



Montana Fish, Wildlife & Parks

Helena Area Resource Office
930 Custer Avenue West
Helena, MT 59620

April 7, 2006

TO: Governor's Office, Mike Volesky, Room 204, State Capitol, P.O.200801, Helena, MT 59620-0801
Environmental Quality Council, Capitol Building, Room 106, P.O Box 201704, Helena, MT 59620
Dept. Environmental Quality, Metcalf Building, P.O. Box 200901, Helena, MT 59620-0901
Montana Fish, Wildlife & Parks
 Director's Office
 Parks Division
 Fisheries Division
 Wildlife Division
 Enforcement Division
 Lands Section
 Design & Construction Bureau
 Legal Unit
 FWP Commissioners
MT Historical Society, State Historic Preservation Office, P.O. Box 201202, Helena, MT 59620-1202
MT State Parks Association, P.O. Box 699, Billings, MT 59103
MT State Library, 1515 E. Sixth Ave., P.O. Box 201800, Helena, MT 59620
James Jensen, Montana Environmental Information Center, P.O. Box 1184, Helena, MT 59624
Janet Ellis, Montana Audubon Council, P.O. Box 595, Helena, MT 59624
George Ochenski, P.O. Box 689, Helena, MT 59624
Jerry DiMarco, P.O. Box 1571, Bozeman, MT 59771
Paul Backlund, Bureau of Reclamation, 7661 Canyon Ferry Rd., Helena, MT 59602
Wildlife Federation, P.O. Box 1175, Helena, MT 59624
Wayne Hurst, P.O. Box 728, Libby, MT 59923
Glen Hockett, 745 Doane Road, Bozeman, MT 59715
Perry Backus, 65 Redtail, Dillon, MT 59725
Tom Sathers, Headwaters Fish & Game Assoc., P.O. Box 1941, Bozeman, MT 59771-1941
Broadwater County Commissioners, County Courthouse, Townsend, MT 59644

Ladies and Gentlemen:

Enclosed is the decision document regarding the Environmental Assessment (EA) that was been prepared for evaluating a mosquito control program on the Canyon Ferry Wildlife Management Area near Townsend, MT. Based on the analyses in the Draft Environmental Assessment, public comment and the need for controlling mosquitoes on the Canyon Ferry Wildlife Management Area, it is my decision to proceed with the control program as outlined in the proposed action or Alternative 2 as described in the Environmental Assessment.

There are no modifications necessary to the to the Draft Environmental Assessment based on public comment. The Draft Environmental Assessment and the “CANYON FERRY WILDLIFE MANAGEMENT AREA MOSQUITO MANAGEMENT PLAN”, together with this Decision Notice, will serve as the final documents for this proposal.

If you have any questions, please don't hesitate to contact me or Tom Carlsen at the Townsend FWP Office, 266-3367. Thank you for your interest.

Sincerely,

Michael Korn
Helena Area Coordinator

**MOSQUITO CONTROL PROGRAM ON THE CAANYON FERRY WILDLIFE
MANAGEMENT AREA NEAR TOWNSEND, MT
ENVIRONMENTAL ASSESSMENT
DECISION NOTICE**

Background

On March 6, 2006, Montana Fish, Wildlife & Parks (FWP) concurrently distributed the “Canyon Ferry Wildlife Management Area Mosquito Management Plan” and an Environmental Assessment (EA) for evaluating a mosquito control program on the Canyon Ferry Wildlife Management Area near Townsend, MT as identified in that plan. During the comment period, which ran until April 5, 2006, there was one comment submitted regarding the Preferred Alternative identified in this EA.

Description of the Proposed Action

The primary objective in developing a mosquito management plan for CFWMA is to identify how, where and when mosquito control will occur on the area. Control efforts can occur that are environmentally friendly and take into consideration the ecology and sensitivity of the many wildlife species that occur on the area. The draft plan describes those control efforts. Because Broadwater County has an on-going mosquito control program the intent is to work in conjunction with the county and more specifically with the Broadwater Mosquito Control District (BMCD), which manages their control program.

There are two primary reasons to control mosquitoes: to preclude the spread of mosquito-borne disease, and to avoid nuisance biting. In the United States, encephalitis and dog heartworm are the primary mosquito-borne diseases. In Montana, Western Equine, St. Louis, and West Nile virus have all been recorded. Encephalitis is an inflammation of the brain and central nervous system, and is characterized by a high to moderate mortality rate, with some survivors having permanent physical and mental disabilities. A 1973 blood-screening clinic determined that 12.19% of the Broadwater County residents showed a positive reaction for HAI titers for the Western Equine and St. Louis strains of encephalitis, indicating exposure to the viruses.

Disease concerns are certainly not the only reason to control mosquitoes. Mosquitoes can be annoying enough to make an area uninhabitable or unsuitable for recreational or industrial development. Economic losses can also be considerable in resort areas and at local tourist attractions.

