and bacteria and prevent mosquito breeding.
- Drain the green pool completely and make sure it cannot hold water in the future; this is the best possible option.

- Consult with a pool maintenance company before draining a pool completely to make sure high water tables will not force the pool out of the ground if emptied.
- Add mosquito fish to the pool. This is often a good solution for swimming pools or other backyard ponds.
- Obtain one of several mosquito control products available to homeowners that will control mosquitoes if used according to the label. Products are often found in garden or hardware stores.



What will happen if I call the local mosquito and vector control agency to report a pool?

A series of actions usually occur. These vary by agency and listed below is one possible course of action.

1. Mosquito and vector control staff will attempt to contact the homeowner or tenant to let them know the pool may be producing mosquitoes; they will ask permission to check and possibly treat the pool to control the mosquitoes.
2. Mosquito and vector control staff will work with the homeowner or tenant to permanently solve the problem, including providing information about how to accomplish this goal. Information is likely to include the options listed above.
3. Mosquito and vector control staff will give the property owner or tenant a reasonable time frame to address the problem by whatever means is deemed appropriate for the particular circumstances.
4. Mosquito and vector control staff will re-check to insure that preventive actions are being implemented.

As a last resort after attempting to work with the property owner or tenant, the mosquito and vector control agency may determine it is appropriate to implement an abatement proceeding. This will occur only if the previously contacted property owner or tenant has NOT implemented corrective action in a reasonable amount of time.

An abatement proceeding may ensue in accordance with state and local laws. Abatement proceedings typically consist of:

1. Formal notification of initiation of proceedings and deadline for eliminating source of vector production.

2. If deadline is not met, the mosquito and vector control agency may implement remedial measures and charge landowner for all associated costs including labor, vehicle expenses, pesticide, and legal expenses.
3. As an alternative, a mosquito and vector control agency may opt to impose fines of up to \$1500 per day to the property owner or place a lien on the property until such time as the source of the vector has been eliminated and all fines have been paid.

Abatement proceedings take time and are used as a last resort, but are a legal recourse available to mosquito and vector control agencies if other methods to eliminate a vector source have failed.

What state and local laws or regulations give mosquito and vector control agencies this authority?

The authority for the formation of mosquito and vector control districts and abatement of a vector source by these districts is provided for in the California Code of Regulations (CCR), Health and Safety Code, Division 3: Pest Abatement.

Chapter 1, Articles 4 and 5 (sections 2040-2067) outlines in detail the powers of mosquito and vector control districts.

Chapter 8, Article 3.5 (sections 2855-2868) outlines in detail the powers of pest abatement districts.

Authority to enter private property and the general operations pertinent to pest control are given in the CCR, Food and Agriculture Code Division 6: "Pesticides and Pest Control Operations." Critical sections pertaining to pest control operations are found in Chapter 3, subchapter 2, article 1:

- Sections: 6614a (Protection of Persons, Animals, and Property)
- Section: 6616 (Consent to Apply)
- Section: 6618 (Notice)
- Section: 6620 (Vector Control Exemption)

Where can I find additional information about West Nile virus and mosquito control?

The CDPH website at www.westnile.ca.gov has information about WNV in California. You can also call 1-877-968-2473 (1-877-WNV-BIRD).

For additional information about mosquito control, please see *Mosquito Control by Public and Private Entities in California: Questions and Answers* on the California Department of Public Health, WNV web site at: www.westnile.ca.gov/resources.php and www.westnile.ca.gov/wnv_faqs_basics.php?id=25

You can also contact your local mosquito and vector control agency for more information.