

COUNTY OF SAN LUIS OBISPO HEALTH AGENCY PUBLIC HEALTH DEPARTMENT

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Guidance for Golf Courses and Agricultural Lands to Reduce Mosquito Breeding

The primary goal of this outreach is to protect the public health from diseases transmitted by mosquitoes. In order to reach this objective, we strive to reduce mosquito populations to tolerable levels, which help decrease the risk of mosquito-borne disease and nuisance mosquito species to the citizens and visitors of our county. In an effort to assist you in minimizing breeding sites at your golf course or on your agricultural lands, we have developed some helpful actions that can effectively reduce the mosquito populations.

Irrigation and Drainage

Over-watering and poor irrigation practices are common producers of mosquitoes around parks, in irrigated fields, and on golf courses, therefore, standing water should be reported to appropriate maintenance personnel. The actions below can help eliminate mosquito-breeding sites by using physical controls

- **1.** Manage sprinkler and irrigation systems to minimize runoff entering storm water infrastructure.
- **2.** Routinely inspect, maintain, and repair irrigation system components.
- **3.** All underground drain pipes should be laid to grade to avoid low areas that may hold water for longer than 96 hours.
- **4.** Improve drainage channels and grading to minimize potential for standing water.
- **5.** Keep ditches clean and well-maintained. Periodically remove accumulated sediment and vegetation. Maintain ditch grade and prevent areas of standing water.
- **6.** Vegetation should be controlled regularly to prevent overgrowth and any weed growth that might become established within the pond. Vegetation in water features provides a protected spot for mosquitoes to lay their eggs.
- 7. Check and repair leaky outdoor faucets.
- **8.** Construct or improve large ditches to a slope of at least 2:1 and a minimum 4-foot wide bottom. Consider a 3:1 slope or greater to discourage burrowing animal damage, potential seepage problems, and prevent unwanted vegetation growth.
- **9.** Design irrigation systems to use water efficiently and drain completely to avoid standing water. Prevent wet areas associated with seepage by repairing leaks in dams, ditches, and drains.

Elimination by natural mosquito control:

- 1) <u>Mosquito Dunks:</u> Mosquito Dunks biological mosquito control contains Bti, a natural mosquito larvicide, which kills mosquito larvae, but is harmless to birds, fish, wildlife, and pets. Simply place a Dunk in any standing water to control mosquito larvae for up to 30 days.
- 2) <u>Gambusia/Mosquitofish</u>: These fish can begin feeding on mosquito larvae the day they are born. They can live in just about any type of water, are extremely tolerant to pollution and changes in salinity, and will eat available vegetation (you don't have to feed them).

Golf Courses: Ponding water from irrigation and over watering.



Agricultural Properties: Ponding from over watering or damaged irrigation.

