

# Endangered Species Act Considerations and Mosquito Control

**Issue:** Decisions on how mosquito control products should be used near sensitive or listed species are not being developed in a transparent manner based upon sound science.

**Background:** The Endangered Species Act (ESA) is intended to protect species that are threatened with extinction in addition to preserving their critical habitat. Under the interim ESA evaluation framework for pesticides, EPA has produced biological evaluations (BEs) utilizing a “worst case” screening-level analysis to determine whether a product “may affect” a **single individual** of a population of an endangered species. If EPA concludes the product “may affect” an individual of a population of a listed species, they are then required to request consultation with the Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) (the “Services”), who then analyze the likelihood and magnitude of an effect on the entire population and provide a biological opinion (BiOp) on whether the use of a product is likely to jeopardize the continued existence of that entire species. If that is determined, the Services will work with EPA, applicants and other stakeholders to identify mitigation measures that are technically and economically feasible to minimize the potential effect to the species.

In developing the BEs/BiOps, EPA and the Services are required to use the “best available” data to determine potential impacts on species. Historically, this requirement has not been met. EPA’s BEs have failed to include all of the relevant available data and EPA has yet to conduct any refinements to this process. As these BEs form the basis for NMFS’ BiOps they share the same flaws. This produces unvalidated conclusions that could be more appropriately classified as unsubstantiated opinions that are not subject to peer review. This was recognized in a recent ruling by the 4<sup>th</sup> Circuit Court of Appeals that considered the NMFS approach to be “arbitrary and capricious” in issuing BiOps relating to salmonids.

**Discussion:** On December 29<sup>th</sup>, 2017, NMFS issued a BiOp on the ESA impacts of EPA’s continued registration of multiple products, which found that Chlorpyrifos and Malathion were likely to jeopardize many species and critical habitats. Unfortunately, the use and exposure data usage were unrealistically high, and the thresholds for finding significant impacts to listed species were absurdly low (a 1/1,000,000 chance of mortality to **one** organism was used to define an impact on an entire species). This BiOp was published to comply with a court-ordered deadline, although NMFS had requested 2 additional years in full coordination with other agencies and the public on a more appropriate method for developing this BiOp. Since this BiOp and its development will likely serve as a standard, this lack of proper preparation is disturbing.

**ACTION NEEDED:** Congress should direct the NMFS to reinitiate consultation on the recently issued BiOp for Chlorpyrifos, Diazinon, and Malathion.

- Congress should direct the Service to obtain realistic levels of pesticide use from stakeholders based on existing application records.
- The Service should determine probability of exposure using environmental monitoring data to reasonably define an impact to a species.

