Memorandum

From: Michael Patterson, Ph. D 07/15/04
Environmental Field Branch
Field and External Affairs Division

To: Arthur-Jean Williams, Chief
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Field and External Affairs Division

Subject: Effects Determination for Diflubenzuron to pacific Anadromous Salmonids

Diflubezuron is a restricted use, urea derivative, insecticide. Target pests include gypsy moth, bean caterpillar, tent caterpillar, clover worm, army worm, bollweevil, aquatic midge, mites, scarid fly, face fly, and mosquito larvae (public health use).

A variety of crops are registered for use of diflubenzuron. These include cotton, citrus, soybeans, mushrooms, peppers, nuts, cattle, rangeland, standing water (sewage), cherries, rice, ornamentals, and forestry. Under prescription it may also be used on enclosed aquatic sites.

Endangered species Risk Quotients are not exceeded for any fish models, however Risk Quotient Levels of Concern are exceeded for both aquatic and marine/estuarine invertebrates. Use rates, however, are relatively low. The major concern is forestry use in the Pacific Northwest. Because there are very large areas of public forest in the states, and the current labels allow application to forestry sites, it is a matter of concern. Local data provided by the Washington State Department of Agriculture and the Endangered Species Protection Service indicate that there are no current use sites in forestry. Based on this information it must be noted that, in the Pacific Northwest, there is a potential for effects on the species of concern, but adverse effects are unlikely. The more specific data from California allow a determination of no effects in all ESU's, with the exception of the Northern California/Souther Oregon Coho Salmon ESU.