SELECTED CONTROL STRATEGY (PROPOSED ACTION)

Achieving good larval control is environmentally friendly and the Center for Disease Control (CDC) has stated that larvicidal applications in catch basins and standing water is an essential component to a mosquito management program and is the most successful method to eliminate mosquitoes over time. In addition, the CDC recommends larvicidal applications rather than spraying adulticides for both efficacy in reducing mosquito populations, environmental factors and cost effectiveness. Adulticiding only kills mosquitoes that are flying and remains effective for only a few hours. The efficacy of adulticiding is open for debate and is not considered an effective tool for mosquito management or control through only one application, or, over time, as shown through scientific research. Reapplications of adulticide may compound negative human health effects of pesticide usage. In addition, adulticide chemicals are not selective for mosquitoes but affect non-target insects, many which are beneficial and essential components of wildlife diets. Some adulticides are also toxic to fish.

For the above stated reasons, it was recommended that mosquito control efforts on the CFWMA consist of timely application of larvicidal agents. Application will be done by licensed applicator ideally from fixed-winged aircraft due to the inaccessible nature of the area where mosquito habitat occurs. Some ground or water (backpack or boat) application of larvicide agents may occur at the discretion of FWP. Application will also be based on agreed upon systematic and scheduled monitoring and only when agreed upon thresholds of larval presence are reached.

Specific larvicides that will be used for controlling mosquito production include Methoprene (Altocid), *Bacillus sphaericus*, *Bacillus thuringiensis israelensis* (Bti).

Larvicides are more effective and less toxic than adult mosquito sprays, and the applications are unlikely to result in human exposure. The preferred larvicide will actually be a mixture of Altocid and Bti.

Unlike conventional pesticides, each Altocid formulation contains methoprene, an insect growth regulator (IGR) that stops mosquitos from becoming breeding, biting adults. Methoprene is target-specific, and will not affect fish, waterfowl, mammals or beneficial predatory insects.

Bti or *Bacillus sphaericus* products are recommended due to their low toxicity to non-target organisms, (Washington Department of Ecology 2002). Federal laws prohibit the application of Bti to reservoirs that contain drinking water, (EPA 1998). *B. sphaericus* has very few environmental risks associated with its use. *B. sphaericus* is both non-toxic and non-pathogenic for a variety of species tested, (Washington Department of Ecology 2002). When used according to label rates, *B. sphaericus* does not appear to harm mammals, birds, fish, or most non-target invertebrates (insects and worms). Since *B. sphaericus* is primarily used in contained waters, the potential for contact among certain terrestrial and aquatic species is further limited. Bti is very specific for mosquitoes and black flies, and has some toxicity toward certain other dipterans (including midges). Bti is the primary material used for mosquito control because of its low toxicity to non-target species.

Public Comment

Montana Fish, Wildlife & Parks is required by the Montana Environmental Policy Act (MEPA) to assess significant potential impacts of a proposed action to the human and physical environment. In compliance with MEPA, an Environmental Assessment (EA) was completed for the proposed project by FWP and released for public comment on March 6, 2006.

Public comments on the proposed project were taken for 30 days, ending April 5, 2006. The EA was mailed to 23 individuals and groups; legal notices were printed in the Helena *Independent Record* and the *Townsend Star*; and the EA was posted on the FWP webpage: <http://www.fwp.mt.gov/publicnotices>.

One comment was received on the proposal. That comment was from the Montana Historical Society and they felt there was a low likelihood that cultural properties, if they exist in the area, would be impacted by the proposed action.

Decision

Based on the analyses in the Draft Environmental Assessment, public comment and the need for controlling mosquitoes on the Canyon Ferry Wildlife Management Area, it is my decision to proceed with the control program as outlined in the proposed action or Alternative 2 as described in the Environmental Assessment.

Additionally, to more effectively administer this program FWP would contract directly with the party doing the monitoring and control work. In both the management plan and the environmental assessment

it was alluded that funds would be transferred to Broadwater County via a Memorandum of Understanding. Internal discussions led to the conclusion that contracting directly for the work to be done made more sense. This in no way changes the work to be done as identified by the Proposed Action and outlined in the management plan and the environmental assessment. Monitoring and control efforts of mosquitoes would still be coordinated with the county.

There are no modifications necessary to the to the Draft Environmental Assessment based on public comment. The Draft Environmental Assessment and the "CANYON FERRY WILDLIFE MANAGEMENT AREA MOSQUITO MANAGEMENT PLAN", together with this Decision Notice, will serve as the final document for this proposal.

I find there to be no significant impacts on the human and physical environments associated with this project. Therefore, I conclude that the Environmental Assessment is the appropriate level of analysis, and that an Environmental Impact Statement is not required.

This decision is subject to appeal, which must be submitted to the FWP Director in writing and postmarked within 30 days of the date on this Decision Notice. The appeal must specifically describe the basis for the appeal, explain how the appellant was previously commented to the department or participated in the decision making process, and lay out how FWP may address the concerns in the appeal. Appeals should be addressed to Jeff Hagener, Montana Fish, Wildlife, and Parks, PO Box 200701, Helena, MT 59620-0701.

April 7, 2006

Michael Korn
Helena Area Coordinator
