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Subject: Overview of USFWS Bandon Marsh NWR Mosquito Control Plan

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The recent increase of mosquito development in the Bandon Marsh NWR (BM) and the surrounding area is a direct result of the restoration of BM. In the introduction of the mosquito control plan the USFWS established that “a team of cooperators, and experts in the field of Oregon tidal marsh ecology and restoration completed a 420-acre tidal marsh restoration project on the Ni-les’tun Unit of Bandon Marsh National Wildlife Refuge” and “ a large portion of the perimeter dike was lowered and three water control structures were removed adjacent to the Coquille River to allow for full tidal flow across the historic and newly restored tidal marsh.” This acknowledges that the restoration caused the area to flood and recede, setting up the perfect development area for the *Aedes Dorsalis* mosquito.

The restoration of the marsh increased the mosquito populations by creating low lying areas as evident in the statement, “After construction, depressions that hold water during low tides remained in many of the shallow ditches that were diked, along some large ditches where the fill settled, and along tracks left by heavy equipment”.

Comments in the introduction of the Mosquito Management Plan indicate that USFWS is well aware that the restoration project created habitat for mosquitoes; “Monthly high tides fill many of the depressions and retain water long enough to permit salt marsh mosquitoes (*Aedes dorsalis*) time to complete their development before drying or the next tidal flushing.” “This created ideal breeding conditions for the salt marsh mosquito and has resulted in unprecedented, and what the Service considers unnatural, mosquito production on the Refuge.

Based on the information presented and historical data, the restoration of BM seems to be the primary cause of the recent drastic increase of mosquitoes in the area. The reason that many of these area were diked up in the first place (in addition to creating agricultural ground) was to control the mosquitoes. This practice was very popular in areas like Florida and the American Southeast. Diking an area that produces mosquitoes is much more cost effective than using chemical control on the mosquitoes each year. Removal of the dikes at Bandon Marsh restored the flooded areas after high tides, therefore restoring the mosquitoes that existed before the dikes were in place.