

Friends of Ballona Wetlands

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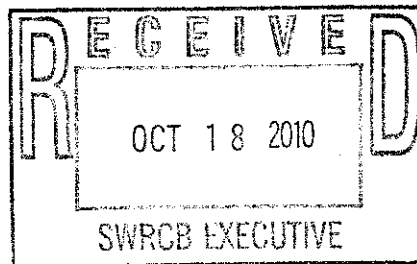
Public Hearing (10/19/10)
Vector Control Permit
Deadline: 11/2/10 by 12 noon

October 18, 2010

VIA EMAIL

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

RE: Comments on Draft Vector Control Permit



Board of Directors
Catherine Tyrrell, President
Dr. David Kay, Vice President
Jacob Lipa, Secretary

Ruth Lansford, Founder
Micah Ali
Dr. Pippa Drennan
Lisa Fimiani
Susan Gottlieb
Stephen Groner
Dr. Edith Read
Bob Shanman
Michael Swimmer
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Emeritus Board
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Friends of Ballona Wetlands appreciates this opportunity to comment on the Draft Vector Control Permit (Permit). For many years we have been concerned about the application of pesticides for vector control in the Ballona Wetlands Ecological Reserve, and the Ballona Freshwater Wetlands, by government agencies that appear to operate without any public accountability or transparency. It is unfortunate that a lobbyist special interest group with a vested interest in full employment of their members for vector control, the Mosquito and Vector Control Association of California (MVCAC), appears to have been the only organization consulted thus far regarding the Permit requirements. We are unable to attend the October 19, 2010 public hearing but hope these written comments are incorporated into the final Permit.

We state at the outset that we are not categorically opposed to the use of pesticides in specific situations where there is no alternative and the chemicals are applied legally by licensed personnel, such as to control highly invasive weeds that jeopardize native habitat. However, we object to the widespread use of pesticides in situations that are discretionary, i.e. where the target organism is merely a "nuisance" to humans and there is no significant threat to public health or safety. Additional comments regarding specific sections of the Draft permit are attached.

We are assisted in preparation of our comments by Dr. Edith Read, a Friends Board member who has had first-hand experience with vector control issues in her management of the Ballona Freshwater Marsh since construction was completed in 2003, and who also holds a Qualified Applicator License in the Aquatics and Landscape Maintenance categories. If you have any questions regarding the attached comments, she can be reached directly at 310-306-3229.

Sincerely,

Lisa Fimiani
Executive Director
Friends of Ballona Wetlands

Specific Comments from Friends of Ballona Wetlands – Draft Vector Control Permit

1) Activities authorized under this Permit should be restricted to situations where there is a significant and demonstrable (not speculative) threat to public health.

Complaints by some members of the public that black flies and midges are a “nuisance” do not warrant control by pesticides, especially in natural areas. Controlling an insect population simply because there is a small risk of an illness or allergic reaction on the part of someone, somewhere, at some unspecified time is not appropriate for the purpose of this Permit. Midges in particular are frequently the most abundant insects in freshwater¹. They can be an important part of an aquatic ecosystem, with larvae comprising part of the benthic invertebrate fauna, consuming algae and detritus². Given the potential environmental impacts, we believe that discharge of pesticides into Waters of the State, if done at all, should be for the sole purpose of addressing a significant, demonstrable threat to public health based on the best available science. Allowing pesticides to enter Waters of the State merely to control a “nuisance” or respond to a citizen complaint, absent any significant and demonstrable threat to public health, must be prohibited.

By the phrase “significant and demonstrable” we mean a threat that is not based on speculation or extremely low risk of mortality. For example, the West Nile virus is here to stay and will never be eradicated. While many birds have died from this virus, many more have survived and are immune. This is the way of evolution. And for humans, the chance of severe disease or mortality once infected is less than one percent³. These facts do not justify widespread applications of pesticides to eradicate mosquitoes. Moreover, the history of pesticides tells us that insects become resistant, with the result that there can be an endless evolution of more powerful pesticides that are more harmful to the environment than existing ones. Fear-based application of pesticides, regardless of actual mortality risk, supports the pesticide industry but does not constitute good policy.

2) Paragraph “M” on page 12, addressing activities that are not authorized, should extend beyond the Endangered Species Act.

