

DEVELOPING APPROPRIATE METHODS TO ASSESS THE POTENTIAL EXPOSURE RISK TO ENDANGERED AND THREATENED SPECIES FROM THE USE OF PUBLIC HEALTH PESTICIDES FOR MOSQUITO CONTROL.

Background: The Endangered Species Act (ESA) is intended to protect and recover imperiled species and their critical habitats. However, its implementation can affect the ability of mosquito control programs to protect people and other animals, including wildlife, from mosquitoes that can adversely impact their health and welfare.

In registering a pesticide, the U.S. Environmental Protection Agency (EPA) conducts a comprehensive risk assessment of a pesticide's potential environmental effects, including ecological effects on nontarget organisms. EPA has also scheduled specific ESA evaluations as part of its pesticide registration review process. These ESA evaluations rely on models and assumptions that are based on agricultural uses of a pesticide, not on mosquito control uses. Consequently, the models' outputs are not reflective of the potential risk to endangered and threatened species from their use in mosquito control programs, and can significantly distort the potential risk. This has cascading consequences throughout the regulatory chain. If it is determined that the mosquito use can adversely affect listed species, the EPA's evaluation is passed onto the Services (the US Fish & Wildlife Service and the National Marine Fisheries Service), who are charged with protecting the species under the ESA. The Services may issue label conditions for the EPA to implement in its pesticide review process, which could either eliminate or condition the use in such a way that the pesticide is no longer viable for use in a mosquito control program.

Discussion: It is recognized that EPA must determine whether pesticide use can adversely affect endangered and threatened species. However, in carrying out the review, the EPA should use the best available data and develop appropriate methodology that reliably assesses the potential risk from mosquito control use. It cannot rely on methodologies and assumptions used in evaluating agricultural uses of a chemical, as the agricultural use far exceeds the amount of product employed for mosquito control for many chemicals. Models based on agricultural uses alone may resulted in the unwarranted discontinuation of public health tools. **EPA, in consultation with the mosquito control representatives, needs to invest the time, personnel and resources necessary to create reliable ESA models that reflect a pesticide's use in a mosquito control program.** This can help assure outcomes which are protective of listed species while still preserving public health.

Current Status: The 2018 Farm Bill established a FIFRA Interagency Working Group to provide recommendations and develop a strategy for improving the pesticide consultation process under Section 7 of the ESA. The Working Group, consisting of representatives from the Department of Agriculture, the Department of Commerce, the Department of the Interior, the Council on Environmental Quality, and the EPA, are required to periodically report to Congress on its progress in developing and implementing its recommendations for improving the ESA Section 7 consultation process. The Working Group should be encouraged to assist EPA in the development of appropriate ESA models for mosquito control. EPA should be strongly encouraged to develop these models in conjunction with mosquito control program stakeholders such as AMCA.