Paragraph M states that the Permit “...does not authorize any act that results in the taking of a threatened or endangered species” or any act that is now prohibited, or becomes prohibited in future, under the California or Federal endangered species acts. We concur with this requirement but ask that the language be expanded to prohibit acts that would violate ANY environmental law or regulation, not just laws and regulations pertaining to endangered species. It may seem self-evident that the Permit does not authorize pesticide application in a manner that violates State or Federal environmental laws or regulations. Such actions could cause the applicator to lose his or her license. However, we feel this restriction needs to be explicitly stated in the Permit conditions so that it is clear that the Permit does not exempt the Discharger from complying with all other Federal, State, and local environmental laws and regulations, including Total Maximum Daily Load (TMDL) requirements for toxics.

¹ Armitage, P.D., P.S. Cranston, and L.C.V. Pinder (editors), 1995. The Chironomidae: Biology and Ecology of Non-Biting Midges, p. 1.

² *ibid.* Chapter 7.

³ Centers for Disease Control, 2010. 2010 West Nile Virus Human Infections in the United States.

3) The list of receiving water monitoring triggers and “pesticides of concern” should be broadened to include methoprene and Bt.

Table 3 of the Draft Permit does not list Receiving Water monitoring triggers for methoprene or Bt (*Bacillus thuringiensis israelensis* and *B.t. sphaericus*). As we understand it, this means that under this Permit, Dischargers would not be required to monitor concentrations of these pesticides or their breakdown products in Receiving Waters. We believe this is a mistake. These chemicals are applied extensively at the Ballona Wetlands and to Ballona Creek for abatement of mosquitoes and midges. Methoprene and Bt are assumed to be “safe” for the environment because they have not been shown to be toxic to non-target organisms when applied in compliance with label restrictions⁴. This assumption is questionable on two points as explained below.

There have been few studies of environmental impacts of methoprene and various formulations of Bt in ecological settings, especially in consideration of the quantities applied in practice. For example, one study of breeding bird response to mosquito control treatments did not find statistically significant effects of methoprene and Bti on breeding bird communities⁵. However, this study applied methoprene and Bti at a maximum rate of 1.8 kg/ha (~1.6 lbs/acre). The maximum label rate of two commonly used granular formulations of Bt, namely Vectobac G and Vectolex CG, is 20 pounds per acre. This maximum label rate is routinely used at the Ballona Wetlands (see below). We believe this issue is of concern, especially considering the potential for “synergistic” effects with other pesticides, such as pyrethrins and pyrethroids. Breakdown products of pyrethroids, particularly bifenthrin, have been found in the sediments of Ballona Creek. Toxicity of the sediments of Ballona Creek is on the list of “impairments” identified by the California Regional Water Quality Control Board and U.S. Environmental Protection Agency⁶. Birds are subject to multiple stressors in the environment, and we believe applications of pesticides in the Ballona Wetlands and Ballona Creek must be prohibited until their environmental effects are fully studied by independent scientists who are not funded by the pesticide or vector control industries, and “trigger” values for Receiving Waters are established. The habitat values of the Ballona Wetlands are well documented⁷. Personnel of the Los Angeles Department of Public Works have been observed placing methoprene bricks encased in mesh bags into Ballona Creek. We also point out that the Los Angeles West Vector Control district routinely applies methoprene to the Ballona Wetlands, including tidal channels connected to the Ballona Creek Estuary.

The second issue is that quantities of pesticides used by government agencies appear to have been under-reported, and have not been adequately monitored in Receiving Waters. The prime

⁴ Environmental Protection Agency, 2007. Larvicides for Mosquito Control. Accessed at <http://www.epa.gov/pesticides/health/mosquitoes/larvicides4mosquitoes.htm>.

⁵ Hanowski, J.M., G.J. Niemi, A.R. Lims, and R.R. Regal, 1997. Response of breeding birds to mosquito control treatments of wetlands. *Wetlands* 17(6): 485-492.

⁶ California Regional Water Quality Control Board and U.S. Environmental Protection Agency, 2005. Total Maximum Daily Loads for Toxic Pollutants in Ballona Creek Estuary.

⁷ Ballona Watershed Task Force, 2004. Ballona Creek Watershed Management Plan. Issued September 2004.

example here at the Ballona Wetlands is Bt. The Los Angeles West Vector Control District has been mixing *B.t. israelensis* and *B.t. sphaericus*, often each at the maximum label rate of 20 pounds per acre, and applying the mixture to the Ballona Freshwater Marsh every week from roughly May through September, every year since at least 2006. The total area of open water and emergent marsh at the Freshwater Marsh is about 16 acres. This means that up to 640 pounds or more of pesticide can be applied every week during the summer and fall seasons, including the bird breeding season. A total of 950 pounds of pesticide was recorded by Dr. Read as having been applied by vector control staff during the week of July 2, 2008. Review of the Department of Pesticide Regulation's use report for the most recent year available (2008) indicates that only 552 pounds of *B.t. sphaericus* and about 315 pounds of *B.t. israelensis* were reportedly used for public health applications in all of Los Angeles County⁸. Not only are there discrepancies between reported and actual pesticide uses, there are visible human impacts of such excessive pesticide use. Exhibit A shows rashes incurred by Dr. Read's wetland maintenance personnel after such pesticides have been applied at the Ballona Freshwater Marsh. Frequency of these rashes appears to be coincident with pesticide applications. Water quality monitoring has not documented any other constituent that could potentially have this effect.

4) Public notice requirements must extend to the public, not just affected government agencies.

Public notice requirements stated under section VIII(B) specify that the Discharger must notify only government agencies. As the Permit is currently worded, these government agencies appear to be under no obligation to actually notify the public. We believe that notices submitted by Dischargers should be posted where readily accessible by the public, such as at the Water Board and Department of Pesticide Regulation web sites, and/or at the web site of the Discharger.

5) Pesticides must only be applied in situations where there is a significant, demonstrable threat to public health, not in "nuisance" situations.

Section VIII (D.2) of the Draft permit allows pesticides to be applied when a "vector" is present at a level that constitutes a "nuisance". For reasons discussed previously, we believe the phrase "public health threat" must replace the word "nuisance."

⁸ California Department of Pesticide Regulation, 2008. Annual Pesticide Use Report Indexed by Chemical, Los Angeles County.

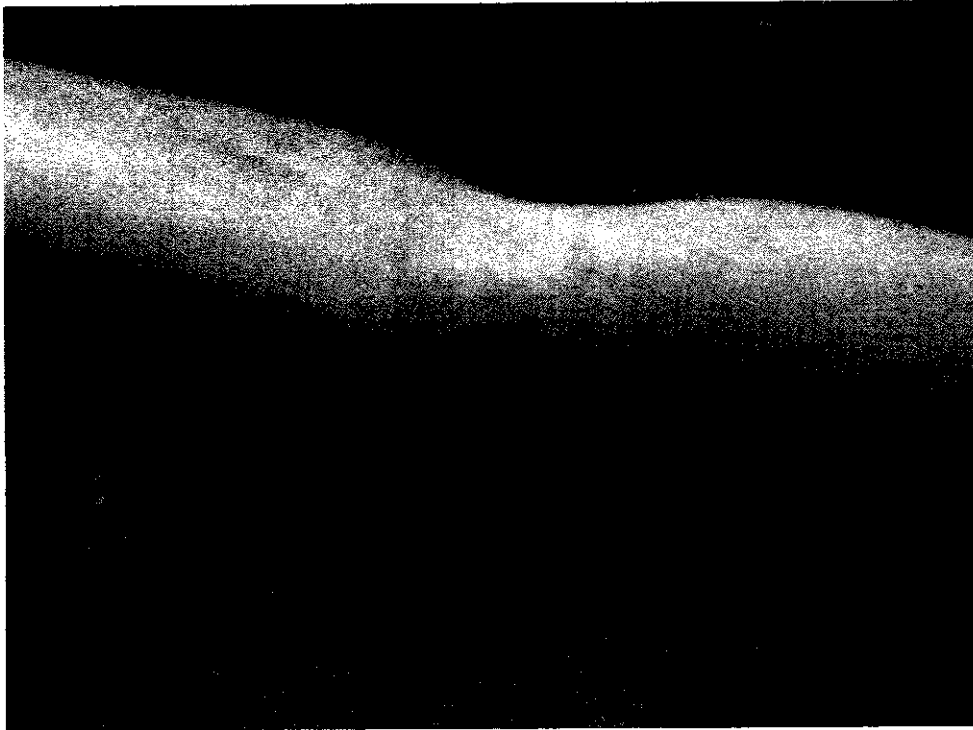


Exhibit A. Rashes incurred in June 2008 by Dr. Read's wetland maintenance personnel following their entry into freshwater to which a Vectobac/Vectolex (= Bti/Bts) mix had been applied by vector control staff. Maintenance personnel must enter the water to clear and thin emergent vegetation, also required by vector control staff. In response to this incident, current routine practice is to avoid exposure to the water on the day that pesticide is applied. Skin and/or eye irritation via direct contact is a known hazard with these pesticides, with prolonged exposure causing allergic sensitization (sources: Material Safety Data Sheets for Vectolex CG and Vectobac G).

Friends of Ballona Wetlands
211 Culver Blvd., Suite K, Playa del Rey, CA 90293
ph: 310.306.5994 fax: 310.306.0031 e: info@ballonafriends.org